## **DESIGN, CONSTRUCTION AND RENOVATION**

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### DESIGN. CONSTRUCTION AND RENOVATION

Overview The following Design, Construction and Renovation Standards, in conjunction with the prototype drawings, represent the requirements established for design of a Home2 Suites™ by Hilton hotel ("Home2"). If discrepancies are found between the standards and prototype drawings, the Architecture & Construction (A & C) Department of Hilton Worldwide will clarify. The Brand Style Guide must be referred to for various building element requirements and for overall design intent. See www.hiltonworldwide.com/design for prototype drawings and applicable standards. All owners are responsible for referencing the most current Standards and up-to-date prototype design. It is the owner's responsibility to ensure that this information is incorporated into the construction documents per the License/Management Agreement. Reduction of scope below these Standards will not be permitted.

Hilton Worldwide, when giving approval for projects, may alter requirements contained herein in accordance with the project's local market, custom or practice.

The Design, Construction and Renovation Standards apply to the following situations:

- 1. New construction projects
- 2. Remodeling, refurbishing, renovation, and additions to existing properties
- 3. Change of ownership, renewal of a license agreement, conversion, or adaptive reuse.

#### Codes

The owner is responsible for compliance with all applicable laws, codes and/or other governing building, zoning and design regulations. In the event applicable local codes and regulations exceed the requirements contained herein, the local codes and regulations must be construed as minimum requirements. All discrepancies found between these standards and applicable local codes must be brought to the attention of Hilton Worldwide for resolution. Where designs deviate from applicable codes and regulations, approval or acceptance by the authority having jurisdiction must be documented and kept on file. Hilton Worldwide is not responsible for review of documents for compliance with local codes. It is the responsibility of the owner to meet or exceed these local regulations. The more stringent requirement between these Brand Standards and the applicable code(s) must be followed as a minimum.

Interior Design Review and Approval Process

New or existing hotels within the Hilton Worldwide portfolio that are undergoing construction, renovation, refurbishment or remodeling must receive prior approval for their design. Submittals must be compiled by a licensed architectural firm and/or licensed interior design firm. Completed submittals must be sent to the Hilton Worldwide GDS (Global Design Services) Director assigned to the particular hotel development. The Design Director will assist with all requirements of the process. Contact GDS for assistance, including a recommendation of design firms.

#### 2501.00 Exterior

Refer to Section 2514.00, Technical Criteria, for requirements applicable to this section.

#### 2501.01 Utilities

### A. Underground Utilities

All utilities in the development must be provided underground. If local service is above ground, provisions must be made at the property line for underground service.

#### B. Drains

Provide complete surface and subsurface drainage systems to collect and dispose of all surplus ground water. All site drainage must flow away from buildings.

### C. Drainage

Roof and porte cochere drainage must be connected to the storm drainage system by concealed piping. Exposed rain drains are not acceptable adjacent to guest entrances and must be concealed.

## D. Surface Drainage

Surface drainage across the sidewalks and landscaped areas adjacent to the building is not acceptable.

## E. Not Applicable to this Brand

### F. Hose Bibbs

Provide hose bibbs or hydrants for porte cochere, parking area, sidewalk, patio and pool deck washdown.

## 2501.02 Landscaping

### A. Registered Landscape Architect

A registered Landscape Architect must develop landscaping plans and maintenance program for all landscaping materials. Hilton Worldwide reserves the right of final approval on all landscape plans.

### B. Not Applicable to this Brand

### C. Landscaping Requirement Areas

Landscaping is required on all areas of the site not covered by pavement or a building. Landscaping includes natural elements such as lawns, plants, trees and water features.

### D. Landscaping Percentage Requirements

A minimum of 10 percent of the total site area must be landscaped. Exceptions for urban locations are subject to review and approval by Hilton Worldwide.

## E. Primary Landscaped Areas

Primary landscaped areas must be generous in scale and concentration, and must be placed adjacent to the entrance drive, the primary hotel entrance, along primary drives and around the outdoor swimming pool area.

## F. Secondary Landscaping

Secondary landscaping must be provided at the entire building perimeter, throughout the parking areas and at the site perimeter.

## G. Initial Planting Specimens

Initial planting specimens must be of a size to give the impression of maturity at time of opening.

### H. Drought Resistant Plants

Native and succulent/drought resistant plants are recommended rather than those requiring significant watering. 100 percent recyclable, synthetic turf fiber infilled with sand/silica and installed with a backing system and aggregate base layer, to ensure proper drainage, may be considered with prior written approval by Hilton Worldwide for location, application and product selection.

### I. Not Applicable to this Brand

### J. Landscaping Screens

Special landscaping or fencing/screening is required to enhance the views from the guest suites and screen undesirable views, such as service areas and any ground mounted equipment. Chain-link or barbed wire type fencing is not permitted. Clearances required by the equipment and/or local jurisdiction must be maintained.

### K. Retaining Walls

Retaining/landscaping walls located in public areas must be of a stone or masonry veneer or any other materials approved by Hilton Worldwide.

#### L. Handrails or Guardrails

Provide handrails or guardrails at the top of all retaining walls 42"/1.0 m above grade accessible to the guest.

### M. Not Applicable to this Brand

#### N. Satellite Dishes

Satellite dishes must be screened from view.

## O. Utility Equipment

Locate all utility equipment away from guest entrances and screen from guest view.

### P. Underground Irrigation System

An automatic underground irrigation system must be provided to support the maintenance of the exterior landscaping. The use of grey or recycled water may be considered for irrigation purposes only.

- Q. Not Applicable to this Brand
- R. Not Applicable to this Brand

#### S. Tree Clusters

Landscaping must include upright shade trees clustered along the walking path and grouped on the Outdoor Lounge side of the site. Design intent is to provide a varying experiential quality while moving around the course, where one of the long sides of the site is more open and the other side is more shaded, in lieu of evenly spacing trees along the path and around the site. Tree clusters must also be positioned to maximize the ability to be viewed while in the public spaces of the building, most importantly the lobby.

#### 2501.03 Sidewalks/Patios

#### A. Sidewalk Material

Sidewalks must be exposed, broom-finished concrete, or better. Access panels and manholes are not permitted in walkways.

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand

#### E. Terrace/Patio

Two patio areas, both brand signature elements, must be provided. The Patio must be next to the pool and it must be 400 ft<sup>2</sup> /37 m<sup>2</sup> minimum. The Outdoor Lounge must be adjacent to the Oasis (lobby) entrance and it must be 660 ft² /60 m².

#### F. Patio Floor Finish

The Patio and Outdoor Lounge must be exposed aggregate with a light sandblast or with a concrete finishing/curing product. The finish must be comfortable to walk on with bare feet. Decorative concrete finishes must be integral with the slab. Topical applications are not allowed.

#### G. Fire Pit

A fire pit must be provided at the Outdoor Lounge patio. Fire pits must be permanent and fueled by natural gas. Bowl must be metal, concrete or stone and must have minimum 18"/450 mm high ledge. UL approved automated operation is required. An emergency shut-off button must be highly visible in the area.

#### H. Outdoor Gas Grill

A minimum of two outdoor gas grills must be provided for guest use at the Patio adjacent to the pool. Grills must be four burner, outdoor rated, heavy-duty, stainless steel with a hinged lid and must have at least 600 in<sup>2</sup>/0.4 m<sup>2</sup> of grill cooking space each. Residential grade grills such as kettle-type are not permitted.

### I. Terrace/Patio Seating

The Patio must have a minimum of (2) four-top tables and a large community table seating 10-12 people. The tables must be metal frame with tops of shatter resistant material. Sun screen umbrellas must be provided at the four-top tables.

## J. Terrace/Patio/Outdoor Lounge

The Outdoor Lounge must have a minimum of (3) lounge chairs with cushions, (2) ottomans with cushions, (4) side tables, (6) benches, (3) fourtop tables with dining chairs, and a fire pit. Individual benches must be 48"/1.22 m to 60"/1.52 m long with backs but without arms. Benches must be made of faux rattan or of recycled plastic polymer. Four-top tables must be metal frame with tops of shatter resistant material.

### K. Not Applicable to this Brand

### L. Smoking Area

Provide a convenient smoking area when hotels are 100 percent non-smoking restricted or when market conditions dictate. Areas must meet the following requirements:

- 1. Area must be permanent in nature and provide cover from the weather. Cover may be an existing feature of the building or an added element.
- 2. The design of the cover and/or structure must match that of the main building.
- 3. Area must be at least 6'-0"/1.8 m from any entrance, not impeding foot traffic, and must be positioned so not to disturb guestrooms.
- 4. Furnishings, Fixtures & Equipment
  - a. One smoker's post receptacle.
  - b. One, 16"/400 mm wide x 30"/760 mm high trash receptacle must be provided.

## M. Exterior Railings

Exterior railings at steps, ramps, landings, retaining walls and exterior swimming pools must be aluminum with an electrostatic finish. Refer to Section 2516.05.D for additional requirements.

### 2501.04 Building Exterior

#### A. Exterior Finish Materials

Exterior building finish materials must be approved by Hilton Worldwide. Refer to the Brand Style Guide at <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a> for acceptable material, texture and color combinations.

#### B. The Beacon

The Beacon is an exterior signature Brand element that is required for all Home2 Suites™ by Hilton hotels. It is the most vertical element on the building and must be positioned near the main entry and drop-off porte cochere. It includes a vertical stripe and a backlit glass box at the top of the building. Refer to the prototype drawings for more details.

#### C. The Band

The Band, a recessed stripe leading from the base of the building up the Beacon is required. The stripe must be the color noted in the Brand Style Guide and it must be illuminated. Lighting must not spill over to adjacent building surfaces. Refer to the prototype drawings and Brand Style Guide for more details.

### D. Not Applicable to this Brand

#### E. Louvers

- 1. Louvers must be Kynar painted aluminum with storm proof and drainable blades in a color that coordinates with the exterior color scheme.
- 2. Exterior louvers, when aligned with guest suite windows, must be the same size and finish as the window frames.
- 3. Louvers must be combined into one larger louver when possible except at the laundry when exhaust may impact make-up air.
- F. Not Applicable to this Brand

#### G. Balconies

- 1. Balconies (when approved by the Brand) must be a minimum of 5'-0"/1.5 m deep.
- 2. Balconies/patios must be designed to provide privacy and security for guestrooms. Views must be blocked to adjacent balconies/patios.
- 3. Balcony floors must slope outwards or toward internal drains.
- 4. Balcony railings must be a minimum of 42"/1.1 m in height and at least partly open, or transparent for views. Any opening in railings must not exceed 4"/100 mm and include a bottom rail a 2"/50 mm maximum above the floor. Railings must not be horizontal or climbable by children.

#### H. Roof Materials

Roof materials must meet the following requirements:

- 1. Single-ply, non-ballasted, directly adhered membrane roofing system.
  - a. Roofing must be installed by a certified roofing contractor and carry a 20 year warranty.
  - b. System must be a light color, energy star or equivalent compliant light color (solar reflective index SRI 78 or better).

#### Roof Vents

Roof vents, exhaust caps and other penetrations must be painted a color compatible with the roofing color on gabled roofs and be hidden from view on flat roofs.

## J. Roof View Screening

All rooftop and ground mounted equipment must be screened from view.

- K. Not Applicable to this Brand
- L. Not Applicable to this Brand
- M. Antennae

Hotel antennae and satellites are not allowed to extend higher than any parapet wall. Other antennae and satellite dishes that are not used for the operation of the property must be camouflaged to blend with the building design.

#### 2501.05 Porte Cochere

A. Required or Optional

A porte cochere is required. Refer to the prototype drawings.

B. Porte Cochere Width

The width of the drive aisle must be at least 12'-0"/3.66 m minimum.

C. Clearance Height

Porte cochere height clearance must not be less than 9'-10"/3.0 m.

- D. Not Applicable to this Brand
- E. Porte Cochere Flooring

The area under the porte cochere must be a decorative non-slip surface paving such as brick, stone, tile pavers or color stamped concrete. Hand troweled, scored concrete, floated concrete or asphalt is not allowed. Decorative paving in driving areas must be sealed and cleanable. Painted finishes are not permitted.

### F. Porte Cochere Columns

Porte cochere support columns and other features at the building entry that could be damaged by car doors, luggage carts, etc. must be finished with a high-quality durable finish to coordinate with main exterior building finishes.

## G. Entrance Drive Paving

Entrance drive paving must be flush with the sidewalk at hotel entrance to facilitate the movement of luggage carts and for easy access into the hotel.

### H. Not Applicable to this Brand

### Soffit Venting

Provide soffit venting to avoid moisture/condensation problems.

## J. Porte Cochere Lighting

Provide decorative or recessed lighting at the porte cochere and any secondary entrances.

## K. Not Applicable to this Brand

## L. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### 2501.06 Parking

- A. Not Applicable to this Brand
- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

## F. Surface Parking

- 1. The parking area must accommodate a minimum of one space for each guest suite.
- 2. Not Applicable to this Brand
- 3. Provide wheelstops where car overhang has the potential of damaging light poles, landscaping or other objects.
- 4. Parking and drive areas must be concrete or sealed asphalt.
- 5. Heavy-duty, 6"/150 mm thick concrete must be used at trash collection and loading areas.
- 6. Provide 6"/152 mm concrete curb and gutter or sloped granite at all edges of the parking lot and drives. Asphalt curbing is not allowed. Turned-down slab edges are permitted at sidewalks.
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand

9. Parking lot striping must be white, except where other colors are required by local codes for fire lanes, accessible parking, no parking zones, etc.

#### G. Drives

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. The drive lane minimum width must be 24'-0"/7.3 m between parking stalls.
- 4. Not Applicable to this Brand
- 5. Dead end drive lanes are not allowed.

## H. Parking Stalls

- 1. Parking stalls must be a minimum of 18'-0"/5 m long.
- 2. Parking stalls must be a minimum of 9'-0"/2.75 m wide centerline to centerline. A maximum of 25 percent of the parking stalls may be compact stalls.
- I. Parking Garage/ Covered Parking

All of the requirements for surface parking, as well as the following, apply to garages and covered parking.

- 1. Not Applicable to this Brand
- 2. Garage must be located within a short distance from the main hotel entrance.
- 3. Finish Options Parking Garage/ Covered Parking

- a. Floor: Steel trowel finished concrete, hardened and epoxy sealed. Floors exposed to external elements must be waterproofed.
- b. Wall: Painted concrete or concrete block; protective barriers must be installed at areas vulnerable to damage.
- c. Ceiling: Painted concrete. Suspended acoustical tile ceilings are permitted only where sublevel of the hotel and necessitated by screening of insulation, piping, etc.
  - 1. Parking garages must have a minimum clear ceiling height of 8'-0"/2.4 m.
- 4. Light fixtures must be suitable for outdoor installation. Wrap-around type fluorescent fixtures are not permitted. Exposed lamp fixtures are not permitted. Fixtures must be located outside of drive lanes.
- 5. Parking garages must be designed to provide positive drainage to prevent standing water.
- 6. Not Applicable to this Brand
- 7. Parking garages or ramps designed with exterior decorative screens rather than permanent walls must be equipped with suitable protective guardrails for guest safety and protection.
- J. Not Applicable to this Brand
- K. Electric Vehicle (EV) Charging Stations
  - 1. EV charging stations are permitted but are not required.
  - 2. Stations must be protected or positioned to prevent damage from vehicles.
  - 3. Power supplied to the stations must be provided underground.
  - 4. Stations must provide Level 2 charging (240 volt AC input) minimum.
  - 5. Features must include the following:

- a. Ability for drivers to access stations via contactless credit cards and/or any manufacturer's subscription.
- 24/7 driver assistance including alternate charging station locations.
- Access control to eliminate energy theft and improve safety.
- Notifications to driver of charge status including completion or interruption of charge.
- e. Cord management system including long reach and storage.
- Enclosure must be corrosion and weather resistant and comply with NEMA 3R.
- 7. Stations must be SAE J1772 compliant and meet all UL and NEC requirements.
- 8. Signage must be provided designating parking space(s) for the electric vehicle charging stations.
- 9. Stations must meet Hilton Worldwide and any applicable local or federal accessibility requirements.

## 2501.07 Flagpoles

## A. Flag Poles

One 30'-0"/9 m flag pole is required for the national flag. Optionally, one 35'-0"/10 m pole for the national flag and two 25'-0"/7.5 m poles, one for the state and one for the Brand flag, are permitted. When multiple poles are used, they must be spaced so that each flag cannot wrap itself around another pole. Flag pole finish must coordinate with exterior materials and color schemes.

## B. Flag Pole Lighting

Flags must be illuminated. Lighting must be ground-mounted up lighting aimed on the flags. Pole mounted fixtures 8'-0"/2.4 m above grade are allowed in climates susceptible to snow.

### 2501.08 Exterior Lighting/Electrical

- A. Not Applicable to this Brand
- B. Not Applicable to this Brand
- C. Guest Entrance Lighting

All guest entrances must be well lit and readily identifiable.

D. Exterior Light Coordination

All exterior light fixtures must be suitable for outdoor installation and must have coordinated color temperature and characteristics.

- E. Not Applicable to this Brand
- F. Parking Lot Fixtures

Parking lot light fixtures must not be used for building uplighting.

G. Exterior Decorative Lighting

Exterior lighting located at the Patio and Outdoor Lounge must be provided through string lights and wall sconces.

H. Site Lighting Control

Exterior lighting must be controlled by a photocell with a manual override switch, by time clock or by building automation system - located in the back of house area. The control system must switch all lights on and off simultaneously.

I. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### J. Parking Lighting

- 1. The parking area must be illuminated.
- 2. Parking lot and driveway lighting must be pole-mounted, high energy efficient and long life.
- 3. Maximum pole height is 30'-0"/9.0 m. Cut off shields or similar devices must be used to prevent glare and annoyance.
- K. Not Applicable to this Brand
- L. Exterior Power Outlets

Provide exterior power outlets (socket outlets) around the building perimeter.

## 2502.00 Lobby Area

Refer to Sections 2514.00, Technical Criteria, and 2515.00, Furnishings, Fixtures, and Equipment, for requirements applicable to this section.

#### 2502.01 Vestibule

A. Vestibule Depth/Door Requirements

A vestibule is required at the entrance to the lobby. Doors must be automatic sliding with a breakaway feature and provide approximately a 4'-0"/1.22 m opening.

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Manual Locks

Any manual locks on the doors must be disengaged.

F. Nighttime Security Requirements

The entrance must be locked during off hours by use of magnetic locks, an intercom with buzzer and card key access. Provide remote release at front desk. A security camera must be provided at the entrance if the primary entrance is not within line of sight of the front desk.

- G. Not Applicable to this Brand
- H. Not Applicable to this Brand
- I. Finish Options Vestibule
  - 1. Floor: Porcelain tile (plank shape and wood look)
    - a. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile, wood
  - 2. Wall: Vinyl wallcovering
  - 3. Ceiling: Paint on gypsum, acoustic ceiling tile
- J. Not Applicable to this Brand

- K. Not Applicable to this Brand
- L. Not Applicable to this Brand
- M. Not Applicable to this Brand
- N. Not Applicable to this Brand
- O. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

## 2502.02 Lobby

- A. Not Applicable to this Brand
- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Luggage Cart Area

An accessible area designated for luggage carts must be provided.

- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Finish Options Lobby
  - 1. Floor: Porcelain tile (plank shape and wood look)
    - a. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile, wood
  - 2. Wall: Vinyl wallcovering. Accent wall tile is required where shown in the prototype.
  - 3. Ceiling: Paint on gypsum, acoustic ceiling tile (maximum percentage as shown in the prototype)
- K. Not Applicable to this Brand
- L. Not Applicable to this Brand
- M. Electrical
  - 1. Lighting must be switched from panels located within an employee area not accessible by guests.
  - 2. Three large decorative pendant lights Brand Signature Elements with dimming capabilities are required over the banquette. Minimum size: 20"/508 mm dia. x 10.5"/267 mm high. Pendant dimensions and hanging height above the floor must be coordinated with the ceiling height. Lamping must not result in "hot spots" or reveal exposed bulbs.
  - 3. Not Applicable to this Brand
  - 4. Not Applicable to this Brand
  - Not Applicable to this Brand
  - Not Applicable to this Brand

- 7. Refer to Section 2514.08 for minimum light level requirements.
- 8. Power outlets (socket outlets) must be provided for guest use.

#### N. House Telephone Outlets

Provide a minimum of one outlet for a house telephone in the lobby area or Business Center, if Business Center is open to the lobby area.

### O. TV Requirements

Two HDTVs, one 40"-42" and one 52", are required and must be easily viewable from the seating areas. The 40"-42" television must be located near the breakfast table. The 52" television must be on the Entertainment Wall.

### P. Furnishings, Fixtures and Equipment

- 1. Not Applicable to this Brand
- 2. Total lobby seating must accommodate the number of persons equal to 40 percent of the guest suite count. In no case must less than 42 seats be provided. Certain markets, such as resort areas or airport locations, require additional seating. If the lobby is enlarged in comparison to the prototype, artwork must be added and all seating must be increased - banquette lengthened and table and chairs added.
- 3. Seating must be composed of four types of zones: the breakfast tables, soft seating, dining seating and window perch seating. Approximately 25 percent of the total seat count must be provided at the breakfast tables. Soft seating must make up approximately 30 percent of the count. Another 30 percent must be composed of traditional dining seating with the remaining 15 percent window perch seating. The Oasis soft seating area must be an eclectic mixture of a banquette, lounge chairs, side chairs, ottomans, stools and tables. Refer to the Furniture, Fixtures, and Equipment Specifications for the design intent for all seating components.
- 4. Not Applicable to this Brand

## Seating

a. A dual-sided banquette – a Brand Signature Element - is required. Backseat and cushion must be tightly upholstered. Convenience outlets must be incorporated into the banquette for guest use. Refer to the Furniture, Fixtures, and Equipment Specifications for

required construction details on the banquette. Finish selections for the banquette may be customized to each design.

- b. Not Applicable to this Brand
- c. Lounge chairs must have upholstered seats and backs and must be of varying styles.
- d. Not Applicable to this Brand
- e. Not Applicable to this Brand
- f. Ottomans must be upholstered and have a minimum top surface area of 324 in<sup>2</sup>/.209 m<sup>2</sup>.
- g. Not Applicable to this Brand
- h. Dining chairs are to be a mix of wood-framed or polypropylene chairs with and without upholstered seats and/or backs. There must be between two to four different chair styles used.
- i. Not Applicable to this Brand
- j. Counter stools with backs must be used at the window perch. They may be with or without upholstery. Footrests must be metal or have metal caps for durability.
- k. Barstools with backs must be used at the breakfast tables. They may be with or without upholstery. Footrests must be metal or have metal caps for durability.
- I. Accent Pillows
  - 1. One banquette 9 accent pillows
- 6. Tables
  - a. Not Applicable to this Brand

- b. Tables used in lobby area must be high quality, commercial grade. The top surface material must be compliant with Section 2515.04.
- c. Commercial-grade bases must be provided for sturdy support of all tables.
- d. Dining tables at the banquette must be approximately 30"/760 mm high. All tabletops must be minimum 1-1/4"/31.7 mm thick. Tabletops must be engineered stone or high pressure laminate with wood edges. Two pairs of tables at the banquette must have the capability to be aligned together to create a larger table for 4-6 people.
- f. Small side tables must be wood, plastic and/or metal and be stain/moisture resistant. They must be of varying styles.
- g. The two breakfast tables must seat a minimum of 6 guests each. The tables must comfortably accommodate three guests per side at a minimum. Each tabletop must contain four power outlets (socket outlets) and two charging USB outlets. Outlets must be UL listed and meet UL spill test requirements. All power cords must be concealed.
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. The Entertainment Wall and Coffee Station must be provided in the Oasis. Refer to Furniture, Fixture and Equipment Specifications for required construction detailing. Any accessories selected for the Entertainment Wall must be submitted to Hilton for approval. Accessories are not allowed elsewhere in the lobby.

2502.03 Not Applicable to this Brand

2502.04 Front Desk

A. Workstation Quantities

Provide the following minimum number of registration workstations: Two stations: 0-200 keys
Add 1 station for each additional 100 keys above 200

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Not Applicable to this Brand
- H. Not Applicable to this Brand
- I. Finish Options Front Desk
  - 1. Floor: Carpet tile (see prototype for location), porcelain tile (plank shape and wood look)
    - a. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile, wood
    - b. At freestanding desks, the lobby flooring must continue behind the front desk. Anti-static/anti-fatigue mats with a wood grain are required behind the freestanding desks. Their design must be approved by Hilton Worldwide.
  - 2. Wall: Vinyl wallcovering
    - a. Not Applicable to this Brand
    - b. Not Applicable to this Brand
    - c. Not Applicable to this Brand

- d. Not Applicable to this Brand
- e. Back wall must comply with the prototype drawings. Material finishes must match those provided in the Furniture, Fixtures, and Equipment Specifications. All materials must be submitted to Hilton Worldwide for review and approval prior to installation.
- 3. Ceiling: Paint on gypsum
- J. Front Desk Millwork
  - 1. The front desk must be freestanding, open on both sides. Refer to the prototype drawings for millwork details.
  - 2. Computer monitors must not be within guest view above the countertop.
  - 3. Not Applicable to this Brand
  - 4. The front desk finishes must be as follows:
    - a. The front desk countertop (customer counter) must be solid surface or engineered stone with a recycled content at a minimum and must match that of the Home 2 MKT. Stone tile, marble, cultured marble and granite are not permitted.
    - b. Not Applicable to this Brand
    - c. The employee side of the front desk must be high pressure plastic laminate as a minimum.
- K. Not Applicable to this Brand
- L. Front Desk Back Wall
  - 1. The front desk back wall with broad sustainable wood band panels and signature green glass window with Brand logo is a Signature Brand Element. Refer to the prototype drawings for detailed information. No other item — signage, power outlets (socket outlets), etc.— is allowed on the back wall.
- M. Electrical

- 1. Refer to Section 2514.08 for minimum light level requirements.
- 2. Not Applicable to this Brand
- 3. Each workstation must have the following as a minimum:
  - a. Above the counter: a duplex power outlet (socket outlet), single telephone outlet and two data ports. Dedicated phone lines are required.
  - b. Below the counter: two quad power outlets (socket outlets) and four data ports. All outlets must be dedicated and grounded.
- 4. The power outlets (socket outlets) below the desk must not be on the same dedicated grounded circuit as the outlets above the desk. Each dedicated circuit may provide power up to three workstations.

### N. Furniture, Fixtures and Equipment

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Safe-deposit boxes must be provided. A minimum of one box for every 20 guestrooms must be provided. These boxes are still required when in-room safes are provided. Safe-deposit boxes must be provided in the office area or within the front desk (employee side) if there is ample space. If the boxes are located within the front desk, and are within view of guests, cabinet doors must conceal them.
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand
- 8. (California Only) When required, seating must be provided for Front Desk team members. Seating must comply with the following:

- · Seating and upholstery must be manufacturer's commercial grade.
- Stack chairs and folding banquet tables are not allowed.
- Clearance from the seat to the front desk millwork must be no less than 8"/200 mm to allow for leg clearance from the seat to the bottom of the apron.

#### 2503.00 Public Restrooms

Refer to Sections 2514.00, Technical Criteria, and 2515.00, Furnishings Fixtures and Equipment, for requirements applicable to this section.

#### A. Restroom Quantities

There must be one restroom each for men and women in the lobby area. The restrooms must not open directly onto the lobby. The number of lavatories, stalls and urinals required are as indicated on the prototype drawings or as dictated by code, whichever is more stringent.

- B. Not Applicable to this Brand
- C. Entrance Doors

All restroom entrance doors must have door closers. A privacy set is required, except in multi-stall restrooms where the entry door is not allowed to be lockable. Push/pull plates are required at multi-stall restrooms. Direct line of sight into multi-occupant restroom toward the urinal or water closet is prohibited.

D. Not Applicable to this Brand

## E. Not Applicable to this Brand

F. Finish Options - Public Restrooms

1. Floor: Porcelain tile

a. Base (minimums): 3"/75 mm porcelain tile,

2. Wall: Vinyl wallcovering, porcelain tile

3. Ceiling: Paint on gypsum, acoustic ceiling tile

G. Restroom Partition Stalls

**Restroom Partitions Stalls** 

1. Water Closet Partitions

Water closet partitions and urinal screens are required for multi-stall restrooms.

- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Partition Installation & Finish

Water closet partitions may be floor or ceiling mounted.

5. Urinal Screen Installation

Urinal screens must be wall mounted with tamper proof fasteners.

#### 6. Partition & Door Material

Partitions and screens must be plastic laminate, solid polymer (high density polyethylene) or better. Metal partitions are not allowed.

#### 7. Partition Door Location

Partition doors must be hung from the same side.

### 8. Partition Door Width

Water closet partition doors must be 2'-6"/760 mm wide minimum.

#### H. Accessories

## 1. Water Closet Stall Required Items

The following items are required within each water closet stall or within the room of single stall toilets:

- a. Surface-mounted dual toilet tissue dispensers. Plastic is not allowed.
- b. Coat hook mounted at 60"/1.5 m above the finished floor.

## 2. Shared Space Required Items

The following items are required within the shared space:

a.	A minimum of one motion-activated, paper towel dispenser that is recessed or semi-recessed. Electric hand dryers are allowed when used in
	conjunction with paper towel dispensers.

- b. Not Applicable to this Brand
- c. Trash receptacle as a freestanding decorative unit or under-counter with a cut-out in the vanity countertop.
- 3. Washbasin Required Items

The following items are required at the washbasin:

- a. Decorative facial tissue dispenser
- b. Decorative liquid soap dispenser
- I. Matching Finishes

All finishes (accessories, fixtures, hardware) must match.

J. Component Finishes

All finish components must be polished or brushed chrome, brushed nickel or stainless steel.

K. Exhaust Ventilation

### 1. Interlock Toilet Exhaust

For multi-stall restrooms, interlock toilet exhaust fan with an air handling system that provides makeup air for the exhaust air volume. Operate fans continuously.

### 2. Negative Toilet Exhaust

Maintain the toilet room negative with respect to adjacent areas by exhausting ten percent more air flow than is supplied directly to the room.

## L. Plumbing

#### 1. Floor Drain

Install chrome plated brass floor drain and slope floor for proper drainage.

### 2. Shock Absorbers

Provide shock absorbers on all flush valve systems with isolation valve and access door for maintenance.

## 3. Exposed Plumbing

Exposed plumbing must be chrome-plated.

#### 4. Water Closet Material

Water closets must be vitreous china, low flow, with elongated bowls and flush valve.

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### 6. Water Closet Seats

Water closet seats must match fixture color, be solid plastic, open front, and self-sustaining.

#### 7. Urinal Material

Urinals must be vitreous china.

#### 8. Fixture Color

All fixtures must be white.

#### 9. Touchless Faucets

Provide commercial grade faucets with single lever or dual lever handles. Dual lever must be 8"/203 mm on centers and have a quarter turn feature. All faucets must be plated brass, with replaceable cartridges, and manufactured by nationally known manufacturers. All fixtures must be low-flow type. Acrylic controls are not allowed.

## M. Vanity

## 1. Vanity Height

The top of the wash basin must be 34"/860 mm high.

#### 2. Wash Basin Material

Wash basins must be vitreous china under-mount bowls with an overflow design as a minimum. Single stall restrooms may have a wall-hung china commercial sink meeting ANSI.

## 3. Top/Splash Material

Built-in vanities must have a solid-surface or engineered stone top and matching splashes. Cultured marble, marble, tile and granite are not allowed. Splashes must be 4"/100 mm.

#### N. Electrical

### 1. Lights

Lights must be key switched or have occupancy sensors with a 30 minute delay before switching off. If sensors are used, a single entry light must remain on at all times in multi-stall restrooms.

## 2. Decorative/Recessed Lighting

In a single user restroom, a decorative light fixture must be provided with a satin nickel, brushed stainless steel, or brushed aluminum finish. It is to be an ambient overhead light with a clear frosted diffuser or lens. Lamping must not create "hot spots" on the shade or lens.

- 3. Not Applicable to this Brand
- 4. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### 5. Power Outlets

Two GFCI/ELCB/RCCB (or equal) power outlets (socket outlets) must be located on a sidewall of the water basin.

### O. FF&E

Furnishings, Fixtures and Equipment

1. Mirror

A decorative framed mirror is required above all vanities.

2. Line of Sight

Direct line of sight via mirror reflection into restrooms is prohibited.

## 2504.00 Food And Beverage

Refer to Sections 2514.00, Technical Criteria, and 2515.00, Furnishings Fixtures and Equipment, for requirements applicable to this section.

## 2504.01 Food Prep/ Kitchen

- A. Not Applicable to this Brand
- B. Food Prep Area Location

Provide food prep directly adjacent to food serving area.

- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Not Applicable to this Brand
- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Not Applicable to this Brand
- K. Not Applicable to this Brand
- L. Not Applicable to this Brand
- M. Not Applicable to this Brand
- N. Not Applicable to this Brand
- O. Not Applicable to this Brand
- P. Not Applicable to this Brand
- Q. Finish Options Food Prep/ Kitchen

- 1. Floor: Quarry tile (6"/150 mm x 6"/150 mm), porcelain tile (12"/300 mm x 12"/300 mm minimum), epoxy-screed concrete floors, poured resinous flooring system. Non-slip pads in high traffic areas.
  - a. Not Applicable to this Brand
  - b. Not Applicable to this Brand
  - c. Not Applicable to this Brand
  - d. Not Applicable to this Brand
  - e. Base (minimums): 4"/100 mm quarry tile. Tile base must be matching, sanitary and coved when possible.
- 2. Wall: Epoxy paint
- 3. Ceiling: Washable ceiling tile, paint on gypsum
- R. Countertop Materials

Countertops must be stainless steel.

S. Storage & Shelving

Storage racks must be provided to accommodate 2.5 par of all china (plates, bowls, coffee cups and silverware). Stainless steel shelving units must be hung to house the microwave and operating manuals.

T. Required Accessories

A hand sink, soap dispenser and hands-free towel dispenser must be provided.

U. Not Applicable to this Brand

### V. Plumbing

- 1. Grease Interceptors (if required by local jurisdiction)
  - a. Provide grease interceptors located outdoors in an area serviceable without disruption of normal activities, and out of guest view.
  - b. Grease drains that are directed to grease traps must use cast iron piping systems that allow mechanical cleaning when blockages occur.
- 2. Floor Drains/Basins
  - a. Provide floor drains.
- W. Not Applicable to this Brand
- X. Electrical
  - 1. Lighting
    - a. Provide recessed fluorescent, vapor-proof fixture with warm white lamps.
    - b. Not Applicable to this Brand
    - c. Not Applicable to this Brand
    - d. Refer to Section 2514.08 for minimum light level requirements.

#### 2. Power

- a. Power outlets (socket outlets) must be provided to suit the installed equipment with an additional general purpose power outlets (socket outlets).
- b. Protect all receptacles in kitchen with GFCI/ELCB/RCCB or equal circuits.

### Y. Not Applicable to this Brand

### Z. Equipment

- 1. Provide for the following commercial grade equipment:
  - a. Three-compartment stainless steel sink with drain boards
  - b. Vertical reach-in refrigerator, 22 ft³/0.329 m³ minimum, with a solid single door and a stainless steel finish. Residential units and top and bottom units are not permitted.
  - c. Vertical reach-in freezer, 22 ft³/0.329 m³ minimum, with a solid single door and a stainless steel finish. Residential units and top and bottom units are not permitted.
  - d. Coffee brewer (see order forms on Hilton Worldwide's The Lobby website).
  - e. Not Applicable to this Brand
  - f. Not Applicable to this Brand
  - g. Not Applicable to this Brand
  - h. Not Applicable to this Brand
  - i. Dishwasher
  - j. Not Applicable to this Brand
  - k. Not Applicable to this Brand
  - I. Not Applicable to this Brand

- m. All equipment must have NSF, Underwriters Laboratories or CE labels or code-approved equivalent.
- 2. Provide a stainless steel island.
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand
- 12. Not Applicable to this Brand
- 13. Provide 3HP disposal in dishwashing area where code permits. Use garbage collector "Hummel pot" where disposals are prohibited.

### 2504.02 Food And Beverage Storage

- A. Not Applicable to this Brand
- B. Dry/Liquor Storage

### Provide a lockable room for dry storage.

- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Not Applicable to this Brand
- H. Finish Options Food & Beverage Storage

Finish Options - Food & Beverage Storage

- 1. Floor: Quarry tile (6"/150 mm x 6"/150 mm), epoxy-screed concrete floors within beer cooler/cellars laid to fall with central floor drain.
  - a. Base (minimum): 4"/100 mm quarry tile
- 2. Wall: Paint, FRP
- 3. Ceiling: Washable ceiling tile, paint on gypsum
- I. Not Applicable to this Brand
- J. Not Applicable to this Brand
- K. Not Applicable to this Brand

#### L. Electrical

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Refer to Section 2514.08 for minimum light level requirements.
- 2504.03 Not Applicable to this Brand
- 2504.04 Not Applicable to this Brand
- 2504.05 Not Applicable to this Brand

### 2504.06 Complimentary Area

- A. Not Applicable to this Brand
- B. Not Applicable to this Brand
- C. Operable Drapery/Doors

Operable drapery is required at the breakfast serving counter to completely close the counter area off during non-breakfast hours. Refer to the prototype drawings for locations and to the Furniture, Fixture and Equipment Specifications for design intent.

- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Not Applicable to this Brand
- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Not Applicable to this Brand
- K. Not Applicable to this Brand
- L. Not Applicable to this Brand
- M. Not Applicable to this Brand
- N. Not Applicable to this Brand
- O. Not Applicable to this Brand
- P. Not Applicable to this Brand
- Q. Not Applicable to this Brand
- R. Not Applicable to this Brand
- S. Not Applicable to this Brand

- T. Not Applicable to this Brand
- U. Not Applicable to this Brand
- V. Finish Options Complimentary Area
  - 1. Floor: Porcelain tile (plank shape and wood look)
    - a. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile
  - 2. Wall: Vinyl wallcovering
  - 3. Ceiling: Paint on gypsum
- W. Millwork

### Serving Counters

- 1. Not Applicable to this Brand
- 2. Serving counters for the breakfast serving area are a Brand signature element and must be provided as shown on the prototype drawings and in the Furniture, Fixtures and Equipment Specifications in relation to style, length and layout.
- 3. The counter must be serviced from the rear and food served from the front.
- 4. Refer to the Furniture, Fixtures and Equipment Specifications for required construction details on the base cabinets. Finish selection is open but must be to the extent shown in the Furniture, Fixtures and Equipment Specifications.
- 5. Counter depth must be 36"/914 mm minimum.
- 6. The countertop must be a solid surface or engineered stone. Tile, cultured marble, marble or granite is not allowed.

- 7. Upper shelving is required.
- 8. A breakfast serving counter, 18'-0"/5.5 m plus an additional 3'-0"/914 mm for juice, must be provided directly adjacent to the front desk as shown on the prototype drawings. In addition, a roller shade must be installed at the juice cabinet and utilized during non-breakfast hours. Refer to the prototype drawings for locations and to the Furniture, Fixture and Equipment Specifications for design intent.
- A coffee serving counter integrated with the Entertainment Wall must be provided. Counter must have a cutout in the top for trash container below. The coffee serving countertop must match the breakfast serving counter. Provide open-front pullout drawers for coffee cup storage. Refer to the Furniture, Fixtures and Equipment Specifications for details.
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand
- 12. A dish recovery unit that is 7'-6"/2.28 m long x 36"/900 mm high x 24"/600 mm deep must be provided. Unit is to have cutouts in the countertop for access to trash and recycling containers below. The dish return cart is to sit next to the unit. Countertop must be an engineered stone or solid surface material.

### X. Lighting

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Refer to Section 2514.08 for minimum light level requirements.

- Y. Not Applicable to this Brand
- Z. FF&E

### Furniture, Fixtures and Equipment

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Provide the following equipment: (Graphics package required on/around some pieces; Refer to hotelsigns.com/home2suites for information.)
  - a. Two commercial microwaves with stainless steel finish that are programmed for the F&B offering. See product details/order forms on Hilton Worldwide's The Lobby website.
  - b. Rotary toaster. See product details/order forms on Hilton Worldwide's The Lobby website.
  - c. Kettle. See product details/order forms on Hilton Worldwide's The Lobby website.
  - d. Not Applicable to this Brand
  - e. One, minimum, waffle iron. See product details/order forms on Hilton Worldwide's The Lobby website.
  - f. Four-head juice dispenser. See product details/order forms on Hilton Worldwide's The Lobby website.

- Coffee urns (decaffeinated and regular, hot water). See product details/order forms on Hilton Worldwide's The Lobby website.
- h. Under-counter mini-refrigerator that is stainless steel, glass front, lockable, 6.5 cu ft. with interior light. See product details/order forms on Hilton Worldwide's The Lobby website.
- i. Refrigerated cold well or food pan with wire rack and poly cover; ensure proper fit within millwork. See product details/order forms on Hilton Worldwide's The Lobby website.

### **2505.00** Not Applicable to this Brand

#### 2506.00 Commercial Facilities

Refer to Sections 2514.00, Technical Criteria, and 2515.00 Furnishings Fixtures and Equipment, for requirements applicable to this section.

### 2506.01 Sundries/Gift Shop

A. Retail Space Requirement

A retail area, the Home2 MKT (a signature Brand element) must be provided. The area must be directly adjacent to the front desk for ease of service by front desk employees.

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand

- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Finish Options Sundries/ Gift Shop
  - 1. Floor: Porcelain tile (plank shape and wood look)
    - a. Base (minimiums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile
  - 2. Wall: Vinyl wallcovering
  - 3. Ceiling: Paint on gypsum
- H. Millwork Requirements

Shelving, 18"/450 mm deep minimum, must be provided for display of food and sundries. Plastic laminate base cabinets and finishes must be provided. Closed lockable cabinetry millwork for storage and an approved adjustable display system for sundries must be provided. Refer to the Furniture, Fixtures and Equipment Specifications for details.

- I. Not Applicable to this Brand
- J. Countertop Height

Millwork countertop must match the front desk countertop (guest side).

K. Cabinetry Requirements

The finish and style of all millwork must coordinate with the front desk millwork.

L. Lighting Requirements

Lights must be wired to stay on at all times or be key switched.

### M. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

N. Not Applicable to this Brand

### O. Equipment

- 1. A commercial-grade, glass door, reach-in refrigerator and separate glass door, reach-in freezer, each 22 ft³/0.6 m³ minimum, with selfcontained condensation evaporation system must be provided. Units must have a minimum of four vinyl-coated adjustable shelves for product display. Exterior surfaces must be all stainless steel or all black. All interior surfaces must be a white finish. The refrigerator and freezer must match in size and color.
- 2. Not Applicable to this Brand
- 3. Ice machines are not allowed in the space.
- 4. Not Applicable to this Brand
- 5. No brand endorsements are allowed on the refrigeration units.
- 6. The freezer and refrigerator units must have illuminated panels above the door. The panel graphics must be the Home2 approved design.

## 2506.02 Guest Laundry

A. Guest Laundry Requirement

A guest laundry must be provided.

B. Guest Laundry Location

Guest laundry must be in a separate room within the fitness center space, but it must not be closed off.

C. Location/Equipment Visibility

Equipment must be hidden from direct view from the fitness center entry.

- D. Not Applicable to this Brand
- E. Finish Options Guest Laundry
  - 1. Floor: ECOSurfaces ECOstone interlocking rubber tiles, ½"/6 mm thick, to match fitness center.
    - a. Base (minimums): 4"/100 mm through body synthetic
  - 2. Wall: Vinyl wallcovering
  - 3. Ceiling: Paint on moisture resistant gypsum
  - 4. No exposed structure, pipes, ducts, etc. are allowed.
- F. Not Applicable to this Brand
- G. Floor Drain

Provide a floor drain with chrome plated brass cover with floor sloped to drain.

H. Not Applicable to this Brand

#### I. Concealed Connections

Conceal all electrical and plumbing connections behind the connected equipment.

### J. Lighting Requirements

Lights must be wired to remain on, be key switched or have occupancy sensors with a 30 minute delay before switching off. If sensors are used, a single entry light must remain on at all times.

### K. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### L. Not Applicable to this Brand

### M. FF&E

Furnishings, Fixtures and Equipment

- 1. A minimum of two each commercial washer and dryer must be provided. Dryers must be vented/exhausted to the exterior. All lint traps/ interceptors must be concealed and out of guest view.
- 2. Provide an area of seating within the fitness center for guest laundry users as shown in the prototype drawings. Seating must include a minimum of two chairs and one side table. Refer to the Furniture, Fixtures and Equipment Specifications for design intent.
- 3. Provide the approved 60"/1.52 m towel and folding station in the adjacent fitness center. Refer to the Furniture, Fixtures and Equipment Specifications for a detailed design.

2506.03 Vending Area

### A. Vending Room Requirements

A minimum of one vending room must be located on every guest suite floor.

- B. Not Applicable to this Brand
- C. Vending Equipment Location

Vending equipment must be located in an alcove or in an enclosed room to reduce noise and conceal visibility from public circulation.

### D. Entrance Doors

Entry door, when provided, must have a vision panel or sidelight.

### E. Finish Options - Vending Area/Corridor Pantry

Finish Options - Vending Area

- 1. Floor: Porcelain tile
  - a. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile
- 2. Wall: Vinyl wallcovering
- 3. Ceiling: Acoustic ceiling tile
- 4. No exposed structure, pipes, ducts, etc. are allowed.

### F. Window Treatments

Vending rooms with windows, located on the exterior wall, must have the same window treatment as adjacent spaces.

#### G. Floor Drain

Provide a floor drain with chrome plated brass cover with floor sloped to drain.

### H. Drain Trap Insulation

Insulate all ice machine drain traps to prevent condensation.

### I. Filtered Water Supply/Power Outlets

Provide a filtered cold water supply to the ice maker and power outlets (socket outlets) for all equipment.

### J. Lighting Requirements

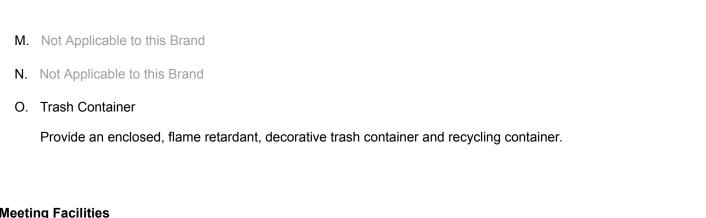
Provide recessed or decorative lighting that is wired to remain on, be key switched or have occupancy sensors with a 30 minute delay before switching off. If sensors are used, a single entry light with a minimum light level of two foot-candles/200 lux maintained when the room is unoccupied, must remain on at all times.

### K. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### L. Vending Area/Corridor Pantry Equipment

When vending areas are required by 2506.03.A, each area must contain a minimum of one self service ice machine with a minimum production capacity of 5 lb/2.2 kg per 24-hours for each guestroom on the floor served. Machine must be equipped with sanitary dispenser operated by push button, questroom key card or complimentary token. Open-bin type ice machines are not permitted.



## 2507.00 Meeting Facilities

Refer to Sections 2514.00, Technical Criteria, and 2515.00 Furnishings, Fixtures and Equipment for requirements applicable to this section.

- A. Not Applicable to this Brand
- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- 2507.01 Not Applicable to this Brand
- 2507.02 Meeting Rooms
  - A. Meeting Room Requirements

Meeting rooms are to be included at the owner's discretion. All individual components must meet these standards. The meeting room(s) allowed by Hilton Worldwide is one bay boardroom, three bay meeting room or one bay boardroom with three bay meeting room.

- B. Not Applicable to this Brand
- C. Meeting Room Length/Width

Meeting rooms are not allowed to be more than twice as long as the narrowest dimension.

- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Restroom Proximity

Provide convenient access to public restrooms.

- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Structural Columns/Stacking Operable Partitions

Structural columns and stacking operable partitions must not protrude more than 1'-6"/450 mm into the meeting room at any point.

K. Not Applicable to this Brand

### L. Not Applicable to this Brand

### M. Credenza

Built-in counters with cabinet storage must be provided. The top surface material must be compliant with Section 2515.04.

### N. Doors

- 1. Single doors must be a minimum of 3'-0"/900 mm wide. Paired doors must be no less than 3'-0"/900 mm wide for each leaf. All doors must be 7'-0"/2.0 m high minimum.
- 2. All entrance and service doors must have a tamper-proof, 180 degree, reverse, one-way viewer looking into the room.
- 3. Interior doors must be solid-core wood. Painted hollow metal doors are allowed only at exterior exits. Exterior doors must be solid; glass doors are not allowed on service or egress paths.
- 4. Not Applicable to this Brand
- 5. Meeting room service doors must have perimeter sound stripping, closers with hold open capability, and kick plates on the meeting room side of the door that blend with décor.
- 6. Meeting room entrance doors must have decorative hardware, perimeter sound stripping, and closers with hold open capability.

### O. Operable Partitions

- 1. Operable partitions must be stacked behind a concealed door in a closet when not in use. Closet doors must match the surrounding wall finish.
- 2. All operable partitions must be top-supported and have a laboratory STC of 52 minimum and field-tested NIC 42. A permanent acoustical separation, having a rating of not less than STC 52, must be installed above each operable partition and extend to the underside of the structure above.

- 3. Provide a positive bulb-seal type mechanical closure (hinged closure not acceptable) with minimum 250 lbs pressure. Provide sufficient structural support in abutting walls to compensate for this requirement.
- 4. Provide hard surfaced, flush walls with sufficient structural support where operable partitions terminate to ensure proper bedding of joint seal.
- 5. Operable partitions must be standard steel construction with minimum 24 gauge steel faces and sound-retardant core assembled to minimum 16 gauge reinforced steel frame, insulated to achieve acoustical performance specified.
- 6. Not Applicable to this Brand
- 7. Seal all wiring and piping penetrations above operable partitions.
- P. Finish Options Meeting Rooms
  - 1. Floor: Carpet (carpet tile)
    - a. Base (minimum): 4"/100 mm through body synthetic
  - 2. Wall: Vinyl wallcovering
  - 3. Ceiling: Paint on gypsum, acoustic ceiling tile
    - a. Not Applicable to this Brand
    - b. The minimum ceiling heights are as follows:

Meeting Room Minimum Ceiling Heights	
Area	Finished Ceiling Height
< 500 ft²/46.45 m²	8'-6"/2.60 m
500 ft²/46.45 m² - 2,000 ft²/185.80 m²	10'-0"/3.05 m
> 2,000 ft <sup>2</sup> /185.80 m <sup>2</sup>	11'-0"/3.35 m

### Q. Not Applicable to this Brand

### R. Electrical

- 1. Provide recessed lighting. Lighting must be dimmable and wired in a minimum of two zones for varying light levels/areas.
- 2. Lighting for divisible meeting rooms must be controlled by local dimmers and by remote dimmers allowing combined dimming control of subdivided spaces.
- 3. Not Applicable to this Brand
- 4. Refer to Section 2514.08 for minimum light level requirements.
- 5. For all meeting rooms over 2,000 ft²/185 m², provide at least one 208-240 VAC outlet.
- 6. Power outlets (socket outlets), every 20'-0"/6.0 m on permanent walls, must be available for display purposes.
- 7. Not Applicable to this Brand
- 8. Provide four floor power outlets (socket outlets) per every 800 ft²/74 m².

## S. Technology

Refer to Section 2507.08 Technology Infrastructure for audio visual requirements.

- 1. Provide one outlet for a house telephone per subdivision.
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand

- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Provide one MATV outlet in each meeting room subdivision.

## T. Furnishings, Fixtures and Equipment

- 1. Meeting rooms must be furnished with folding tables with high pressure laminate or ABS tops and stack chairs with fabric upholstered seats and backs. Chair seat to be a minimum of 18"/450 mm wide x 22"/560 mm deep.
- 2. Not Applicable to this Brand
- 3. A projection screen must be provided, sized appropriately for the space. If permanently installed, it must be ceiling recessed.
- 4. Provide wall-mounted artwork.
- 5. Window Treatment Refer to 2515.03 for additional requirements
  - a. Provide decorative window treatment with blackout capability. Refer to the Furniture, Fixtures and Equipment Specifications for design intent.

#### 2507.03 Boardroom

A. Boardroom Requirements

Boardrooms to be included at the owner's discretion. All individual components must meet these standards.

B. Not Applicable to this Brand

- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Doors
  - 1. Boardroom entrance doors must swing flat against the pre-function wall.
  - 2. All entrance and service doors must have installed a tamper-proof, 180 degree, one-way viewer looking into the function space.
  - 3. Doors must be solid core wood. Painted hollow metal doors are not allowed.
- G. Finish Options Boardroom
  - 1. Floor: Carpet (carpet tile)
    - a. Base (minimum): 4"/100 mm through body synthetic
  - 2. Wall: Vinyl wallcovering
  - 3. Ceiling: Paint on gypsum
- H. Not Applicable to this Brand
- Electrical
  - 1. Lighting must be recessed or decorative, centralized dimmer controlled and be provided along the perimeter of the room.
  - 2. Refer to Section 2514.08 for minimum light level requirements.
  - 3. Provide two power outlets (socket outlets) at no more than 12'-0"/3.7 m on center around perimeter walls.

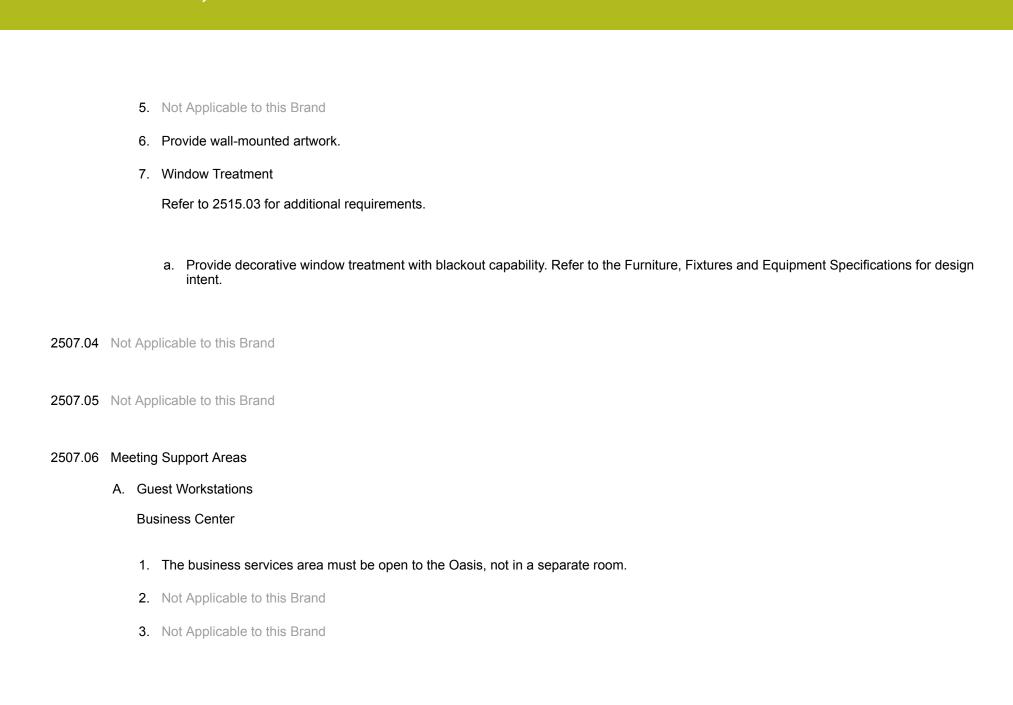
- 4. Power and data connections must be provided in pop-up boxes in the conference table top.
- 5. Provide two floor power outlets (socket outlets) per every 400 ft²/37 m².

### J. Technology

- 1. Provide a telephone outlet integrated into the boardroom table.
- 2. A telephone outlet is required for house telephone.
- 3. Not Applicable to this Brand
- 4. Audio Visual (AV)
  - a. AV connections must be provided in pop-up boxes in the conference table top.
  - b. Provide a minimum 52" wall mounted HDTV with connectivity to MATV system and to boardroom table connection, or else provide a ceiling recessed, electronically operated screen with controls located near lighting controls.
- K. Furnishings, Fixtures and Equipment

Furnishings, Fixtures and Equipment

- 1. Provide a permanent conference table to seat a minimum of eight people.
- 2. Provide Diffrient World task chair by Humanscale with mesh back, upholstered seat and adjustable armrests.
- 3. A built-in counter with cabinet storage must be provided for service. The top surface material must comply with Section 2515.04. A free standing console is allowed.
- 4. Not Applicable to this Brand



- 4. Not Applicable to this Brand
- Not Applicable to this Brand
- Not Applicable to this Brand
- 7. Finish Options Business Center
  - a. Floor: Porcelain tile (plank shape and wood look)
    - 1. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm wood, porcelain tile
  - b. Wall: Vinyl wallcovering
  - c. Ceiling: Paint on gypsum, acoustic ceiling tile
- 8. Provide a minimum of two computer workstations.
- 9. Not Applicable to this Brand
- 10. A dual station desk with central storage armoire with doors must be provided. Refer to the Furniture, Fixture and Equipment Specifications for required construction detailing of the workstation. A shared printer must be placed on the open shelves. CPUs should be in the lower cabinet out of direct view. Finish selections listed in the specifications are optional.
- 11. Not Applicable to this Brand
- 12. Not Applicable to this Brand
- 13. Electrical
  - a. Provide two power outlets (socket outlets) in a pop-up box in the top of each workstation. Outlets must be UL listed, plug-in type and meet UL spill test requirements.

- b. Provide a minimum of four power outlets (socket outlets) and data outlets at each workstation.
- c. Not Applicable to this Brand
- d. Not Applicable to this Brand
- e. Lights in business center area must be on keyed switches.
- f. Refer to Section 2514.08 for minimum light level requirements.
- Technology
  - a. Not Applicable to this Brand
  - b. Provide data outlets at each PC workspace.
- 15. Furniture, Fixtures and Equipment
  - a. Refer to Section 1201.02 for equipment requirements.
  - b. A Diffrient World chair by Humanscale with upholstered seat and adjustable armrests is required at each workstation.
  - c. The Brand Signature Artwork is required. Refer to the Furniture, Fixtures and Equipment Specifications on <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a> for required specifications. Installation requirements include:
    - 1. Artwork must be displayed over each workstation and security mounted.
    - 2. One area must include four, 14"/350 mm x 14"/350 mm pieces that are displayed together and stacked evenly in two rows to create a square.

- 3. The second area must display a single 30"/750 mm x 30"/750 mm piece.
- 4. Each artwork display must cover 900 in2/0.6 m<sup>2</sup>.

## B. Meeting Storage

- 1. The area of lockable storage for the meeting rooms must be a minimum of 15 percent of the total meeting room square footage.
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Finish Options Meeting Storage
  - a. Floor: Steel troweled concrete, hardened and sealed
    - 1. Base (minimum): 4"/100 mm vinyl
  - b. Wall: Paint

- 1. Provide protection to meeting storage walls with a 48"/1.2 m high laminated or fiber reinforced panel wainscot applied to gypsum board partitions unless CMU walls are provided.
- c. Ceiling: Paint on gypsum, painted structure
- 8. Lighting fixtures must have a protective wire or plastic enclosure.
- 9. Refer to Section 2514.08 for minimum light level requirements.

#### 2508.00 Recreational Facilities

#### 2508.01 Fitness Center

A. Fitness Center Requirement

All hotels must have a fitness center.

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Size Requirement

The fitness center must be a minimum of 580 ft²/53.8 m² that is located off the lobby and includes a quest laundry. For properties larger than 120 quest suites, this space must be enlarged to 675 ft<sup>2</sup>/62.7 m<sup>2</sup>. For more than 160 quest suites, add 3 ft<sup>2</sup>/0.3 m<sup>2</sup> per additional quest suite.

E. Larger Hotel Requirements

Properties with more than 160 rooms must contact Hilton Worldwide for additional equipment requirements.

### F. Equipment Requirements Larger Hotel

Properties that exceed their minimum square footage requirement (based upon room count) must meet the equipment requirements (number and type of pieces) for their total square footage.

- G. Not Applicable to this Brand
- H. Securable & Spa Adjacent

The fitness center must not be directly accessible to the pool areas.

- I. Not Applicable to this Brand
- J. Doors and Windows
  - 1. Entry door must have a large view panel (the maximum code will allow) or be a solid door with side lights. The view panel and side lights must not have window treatments other than specified graphics from the Brand. Maximum glass is preferred between the fitness center and the adjacent corridor, pool, or exterior.
  - 2. Not Applicable to this Brand
  - 3. Roller or Mecho shades matching the décor are required on any exterior-facing, floor to ceiling-height windows.
- K. Finish Options Fitness Center
  - 1. The fitness center must have brand approved finishes. Requirements include neutral walls with an accent wall, tiled pilasters, rubber flooring, and branded graphics.
  - 2. Floor: ECOSurfaces ECOstone interlocking rubber tiles, ¼"/6 mm thick, in four colors. Order forms are located in the Spin2Cycle Fitness Center Manual at www.hiltonworldwide.com/design.

- a. Base (minimums): 4"/100 mm through body synthetic
- 3. Wall: Vinyl wallcovering, porcelain tile
  - a. Not Applicable to this Brand
  - b. Accent walls must be provided both accent wallcovering and accent tile. All other walls must be neutral in color. Refer to the Spin2Cycle Fitness Center Manual at www.hiltonworldwide.com/design for design intent and required specifications.
- 4. Ceiling: Paint on gypsum, acoustic ceiling tile
  - a. Not Applicable to this Brand
  - b. Ceiling height must be 9'-0"/2.75 m or higher.
- L. Not Applicable to this Brand

#### M. Electrical

- 1. Provide recessed or decorative fixtures. Submit lighting plan and specifications for review and approval.
- 2. Lights for the fitness center must be on keyed switches or controlled at the circuit breaker so that they remain on at all times.
- Refer to Section 2514.08 for minimum light level requirements.
- 4. Provide electrical and television connections to fitness equipment that is required for proper installation per manufacturers' instructions. Locate outlets convenient to equipment and out of guest traffic.
- 5. Power cords must be hidden from view where possible.
- N. House Telephone Outlets

Provide an outlet for a house telephone.

### O. Technology

- 1. Provide one remote controlled, wall or ceiling mounted, 37"minimum HDTV. An additional television is required in rooms over 350 ft²/32.5 m<sup>2</sup>. Refer to 1706.01.C for specifics.
- 2. Personal viewing screens in cardio equipment must support a free-to-guest signal from head-end or set-top box input to display at a minimum 12 channels with a mix of news, sports, and entertainment programming.
- 3. Personal viewing screens (PVS) are optional.

### P. Furniture, Fixtures and Equipment

- 1. Refer to the Hilton Worldwide Fitness Center website for a list of required equipment.
- 2. Not Applicable to this Brand
- 3. All fitness equipment clearances as specified by the manufacturer must be maintained in accordance with the plans provided at installation.
- 4. Contact the Hilton Worldwide spa and fitness team for assistance with a floor plan layout identifying placement and quantities of equipment for non-prototypical layouts.
- Not Applicable to this Brand
- 6. Towel and folding station that is shared with the guest laundry must be positioned in the fitness center. A decorative towel hamper must be provided.
- 7. Four wall-mounted towel/coat hooks are required near the water cooler.
- 8. Mirrors

- a. Wall mirrors must be installed flush mount or leaning. Framing color must coordinate with room décor. Specifications may be found in the Spin2Cycle Fitness Center Manual.
- 9. A silver with black accent, 58", bottled water cooler with cup dispenser must be provided for guest use. The cooler must include room and cold temperature options and include a faucet drip tray. See the Spin2Cycle Fitness Center Guide for product specification from Aquaverve.
- 10. Artwork is not required in the fitness center. All artwork must be approved by Hilton Worldwide.
- 11. A decorative trash can must be provided.

2508.02 Not Applicable to this Brand

### 2508.03 Pool/Whirlpool

### A. Design Criteria

All design criteria for the pool will also apply to the whirlpool where applicable.

### B. Pool Requirement

A pool must be provided.

### C. Outdoor Pools

The pool is required to be indoors when the monthly average high temperatures are less than 70 °F/21 °C for more than five months of the year. Refer to <a href="https://www.weatherbase.com">www.weatherbase.com</a> for the average monthly high temperatures.

D. Whirlpool Requirement

Whirlpools are allowed but not required.

### E. Dimensions

- 1. Indoor pools must have a minimum water surface of 400 ft<sup>2</sup>/37 m<sup>2</sup> and a width of not less than 15'-0"/4.57 m.
- 2. Outdoor pools, when provided, must have a minimum water surface area of 600 ft²/56 m².
- 3. Kidney-shaped or other "free-form" pools (permitted in exterior applications only) are to have an equivalent minimum water area.
- 4. The minimum pool depth must be 3'-0"/900 mm except when a zero entry ramp is used; the maximum depth must be 5'-0"/1.5 m. The maximum pool depth must be 2'-7"/0.8 m for kid's pools.
- 5. The whirlpool must be located near the pool and have a minimum 50 ft<sup>2</sup>/4.65 m<sup>2</sup> surface area.
- 6. Hilton Worldwide reserves the right to increase the minimum pool size dependent upon key count and/or market demands.

#### F. Orientation

The orientation of the outdoor pool must be such that it receives unobstructed sunlight from mid-morning to late afternoon. Provide some questrooms with views of the pool. Screen views toward the pool from parking areas, adjacent sites, other buildings, public streets, etc.

#### G. Materials Not Allowed

Fiberglass and stainless steel pools/whirlpools are not allowed.

#### H. Gunite Construction

All pools and whirlpools must be gunite construction with a troweled on white marble plaster finish.

### Enclosed Pool

When an enclosed pool is provided, its exterior design must be consistent with the exterior design of the main building.

- J. Not Applicable to this Brand
- K. Not Applicable to this Brand

### L. Doors and Windows

- 1. Doors to indoor pools must have a full vision panel.
- 2. Interior metal doors and frames in indoor pools must be galvanized steel and suitable for a high moisture environment.
- 3. If doors are provided at the exterior walls of the building, they must be equipped with locking hardware.
- 4. Storefront (a.k.a. frame and glass) window and door frames must be aluminum with an approved coating.
- 5. All pools must be securable after hours.
- 6. Entry gates to outdoor pools must be self-closing and self-latching. The entry handles and/or latch must be mounted at 48"/1.2 m above the finished floor (if allowed by local code) to prevent access by unaccompanied children.
- M. Finish Options Indoor Pool
  - 1. Floor: Porcelain tile
    - a. Base (minimum): 3"/75 mm porcelain tile
  - 2. Wall: Epoxy paint, porcelain tile (8"/200 mm x 8"/200 mm minimum), acrylic knockdown. Walls must be painted the striped design shown in the prototype. A 4'-0"/1.22 mm high tile wainscot is required with the acrylic knockdown finish.

- 3. Ceiling: Epoxy painted moisture resistant gypsum, acoustic ceiling tile (66 percent maximum), synthetic stucco, tongue-and-groove wood decking ceiling
  - a. The minimum ceiling height is 9'-0"/2.75 m.
  - b. All exposed duct work (painted, spiral aluminum), conduit, sprinkler piping, etc., must be routed in clean and short coordinated spans for wood decking ceiling. All other ceiling types must have concealed systems.
- 4. High quality, non-corroding finishes are to be provided throughout pool area.

## N. Deck/Coping

- 1. A minimum 5'-0"/1.52 m wide perimeter deck around three sides of the pool and 3'-0"/900 mm wide deck on the last side is required. A 3'-0"/900 mm wide perimeter deck (minimum) around whirlpools is required.
- 2. In addition to the perimeter deck requirements, a minimum 500 ft²/46.45 m² of usable deck area must be provided adjacent to the pool and dedicated to one end for seating.
- 3. The pool deck area must slope away from the pools to drains. Decks must not drain into landscaped areas.
- 4. The coping must have a non-slip finish.
- 5. Pool coping must be designed to allow maintenance or replacement without removal of the pool deck.
- 6. The pool deck must be easily cleanable. The floor surface finishes must be applied to provide a "low risk of slip" rating both under wet and dry conditions. The testing methods employed must be those that are specified by local laws or recognized as best practice guidance issued from the country. Refer to Section 2514.03.A.
- 7. Not Applicable to this Brand
- 8. Outdoor pool decks must have a Solar Reflectivity Index (SRI) of no less than 0.30.
- 9. Joints where the pool or whirlpool coping meets the deck must be protected from the relative pressure of adjoining deck movement.

- 10. Joints where the deck meets the pool or whirlpool must be watertight.
- 11. Decks must be installed with relief joints for thermal movement and potential settling.
- 12. Not Applicable to this Brand
- 13. The pool deck must not be permeable. Large-scale deck paver systems may be used that allow water to drain through to an airspace that drains.

## O. Stairs/Railing/Fencing

- 1. Steps with uniform treads and risers and a handrail must be provided at the whirlpool and shallow end of the pool (unless zero entry ramp is provided). At least one ladder must be provided at the deep end.
- 2. Fencing (minimum 48"/1.2 m high) is required around all outdoor pool areas. Top rail must be rounded. Pointed finials and exposed ends of pickets are not permitted. Chain link or wood fencing is not allowed.

### P. Pool Markers

- 1. Recessed hard tile water depth markings in contrasting colors must be placed on the top of the pool and whirlpool coping and on the inside rim of the pool and whirlpool perimeter, above the water line at reasonable intervals and at every 12"/300 mm of depth change. Lettering must be at least 4"/102 mm high.
- 2. Wherever islands, fountains and other structures are located within pools, depth markings must be posted thereon and must be visible from the opposite pool edge.
- 3. Depth indicators must be in Imperial and metric units.
- 4. The depth must be measured 24"/600 mm away from the edge of the coping from the bottom to the water surface.
- 5. The pool and whirlpool copings must have the international no diving symbol and the words "NO DIVING" around the pool and whirlpool perimeter. The text must be legibly displayed in 4"/100 mm high, contrasting characters in the English language. Text in the local language may also be added.

6. Painted, stenciled and vinyl appliqué markings must not be used.

### Q. Mechanical

- 1. Provide water vapor retarder within the pool enclosure walls to prevent moisture migration into the wall or ceiling cavities, adjacent spaces, and to minimize moisture condensation potential within the envelope.
- Not Applicable to this Brand
- 3. Indoor pools must be maintained at a minimum of 83 °F/28.3 °C.
- 4. Conditioned outdoor pools must have temperature maintained between 80 °F/26.7 °C and 89 °F/31.7 °C. Locations where pool water temperatures will rise above 89 °F/31.7 °C must provide cooling systems to maintain pool water temperatures within the specified range.
- 5. The whirlpool must be operated between the temperatures of 99 °F/37.2 °C and 103 °F/39.4 °C. The water is never allowed to be in excess of 104 °F/40 °C.
- 6. Provide a complete HVAC and dehumidification system to maintain the pool area temperature and relative humidity while minimizing pool water evaporation. Provide the features listed below:
  - a. A packaged system specifically designed for pool area dehumidification, factory assembled and tested, with test report available on request.
  - b. Materials suitable for the pool environment with air side surfaces coated for corrosion protection.
  - c. An outdoor air connection that provides the outdoor air required in Section 2514.06.
  - d. A microprocessor control system with solid state sensors and a remote-mounted solid state control panel with LED indicators and service diagnostics located in the pool room.
  - e. Heating:

- 1. Gas duct heater: Provide a gas-fired duct heater with stainless steel heat exchanger, two-stage or modulating heating control, stainless steel burners, spark ignition and power vent.
- 2. Electric duct heater: Provide an electric resistance, two-stage or SCR controlled duct heater that complies with NFPA 70.
- 3. If fuel fired systems are used, they must be designed to comply with NFPA 54 (www.nfpa.org) and manufacturers recommended installations instructions.
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Pool equipment rooms must not be located below guest suites.
- 10. Pool equipment and chemicals must be located in a lockable, vented storage room away from guest view.

## R. Plumbing

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Provide a frost-proof hose bib for wash down.

## S. Safety/Pool Systems

- 1. Not Applicable to this Brand
- 2. Conventional sand filters, high-rate sand filters or pressure-type diatomaceous earth filters are allowed.
- 3. Design pool filtration and recirculation system to recirculate the entire pool water volume every six hours.

- 4. Equipment must include gauges, sight glass and air release valves. Installation and equipment are subject to local health regulations.
- 5. Not Applicable to this Brand
- Not Applicable to this Brand
- Not Applicable to this Brand
- 8. All pools must be equipped with continuous monitoring/feed disinfecting equipment. The equipment must maintain a residual of not less than one part per million. Allowed disinfecting equipment includes:
  - A saline-based generator system that is NSF 50 and UL standard 1081 (www.ul.com) tested and certified (or the equivalent) and sized
    per local guidelines.

### T. Electrical

- 1. The circuits supplying the underwater lighting fixtures or other outlets in the pool area must be low voltage and be protected through an approved ground fault interrupter which automatically de-energizes the circuit should a short circuit or voltage leak occur.
- 2. Provide a labeled emergency equipment shut-off switch/button located adjacent to the whirlpool that will shut off all jet pumps/blower and recirculating pumps.

## 3. Lighting

- a. All electrical power circuits installed in and around the pool area must be equipped with GFCI/ELCB/RCCB or equal ground fault interrupters.
- b. Direct outdoor lighting away from guestroom windows.
- c. Provide a minimum of two UL (www.ul.com) listed wet niche submersible and underwater rated light fixtures for each pool and one fixture for each whirlpool. Lights must be changeable without draining the pool.
- d. Lights are not allowed to be located over the water surface.

- e. Lights at the indoor pool area must be on keyed switches or controlled in a location that is not accessible by guests so they remain on at all times.
- f. Refer to Section 2514.08 for minimum light level requirements.
- U. House Telephone Outlets

Provide an outlet for a house telephone.

V. Furniture, Fixtures and Equipment

Furniture, Fixtures and Equipment

Refer to Section 2515.01.E, Outdoor Furniture, for requirements applicable to this Section.

- 1. Pool furnishings must be commercial quality. All tabletops must be of a shatter-resistant material. A combination of chairs, tables, and chaises must be provided to seat a minimum of 16 guests. The minimum seating requirement may vary for certain markets. Refer to the Furniture, Fixtures and Equipment specifications for design intent.
- 2. Not Applicable to this Brand
- 3. At least one freestanding sunscreen umbrella must be provided at outdoor pools.
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Window treatment is optional at the exterior window for indoor pool areas. If provided, treatment must be roller shades.
- 8. A pool furniture storage area must be provided in the vicinity of outdoor pools and outdoor pool patios.

- Not Applicable to this Brand
- 10. Plant containers must be incorporated into the overall layout of the furnishings.

### W. Safety Equipment

The following safety equipment is required at a minimum and must be provided and/or be readily available at every pool, even when the pool is closed (including off season):

- 1. Provide an anti-entrapment (hair, digit and suction) drain cover for all primary drains and suction inlets for all pools, whirlpools, water features and/or water fountains. Fountains with natural flow or drip and not mechanically powered are not included. All drain covers must be secured on drains at all times. Properties must retain a letter by the installer that states the cover was installed per the manufacturer's instructions.
- 2. A Safety Vacuum Release System (SVRS) or other approved automatic drain blockage relief system is required for all pools, whirlpools, water features and fountains that currently have a single main drain installed. All newly constructed pools, whirlpools, water features and fountains must be designed without the need for a SVRS.
- 3. A professionally-fitted pool cover must be installed when the outdoor pool and/or whirlpool is closed for the season. The temporary use of pool covers is prohibited. When used, pool covers and their installation must meet local code regulations.

## X. Diving Boards

Temporary or permanent swimming pool diving boards, diving platforms, slides, and/or trampolines are prohibited.

### 2508.04 Locker Room/Restroom

## A. Restroom Proximity

Restroom facilities are required adjacent to the indoor pool area.

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Unisex Restroom Requirement

A unisex restroom facility is acceptable, code permitting.

## E. Entry Doors

The entry door must have self-closing hardware. Single occupant rooms must have a privacy lock set.

- F. Finish Options Locker Room/Restroom
  - 1. Floor: Porcelain tile (12"/300 mm x 12"/300 mm minimum). Rectangular tiles are allowed.
    - a. Base (minimum): 3"/75 mm porcelain tile
  - 2. Wall: Porcelain tile, acrylic knockdown. Full height porcelain tile wall is required on all plumbing fixture walls.
  - 3. Ceiling: Paint on gypsum, acoustic ceiling tile
- G. Not Applicable to this Brand
- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Not Applicable to this Brand
- K. Plumbing

- 1. Provide a floor drain. Slope floor to drain.
- 2. Water closets must have an elongated bowl and be vitreous china with a flush valve.
- 3. Water closets must have a commercial grade, closed-front, self-sustaining, solid plastic seat. The color of seat and lid must match the fixture.
- 4. Exposed plumbing must be chrome-plated.

### L. Electrical

- 1. Provide one duplex outlet with GFCI/ELCB/RCCB or equal ground fault protection at 3'-6"/1.07 m above the finished floor adjacent to vanity.
- 2. Refer to Section 2514.08 for minimum light level requirements.
- M. Not Applicable to this Brand
- N. Furniture, Fixtures and Equipment
  - 1. Restroom accessories are required as follows:
    - a. Surface-mounted, dual roll, decorative toilet tissue dispenser. Plastic is not allowed.
    - b. Wall-mounted paper towel dispenser and trash receptacle. Electric hand dryers are allowed when used in conjunction with paper towel dispensers.
    - Wall-mounted liquid soap dispenser at each vanity bowl
    - d. Mirrors are required over the water basins. They must be installed with concealed clips or fasteners.

2508.05 Sauna

## A. Sauna Requirement

Hot or dry saunas are not allowed.

### 2508.06 Steam Room

A. Steam Room Requirement

Steam rooms are not allowed.

## 2508.07 Not Applicable to this Brand

2508.08 Not Applicable to this Brand

## 2508.09 Walking Path

A. Walking Trail Requirements

A walking trail is not required but when provided must follow the requirements of this section.

B. Width

Trail must be 4'-0"/1.22 m wide around the perimeter of the site that maximizes the length of the loop.

C. Surface Materials

The trail surface must be recycled rubber tire, compacted crushed decomposed granite, concrete or asphalt and it must meet all accessibility requirements. It must be easily definable from other paving surfaces with separate use. Where the trail intersects or overlays driving aisle, trail must be differentiated by using a different material or striping on the drive aisle.

## D. Edges Requirements

The trail edges must be separated from adjacent landscaping by a vertical (metal or plastic) edging system if the trail material used can facilitate plant growth.

### 2509.00 Circulation

Refer to Sections 2514.00, Technical Criteria, and 2515.00, Furnishings, Fixtures and Equipment, for requirements applicable to this Section.

### 2509.01 Elevators/Lifts

- A. Not Applicable to this Brand
- B. Elevator/Lift Controls

Top of elevator/lift controls must be mounted no more than 48"/1.2 m above the finished floor.

C. Operating Panels

A minimum of one operating panel is required in each cab.

D. Door Open Button

Each elevator/lift control panel must be equipped with a "door open" button.

- E. Not Applicable to this Brand
- F. Ventilation Requirements

Elevator cabs that are not surrounded by conditioned space must be ventilated with a two-speed exhaust fan and concealed vents at the base and ceiling of the cabs.

G. Intercom Requirement

A recessed intercom connected to a constantly monitored location is required in all elevators/lifts.

- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Guest Elevator/Lifts
  - 1. All hotels must have a minimum of two elevators/lifts with a minimum platform area of 28.3 ft²/2.63 m² and a 2,500 lb/1,134 kg capacity.
  - 2. Local codes may require larger capacities or the accommodation of an ambulance stretcher.
  - 3. Not Applicable to this Brand
  - 4. Finish Options Guest Elevator/Lifts
    - a. Floor: Carpet (carpet tile), porcelain tile (12"/305 mm x 12"/305 mm minimum)
      - 1. Base: Recessed, flush or surface mounted stone, wood stain grade, metal or plastic laminate base

- b. Wall: Decorative plastic laminate panels, decorative panels and mirrors
- c. Ceiling: Decorative with lighting. Eggcrate ceilings are not allowed.
- 5. Not Applicable to this Brand
- 6. Hydraulic passenger elevators/lifts are allowed and must have the following minimum cab speeds:

# Floors	Up	Down	Туре
2-3 Stories	150 FPM/0.64 m/s	165 FPM/0.84 m/s	Hydraulic
2-3 Stories	150 FPM/0.64 m/s	150 FPM/0.64 m/s	MRL gearless
4-5 Stories	150 FPM/0.64 m/s	150 FPM/0.64 m/s	MRL gearless

- 7. An elevator/lift study must be submitted on non-prototypical properties. Elevator/lift study must support an average wait time of 40 seconds with 12 percent handling capacity in a 5 minute period. Variables to be used for the study are 100 percent occupancy, 1.8 occupants per room. The elevator/lift study must include occupancy in all public areas of the hotel.
- 8. Elevator/lift walls must have a handrail mounted 32"/810 mm above the finished floor on the back wall or have handrails on both side walls.
- 9. Minimum width of the passenger elevator door opening is 3'-6"/1.07 m.
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand
- 12. Not Applicable to this Brand
- 13. If a rear door opening into back-of-house is provided, the door must be operable only by using an employee key to prevent guest access.
- 14. Not Applicable to this Brand

15. Refer to Section 2514.08 for minimum light level requirements.

## K. Parking Garage Elevator/Lifts

- 1. Parking garages must have a minimum of one elevator/lift.
- Where multi-level garages are provided, exit stairwells must meet the requirements in Section 2509.04.
- 3. Parking garage elevators/lifts, when integral with the hotel, must terminate at the lobby level, within view of the front desk. Direct guest access from parking garage level to guest suite floors must be by card key/room key access.
- 4. Not Applicable to this Brand
- 5. Refer to Section 2514.08 for minimum light level requirements.

### L. Service Elevator/Lifts

- 1. Service elevators/lifts are optional, but may be required at the discretion of Hilton Worldwide for particular project conditions. All designated service elevators/lifts must have a minimum platform area of 38.5 ft²/3.57 m² and a 3,000 lb/1,360 kg capacity.
- 2. Not Applicable to this Brand
- 3. Service elevator/lift must have the following minimum cab speed:

# Floors	Speed	Туре
2-5 Stories	150 FPM/0.76 m/s	Hydraulic/MRL gearless
6-7 Stories	150 FPM/0.76 m/s	MRL gearless
8-14 Stories		Geared/MRL gearless
14-20 Stories	500 FPM/2.54 m/s	Gearless/MRL gearless

4. Not Applicable to this Brand

- 5. Not Applicable to this Brand
- 6. Service elevator/lift control buttons must be vandal-proof.
- Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Service elevator/lift doors must be stainless steel pressed pattern.
- 10. Finish Options Service Elevator/Lifts
  - a. Floor: Vinyl composite tile, non-skid diamond mesh, porcelain tile (12"/300 mm x 12"/300 mm minimum; rectangular tiles are allowed), natural stone
    - 1. Base (minimums): 4"/100 mm vinyl; 3"/75 mm stainless steel
  - b. Wall: Stainless steel pressed pattern with wall bumpers at 14"/350 mm and 32"/800 mm above the finished floor, plastic laminate
  - c. Ceiling: Baked enamel paint
- 11. Protected lighting is required.
- 12. Refer to Section 2514.08 for minimum light level requirements.

### 2509.02 Elevator/Lift Lobbies

- A. Hotel Lobby
  - 1. Elevator lobbies must be a minimum of 6'-0"/1.8 m in depth. Depth must be increased to 8'-0"/2.4 m at elevator/lift lobbies used as a passageway to a secondary entrance or exit.

- 2. Not Applicable to this Brand
- Call buttons must be available for each elevator/lift bank and must be mounted with the centerline at 42"/1.0 m above finished floor.
- 4. Heat or touch-sensitive call buttons are permitted, provided there is an automatic auxiliary return in the event of fire or other emergency.
- 5. An audible signal is required in each elevator/lift lobby indicating the arrival of an elevator/lift cab, along with a directional graphic indicating the current travel path of each cab.
- 6. Not Applicable to this Brand
- 7. Finish Options Guest Elevator Lobby first floor
  - a. Floor: Porcelain tile (plank shape and wood look)
    - 1. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile
  - b. Wall: Vinyl wallcovering, acrylic knockdown
  - c. Ceiling: Paint on gypsum
- 8. Finish Options Guest Elevator Lobby second floor and above
  - a. Floor: Porcelain tile, carpet (carpet tile)
    - 1. Base (minimums): 4"/100 mm through body synthetic, 3"/75 mm porcelain tile
  - b. Wall: Vinyl wallcovering
  - c. Ceiling: Paint on gypsum, acoustic ceiling tile
- 9. Furniture, Fixtures and Equipment

- a. Provide a console table at all floors. Table accessories must be submitted for approval.
- b. Provide minimum of 864 in<sup>2</sup>/0.55 m<sup>2</sup> of artwork above the console table.
- 10. Refer to Section 2514.08 for minimum light level requirements.
- 11. Not Applicable to this Brand
- 12. An outlet for house telephones must be provided at each elevator/lift landing within the parking garage.

### 2509.03 Corridors

A. Guestroom/Guest Suite Corridors

**Guest Suite Corridors** 

- 1. Corridors must be a minimum of 5'-0"/1.52 m clear width.
- 2. Not Applicable to this Brand
- 3. Guest suite corridors must have windows when possible.
- 4. Finish Options Guestroom Corridors
  - a. Floor: Carpet (carpet tile), porcelain tile (allowed where shown in the prototype)
    - 1. Base (minimums): 4"/100 mm through body synthetic
    - 2. Not Applicable to this Brand

- 3. Corridor carpet tile must be in an approved pattern and color. Refer to the Brand Design Brief for design intent and submit selections to Hilton Worldwide for approval.
- b. Wall: Vinyl wallcovering
- c. Ceiling: Paint on gypsum, wood or special finish
  - 1. Not Applicable to this Brand
  - 2. Provide a minimum ceiling height in guest suite corridors of 8'-0"/2.4 m.

### 5. Electrical

- a. Provide convenience outlets in corridors for housekeeping equipment with spacing not to exceed 50'-0"/15 m on center.
- b. Provide decorative light fixtures, wall sconces and/or ceiling fixtures at the locations shown in the prototype drawings.
- c. Not Applicable to this Brand
- d. Not Applicable to this Brand
- e. Refer to Section 2514.08 for minimum light level requirements.
- 6. Not Applicable to this Brand
- 7. Window Treatment Refer to 2515.03 for additional requirements
  - a. Decorative window treatments are required on guestroom corridor windows. Refer to the Furniture, Fixture and Equipment Specifications for design intent.
- B. Service Corridor

- 1. Service corridors must be a minimum of 5'-0"/1.5 m wide.
- 2. Finish Options Service Corridor
  - a. Floor: Vinyl composite tile, carpet, sealed concrete
    - 1. Base (minimums): 4"/100 mm vinyl
  - b. Wall: Epoxy paint
  - c. Ceiling: Acoustic ceiling tile
- 3. Provide a minimum of one duplex electrical convenience outlet on each wall with spacing not to exceed 50'-0"/15 m on center.
- 4. Refer to Section 2514.08 for minimum light level requirements.

### 2509.04 Exit Stairs

A. Stairwell Width

The widths of stairwells must not decrease in the direction of egress from the building.

B. Stairwell Landing

Every stairwell landing must have a dimension, measured in the direction of travel, equal to the width of the stairwell or greater.

C. Stairwell Treads and Risers

All stairwell treads and risers must be solid type for the entire width of the stair.

### D. Doors

All stairwell doors must include automatic door closures and be self latching.

## E. Finish Options - Exit Stairs

- 1. Floor: Sealed concrete
  - a. Treads at a minimum must be exposed, hand troweled concrete with sealer and non-skid nosings of contrasting color.
  - b. Landings at a minimum must be exposed, hand troweled concrete with non-slip finish and hand sealed.
  - c. Base (minimum): 4"/100 mm vinyl
- 2. Wall: Paint
- 3. Ceiling: Paint
- 4. A class "A" flame spread rating is required for all finishes.

## F. Rising Mains

If stairwells contain dry and wet rising mains, all valves must be locked and fitted with tamper switches.

## G. Lights

Lights are not allowed to be manually operated and must remain on when the space is occupied.

## H. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### 2510.00 Guestroom/Suites

Refer to Sections 2514.00, Technical Criteria, and 2515.00 Furnishings, Fixtures and Equipment, for requirements applicable to this section.

## A. Room Types and Layouts

1. Minimum Size Requirements

Refer to the prototype drawings for typical room types and layouts. These room sizes must be considered minimums. These layouts must be adhered to unless otherwise agreed to by Hilton Worldwide.

## B. Connecting Rooms

1. Connecting Room Percentage

A minimum of 10 percent of the guestrooms must be connecting. (Example: a 100 key hotel would have five rooms connecting to another five rooms for a total of 10 connecting rooms.) The connecting rooms must be comprised of a variety of room and suite types including wheelchair-accessible rooms and one bedroom suites. No more than half of the required minimum combinations are allowed to include wheelchair accessible rooms.

### C. Room Mix

1. Room Mix

The majority of the guest suites must be single bedded studios. Double queen studios are permitted but must not exceed 25 percent of the total key count. Seven to twelve percent of the total key count must be dedicated to one-bedroom suites. Refer to the prototype drawings for more information.

## D. Smoking Guestrooms

All smoking guest suite locations must be approved by Hilton Worldwide. Refer to Section 103.01 for required number of smoking rooms.

### 2510.01 Doors

- A. Entry Doors
  - 1. Doors must be 1-3/4"/44.5 mm solid-core, stained or painted or plastic laminate, flush doors.
- B. Entry Door Frames
  - 1. Framed, non-masonry walls must be reinforced on the "strike" side of the jamb to prevent prying and flexing for security control.
- C. Entry Door Hardware
  - 1. Provide electronic lockset from a Hilton Worldwide approved manufacturer. Refer to Section 2514.00 Technical Criteria for detailed standards.
  - 2. Entry doors must have adjustable type, automatic, 2-stage hydraulic door closer with stop. Hold-opens of any type are not allowed at entry doors.
  - 3. Entry doors must have sound stripping.

- 4. Tamper-proof, 180 degree one-way viewers with cover (on guest suite side) are required for all guest suite entrance doors and must be installed 5'-0"/1.5 m above finished floor and secured in a manner that must not be removed from the corridor side of the door.
- 5. A safety (flip) latch is required for all entrance doors. Locate 4'-0"/1.2 m maximum above finished floor. Surface mounted safety chain locks and swing bar door guards are not allowed.
- 6. Not Applicable to this Brand
- 7. Provide a vinyl threshold at the guestroom entry.
- 8. Provide a door sweep. The makeup air feature for these sweeps may be utilized if needed. Sweeps must be installed to allow 1/16"/1.59 mm gap.
- 9. Door hardware for all properties must be satin stainless steel or satin chrome. The finish on all hardware must be the same, including hinges.
- 10. Kick plates are not allowed.

## D. Connecting Doors

- 1. When guestrooms are connected, they must be separated by two doors.
- 2. The door frame must be the full width of the wall thickness.
- 3. Hold opens of any type are not allowed.
- 4. Each door must have a latch set with an operating lever on the room side only.
- 5. Each door must have a thumb-turn deadbolt with 1"/25 mm throw. A blank plate must be installed on the opposite side of the door.
- 6. A safety latch, same as on entry door, must be provided on each door.
- 7. Sound stripping, same as on entry door, must be provided on the door frame of each door.

- 8. Provide door sweeps the same as entry door on both doors for sound attenuation. Automatic drop down seals are also permitted. A makeup air feature is not allowed.
- 9. A threshold matching the entry door must be provided. Threshold must be as wide as the door frame.
- 10. All hardware finishes must match the entry door hardware finish.

## E. Sliding Glass Doors

- 1. Sliding glass doors must have a non-keyed, auxiliary/additional locking device. Surface mounted safety door chains are not allowed.
- 2. Sliding glass doors must be shatterproof or have tempered glass.
- 3. The sliding panel must be mounted on the interior track to prevent any removal of the door from the exterior.

### 2510.02 Windows

### A. Window Area

Refer to prototype drawings for size and location of required suite windows.

## B. Operable Windows

Operable windows, if provided, must have a screen and a childproof locking device approved by Hilton Worldwide and are not allowed to open more than 4"/102 mm unless required otherwise by code. Once opened, the window must remain in the open position without having to be propped open.

## C. Louvers

Louvers for thru-wall HVAC units in guestrooms must be furnished by the window manufacturer and must be aluminum, architectural-style with a finish to match the window sections. These architectural louvers must be an integral part of the window system (one-piece factory assembled unit). Louvers must meet the free air requirement of the thru-wall unit selected.

### D. Window Sill Materials

Window sills must be provided in all instances and they must be engineered stone. Refer to the window sill detail as outlined in the prototype drawings at <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a> to better accommodate the required roller shade window treatment.

### 2510.03 Finish Options - Guestrooms/Suites

- A. Floor: Carpet (carpet tile), porcelain tile. Inset accent carpet must be provided at sofa as shown in the prototype drawings.
  - 1. Not Applicable to this Brand
  - 2. Base (minimums): 4"/100 mm vinyl
  - 3. Tile flooring is required at the guest suite entry.
  - 4. Not Applicable to this Brand
  - 5. Hard surface flooring is acceptable in guestrooms only where shown in the prototype drawings. Alternate locations must be approved by Hilton Worldwide.
- B. Wall: Vinyl wallcovering, acrylic knockdown
  - 1. Vinyl wallcovering is required on the headboard and sofa walls unless located on an exterior wall.
  - 2. Not Applicable to this Brand

- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Acrylic knockdown is required on all walls of the guest suite except the headboard and sofa walls, which require vinyl wallcovering, unless they are exterior walls.
- 6. The exterior wall acrylic knockdown finish must be a tonal accent color.
- C. Ceiling: Paint on gypsum smooth or orange peel, sprayed texture sample must be reviewed and approved by Hilton Worldwide.
  - 1. Not Applicable to this Brand
  - 2. When less than 4'-0"/1.22 m wide pre-cast concrete floor planks are used, a furred drywall ceiling must be installed.
  - 3. Ceilings must be a minimum height of 8'-0"/2.4 m.
  - 4. Entry ceilings must be a minimum height of 7'-2"/2.2 m.
- D. Not Applicable to this Brand
- E. Room Divider Drapery

A room divider drapery is required in all studio guest suites. Refer to Section 2515.03.A.7.o for requirements.

## 2510.04 Closets

A. Walk-in Closet

All guest suites must have an enclosed closet a minimum size of 2'-0"/600 mm deep x 3'-0"/900 mm wide.

### B. Closet Shelf/"Uncloseted" Closet

Closet rods must be provided by the working wall manufacturer.

### C. Doors

A drapery panel is required at the closet. Refer to Section 2515.03.A.7.p for requirements.

### 2510.05 Bed

### A. Bed Frame/Base

- 1. Bed bases are required except when frames are required for accessibility.
- 2. A minimum 7.25"/184 mm high bed base must be provided to achieve a typical top of bed height of 26"/650 mm. Bed height is the measurement of the finished bed including base and mattress set (bedding not included). Accessibility requirements for the jurisdiction must be verified and followed as they may be more restrictive.
- B. Not Applicable to this Brand

### C. Mattress Sets

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Mattress sizes are: 76"/193 cm x 80"/200 cm

### 60"/150 cm x 80"/200 cm

- 5. Not Applicable to this Brand
- 6. All guestrooms must have Serta® Suite Dreams II™ box spring and mattress sets.

## D. Bedding

1. Refer to Section 902.02.F for all top of bed bedding.

## 2510.06 Furnishings, Fixtures and Equipment

Refer to Section 2515.00 for general FF&E requirements.

## A. Furnishings

- 1. Refer to the prototype drawings for required furnishings. Alternate room sizes and furniture plans must be submitted to Hilton Worldwide for approval.
- 2. Case goods must be provided by one of the approved manufacturers listed in the Furniture, Fixture and Equipment Specifications found online at <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a>.
- 3. There must be a minimum clearance of 12"/300 mm between beds or between any bed and the wall.
- 4. Headboard
  - a. Headboards must be plastic laminate to match the working wall desktop with non-porous upholstered panel inset and integrated nightstand.
  - b. Headboards must be anchored securely to the wall with cleats.

- c. Not Applicable to this Brand
- d. Design must be coordinated with outlet locations to prevent conflict.
- e. Not Applicable to this Brand
- f. The base of the wall hung headboard must be a minimum of 2"/50 mm below the top of the box spring.

### 5. Bedside Surface

- a. The freestanding nightstand must be a minimum 24"/610 mm diameter table.
- b. The integrated nightstand must have a shelf with drawer and be attached to the headboard. Top surface dimensions of nightstand must be 14"/356 mm x 17"/431 mm.
- c. The surface must support a minimum of 250 lbs/115 kg
- d. The top of the integrated nightstand must align with the top of the mattress.
- e. Not Applicable to this Brand
- f. Not Applicable to this Brand
- g. Not Applicable to this Brand
- h. Design must be coordinated with outlet locations to prevent conflict.
- i. A minimum of 3"/75 mm must be provided between the bedside surface and the mattress for top of bed linens.
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand

- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Entertainment Area
  - a. Refer to Section 2510.09 for television equipment requirements.
  - b. A three-drawer chest with single-door cabinet and adjustable shelf with back panel for mounting of television is required in the bedroom area where shown on the prototype drawings.
  - c. Not Applicable to this Brand
  - d. Casegoods supporting the weight of the television and/or television mount must be reinforced.
  - e. Not Applicable to this Brand
  - f. The television must be positioned within view from the bed and work area in typical guest suites. Televisions in sitting rooms or living areas must be easily viewed from the soft seating/lounge area. Other areas within the room(s) must be considered and accommodated when possible.
  - g. Not Applicable to this Brand
  - h. Not Applicable to this Brand
  - i. Casegood design must be coordinated with outlet locations to prevent conflict.
- 11. Not Applicable to this Brand
- 12. Work Area
  - a. Surface area must be a minimum of 1,100 in²/0.70 m².

- b. Top must be plastic laminate with PVC T-edge.
- c. Desk must have metal legs with casters.

## 13. Dining Table

- a. Dining tables are required where shown in the prototype drawings. Tables must have four legs instead of a pedestal or base. Minimum dimensions: 36"/900 mm wide x 36"/900 mm deep x 30"/760 mm high.
- Not Applicable to this Brand

### 15. End Table

- a. Guest suites must have at least one set of nesting tables at the sofa that pull out into the room.
- b. Minimum dimensions: Large table: 27"/686 mm wide x 15"/381 mm deep x 20"/508 mm high; Small table: 23"/584 mm wide x 12"/300 mm deep x 17"/432 mm high.
- 16. Not Applicable to this Brand

## 17. Sofa Bed

- a. All guest suites must have a sofa bed with full size mattress and mechanism as specified in Section 2515.01.D. Refer to Furniture, Fixtures and Equipment Specifications found on <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a> for approved manufacturers.
- b. Sofa must have a tight back with button tufting. Contrasting welt and button detail are required. Seat cushions must be reversible and constructed with high resilient foam and a minimum of 25 innersprings per cushion. Cushion must be 1.8 foam core with 1.25 oz Thermafiber wrap.

### 18. Ottoman

a. An ottoman must be provided with the sofa bed. All pieces must be fully upholstered. The ottoman must be a cocktail/ottoman combination.

- b. Ottomans must have a minimum top surface area of 450 in<sup>2</sup>/0.29 m<sup>2</sup>.
- c. Top surface must be upholstered faux leather, tightly bound (no tufting) over firm padding.
- 19. Not Applicable to this Brand
- 20. Lounge Chair
  - a. Lounge chair and arms must be fully upholstered. Loose cushions must be reversible.
- 21. Not Applicable to this Brand
- 22. Not Applicable to this Brand
- 23. Dining Chairs
  - a. The number of chairs as shown in the prototype drawings is required. Arms are not required. Chairs with arms must fit under the table without scarring table or arms.
- 24. Work Area Chair
  - a. A Diffrient World chair by Humanscale, with upholstered seat and adjustable armrests is required at the desk in each guest suite.
  - b. Not Applicable to this Brand
  - c. Ensure that the height of the desk chair is coordinated with the height of the desk work area to avoid damage to the chair arms.
- 25. Not Applicable to this Brand
- 26. Not Applicable to this Brand
- 27. Working Wall

- a. The working wall, a signature brand element, consisting of the kitchen, work area, television panel, and storage, must be provided in each guest suite. The working wall must include the following items:
  - 1. Kitchen: Base cabinetry of three drawer and door sections for storage; open Section for dishwasher; open upper shelf for storage of china and for microwave. The kitchen countertop must be caulked along the back and side splashes.
  - 2. Work Area: Open upper shelving; open section for movable desk.
  - Clothes Storage: Three-drawer chest; cabinet with adjustable shelf; closet with door drape; open upper shelving.
- b. Different finish options, including countertop materials, are available from the manufacturers to coordinate with a design package selected or a Hilton approved custom design palette.
- c. Refer to guest suite layouts in the prototype drawings for further details and specific layout of the working wall required for each guest suite type. Prototype drawings may be found online at <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a>.

### B. Artwork

- 1. Refer to Section 2515.05 for artwork requirements.
- 2. Artwork to be provided as shown in the prototype drawings.
- 3. Artwork must be sourced from a commercial art supplier and be one of the following:

Framed, including a single or double mat, with clear glass.

Stretched canvas giclee over hardboard backing with 1"/38 mm deep stretcher bars.

A hard, smooth, cleanable medium with recycled or renewable content (i.e., aluminum, bamboo, etc.). Surface must be treated to prevent fading, discoloration and scratches.

### C. Mirrors

Refer to Section 2515.06 for additional mirror requirements.

1. All suites must have a full length mirror located on the bath wall. The mirror must be framed and mounted 6"/152 mm above the finished floor. There must be no visible clips or fasteners. Framed mirror size: 76"/1.93 m high x 32"/813 mm wide x 3"/76 mm deep.

## D. Lighting Fixtures

- 1. See the prototype drawings for light fixture locations.
- 2. All lamps must be approved by Underwriters Laboratories with a label affixed to each lamp. UL Standard #153 (www.ul.com) must be used for lamps.
- 3. All lamps must pass the Underwriters Laboratories tip test or CE certificate (declaration of conformity).
- 4. Light fixture finish must be appropriate to the overall design of the room. Plastic is not permitted except for the switch.
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand

### 12. Not Applicable to this Brand

### 13. Hardwired Fixtures

- a. Recessed can light fixtures must be provided at the entry as shown on the prototype drawings.
- b. Not Applicable to this Brand
- c. A hardwired wall sconce is required at the end wall of the guest suite where shown on the prototype drawings. Fixture must be controlled by a wall switch mounted directly below and cannot project more than 4"/102 mm off the face of the wall. The shade must be light-colored and translucent to provide side illumination for the closet area and guest suite.

### 14. Portable Fixtures

- a. Electrical cords must be as short as possible. Excess length must be removed or concealed.
- b. Not Applicable to this Brand
- c. Table lamps must have a power outlet (socket outlet) and lamp switch (rocker style) in the base. The outlet is not required if it is provided by other means above the counter.
- d. All lamps must have a satin nickel, brushed stainless steel, or brushed aluminum finish or trim finish.
- e. All portable fixtures must have felt protective padding secured to the bottom.

## 15. Table Lamps

a. A table lamp is required where shown in the prototype drawings.

## 16. Work Surface Lamp

a. An adjustable task lamp is required at the Work Area section of the Working Wall. It must be freestanding and adjustable to illuminate mobile work surface. It can be no more than 15"/381 mm high, as it must clear the upper shelf.

### 17. Bedside Lamp

- a. A light fixture is required at each nightstand. All beds must have a wall-mounted fixture on one side of the bed and a freestanding fixture on the other side. The freestanding fixture must be provided at the freestanding nightstand and it must provide ambient and reading functions. Shade must be translucent white.
- b. Style of lamp base and extension must take into account the size of the bedside surface area combined with other equipment (telephone, clock radio, etc.)
- c. Not Applicable to this Brand
- d. The wall-mounted bedside lamp is required to be attached to the headboard. The cord location and penetration of the nightstand must be coordinated.

### 18. Floor Lamp

- a. A floor lamp is required at the sofa where shown on the prototype drawings. Fixture must have a substantial base to avoid tipping.
- b. Not Applicable to this Brand
- c. Not Applicable to this Brand
- d. Provide rocker switches on floor lamps. Switches on floor lamps must not be a pull chain or twist switch.
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Window Tretaments

Refer to Section 2515.03.A.7 for Guestroom Window Treatment.

#### 2510.07 Mechanical

### A. System Types

- 1. Select an appropriate air conditioning unit that is dedicated to individual guestrooms and provides on-demand heating and air conditioning that complies with the Indoor Environmental Requirements Matrix included in Section 2514.06.
- Acoustical Requirements: Comply with Indoor Environmental Requirements Matrix included in Section 2514.06.

#### B. PTAC and PTHP Units

Provide packaged through-wall units that include the following features:

- 1. Provide a minimum two-speed fan capability.
- 2. Provide acoustical treatment of fans and compressors for quiet operation.
- 3. Provide easily accessed and cleanable filter media.
- 4. Electric heat (if used): Use coiled or sheathed heating elements operating at moderate temperatures to prevent glowing, with thermal safety and overheat limit control and two stages for coils of 3.5 kW or larger.
- 5. Wall sleeve: Provide insulated metal or thermoplastic sleeve, complete with universal drain kit, piped to vertical concealed condensate drain.
- 6. Include slide-out chassis design for service.
- 7. Provide hard-wired power connection for electrical supply of 265-volts and higher, or where the wiring and plug connection cannot be concealed in the standard sub-base. Exposed power cord and receptacles are not allowed.
- 8. If a digital control is mounted directly in the unit, it must communicate with the remote, wall-mounted thermostat and display identical readings or else be covered with a plate that directs the guest to the wall device.

- 9. Install concealed condensate piping connected to the sleeve drain kit and terminate underground to a storm, sanitary sewer, dry well, or landscape bed as allowed by local code. Above ground traps and exposed piping is not allowed.
- 10. If PTAC units are not as wide as the window unit in which they are placed, a drywall enclosure to finish the gap between the PTAC unit and the wall opening must be provided with a windowsill. A drywall enclosure and windowsill are also required at windows with a louver but no PTAC; exposed metal panels are not allowed.
- C. Guestroom/Guest Suite Thermostat

**Guest Suite Thermostat** 

- 1. Remote, wall-mounted, electronic digital thermostat specifically designed for guest suite applications must be provided. Rooms with PTACs are only required to have remote thermostats in double gueen studios and one bedroom suites.
- 2. Required features are as follows:
  - a. System on/off selection
  - b. Automatic or Manual heating/cooling selection
  - c. Backlit LED/LCD digital display with temperature numerals that are at least 0.5"/12.0 mm in height.
  - d. Fan mode button that allows guest to have either continuous fan, fan cycling on demand of heating/cooling, and manual speed selection.
  - e. Concealed temperature limits for heating and cooling.
  - f. If an in-room energy management solution based upon occupancy is installed, it must include a door switch or electronic lock interface to assure that occupancy status is verified each time the entry door is opened. Once verified, the thermostat controls must remain in the occupied mode until the door or electronic lock is again activated. The system should assure that occupancy status is obtained through an automated sensor however, the sensor is not allowed through the key reader. Key reader HVAC systems are not allowed.

- 3. Locate thermostats remotely from the air conditioning device, typically near the bathroom and entry wall in a location unaffected by supply air drafts.
- 4. Not Applicable to this Brand
- 5. Install interlocks with exterior operable doors that de-energize the air conditioning when the doors are open.
- 6. Hilton Worldwide must review and approve all selections.

#### 2510.08 Electrical

A. Power Outlets

Power outlets must be placed to allow convenient connection of the individual light fixture. Power cords must be concealed from guest view.

B. Back-to-back Power Outlets

Back-to-back power outlets are not permitted between guestrooms. Outlets in walls between guestrooms must be offset horizontally a minimum of 6"/152 mm.

- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Power Requirements
  - 1. Locations required:
    - a. Electrical sockets are required where shown in the prototype drawings.

- b. Convenience electrical sockets are required for the iron and coffee maker.
- c. Minimum of four power outlets must be provided at the work surface for guest convenience. One must be a USB port. Outlets may be provided in the base of light fixtures, recessed in the wall or recessed in the work surface.
- d. Power outlet for the work surface lamp must be located below the work surface.
- e. Microwave outlet must be mounted horizontal above the working wall.
- f. Not Applicable to this Brand
- g. Not Applicable to this Brand
- h. Non-switched, power outlets (socket outlets) must be provided at each bedside surface for guest convenience. There must be at least one socket outlet at each surface and two socket outlets where the surface is shared between two beds. Up to half are allowed to be USB outlets. Outlets are not allowed in light fixtures and must be for guest use only.

#### 2. Circuits

a. Provide a minimum of two independent power circuits for the general devices and light fixtures, and at least one GFCI/ELCB/RCCB or equal circuit for the bathroom. Circuit interruption in one guest suite should not affect an adjacent room.

### F. Lighting

- 1. Comply with requirements included in Section 2514.08.
- 2. Wall switch must be provided adjacent to entry to control ceiling mount entry light. Coordinate location with safety latch.

## 2510.09 Technology

A. Telephone

- 1. All guest suites must contain a telephone outlet at the night stand.
- 2. One bedroom suites must also contain a telephone outlet in the living area.
- 3. Telephone outlets must be mounted at standard code heights out of guests' view.

#### B. Internet Access

- 1. Refer to Section 2514.09 for requirements within the guest suite.
- 2. When wired, an Internet connection must be provided above the work surface, mounted horizontally at 34"/864 mm above the finished floor.

### C. Television

- 1. Televisions must comply with the specifications provided in Sections 1706.00 and 2514.09.
- 2. Televisions must be the following minimum sizes:
  - a. Minimum 40" screen at the living area of all studios and one bedroom suites
  - b. 37" screen at the bedroom area of one bedroom suites

### 2510.10 Kitchen/Wet Bar

A. Wet Bar/Kitchen Requirement

Kitchens are required in all guest suites.

B. Cabinets

Refer to the prototype drawings and Section 2510.09 for information on the working wall.

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Ventilation must be provided, as required by equipment manufacturers.

### C. Plumbing

- 1. A 16"/412 mm long x 20"/521 mm wide x 8"/203 mm deep minimum stainless steel undermount kitchen sink is required.
- 2. A single or dual-lever kitchen faucet is required. The faucet must match the finish of the bath fixtures.

## D. Appliances

- 1. The following appliances are required in the guest suite kitchen. Selection must be similar, if not identical, in size to the dimensions listed below in order to fit in the working wall.
  - a. An over-the-range microwave oven, 29-7/8"/760 mm wide x 15-1/4"/391 mm deep x 16-3/4"/418 mm high; capacity 1.8 ft³/0.05 m³. The microwave oven must include an under-cabinet light.
  - b. A frost-free upright model refrigerator/freezer with a separate door for the freezer, 23-5/8"/600 mm wide x 27"/686 mm deep x 58-5/8"/1.48 m high; capacity 10.3 ft³/0.3 m³. Maximum dimensions: 25"/635 mm wide x 27"/686 mm deep.

- c. A built in dishwasher, 24"/600 mm wide x 34"/860 mm high x 25-3/4"/654 mm deep.
- d. Not Applicable to this Brand
- e. A disposal, minimum 1/3 horsepower is required.
- 2. Microwave, refrigerator, and dishwasher must have a stainless steel, black or gray case with stainless steel front panels. All appliances must coordinate in finish.
- 3. All appliances (except microwaves) must be Energy Star rated.

### 2511.00 Not Applicable to this Brand

#### 2512.00 Guest Bathroom

Refer to Sections 2514.00, Technical Criteria, and 2515.00 Furnishings, Fixtures and Equipment, for requirements applicable to this section.

## A. Bathroom Fixture Requirements

The inside finished dimensions as shown in the prototype drawings are minimums.

- B. Not Applicable to this Brand
- C. Not Applicable to this Brand

#### 2512.01 Doors

#### A. Barn Doors

Door type and style must be as shown in the prototype drawings.

#### B. Door Width

Clear width of door opening, when fully open, must be 32"/800 mm or greater.

### C. Door Hardware Requirements

All hardware must be commercial grade and have a finish to coordinate with surrounding bath accessories or entry door hardware.

### D. Not Applicable to this Brand

## E. Swinging Door Locking Hardware

Swinging doors must have a lock. They must also have a latch or pull that operates from either side, except when locked. Swinging door locks must release by turning the inside lever and by closing the door; an emergency device must release this lock from the outside of the bathroom.

## F. Barn Door Locking Hardware

A pull must be provided on both sides of barn or pocket doors. Stops must be coordinated with the handle and size of the door to achieve desired results. Locking hardware is not required on sliding barn doors.

## 2512.02 Finish Options - Guest Bathroom

- A. Floor: Porcelain tile
  - 1. Base (minimums): 3"/75 mm porcelain tile
  - 2. The bathroom door threshold must be a metal extrusion threshold. Threshold is not permitted if tile floor extends past bathroom entry door.
- B. Wall: Vinyl wallcovering, acrylic knockdown only permitted above prefab surrounds.
  - Not Applicable to this Brand
  - 2. Not Applicable to this Brand
  - 3. Not Applicable to this Brand
  - 4. Not Applicable to this Brand
  - 5. Not Applicable to this Brand
  - 6. Moisture-resistant gypsum board is required.
  - 7. Tub/shower surrounds: Cultured marble, prefab surrounds that are part of a modular unit
    - a. Cultured marble finish must have a pattern, matte finish and coordinate with vanity top. Trim pieces, when used, must be scribed to tub or shower edge. Samples must be reviewed and approved by Hilton Worldwide prior to installation.
    - b. Exposed and visible edges of surround panels must have a factory-finished edge.
- C. Ceiling: Paint
  - 1. Ceiling must be moisture resistant gypsum board.
  - 2. Ceilings must be a minimum height of 7'-3"/2.20 m.

#### 2512.03 Mechanical

#### A. Mechanical Exhaust

The bathroom area must be mechanically exhausted to the exterior as described in Section 2514.06.

### B. Re-circulating Type Exhaust

Re-circulating-type exhaust is not allowed.

#### C. Noise Level

- 1. If individual exhaust fans are used, select for maximum inlet noise level of 2.0 sones per AMCA Standards at design air flow and static pressure.
- 2. If a central exhaust fan is used, design for noise levels within the guest suites that comply with Section 2514.06.

#### D. Exhaust Fan Wall Switch

Provide separate wall switch for exhaust fan. An occupancy/motion sensor controlled exhaust fan is not allowed.

#### E. Toilet Exhaust Termination

Toilet exhaust must terminate to the exterior at the roof level.

### 2512.04 Fixtures/Plumbing

## A. Plumbing Fixture Requirements

Provide white plumbing fixtures (shower pan, bathtub, water closet and water basin) with chrome-plated exposed drain lines.

### B. Fixture Trim Finish Coordination

Fixture trim must be brushed nickel or brushed chrome. All finishes must coordinate in color.

### C. Stoppers

Bathtubs and water basins must provide a gravity overflow outlet sized for full flow rate.

### D. Stoppers

Provide metallic, mechanical lift type operated stoppers from the overflow or twist and lift stoppers.

#### E. Bathtubs

- 1. Not Applicable to this Brand
- 2. Bathtubs are allowed in double queen studios and one-bedroom suites.
- 3. All bathtubs must be a minimum of 5'-0"/1.5 m long.
- 4. Acceptable bathtubs:
  - a. Cast iron bathtubs that meet the following minimum requirements:
    - 1. An acid-and scratch-resistant enameled finish on a single one-piece, sand-cast base with integral apron.
    - 2. An integral slip-resistant surface on the bottom of the well meeting ASTM F462-79 (2007) Slip-Resistant Bathing Facilities (www.astm.org).

- 3. Integral lumbar support/sloped back.
- b. Porcelain-on-steel composite bathtubs that meet the following minimum requirements:
  - 1. An acid-resistant enameled finish on a minimum 16-gauge one-piece, steel-formed bathtub with an integral apron and an acrylic-composite backing on the underside of the bathtub.
  - 2. An integral slip-resistant surface on the bottom of the well meeting ASTM F462-79 (2007) Slip-Resistant Bathing Facilities (www.astm.org).
  - 3. Straight tiling bead/flange.
  - 4. Fully-bonded or integrated support on the bottom of the bathtub unit for support strength, sound deadening and heat retention.
  - 5. Integral lumbar support/sloped back.
- c. Porcelain-on-steel (POS) bathtubs that meet the following minimum requirements:
  - 1. An acid-resistant enameled finish on a minimum .0598"/1.5 mm thickness (16-gauge), one-piece, steel-formed bathtub with an integral apron.
  - 2. An integral slip-resistant surface on the bottom of the well meeting ASTM F462-79 (2007) Slip-Resistant Bathing Facilities (www.astm.org).
  - 3. Straight tiling bead/flange.
  - 4. Fully-bonded or integrated composite material on the bottom of the bathtub unit for support strength, sound deadening and heat retention.
  - 5. Integral lumbar support/sloped back.
- d. Vikrell bathtubs by Sterling with a textured swirl gloss finish.

5. Unacceptable bathtubs: Fiberglass, acrylic, plastic, bathtub liners, applied bath mats or strips

#### F. Showers

- 1. Not Applicable to this Brand
- 2. Showers are required in all single bedded studios except when bathtubs are required by Section 2517.00.
- 3. The minimum shower receptor dimensions must be 48"/1.2 m x 36"/900 mm.
- 4. Acceptable shower receptors:
  - a. Cast iron receptors that meet the following minimum requirements:
    - 1. An acid-and scratch-resistant enameled finish on a single one-piece, sand-cast base with integral apron.
    - 2. An integral slip-resistant surface on the bottom of the well meeting ASTM F462-79 (2007) Slip-Resistant Bathing Facilities (www.astm.org).
  - b. Porcelain-on-steel composite receptors that meet the following minimum requirements:
    - 1. An acid-resistant enameled finish on a minimum .0598"/1.5 mm thickness (16-gauge), one-piece, steel-formed receptor with an integral apron and an acrylic-composite backing on the underside.
    - 2. An integral slip-resistant surface on the bottom of the well meeting ASTM F462-79 (2007) Slip-Resistant Bathing Facilities (www.astm.org).
    - 3. Straight tiling bead/flange.
    - 4. Fully-bonded or integrated support on the bottom of the tub unit for support strength, sound deadening and heat retention.
  - c. Porcelain-on-steel (POS) receptors that meet the following minimum requirements:

- 1. An acid-resistant enameled finish on a minimum .0598"/1.5 mm thickness (16-gauge), one-piece, steel-formed tub with an integral apron.
- 2. A slip-resistant surface on the bottom of the well meeting ASTM F-462 Slip-resistant Bathing Facilities (www.astm.com).
- Straight tiling bead/flange.
- 4. Fully-bonded or integrated composite material on the bottom of the tub unit for support strength, sound deadening and heat retention.
- d. Single-piece cast marble receptors.
- e. Not Applicable to this Brand
- f. Vikrell receptors by Sterling.
- 5. Unacceptable shower receptors: Fiberglass, plastic
- 6. Not Applicable to this Brand
- 7. Shower enclosure
  - a. Showers (not tubs) require a bypass sliding door system with a 72"/1.83 minimum walk-through clearance. Doors must be frameless with smooth, tempered frosted glass, 1/4"/6 mm minimum thick, with either tubular pull handles (8"/200 mm long or more, mounted vertically) or towel bar handles (mounted horizontally). Stabilizer bars for bracing are not allowed. System frame must be aluminum or stainless steel. Metal component finishes must match finishes of bath fixtures and accessories refer to 2512.04.B.

#### G. Water Closet

- 1. Provide a dual-flush, tank type, vitreous china water closet with a smooth skirted base and an elongated bowl.
- 2. Water closets must have a commercial grade, closed-front, solid plastic seat with cover. The water closet seat and lid must remain in an upright position without being held. The color of seat and lid must match the fixture.

- 3. Water supply must be mounted approximately 10"/254 mm above the floor to avoid conflict between the escutcheon plate and wall base.
- H. Bathtub and Shower Controls
  - Bathtub/Shower Applications: Valve must be anti-scald, pressure and/or thermostatic automatically compensating mixing valve type.
    Construction must include integral stops, high temperature limit adjustment and replaceable cartridges. Brass/Bronze construction required for the main body. Lever operation of the valve is required for manual valves. Unless integral diverter is provided as part of the mixing valve, a lift knob for shower diversion must be located on top of the bath spout.
    - a. Minimum requirements:
      - 1. Compliance to ASME A112.18.1/CSA B125.1 and ASSE 1016.
  - 2. Single Showerhead and combination showerhead/hand shower applications: Valve must be anti-scald, pressure and/or thermostatic automatically compensating mixing valve type. Construction must include integral stops, high temperature limit adjustment and replaceable cartridges. Brass/Bronze construction is required for the main body. Lever operation of the valve is required for manual valves. If applicable, lever or push button diverter actuation may be used. Diverter must be integral to the control valve or located within 1'-8"/0.5 m from the control valve.
    - a. Minimum requirements:
      - 1. Compliance to ASME A112.18.1/CSA B125.1 and ASSE 1016.
  - 3. Not Applicable to this Brand
  - 4. Valve trim: All finished exposed trim (including exposed valves) must meet minimum code requirements for corrosion in compliance to ASME A112.18.1/CSA B125.1. Trim must include identifiable control setting by symbols, letters or graphics/colors to indicate "off", "cold" and "hot" operation for the control valve.
  - 5. All valves and trim must be approved by Hilton Worldwide.
  - 6. Not Applicable to this Brand

#### 7. Showerheads

- a. Provide an adjustable flow rate showerhead with fine and coarse spray. Showerhead must incorporate flow rate restrictor providing a maximum flow of 2.0 GPM/7.6 LPM at minimum delivered water pressure of 30 PSI/2.1 bar. Showerheads/hand showers must comply with minimum performance standards for low flow heads similar to USEPA Water Sense listings. Showerhead must be approved by Hilton Worldwide.
- b. All showerheads/hand showers must be code listed indicating compliance to a formal standard and the markings should appear on the device. The code listing should include minimum corrosion standards.
- c. Rough-in for the showerhead must be 6'-10"/2.08 m to 7'-0"/2.1m above the finished floor. Exception: showerheads on an adjustable bar/rail, in which case the bottom of the showerhead must reach at least 6'-6"/2.0 m.

### Vanity Faucets

- 1. Provide commercial grade faucets with dual lever handles with guarter turn feature and 8"/200 mm centers, or single-lever handles. Fixtures must be plated brass with replaceable cartridges, as manufactured by nationally known manufacturers. Lever handles must not have exposed screws. Lever-activated waste stoppers are required.
- 2. Each hot and cold water supply must have an individual shut off valve.
- 3. All properties must have a 1.5 gpm/5.6 lpm aerator.

#### J. Water Basin

1. Water basin must be an undermount/bottom-set vitreous china bowl.

#### 2512.05 Electrical

#### A. Illuminated Rocker Switch

Provide a wall switch immediately adjacent to entrance of bathroom.

### B. Light & Exhaust Fan Switch

Lights and exhaust fan must be switched separately. They must be ganged in a box and with a nightlight of white LED light.

#### C. Power Outlets

Two GFCI/ELCB/RCCB or equal power outlets (socket outlets) must be located at one end of the bathroom vanity for convenient use of personal care appliances (unless prohibited by local law).

## D. Light Switch & Electric Outlet Locations

Locate the light switch and electrical outlets so they do not conflict with the mirror, vanity backsplash or towel holder.

### 2512.06 Lighting

## A. 2514.08 Requirements

Comply with requirements included in Section 2514.08.

## B. Damp Location Lighting

All guest bathroom lighting must be approved for a damp location.

- C. Not Applicable to this Brand
- D. Wall Sconces

Provide a wall-mounted decorative fluorescent fixture in the guest bathroom over the vanity when a framed mirror is provided. If an integral lit or back-lit mirror is provided, it must be supplemented with a recessed ceiling fixture centered over the vanity bowl.

### E. Ceiling-mounted Light Fixture

A recessed down light must be provided above the shower area as shown on the prototype drawings.

2512.07 Not Applicable to this Brand

#### 2512.08 Vanities

A. Wash Basin/Vanity Top Height

The top of the wash basin must be 34"/860 mm high.

#### B. Base

- 1. Vanity bases must be provided by an approved manufacturer listed in the Furniture, Fixtures and Equipment Specifications found on <a href="https://www.hiltonworldwide.com/design">www.hiltonworldwide.com/design</a>. Bases must have a furniture appearance and include a wood-look plastic laminate open shelf, a top drawer on each side of the sink and a false drawer panel under the sink.
- 2. Vanities must be freestanding with tops 4"/102 mm, minimum, away from side walls unless shown otherwise on the prototype drawings. The back must be securely attached to the wall.
- 3. Refer to Section 2515.01 for more information on the construction of the vanity base.

## C. Tops

- 1. Not Applicable to this Brand
- 2. Vanity tops must be provided by the approved casegood manufacturers. The tops must be engineered stone and match the working wall kitchen countertop. Tops must have straight fronts as shown in the prototype drawings. The top must be 3/4"/20 mm thick with a straight eased and polished front edge, 1"/25 mm overhang and polished sink cutout. Separate 4"/100 m backsplash with polished and eased edges is required.

#### 2512.09 Bathroom Accessories

A. Bathroom Accessory Materials

All bathroom accessories must be non-corrosive and must match the plumbing fixture trim finish and style. Refer to section 2512.04.B For required finishes.

B. Internal Wood Blocking

Internal wood blocking secured to study is required for all wall mounted accessory items.

C. Required Accessories

All guest bathrooms must contain the following accessories:

- 1. Toilet Paper Holder
  - a. A single- or double-roll, surface-mount toilet paper holder, non-restrictor type must be provided. When within reach, the holder may be mounted under the vanity front - see prototype drawings. All wall-mount applications must utilize decorative holders.
- 2. A curved shower rod is required for all rooms that have shower/bathtub compartments. Rod must be oval or round tube and must not rotate within the mounting bracket. Rod must be mounted 6'-8"/2.04 m above the finished floor to the center line of the rod, vertically centered on back side of bathtub edge, and permanently secured. Anchors are required to securely fasten to wall. Shower curtains must not be used on

walk-in showers unless required for wheelchair accessibility.

#### 3. Grab Bar

- a. A grab bar is required at all bathtubs, at all whirlpools and in all shower enclosures. A decorative, stainless steel (or a finish to coordinate with surrounding fixtures and accessories) grab bar, 24"/600 mm in length, must be installed vertically on the back wall, 1'-9"/525 mm from the showerhead wall at bathtubs and 1'-1"/330 mm from the showerhead wall at shower enclosures. Whirlpool tubs must have the grab bar installed vertically on the side wall, directly above the outer edge of the whirlpool. A grab bar is not required at freestanding tubs. The bottom flange of the grab bar must be 30"/760 mm above the finished floor.
- b. All grab bars must be securely anchored and capable of withstanding 250 lbs/120 kgs of pull. Cement adhesive is not acceptable. Grab bars must have flange covers to conceal the mounting screws. Towel bar must not serve as a grab bar.

### 4. Soap Dishes

a. Integral shelving/soap dishes must be provided with modular shower units. Shelving must consist of two to four shelves sufficient in size to each hold a 20 oz./0.6 liter bottle minimum. For non-modular shower-only units and bathtub/shower combos, a soap dish must be placed in each corner, 48"/1.2 m above the finished floor.

### 5. Towel Storage

- a. Towel storage must be incorporated into the vanity base to accommodate the Brand terry program.
- 6. Not Applicable to this Brand
- 7. Three, single-prong, decorative towel hooks must be provided. Mount in locations as shown on the prototype drawings.
- 8. Not Applicable to this Brand
- 9. A brand approved, bulk dispenser(s) is required for dispensing of shampoo and body wash. It must be lockable, non-metal, easily maintained and positioned on the showerhead wall. Mount in locations as shown on the prototype drawings.

## 2512.10 Furniture, Fixtures and Equipment

Refer to Section 2515.00 for typical FF&E requirements.

- A. Not Applicable to this Brand
- B. Mirror
  - 1. A decorative, framed mirror is required above the vanity. Must be installed with tamper-proof wall mounts with no visible clips or fasteners. An integral lit or back-lit mirror may be submitted to Hilton Worldwide for approval in lieu of a framed mirror.

#### 2513.00 Back-of-House

Refer to Sections 2514.00, Technical Criteria, and 2515.00, Furnishings, Fixtures and Equipment, for requirements applicable to this section.

#### 2513.01 Office

#### A. All Offices

- 1. Provide, as a minimum, the offices and work areas as shown on the prototype drawings. Hilton Worldwide reserves the right to require additional offices dependent upon a particular property's location.
- 2. Provide a tamper-proof, 180-degree, one-way viewer at the main office door entry. Install viewer at centerline of door, 5'-0"/1.5 m above the finished floor.
- 3. Provide locksets with push-button lock or electronic card reader on all offices. Push-button lock must release with a key, by turning the inside lever and/or by closing the door.
- 4. Not Applicable to this Brand

## 5. Finish Options - Offices

a. Floor: Carpet (carpet tile)

1. Base (minimum): 4"/100 mm vinyl

b. Wall: Vinyl wallcovering

c. Ceiling: Acoustic ceiling tile

6. All built-in counters, shelves and cabinets must have at minimum a plastic laminate finish. Work counters must be 30"/760 mm deep. The top surface material must comply with Section 2515.04.

#### 7. Mechanical

a. Provide a thermostat for the office area. Separate controls are required for the general manager's office.

#### 8. Electrical

- a. At each desk/workstation there must be a minimum of one dedicated quad outlet and one duplex outlet. This must be located within 5'-0"/1.5 m of the workstation. All outlets must be ground. Each dedicated circuit may provide power for up to three workstations.
- b. Provide a minimum of one duplex convenience outlet on each wall with spacing not to exceed 20'-0"/6.0 m on center.
- c. Provide one, 40 amp duplex outlet on a dedicated circuit for the copier.
- d. Not Applicable to this Brand
- e. Not Applicable to this Brand
- f. All office lighting must be locally switched.

- g. Refer to Section 2514.08 for minimum light level requirements.
- 9. Provide three telephone/data outlets within 5'-0"/1.5 m of each workstation.
- 10. Each workstation must be wired as required by Section 2518.00.
- 11. Provide commercial grade, quality partitions and coordinating furniture in all offices.
- 12. For each office, provide a minimum of the following:
  - a. Desk (with pencil drawer and file drawer)
  - b. Desk chair with arms, five-star base with casters and pneumatic lift. Arms must be coordinated with clearance under the desk.
  - c. File cabinets (must be lockable)

### 2513.02 Housekeeping Zones

A. Laundry/Valet

Laundry

- 1. The minimum size of the laundry area and the minimum number of equipment pieces must be as shown in the prototype drawings.
- 2. Not Applicable to this Brand
- 3. Locate the laundry on lowest level of the property and acoustically insulate to prevent vibration and noise transmission to other areas of the property.
- 4. Not Applicable to this Brand

- 5. Not Applicable to this Brand
- 6. Dryers must be enclosed in a gypsum board enclosure. Provide at least 2'-0"/600 mm of service access in the rear. Verify all service access requirements. The door to this enclosure must open out.
- 7. Provide linen storage within the laundry. Minimum shelving must be as shown on the prototype drawings.
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. The laundry must contain the termination of the linen chute.
- 11. Doors
  - a. Entrance doors must be 3'-6"/1.0 m wide and a minimum height of 6'-8"/2.0 m.
  - b. Primary entrance door must have lockset and door closer with hold open feature.
- 12. Finish Options Laundry
  - a. Floor: Vinyl composition tile (allowed in dry areas, but not under large stationary equipment); concrete steel troweled, triple epoxy sealed or better
    - 1. Base (minimum): 4"/100 mm vinyl
  - b. Wall: Epoxy paint, moisture-resistant gypsum board (painted), masonry (painted)
  - c. Ceiling: Acoustic ceiling tile, paint on gypsum
- 13. Mechanical
  - a. Provide an independent central HVAC system for the laundry.

- b. Not Applicable to this Brand
- c. Dryer Makeup Air and Exhaust System:
  - 1. Provide source for outdoor treated makeup air as required by the dryer manufacturer's recommendations.
  - 2. Provide combustion air source for gas dryers that comply with NFPA 54 and 90A requirements (www.NFPA.org).
  - 3. In cold climates, protect equipment and piping from freeze potential.
  - 4. Fabricate and install exhaust ductwork to minimize dust or lint entrapment and provide cleanout openings at least 20'-0"/6.0 m.
  - 5. Laundry equipment supplier must provide a wet or dry exhaust vent filter to collect and control lint accumulation.
  - 6. Provide weather-stripped, motorized dampers interlocked to the dryer circuit.
- d. Not Applicable to this Brand
- e. Plumbing
  - 1. Not Applicable to this Brand
  - 2. Provide area floor drains and a continuous trough drain with open grating at the washers/extractors.
  - 3. Provide water temperatures to washing equipment at 165 °F/74 °C or as recommended by the equipment supplier and chemical system provider.
  - 4. Provide floor drains in front of every other washer.
  - 5. Provide individual shut off valves for each laundry equipment item, for each type of service.
  - Not Applicable to this Brand

- 7. Not Applicable to this Brand
- 8. Provide a two-compartment linen soaking water basin.
- 9. Not Applicable to this Brand
- Provide water softening for laundry if domestic water supply exceeds five grains of hardness.
- 11. Where employees handle substances that could injure their eyes or get onto their bodies, provide a plumbed or gravity fed eyewash station and/or safety shower with floor drain that complies with ANSI/ISEA Z358.1 (www.ansi.org). It must be on an unobstructed path and accessible within 10 seconds of the hazard. Bottled saline or flushing liquids are considered a secondary eyewash and should not be used in place of an ANSI compliant unit.

#### 14. Electrical

- a. Provide power as required for washers/extractors, dryers and ironers.
- b. Refer to Section 2514.08 for minimum light level requirements.
- c. Not Applicable to this Brand
- d. Provide a minimum of one 20 amp duplex outlet on each wall with spacing not to exceed 20'-0"/6.0 m on center in laundry.
- e. Provide a GFCI/ELCB/RCCB or equal ground fault protected duplex outlet behind each washer for service and detergent dispenser.
- f. Provide a GFCI/ELCB/RCCB or equal ground fault protected duplex outlet behind dryers for service.
- 15. Provide an outlet for a wall-mounted house telephone.
- 16. Equipment
  - a. All laundry equipment must be installed with vibration isolators.

- b. Not Applicable to this Brand
- c. Not Applicable to this Brand
- d. Not Applicable to this Brand
- e. Provide a small commercial grade washer and dryer in properties without full service laundries.
- 17. Provide a laundry folding table with adjustable heights.

#### B. Linen Chute

- 1. Linen chutes are required in buildings with three or more floors. In two-story buildings, a linen drop is permitted with a 1-1/2 hour fire-rated door assembly to maintain the required floor-to-floor fire rating.
- 2. Direct access from a guest corridor or any other public area is not allowed.
- 3. The linen chute must be 24"/600 mm diameter with an 18"/450 mm square access door on each guest suite floor.
- 4. Linen chutes must run vertically. Offsets are not allowed. The linen chute must terminate in the sorting area of the laundry.
- Not Applicable to this Brand
- 6. Linen chute discharge doors must be top-hinged with fusible link release, fire/smoke seals and when closed must be at least 6'-0"/1.8 m above the finished floor.
- 7. The linen chute must have self closing, self-locking doors. Doors must be interlocked unless the chute area is locked off from the public.

## C. Housekeeping

1. Not Applicable to this Brand

- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand
- 12. Mechanical/Plumbing
  - a. Not Applicable to this Brand
  - b. Where employees handle substances that could injure their eyes or get onto their bodies, provide a plumbed eye-wash station and/or safety shower that complies with ANSI/ISEA Z358.1-2009 (www.ansi.org) with floor drain. It must be on an unobstructed path and accessible within 10 seconds of the hazard.

## 2513.03 Engineering

A. Size Requirement

The engineering area must be a minimum of 150 ft <sup>2</sup> /14 m	T	ne engineering	area mu	ust be a	minimum	of	150	ft <sup>2</sup> /14	m²
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- B. Not Applicable to this Brand
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Workbench/Desk

Provide a workbench.

- H. Door
  - 1. Not Applicable to this Brand
  - 2. Doors must have a lockset.
- I. Finish Options Engineering
  - 1. Floor: Vinyl composite tile, concrete steel troweled and sealed (only when room does not open directly off a public area)
    - a. Base (minimum): 4"/100 mm vinyl
  - 2. Wall: Paint

### 3. Ceiling: Acoustic ceiling tile

- J. Not Applicable to this Brand
- K. Workbench Convenience Power Outlets

Above the workbench, provide a minimum of six convenience power outlets (socket outlets) at 48"/1.2 m above the finished floor.

### L. MATV Outlets

Provide two MATV outlets at 48"/1.2 m above the finished floor above the workbench.

### M. Power Tool Power Outlets

Above the workbench, provide a minimum of two power outlets (socket outlets) sized for power tools.

## N. Stationary Power Tool Power Outlets

When a full workshop is provided, provide a minimum of two power outlets (socket outlets) on separate circuits sized for stationary power tools.

#### O. Wall Convenience Power Outlets

Provide a minimum of two convenience power outlets (socket outlets) on each wall with spacing not to exceed 20'-0"/6.0 m on center.

### P. PMS Connection

Provide a property management system connection at the engineer's desk.

- Q. Not Applicable to this Brand
- R. Desk Telephone Outlet

Provide a telephone outlet at the engineer's desk.

S. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### 2513.04 Employee Facilities

A. Break Room

Dining/Break Room

- 1. A break room must be included as shown on the prototype drawings.
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand

- 8. Doors, when accessed directly off a service corridor, must have a glass vision panel.
- 9. Finish Options Dining/Break Room
  - a. Floor: Concrete steel troweled and sealed
    - 1. Base (minimums): 4"/100 mm vinyl
  - b. Wall: Paint
  - c. Ceiling: Acoustic ceiling tile, paint on gypsum
- 10. Furnishings, Fixtures and Equipment
  - a. Provide counter and cabinets to house microwave, full-size refrigerator and sink with hot and cold water.
  - b. Provide a minimum of one table with high pressure laminate top and four chairs.
  - c. Provide a microwave, full-size refrigerator and full-size two-compartment stainless-steel water basin.
- 11. Refer to Section 2514.08 for minimum light level requirements.
- 12. A data line extension from the Computer/Telecom room and four power outlets (socket outlets) for a computer are required if room is used for training.
- 13. Provide a minimum of one outlet for a house telephone if not adjacent to laundry.
- B. Locker Room / Employee Restroom
  - 1. Not Applicable to this Brand
  - 2. An employee restroom is optional.

- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Multi-user rooms require a self-closing entrance door with stainless steel or aluminum kick plates and push/pull plates. Single user rooms require a self-closing entrance door with a lockset and closer.
- 11. Not Applicable to this Brand
- 12. Finish Options Employee Restroom
  - a. Floor: Porcelain tile
    - 1. Base (minimums): 4"/100 mm porcelain tile
  - b. Wall: Paint
  - c. Ceiling: Acoustic ceiling tile
- 13. Mechanical/Plumbing
  - a. Water closets must be vitreous china and flush valve-type with elongated bowls.

- b. Water closet seats must be white, solid plastic and be self-sustaining.
- c. Not Applicable to this Brand
- d. Not Applicable to this Brand
- e. Exposed plumbing must be chrome-plated.
- f. Not Applicable to this Brand
- g. Provide a chrome-plated brass floor drain in restrooms. Slope floor to drain.
- 14. Refer to Section 2514.08 for minimum light level requirements.
- 15. Provide a minimum of one GFCI/ELCB/RCCB or equal, ground fault protected, power outlet (socket outlet) at each water basin.
- 16. Furnishings, Fixtures and Equipment
  - a. Provide a mirror above each wash basin.
- 17. Restroom accessories are required as follows:
  - a. Dual toilet paper holder.
  - b. Not Applicable to this Brand
  - c. Not Applicable to this Brand
  - d. Wall-mounted waste receptacle or waste basket.
  - e. Wall-mounted paper towel dispenser. Electric hand dryers are allowed when used in conjunction with paper towel dispensers.

- f. Wall-mounted liquid soap dispenser at each water basin.
- g. A coat hook is required on the back of each door, mounted 48"/1.2 m above the finished floor.
- 18. Not Applicable to this Brand
- 19. Provide a minimum of one locker per 15 guest suites. When separate rooms are provided for lockers, allocate the number of the lockers according to employee mix.
- 20. Lockers must be a minimum of 2.5 ft<sup>3</sup>/ 0.07 m<sup>3</sup>, two-tier with a base.
- C. Employee Nursing Room
  - 1. A private room/office may be required by the Fair Labor Standards Act. If so, the room is not allowed to be located within the restroom.
  - 2. Provide a sink, side table with under-counter refrigerator, lounge chair, full-length mirror and electrical convenience outlet.
- D. Not Applicable to this Brand
- E. Not Applicable to this Brand
- F. Not Applicable to this Brand
- G. Not Applicable to this Brand
- H. Not Applicable to this Brand
- I. Not Applicable to this Brand
- J. Employee Smoking Area

When possible, provide an employee smoking area that is covered and unaccessible to guests view.

## 2513.05 Storage

A. General Storage Requirements

General storage must be a minimum of 120 ft²/11.14 m² or 1 ft²/0.093 m² per guestroom, whichever is greater.

- B. Not Applicable to this Brand
- C. Secured Lost & Found Storage

Provide a secured storage for lost and found.

- D. Not Applicable to this Brand
- E. Finish Options Storage

Finish Options – all storage rooms

- 1. Floor: Vinyl composite tile, concrete steel troweled and sealed
  - a. Base (minimum): 4"/100 mm vinyl
- 2. Wall: Paint
- 3. Ceiling: Paint, acoustic ceiling tile
- F. Wall Convenience Power Outlets

Provide a minimum of one convenience power outlet (socket outlet) on each wall with spacing not to exceed 20'-0"/6.0 m on center.

G. Light Fixture Exclusions

Incandescent light fixtures are not acceptable.

## H. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

## I. Gas-Powered Equipment/Flammable Liquid Storage

Gasoline-powered equipment and flammable liquids must be stored in an enclosure away from the main building, in a protected room or in a cabinet specifically constructed and approved for the storage of flammable liquids.

## J. Linen Storage

- 1. A linen storage room must be provided on each floor.
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Each linen storage must contain the following elements:
  - a. Cart storage: Provide space for two carts, each approximately 58"/1.5 m long x 21"/550 mm wide x 44"/1.1 m high.
  - b. Linen storage: Provide 36'-0"/10 m (total lineal) of 18"/450 mm deep, floor-to-ceiling shelving spaced approximately 18"/450 mm apart.

- c. Housekeeping appliances storage: Provide a limited amount of vertical storage space for mops, brooms, etc.
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Any electrical risers or equipment located within the linen room is required to be enclosed in a serviceable closet or have a lockable panel cover.

### K. Outdoor Storage

- 1. An outdoor storage building may be required based on site constraints and climate conditions. If provided, it must be a concrete block structure with an exterior finish to match that of the main building. The interior walls and ceiling must be painted as a minimum. The floor finish must be sealed concrete.
- 2. The outdoor storage building is for one or more of the following:
  - a. Tools and equipment
  - b. Maintenance supplies and a workbench
  - c. Lawn equipment (mower, edger, shears, hose, etc.)
  - d. Littervac, wheelbarrow and snow removal equipment, where applicable
- 3. Double metal doors or a roll-up garage door with a ramp leading up to it must be provided for ease of equipment transfer.
- 4. Temporary or portable structures are not permitted.

### 2513.06 Electrical Rooms

A. Door & Hardware

Entry door must have a lockset and door closer.

- B. Finish Options Electrical Rooms
  - 1. Floor: Concrete steel troweled and sealed, porcelain tile
    - a. Base (minimum): 4"/100 mm vinyl
  - 2. Wall: Paint
  - 3. Ceiling: Paint, acoustic ceiling tile, painted structure
- C. Electrical Panel Boxes & Circuits

All electrical panel boxes and circuits must be labeled.

D. Locked Electrical Panel Boxes & Circuits

Unless prohibited by local authorities, all electrical panels and circuits accessible to the public must be kept locked. Electrical panel boxes must be located in separate panel rooms when possible.

E. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

F. Electric Shock Treatment Notices

Electric shock treatment notices must be prominently displayed on all switch boards, panel boards, industrial control panels, and motor control centers that are likely to require examination, adjustment, servicing, or maintenance while energized, to warn qualified persons of potential

electric arc flash hazards. The marking must be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment. Notice must also be displayed on the entry door.

#### 2513.07 Mechanical Rooms

#### A. Door Width

Mechanical rooms (not including small closets) must have a 3'-6"/1.0 m wide door or two 3'-0"/900 mm wide doors for equipment removal. Doors must have a lockset and door closer with hold open feature.

- B. Finish Options Mechanical Rooms
  - 1. Floor: Concrete steel troweled and sealed, porcelain tile
    - a. Base (minimum): 4"/100 mm vinyl
  - 2. Wall: Paint
  - 3. Ceiling: Paint, acoustic ceiling tile, painted structure
- C. Not Applicable to this Brand
- D. Domestic Water Heating System
  - 1. Provide a temperature gauge in the discharge from each water heater and a separate gauge in the common supply water header leaving the domestic water heaters.
  - 2. Install adjustable angle, bi-metal, 3"/76 mm dial-type gauge, 0°F/-20°C to 200°F/95°C temperature range in a thermal well appropriately sized for the pipe.

3. Provide combustion air requirements required by manufacturer and local codes.

#### E. Floor Drain

- 1. Provide at least one brass floor drain or as necessary for equipment drains and overflows, arranged to minimize potential tripping hazards.
- 2. Install suitable trap primer device complete with isolation valve and access for maintenance.
- F. Not Applicable to this Brand
- G. Wall Convenience Power Outlets

Provide a minimum of one convenience duplex outlet on each wall with spacing not to exceed 20'-0"/6.0 m on center.

H. Electrical Equipment Mounting Height

Any electrical equipment must be mounted 6"/150 mm above floor level to avoid contact with water from potential leaks.

I. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

## 2513.08 Computer/Telecom Room

A. Computer Room Equipment Requirements

Computer room must contain the main PBX, Internet, IPTV equipment and the hotel management system equipment.

B. Size Requirement

For hotels with less than 300 guestrooms, a minimum 130 ft<sup>2</sup>/12 m<sup>2</sup> room is required. Hotels with more than 300 keys must increase the size to a minimum 170 ft²/16 m². For non-prototypical hotels, the building layout or use of IDF (Intermediate Distribution Frame) rooms containing remote cabinets may affect the size requirement.

#### C. Central Location

The room must be centrally located within the hotel. It may be located remote from the front desk but must only be accessible from back-ofhouse areas.

### D. Thoroughfare Not Allowed

The room must not serve as a thoroughfare to any other room.

## E. Heat/Electromagnetic/Fire/Flood Location Risk

The room must not be located adjacent to any area where there are potential risks for physical damage from excessive heat, electromagnetic fields, fire or flood.

## F. Telecom Equipment Adjacency

For maximum efficiency, the computer equipment room must be within 100'-0"/30 m of the telecom equipment.

## G. Weight Support

Floor must be capable of supporting up to 670 lb/ft<sup>2</sup> / 1000 kg/m<sup>2</sup>.

## H. Watertight Ceiling

Floor immediately above the room must be watertight and any openings in the ceiling, walls or floor must be sealed.

### I. Structural Columns/Pillars

There must be no structural columns, pillars or other protrusions within the room that prevent full access to walls for mounting of equipment.

#### J. Windows

Windows are not allowed.

## K. Earthquake/Disaster Regulations

The room must meet local earthquake or disaster regulations.

- L. Finish Options Computer/Telecom Room
  - 1. Floor Electrostatic discharge (ESD) material tile, paint, carpet or VCT
    - a. Base (minimum): 4"/100 mm vinyl
  - 2. Wall: Paint (walls must be painted white)
  - 3. Ceiling: Painted structure. Suspended ceilings are not allowed. Computer/telecom room must have a minimum ceiling height of 8'-6"/2.6 m.
- M. Workbench

A workbench must be provided. The workbench must not serve as a permanent office area but must have a clear workspace for a PC or server.

## N. Mechanical / Plumbing

- 1. An air conditioning / cooling system must be installed to service the computer room which complies with Section 2514.00 Environmental Control Requirements.
- 2. Provide a complete computer room type air conditioning system and loaded such that all terminal units within the computer room are not suspended over IT/Telecom equipment, including any wet piping, appurtenances or condensate drainage. Preferred location of the equipment is outside the room with ducted air supply to/from the units. Air conditioning to be sized to provide adequate cooling for the design equipment density in the rack system plus 33 percent for future loads, and all other internal room loads. Equipment must be able to reject internal heat loads regardless of outdoor temperature.
- 3. Provide malfunction alarms for high temperature, low temperature and low relative humidity with remote annunciation to the security office (if applicable) and engineering office.
- 4. Wet systems are not allowed to pass through the room.

## O. Light Switch Location

Light switch for the room must be immediately adjacent to the entry door.

## P. Light Levels

Refer to Section 2514.08 for minimum light level requirements.

### Q. Power Outlets

A minimum of four dedicated guad outlets must be provided adjacent to the property management system rack. All outlets must be grounded.

#### R. Dado-trunk

The area above the workbench must be fitted with a dual compartment dado-trunk (power and data) running parallel to the floor at a height somewhere between 3'-0"/1.0 m to 5'-0"/1.5 m. Outlets must be presented in pairs with no fewer than six power and six data.

## S. Cabling

Cabling must run over equipment racks in approved cable trays. Refer to Section 2518.00.

## T. PMS Equipment & Computer/Telecom Location

Property Management System equipment at workstations must be within 300'-0"/90 m of the computer/telecom Room.

### U. Serial Cable Interface of Systems

Interface of systems (telephone/MATV/point of sale) with serial cable must be within 100'-0"/30 m of the Property Management System equipment in the computer/telecom room. Larger distances require fiber optics in lieu of Cat6 cable.

## V. Equipment Racks

Equipment racks must be 42U (31"/800 mm x 39"/1000 mm) with suitable cable management. Racks are allowed to be open or enclosed models. Enclosed models must be lockable. Specific cabinets with different dimensions may be required by certain vendors.

## W. PBX/HSIA Systems Racks

PBX and HSIA systems must be installed in proprietary racks or on standard data racks. They are not allowed to be freestanding.

## X. Maneuvering Space

Sufficient maneuvering space must be provided in front and back of the equipment racks for access.

## Y. Uninterrupted Power Supply

Uninterrupted power supply (UPS) is required for the computer systems.

- 1. The system must provide no less than one hour autonomy for the computer systems attached.
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. The UPS must provide adequate surge protection to connected systems.

#### 2513.09 Trash Collection Area

A. Trash Chute Requirements

Trash chutes are not permitted.

B. Trash Collection Room Requirements

Trash collection rooms are not permitted.

- C. Trash Compactor/Container
  - 1. A trash container is required. A trash compactor is allowed.

- 2. Trash containers must be fully hidden from public view within an enclosure. The enclosure must be a concrete block structure, positioned away from the main building when possible, with an exterior finish to match that of the main building. The interior must be painted as a minimum.
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. The trash compactor/container must have a 20'-0"/6 m minimum long concrete pad for support of the trash collection vehicle.
- 6. Not Applicable to this Brand
- 7. The trash enclosure must be sized to include a commercial recycling container.
- 8. Provide solid gates that close and secure the area.
- 9. Painted steel pipe bollards must be installed around the container to prevent damage to walls.
- 10. Not Applicable to this Brand
- 11. Install the compactor/container on a concrete slab and pitch toward a separate sanitary drain (when permitted by the local jurisdiction).
- 12. Locate a self-priming sanitary drain beneath the compactor/container. Position the drain near one end of the compactor/container area so that it is accessible when the compactor/container is in place.
- 13. Not Applicable to this Brand
- 14. Not Applicable to this Brand
- 15. Provide a hose bib for wash down.

#### 2514.00 Technical Criteria

#### 2514.01 Doors and Windows

A. Public Area Door Height & Width

All public area doors must be a minimum of 6'-8"/2.0 m in height and be a minimum of 3'-0"/900 mm in width.

B. Guestroom/Guest Bath and BOH Door Height & Width

Guestroom entry, guest bathroom and back-of-house doors (leaf) must be a minimum of 6'-8"/2.0 m in height and be a minimum of 3'-0"/900 mm in width.

C. Exterior Doors to Public Areas

Exterior doors to all public areas must be aluminum and glass.

D. Exterior Door Weather Stripping

Exterior doors must have weather-stripping with the appropriate type of threshold.

E. Out-swinging Exterior Metal Doors

Out-swinging exterior metal doors must have closed tops.

F. Interior/Exterior Metal Door Requirements

When metal doors are used on the interior, they must be must be a minimum 18 gauge (.0478 inch/1.214 mm) cold-rolled steel with a minimum 16 gauge (.0598 inch/1.519 mm) cold-rolled steel welded frame. When metal doors are used on the exterior, they must be a minimum 16 gauge (.0598 inch/1.519 mm) 'A-60' galvanized.

## G. Door Frame Requirements

Door frames must be welded or knockdown three-piece metal frames and must be properly secured and installed. Snap-on trim is not allowed.

#### H. Door View Panels

Provide view panels in doors of rooms including fitness center, guest laundry, business center, vending (if applicable), swimming pool, etc. unless side lights are provided.

### Doorstops

Provide wall-mounted doorstops for all doors. Floor-mounted door stops are not allowed.

#### J. Kick Plates

All back of house doors subject to heavy traffic must have stainless steel kick plates. Kick plates are not allowed on public or guestroom area doors.

K. Hinged doors must have lever hardware. For instances when panic hardware is required instead of lever hardware, refer to 2516.05.C.5.

## L. Hinges

All doors must have a minimum of three commercial-grade hinges.

## M. Doors & Door Hardware Style & Finish

All doors and hardware for doors to electrical and telephone closets, stairwells and other non-public spaces on guest suite floors must match, to the extent possible, the style and finish of the guest suite entry doors.

- N. Not Applicable to this Brand
- O. Electronic Locks

Electronic locksets are required in the following locations (deadbolt must be removed with the exception of the guestroom entry):

- 1. Main entry door to the property (when required by 2502.01.F)
- 2. Each suite entry
- 3. Not Applicable to this Brand
- 4. Fitness Center
- 5. Indoor swimming pool entry and secondary entries (exception: entry from secure outdoor patio)
- 6. Not Applicable to this Brand
- 7. Meeting rooms
- 8. Not Applicable to this Brand
- 9. Computer/Telecom Room
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand
- 12. Not Applicable to this Brand

- 13. Not Applicable to this Brand
- 14. Secondary guest entrances to the public corridors
- P. Electronic Lock Vendors

Electronic locksets must be procured from approved vendors and have the following minimum features:

- 1. A mechanical override (hard key) is not allowed.
- 2. An encoded card key/FOB must be used for operation.
- 3. An audit/interrogation feature must be provided.
- 4. The dead bolt must be engaged by a turn piece on the inside of the guest suite.
- 5. The deadbolt and latch bolt must both retract when the inside lever is turned.
- 6. The lever must remain in a horizontal position when not in operation, and inside guest suite lever must remain in perpendicular position when not in use.
- 7. RFID/Radio frequency identification (contact-less) locks are required and must have Hilton Worldwide BLE compatibility for integration with the Hilton Worldwide 'Straight to Room' program.
- Q. Not Applicable to this Brand
- R. Restricted Area Locking Devices

Restricted areas of the hotel must have an access-control system incorporated into door-locking devices. Approved devices are card access systems, digital keypad systems or remotely-controlled electronic door latches. Areas that must be provided access-control devices include, but are not limited to:

- 1. Entrance to front office area
- 2. Back office areas accessible from public corridors
- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Back-of-house access from meeting rooms
- S. Wall Covering Caulk

Caulking to match wall covering is required around all door frames.

T. Acoustic, Smoke Seals, Neoprene Silencers & Weath

Vinyl bulb weather-stripping must be provided on all exterior doors.

U. Rooftop Exit Locking Requirements

All rooftop exits must be equipped with a panic bar or other releasing device, latching hardware and an alarm that is monitored in the security dispatch office or PBX. These doors must have a sign on the inside face indicating the door is alarmed and to be used in emergency situations only, if accessible to the public.

V. Internal Windowsill Finishes

Internal windowsills must be granite, quartz, natural stone or approved composite solid surface material. Wood, drywall, plastic laminate and metal are not allowed.

W. Window Material Requirements

Windows must be standard aluminum with clear dual glazing and a finish compatible with other window trim. Extruded polymer (uPVC) windows are an acceptable alternative when they have galvanized steel reinforcement (minimum 0.08"/2 mm thick) and minimum 0.106"/2.7 mm thick primary frame and sash extrusions (exterior), are commercial rated, and have a 10 year warranty against fading. All window frame colors must coordinate.

#### X. Exterior Window Insulation

Exterior windows must be insulated. Frames must be thermally broken in areas where ASHRAE design temperature is below 32 °F/0 °C or above 82.4 °F/28 °C.

### Y. Safety Bar Requirement

Glass panels, windows, glass doors, sidelights, etc. that extend to the floor in all areas must be shatterproof, be tempered glass, or be equipped with a safety bar mounted at 3'-0"/900 mm above the finished floor.

#### Window Air Infiltration

Windows must comply with a maximum air infiltration rate of 0.3 ft<sup>3</sup> per square foot per minute or 5.5m3 per sqm per hour (7.1 kg/sqm per hour) at DP of 30Pa, and with no water leakage at 6.5 psf (300Pa) differential, a U-value of 0.4 and with an allowable wind load of 105 lbs per ft<sup>2</sup>/47 kg per m<sup>2</sup>/470 Pa.

- AA. Architectural films must meet the following requirements:
  - Class A ASTM E84 Fire Rating
  - 2. Have pressure-sensitive adhesive (PSA) backing and this backing must have air release channels

	3. Must be minimum 8 mil thickness Must be low VOC
	4. Must feature 5,000 cycle or greater Taber Abrasion resistance
	5. Must be able to conform and adhere to three-dimensional surfaces
	6. Must be disposable in regular trash (non-hazardous)
	7. Must be removable (may require use of heat)
	8. Architectural films may be recovered with replacement architectural films not more than once.
AB.	Public Area Operable Windows
	Public area operable windows located above the ground floor are not allowed to open more than 4"/100 mm unless required otherwise by code. Once opened, the window must remain in the open position without having to be propped open.

#### 2514.02 Walls

- A. Vinyl Wall covering
  - 1. All vinyl wall covering must meet the following requirements:
    - Class A ASTM E84-12c tunnel test (www.astm.org).
    - b. Not Applicable to this Brand
    - c. All wall covering adhesives must be strippable and must contain mildew inhibitors.
    - d. 20 oz. per linear yard/ 460 g per square meter, Type II or heavier must be used in public areas and back-of-house areas.
    - e. 15 oz. per linear yard /350 g per square meter, Type I or heavier must be used in guest suites.
    - f. 15 oz. per linear yard /350 g per square meter, Type I or heavier must be used in guest suite bathrooms.
    - g. 54"/1.3 m
    - h. Fabric backing is required. Non-woven wallcoverings of paper backed vinyl can be used within niches and protected areas with Hilton Worldwide approval.
    - All wall coverings must contain an antimicrobial substance in the manufacturing process to safeguard against micro-organisms such as bacteria, fungi and actynomycetes.
    - j. Microvented wallcovering is required to meet ASTM E96-02, Method B. Minimum 21 ounce rated at 10 perms and approximately 25,000 holes per square foot is required. A sample is required for review and approval from Hilton Worldwide prior to ordering.
  - 2. Hotel must not install wall vinyl over existing wall vinyl in any areas of the hotel. Old wall vinyl must be completely removed before new wall vinyl is installed.
- B. Acrylic Knock-Down

- 1. Acrylic knock-down is required in guest suites where noted on prototype drawings.
- In areas with high humidity levels, 100 percent acrylic knock-down may be considered for exterior walls in public areas. Prior approval is required.
- Contact Hilton Worldwide for a list of approved manufacturers. Proposed substitute products must have the following information forwarded for approval:
  - a. Two samples (8"/200 mm x 8"/200 mm minimum) showing the specific color and texture of the knock-down finish must be submitted. If the product is approved, one sample must be retained and one must be returned and must be kept on file at the jobsite for reference.
  - b. All submitted products must meet the following minimum performance characteristics and supportive documentation must be provided to verify conformance.
    - 1. Perm rating of greater than 16 for the system, including basecoat, primers, texture coats, etc.
    - Scrub resistance of a minimum of 2500 scrubs before failure ASTM D2486-06 (www.astm.org).
    - 3. Minimum dry film thickness of 10 mils or greater.
    - 4. VOC levels of 1.0 lbs. per gallon/120 grams per liter or less ASTM-D3960-05 (www.astm.org).
    - 5. Minimum of a five year product performance warranty and a five year warranty against mold and mildew growth. (The product must have been in commercial use for a time period that meets or exceeds the factory-stated warranty period.)
    - 6. A product listing a "sealer" as part of the system is not permitted.
  - c. All submittals must be accompanied by Independent Laboratory Test Results to support manufacturer claims. Submitted Independent Lab Test Results must be on the testing lab letterhead. Test results on the manufacturer's letterhead will not be accepted.
  - d. Substitutions must all be submitted for review with sufficient time allowed for evaluation.

- e. No product is to be considered approved until Hilton Worldwide provides written approval during plan submittals and the installation approval until installed and reviewed and approved on site.
- 4. Wall finish using drywall mud or non-acrylic finishes with paint is not permitted in all instances.

#### C. Tile

- 1. Tile must be decorative ceramic tile, stone or porcelain tile, minimum 3/8"/9.53 mm thick with rectified edge.
- 2. Tile grout must be non-shrink-type epoxy or latex Portland cement to minimize staining and the minimum grout joint must comply with ISO and ANSI guidelines.
- 3. Tile must not be installed over old tile in any areas of the property. Old tile must be completely removed before new tile is installed.
- D. Not Applicable to this Brand

#### E. Paint

- 1. All paints must be low VOC (less than 50 VOC grams per liter) and low odor.
- 2. Paint in high humidity areas must be satin or semi-gloss finish with a mildew-resistant formulation.
- 3. Paint used in high contact areas must be satin or eggshell finish that is durable, washable and stain resistant.
- 4. Paint used on the interior walls of an indoor swimming pool room must be epoxy paint.
- F. Not Applicable to this Brand
- G. Chair Rails/Corner Guards
  - 1. When chair rails are used, they must have a decorative profile and be constructed of a material resistant to wear.

- Not Applicable to this Brand
- 3. Provide full height corner guards at outside corners in all high traffic public and guestroom areas. Corner guards must be a resilient vinyl to coordinate with the wall color and must be adhesive mount. The flanges must be a maximum width of 1"/25 mm.

#### 2514.03 Floors

## A. Slip Resistance Requirements

- 1. Tile must have a static coefficient of friction SCOF (ASTM-C1028-07e1; www.astm.org) of 0.6 wet or better or Dynamic Coefficient of Friction DCOF (ASTM-A137.1) of .42 or better and a breaking strength (ASTM-C648-04, 2009; www.astm.org) of not less than 250 lbs or ISO equivalent.
- 2. Kitchen floor tile must pass the Robert's wheel abrasion test or ISO equivalent and have a slip-resistance coefficient of at least 0.6 when wet, or regional statutory standard.

#### B. Tile

- 1. Tile must be decorative non-slip or unpolished porcelain or natural stone tile, minimum 5/16"/8 mm thick with a rectified edge.
- 2. Public area floor tile must be 18"/450 mm x 18"/450 mm minimum. Rectangular-shaped or plank-shaped tiles are permitted. Small tile mosaics are permitted for accents when the design is approved by Hilton Worldwide.
- 3. Not Applicable to this Brand
- 4. Guestroom tile must be 12"/300 mm x 12"/300 mm minimum. Rectangular-shaped tiles or plank-shaped tiles are permitted.
- 5. Rectangular shaped tiles must be 12"/300 mm x 24"/600 mm minimum. Plank-shaped tiles must be sized no less than 3"/75 mm x 24"/600 mm or no greater than 9"/225 mm x 36"/900 mm.

- 6. Tiled shower floors are only allowed in accessible roll-in showers. 2"/51 mm x 2"/51 mm tiles minimum.
- Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Tile must not be installed over old floor tile in any areas of the hotel. Old tile must be completely removed before new tile is installed. Thin tile (1/8" thick) may be installed over existing tile in vertical wall applications only where critical room dimensions will not be impacted.
- 10. Not Applicable to this Brand
- 11. Wall base must have a factory finish edge or approved alternate.
- 12. Porcelain tile must be through body/color body material or a glazed porcelain that meets Mohs scratch hardness minimum rating of 7.0.
- 13. Must pass ASTM C373 for water absorption, frost and chemical resistant.
- 14. Must pass ASTM CTI 81-7D for stain resistance.
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand

#### E. Grout

- 1. Natural stone grout must be non-shrink-type epoxy or latex portland cement to minimize staining and the minimum grout joint should comply with ISO or ANSI guidelines. 3/16" / 5 mm is the maximum width allowed. At plank-shaped tile, color of grout is to match color of tile.
- 2. Cementitious grout must be sealed after installation.

#### F. Concrete

1. Concrete must be helicoptered, polished and sealed.

- 2. Concrete strength must be a minimum of 4,000 PSI/27,850 kPa.
- 3. Seal as recommended by manufacturer and sealer must be applied in three coats.
- 4. Substrate must be dust free, free of cracks, level and sound concrete subfloor.
- 5. Verify with manufacturer the appropriateness of substrate.
- 6. Coefficient of friction must comply with all state and local codes for both wet and dry application.
- G. Not Applicable to this Brand
- H. Carpet
  - 1. Carpet must meet the following criteria:
    - a. Radiant panel: ASTM E-648-10 Class 1 (installed carpet only)

Area rugs must meet DOC FF 1-70.

- b. Smoke density: ASTM E-662-09
- c. Lightfastness: AATCC 16-E
- d. Color fastness to water: AATCC 107
- e. Color fastness to rubbing: AATCC 165
- f. Wear resistance: ASTM D5252
- g. Appearance retention: ASTM D5252

- h. Tuft anchorage: ASTM D1335
- i. Flammability
  - 1. Not Applicable to this Brand
  - 2. Radiant Panel Test: ASTM E-648
- j. Not Applicable to this Brand
- k. Not Applicable to this Brand
- I. Not Applicable to this Brand
- m. Static electricity/Stroll test: AATCC 134 < 3.0 KV
- n. All carpet must pass TARR (Texture Appearance Retention Rating) of 2.5 3.0 or higher (Hexapod Test).
- o. All nylon carpet must be stain treated with foam and heat set method.
- p. International test certificates are required.
- 2. Carpet must comply with the following minimum specifications:
  - a. Not Applicable to this Brand
  - b. Not Applicable to this Brand
  - c. Not Applicable to this Brand
  - d. Not Applicable to this Brand

- e. Not Applicable to this Brand
- f. Not Applicable to this Brand
- g. Not Applicable to this Brand
- h. Not Applicable to this Brand
- Not Applicable to this Brand
- j. Not Applicable to this Brand
- k. Not Applicable to this Brand
- Not Applicable to this Brand
- m. Not Applicable to this Brand
- n. Carpet tiles must be throughout the hotel. All tiles must be provided by the following manufacturers:
  - 1. Interface FLOR (tile with InterComfort cushion)
  - 2. Milliken (tile with Enhancer technology attached pad)
  - 3. Shaw (tile with Ecoworx backing system and attached cushion back)
  - 4. Mohawk/Durkan (tile with UW Ecoflex Air II attached pad)
  - 5. Alternate carpet tile manufacturers must provide significant sustainable contributions during development of their tiles. Examples of such contributions are integrating a high percentage (65 percent or more) of pre-consumer recycled content or maintaining a negative carbon footprint in manufacturing the tile. All alternate manufacturers must be approved by Hilton Worldwide.

- 3. Not Applicable to this Brand
- 4. Not Applicable to this Brand
- 5. Not Applicable to this Brand
- 6. Not Applicable to this Brand
- 7. Carpet Tile Installation
  - a. Comply with manufacturer's instructions and recommendations. Use manufacturer's recommended adhesives.

### 2514.04 Ceilings

## A. Height

No ceiling in a habitable public space is allowed to be less than 7'-6"/2.3 m. In no case must any ceiling be less than 7'-0"/2.1 m. Local codes may require higher ceilings than noted.

#### B. Paint

- 1. Painted ceilings in public areas must have a smooth or light sand finish.
- 2. Guest suite furr downs must have a smooth painted finish.
- 3. Guest suite bathroom ceilings must be painted with latex enamel/semi-gloss paint in a smooth or orange peel finish.
- 4. All back-of-house ceilings must be painted or better.
- 5. All paints must be low VOC (less than 50 VOC grams per liter) and low odor.

- 6. Paint in high humidity areas such as guest suite bathrooms must be washable and have a mildew resistant finish.
- C. Acoustic Ceiling Tile (ACT)
  - 1. Tile in public areas must be 2'-0"/600 mm x 2'-0"/600 mm premium tegular (reveal) edge tiles. Alternate sizes must be approved by Hilton Worldwide.
  - 2. 12"/300 mm x 12"/300 mm and 24"/600 mm x 48"/1.2 m tiles are not allowed in any public spaces.
  - 3. Not Applicable to this Brand
  - 4. Concealed spine acoustical tile ceilings are not allowed in public areas.
  - 5. Tiles in back-of-house areas that are accessible by the public such as offices must be 2'-0"/600 mm x 2'-0"/600 mm.
  - 6. Panel performance must prevent panel sag.
  - 7. All exposed ceiling grid systems must be a narrow spline, 9/16"/15 mm maximum width, and must match the color of the ceiling tile.
  - 8. Grid systems in indoor pools must include a painted aluminum grid and vinyl coated, moisture-resistant tiles. All hanger wires must be stainless steel.
  - 9. Mineral fiber tiles are not allowed in humid environments.
  - 10. Not Applicable to this Brand
  - 11. Acoustic ceiling tile is not allowed in guest suites.
  - 12. Kitchen ceilings must be washable plastic or fiberglass tile ceiling with aluminum suspension system.

#### 2514.05 Acoustical Performance

A. The following minimum criteria must be used for the acoustical performance of the building design. Acoustic performance must be measured using ISO 140, ISO 717 and ISO 3382, www.iso.org. An acoustical consultant is recommended.

Acoustical Performance Minimum Criteria		
STC = Sound Transmission Coefficient / IIC = Impact Insulation Class		
Function / Meeting Rooms		
Function or meeting rooms	54 STC	
Meeting room – operable partitions	52 STC	
Meeting room – baffles above ceiling / partitions	54 STC	
Boardroom	54 STC	
Service room adjacent to meeting room	52 STC	
Suite		
Suite to exterior	50 STC	
Suite to Suite	50 STC	
Suite to swimming pool or fitness center	60 STC	
Suite to public space	50 STC	
Suite to back of house	60 STC	
Suite floor / ceiling	50 STC	
Suite to elevator lobby	60 STC	
Back of House		
Corridor to mechanical, laundry, service rooms	50 STC	
Floor Impact		
Suite to Suite	55 IIC	
Suite sleeping area to mechanical room	55 IIC	

- B. Not Applicable to this Brand
- C. Acoustically Treated Ceiling Assemblies

Ceiling assemblies must be acoustically treated to limit sound transference where the pool is located directly below guest suites.

### D. Pool Equipment Noise & Aesthetics

Locate pool equipment to minimize noise to adjacent guest areas.

#### 2514.06 Mechanical

## A. HVAC System Types

- 1. Not Applicable to this Brand
- The system type and design capacity must be determined based on the standards required by Hilton Worldwide Architecture and Construction, ASHRAE, national and local codes whichever is more stringent.
- 3. Provide complete calculations and written confirmation that the design of the variable refrigerant system (VRF) complies with ANSI/ ASHRAE standard 15-2007, Safety Standards for Refrigeration Systems, and ANSI/ASHRAE standard 34-2007, Designation and Safety Classification of Refrigerants (www.ansi.org, www.ashrae.com).
- 4. Do not use system types that require summer/winter changeover of heating/cooling capacity must not be used.
- 5. Do not use PTAC (Packaged Terminal Air Conditioner) type units except in guestrooms.
- Design all HVAC systems to comply with ASHRAE Standard 90.1-2013 (www.ashrae.com) or an equivalent standard. Submit written compliance forms to Hilton Worldwide for review.
- 7. Refrigeration System Safety:
  - Design all refrigeration systems and machinery rooms to comply with ASHRAE Standards 15 and 34, or equivalent local codes and standards.
  - b. For variable refrigerant flow systems that use R-410a in guest suites, the room volume calculations must include the following requirements:

- 1. Room volume must be reduced from the entire floor -to-ceiling measurement, and calculated base upon the floor-to bed-height or 3'-0"/900 mm, whichever is higher.
- Room volume must exclude the toilet room.
- 3. Room volume must exclude the volume of any fixed or portable case work.
- Disregard any exhaust air flow out of the toilet room and any supply air into the guest suite from other ventilation systems.
- 5. Accessible rooms must reduce the allowable refrigerant volume by 50 percent of non-accessible rooms.
- 6. Refrigerant piping must not be routed in egress corridors where accidental discharge may occur.
- 7. When the above requirements are unobtainable, an alarming device must be provided within each guestroom for detection of a refrigerant leak. In no case must the audible alarm be less than 75 dBA at the pillow level in all guestrooms, with intervening doors closed during the alarm.
- c. Submit written documentation that indicates compliance with the safety codes for review by Hilton Worldwide.
- B. HVAC System General Requirements
  - 1. Air Handling Equipment and Devices:
    - a. Not Applicable to this Brand
    - b. Install all HVAC equipment with access for maintenance. Do not install air-handling units, fan coil units, and mechanical equipment requiring regular maintenance above gypsum board or inaccessible ceilings. Service access of non-guest area equipment must not be from guest areas.
    - c. Protect all air handling devices having internal insulation with foil facings or double-wall construction.
    - d. Fabricate cooling coil condensate drain pans from non-corrosive materials.

#### e. Controls

- 1. Provide electric silent two-position or modulating motorized valve actuators that are replaceable without valve removal.
- Provide silent type relays in guest suite devices.

#### f. Filtration

- 1. Unless more stringent local codes require it, provide minimum single-stage MERV 8 filtration (or equivalent) for recirculating equipment. Provide minimum MERV 12 filtration (or equivalent) for air handling equipment used to condition and supply ventilation air.
- Provide fully synthetic media that does not allow microbial growth when wetted.
- 2. Use only rigid metallic ductwork for supply air, outdoor air and exhaust systems. Flex ductwork is allowed for a maximum distance of 8'-0"/2.4 m between rigid duct and diffuser/grille.
- Use duct liner only where required for acoustic needs using closed-cell elastomeric material that complies with ASTM C1534-07-E1 (www.astm.org).
- 4. Provide non-adjustable digital temperature sensors located to effectively control the temperature in all conditioned areas. Thermostats in the fitness center and individual meeting rooms and boardrooms must be adjustable by guests.
- 5. Not Applicable to this Brand
- 6. Screen all rooftop and ground mounted equipment from street views. Locate equipment to avoid increased noise levels in adjacent guest suites.
- Provide a complete fully automated monitoring and dosing water treatment system for open loop systems, and chemical feed capacity for closed loop systems.
- 8. Design all gas or oil fired equipment rooms to comply with NFPA 54-2009, NFPA 58-2008, NFPA 31-2006, or equivalent local codes and standards.

## 9. HVAC Piping

- a. Avoid exposed piping in all areas but mechanical spaces.
- b. Conceal all piping, except in mechanical spaces, to complement adjacent finishes.
- Insulate all chilled water and condensate drain piping using closed-cell insulation products that comply with ASTM C534 or ASTM C522-03 (2009) e1 (www.astm.org). Select insulation thickness per the 2013 ASHRAE Handbook of Fundamentals, Chapter 23 (www.ashrae.com).
- d. Do not use polyvinyl chloride (PVC) and chlorinated polyvinyl chloride (CPVC) piping systems.
- e. Provide full-port ball valves and butterfly valves for isolation and shutoff service. Gate valves must not be used.
- Install unions and isolation valves on supply and return connections at each air-handling device.
- g. Provide riser isolation and drain valves to minimize disruption of guest suite services during failures.
- h. Provide a means for balancing and maintaining water flows at each device and distribution loop.
- i. Provide a means for air elimination and removal from the system and at each terminal device.
- j. Ground mounted units must have condensate piping connected to an underground collection system.
- C. Not Applicable to this Brand
- D. Water Chillers and Chilled Water Distribution

Water Chillers and Chilled Water Distribution (if applicable)

1. Provide Underwriters Laboratories (or recognized equivalent)-listed chiller that complies with the latest pressure vessel design and construction standards for both refrigerant and waterside heat exchangers.

- 2. Rate per the latest ARI Standard (or recognized equivalent) and provide minimum of two chillers, with system sized to allow at least 75 percent of design capacity with one chiller not operable.
- 3. Not Applicable to this Brand
- 4. Acceptable Refrigerants are R-134a, R-407, R-410, and R-123. Comply with Montreal Protocol for phase-out compliance of refrigerants.
- Select unit efficiencies that comply with national and local energy code requirements or ASHRAE Standard 90.1-2013 (www.ashrae.com)
  pending review by Hilton Worldwide for exceptions.
- 6. Refrigerant Safety must comply with ANSI/ASHRAE Standard 15 (www.ashrae.com).
- 7. Cooling Towers
  - a. Select cooling towers based upon 0.4 percent wet bulb/mean coincident dry bulb (WB/MCDB) ASHRAE climate conditions.
  - b. Galvanized steel construction is not allowed in coastal environments.
  - c. Select tower locations to avoid noise or transmitted vibration that affects the guest suites or guest areas.
  - d. Locate cooling towers where re-entrainment of tower plume will not affect other air handling systems.
- 8. Specification of chillers shall be solely based upon performance criteria. Do not specify chillers by type of technology.

### E. Ventilation Air

- 1. General
  - a. Design ventilation air systems to comply with ASHRAE Standard 62.1-2013, Ventilation for Acceptable Indoor Air Quality (www.ashrae.com) and local codes.
  - b. Distribute conditioned ventilation air directly into each guest suite. Operable windows are not allowed as the primary means of guest suite ventilation.

- c. If allowed by local codes, ventilation air may be supplied to the guest suite via corridor supplied air and door undercuts. If automatic door bottoms or seals are required for smoke control, corridors may not be used as the source of guest suite ventilation.
- d. Packaged terminal units (PTAC) including packaged terminal heat pumps and vertical packaged terminal units may be used for providing ventilation air under the following conditions:
  - 1. All Climate Zones within Dry and Marine Regions as indicated in the International Energy Conservation Code: Standard PTACs with an outside air vent may be used to provide ventilation air to guestrooms. In Climate zones 7 and 8, provide dedicated ventilation air units to meet humidification requirements.
  - 2. Climate Zones 4, 5 and 6 within the Moist Region as indicated in the International Energy Conservation Code: Only packaged terminal units equipped with a compressor, condenser and evaporator dedicated solely for the purpose of conditioning outside air may be used to provide ventilation air to guestrooms.
  - 3. Climate Zones 1, 2, 3 and 7 within the Moist Region as indicated in the International Energy Conservation Code, and Hawaii: Only packaged terminal units equipped with a compressor, condenser and evaporator dedicated solely for the purpose of conditioning outside air may be used to provide ventilation air to guestrooms. Packaged terminal units providing guestroom ventilation must be accompanied by dedicated ventilation air units supplying a total volumetric air flow equaling at least 25 cfm per guestroom plus the required ventilation of the front-of-house and back-of-house spaces. The distribution of air from the dedicated ventilation air units may be to the corridors.
- e. Dedicated ventilation air equipment must be specifically designed to allow the ventilation air to be supplied at room neutral conditions.
- f. Not Applicable to this Brand
- g. Provide building air balance calculations to Hilton Worldwide for review and approval.
- 2. Dedicated Ventilation Air Equipment Selection
  - a. Select ventilation air units to offset any continuous bathroom exhaust air quantity, any other exhaust air from the corridors, plus air flow to maintain pressure relationships identified in the Environmental Conditions matrix. If prevailing winds will affect building pressurization, this must be taken into account in determining building air balance calculations and air quantity for pressurization.
  - b. Design Criteria
    - Summer

- a. Outdoor Conditions: Select ventilation air entering air temperature (EAT) for cooling based on ASHRAE 0.4 percent summer design Dehumidification [dew point/mean coincident dry bulb (DP/MCDB)] and Humidity Ratio (HR) (www.ashrae.com).
- b. Discharge Air Conditions: Select the cooling coil to produce 55 °F DB/12.8 °C DB leaving air temperature and reheat to approximately 68 °F DB/20 °C if for corridor distribution or 70 °F DB/ 21 °C DB if supplied directly into questroom.

#### 2. Winter

a. Select EAT for heating based on ASHRAE Annual Extreme Daily Mean Dry Bulb (MDB) Minimum winter design temperature (not Heating DB at 99.6 or 99 percent) (www.ashrae.com).

#### F. Dedicated Ventilation Air Units

- 1. Provide ETL or Underwriters Laboratories (www.ul.com) listed equipment, or similar recognized agency that complies with local code requirements. Rate per ARI Standards or equivalent refrigeration standards agency.
- 2. Provide preheat, cooling, dehumidification, humidification and reheat sections.
  - a. Humidification Requirement: Provide ventilation air units in ASHRAE (www.ashrae.com) Climate Zones 7 and 8 with humidification capability to comply with the Environmental Conditions Matrix included in the beginning of this Section.
- 3. Wall construction must be double-wall insulated type.
- 4. Condensate drain pans must be insulated, stainless steel and corrosion-resistant construction.
- 5. Provide spacer for temperature sensor between cooling and reheat coils or means of coil temperature measurement via suction pressure sensing device.
- 6. Provide special filter support structure to prevent moisture laden filter collapse.
- 7. Direct-Expansion (DX) Ventilation Air Units

#### a. Refrigeration

- 1. Provide a minimum of two independent cooling circuits for units up through nominal 30 tons (105 kW) and at least four independent cooling circuits for larger units.
- 2. Provide cooling coil refrigeration circuiting with an intertwined arrangement. Face or horizontal split coil arrangement is not acceptable.
- 3. Provide digital scroll lead compressor or include hot-gas re-injection (by-pass) on the lead refrigerant circuit.
- 4. Provide hot-gas reheat coil, complete with modulating refrigerant valve, downstream of cooling coil, with spacer for temperature sensor between cooling and reheat coil. Do not use systems utilizing sub-cooler reheat circuits. Fuel gas or electric reheat is not allowed.
- 5. Provide dehumidification refrigeration circuit if the outdoor ambient design humidity ratio is more than 100 grains/lb./14.3 g/kg or in those areas with annual rainy seasons. Do not use systems utilizing sub-cooler reheat circuits.

#### b. Gas Heating

- 1. Provide stainless steel heat exchanger.
- 2. Provide minimum four-stage or modulating (minimum 3:1 turndown) control for heating.
- c. Electric Heating: Provide with minimum four-stage control or SCR (saturated core reactor) modulating controls.
- d. Use factory-mounted controls that provide continuous heating, cooling, and dehumidification of outside air using discharge air temperature control scheme, with space temperature reset control capability.
- 8. Access panels must be hinged and use latches that do not require the use of tools to open.

2514.07 Plumbing

#### A. Plumbing Piping

- Domestic water storage, drainage systems and hot and cold piping material selections and system design must comply with national and local code requirements. For those locations without code requirements, contact Hilton Worldwide for acceptable minimum code requirements.
- 2. Not Applicable to this Brand
- 3. Do not use polyvinyl chloride (PVC) or polybutylene materials for potable water.
- 4. Insulate all metal cold water and condensate drain piping using closed cell insulation products that comply with ASTM C534 or ASTM C522-03 (2009) e1 (www.astm.org). Select insulation thickness per the 2013 ASHRAE Handbook of Fundamentals, Chapter 23.

#### B. Valve Requirements

- 1. Install unions and isolation valves on domestic water supply and return connections at each riser or horizontal distribution header.
- 2. Provide isolation or stop valves at each plumbing fixture.
- 3. Provide full port ball valves or butterfly valves for isolation or shut-off service.

#### C. Floor Cleanouts

Locate floor cleanouts outside of normal foot traffic in all public and back-of-house areas.

#### D. Backflow Prevention Devices

Install suitable backflow prevention devices on all potable water systems.

#### E. Grease, Oil & Sand Traps

Locate grease, oil or sand traps in the back-of-house or service areas where the devices must be serviced without disrupting normal operations and out of site of normal guest activities.

- F. Domestic Hot Water Generating System
  - 1. Provide hot water production during all normal operating flow regimes.
  - 2. Select system types, storage and heaters that will provide stable water temperature during all flow conditions, and recirculation system for on-demand hot water in guest suites.
  - 3. Select system equipment that provides for 100 percent design heating capacity with one heater out of service.
  - 4. For systems that use separate heaters and storage to meet demand, provide at least two storage tanks for maintenance.
  - 5. Not Applicable to this Brand
  - 6. Not Applicable to this Brand
  - 7. Hot water is to be stored at no less than 140° F/60° C and delivered to guest accessible outlets at no less than 113° F/45° C.
- G. Not Applicable to this Brand
- H. Commercial Grade Plumbing Fixtures

Provide commercial grade quality plumbing fixtures for all public and back-of-house areas.

I. Conceal Water Pipes

Conceal all water pipes except in mechanical rooms.

#### 2514.08 Electrical

#### A. NFPA 70 Adherence

Comply with applicable edition of NFPA 70 (www.nfpa.org) and all national or local codes.

#### B. Light Fixture Safety Listing Requirements

All lighting fixtures must have a safety listing as provided by a nationally recognized testing laboratory, e.g. CE, ISI, UL, VDE. Any other safety listings on any light fixture (plug-in or hardwired) will need to have undergone the equivalent ASTM testing that would have been required to achieve a UL listing, approval by the local authority having jurisdiction, and that the property insurance will not be in jeopardy by use of this labeling.

### C. Power Supply

- 1. In locations where replacement transformers are not available within 24 hours, provide redundant primary transformers that have 100 percent building load capacity for each transformer.
- 2. Provide main switchboard with provisions that will allow scheduled maintenance on main switchgear without hotel power interruption.
- 3. In areas where normal power sources are interrupted more than once per day, provide either full on-site power or two sources of utility supplied power.
- 4. Not Applicable to this Brand
- 5. Locate primary power switchgear in locations where it will not flood.

### D. Electrical Wiring Conduit

Electrical wiring must be in conduit (MC cable permitted). Wood-framed buildings are permitted to use "Romex" when code allows.

### E. Copper Conductors

Use copper conductors. Aluminum branch and feeder wiring is only allowed on circuits 100 amp and larger, subject thermal imaging to confirm proper termination.

#### F. Panels and Service Equipment

- 1. Install only in non-public and protected service areas. Mechanical or linen room locations are allowed as long as they are not subject to water piping and have adequate clearances that will not be compromised by storage of other materials.
- 2. Provide securable panel covers and circuit interruptions devices that can be locked and tagged out.

#### G. Outlet Devices

- 1. Install at least 6"/152 mm above finished floor.
- 2. Install at least 50'-0"/15.2m on center, maximum, in all public corridors.
- 3. The use of extension cords or power strips, even if surge protected, is not allowed.
- 4. All hardware components of the Property Management System must be plugged directly into an electrical outlet on a dedicated and ground circuit.
- 5. All UPS outlets must be of a different color and, where allowed, a different style compared to normal outlets. Outlets must be clearly labeled.

### H. Raceways/Conduits

- 1. Conceal all raceways and/or conduit in public, finished back-of-house and guest areas.
- 2. Exposed raceways and/or conduit are only allowed in unfinished service corridors, mechanical or electrical spaces, and parking garages.
- 3. Existing properties facing wiring installation challenges must receive prior approval from Hilton Worldwide for the use of wire molding. When allowed in public areas, molding must be painted to match the ceiling or wall depending upon placement. Molding must not be run centered

on the ceiling. It must run as close as possible to the intersection of the wall and ceiling and must extend completely into corners where possible. In guestrooms where retrofitting into walls is not possible, raceways must be concealed in an UL approved baseboard/raceway system.

I. The following table represents the minimum foot-candles/lux levels required within all properties, unless otherwise noted. In the event an area is not listed below, reference the most current version of the Illuminating Engineering Society guidelines (www.ies.org), local codes and/or a professional third party lighting consultant for guidance. Exterior lighting must reference local codes & lighting zone 0-4, fixture BUG ratings requirements IES CH26 Exterior lighting guidelines. Additional requirement lighting requirements can be found in the Fire & Life Safety Section 2516.05.F Egress Lighting.

Area	Horiz Spec FC/Lux	Horiz. Measure Location at	Horiz Gauge	Vertical FC/Lux	Vertical Measure Location at	Vertical Gauge	Light source Kelvin color temperature Maximum.
Surface Parking Areas							
Drive Entrances/Porte Cochere	10 / 100	grade	Avg	n/a	n/a	n/a	4000
Drive Lanes	1 / 10	grade	Avg	2 / 20	5' AFG	Avg	5000
Parking Stalls	1 / 10	grade	Avg	2 / 20	5' AFG	Avg	5000
Parking Structures							
Entrances - Canopied	5 / 50	grade	Avg	2 / 20	5' AFG	Avg	4000
Drive Lanes	5 / 50	grade	Avg	n/a	n/a	n/a	5000
Parking Stalls	5 / 50	grade	Avg	n/a	n/a	n/a	5000
Outdoor Miscellaneous							
Exterior Paths & Walkways	1 / 10	grade	Avg	n/a	n/a	n/a	4000
Guest Areas - Lobby							
Lobby Entrance (day)	10 / 100	floor	Avg	3 / 30	5' AFF	Avg	3000
Lobby Entrance (night)	5 / 50	floor	Avg	2 / 20	5' AFF	Avg	3000

Service Desks (Registration,Concierge etc)	20 / 200	top desk	Avg	5 / 50	top desk	Avg	3000
Lobby Guest Circulation	2 / 20	floor	Avg	n/a	n/a	n/a	3000
Guestroom Corridor at Guestroom Entrances - Under Door	10 /100	floor under door lock	Avg	n/a	n/a	n/a	3000
Guestroom Corridor at Guestroom Entrances - door lock	15 / 150	door Lock	Avg	n/a	n/a	n/a	3000
Guestroom Corridor Middle	2 / 20	floor	Min	2 /20	5' AFF	Avg	3000
Restrooms (inside partitions)	5 / 50	floor	Avg	3 / 30	3-5' AFF	Avg	4000
Restrooms (countertop)	15 / 150	at counter top	Avg	20 / 200	3-5' AFF	Avg	4000
Exit Stairs (typical)	5 / 50	floor	Avg	3 / 30	5' AFF	Avg	4000
Elevators - lobby	5 / 50	floor	Avg	3 / 30	5' AFF	Avg	4000
Elevators - cab interior	5 / 50	floor	Avg	3 / 30	5' AFF	Avg	4000
Food and Beverage Outlets							
Dining - Casual	10 / 100	table	Avg	5 / 50	4' AFF	Avg	3000
Dining - Fine	3 / 30	table	Avg	1 / 10	4' AFF	Avg	2700
Dining - 3 meal breakfast	10 / 100	table	Avg	3 /30	4' AFF	Avg	3000
Dining - 3 meal lunch	5 / 50	table	Avg	2 / 20	4' AFF	Avg	3000
Dining - 3 meal dinner	3 / 30	table	Avg	1 / 10	4' AFF	Avg	3000
Café / Grab & Go	10 /100	table	Avg	3 / 30	4' AFF	Avg	3000
Lounge / Bar	4 / 40	bar top	Avg	1.5 / 3	3-5' AFF	Avg	2700
Lounge - Bar	10 / 100	table	Avg	5.5 / 11	5' AFF	Avg	2700
Lounge - Reading / Work Areas	15 / 150	table	Avg	5.5 / 11	4' AFF	Avg	2700

Lounge - Social / Waiting Areas	10 /100	floor	Avg	5.5 / 11	5' AFF	Avg	2700
Executive Lounge	10 /100	table	Avg	3 / 30	4' AFF	Avg	3000
Commercial Facilities							
Specialty retailer - circulation	15 / 150	floor	Avg	5 / 50	5' AFF	Avg	4000
Specialty retailer - general retail	40 / 400	floor	Avg	15 / 150	3-5' AFF	Avg	4000
Specialty retailer - feature displays	120 / 1200	floor	Avg	75 / 750	3-5' AFF	Avg	4000
Specialty retailer - Perimeter	na	na	na	40 / 400	5' AFF	Avg	4000
Business Center - Computer	15 / 150	table	Avg	5 / 50	3' AFF	Avg	3000
Business Center - Print Area	30 / 300	table	Avg	7.5 / 75	3' AFF	Avg	3000
Business Center - Informal Mtg Area	7.5 / 75	table	Avg	4 / 40	4' AFF	Avg	3000
Guest Laundry	30 / 300	floor	Avg	15 / 150	3-5' AFF	Avg	4000
Vending Room /Ice Room	10 / 100	floor	Avg	10 / 100	3-5' AFF	Avg	4000
SPA - Treatment Rooms	1 / 10	floor	Avg	n/a	n/a	n/a	2700
SPA - Changing Rooms	5 / 50	floor	Avg	10 / 100	5' AFF	Avg	2700
SPA - Make-up Stations	30 / 300	floor	Avg	30 / 300	4' AFF	Avg	2700
SPA - Manicures (hand rest)	50 / 500	hand rest	Avg	15 / 150	4' AFF	Avg	2700
SPA - Pedicures (foot rest)	50 / 500	foot rest	Avg	15 / 150	4' AFF	Avg	2700
SPA - Salon (Barber)	50 / 500	4' AFF	Avg	30 / 300	4' AFF	Avg	2700
Meeting Facilities							
Pre-Function Area - Circulation	5 / 50	floor	Avg	1.5 / 15	5' AFF	Avg	3000
Pre-Function Area - No Event Off Hrs	5 / 50	floor	Avg	1.5 / 15	5' AFF	Avg	3000
Pre-Function Area - Regististration Table	20 / 200	table	Avg	3 / 30	4' AFF	Avg	3000

Pre-Function Area - Social Function	10 / 100	floor	Avg	4 / 40	4' AFF	Avg	3000
Ballrooms - Casual	20 / 200	floor	Avg	5 / 50	4' AFF	Avg	3000
Ballrooms - Formal (Business)	15 / 150	floor	Avg	4 / 40	4' AFF	Avg	3000
Ballrooms - Formal (Evening)	7.5 / 75	floor	Avg	2 / 20	4' AFF	Avg	3000
Ballrooms - Exhibition (show)	50 / 500	floor	Avg	20 / 200	3' AFF	Avg	4000
Meeting Rooms/Boardroom	40 / 400	table	Avg	15 / 150	4' AFF	Avg	3000
Recreational Areas							
Swimming Pool/Whirlpool (Deck/Indoor)	15 / 150	floor	Avg	2 / 20	5' AFF	Avg	4000
Swimming Pool/Whirlpool (Outdoor)	2 / 20	grade	Avg	0.6 / 6	5' AFG	Avg	4000
Locker Room (general)	10 / 100	floor	Avg	3 / 30	3-5' AFF	Avg	4000
Locker Room (Countertop)	2 / 20	counter	Avg	20 / 200	3-5' AFF	Avg	4000
Locker Room - top plumbing fix	10 / 100	top of fixture	Avg	3 / 30	3-5' AFF	Avg	4000
Locker Room - Showers	10 / 100	floor	Avg	5 / 50	3-5' AFF	Avg	4000
Fitness Center - Aerobics	40 / 400	floor	Avg	4 / 40	3-5' AFF	Avg	4000
Fitness Center - Strength Trng	40 / 400	floor	Avg	15 / 150	3-5' AFF	Avg	4000
Fitness Center - Yoga	15 / 150	floor	Avg	10 / 100	3-5' AFF	Avg	4000
Fitness Center - Personal Trng	40 / 400	floor	Avg	15 / 150	3-5' AFF	Avg	4000
Guestrooms/Suites							
Floor (general)	2 / 20	floor	Avg	n/a	n/a	n/a	2700
Pillow (reading)	20 / 200	at pillow	Avg	10 / 100	3' AFF	Avg	2700
Tabletops/Counters	20 / 200	table	Avg	n/a	n/a	n/a	2700
Seating Areas (Casual)	15 / 150	2'6" AFF	Avg	5 / 50	3-5' AFF	Avg	2700
Closet (dedicated or foyer source)	10 / 100	shelf face / 6' AFF	Avg	5 / 50	shelf face	Avg	2700

Entrance / Foyer	5 / 50	floor	Avg	1 / 10	5' AFF	Avg	2700
Desk	20 / 200	desk	Avg	3 / 30	4' AFF	Avg	2700
Dining Table	20 / 200	table top	Avg	3 / 30	4' AFF	Avg	2700
Kitchenette	50 / 500	prep surf	Min	20 / 200	prep surf	Avg	2700
Guest Bathrooms							
Vanity Top	40 / 400	vanity top	Avg	30 / 300	5' AFF	Avg	3000
Tub/Shower (with shower curtain closed)	5 / 50	tub	Avg	2 / 20	3-5' AFF	Avg	3000
Water Closet Seat	20 / 200	toilet seat	Avg	1.5 / 15	3-5' AFF	Avg	3000
Back of the House Areas							
Office - Reading / Writing (8-10 pt font)	30 / 300	floor	Avg	7.5 / 75	4' AFF	Avg	4000
Service Area Circulation	5 / 50	floor	Avg	3 / 30	5' AFF	Avg	4000
Kitchen - Food Prep	50 / 500	surface	Min	20 / 200	surface	Avg	4000
Kitchen - Dishwashing	20 / 200	counter	Min	10 / 100	4' AFF	Avg	4000
Kitchen - Food storage Refrigerated & Non	10 / 100	floor	Min	3 / 30	3-5' AFF	Avg	4000
Kitchen - Storage Wares	20 / 200	floor	Min	10 / 100	3-5' AFF	Avg	4000
Cashier	20 / 200	counter	Avg	7.5 / 75	5' AFF	Avg	4000
Employee Cafeteria	20 / 200	table	Avg	5 / 50	4' AFF	Avg	4000
Storage Rooms - Freq Use	10 / 100	floor	Avg	3 / 30	4' AFF	Avg	4000
Storage Rooms - Infreq Use	5 / 50	floor	Avg	2 / 20	4' AFF	Avg	4000
Electrical Closets	10 / 100	floor	Avg	10 / 100	5' AFF	Avg	4000
Mechanical / Elec Rooms	20 / 200	floor	Avg	10 / 100	5' AFF	Avg	4000
Computer Room	20 / 200	floor	Avg	20 / 200	5' AFF	Avg	4000
Janitor Closet	10 / 100	floor	Avg	3 / 30	4' AFF	Avg	4000
Laundry / Linen room	30 / 300	floor	Avg	15 / 150	3-5' AFF	Avg	4000
Receiving/Trash Area - Dock	20 / 200	floor	Avg	3 / 30	4' AFF	Avg	4000

Receiving/Trash Area - Receiving	30 / 300	floor	Avg	10 / 100	4' AFF	Avg	4000
Valet	10 / 100	floor	Avg	5 / 50	5' AFF	Avg	4000

- J. Public Area Lighting (including Guestrooms)
  - 1. Incandescent lamps are not allowed in guestrooms.
  - 2. Surface mount strip fluorescent fixtures are not permitted (including vending, guest laundry, business center, etc.).
  - 3. Indirect lighting must be used on all fluorescent fixtures in meeting rooms and the fitness center.
  - 4. Compact fluorescent lamps (CFLs) must not require warm up time for brightness. They must be instant-start and flicker-free.
- K. Power Density and Lighting Efficiency
  - 1. Comply with ASHRAE Standard 90.1-2007 (www.ashrae.com) or applicable Energy Codes. Submit written documentation to Hilton Worldwide to show compliance with the applicable energy codes and that all fixtures are UL listed.
  - 2. All lighting must meet Correlated Color Temperature (CCT) of 2700-3000 Kelvin and Color Rendering Index (CRI) minimum of 80.
- L. Controls
  - 1. Conceal from guest views
  - 2. Service corridors: Switch from local panels whenever practical.

- 3. Lobby: dimmer control
- 4. Meeting rooms/boardrooms: dimmer control with local bypass switching
- 5. General interior lighting: switch locally
- 6. Stairway and exit lights: switch from panels
- 7. Guest corridors: switch at panel located in electrical closet
- 8. Public areas: Control from back-of-house areas
- M. BOH Electrical Lamp Protection

Back-of-house electrical lamps must be protected by lens or safety tube covers.

N. Labeling Electrical Panels and Equipment Circuits

Electrical panels and equipment circuits must be labeled.

O. Motion-sensored Light Fixtures

Motion-sensored light fixtures are allowed in the back-of-house locked spaces. Motion-sensored light fixtures are not allowed in guest suites unless required by local code.

### 2514.09 Technology

A. Refer to Section 2518.00, Technology Wiring Standards, for specific requirements regarding voice, data, television and Property Management System wiring.

#### B. Telephone

- 1. Comply with the specifications provided in Section 1704.00.
- C. Internet Access Location Requirements

Internet access must be provided in the following areas. The type of internet access listed must be provided as a minimum. Additional types are allowed. See Section 1705.00 for specific requirements.

- 1. Studio and one-bedroom suites wireless required, wired optional
- 2. Lobby wireless
- 3. Meeting rooms wireless
- 4. Boardroom wireless
- 5. Business center wired for business center equipment; wireless for guests
- 6. Breakfast table in Oasis wireless
- 7. Not Applicable to this Brand
- 8. Not Applicable to this Brand
- 9. Not Applicable to this Brand
- 10. Not Applicable to this Brand
- 11. Not Applicable to this Brand
- 12. Outdoor Lounge and Patio wireless

- 13. Not Applicable to this Brand
- 14. Not Applicable to this Brand
- 15. Not Applicable to this Brand
- 16. Not Applicable to this Brand
- 17. Fitness Center wireless

#### D. Television

- 1. Comply with the specifications provided in Section 1706.00. Required minimum sizes are given in individual areas of Section 2500.00.
- 2. Televisions must be connected to a master antenna system or cable that is capable of passing high definition (HD) content to all televisions.
- 3. Guestroom televisions must be attached securely to a swivel base or mount.
- 4. Not Applicable to this Brand
- 5. Wall-mounted televisions are not permitted.
- 6. Guest suite televisions must not be pre-programmed to automatically turn off after any amount of time. A guest-controlled sleep timer is acceptable.
- 7. If a control box is required with the television, it must be hidden from view and space for it included in the design of the furniture supporting the television.

### E. Sound System

Music

- 1. Distributed audio (background music) is required in the following areas.
  - a. Patio and Outdoor Lounge
  - b. Porte cochere
  - c. Lobby (including Breakfast Area)
  - d. Not Applicable to this Brand
  - e. Not Applicable to this Brand
  - f. Not Applicable to this Brand
  - g. Not Applicable to this Brand
  - h. Not Applicable to this Brand
  - i. Not Applicable to this Brand
  - j. Not Applicable to this Brand
  - k. Not Applicable to this Brand
  - I. Meeting room
  - m. Not Applicable to this Brand
  - n. Not Applicable to this Brand
  - o. Not Applicable to this Brand

- p. Indoor pool
- q. Elevator lobby (first floor)
- 2. Volume must be controllable by guest in the meeting rooms and fitness center when provided in those rooms.
- 3. Not Applicable to this Brand
- 4. A wireless solution is acceptable for existing hotels.
- 5. Brand approved music must be provided. Contact the Brand Performance Support Advice team for more information.
- F. Not Applicable to this Brand
- G. Emergency Communication
  - 1. All properties must have emergency telephones/communications.
  - 2. Dedicated emergency telephones are to be installed in the following areas:
    - a. Self-park parking garages -- one minimum per level
    - b. Within each elevator/lift including service elevators/lifts.
  - 3. Not Applicable to this Brand
  - 4. Dedicated panic buttons are to be installed in the following areas:
    - a. Not Applicable to this Brand
    - b. Not Applicable to this Brand

- c. Cash handling areas
- d. Areas of potential gas release
- e. Front desk at each workstation
- H. Not Applicable to this Brand
- I. Security Systems
  - 1. Not Applicable to this Brand
  - 2. Not Applicable to this Brand
  - 3. Closed Circuit TV Surveillance System (CCTV)
    Installing a CCTV system is allowed. However, monitors may not be mounted in any area of the hotel within view of guests. Monitors are permitted at the front desk but must have a built in appearance and not within view of guests.
- 2514.10 Not Applicable to this Brand

#### 2514.11 Hazardous Materials

Materials are not allowed if they pose potential harm to guests or team members or to the environment. Materials are considered harmful if they have the potential to fail in practice, either during their installation or during their life including long-term disposal or degradation. The following materials are not recommended for use. They include, but are not limited to, the following:

- A. Deleterious Materials
  - 1. Asbestos

- 2. CFCs
- 3. Crystalline silica
- 4. Formaldehyde
- 5. Lead
- 6. Man-made mineral fibers
- 7. Polychlorinated biphenyls (PCBs)
- 8. Vermiculite
- 9. Volatile organic compounds (VOCs)
- 10. Wood preservatives
- 11. Brick slips and brick panels
- 12. Calcium chloride
- 13. Calcium silicate brickwork
- 14. Cem-fil
- 15. High alumina cement (HAC) concrete
- 16. Mundic
- 17. Sea dredged aggregates

- 18. Wood wool slabs or wood wool cement boards
- B. Problematic Materials
  - 1. Cement fiber slates
  - 2. Composite panels
  - 3. Galvanized steel wall tiles
  - 4. Hollow clay pot floors
  - 5. Nickel sulphides
  - 6. RAAC planks
  - 7. Tesserae
  - 8. Thin stone panels
- C. Other materials
  - 1. Hair plaster
  - 2. Masonry and steel—coke breeze/furnace ash and filler joist construction, "Regent Street Disease"

### 2515.00 Furnishings, Fixtures and Equipment

Additional requirements for the guest suites are located in Section 2510.00.

#### A. Soft Good/Casegood Replacement Cycles

For existing hotels, any softgood or casegood must be replaced when condition warrants as determined by the Brand or when 5 years old (softgoods) or 10 years old (casegoods), whichever comes first.

#### 2515.01 Furniture

A. Soft Good/Casegood Replacement Cycles

Furniture and its hardware must be manufacturer's commercial furniture or better.

#### B. Furniture

- Not Applicable to this Brand
- 2. General Construction
  - a. Joints must be splined, mortised and tenoned, tongued or doweled, or full length blocked, glued and screwed in two directions, following the best practice of commercial construction. All work must be carefully corner-blocked, well fitted, glued and reinforced with wood screws.
  - b. All excess glue must be cleaned from surfaces exposed during normal use.
  - c. Not Applicable to this Brand
  - d. All screws must be turned in, in such a way as to not strip the hole or the screw head, and not split or swell the joining member.
  - e. All plastic laminate tops must be surfaced with high pressure laminate with a minimum 45 lb/20 kg density industrial grade particle board core with fine face particles and proper backing sheet to prevent warping. Tops must be laminated using contact, semi-rigid (PVAC) or rigid (ureas, resorcinol) adhesives to provide for type two bonding. All plastic laminate tops must be an exact match to the veneers. A sample must be presented to Hilton Worldwide for approval.

- f. All edges must be solid wood with decorative edge. Solid edges must be over veneered. A 1 mm minimum PVC trim that matches the adjacent finish must be provided at the working wall.
- Solid wood panels must float within the frames of doors or drawer fronts.
- h. Off-the-floor cases over 60"/1.5 m in length must have turn-buckles or center support. The vertical panels and shelving of the working wall must be 1-1/8"/28.6 mm thick.
- Caster blocks are to be glued and attached with screws.
- Double lagged leg bolts and leg stretchers must be utilized on all desks.
- k. Where natural stone, granite or similar approved tops are specified, a sub-top of 1/2"/12.0 mm (minimum) plywood must be provided. Manufactured stone tops that are 1-3/16"/30 mm thick with no plywood sub-top must be provided at the kitchen area of the working wall.
- Where glass tops are used, they must be securely fitted to the base and must not be loose.

#### 3. Material Requirements

- Endangered wood species are not permitted.
- b. Casegoods must be of good quality with solid timber edge bands, veneered interiors, etc. and kiln dried with minimum moisture levels depending on species.
- c. Type or species of veneer must be spelled out on all factory quotes. All face veneers and balancing back veneers must be applied with waterproof glue under controlled pressure.
- d. Minimum veneer thickness is 0.06 cm/0.61 mm.
- e. Not Applicable to this Brand

- f. Back panels must be glued and securely fastened by screws or gun staples. Fasteners must be flush with outside back and must not swell, split or protrude through finished surfaces.
- g. Optional wooden dust bottoms must have one good side, with the good side exposed when the drawer is removed.
- h. Top edges of drawer sides and backs must be sanded flat with beveled edges and rounded bottom and covered with a clear sealer coat and finished with a catalyzed top coat. Discoloration, mineral streaks and excessive machine marks will not be permitted. Glued-up stock must match in color.
- i. Drawers must be well sealed on the inside backs, fronts, side partitions, bottoms, outside sides and backs. They must be free of dirt, dust, glue or any foreign matter prior to rubbing, waxed with the required material and wiped dry to remove sand and sealer dust.

  Manufacturer to provide heavy duty commercial ball bearing drawer glides with stops at 2/3 the depth of the drawer.
- Dovetails must be well glued, fitted, puttied if necessary, and sanded.
- k. Drawers must have hardwood or 7-ply veneer sides and backs finished smooth with a clear sealer coat and a catalyzed top coat. All joints must be multi dovetail or linear (French) dovetail. Drawer bottoms must be plywood, and in all cases must be contained in dadoes on all four sides; glue-blocked in place to assure continuing squareness. Drawer inside must be stained and finished with a catalyzed top coat.
- All exposed metal must be of a gauge appropriate to piece and have no visible welded joints. Metal finishes must have clear enamel
  matte coating, clear rust inhibitor, baked enamel, or powder coated finish for humidity protection to prevent rust and corrosion.
  Manufacturer to ensure materials are non-corrosive and suitable for use in high humidity and salt air locations as required.
  - 1. Wood particleboard cores must conform to commercial standards Type I, Grade B, Class II.
  - 2. Tops must be particle board if they are core or veneer banded on all four edges and do not have an unsupported span of more than 25"/635 mm. Tops with unsupported spans of 30"/760 mm or more must have anti-snag strips or backing sheets.
  - 3. No exposed particle board will be allowed in any furnishings. This includes routed and stained edges on tops.
  - 4. Lock-mitered cases must have core bands on fronts and backs of particle board.

- 5. Particle board is allowed to be used in doors if it is banded on four sides.
- 6. Hardware must have applied rust-proof and tarnish-proof sealers.
- m. The hardwood plywood must be constructed as specified. Bondage must be Type 2 or better, and face and back veneers must not be less than 1/32"/79 mm to 1/42"/56 mm thick before sanding. When face and back veneers are not of the same species, the two veneers must be of the same density and thickness.
- n. Face veneers must be Grade 1 flat cut quartered veneers. All face veneers in one panel must be matched for color and grain to present a uniform appearance. This requirement applies to all paneled surfaces which can be viewed in normal position of use and, in addition. the back of the desk, top side of shelves and the interior of bookcases and various other visible compartments and surfaces.
- o. Face side of drawer bottoms or mirror backs and various other unexposed surfaces must be Grade II or better, and may be rotary cut veneers.
- p. Veneer cores must be Grade II or better and any voids at panel edges must be fitted. The entire exposed edge of the core must be banded with the same kind of wood as other exposed parts.
- q. Back of drawer bottoms must be Grade III or better. Lumber core panels must be regular grade except that no butt joints or knots in excess of 1.2"/12.5mm diameter will be permitted.
- r. Crossbands must not be less than 1/32"/79 mm thick and must be Grade II or better.
- s. Crossbands, veneer cores and lumber cores must be of medium or low-density wood.
- t. Not Applicable to this Brand
- u. Rattan/Wicker: Skin off is required to allow stain to be absorbed evenly and lacquer to protect the finish. Skin on is a natural finish and requires a sealer to maintain natural color.
- 4. Workmanship

- a. Doors must be free of rattle, squeaking, warp or rubbing. All doors must be approximately uniform in clearance. All catches must be properly aligned and installed.
- b. Drawers must have free-running action with no binding or sticking. Drawers with side mounted metal glides must operate freely with no squeaking or rattling and be well lubricated. Drawer guides and runners must be securely fastened and properly positioned to assure correct drawer alignment.
- c. Route lines, cut-outs or grooves must be smoothly machine and/or sanded. Shapes, carvings and 'U' cuts are to be finished smoothly with no visible unfinished or rough areas.
- d. Drawer interiors and storage compartments are to be sanded smooth and free of glue or finish runs and PVC bonded to prevent moisture absorption. Sides, ends and bottoms are to be free of splinters, snags, slivers, staples, nails and screws.
- e. All hardware, such as hinges, pulls, latches, catches, glides, etc., must be attached so that they fit and operate properly and serve their purposes during transit and use.
- f. Mitered corners are to be square, flush, tight and well glued.
- g. Interior screws must be flush or countersunk with the surface of the part where used.
- h. All glides, casters and ferrules must be properly attached so as to remain permanently in place at all times and capped.
- i. Face-nailed molding and overlaps must be nailed as inconspicuously as possible with nails countersunk and filled. Back nailing must be used whenever possible.
- j. All cane must be applied straight with no broken or loose strands and must be smooth after rubbing.
- k. All items furnished under this section must be guaranteed against manufacturing defects in workmanship and materials. Repairs of such defects during the first year, after final completion and acceptance, must be made by the manufacturer at their cost and expense, without charge to the purchaser or hotel. All such replacements and repairs must be made at one time and at hours mutually satisfactory to both owner and factory.
- Not Applicable to this Brand

m. All dining tables must have adjustable glides.

#### 5. Appearance and Finish

- Color of like finishes must be color-fast, uniform and compatible between pieces manufactured in the same plant; between pieces made in various plants, and from one production cut to another.
- b. Each finishing material must be formulated and individually batch-checked to insure compatibility with the batch and every other material used to produce a color-fast finishing system.
- c. Distressing, shading, highlighting and spatter in any one group must be consistent and uniform between pieces and plants and from one cut to another.
- Interior surfaces of compartments and drawers must be free of dirt, dust, shavings or any foreign matter before finishing.
- e. Finish must be rubbed to required smoothness and sheen and must be sufficiently dry to prevent marring or printing on the surface when packed. Finishes rubbed through are not acceptable.
- f. Edges and backs of doors and drawers must be finished to be compatible with exterior.
- g. Excess pumice, oil, wax and rubbing compound must be wiped clean after rubbing.

### h. Finishing:

- 1. Spray with stain and/or washcoat and/or toner.
- 2. Spray with filler as required to properly fill wood pores, remove all excess filler and allow to dry.
- 3. Spray with sealer of not less than 16 to 20 percent solid content.
- 4. Sand sealer smooth, finishing with paper.
- 5. Shade with shading stain as required to obtain uniform color and effect.

- 6. Not Applicable to this Brand
- 7. Spray two coats of moisture-resistant catalyzed finish.
- 8. Rub with steel wool, wet or dry finishing paper, wax and wipe clean as desired for the required sheen specified.
- 9. Clean laminate surfaces with cleaning agents and wipe dry.
- 10. Finishing must be performed according to local guidelines of Finish System Standards for a 'Premium Grade' better in the US or custom grade quality in Asia Pacific and Europe. All wood must be finished with a commercial grade conversion lacquer finish to withstand water and alcohol.
- 11. For Closed Grain Woods, finishing steps must be as follows:
  - 1. Vinyl Washcoat
  - 2. Stain
  - 3. Vinyl Sealer
  - 4. Sand (220 Grit)
  - 5. Top Coat
  - 6. Top Coat
- 12. For Open Grain Woods, finishing steps must be as follows:
  - 1. Stain
  - 2. Vinyl Sealer
  - 3. Sand (220 Grit)
  - 4. Top Coat
  - 5. Top Coat
- i. Lacquer painted surfaces are not allowed.
- j. Lacquer Finishes
  - 1. Polyurethane Lacquer

- a. The use of polyurethane lacquer (PU) is required when there is no glass, stone or laminate top. This finish is for interior use only, as to maintain the appearance of the piece for a minimum of ten years.
  - 1. PU 100 Gloss This finish is a polyurethane Clear Lacquer with a H99-03 (NY)Polyfunctional Isocyanurate Hardner leaving a clear gloss of greater than 90 degrees.
  - 2. PU 50 Matt This finish is a Polyurethane Satin Clear Lacquer with a 98- HO Polyfunctional Isocyanurate Hardner leaving a milky appearance with a gloss of 45-50 degrees.

#### 2. Catalyzed Lacquer

- a. They are a two part system, the lacquer and the catalyst. A post cat conversion varnish is the standard of the industry for most cabinetry. It is a hard, durable and chemical resistant finish. It is slower to dry than a pre cat or nitrocellulose lacquer. But because there is a high catalyst ratio it will cure to about 85 percent within a 24 hour period. You must use it in a controlled environment. It needs to be greater than 65° F/18° C to be used, otherwise it will fail to crosslink properly and you will get a much reduced durability. Catalyzed Lacquer is a solvent based finish that has cross-linking properties to form a more durable surface.
  - 1. Pre-catalyzed has the catalyst added at the factory, where with post-catalyzed, you add the catalyst at the time of use. Pre-cats are generally a little slower in dry time and cure because the catalyst is not as powerful, or "hot." There are also blocker solvents in the lacquer that help prevent the chemical reaction from taking place in the can. This results in long pot lives, six months or better, and no hassle with adding catalyst.
  - 2. Post-catalyzed lacquers dry and cure faster, and are better for high production uses.

#### Performance

- a. Drawers and doors must be fitted, properly aligned and must operate smoothly under various atmospheric conditions.
- b. All doors, drawers, leg mechanisms, trays and other operating parts must be well fitted, properly aligned and operate smoothly without loose or sloppy action.

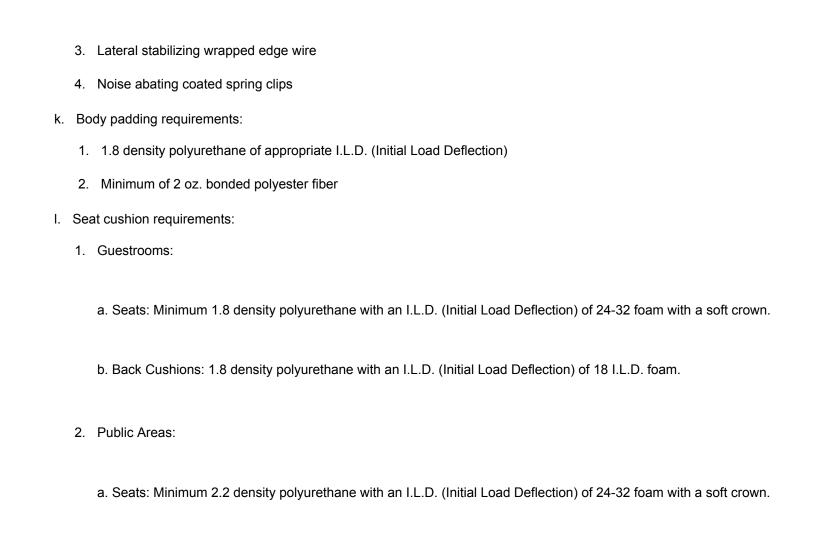
- c. Doors must not rub, rattle or be warped. Hinges must operate smoothly and quietly with no binding or other defect to affect performance.
- d. All tops and structural members must be warp-free.
- e. Hardware, both trim and functional, must be straight and firmly attached.

#### C. Upholstered Furniture

- Refer to prototypical drawings for location, number and groupings of individual pieces.
- Refer to the Brand Design Brief and Furniture, Fixtures and Equipment Specifications for the general design intent of these pieces. All furniture must reflect the design intent.
- 3. Upholstered furniture may not be fully upholstered in vinyl. Vinyl is permitted on seats only. Vinyl welts are not allowed.
- 4. Upholstered furniture must meet the following requirements: (when applicable)
  - a. Adhesive reinforced seams as necessary
  - b. Lined flounces
  - c. Sleeper deck flap
  - d. Non-corrosive rust proof zippers
  - e. Non-corrosive, heavy duty, nylon carpet glides to fit the footprint of the leg. The appropriate glides are required on all dining chairs and bar stools to eliminate damage to the flooring material.
  - f. Components (fabric, decking material, filling/padding, welt cord and barrier material, if used) must be tested in accordance with local fire regulations. Salt-base flame-retardant chemicals are not to be used.
  - g. All flame retardant certificates of compliance must be provided to the hotel for all components of the upholstered items.

#### h. Frame requirements:

- 1. Joints are double doweled, glued and screwed.
- 2. Corner blocked, gusseted, glued and screwed as necessary.
- 3. Metal or sleigh base for some applications.
- i. Seat spring requirements:
  - 1. Sinuous (No-sag) construction
  - 2. 8 gauge spring wire
  - 3. 4"/102 mm or less spacing on center
  - 4. Noise abating coated spring clips
  - 5. Lateral stabilizing wrapped edge wire
  - 6. 2 oz. bonded polyester deck insulator
  - 7. Springs must be hand-tied, connecting insulated wire
  - 8. Universal springs must have lifetime guarantees
- j. Back spring requirements:
  - 1. Sinuous (No-sag) construction
  - 2. 11 or 12 gauge wire



b. Back Cushions: 1.8 density polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D. foam.

- 3. Wherever urethane foam cushioning is utilized in seating, it must be combustion modified high resiliency (ICMR foam in the US and CMHR in Europe).
- 4. Cushions and back pillows must be poly-dacron and wrapped with muslin and must pass local, state, and federal code requirements. Cushion covers must have security clips in US and non-corrosive zippers as required for cleaning ease.
- m. Back pillow requirements:
  - 1. 2.25 density high resilience polyurethane with an I.L.D. (Initial Load Deflection) of 18 I.L.D.
  - 2. Wrapped in polyester fiber or down proof bag enclosing non-bonded polyester fiber
- n. Fabric requirements:
  - 1. Not Applicable to this Brand
  - 2. Stain resistant finish is required.
- 5. Not Applicable to this Brand
- 6. Decorative Pillows insert must be microfiber; 0.7 denier hollow conjugated siliconized microfiber or finer than 1.3 denier.
- D. Sofa Bed
  - 1. General Requirements
    - a. Solid double-doweled hardwood frame and platform base reinforced with metal with no protruding metal bars, springs or casters under the bed with a standard bed height of 20"/508 mm with solid birch hardwood slats. Traditional eight-way, hand-tied suspension is optional. Single coil springs are attached with links and hand-tied to each other for elasticity in the seat.

- b. Not Applicable to this Brand
- c. High quality 4/4 kiln dried hardwood and laminate panel board construction with fasteners and reinforced mechanisms. Cushions must be 8 gauge sinuous construction with 1.8 # of highly resilient foam or 25 innersprings per cushion wrapped with Dacron.
- d. All materials to meet or exceed CA TB 117, TB-1633 and local regulatory guidelines.
- 2. Sleeper Mechanism
  - a. Mechanism must be Leggett & Platt "Platinum X" Sleep System model.
- 3. Sleeper Mattress
  - a. Not Applicable to this Brand
  - b. Not Applicable to this Brand
  - c. Not Applicable to this Brand
  - d. Not Applicable to this Brand
  - e. Mattress must be Leggett & Platt 3500 Series, AireForm that is 52"/1.3 m wide x 72"/1.8 m long, 6"/150 mm thick, with gel infused memory foam topper, and fire retardant foam throughout entire mattress.
  - f. Not Applicable to this Brand
  - g. Not Applicable to this Brand
  - h. Not Applicable to this Brand
- E. Outdoor Furniture

1. All pool and balcony furniture must be weighted for coastal and areas with high winds.

Weight guidelines:

Chaise: 40 lbs/18.1 kg-50 lbs/22.7 kg

Dining Chair: 20 lbs/9.1 kg Barstool: 20 lbs/9.1 kg

Dining Table Bases: 110 lbs/49.9 kg Dining Table Tops: 50 lbs/22.7 kg Tea Table Top and Base: 10 lbs/4.5 kg

#### 2. Frames/Table Bases

- a. Metal Finishes: All outdoor furniture frames must be made of wrought aluminum, cast aluminum or steel; sealed; powder coat finish to avoid corrosion and rusting.
- b. Not Applicable to this Brand
- c. Woven: Woven must consist of an all-weather product (i.e., A026 Polystrap) or polyurethane resin fibers; resistant to harsh weather; UV rated.
- d. Composite/Synthetic:
  - 1. Composite: woods must be made of Marine Grade Polymer (MGP)
  - 2. Synthetic: woods 100 percent recycled polyethylene plastic; pre-dyed coloring to avoid against fading; UV stabilizers; seat slats must have slight flex for extra comfort.
  - 3. Polywood: Lumber must be made from high-density polyethylene (HDPE), UV-inhibited pigment systems, foaming compounds, and selected process additives. The HDPE primary raw material must be derived from post-consumer bottle waste, such as milk and detergent bottles or other HDPE post industrial material. This material must be cleaned by a decontamination process to a high purity level, which removes contaminants such as food residue, paper, and adhesives. It must then compounded into a rigid board stock material; with the resulting finished product containing over 90 percent recycled plastic by weight.
- 3. Table Tops

- a. Glass: Glass tops are not acceptable.
- b. Wood: Wood tops must be sealed with a clear coat polyurethane.
- c. Composite/Synthetic Wood:
  - 1. Composite: Woods must be made of Marine Grade Polymer (MGP)
  - 2. Synthetic: Woods 100 percent recycled polyethylene plastic; pre-dyed coloring to avoid against fading; UV stabilizers.
- d. Not Applicable to this Brand
- e. Composite/Synthetic Stone:

Quarizz: This is an MDF center with a sealed concrete exterior; epoxy undercoat with Tiger Drylac top coat and is suitable for outdoor areas.

- f. Acrylic: Requires a removable metal rim with diameter cross supports; minimum thickness of .22"/5.6 mm for tea tables; minimum .50"/12.7 mm for dining tables and of a textured pattern, as not to show scratches.
- 4. Table Glides:

Outdoor tables exceeding 24"/600 mm must have heavy duty nylon (plastic not acceptable) adjustable glides that are weather resistant and suitable for various types of flooring finishes.

- 5. Cushions
  - a. Dacron Foam: minimum of 2.8 lb/1.3 kg density with a polyester cushion padding resistant to harsh weather conditions; quick drying; mildew resistant; meets CAL TB Section 3; ASTM D 3675 Flame Spread; ASTM E 662 Smoke Density.
  - b. Dry Ease Foam: 50 ILD EZ-Dry Foam with pore size of 35 ppi; density 2.0 lbs./ft³; tensile 8.0 psi; elongation 25 percent; tear 2.0 lbs/in; IFD 25R (15" x 15" x 4"/375 mm x 375 mm x 100 mm) 50 lbs; 50 percent compression set at 15 percent.

- c. Fabric: must be a solution dyed acrylic fabric; rated specifically for outdoor use; stain treatment; meets all regulatory guidelines.
- d. Cushions: must be removable and have a non-corrosive, coordinating zipper; color must coordinate with complimentary fabric.
- 6. Chaise lounges used in sandy areas are required to use a sleigh/sled style base frame.

#### 2515.02 Fabrics

A. Fabric Selection Requirements

All fabric selections must meet the following:

- 1. Be of heavy duty contract quality.
- 2. Runs must be of the same color batch/dye lot.
- 3. Comply with the following rub tests:
  - a. Upholstery and pillow fabrics: 30,000 DR Wyzenbeeck or equivalent.
  - b. Light fastness: 40 hours. Test method: A.A.T.C.C. (American Association of Textile Chemists and Colorists, www.aatcc.org/) or regional testing.
- 4. Comply with the local fire regulations or the following, whichever is more stringent.
  - a. Interior drapery fabrics used must meet the following codes:
    - 1. NFPA 701

- 2. Proof of compliance is required by either a sewn-in manufacturer's tag or a letter on file from the manufacturer.
- b. Upholstery fabrics used must meet the following codes:
  - 1. CAL 117/NFPA 260
- c. Decorative pillow and bed valance/skirt fabric used must meet the following codes:
  - CAL 117, NFPA 260/ UFAC Class 1
- 5. Flame retardant certificates of compliance must be provided to the property.
- 6. Stain treatment is required on all upholstery and decorative pillow fabrics.
- 7. Not Applicable to this Brand
- 8. Upholstery vinyls must be 100% polyvinyl chloride (PVC) or polyurethane (PU) faced vinyl. PU must come with testing to show that the product exceeds ISO 1419 (Tropical Test Method C, 5 weeks).
  - a. Backings: Single direction knits and suede backing are not acceptable.
  - b. Stain resistance: Guestroom vinyl to exhibit durable stain resistance and release of stains from food, drinks and writing instruments using common cleaning agents. Vinyl must demonstrate release of stains such as black coffee, red wine, ballpoint pen, mustard, iodine and denim color transfer after being pressed into the surface at a load of one psi for one minute followed by an aging period of 24 hours. The minimal stain rating following cleaning should be a 4.5 using the AATCC gray scale (5.0 = no change). The stain resistance must not be imparted using a sacrificial top layer; rather, cleaning resistance must be repeatable and the appearance must not be changed by cleaning. These properties must exist after 30,000 double rubs on the Wyzenbeek machine.

2515.03 Window Treatment

### A. Window Treatment

- Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- Not Applicable to this Brand
- 5. Public Areas
  - a. All windows must have roller shades unless otherwise noted. Drive chains for roller or mecho shades must be #10 qualified stainless steel chain rated to 90 lbs./40.8 kg minimum breaking strength. Nickel plated chain must not be used.
  - b. Roller or mecho shades must be used at the fitness center floor to ceiling exterior windows. Drive chains for roller or mecho shades must be #10 qualified stainless steel chain rated to 90 lbs./40.8 kg minimum breaking strength. Nickel plated chain must not be used.
  - Vision panels and/or side lights at the entry door to public spaces are not to receive window treatments and must be left uncovered for security purposes.
- 6. All other windows (for example non-public spaces such as offices or housekeeping) must have roller shades at a minimum.
- 7. Guestroom Window Treatment
  - a. Window treatments in guest suites must be a commercial grade roller shade with a side track system. Roller must include a separate sheer and blackout. The shade must extend to the window sill and must sit inside the window opening. Refer to the Furniture, Fixtures and Equipment Specifications for more information.
  - b. Not Applicable to this Brand
  - c. Not Applicable to this Brand

- d. Not Applicable to this Brand
- e. Not Applicable to this Brand
- Not Applicable to this Brand
- g. Not Applicable to this Brand
- h. Not Applicable to this Brand
- i. Not Applicable to this Brand
- Not Applicable to this Brand
- k. Not Applicable to this Brand
- I. Not Applicable to this Brand
- m. Not Applicable to this Brand
- n. Not Applicable to this Brand
- o. Room divider draperies in the guest suites must be ripple fold, 150 percent fullness and consist of one operable panel. Fabric weight must be seven ounces minimum and be double sided to provide a finished presentation from both sides of the divider drapery. Drapery divider must have split top grommets for ease of removal for cleaning. A grommet pull no higher than 48"/1.2 m above the floor must also be provided. The Winglt Room Divider, #WRD5SS86SN or approved equal, must be used for the room divider rod. The 18 gauge stainless steel tubing must be hung by stainless steel rods and anchored into structural wood blocking. The rod must be designed to release from the mount when loaded with excess of 100 pounds.
- p. Closet drapery panels are required at all closets. The drapery must consist of one operable panel at 150 percent fullness. The drapery panel must have split top grommets for ease of removal for cleaning as well as a grommet pull no higher than 48"/1.2 m above the floor. The drapery rod is provided through the working wall manufacturers.

- q. Not Applicable to this Brand
- r. Motorized Blinds
  - 1. Must be contract grade.
  - 2. Must be inside window mount.
  - 3. Must be 99% blackout.
  - 4. COM must be of contract grade and meet local fire regulations.
  - 5. No more than 1/16"/1.6 mm clearance is allowed on each side.
  - 6. Wall switch or remote controls are acceptable.
- s. Manual Blinds
  - 1. Must be contract grade.
  - 2. Must be inside window mount.
  - 3. Must be 99% blackout.
  - 4. COM must be of contract grade and meet local fire regulations.
  - 5. No more than 1/16"/1.6 mm clearance is allowed on each side.
  - 6. Chain pulls must be secured at the bottom.

2515.04 Top Surfaces

## A. Top Surfaces Definition

Top surfaces are all tabletops or countertops or other horizontal interior architectural element that people can touch.

## B. Top Surface Material Requirements

Materials used must meet the performance criteria that follows:

- 1. Structural integrity as required for intended use without deflection
- 2. Solid, non-porous material
- 3. Impact and scratch resistant
- 4. Resistant to damage from standing water
- 5. Non-corrosive material
- 6. Washable with standard non-toxic housekeeping chemicals
- 7. Not Applicable to this Brand
- 8. Countertop materials used in food preparation and serving areas must be resistant to damage from heat.
- C. Not Applicable to this Brand
- D. Not Applicable to this Brand
- E. Overall Top Surface

An overall top surface minimum thickness of 3/4"/19 mm is required when a laminate top is used.

## F. Porous Stone Tops

All porous stone tops must be properly sealed upon installation. The use of a tuff skin sealer or an equivalent is required.

## G. Fixed Glass & Bumpers

Glass must be fixed. Provide clear acrylic bumpers adequate for size of top of table/case piece.

### H. PLAM Requirements

Plastic laminate tops must be surfaced with high pressure laminate with a minimum 45 lb/20 kg density industrial grade MDF core with fine face particles and proper backing sheet to prevent warping. Tops must be laminated using contact, semi-rigid (PVAC), or rigid (ureas, resorcinol) adhesives, to provide for type two bonding. A "V" groove 1/16"/2 mm deep is required for all inset laminate tops with a solid wood edging sanded smooth. All patterned plastic laminate must be matched exactly at joints. The finished appearance of the plastic laminate must be free from blisters, cracks or any other defects due to faulty workmanship.

### I. Stone Top Requirements

Engineered stone top must have plywood sub-top, painted black. Top must be glued and screwed to base of casegood. All exposed surfaces must be properly treated to protect top from water, alcohol, and chemical stains.

## J. Top Surface Construction Approval

The construction of the top surface must be approved on an individual basis by Hilton Worldwide as being aesthetically appropriate for the Brand and the specific context of the design.

### 2515.05 Art

## A. Artwork Framing Standards - Public Areas:

### 1. Mounting

- a. Paper art must be dry mounted to prevent buckling with the following exceptions:
  - 1. Expensive pieces whose value will be jeopardized. Proper conservational mounting techniques may be used, such as T hinges made from acid free linen tape.
  - 2. Dimensional art or where dry mounting is impossible.
  - 3. Free floating pieces
- b. Photographs must be mounted if possible. Valuable photographs may be mounted using conservation adhesive tissues and backing boards.

### 2. Matboards

a. Conservation of artwork requires either an acid free rag matboard, or at minimum an alpha cellulose board. Approved brands are Bainbridge Alphamat, Crescent Rag, Larson Juhl Artique and Rising.

#### 3. Glass

- a. Regular framer's glass is acceptable. A conservation glass, such as 98 percent UV protected, is preferred for valuable pieces.
- b. Plexiglas is acceptable for larger pieces in excess of 48"/1.2 m in width.
- c. Reflection controlled glass or Plexiglas must be used at bright sunlight areas.

#### Frames

- a. Wooden moldings are preferred.
- b. Not Applicable to this Brand

- c. All frames must be sealed with either a paper moisture barrier or tape.
- B. Contract Framing Standards Guestrooms
  - 1. Mounting
    - a. Wet or dry mount to foamcore is acceptable. Unique specifications or art type require an alternative method of display, such as stretched canvas or fiberboard.
  - 2. Matboards
    - a. Matboards must be white core regular matboard or better.
  - 3. Glass
    - a. Regular framer's glass is acceptable.
  - 4. Frames
    - a. Wooden moldings are preferred.
    - b. MDF core frames are acceptable upon prior approval by Hilton Worldwide.
    - c. When fitted, all frames must be sealed with either a backing paper or tape.
  - 5. Not Applicable to this Brand
  - 6. Security Hardware
    - a. Artwork must be supplied with a T-screw locking system or other approved method.

b. Lighter artwork may utilize standard brackets at top. Heavier items, especially mirrors, must use a Z-bar or similar cleat at top as well as a T-screw lock at bottom.

### 2515.06 Mirrors

### A. Mirror Requirements

Mirrors must be 3/16"/4 mm – 1/4"/6 mm polished with vinyl backing/vinyl safety back, free of distortion. Mirrors must be fabricated of polished plate glass. All mirrors must be guaranteed against silver oxidation. All mirrors must be mounted on hardwood or masonite backing at a minimum 3/16" thickness.

### B. Frames

- 1. Wooden moldings are preferred.
- 2. Not Applicable to this Brand
- 3. All frames must be sealed with either a paper moisture barrier or tape.
- 4. MDF frames are not allowed in bathrooms or other areas in close proximity to moisture.

## C. Mirror Installation Requirements

All mirrors must be installed with tamper-proof 3-point (4-point must be used on larger pieces) security mounting hardware appropriate for wall condition and weight of mirror for a complete and finished installation.

## 2516.00 Fire Protection and Life Safety Requirements

#### 2516.01 Administration

### A. Applicability

- 1. This standard details fire and life safety requirements for the design and construction of new properties, conversion of existing properties and the renovation of existing properties under the Hilton Worldwide Portfolio of Brands. These requirements are applicable to all properties within the Hilton Worldwide system including owned, managed and franchised properties.
- 2. The requirements are performance-based with the goal of safeguarding guests and employees from fire incidents within all Hilton Worldwide properties.

### B. Compliance with Standards

- Where the requirements of local, regional and/or national authorities (i.e. the Authority Having Jurisdiction hereafter, AHJ) exceed those prescribed by Hilton Worldwide, the more stringent standard must be followed. Conflicts between applicable standards must be referred to Hilton Worldwide's Architecture and Construction group for review and resolution. Where a clearly recognized AHJ does not exercise jurisdiction, Hilton Worldwide reserves the right to specify additional fire and life safety standards applicable to a project or property.
- 2. In the event of unusual circumstances, alternative design approaches may be considered. Nothing within these standards is intended to prevent the use of systems, methods or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability and safety.

#### 2516.02 Fire Rated Construction

## A. Minimum Fire Ratings

Minimum fire ratings for construction elements must be utilized in accordance with the construction codes as identified per the requirements of Section 2500.00. Where construction codes referenced in Section 2500.00 are not current and compatible with Section 2516.00, Hilton Worldwide reserves the right to stipulate the use of alternate or supplemental construction codes. In addition, the following minimum standards apply.

## B. Roof System Requirements

Roof systems, except for ancillary detached buildings, must be "class A, B, or C" rated as defined by Underwriters Laboratories (www.ul.com).

C. Fire-resistive construction is required for the following areas. Structural support systems for these areas must be of equal or better fire rated construction. Exception: In existing low rise buildings constructed of reinforced concrete, no more than 6 vertical levels of travel and with a load of less than 75 guestrooms per egress stair, the stairs and elevator/lift shaft wall ratings can be reduced to one hour.

Area	One-Hour	Two-Hour
All floors, load-bearing walls, columns, and beams	X	
Between guest rooms*	X	
Between corridors and guest rooms*	X	
Rooms containing gas-fired equipment	X	
Laundry area perimeter	X	
Stairs and elevator/lift shafts	<four-stories< td=""><td>≥Four-Stories</td></four-stories<>	≥Four-Stories
Flue enclosure	<four-stories< td=""><td>≥Four-Stories</td></four-stories<>	≥Four-Stories
Linen chute	<four-stories< td=""><td>≥Four-Stories</td></four-stories<>	≥Four-Stories
Trash collection room*		X
Recyclable storage room*		Х

<sup>\*</sup>The rating may be reduced by half when the building is protected throughout with automatic sprinklers, where allowed by the local AHJ.

D. Doors in fire-resistive partitions must be self closing with the following ratings where allowed by the local AHJ: In buildings that meet the Exception in 2516.02.C, the door ratings shall be no less than half the overall rating of the wall and never less than 30 minutes, where allowed by the local AHJ.

	Sprinklered	Non-Sprinklered
One-Hour Fire Resistive Walls	20 minute	30 minute
Two-Hour Fire-Resistive Walls	60 minute	90 minute
Guestroom Entry Doors	20 minute	30 minute

## E. Mixed-Use Buildings Fire Separation

Mixed-use buildings must have a two-hour fire separation between the property and adjacent occupancy. This may be reduced to one-hour when the entire building is protected throughout with automatic sprinklers. Accessory areas, such as retail spaces, comprising less than 10 percent of the floor area are excluded from the separation requirement. Parking garages are not considered a separate use, unless the garage is shared as part of a mixed use complex with the following criteria: the garage must have a continuous two hour separation from all hotel areas, the garage must have smoke and CO detection interfaced to the hotel alarm panel, mechanical ventilation if 60 percent of the walls are not open to natural air flow, and standpipe system with hose stations (piping, hose and nozzles) located to allow for 100 percent coverage of the garage area.

#### F. Fire-rated Doors and Frames

Fire-rated doors and frames must be independently certified as fire rated in the country of installation by a national fire body authorized to certify such systems. A proprietary metal seal/sticker must be attached to the edge of the door and frame indicating the rating.

## G. Fire Dampers

Fire dampers rated for 90 minutes must be provided in penetrations through two-hour partitions.

#### H. Fire-Resistive Construction Penetrations

All penetrations in fire-resistive construction must be protected with through penetration systems approved by Underwriters Laboratories, www.ul.com, or equal.

### 2516.03 Fire Suppression

### A. General

- 1. All buildings must be provided with comprehensive automatic fire sprinkler capability, except as noted within this Section.
  - a. Buildings less than 86'-6"/27 m in height are not required to be sprinkler protected. The height of the building is measured from the level
    of means of egress to the floor slab of the highest normally occupied guest level.
  - b. Guestroom bathrooms less than 90 ft²/8.4 m² with non-combustible fixtures and closets less than 24 ft²/2.2 m² are not required to be sprinkler protected.
  - c. High ceiling areas, including atriums, greater than 55'-0"/16.8 m are not required to be provided with automatic sprinkler protection at the ceiling level. Floor areas opening to such space require automatic sprinkler protection. Also reference Section 2516.04.C.12 for additional smoke detection requirements.
  - d. Small, typically non-occupied auxiliary structures, located remotely from principal buildings and containing non-critical functions are not required to be sprinkler protected.
  - e. Sprinklers are required in garages except when detached, above grade and having walls that are open at minimum 60 percent or as defined in 2516.02.E
  - f. Sprinklers are required in below grade spaces except when the aggregate occupant load is less than 50 persons for all below grade spaces. If the below grade occupancy load for the back of house is < 15 and there are two dedicated means of egress for the public areas, provide sprinklers in the public areas only as long as 2-hour construction separates the public areas from the back of house areas.
- 2. Protective systems must be specified, installed and successfully commissioned in conformance with one of the following standards:
  - a. NFPA 13 Standard for the Installation of Sprinkler Systems latest edition (www.nfpa.org)
  - b. EN 12845 Fixed Firefighting Systems Automatic Sprinkler Systems Design, Installation and Maintenance latest edition (www.bsigroup.com)

- c. GB 50084 Automatic Sprinkler System Design Code China latest edition (www.china-fire.com)
- 3. Automatic water mist systems may be substituted for automatic sprinklers subject to compliance with NFPA 750 (www.nfpa.org) and the approval of the local AHJ.

### B. Automatic Sprinkler Protection

- 1. Automatic sprinkler systems must be hydraulically designed by experienced and licensed fire protection design professionals subject to Hilton Worldwide approval. At a minimum, systems must be designed using the following criteria:
  - a. Design areas (i.e. that area in the building used to establish minimum hydraulic demand requirements) must not be reduced below 1,500 ft<sup>2</sup>/139 m<sup>2</sup>.
  - b. A minimum interior hose demand of 100 gpm/379 Lpm must be included in hydraulic demand calculations.
  - c. A safety factor of 10 percent must be applied to hydraulic demand calculations.
- 2. Except for areas subject to freezing, wet pipe style automatic sprinkler protection must be provided in all areas. In areas subject to freezing, dry-pipe or anti-freeze style sprinkler protection must be provided. Electric heat tracing of piping and system components is prohibited.
- Reliable measures must be provided to maintain wet pipe fire protection piping and equipment at a minimum temperature of 40 °F/4 °C.
- 4. Quick Response (QR) sprinklers must be used throughout automatic sprinkler systems, subject to installation criteria published by the manufacturer. The use of standard response sprinklers in existing buildings is permitted until such time as major renovation of the automatic sprinkler system(s) occurs.
- 5. Non-concealed or recessed (ceiling or sidewall) sprinkler heads must have appropriate signage to discourage interaction with the device.
- 6. Not Applicable to this Brand
- 7. Consideration must be given to design and system component selection in areas subject to freezing (including unheated interior building spaces and freezers), corrosive atmospheres (pool areas, saunas and laundries) and exposure to salt air.

- 8. Exposure to natural hazards must be included in the design and installation of systems as warranted including seismic loads, flood exposure and tornadoes.
- 9. Systems must be zoned, at a minimum by guestroom floor.
- 10. Provide an electrically supervised valve tamper switch for each system control valve. Electrically supervised water flow switches must be provided for each system zone as well as each riser.
- 11. Properties being converted to a Hilton Worldwide brand must be evaluated for the presence of failing, deteriorating, obsolete or recalled automatic sprinkler components. Continued service of these components must not be permitted:
  - a. Automatic sprinkler piping systems containing polybutylene piping, or ultra-thin wall piping such as Poz-Lok tubing.
  - b. CPVC piping exposed to incompatible chemicals, fire stopping material and other substances known to cause pipe failure.
  - Sprinkler components exhibiting microbiologically influenced corrosion (MIC).
  - d. Automatic sprinklers subject to recall and replacement by manufacturers notably Central Omega (recall date 1998) and Central O-Ring (recall date 2003) model sprinklers.

## C. Standpipe and Hose Systems

- 1. All properties must be provided with interior hose connections supplied by dedicated standpipe systems, or piping combined with automatic sprinkler systems, except as noted in this Section:
  - a. Buildings with the highest occupied floor less than 88'-6"/27 m above the level of exit discharge do not require a standpipe system unless building configurations or floor layouts do not permit hose deployment by local fire forces.
- 2. For buildings protected by automatic sprinklers, standpipe systems and hose connections may be designed and installed for fire department or brigade service use only. Calculated interior hose demand must be 100 gpm/379 Lpm and provided through automatic means.
- 3. For those buildings not provided with automatic sprinklers, standpipe systems must include complete hose stations (piping, hose and nozzles). Water supply must be of the wet/automatic style.

- a. The water supply must be designed to provide a minimum flow rate of 500 gpm/1895 Lpm.
- b. The minimum duration of flow must be 30 minutes.
- 4. When the standpipe system is provided with a fire department connection, the local fire department must be consulted regarding available water supply.
- 5. Diameter and threading of hose connections must be consistent with those used by firefighting forces responding to the property.
- 6. Pressure at the nozzle tip must be 100 psi/6.9 bar.
- 7. Pressure reducing mechanisms must be utilized where hose connection outlets exceed 175 psi/12 bar.

## D. Water Supply Requirements

- 1. A reliable water supply, capable of supplying the calculated, hydraulic requirements of the installed fire suppression systems, for a minimum period of 30 minutes, must be provided.
- 2. The water supply must be provided by one or more of the following components:
  - a. Connection to a reliable municipal water supply.
  - b. Connection to a municipal water supply augmented with booster fire pump(s) to meet calculated requirements.
  - c. Connection to a fire pump(s) supplied by a water tank of sufficient capacity to meet calculated demands. In the event two or more fire pumps are provided, pump drivers will vary between electric motor driven and diesel engine driven units.
  - d. Connection to an elevated water storage tank.
- 3. Exposure to natural hazards including seismic loads, flood exposure, severe wind load and tornadoes must be considered.
- 4. Water supply components must be specifically designed and rated for fire protection service as approved by Underwriters Laboratories, www.ul.com, or equal.

### E. Kitchen Hood and Duct Protection

- 1. Where a kitchen hood exhaust system is used to control grease-laden vapors, the following fire protection systems and hood/duct construction criteria must be verified as being installed:
  - a. A fire suppression system designed for the installation in a kitchen hood to protect kitchen appliances and the kitchen hood exhaust system. The suppression system must provide protection of the kitchen cooking appliances, the kitchen exhaust hood, and the exhaust plenum portion of the hood connection to the exhaust duct.
  - b. The kitchen exhaust hood and the exhaust ducting must be solely dedicated to the exhaust of grease laden vapors and must be separated from all other exhaust systems.
  - c. The kitchen hood and exhaust ducting must not be constructed of any material that is subject to corrosion or heat degradation. No galvanized metal is allowed.
  - d. Kitchen exhaust duct system must be constructed and installed so that grease cannot collect or leak from any joint in any portion of the exhaust system.
  - e. Grease duct cleanout access panels must be provided to allow inspection and cleaning of all sections of the duct system. Access hatches must not be spaced more than 19'-8"/6 m apart.
  - f. All sections of the exhaust duct must have a two-hour fire-resistive rating from the point of duct penetration of a ceiling, wall or floor to its exterior termination.
  - g. Clearance of the kitchen exhaust duct to the interior surface of combustible materials must be not less than 15-3/4" / 400 mm, or from noncombustible material must not be less than 6"/150 mm.
- 2. New and replacement kitchen hood suppression systems referred to in 2516.03.E.1.a must be pre-engineered wet-chemical fire extinguishing systems rated compliant with UL 300 (www.ul.com) or GB 50016-2006 Clause 8.5.8 and provided with connection to the hotel's automatic sprinkler system or reliable water supply.
- 3. A manual shut off and reset valve for the gas supply must be provided along the means of egress from the cooking area.

### F. Fire Extinguishers

- 1. Portable fire extinguishers must be provided and installed in accordance with the AHJ.
- 2. Fire extinguishers must be contained in recessed cabinets in public spaces as allowed by the AHJ.
- 3. At a minimum, fire extinguishers must be provided in the following non public areas:
  - a. Office areas
  - b. Laundry
  - c. Engineering and mechanical spaces
  - d. Kitchens
  - e. Storage rooms (exempt where allowed by the AHJ when under 500 ft²/46 m² or within a travel distance of 75'-0"/23 m of another readily available extinguisher)

### G. Special Hazards

- 1. Special hazards must be reviewed by a qualified engineer. These hazards include, but are not limited to electrical transformer vaults, large gas or chemical storage facilities, and extraordinarily large IT and/or PBX rooms.
- H. Commissioning of Fire Suppression Systems
  - 1. All fire suppression systems must be formally and successfully tested based on the requirements of the standard referenced at Section 2516.03.A.2, prior to turnover for operational purposes. Commissioning activities must be witnessed by a qualified, independent third-party engineer.
  - 2. Project documentation, including specifications, test documentation and as-built shop drawings must be provided to the property operations staff.
  - 3. Testing and commissioning must verify the correct operation of all interfaces with ancillary systems, including the building fire alarm system.

- 4. Provide demonstration and instruction of the installed equipment to selected members of the property operations staff.
- 5. Provide written verification of testing, utilizing standard forms required by Section 2516.03.A.2. Where required, testing documentation must be furnished to the AHJ.

### 2516.04 Fire Detection, Communication and Alarm Systems

### A. General

- 1. All buildings must be provided with reliable capability to detect a fire incident, report the incident to hotel staff and initiate appropriate evacuation sequences.
- 2. Fire alarm and detection systems must be designed by experienced and licensed fire protection design professionals subject to Hilton Worldwide approval.
- 3. All new and retrofit systems must utilize the point-addressable, distributed processing, distributed amplification technology providing a discrete system "address" for each individual initiating device.
- 4. The design, installation and commissioning for a new fire detection and alarm system must provide a fully automatic fire detection and alarm system to satisfy the area coverage, and operational and performance criteria as outlined in this section.
- 5. For new, renovated or altered systems, specifications meeting one of the following standards must apply:
  - NFPA 72 (National Fire Alarm and Signaling Code) latest edition, www.nfpa.org
  - British Standard 5839 (Fire Detection and Fire Alarm Systems for Buildings) latest edition, www.bsigroup.com
  - c. GB 50166 (Code for Installation and Acceptance of Fire Alarm System) latest edition, www.china-fire.com
- All equipment including cabling must be supported and approved by one of the following testing laboratories:
  - a. UL (Underwriters Laboratories), USA, www.ul.com

- b. Vds (Verband der Sachvershicherer), Germany, www.vds.de
- c. BS (British Standards), www.bsigroup.com
- d. CEN (European Committee for Standardization), www.cen.eu
- e. 3C China Compulsory Certification by the "Certification and Accreditation Administration of the PRC", www.cnca.gov.cn or www.ccc-cn.org

### B. Basic Design Principles

- 1. All new and retrofit systems must be capable of expansion to support at least a ten percent increase in initiating, control and, notification appliance circuits.
  - a. Control cabinets, power supplies and amplifier capacities must be sized accordingly.
  - b. Spare cabinet and power supply capacity must be evenly distributed throughout the system.
- Where permitted by local code, all new and retrofit systems must incorporate an alarm verification function in the control panel for systemtype smoke detectors. Alarm verification must not be provided for manual fire alarm boxes or water flow alarm switches.
- 3. Pre-signal alarms allowing time to investigate a detection device prior to general alarm are permitted provided the following conditions are met:
  - a. The local AHJ allows such arrangement.
  - b. Heat detectors and suppression system detection cause immediate evacuation sequence.
  - Subsequent devices in the same zone cause immediate evacuation sequence.
  - d. The time to investigate before a general evacuation sequence is less than four minutes.
  - e. The property has sufficient staff on-duty to conduct an investigation of the incident.

- 4. Where reliable conditioned commercial power and/or emergency power is not anticipated and in areas subjected to severe lightning, a UPS must be configured to protect the fire alarm central control equipment, and peripheral printers and terminals, against brownout and voltage transients. Upon utility power failure, the UPS must provide power to all connected loads per above. Design and installation must be coordinated with Section 2516.06.
  - a. At a minimum, provide a Power Conditioner/Voltage Regulator (PC/VR) for the fire alarm panel.
  - The PC/VR kVA output must be capable of supporting the fire alarm equipment.
  - c. The PC/VR must have Automatic Voltage Regulation capable of maintaining output voltage to within five percent of its nominal voltage rating with an input voltage variation of +15 percent to -25 percent.
- 5. Transient surge suppression must be provided for each circuit connected to the fire alarm system that enters or exits the building housing the fire alarm control panel, or sub-panel.
- 6. Where devices are located in unconditioned space, they must be suitable for such areas as determined by the manufacturer and protected from weather and corrosion.
- 7. Hotels located within a mixed-use development must have a dedicated, hotel fire detection, communication and alarm system with equipment capable of interfacing with fire alarm signals from the entire development. Fire alarm interface equipment must be tied to an emergency power source.

#### C. Fire Detection

- 1. Local hard wired single-station smoke alarms must be installed in each sleeping area and sitting room of suites. In Historically listed properties wireless single-station alarms where the battery life is monitored by the panel and batteries are utilized with a shelf life rated at over 10 yrs and long-term discharge under low-discharge conditions rated at over 6 years.
  - a. Where two or more smoke alarms are located in a suite, they must be interconnected to alarm simultaneously.
  - b. Smoke alarms must be provided with integral battery-back up. Except when using wireless devices as described in 2516.04.C.1
- 2. For buildings protected throughout by monitored suppression systems, addressable smoke detectors must be provided within each area as follows:

- a. Interior guest suite corridors
- b. Elevator lobbies
- Mechanical and electrical rooms
- d. Computer/telecom/PBX rooms
- e. Storage rooms
- 3. The use of smoke detectors must be limited, unless local codes require additional units or prohibit the removal of existing detectors. Existing detectors that provide serviceable control hardware, exhibit no false alarms and are generally stable are not required to be removed.
- 4. In buildings that are not protected throughout by monitored fire suppression systems, fully addressable fire detection must be provided in all spaces.
- 5. In-duct smoke detectors must be provided downstream of air filters and prior to branch connections in air conditioning systems having a capacity greater than 2,000 ft<sup>3</sup> per minute/944 L per second, and at each connection to a vertical duct or riser serving two or more stories.
- 6. Duct detectors must provide a supervisory alarm only and not cause evacuation unless required by local code.
- 7. Any detection device not accessible from the floor level must be provided with a remote test switch and indicator light.
- 8. A manual fire alarm (manual call) station must be located in close proximity to the front desk.
- 9. Manual fire alarm stations must be provided at each floor exit and exit to the exterior. If permitted by local code, manual fire alarm stations may be omitted on guest floors in sprinkler-protected buildings.
- 10. Special fire suppression systems and kitchen hood systems must be monitored by the fire alarm system. Activation of the kitchen hood suppression system must de-energize the kitchen air supply and extraction system.

- 11. Fire pump, emergency generator, sprinkler and standpipe system alarm and supervisory devices must be monitored by the fire alarm system.
- 12. Projected beam-style smoke detection must be used within atriums. Individual, spot-type detectors must not be provided within atriums, unless required by the local AHJ.
  - a. Provide projected beam smoke detectors installed at every third level in accordance with the listing parameters of the selected device.
  - b. For irregular shaped atriums, more than one beam may be needed on each level, or an aspirating system may be necessary to provide required coverage.
  - c. Fire modeling must be used to determine type, location and style of coverage and to demonstrate that a smoke layer is maintained 6'-0"/1.83 m above the highest floor level of exit access, or unprotected opening to adjoining spaces.

### D. Notification

- 1. At a minimum, the following devices must provide fire alarm annunciation:
  - a. Main fire alarm control panel and printer
  - b. Remote annunciator and printer in the security office
  - c. Remote annunciator at the front desk, PBX or other 24-hour staffed area
  - d. Color display terminal(s) with graphic capability (required at properties greater than 1,000 guestrooms and/or multi-building facilities)
- 2. Audible notification appliances must be installed, spaced and tapped so as to produce a sound output on alarm that is clearly audible above the ambient noise level throughout the building.
  - a. In no case must the audible alarm be less than 15 dBA above the ambient room noise level or less than 5 dBA above the maximum ambient noise level in public and common areas, with a minimum of 65 dBA, and a maximum of 110 dBA.

- b. In no case must the audible alarm be less than 75 dBA at the pillow level in all guestrooms, with intervening doors closed during the alarm.
- 3. A speaker or horn must be provided in each guestroom and area used for sleeping purpose.
- 4. Speakers must be equipped with variable watt input taps.
- 5. Notification appliance circuits must be arranged so that no single cut or fault will result in the circuit not operating.
- 6. Voice systems
  - a. A voice system must be provided for areas in buildings where the highest occupied floor is greater than 88'-6"/27 m above the level of exit discharge and/or buildings containing assembly areas designed for 1,000 or more persons.
  - b. Voice instructions must be in the local language and English, at a minimum.
  - c. Speakers must be located in the following areas:
    - 1. Each guestroom and parlor
    - 2. Public assembly rooms
    - 3. Corridors and elevator lobbies
    - 4. Rooms over 1000 ft²/92 m²
    - 5. Every fifth floor in interior exit stairs
    - 6. Mechanical rooms
    - 7. Roof areas accessible by exit stairs

- 7. Speakers must be zoned by floor, except stairs must be zoned by individual stairway.
- 8. Visible notification appliances consisting of xenon clear lens strobe units must be installed in the following areas, which must activate automatically upon any alarm within the building, including but not limited to:
  - a. Guestroom corridors Adjacent to the exits and transition points.
  - b. Accessible/hearing impaired guestrooms
  - Public restrooms 1 Speaker/Horn combination unit min/room.
  - Meeting rooms 1 Speaker/Horn combination unit min/room.
  - Dining rooms 1 Speaker/Horn combination unit min/room.
  - f. Ballrooms 1 Speaker/Horn combination unit min/room.
  - Common area corridors Adjacent to the exits and transition points.
  - h. Back-of-house areas having high ambient noise conditions
- 9. Activation of the smoke detector in the accessible/hearing impaired guestroom must cause activation of the visible notification appliance in that room and other devices as required by local codes.
- 10. Activation of the corridor notification appliance circuit must cause activation of the visible notification appliance in the accessible/hearing impaired room(s) on that floor and other devices as required by local codes.

### E. Interfaces and Other Devices

- 1. Fire alarm signals must be coordinated with the building management systems, mechanical systems and security systems in the design of the fire alarm system.
- 2. Magnetic door holders must be provided for self-closing fire doors that are required to be in the open position for business operations.

- 3. Control devices must be provided to shut off music and other entertainment devices that would interfere with the operation of notification systems.
- 4. Door locking systems must be de-energized during a fire alarm event.
- 5. Elevator lobby smoke detectors operation must cause all elevator cars to recall in the elevator bank affected.
- 6. Carbon monoxide detectors must be provided in the room or area of origin for all areas utilizing fuel-fired equipment, including fireplaces. Combination smoke/carbon monoxide detectors are permissible. Refer to local codes and ordinances for additional requirements.
- 7. Provide a system operational matrix for all components, specific to the property and systems. The following matrix is intended as an example only. The project-specific matrix must be approved by Hilton Worldwide Architecture & Construction during design development.

Output (across) Input (down)	În	Signal In Guest	Receipt At Control	System	At Central	Receipt At Control	At Control	Audible/ Visible Signal At Fire Area	Silloke		Flevator	Music/ Enter- tainment Shut Down
Single Station Guest Room Smoke Alarm												
Accessible Guest Room Smoke Detector	Х	х										
Guestroom System Smoke Detector	Х			х			х					
Area System Smoke Detector			Х	Х	Х			Х	Х	Х		х

Output (across) Input (down)	Audible Signal In Guest Room		Receipt At Control	Receipt At System Printer	At	Receipt At	Supervisory	Audible/ Visible Signal At Fire Area	Activate Smoke Mode In Fire Area	Release Door Holders In Fire Area	Elevator Recall	Music/ Enter- tainment Shut Down
Elevator Lobby Smoke Detector			X	×	X				X	X	X	
Duct Type Smoke Detector							Х		Х			
Heat Detector			Х	Х	Х			Х	Х	Х		
Water Flow Switch			Х	Х	Х			Х	Х	Х		Х
Manual Fire Alarm Station			Х	Х	Х			Х		Х		Х
Special Suppression Systems			X	X	Х			X	Х	Х		х
Valve Supervisory Switch				×	х		Х					
Fire Pump Signals				х		Х	Х					
System Trouble				Х	Х	Х						
Emergency Generator Signals				Х		Х	Х					
CO Detection				Х	Х		Х					
CO Detection (Guestroom)	Х	Х										

### F. Installation

- 1. New and retrofit fire detection and alarm systems must be installed meeting the requirements of the standard referenced at Section 2516.04.A.5 and the manufacturer. The following provisions are supplemental requirements:
  - a. Fire detection and alarm cable, where used and not installed in metal conduit or raceway, must be mechanically protected by building construction. Installation must be in areas not subjected to mechanical damage.
  - b. All cable that is not enclosed by conduit must be supported and anchored with nylon straps or clamps. Staples are prohibited. Fire alarm cable must be supported by the building structure at intervals not greater than 10'-3"/3.05 m. Cable installed above drop ceilings must not be laid on ceiling tiles. Circuits must not be fastened in such a manner that puts tension on the cable.
  - c. All cable runs must be continuous between devices, without splices. Where a continuous run is not feasible, connections must be made using terminal blocks installed in a metal electrical box. All other connections must be to terminal blocks. Wire nuts must not be permitted. Cables connected together must have the same color insulation.
  - d. All cable must be sized, twisted and shielded and installed as required by protocols established by the fire alarm system manufacturer.
  - e. All electrical enclosures, raceways and conduits must contain only those electrical circuits associated with the fire detection, emergency communications and alarm system and must not contain any circuits that are unrelated to the system.
  - f. All electrical circuits must be numerically identified at both ends with wire taped numbers.
  - g. All underground cabling must be listed for fire alarm service and for direct burial. Underground cabling must be installed in liquid-tight PVC conduit with no splicing below ground. Provide additional ground wire within conduit to maintain reference ground on system between buildings.
  - h. All conduit, junction boxes and enclosures subjected to moisture must be weatherproof.
- G. Commissioning and Acceptance

- 1. All systems must be formally and successfully tested, based on the requirements of the standard referenced at Section 2516.04.A.5, prior to turnover for operational purposes. Commissioning activities must be witnessed by a qualified, independent third-party.
- 2. Testing must be documented in accordance with the standard referenced at Section 2516.04.A.5. Project documentation, including specifications, test documentation and as-built shop drawings must be provided to property operations staff.
- 3. System software, including security of stored information and reprogramming capability must be provided to property operations staff.
- 4. Where required, testing documentation must be furnished to the applicable AHJ.
- 5. Testing and commissioning must verify the correct operation of all interfaces with ancillary systems, including automatic sprinklers, heating and air conditioning, elevators, smoke control and emergency generators.
- 6. Provide demonstration and instruction to selected members of the property operations staff of the installed equipment.
- 7. Provide written verification of testing utilizing standard forms required by the standard referenced at Section 2516.04.A.5.

## 2516.05 Means of Egress

### A. General

- 1. Fire/emergency exits must be provided as follows:
  - a. A minimum of two exits must be provided for each floor, new build properties must provide a minimum separation of one third of the diagonal distance of the floor.
  - b. A minimum of two exits must be provided from within an individual room where room occupant load exceeds 50 persons. New build properties must provide 2 exits separated at a minimum of one third of the diagonal distance of the room.
  - c. Where occupant load exceeds 500 persons on a floor or within a room, a minimum of three exits must be provided.
  - d. When occupant load exceeds 1000 persons on a floor or within a room, a minimum of four exits must be provided.

2. Occupant load must be calculated using the following:

Occupant Load						
Use	ft² / person	m² / person				
Assembly – No fixed seating, concentrated (chairs only)	7	0.65				
Assembly – No fixed seats, less concentrated (tables and chairs – such as restaurants)	15	1.4				
Assembly – Pre-function area	5	0.47				
Kitchens	100	9.3				
Swimming Pools	50	4.6				
Swimming Pool Deck Areas	30	2.8				
Property Guestroom Areas	200	18.6				
Storage / Mechanical	500	46.5				
Retail	30	2.8				
Fitness Centers with Equipment	50	4.6				

- 3. Occupant load calculations in assembly areas must be based on the higher of either the pre-function or assembly area loads.
- 4. Total exit width provided must be calculated based on capacity factors of inches/mm per person as follows:
  - a. Stairways 0.3"/7.6 mm or follow NFPA 101
  - b. Doorways and level travel 0.2"/5 mm or follow NFPA 101
- 5. Travel distances must comply with the following:

Travel Distance Requirements				
	With Sprinklers	Without Sprinklers		

Travel distance from a guestroom door to an exit	200 ft/61 m	150 ft/46 m
Travel distance to an exit for all other areas	250 ft/76 m	200 ft/61 m
Common path of travel to an exit	100 ft/30 m	75 ft/23 m
Maximum dead-end corridors	65 ft/20 m	50 ft/15 m

- 6. Egress corridors must be a minimum of 44"/1.12 m clear width. Existing properties can be a min 36"/900 mm.
- 7. Headroom clearance in all egress paths must be a minimum of 80"/2.03 m. Exception, non guest access routes can have limited points due to structure or mechanical obstruction at no less than 75"/1.9 m with warning pads mounted at both sides of the obstruction.
- 8. Exit paths through an intervening room or space is allowed when all of the following are met:
  - a. The intervening room or area is of no greater hazard.
  - b. There is a clear and unobstructed path to an exit.
  - c. There is not more than one intervening room or space to pass through.

### B. Stairs

- 1. A minimum of two exit stairs must serve each floor above or below grade. Existing properties can utilize one stair if the highest occupancy load is less than 15 persons and the building is sprinklered.
- Stairs must have a minimum clear width of 44"/1.1 m. Existing properties can be a min 36"/900 mm.
- 3. Tread depth for the full width of exit capacity must be:

- a. New stairs a minimum of 11"/279 mm.
- b. Existing stairs a minimum of 9"/225 mm.
- 4. Riser height must be:
  - a. New stairs a maximum of 7"/179 mm.
  - b. Existing Stairs a maximum of 8"/203 mm.
- 5. Egress stairs serving occupied floors above 88'-6"/27 m to the level of exit discharge must be classified as smoke proof enclosures using one of the following methods:
  - a. Mechanical ventilation
  - b. Natural ventilation
  - c. Enclosure pressurization
- 6. Open external egress stairs serving floors within one level of the level of exit discharge are allowed when designed to prevent the accumulation of water. Open external egress stairs serving floors more than one level away from the level of exit discharge are allowed except in areas subject to freezing where the stairs must be fully enclosed.
- 7. Scissor stairs may be utilized, where allowed by local code, provided no penetrations exist between the stairs and each stair is separated by rated construction as required in Sections 2516.02.C and 2516.02.D.
- 8. All stairs must discharge to the exterior.
  - a. Where local code allows, and the building is protected by automatic suppression, 50 percent of occupant load may discharge to a lobby with a clear path to the exit when the lobby is at level of exit discharge.
- 9. Enclosed egress stairs must not be used for any other use.

- 10. Storage is prohibited under egress stairs.
- 11. Normally unoccupied spaces, such as mechanical or storage rooms, must not open directly to egress stairs.
- 12. No wiring or ductwork is permitted within the exit enclosure except for that which is necessary to serve the exit.
- 13. All exits must discharge to an open area considered as a public way, or lead to a public way via an unobstructed path.
- 14. Buildings that are not fully sprinklered must have an area of refuge within each stair that accommodates one wheelchair per 200 persons for each floor.

### C. Doors

- 1. All doors in a path of egress must have a minimum of 32"/800 mm of clear width, including guestroom doors.
- 2. All egress doors must swing in the direction of egress when serving 50 or more persons.
- 3. All egress doors serving an exit enclosure or exit discharge must swing in the direction of egress.
- 4. Door latches must have active lever hardware, requiring an obvious one-hand method of operation. For instances when panic hardware is required instead of lever hardware, refer to 2516.05.C.5.
- 5. When latching hardware is provided at doors serving 100 or more persons, panic hardware must be provided instead of levers. Panic hardware is also required at all exit doors to the exterior.
- 6. Electronically access-controlled doors in an egress path must meet all of the following:
  - a. Open upon activation of the fire detection and alarm system.
  - b. Provided with a manual releasing device within 5'-0"/1.52 m.
  - c. Unlock upon loss of power to the device.

- 7. Opening force for any door in an egress path must not exceed the following:
  - a. 15 lbf/67N to release latch
  - b. 30 lbf/133N to set in motion
  - c. 15 lbf/67N to fully open
- 8. Locks, if provided, must not require the use of a key, a tool, or special knowledge or effort for operation from the egress side.

### D. Handrails and Guards

- 1. Handrails must be provided at all stairs and ramps.
- 2. Inside handrails at turns of stairs must be continuous.
- 3. Handrails must be located between 34"/860 mm and 38"/965 mm above the surface of the tread.
- 4. A minimum clearance of 2.25"/57 mm must be provided between the handrail and the wall.
- 5. Guards must be provided at the top landing area for all stairs and along the stairs and intermediate landings when there is a gap between runs wider 6"/150 mm.
- 6. Guards must be not less than 42"/1.1 m high.
- 7. Open guards must have intermediate rails or ornamental pattern such that a 4"/102 mm diameter sphere is not able to pass through.
- 8. Ornamental patterns must be designed to minimize the ability to climb handrails.

## E. Egress Signage

1. Exits and exit access must be marked with exit signs that are readily visible in the path of egress.

- 2. Exit signs must be internally or externally illuminated at all times.
- 3. In the event of power failure, emergency power must be supplied for the exit signage for a minimum of 60 minutes.

### F. Egress Lighting

- 1. Emergency lighting must be designed to provide sub circuit protection in all areas via a central battery cubicle or by self contained fittings. The lights and circuits must also be included on the generator supplies under total building failure.
- 2. The means of egress, paths leading to a public way, and the public way must be illuminated at all times the building or space is occupied.
- 3. Emergency light levels must reach 50 percent output within five seconds and 100 percent output within 60 seconds.
- 4. Mandatory lighting must achieve a minimum illumination level of 1 ft-candle/10.8 lux at the floor for the following locations: stairs, landings, change of levels, change of direction, intersections, at emergency stairwell doors (corridor side), at emergency exit doors from areas of risk such as kitchens and public assembly spaces and at emergency exit doors from back of house spaces (plant rooms, plumbing/sprinkler rooms, switchgear/transformer rooms, etc.)
- 5. Mandatory lighting must achieve a minimum illumination level of 0.5 ft-candle/5.4 lux at the floor directly in front of all firefighting equipment/ appliances, fire panels and pull stations, throughout the entire property.
- 6. Infill lighting between mandatory lighting along the means of egress, must achieve an average minimum illumination level of 0.5 ft-candle/5.4 lux at the floor and, not less than 0.1 ft-candle/1.1 lux at any point, along the entire means of egress at floor level and at the public way.
- 7. In the event of power failure, emergency power must be supplied for the egress lighting for a minimum of 60 minutes.

## 2516.06 Emergency Power

A. General

- 1. All properties must be provided with reliable emergency electrical power capability. In the event of loss of normal power service, the emergency service must be designed to provide power to building systems critical to the safety/security of property guests and employees. Requirements for business critical systems and functions must be referenced at Section 2514.08.
- 2. Failure of normal electrical power must result in the automatic transfer of critical electrical loads to an Emergency Power Supply (EPS). Acceptable sources of emergency power include:
  - Dedicated emergency generators
  - b. Batteries
  - c. Power feed from a reliable electrical supply verified to be independent of the property's primary electrical feed.
- Critical loads must be permanently and reliably connected to the EPS.
- 4. Technical requirements for EPS components including generators, fuel tanks, controllers and automatic transfer switches; design and installation methodology; and commissioning practices must be consistent with recognized standards as specified by the equipment manufacturers and accepted by the responsible AHJ.
- 5. Emergency generator(s) provided to satisfy EPS requirements must be in a weatherproof enclosure, and consider:
  - Separation between adjacent equipment and building spaces
  - Ventilation requirements
  - Fuel system safety
  - d. Vibration and noise, and exhaust discharge
  - e. Exposure to seismic activity, wind loading, hurricane/cyclone and tornado exposure
- 6. In the event of loss of standard electrical power, at a minimum, EPS capability must be provided to:

- a. Safely maintain guests and employees within the property until restoration of standard power.
- b. Maintain the ability to safely evacuate the property including:
  - 1. The provision of lighting levels through designated means of egress and at control points (front desk, security, fire command)
  - 2. Emergency signage
  - 3. Power for emergency operations of elevators when required by the local AHJ
  - 4. Power for communications including the building fire alarm system and telephone equipment
- c. Maintain systems critical to life safety and security in operational readiness, including:
  - Fire pump(s) when required to meet the standards set forth in 2516.03.C and 2516.03.D
  - 2. Smoke control and stairwell pressurization equipment
  - 3. All security-related equipment and devices including security office(s), remote sensors/detectors and cameras
  - All electrically-controlled locking/unlocking mechanisms
- 7. Electrical loads critical to life safety, fire protection and security must take precedence over all other electrical loads.
- 8. For properties subject to natural events including hurricanes/cyclones, earthquakes, flooding/tidal waves, tornadoes, significant winter storms, wildfires and/or located in an area with unreliable standard power, consideration must be given to the provision of additional EPS capability. Duration of the EPS must be designed based on likely exposure to the identified hazard(s) and available fuel to resupply the property. No less than two days' supply of fuel must be provided based on the calculated loads where fuel resupply may be interrupted.
- B. Testing and Documentation
  - The EPS must be formally and successfully tested for the automatic transfer and operation of equipment supplied.

2. Provide demonstration and instructions to selected members of the property operations staff in the proper operation of the installed equipment.

### 2517.00 Accessibility Guidelines

### A. ADA Requirements

All hotels must comply with Title III of the Americans with Disabilities Act ("ADA"). Refer to Section 104.00 and to www.ada.gov for more information.

### B. Disabled Codes/Laws Requirements

All properties within the Hilton Worldwide Portfolio of Brands must be designed in compliance with local, regional and national codes or laws for disabled or universal access. The applicable code must be identified and provisions agreed upon in advance with Hilton Worldwide in the country of operation. For countries without applicable codes, refer to the Hilton Worldwide Global Accessibility Guide for recommendations.

# C. Existing Properties

Existing properties must comply at the time of refurbishment or as required by the local jurisdiction.

# D. Owner Responsibility

The owner of the property is responsible for compliance with and the provision of all applicable codes. The owner is urged to seek appropriate council to ensure compliance. Hilton Worldwide does not and cannot warrant conformance with or interpretation of any codes, laws or regulations relating to accessibility for individuals with disabilities.

### 2518.00 Technology Wiring Standards

#### 2518.01 Application

Section 2518.00 details wiring requirements for the design and construction of new properties, conversion of existing properties, renovation of existing properties and new installations of cabling infrastructure under the Hilton Worldwide Portfolio of Brands. These requirements are applicable to all properties within the Hilton Worldwide system including owned, managed and franchised licences.

### 2518.02 Approved Supplier

All systems must be supplied and installed by a supplier approved by Hilton Worldwide.

## 2518.03 Wiring Standards (Voice and Data)

A. Structured Cabling System

The Structured Cabling System (SCS) must be fully certified with a relevant 20 year performance warranty.

B. Distribution Tray of Cable Trays and Baskets

The building must be equipped with a distribution network of cable trays and baskets. The containment must be located within communications risers, ceiling channels and raised floor voids. Separate containment must be installed for voice/ data and power cabling.

C. Category 6 (Cat6) Cabling System

Category 6 (Cat6) Cabling is required.

- System Specification
  - a. The cabling system must be designed and installed according to ISO 11801:2002 Class E and also meet the following:
    - 1. BS EN 50173-1:2002 Class E
    - 2. ANSI/EIA-568-B
  - b. The cabling system must meet the permanent link and channel performances defined in these standards or better.
- 2. Components Specification
  - a. Cable
    - 1. The cable must meet ANSI/EIA-568-B and/or BS EN 50173-1:2002 Class E Standard. The flammability performance must meet IEC 60332-1 as a minimum.
    - 2. The cable must have current independent third party approval status and must be audited and certified as 'fit for purpose' before handing to hotel.
    - 3. Existing buildings that have CAT5e cabling already installed and certified are not required to re-cable CAT6 unless undergoing major refurbishment; however, valid network cable certification is required. Properties entering with pre CAT5e cabling or already within the Hilton Worldwide system that perform a refresh or new installation of cabling infrastructure must meet current Wiring Brand Standards (2518.02 – 2518.10).
  - b. Connecting hardware
    - 1. Patch panels

- a. Must be 19"/480 mm rack mounting; in exact multiples of 1U in height.
- b. Cable termination must be LSA or 110 Insulation Displacement Connectors.
- c. Front connectors must be RJ45 style IEC 60603-7-2/3 568B wired. ('A' wired may be selected as an option.)
- d. Electrical performance must be Category 6 or better.

#### 2. Connectors

- a. Cable termination must be LSA or 110 IDC.
- b. Connectors must be RJ45 style IEC 60603-7-2/3 568B wired. ('A' wired may be selected as an option.)
- c. Electrical performance must be Category 6 or better.

#### 3. Wall outlets

- a. White plastic with shuttered 1"/25 mm x 2"/50 mm modules, two or four-gang density.
- b. Outlets in public areas that are connected to the Hilton network must be lockable and secured from external access.

#### 4. Floor outlets

a. White plastic with shutters, 06C style or 1"/25 mm x 1-1/2"/37 mm modules.

#### 5. Patch leads

- a. Must be 24 AWG (UTP), 26 AWG (STP) stranded, with low flammability sheath to standard IEC 60332-1.
- b. Connectors must be RJ45 style IEC 60603-7-2/3.

c. Electrical performance must be Category 6 or better.

#### D. Installation specification

- 1. The cabling system must be procured from one manufacturer and must be installed according to the manufacturer's instructions.
- 2. Planning, quality control, and documentation must be according to BS EN 50174:2002 parts 1 and 2. External cables must be installed according to BS EN50174-3:2003. Grounding and bonding must be in accordance with BS EN 50310:2000.
- 3. 100 percent of the installed cables must be tested. 100 percent of the test data must be reviewed and approved by the manufacturer and an independent third party before any warranty certificate is released.
- 4. The Permanent Link must be tested to IEC 61935 with a Level III (or higher) cable tester set to Class E Permanent Link referencing the Permanent Link performance standards detailed in ISO 11801:2002, or Class E detailed in BS EN 50173-1:2002, or Cat 6 detailed in ANSI/ TIA/EIA-568-B.
- 5. The results must be stored in an electronic database compatible with the tester manufacturer's cable management program.
- 6. The cabling must be covered by a 20-year product and application warranty and installed by an installer accredited and trained by the manufacturer. Proof of training, which must be less than two years old, must accompany the tender.
- 7. A labeling and administration system must be designed into the cable system in line with BS EN 50174-1:2001 or ISO/IEC 14763-2 or ANSI/TIA/EIA-606-A. The numbering scheme must be Cabinet/Patch Panel/Patch Point – 2B/03/26, which would be Remote Cabinet 2B, Patch Panel in Cabinet 03, and Point 26. For questrooms, it would be Room Number/ Patch Point – 101/A, which would be room 101 and Point A (Bedside).
- 8. The cabling system must be earthed according to the manufacturer's instructions and BS EN50174-3:2003 or ANSI/TIA/EIA-607.
- 9. Separation of power and data cables must be according to EN 50174-2:2001 except where local or national electrical safety regulations require a greater separation.
- 10. Optional: A cable containment system must be supplied according to BS EN 50174-2:2001, ANSI/TIA/EIA 569-B or ISO 14763-2.

### E. LAN Application

- 1. Any communications protocol designed for use on 100-Ohm (nominal) characteristic impedance Class E cabling system must operate satisfactorily on the installed cabling system. 'Satisfactory' means better than one in ten-to-the-power of 10 bit error rate whilst in the presence of up to 3 V/m external interference over 100 MHz for at least thirty minutes.
- 2. LAN operation must include, but not be limited to, ATM at 155 Mb/s (and 622 Mb/s and 1.2 Gb/s when Class E interfaces are available) and Gigabit Ethernet to IEEE 802.3ab.
- 3. Delay skew of the Permanent Link must be better than 20 nanoseconds (typical) to ensure satisfactory video operation.

### F. EMC (Electromagnetic Compatibility) Performance

1. The structured cabling system must comply with cable balance and EMC requirements of BS EN 50288-3-1:2003 and ISO 11801:2002 and must not degrade the EMC performance of any electrical device connected to it. The manufacturer must guarantee this facility.

### 2518.04 Horizontal Sub System

# A. Horizontal Wiring

- 1. In the context of this specification, horizontal wiring covers all copper Category 6 cabling between the MDF/IDF and the terminated RJ45 socket at the outlet location.
- 2. Horizontal cabling must be arranged in a physical star topology radiating directly from the MDF/IDF to the outlet. Each outlet must be individually connected back utilizing a single cable to the MDF/IDF, no outlets must be connected in parallel or chain. There must also be no intervening connections between the outlet and the MDF/IDF, the cable must be continuous end-to-end.

#### B. Horizontal Cable Containment

1. All horizontal Cat 6 cabling must be installed upon dedicated cable trays/baskets or within conduits/multiple compartment trunks between the MDF/IDF and the outlet socket.

2. The voice and data cables must not be installed within the same containment as any other services, and the minimum segregation spacing must be maintained to minimize data interference.

#### C. Patch Panels/Frames in General

- 1. Voice and data patch panels must be manufactured to Category 6 Standard.
- 2. The voice and data patch panels within the local computer rooms must be Modular Patch Panels mounted within equipment cabinets. The patch panels must have Insulation Displacement Connections (IDC) on the rear and RJ-45 8 position sockets on the front. The voice and data patch panels must have no fewer than 24 x RJ-45 ports in 3 groups of 8 ports. A cable management / patch cord organizer must be installed after every 48 ports.

#### D. Voice Service Frames

- 1. The Main Distribution Frame (MDF) within the main communications room must distribute voice services and must be of Krone type 108A Dual Vert complete with all necessary terminations as Krone type 237A.
- 2. The frame must be secured to a 1"/20 mm plywood mounting board located adjacent to the PBX and the horizontal cabling racks within the main communications room.

### E. Fiber Optic Patch Panels

- 1. Fiber optic patch panels must be capable of housing no fewer than 12 x LC connectors. All fiber optic cores must be fusion spliced using pigtails onto LC connectors. Each fiber patch panel must use 1U of cabinet space and be located above the active components within the same cabinet or patch panels within the local communications rooms.
- 2. Two categories of copper based, rack mounted patch frames are required within each communications room to support:
  - a. Termination of horizontal cabling from information outlets; on these panels there must be a definitive demarcation separating voice and data cabling. Patch panels must be RJ-45 modular in construction.
  - b. Termination of intra-building voice backbone cables, providing connectivity between voice services and the information outlet patch panels outlined above. The voice patch panels must be modular in construction and must contain no fewer than 24 x RJ-45 ports.

### F. Backbone Cabling Within the Building

#### 1. Voice Backbone

a. Star topology copper based UTP backbone cables must distribute voice services from the MDF located within the main computer room to each of the local computer rooms. Sufficient wire pairs must be included to provide a service based on 1-pair modularity, plus 25 percent spare capacity.

#### Data Backbone

a. The data backbone cabling between the main computer room and the local computer rooms must be interior grade LSZH sheathed, 12 core 50/125 multimode and tight buffered fiber optic cable (OM3 or better). LC connectors must be used for all fiber optic connections.

#### 3. Intra-building Backbone Cable Routing

a. The main vertical and horizontal intra-building backbone cabling must be routed via a network of cable trays.

#### 2518.05 Communications Cabinets

#### A. Specifications

- 1. Communications cabinets must have 42U of usable frame height, 31"/800 mm x 39"/1.0 m and must provide a sufficient degree of protection to BS.5490 IP 20. The cabinets are required within each communications room (main and local) for the housing of the active components, modular patch panels (copper cables) and fiber optic patch panels. In the absence of active components specification details, it is assumed that the equipment will take up 17U of frame space.
- 2. All cabinets must be uniform in manufacture, appearance and color (light grey / black). Each cabinet must be fitted with a lockable smoked glass or mesh front door and a lockable rear door. All cabinet doors must have locks operated by a single key. Each cabinet must incorporate removable side panels and cable management rings and brackets for the dressing of patch leads and cords.
- 3. All cabinets must incorporate integrated surge protected power socket strips with no fewer than of eight socket outlets, which must connect to the power distribution system via the UPS.

4. A gap of at least 6"/150 mm must be maintained between the front of the patch panels and the front of the cabinet.

#### B. Patch Cords / Leads

- 1. Fiber Optic patch leads of 3'-3"/1.0 m length, 50/125 multimode duplex, 1/10"/2.5 mm LC type, must be provided by the cabling contractor (OM3 or better).
- 2. Connecting modular data patch panel (information outlet patch panel) to modular voice/data patch panels must be achieved using 4 pair, 8 pin, RJ-45 to 8 pin RJ-45 Category 6 patch leads of varying lengths.

#### C. Device Leads

1. Device leads from the data outlets to the user workstation must be provided with quantities and lengths confirmed by Hilton Worldwide.

#### 2518.06 Implementation and Hand-Over

### A. Installation Quality

- 1. The complete structured cabling system must be installed in accordance with the quality standards as applicable and in accordance with the manufacturer's guidelines.
- 2. The structured cabling contractor must ensure that all installation staff has a complete understanding of the quality requirements
- 3. Where the structured cabling contractor is involved in the design element of the project, the nominated designer must be BICSI registered and hold the accredited RCDD status.

### B. Testing

1. Testing of fiber optic cables must be carried out using an OTDR, and must be carried out at both 850 and 1300nm for multimode, along with 1310 and 1550nm for single mode, from each end of the cable. Each trace must be recorded along with the test engineers name and signature.

- 2. Should the testing identify a failure, this must be immediately rectified and noted with the hand-over documentation under test failure. Where rectification is not possible then the cable and associated components must be replaced and removed from site.
- 3. The cabling contractor must undertake to provide Hilton Worldwide IT with advance knowledge of all testing activities and allow witness to the testing as required.

#### C. Manuals and Documentation

- 1. The structured cabling contractor must provide the following items as hand-over documentation to Hilton Worldwide nominated representatives at the conclusion of the project.
  - a. Two paper copies and a CD-ROM of all fitted drawings showing the cabling schematics, connectivity drawings, cabinet and frame schematics, all clearly showing label designations. All drawings must be produced using the latest version of AutoCAD for Windows and saved in .DWG or .DXF file format.
  - b. Communications cabinets and patch panel layouts.
  - c. A schedule of information outlets containing label designations and locations. The schedule must be presented in the form of a Microsoft Excel spreadsheet and be provided in both paper and CD-ROM formats.
  - d. Test results (copper and fiber) on paper and CD-ROM.
  - e. 20 year warranty application assurance certificate.

#### 2518.07 Wireless Distribution

# A. Wi-Fi UTP Cable, Category 6

The provisioning of Wireless Internet (Wi-Fi) services in the Hilton Worldwide portfolio of brands require the installation of UTP cable, Category 6, from main computer room or intermediate data cabinets to locations throughout the hotel (see below) for the mounting, installation and servicing of Wireless Access Points (WAPs). All previous reference to conduit, cable placement and termination requirements for Category 6 cabling in this document must be adhered to for installation of this Wi-Fi cabling. The scope of this definition relates only to the design and

installation of the cabling system for this Wi-Fi network. Reference to WAPs in this document is intended to give a point of reference for design of the cabling system.

### B. Areas of Coverage

1. Care must be taken to ensure the installation of enough infrastructure in these areas such that their subsequent division by mechanical or other partitions does not deteriorate signal reception in any one partitioned area. Guestrooms to include all space within all guestrooms. suites and parlors. These also include coverage for all fractional ownership or condominium units as may reside within the property.

#### C. Installation Parameters

- 1. The installed infrastructure defined here must provide for the installation of WAPs such that the following criteria are met: WAPs must be securely mounted with a manufacturers bracket in a subdued and aesthetic manor. WAPs must be permanently accessible after installation to facilitate repair or replacement. WAPs must meet the engineering standards provided in the "Guest Internet Access Network Standards Guide Global.pdf" published on https://teamsites.hilton.com/sites/ InfrastructureandTechnology/Architecture/Networks/Wireless.aspx.
- 2. Cable runs for the Wi-Fi network must be terminated in 8pin RJ¬45 female jacks at the access point location. Jacks must be installed in wall plates if the WAP is to be mounted aesthetically in a visible location, and interconnected with the shortest possible patch cord to maintain a neat and tidy look and also to minimize tampering.

#### 2518.08 Patch Cable Standards

#### A. Patch Panel Standards / Lead Colors

- 1. Patch leads colors must be used to differentiate amongst various vendors / systems in all patch cabinets, for example, Internet access, digital TV systems, minibar, guest telephones, and cordless telephones.
- 2. The Cat6 cables used must adhere to the following color code:

Main & Remote Computer Rooms	Color
Voice & Fax Lines	Light Blue
Server Connections	Red
Point of Sale	Black
Printers	Green
Guest Internet (incl Wireless Access Points)	Purple
Guest Minibar System	Orange
TV System	Yellow
Keycard System	White
Interfaces	Pink
Wireless Access Points (DECT, Hilton)	Brown
Electronic Meeting Signs	Light Grey
Cross-over Cables	Dark Blue
Desktops	Dark Grey

#### B. Patch Lead Standards - Devices

1. All patch leads connecting devices to the network Cat6 sockets, i.e. desktop PCs, laptops, printers, etc must be grey.

# 2518.09 Guest Room Technology Services

## A. Cabling Requirements

- 1. In order to ensure quality of service and flexibility, a minimum of 2 (points B&E) and up to 4 x 4-pair cables (CAT6-RJ45) are required to provide data services and be labeled accordingly (x). Placement requirements must be verified within Sections 2510.00 and 2512.00.
- 2. At the desk area and/or living room

- a. (A) Telephone if required in Sections 2510.00-2512.00
- b. (B) Guest Internet access Wi-Fi Access Point and Wired Internet (when provided)
- 3. For the TV/ Credenza
  - a. (C) Future use/ Digital TV
- 4. By the bedside
  - a. (E) Telephone

#### 2518.10 Wiring Standards (Coaxial – MATV, CATV)

Hotels must install coaxial cable, homerun to each guestroom. The following provides detailed specifications about the coaxial cabling. Hotels must consult their intended in-room entertainment provider to determine if there are additional wiring specifications or documentation. Hotels must work with a professional cable installer to design and install the cable plant. For IPTV installations, see CAT6 documentation in Section 2518.03.

## A. System Specifications

System Specifications All installations must conform to relevant standards and safety specifications for the appropriate region. These may include:

- 1. MATV Installations: ANSI/SCTE 40 2004 (US), BS EN 50083 (UK)
- 2. Coaxial Cables: ANSI/SCTE 74 2003 (US), BS EN 50117 (UK)
- 3. Grounding of coaxial antenna systems: outlined in NEC Article 250 (US), ANSI/NFP 70 (US), BS EN 50310 and section 2518.8.5 (UK)
- B. Cable Types

- 1. Coax The cable must meet or exceed specifications in ANSI/SCTE 74 2003 (US), BS EN 50117 (UK) or local equivalent standards, as follows:
  - a. Room drop maximum 150ft: RG-6 quad-shielded, Belden or Commscope or equivalent
  - b. Feed trunk cable maximum 230ft: RG-11 guad-shielded, Hard-line/.500 or greater, Belden or Commscope or equivalent
  - c. Not Applicable to this Brand
  - d. Core trunk cable between MDF and all IDFs: RG-11 quad-shielded, Hard-line/.500 or greater, Belden or Commscope or equivalent
  - e. Cabling must be 60% braid, solid copper center conductor rated for 5MHz 1GHz
- 2. Fibre

Use if the satellite dish is located more than 150m/500ft from the head end:

- a. Single Mode G.657.A 3mm armoured or equivalent
- C. Connections

All coaxial network connections must be as follows:

- 1. Round tapered or snap-and-seal
- 2. Properly mated and tightened to approximately 30 in/lbs of torque
- D. Signal Level

Measured at room outlet:

### Head End System Wiring (HD/QAM256)

a. Bandwidth sweep tested from: 5 MHz to 1GHz

b. Modulation Error Ratio (MER): 37-40dBmV

2. Satellite Set-Top Box System Wiring (i.e., DRE - DIRECTV Residential Experience/Integrated Reception System (IRS)/ DVB-S and DVB-S2)

a. Signal level: 50dB - 75dB

b. Minimum SNR: 12dB

c. Minimum BER: <2.0 E-04 (Pre Viterbi)

#### E. Antenna

- 1. All UHF antennas must incorporate a balun to ensure the matching of the dipole to the feeder cables.
- 2. Antenna must be cabled from rooftop to MDF head end. See above for cabling length requirements.
- 3. The aerial system, mounts, and support structures must be capable of withstanding winds of 100mph/160kph and take into account local environmental conditions (snow, ice, extreme wind etc.).

#### F. Satellite Dishes

- 1. Satellite dishes must be constructed to withstand a wind speed of 60mph/100kph and be of an adequate size for the system concerned and take into account local environmental conditions (snow, ice, extreme wind etc.).
- 2. Satellite must be cabled from rooftop to MDF head end and able to produce a 15dB carrier-to-noise level at the installations site for the given transponders being received. See above for cabling length requirements.

3. Dishes must be aligned for maximum signal strength and carrier-to-noise ratios. The LNB must be aligned so that the horizontal and vertical transponders appear equal and give maximum rejection of the opposite polarity.

### G. Coax Topology

- 1. Head End System Wiring (i.e., HD/QAM/DVB-T/DVB-T2/DVB-C/digital signal distribution)
  - a. Wiring must be star topology or home run to each guestroom. Run a single cable trunk feed from MATV head end (MDF) to a central point within each hotel corridor/riser/IDF closet. Use multi-output taps to distribute the signal; from the IDF, run one coaxial cable to each guestroom.
- 2. Satellite Set-Top Box System Wiring (i.e., DRE DIRECTV Residential Experience/Integrated Reception System (IRS )/ DVB-S and DVB-S2)
  - a. Wiring must be star topology or home run to each guestroom. Run 6 cable trunk feeds from IRS amplifier to central points within the hotel corridors/risers/IDF closets. Use a multi-switch to distribute the signal from the hotel corridors/risers/ IDF, run one coaxial cable to each guestroom.

## 2519.00 Signage and Graphics

## 2519.01 General Signage

A. All Signage

All signage, existing and replacement, must comply with these standards. Refer to Section 500.00 for Identity and Marketing requirements.

B. Relicensing/Change of Ownership Signage Requirement

Upon relicensing or change of ownership, existing signage must be brought up to current signage specifications as directed by Hilton Worldwide.

# C. Signage Approval

All signage must be approved by Hilton Worldwide. Written approval must be obtained prior to fabrication and installation.

## D. Non-English Speaking Locations

Signage in non-English speaking locations must be bilingual, in both English and the local language.

## E. Etched Trademark Requirements

Trademarks owned by Hilton Worldwide must not be etched in any construction surface where they become permanent and cannot be easily removed.

### F. Construction Project Identification Sign

A construction project identification sign must be installed once construction begins.

# 2519.02 Interior Signage

# A. Interior Signage Design & Approval

Interior signage must be the Brand approved design. Refer to www.hiltonworldwide.com/design for Interior Signage Specifications.

# B. Interior Signage Manufacturers

An approved sign manufacturer must fabricate all interior signage. Contact information may be found online at suppliers connection. hilton.com.

#### C. Public Area Glass Panels

In all public areas, glass panels (e.g., windows, glass doors, sidelights, etc.) which extend to the floor without a horizontal break or partition, or without decorative framing, must be identified with customized graphics where required by applicable law.

### D. Directional Signage

- 1. Interior corridor signage must be brought up to the current standard at the time of any renovation within the corridor.
- 2. A comprehensive system of informational/directional signs must be installed directing guests to all appropriate facilities contained within the building.

### E. Lobby Area Signage

- 1. 100 percent non-smoking hotels must have signage at the front entrance visible for any guest entering the building. It must not be displayed directly on the front doors or at the front desk.
- 2. Not Applicable to this Brand
- 3. Not Applicable to this Brand
- 4. Prominently display the Home2 Guarantee near the Entertainment Wall as shown on the prototype drawings. Drawings can be found at www.hiltonworldwide.com/design.

#### F. Public Restrooms

1. Public restrooms must be clearly identified using international symbols.

# G. Food & Beverage

1. The hours of operation for the Inspired Table® Breakfast must be included in the graphics/signage. See www.hiltonworldwide.com/design for specifications.

- 2. Not Applicable to this Brand
- 3. The Inspired Table® Breakfast graphics/signage are required. See www.hiltonworldwide.com/design for specifications.

#### H. Commercial Facilities

- 1. Not Applicable to this Brand
- 2. Not Applicable to this Brand
- 3. Only approved Spin2Cycle signage and graphics are permitted. See www.hiltonworldwide.com/design for specifications.
- I. Not Applicable to this Brand

### J. Meeting Facilities

1. The primary entrance to the meeting facilities must have an event board. It may be freestanding or wall-mounted but must coordinate with other interior signage. If using a decorative easel-type frame for display, the sign must be glassed and matted in a decorative frame. Reader board signs with removable letters must not be used.

# K. Fitness Center Signage

- 1. The facility must be clearly marked and identified with the approved Brand graphics. Refer to www.hiltonworldwide.com/design for required signage.
- 2. Hours of operation must be posted for the Fitness Center.
- 3. Not Applicable to this Brand
- 4. Easy-to-understand instructions for use of the equipment must be clearly visible.
- 5. A sign outlining applicable health, safety and emergency information for use of the fitness center must be posted.

- Only approved Spin2Cycle signage and graphics are permitted. See www.hiltonworldwide.com/design for specifications.
- L. Pool/Whirlpool/Spa Signage

Pool/Whirlpool Signage

- Not Applicable to this Brand
- 2. A professionally prepared sign outlining guidelines and rules for use of the swimming pool must be prominently displayed. Swimming pool signs must match the design of and be consistent with the other signs in the hotel sign system.
- 3. A professionally prepared sign outlining guidelines and rules for use of the whirlpool must be prominently displayed. Whirlpool signs must match the design of and be consistent with the other signs in the hotel sign system.
- 4. Not Applicable to this Brand
- 5. Pool lifts must have identification and instructional signage that matches all other signage in the pool area. Sample verbiage at the lift: "POOL LIFT Reserved for quests with mobility disabilities only. For lift assistance or instructions, contact the front desk."

### M. Circulation Signage

- 1. Hotels that are 100 percent non-smoking must have a "no smoking" sign in the elevator lobby on all floors.
- 2. Elevator lobbies and elevator cabs must have signs that state during a fire emergency the exit stairs must be used instead of the elevator.
- Not Applicable to this Brand
- 4. Two (2) brand approved elevator frames with posters must be installed in each public elevator. Posters and frames are available on home2suites.mymarketingbench.com. No other artwork or graphics are permitted.
- 5. Not Applicable to this Brand

- 6. All floor levels, within enclosed stairs, must be clearly numbered at each landing. The letters must be 6"/150 mm minimum high and reflective.
- 7. Exit stair doors must have signs that state they are fire doors and must remain closed at all times.
- 8. All entrance/exit doors normally locked during specific times, or as required by code, in the evening must have signs, both inside and outside the doors that indicate the time they are locked and include directions to the appropriate alternate entrance/exit doors.

#### N. Guestroom Signage

- 1. Guestroom signage must be provided on corridor wall adjacent to strike side of each guestroom door.
- 2. Not Applicable to this Brand
- 3. The international "no smoking" symbol must be clearly displayed at all guestrooms designated as "non-smoking". The graphic must be included with the guestroom numeral signage.
- 4. The back of the guestroom door must include a sign containing fire evacuation information. This sign must be centered on the door below the door viewer. The following must be included:
  - a. Emergency exit plan
  - b. Pull station and fire extinguisher locations
  - c. Maximum room rate (where required by law)
  - d. Check-in and check-out times (where required by law)
  - e. Safety deposit box availability
  - f. Local laws/standards

- g. For your privacy and security, always use your deadbolt to double lock your room from inside. The safety latch and door viewer must be used to visually identify anyone outside your door. Follow these general guidelines at all applicable passage doors.
- 5. When local codes require separate from the evacuation sign, room rate cards and local law cards must be professionally printed and displayed conspicuously within each room. Codes permitting, cards may be placed in the closet.

2519.03 Not Applicable to this Brand

### 2519.04 Exterior Signage

- A. Refer to www.hiltonworldwide.com/design for property identification signs in the Exterior Signage Specifications.
- B. Main Entry Door Property Identification Sign

An approved sign manufacturer, licensed by Hilton Worldwide, must fabricate and install all property identification signs. Contact information may be found online at www.hiltonworldwide.com/design.

- C. Property Identification Signs
  - 1. A minimum of one internally illuminated ground monument sign and one internally illuminated building mounted sign is required for all properties. Additional signage may be required by Hilton Worldwide dependent upon building orientation and visibility.
  - 2. Not Applicable to this Brand
  - 3. The ground sign pedestal or base must be protected from damage by planter box, landscaping or other means.
  - 4. Blade signs are allowed at urban locations when a mount location is not available for ground signs. Blade signs must be internally lit and comply with brand standards. Neon is not allowed.

- 5. Illuminated signs must be time switched and photo-cell controlled.
- 6. Exposed conduit and/or raceways are prohibited at building face signs.
- 7. No marquees or electronic rate signs of any type are permitted. "No vacancy" signs are not allowed.
- 8. At time of replacement, materials including the light source must match any remaining/existing materials. Full signage replacement must comply with current specification standards.
- 9. Exterior signage must be installed prior to opening, including conversion properties.

### D. Exterior Miscellaneous Signs

- 1. External way finding signage must be provided for properties where travel path decision points occur forcing a guest to turn left, right or continue straight ahead.
- Not Applicable to this Brand
- 3. Not Applicable to this Brand
- A designated outdoor pet-friendly area must be clearly identified with brand approved graphics. Refer to www.hiltonworldwide.com/ design for specifications.
- 5. Porte cochere clearance signage must be provided for clearances less than 15'-0"/4.5 m. Letter height must be 6"/15 cm minimum and the color must contrast the adjacent building color.
- 6. Not Applicable to this Brand
- 7. Temporary exterior signage and/or banners must be approved by the Brand before being posted. No additional advertising (billboards or reader boards) are permitted.
- 8. Walking paths must be clearly identified with brand approved graphics. Refer to www.hiltonworldwide.com/design for specifications.

## E. Parking Signage

- 1. Directional signage to the parking area must be clearly visible when not obvious.
- 2. Floor level and area signs must be provided in parking garages for ease of locating vehicles.
- 3. A disclaimer must be posted in all guest parking areas on the site that user assumes all risks. Signs must be located along parking lanes and be mounted to light poles or independent poles with spacing not to exceed 100'-0"/30 m.
- 4. Not Applicable to this Brand
- 5. Signage identifying designated accessible parking spaces must be provided at guest parking areas.
- 6. Signage must be provided designating parking space(s) reserved for electric vehicle charging stations.

Abbreviations			
°F	Fahrenheit	A	Amp
Α	Amp	ACT	Acoustical Ceiling Tile
ACT	Acoustical Ceiling Tile	AFF	Above the Finished Floor
AFF	Above the Finished Floor	С	Celsius
С	Celsius	CDB	Celsius Dry Bulb
CDB	Celsius Dry Bulb	CFLs	Compact Fluorescent Lamp
CFLs	Compact Fluorescent Lamp	CFM	Cubic Feet per Minute
CFM	Cubic Feet per Minute	CPU	Central Processing Unit
CPU	Central Processing Unit	CYP	Computer Yarn Placement
CYP	Computer Yarn Placement	D	Depth
D	Depth	dBA	A-weighted decibel
dBA	A-weighted decibel	DDM	Distributed Data Management
DDM	Distributed Data Management	dia.	Diameter
dia.	Diameter	DP	Dew Point
DP	Dew Point	DX	Direct Expansion

Abbreviations			
DX	Direct Expansion	EAT	Entering Air Temperature
EAT	Entering Air Temperature	EIFS	Exterior Insulation Finish System
EIFS	Exterior Insulation Finish System	FDB	Fahrenheit Dry Bulb
FDB	Fahrenheit Dry Bulb	FF&E	Furniture, Fixtures & Equipment
FF&E	Furniture, Fixtures & Equipment	FPM	Feet Per Minute
FPM	Feet Per Minute	FT	Feet or Ft2 (Feet squared)
FT	Feet or Ft2 (Feet squared)	GFCI	Ground Fault Circuit Interrupter
GFCI	Ground Fault Circuit Interrupter	GFI	Ground Fault Interrupter
GFI	Ground Fault Interrupter	GPF	General Protection Fault
GPF	General Protection Fault	GPM	Gallons Per Minute
GPM	Gallons Per Minute	Н	Height
н	Height	HD	High Definition
HD	High Definition	HR	Humidity Ratio
HR	Humidity Ratio	HSIA	High Speed Internet Access
HSIA	High Speed Internet Access	HVAC	Heating Ventilation Air Conditioning

Abbreviations			
HVAC	Heating Ventilation Air Conditioning	HZ	Hertz
Acronyms			
A&C	Architecture & Construction	AAMA	American Architectural Manufacturers Association
AAMA	American Architectural Manufacturers Association	AATCC	American Association of Textile Chemists and Colorists
AATCC	American Association of Textile Chemists and Colorists	ABA	Architectural Barriers Act
ABA	Architectural Barriers Act	ADA	American Disabilities Act
ADA	American Disabilities Act	AGA	American Gas Association
AGA	American Gas Association	AMCA	Air Moving and Conditioning Association
AMCA	Air Moving and Conditioning Association	ANSI	American National Standards Institute
ANSI	American National Standards Institute	ARI	Air Conditioning and Refrigeration Institute
ARI	Air Conditioning and Refrigeration Institute	ASA	American Standards Association
ASA	American Standards Association	ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers	ASME	American Society of Mechanical Engineers
ASME	American Society of Mechanical Engineers	ASTM	American Society for Testing and Materials

Acronyms			
ASTM	American Society for Testing and Materials	AWMA	Air & Waste Management Association
AWMA	Air & Waste Management Association	AWS	American Welding Society
AWS	American Welding Society	BS	British Standard
BS	British Standard	CFFA	Chemical Fabrics and Film Association
CFFA	Chemical Fabrics and Film Association	DHI	Door and Hardware Institute
DHI	Door and Hardware Institute	DHSI	Door and Hardware Systems, Inc.
DHSI	Door and Hardware Systems, Inc.	DIN	Deutsches Institut fur Normung (German Institute for Standardization)
DIN	Deutsches Institut fur Normung (German Institute for Standardization)	EN	Euro Norm (European Standard)
EN	Euro Norm (European Standard)	EPA	Environmental Protection Agency
EPA	Environmental Protection Agency	ETL	Environmental Testing Laboratories
Terminology/Definitions			
AACHEN	Measurement for dimensional stability	Alarm verification	A feature internal to automatic fire detection and alarm systems, wherein the report of smoke detection is confirmed within a specific period of time before initiating an alarm
Alarm verification	A feature internal to automatic fire detection and alarm systems, wherein the report of smoke detection is confirmed within a specific period of time before initiating an alarm	Area of refuge	An area where persons unable to use stairways may remain for a period of time, waiting for assistance or instructions during an emergency

Terminology/Definitions				
	Area of refuge	An area where persons unable to use stairways may remain for a period of time, waiting for assistance or instructions during an emergency	Common path of travel	The portion of an egress path traveled before two or more distinct paths to an exit are available
	Common path of travel	The portion of an egress path traveled before two or more distinct paths to an exit are available	Dead end corridor	The portion of a corridor where only one path of travel is available before two or more distinct paths to an exit are available
	Dead end corridor	The portion of a corridor where only one path of travel is available before two or more distinct paths to an exit are available	Level of exit discharge	The point at which a person is considered to be exited from a building and is in, or has immediate access to a public way
	Level of exit discharge	The point at which a person is considered to be exited from a building and is in, or has immediate access to a public way	lux	Unit of measurement for illumination