PART 1 - GENERAL

SPEC NOTES:

.1 *Use this specification section when a comprehensive specification is required to specify painting of new, previously unpainted exterior and interior surfaces.*

.2 *Work under this section also includes: moisture testing and surface preparation of substrates as required for acceptance of paint, including cleaning, small crack repair, patching, caulking, and making good surfaces and specific pre-treatments, sealing, and priming of surfaces to the limits defined within the MPI Architectural Painting Manual.*

.3 Review all requirements noted herein and carefully choose those that meet project requirements. The Specifier must choose one item from a series of items surrounded with [..] brackets and delete the remainder, including all SPEC NOTES. Items surrounded with (..) brackets are additional information / comments that should be left in the specification.

*.4 Adding or deleting items in this specification must be done with care and caution. The onus of doing so rests with the Specifier who must have a complete and thorough understanding of what is required. Where additional information must be added to this specification the Specifier must ensure that such information is not only accurate but also in accordance with **MPI** requirements.*

.5 The Owner or Consultant must provide a Finish Schedule for all exterior and interior surfaces to be painted clearly indicating the paint system and gloss level required for each surface type based on MPI descriptions and gloss ratings available for the selected system. This information should be issued to painters bidding the work.

1.1 Description:

SPEC NOTE: *This article (1.1) is not intended to "scope" painting work but to serve as a general description. The onus of defining the extent of this section of Work remains with the Project General Contractor, who will ensure that the area / scope of responsibility of any particular Subcontractor / supplier is set out in full detail when awarding the painting and decorating subcontract. The extent of this section of Work is also governed by the limits of local trade agreements and conditions. This article should be used in conjunction with 1.2, Related Sections.*

.1 Section Includes: All labor, materials, tools and other equipment, services and supervision required to complete all exterior and interior painting and decorating work as indicated on Finish Schedules and to the full extent of the drawings and specifications.

.2 Work under this contract shall also include, but not necessarily be limited to:

SPEC NOTES:

.1 Delete, revise or add to example selections listed below as required.

*.2 As a general note, where specification numbers are referenced throughout this painting specification, they should be revised as required by the specifier to suit project specification section number requirements (preferably in accordance with the latest version of the **MasterFormat** numbering system) and/or where other pertinent specification sections are impacted by work of this section, their numbers should be appropriately inserted as required.*

.a High pressure washing and abrasive blasting in accordance with the requirements of Section [*insert appropriate specification section number*]. [***SPEC NOTE:** see 1.2.1 and amend as required.*]
.b Surface preparation of substrates as required for acceptance of painting, including cleaning, small crack repair, patching, caulking, and making good surfaces and areas to the limits defined under ***MPI*** preparation requirements.
.c Surface preparation and prime painting surfaces for wall coverings prior to installation in accordance with ***MPI*** and wall covering manufacturer's requirements. [***SPEC NOTE:** see 1.2.1.m and amend as required.*]
.d Specific pre-treatments noted herein or specified in the ***MPI*** Architectural Painting Specification Manual.
.e Priming (except where pre-primed with an approved primer under other Sections of work) and painting of structural steel, miscellaneous metal, ornamental metal and primed steel equipment.
.f Priming and back-priming of wood materials as noted herein or specified in the ***MPI*** Architectural Painting Specification Manual.
.g Painting of all semi-concealed areas (e.g. inside of light troughs and valances, behind grilles, and projecting edges above and below sight lines).
.h Painting of roof vent flashings in accordance with the requirements of Section 07600.
.i Stencil painting (e.g. locker numbers in tenant storage rooms).

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.j Zone and traffic marking (e.g. parking lines and numbers, direction arrows, small car, barrier free accessible and visitor parking bay designations, speed bump and pedestrian walkway demarcation, overhead height restrictions, etc. on exterior (asphalt and/or concrete) and interior (asphalt and/or concrete) surfaces except where such work is part of asphalt or concrete paving specification work.

.k Painting and finishing of all exposed to view elevator equipment and components (i.e. doors and door frames) unless pre-finished.

.l Painting of exposed to view mechanical (heating, ventilating and plumbing) services and equipment, e.g., ducts, sprinkler piping, etc., and electrical work to extent noted on Finish Schedule unless pre-finished.

.m Re-painting of existing surfaces and finishes when adjacent to new painting work where applicable including surface preparation, prime and finish coats in accordance with ***MPI*** Repainting requirements.

.n Provision of safe and adequate ventilation as required over and above temporary ventilation supplied by others, where toxic and/or volatile / flammable materials are being used.

.3 Refer to drawings and schedules (e.g., Finish Schedule) for type, location and extent of finishes required, and include all touch-ups and field painting necessary to complete work shown, scheduled or specified.

.4 This Section along with the drawings forms part of the Contract documents and is to be read, interpreted and coordinated with all other parts, including .

.5 Division 0, Section 00700 - General Conditions and Section 00800 - Supplementary Conditions and Division 1 - General Requirements form an integral part of this Section of Work. Painting contractor shall refer to these and all other related parts.

SPEC NOTE: *Clauses 1.1.4 and 1.1.5 above may be deleted or revised as required to suit specification and/or form of Contract requirements.*

1.2 Related Sections:

.1 Unless otherwise noted, the following work or conditions are not included under this Section of work:

SPEC NOTES:

.1 Delete, revise or add to example selections listed below as required. Also list here any specific exclusions normally assumed to be part of the painting work. Coordinate items with other Sections of Work in the Project Manual.

.2 Work included in other sections may be indicated by listing appropriate sections as below:

Section 01500 - Temporary Facilities and Controls (temporary heat, lighting, scaffolds, etc.)
Section 01575 - Environmental Controls and Procedures (waste management and disposal)
Section 02740 - Asphalt Paving (traffic lines and markings)
Section 03300 - Cast-in-Place Concrete (special finishes)
Section 04200 - Masonry (sealers over concrete or clay units)
Section 05120 - Structural Steel (shop primers and pre-finishing if applicable)
Section 05210 - Steel Joists (shop primers)
Section 05300 - Metal Decking (shop coatings)
Section 05500 - Miscellaneous Metal Fabrications (shop primers and pre-finishing if applicable)
Section 05510 - Custom Metalwork (shop primers and pre-finishing if applicable)
Section 06200 - Finish Carpentry (priming and finishing)
Section 06400 - Architectural Woodwork (priming and finishing)
Section 08210 - Wood Doors and Frames (pre-finishing)
Section 09720 - Wall Coverings
Section 09915 - Exterior Repainting
Section 09920 - Interior Repainting
Section 09970 - Electrostatic Painting
Section (03655)(09995) - Abrasive Blasting
Division 15 - Mechanical (painting, stenciling, banding of mechanical systems)
Division 16 - Electrical (painting, stenciling, banding of electrical systems)

.3 Alternately, work included in other sections may be indicated by general statements as below:

.a Temporary heat and light, scaffolding and platforms, housekeeping services when provided as specified under Section 01500.

.b Condition of substrates, correction of defects and deficiencies in substrates which may adversely affect painting work, except for minimal work performed by this trade and preparation of surfaces to receive paint and finishes under this section of work.

.c Abrasive blasting, shop cleaning, shop priming including site touch-ups, and shop painting when applicable, of structural steel, metal joists and decking, miscellaneous metal, ornamental metal and steel equipment as specified under Sections [*insert appropriate section numbers*].

.d Removal of shop coatings, cleaning of surfaces and re-applying damaged and/or non-conforming shop coats of paint, other than minimal spot touch-up.

.e Shop priming (and shop or pre-painting when applicable) of metal and wood doors, frames and windows including fittings as specified under Section [*insert appropriate section number*].

.f Painting of copper, aluminum, stainless steel, nickel, bronze or brass surfaces, unless otherwise specified herein.

.g Painting of materials and equipment off-site, e.g. pre-finishing millwork, etc.

.h Zone and traffic markings, e.g., parking bay lines and numbers, small car, barrier free accessible and visitor parking bay designations, speed bumps, overhead height restrictions, pedestrian walkway demarcation, etc. on interior (e.g. concrete) and exterior (e.g. asphalt and/or concrete) surfaces as specified under Section [*insert appropriate section number*].

.i Game line markings as specified under Section [insert appropriate section number].

.j Paint identification of equipment and services and hazards to safety.

.k Tenant improvement painting except for prime coat.

.l Applied finishes (e.g. wall fabrics) including surface preparation as specified under Section [*insert appropriate section number*]. [***SPEC NOTE:*** *see 1.1.2.c and amend as required. Delete if reference to other sections is used.*]

.m Re-painting of existing surfaces and finishes including surface preparation, prime and finish coats in accordance with ***MPI*** Repainting Manual requirements (as specified under Section [*insert appropriate section number*]).

.n Painting of mechanical (heating, ventilating and plumbing services and equipment) and electrical work including color coding, stenciling and banding.

SPEC NOTE: *Use the following items (1.3 and 1.4) only where required with such Prices listed on the appropriate Bid Form page. Refer to Division 1 for specific requirements.*

1.3 Pricing:

SPEC NOTE: *Delete, revise or add to example selections listed below to suit project requirements if required Refer to Division 1.*

.1 Provide Unit Prices for the following items and indicate same on appropriate Bid Form page.

.a For painting of gypsum board (wall) surfaces including surface preparation using Premium Grade INT 9.2A, Latex with G3 (eggshell) finish, based on cost per square [meter] [foot].

.2 Provide Separate Prices for the following items and indicate same on appropriate Bid Form page.

.a For surface preparation and prime coat for specified wall fabric.

.3 Provide Alternative Prices for the following items and indicate same on appropriate Bid Form page.

.a For painting of wall surfaces including surface preparation, prime and finish coats in lieu of wall fabric preparation and installation.

.b For painting of all wood doors and wood frames where applicable in lieu of pre-finishing doors and frames in accordance with the requirements of Section [*insert appropriate section number*].

1.4 References:

.1 The latest edition of the following reference standards shall govern all painting work:

.a Architectural Painting Specification Manual by the Master Painters Institute (MPI), including Identifiers, Evaluation, Systems, Preparation and Approved Product List. (hereafter referred to as the ***MPI*** Painting

Manual) Test Method for Measuring Total Volatile Organic Compound Content of Consumer Products, Method 24 (for Surface Coatings) of the Environmental Protection Agency (EPA).

.b National Fire Code of Canada.

1.5 Quality Assurance:

.1 This Contractor shall have a minimum of five (5) years proven satisfactory experience and shall show proof before commencement of work that he will maintain a qualified crew of painters throughout the duration of the work. When requested, Contractor shall provide a list of the last three comparable jobs including, name and location, specifying authority / project manager, start / completion dates and value of the painting work.

.2 Only qualified journeypersons, as defined by local jurisdiction shall be engaged in painting and decorating work. Apprentices may be employed provided they work under the direct supervision of a qualified journeyperson in accordance with trade regulations.

.3 All materials, preparation and workmanship shall conform to requirements of the latest edition of the Architectural Painting Specification Manual by the Master Painters Institute (***MPI***) (hereafter referred to as the ***MPI*** Painting Manual)

.4 All paint manufacturers and products used shall be as listed under the Approved Product List section of the ***MPI*** Painting Manual.

.5 All painting and decorating work shall be inspected by a Paint Inspection Agency (inspector) acceptable to the specifying authority The painting contractor shall notify the Paint Inspection Agency a minimum of one week prior to commencement of work and provide a copy of the project painting specification, plans and elevation drawings (including pertinent details) as well as a Finish Schedule.

.6 **All surfaces requiring painting shall be inspected** by the Paint Inspection Agency who shall notify the Consultant and General Contractor in writing of any defects or problems, prior to commencing painting work, or after the prime coat shows defects in the substrate.

***SPEC NOTE**: Use the following clause only when special paint or coating systems are used on a project and/or when the involvement of the specific paint / coating manufacturer is warranted. This requirement should be clarified with the manufacturer before such a clause is incorporated into the specification.*

.7 Where “special” painting, coating or decorating system applications (i.e. non-***MPI*** listed products or systems) are to be used, the paint or coating manufacturer shall provide as part of this work, certification of all surfaces and conditions for specific paint or coating system application as well as on site supervision, inspection and approval of their paint or coating system application as required at no additional cost to the Owner.

***SPEC NOTE**: Refer to Paint System Spec Notes preceding 3.4 Exterior Finish / Coating Systems and ensure that appropriate clauses indicated have been included in the appropriate steel sections.*

.8 The painting contractor shall receive written confirmation of the specific surface preparation procedures and primers used for all fabricated steel items from the fabricator / supplier to ascertain appropriate and manufacturer compatible finish coat materials to be used before painting any such work.

1.6 Regulatory Requirements:

.1 Conform to the latest edition of Industrial Health and Safety Regulations issued by applicable authorities having jurisdiction in regard to site safety (ladders, scaffolding, ventilation, etc.).

.2 Conform to requirements of local authorities having jurisdiction in regard to the storage, mixing, application and disposal of all paint and related waste materials. Refer to Waste Management and Disposal.

.3 Notify the Paint Inspection Agency on award of contract and make application for assignment of an Inspector using appropriate forms supplied by the Agency as well as provide a copy of the project painting specification, drawings, color schedule and list of proposed materials for review purposes prior to commencement of work.

***SPEC NOTE:** Information regarding the chemical composition of all coatings or treatments applied by others (e.g. pressure preservative*

treatments (e.g. wood decking), concrete and masonry sealers, etc.) and their paintability shall also be provided to the painter and to the Paint Inspection Agency by the suppliers of such products or materials.

.4 Fully cooperate at all times with the requirements of the Paint Inspection Agency in the performance of their duties, including providing access and assistance as required to complete inspection work.

1.7 Samples and Mock-Ups:

.1 When requested by the Consultant or Paint Inspection Agency, provide duplicate minimum 300 mm (12") square samples of surfaces or acceptable facsimiles requested painted with specified paint or coating in colors, gloss / sheen and textures required to ***MPI*** Painting Manual standards for review and approval. When approved, samples shall become acceptable standard of quality for appropriate on-site surface with one of each sample retained on-site.

.2 When requested by the Consultant or Paint Inspection Agency, prepare and paint designated surface, area, room or item (in each color scheme) to requirements specified herein, with specified paint or coating showing selected colors, gloss / sheen, textures and workmanship to ***MPI*** Painting Manual standards for review and approval. When approved, surface, area, room and/or items shall become acceptable standard of finish quality and workmanship for similar on-site work.

1.8 Submittals:

.1 All submittals shall be in accordance with the requirements of Section 01300 - Submittals.

.2 Submit consent of surety with Bid Submission as proof of ability to supply a 100% two (2) year Maintenance Bond.

.3 If requested, submit a list of all painting materials to the Consultant and the Paint Inspection Agency for review prior to ordering materials. If requested, provide an invoice list of all paint materials ordered for project work to Paint Inspection Agency indicating manufacturer, types and quantities for verification and compliance with specification and design requirements.

.4 Submit two sets of Material Safety Data Sheets (MSDS) prior to commencement of work for review and for posting at job site as required.

.5 If requested, submit work schedule for various stages of work when painting occupied areas for the Consultant's review and Owner's approval.

.6 At project completion provide an itemized list complete with manufacturer, paint type and color coding for all colors used for Owner's later use in maintenance.

.7 At project completion provide properly packaged maintenance materials as noted herein and obtain a signed receipt.

1.9 Product Delivery, Storage and Handling:

.1 Deliver all painting materials in sealed, original labeled containers bearing manufacturer's name, brand name, type of paint or coating and color designation, standard compliance, materials content as well as mixing and/or reducing and application requirements.

.2 Store all paint materials in original labeled containers in a secure (lockable), dry, heated and well ventilated single designated area meeting the minimum requirements of both paint manufacturer and authorities having jurisdiction and at a minimum ambient temperature of 45° F (7° C). Only material used on this project to be stored on site.

.3 Where toxic and/or volatile / explosive / flammable materials are being used, provide adequate fireproof storage lockers and take all necessary precautions and post adequate warnings (e.g. no smoking) as required.

.4 Take all necessary precautionary and safety measures to prevent fire hazards and spontaneous combustion and

to protect the environment from hazard spills. Materials that constitute a fire hazard (paints, solvents, drop clothes, etc.) shall be stored in suitable closed and rated containers and removed from the site on a daily basis.

SPEC NOTE: *Painting subcontractor to be provided with adequate storage facilities meeting above requirements by General Contractor.*

.5 Comply with requirements of authorities having jurisdiction, in regard to the use, handling, storage and disposal of hazardous materials.

1.10 Scheduling:

SPEC NOTE: *Delete, revise or add to the example selections below to suit project requirements.*

.1 Schedule painting operations to prevent disruption of and by other trades.

.2 Schedule painting operations in occupied facilities to prevent disruption of occupants in and about the building. Painting shall be carried out [after facility working hours] [during silent hours] [on weekends] in accordance with Owner's operating requirements. Schedule work such that painted surfaces will have dried before occupants are affected. Obtain written authorization from Consultant / Owner for changes in work schedule.

1.11 Project / Site Requirements:

.1 UNLESS specifically pre-approved by the specifying body, Paint Inspection Agency and the applied product manufacturer, perform no painting or decorating work when the ambient air and substrate temperatures are below 50° F (10° C) for both interior and exterior work.

.2 Perform no exterior painting work unless environmental conditions are within MPI and paint manufacturer's requirements or until adequate weather protection is provided. Where required, suitable weatherproof covering and sufficient heating facilities shall be in place to maintain minimum ambient air and substrate temperatures for 24 hours before, during and after paint application.

.3 Perform no interior painting or decorating work unless adequate continuous ventilation and sufficient heating facilities are in place to maintain ambient air and substrate temperatures above minimum requirements for 24 hours before, during and after paint application. Provide supplemental ventilating and heating equipment if ventilation and heating from existing system is inadequate to meet minimum requirements.

.4 Perform no painting or decorating work when the relative humidity is above 85% or when the dew point is less than 5° F (3° C) variance between the air / surface temperature.

.5 Perform no painting or decorating work when the maximum moisture content of the substrate exceeds:

.a 15% for wood.
.b 12 % for plaster and gypsum board.

.6 Conduct all moisture tests using a properly calibrated electronic Moisture Meter, except test concrete floors for moisture using a simple cover patch test.

.7 Test concrete, masonry and plaster surfaces for alkalinity as required.

Note: Concrete and masonry surfaces must be installed at least 28 days prior to painting and decorating work and must be visually dry on both sides.

.8 Apply paint only to dry, clean, properly cured and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.

.9 Perform no painting or decorating work unless a minimum lighting level of 323 Lux (30 foot candles) is provided on surfaces to be painted or decorated. Adequate lighting facilities shall be provided by the General Contractor.

1.12 Maintenance Materials:

.1 At project completion provide [4 liters (1 gallon) of each type and color of paint from same production run (batch mix) used in unopened cans] [full unopened cans of surplus paint], properly labeled and identified for Owner's later use in maintenance. Store where directed.

1.13 Waste Management and Disposal:

.1 Paint, stain and wood preservative finishes and related materials (thinners, solvents, etc.) are regarded as hazardous products and are subject to regulations for disposal. Obtain information on these controls from applicable [Provincial] [State] [Local] government departments having jurisdiction.

.2 All waste materials shall be separated and recycled. Where paint recycling is available, collect waste paint by type and provide for delivery to recycling or collection facility. Materials that cannot be reused must be treated as hazardous waste and disposed of in an appropriate manner.

.3 Place materials defined as hazardous or toxic waste, including used sealant and adhesive tubes and containers, in containers or areas designated for hazardous waste.

.4 To reduce the amount of contaminants entering waterways, sanitary/storm drain systems or into the ground the following procedures shall be strictly adhered to:

.a Retain cleaning water for water-based materials to allow sediments to be filtered out. In no case shall equipment be cleaned using free draining water.
.b Retain cleaners, thinners, solvents and excess paint and place in designated containers and ensure proper disposal.
.c Return solvent and oil soaked rags used during painting operations for contaminant recovery, proper disposal, or appropriate cleaning and laundering.
.d Dispose of contaminants in an approved legal manner in accordance with hazardous waste regulations.
.e Empty paint cans are to be dry prior to disposal or recycling (where available).
.f Close and seal tightly partly used cans of materials including sealant and adhesive containers and store protected in well ventilated fire-safe area at moderate temperature.

.5 Set aside and protect surplus and uncontaminated finish materials not required by the Owner and deliver or arrange collection for verifiable re-use or re-manufacturing.

1.14 Guarantee:

.1 Furnish a 100% two (2) year Maintenance Bond - in accordance with ***MPI*** Painting Manual requirements. The Maintenance Bond shall warrant that all painting work has been performed in accordance with ***MPI*** Painting Manual requirements.

.2 All painting and decorating work shall be in accordance with ***MPI*** Painting Manual requirements and shall be inspected bya qualified Inspector. The cost for such inspections, and for the Maintenance Bond, shall be included in the Base Bid Price.

.3 Painting and decorating Subcontractors choosing the Maintenance Bond option shall provide a maintenance bond consent from a reputable surety company licensed to do business in Canada. Cash or certified check are not acceptable in lieu of surety consent.

PART 2 - PRODUCTS

2.1 Materials:

SPEC NOTE: *Delete, revise or add to the example selections below to suit project requirements.*

.1 Only materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, etc.) listed in the latest edition of the ***MPI*** Approved Product List (APL) are acceptable for use on this project. All such material shall be from a single manufacturer for each system used.

.2 Other materials such as linseed oil, shellac, thinners, solvents, etc. shall be the highest quality product of an ***MPI*** listed manufacturer and shall be compatible with paint materials being used as required.

.3 All materials used shall be lead and mercury free and shall have low VOC content where possible.

.4 Where required, use only materials having a minimum ***MPI*** "Environmentally Friendly" [E1] [E2] [E3] rating based on VOC (EPA Method 24) content levels.

.5 Where indoor air quality (odour) is an issue, use only ***MPI*** listed materials having a minimum [E2] [E3] rating.

.6 [Where required to meet LEED (Leadership in Energy and Environmental Design) program requirements, use only MPI listed materials having an "L" rating designation.]

SPEC NOTES – ENVIRONMENTAL ISSUES:

.1 The use of water borne versus oil based paints and coatings requires careful evaluation. The release of VOC's and solvent vapours during painting and cleanup, particularly in confined areas and where such vapours may prove offensive to individuals in an occupied facility are a consideration, as well as the oft forgotten residue flushed down the drain during water-borne paint cleanup. Any evaluation must be carefully and dispassionately considered based on actual VOC content of the product used and that released over the life cycle term, on actual site conditions and on long-term durability and life cycle costing requirements.

.2 In assessing the requirements for selection of an environmentally friendly water borne or oil based paint product, total VOC content and life cycle / durability must be considered. Refer to MPI Approved Products Listing for the VOC content level of paint products and to the MPI website (www.paintinfo.com) for current information.

.3 Specifying authorities should also be aware that the current range of ecologo paint products is very limited and should not be used as a selection criteria.

.4 From an environmental impact point of view, tints are likely the component with the greatest environmental impact and health risks. For this reason, pastel shades may be more preferable to use then more heavily saturated colours.

.7 All paint materials shall have good flowing and brushing properties and shall dry or cure free of blemishes, sags, air entrapment, etc. Refer to 3.7, Field Quality Control / Standard of Acceptance requirements.

.8 Where required, paints and coatings shall meet flame spread and smoke developed ratings designated by local Code requirements and/or authorities having jurisdiction.

SPEC NOTE: *Insert required rating and/or testing requirements if appropriate.*

.9 Glass Reflective Beads (for pavement marking): of type suitable for application to a wet paint surface for light reflectance. Apply beads at a minimum rate of 0.5 kg/l (5 lbs/g) to an ***MPI*** listed white and/or yellow latex or alkyd zone / traffic marking paint.

.10 Slip Resistant Additive (SRA): rubber aggregate, clean/washed silica sand or ground walnut chips (interior dry areas only) for use with or as a component part of paint (usually floor / porch / stair enamel) on horizontal surfaces as required to provide slip resistance. Where site applied, material to either mixed into paint (and mixed constantly to keep material in suspension) or broadcast into first or prime coat as required.

2.2 Equipment:

.1 Painting and Decorating Equipment: to best trade standards for type of product and application.

.2 Spray Painting Equipment: of ample capacity, suited to the type and consistency of paint or coating being applied and kept clean and in good working order at all times.

2.3 Mixing and Tinting:

.1 Unless otherwise specified herein or pre-approved, all paint shall be ready-mixed and pre-tinted. Re-mix all paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity.

.2 Paste, powder or catalyzed paint mixes shall be mixed in strict accordance with manufacturer's written instructions.

.3 Where thinner is used, addition shall not exceed paint manufacturer's recommendations. Do not use kerosene or any such organic solvents to thin water-based paints.

.4 If required, thin paint for spraying according in strict accordance with paint manufacturer's instructions. If directions are not on container, obtain instructions in writing from manufacturer and provide copy of instructions to Consultant.

2.4 Finish and Colors:

.1 Unless otherwise specified herein, all painting work shall be in accordance with ***MPI*** [Custom] [Premium] Grade finish requirements.

.2 Colors shall be as selected by the Consultant from a manufacturer's full range of colors. [Refer to Finish Schedule for identification and location of colors.] [A Finish Schedule will be furnished after award of the Contract.]

SPEC NOTES:

.1 Note that Finish Schedule should include all exterior and interior painted items (e.g. siding, doors, frames, trim, base, sills, walls, decks, railings, etc.) and the gloss level. The paint manufacturer and color code number should also be provided if selected by the Designer.

.2 In addition, where more than one color is used on walls within an area this shall also be scheduled.

Generally and unless otherwise specified herein or noted on Finish Schedules the quantity of colors and finishes shall be based on the following criteria:

SPEC NOTES:

.1 Delete, revise or add to the following example selections below to suit project requirements.

.2 Revise number of colors and schemes to suit project requirements and ensure these items are noted on the Exterior and Interior Finish Schedules.

.3 Exterior colors will be based on [three (3)] base colors and [two (2)] accent colors with a maximum of [one (1)] deep or bright color. No more than [six (6)] colors will be selected for the entire project. Note that this does not include pre-finished items by others, e.g. flashings, aluminum or vinyl windows, aluminum doors, etc.

.4 Interior colors will be based on [five (5)] base colors and [three (3)] accent colors with a maximum of [one (1)] deep or bright color. No more than [eight (8)] colors will be selected for the entire project and no more than [three (3)] colors will be selected in each area. Note that this does not include pre-finished items by others, e.g. aluminum or vinyl windows, aluminum doors and handrails, etc.

SPEC NOTE: *Revise number of colors and schemes to suit project requirements.*

.5 Interior colors and/or patterns shall be consistent [throughout each unit] with [two (2)] [three (3)] separate schemes prepared.

.6 Unless otherwise noted or scheduled, walls shall be painted the same color within a given area.

.7 Ceilings (except those having a spray textured coating) shall be painted [white] [the same color as walls].

.8 Corridors shall be painted [the same color on all floors] [different colors on alternate floors] with [two (2)] separate [two (2)] color schemes prepared for doors and trim.

.9 Designated rooms / spaces shall be painted using different colors or more than one color than typical rooms in accordance with Finish Schedule requirements with a minimum of [two (2)] colors required.

.10 Except as noted herein or indicated on the Finish Schedule, interior walls and ceiling surfaces shall be painted in accordance with the following criteria over appropriate prime / sealer coat:

[.a all areas (except as noted): washable latex with G3 (eggshell) finish.]
[.b laundry facilities / rooms, public wash / shower / bathrooms, residential kitchens and bathrooms and ensuites: [washable latex] [alkyd] with G5 (semi-gloss) finish.]
[.c public change / wash / shower rooms and institutional facility bathing and shower rooms: epoxy (tile-like) G5 (semi-gloss) finish for wet surfaces.]
[.d public and institutional facility "clean" or "sanitary" areas such as food preparation and laboratory areas: epoxy (tile-like) G5 (semi-gloss) finish for dry surfaces.]

.11 [Doors shall be painted a different color than door frames and trim with walls a different color than either.] [Doors, frames and trim shall be painted a different color than walls] [the same color as walls.] Unless otherwise noted or scheduled all doors, frames and trim shall be painted using a G5 (semi-gloss) finish.

.12 Window frames (unless pre-finished) [including trim and sills shall be painted [a different color than walls] [the same color as walls] [shall be painted a different color than window trim and sills and a different color than walls]. Unless otherwise noted or scheduled all window frames, trim and sills shall be painted using a G5 (semi-gloss) finish.

.13 Where required by authorities having jurisdiction, exit and vestibule doors shall be painted a contrasting color to walls and a different color than any other door in the same area.

.14 Access doors, prime coated butts and other prime painted hardware (e.g. door closers), registers, radiators and covers, exposed piping and electrical panels shall be painted to match adjacent surfaces (i.e. same color, texture and sheen), unless otherwise noted or where pre-finished.

.15 Plywood service panels (e.g. electrical, telephone and cable vision panels) including edges shall be back-primed and painted [flat gray] [to match painted wall mounted on].

.16 The inside of light valances shall be painted gloss white.

.17 The inside of all duct work behind louvers, grills and diffusers for a minimum of 460 mm (18") or beyond sight line, whichever is greater, shall be painted using flat black (non-reflecting) paint.

.18 Parking bays lines shall be identified with 100 mm (4") wide white or yellow painted lines with each bay consecutively numbered with 50 mm (2") wide white or yellow painted numbers in accordance with approved parking layout and/or in accordance with the requirements or authorities having jurisdiction.

.19 Barrier free accessible parking bays and refuge areas shall be identified with appropriate symbol designation and/or in accordance with the requirements or authorities having jurisdiction.

.20 Pedestrian walkways shall be identified with 100 mm (4") wide yellow painted lines at 45 degrees to path of travel spaced at 450 mm (18") o.c. and/or in accordance with the requirements or authorities having jurisdiction.

.21 Low headroom areas shall be identified with minimum 100 mm (4") wide yellow band on leading edge marked "CAUTION _ LOW CLEARANCE" in 50 mm (2") high black letters at suitable intervals and/or in accordance with the requirements or authorities having jurisdiction.

.22 Where other methods are not specified (i.e. applied material or nosings) and/or in accordance with the requirements or authorities having jurisdiction at stairs providing access and exit for persons with visual impairment, slip resistant paint shall be applied to handrails and treads. Slip resistant paint shall be of a contrasting color at tactile warning strips at stair treads and landings.

2.5 Gloss / Sheen Ratings:

.1 Paint gloss shall be defined as the sheen rating of applied paint, in accordance with the following ***MPI*** values:

Gloss Level	Description	Units @ 60 degrees	Units @ 85 degrees
G1	Matte or Flat finish	0 to 5	10 max.

G2	Velvet finish	0 to 10	10 to 35
G3	Eggshell finish	10 to 25	10 to 35
G4	Satin finish	20 to 35	35 min.
G5	Semi-Gloss finish	35 to 70	
G6	Gloss finish	70 to 85	
G7	High-Gloss finish	> 85	

.2 Gloss level ratings of all painted surfaces shall be as specified herein and as noted on Finish Schedule.

SPEC NOTES:

.1 A high gloss finish provides more physical and stain resistance with such painted surfaces appearing to have a "hard" finish. Such glossy finishes, however tend to enhance textures or defects of the surface to which they are applied. Use of higher gloss finishes should be reviewed from the point of view of excessive surface preparation required which might not be warranted for the surface to be coated.

.2 Unless otherwise approved by the painting inspection agency having jurisdiction, the use of deep colors or high contrast accent colors will require a minimum of three or more finish coats over primer to achieve satisfactory hiding results.

*.3 Caution should be used when specifying deep colors in high traffic areas, regardless of the surface to which these colors are applied. Machine tinted color in a flat, eggshell, semi-gloss and to some extent high gloss finish will mark easily and leave an unsightly appearance with loss of sheen and with considerable reduction of abrasion resistance. In such cases, either a clear urethane or high performance acrylic type of coating over such deep colors may solve the problem but may also result in a change in hue and where touch-up painting is required the entire surface will have to be redone from break to break or from corner to corner as spot touch-up will be very noticeable. Refer to **MPI** Painting Manual.*

.4 Gypsum board shall be finished by others to specified levels of finish recognized by the drywall industry to suit project requirements. The specifier should be aware of the limitations of such levels of finish particularly when semi-gloss and gloss paints are applied to such surfaces. Where a smooth, high quality or gloss appearance is required over gypsum board (i.e., where semi-gloss, gloss, or non-textured flat finishes or dark colors are applied or where severe or critical lighting conditions occur) a Level 5 finish (three coats of sanded joint compound with a thin skim coat of joint compound or similar material applied to entire board surface) is recommended. The gypsum board finish is to be assessed by the drywall applicator for imperfections prior to the application of paint finishes. The specifier is to ensure that the appropriate levels of gypsum board finishes are specified to suit expected (painted) finish appearances.

PART 3 - EXECUTION

3.1 Condition of Surfaces:

.1 Prior to commencement of work of this section, thoroughly examine (and test as required) all conditions and surfaces scheduled to be painted and report in writing to the Contractor and Consultant any conditions or surfaces that will adversely affect work of this section.

.2 No painting work shall commence until all such adverse conditions and defects have been corrected and surfaces and conditions are acceptable to the Painting Subcontractor and Inspection Agency.

.3 Commencement of work shall not be held to imply acceptance of surfaces except as qualified herein. Such surfaces as concrete, masonry, structural steel and miscellaneous metal, wood, gypsum board and plaster, shall not be the responsibility of the Painting Subcontractor.

.4 The Painting Subcontractor shall not be responsible for the condition of the substrate or for correcting defects and deficiencies in the substrate which may adversely affect the painting work except for minimal work normally performed by the Painting Subcontractor and as indicated herein. It shall always, however, be the responsibility of the Painting Subcontractor to see that surfaces are properly prepared before any paint or coating is applied.

3.2 Preparation of Surfaces:

.1 Prepare all surfaces in accordance with ***MPI*** requirements. Refer to the ***MPI*** Painting Manual in regard to specific requirements[. for the following:]

SPEC NOTE: *Use the following if desired and delete any items that are not applicable.*

.a environmental conditions.
.b pH testing.
.c acid etching.
.d rust stain removal.
.e asphalt surfaces.
.f vertical and horizontal concrete surfaces.
.g clay and concrete masonry units.
.h structural steel and miscellaneous metals.
.i steel exposed to high heat.
.j galvanized and zinc coated metal.
.k aluminum and copper surfaces.
.l glue laminated beams and columns.
.m dimension and dressed lumber.
.n wood doors.
.o wood paneling and casework.
.p wood decks, floors, stairs and steps.
.q wood shingles and shakes.
.r stucco, plaster and gypsum board.
.s acoustical panels and tiles.
.t canvas and cotton coverings.
.u bituminous coated surfaces.

.2 Sand, clean, dry, etch, neutralize and/or test all surfaces under adequate illumination, ventilation and temperature requirements.

.3 Remove and securely store all miscellaneous hardware and surface fittings / fastenings (e.g. electrical plates, mechanical louvers, door and window hardware (e.g. hinges, knobs, locks, trim, frame stops), removable rating / hazard / instruction labels, washroom accessories, light fixture trim, etc. from wall and ceiling surfaces, doors and frames, prior to painting. Carefully clean and replace all such items upon completion of painting work in each area. Do not use solvent or reactive cleaning agents on items that will mar or remove finishes (e.g. lacquer finishes). Doors shall be removed before painting to paint bottom and top edges and then re-hung.

.4 Protect all adjacent interior surfaces and areas, including rating and instruction labels on doors, frames, equipment, piping, etc., from painting operations and damage with drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.

.5 Substrate defects shall be made good and sanded by others ready for painting particularly after the first coat of paint. Start of finish painting of defective surfaces (e.g. gypsum board) shall indicate acceptance of substrate and any costs of making good defects shall be borne by the painter including re-painting of entire defective surface (no touch-up painting).

.6 Confirm preparation and primer used with fabricator of steel items. Refer to Quality Assurance.

SPEC NOTES:

*.1 Primers (e.g. alkyd, epoxy, zinc, etc.) require overcoating within manufacturer's specified time limits. After this time they may become too hard to facilitate good adhesion. This is particularity important in the selection and use of primers in the fabrication of structural steel and miscellaneous metal. Shop cleaning procedures, the selection of the "correct" primer and inspection for such work must be in accordance with **MPI** Painting Manual requirements.*

.2 *Painting work shall be scheduled **before** the installation of miscellaneous hardware, surface fittings, fastenings, fixtures and trim by others including the hanging of doors and installation of door hardware (see 3.1.5 above). If such items require the removal, storage, and reinstallation, the coordination and onus rests with the General Contractor. Extensive touch-up painting necessary as a result of the installation or re-installation of such fittings by others after painting, shall be considered as additional services at additional cost to the Owner.*

3.3 Application:

.1 Do not paint unless substrates are acceptable and/or until all environmental conditions (heating, ventilation,

lighting and completion of other subtrade work) are acceptable for applications of products.

.2 Apply paint or stain in accordance with ***MPI*** Painting Manual [Premium] [Custom] Grade finish requirements.

.3 Apply paint and decorating material in a workmanlike manner using skilled and trade qualified applicators as noted under Quality Assurance.

.4 Apply paint and coatings within an appropriate time frame after cleaning when environmental conditions encourage flash-rusting, rusting, contamination or the manufacturer's paint specifications require earlier applications.

.5 Painting coats specified are intended to cover surfaces satisfactorily when applied at proper consistency and in accordance with manufacturer's recommendations.

.6 Tint each coat of paint progressively lighter to enable confirmation of number of coats.

.7 Unless otherwise approved by the painting inspection agency, apply a minimum of four coats of paint where deep or bright colors are used to achieve satisfactory results.

SPEC NOTE: *Refer to Spec Notes at beginning of 2.5 in regard to the use of deep colors.*

.8 Sand and dust between each coat to provide an anchor for next coat and to remove defects visible from a distance up to 1000 mm (39").

.9 Do not apply finishes on surfaces that are not sufficiently dry. Unless manufacturer's directions state otherwise, each coat shall be sufficiently dry and hard before a following coat is applied.

.10 Prime coat of stain or varnish finishes may be reduced in accordance with manufacturer's directions.

.11 Paint finish shall continue through behind all wall-mounted items (e.g. chalk and tack boards).

PAINT SYSTEM SPEC NOTES:

1. Select appropriate paint systems for exterior and interior surfaces to be painted and delete all other systems not required.

*2. Insert appropriate gloss level rating (G1, G2, etc.) in place of [insert gloss level]. Refer to **MPI** Approved Product Listings to ensure that desired gloss level is available. Specific paint colors and gloss ratings should be indicated on Finish Schedules for both interior and exterior surfaces.*

3. Where different finishes are required under a specific heading, a reference to applicable materials must be inserted after the finish, e.g.:

EXT 6.3B Alkyd G5 finish for wood doors and frames.
EXT 6.4B Alkyd G4 finish for fascias.
INT 9.2C Latex sealer / alkyd G5 finish for kitchens and bathroom surfaces.
INT 9.2C Latex sealer / alkyd G3 finish for all other surfaces.

4. Where both Custom Grade (typically one primer and one finish coat) and Premium Grade (typically one primer and two finish coats) systems are used, indicate same on the Finish Schedule or indicate specific system when it differs from the "typical" grade selected.

*5. Where choice of an "Environmentally Friendly" (i.e., low odor / VOC) "green") product is required, specifier must consult **MPI** Product Selection Guide and select system / products having desired E1, E2 or E3 rating. This includes non-latex / non-water based paints and finishes which meet EPA Method 24 / MPI criteria.*

*6. For individual product selection and evaluations refer to **MPI** Painting Manual Approved Product List.*

*7. For specific surface preparation requirements for each system refer to Chapters 2 (Exterior) and 3 (Interior) of the **MPI** Painting Manual.*

8. Ensure that shop preparation and shop primers for exterior and interior structural steel and miscellaneous metals are compatible with field applied coatings. This can be done by incorporating the following notes within each appropriate steel work specification section.

"Shop primers for all exterior and interior painted steel work shall be of types specified in the painting specification section. Where non-complying primers are used by the steel fabricator, the fabricator shall completely remove same from all surfaces and prepare and prime surfaces in accordance with the requirements of Section 09900 for painted steel work at no additional cost to the Owner or the painter."

"The Fabricator of structural steel and miscellaneous metal items shall notify the Paint Inspection Agency on award of contract and provide a written confirmation of preparation procedures and of primers used for all steel items supplied."

"A third party independent inspection agency may periodically inspect all exterior and interior steel work to be painted for finish, surface preparation and application of required primers."

*.9 For specific surface preparation and paint system selection requirements of previously painted adjacent surfaces refer to the **MPI** Repainting Manual.*

3.4 Exterior Finish / Coating Systems:

Paint exterior surfaces in accordance with the following ***MPI*** Painting Manual requirements:

.1 **Asphalt Surfaces:** (zone / traffic marking for drive and parking areas, etc.)

EXT 2.1A	Latex zone / traffic marking finish.
EXT 2.1B	Alkyd zone / traffic marking finish.

SPEC NOTES:

.1 Determine if painting of zone / traffic or game lines on asphalt surfaces is or is not included under work of this section and ensure this work is coordinated or included in the appropriate section of work. Include the following statements as appropriate:

*.2 Painting of zone / traffic line layouts on exterior asphalt surfaces to be (by others) in accordance with requirements of the **MPI** Painting Manual, approved drawings and Section [insert appropriate section number].*

*.3 Painting of game line layouts on exterior asphalt surfaces to be (by others) in accordance with the requirements of the **MPI** Painting Manual, approved drawings, Section [insert appropriate section number].*

.2 **Concrete Vertical Surfaces:** (including horizontal soffits)

EXT 3.1A	Latex [insert gloss level] finish (over alkali resistant primer).
EXT 3.1B	Latex [insert gloss level] finish over latex [insert texture type] aggregate.
EXT 3.1C	Water based light industrial [insert gloss level] coating.
EXT 3.1D	Epoxy (over epoxy)
EXT 3.1E	Epoxy-modifed latex finish.
EXT 3.1F	Elastomeric coating.
EXT 3.1G	Water repellent (non-paintable) finish.
EXT 3.1H	Water repellent (paintable) finish.
EXT 3.1J	Concrete stain finish.
EXT 3.1K	Latex [insert gloss level] finish.
EXT 3.1L	High-build latex finish.
EXT 3.1M	Polyurethane, pigmented finish (over epoxy).
EXT 3.1N	Latex [insert gloss level] [insert texture type] aggregate finish.

SPEC NOTES:

.1 Note that the application of water repellent sealers to exterior concrete surfaces may be by others in accordance with concrete finishes specification requirements. When such surfaces are also required to be painted after the application of a water repellent sealer, ensure that a paintable sealer is used. Ensure this work is co-ordinated or included in the appropriate section of work.

.2 When EXT 3.1G, 3.1H or 3.1J systems are not part of the work under this section include the following statement:

"The application of [water repellent sealers][concrete stain] to exterior concrete vertical surfaces shall be done by others in accordance with the requirements of Section 03300."

.3 **Concrete Horizontal Surfaces:** (decks, stairs, driveways, parking and court areas, etc.) ***(SRA Optional for all these systems)***

EXT 3.2A	Latex floor paint [gloss] [low gloss] finish.
EXT 3.2B	Latex deck coating.
EXT 3.2C	Epoxy deck coating, slip resistant.

EXT 3.2D	Alkyd floor enamel [insert gloss level] finish.
EXT 3.2E	Latex zone / traffic marking finish. [for parking lines, etc]
EXT 3.2F	Alkyd zone / traffic marking finish. [for parking lines, etc]
EXT 3.2G	Sealer, clear finish.
EXT 3.2H	Sealer, clear, water based finish.
EXT 3.2J	Concrete stain finish.

SPEC NOTE: *Determine if painting of zone / traffic lines on concrete surfaces is or is not included under work of this section and ensure this work is co-ordinated or included in the appropriate section of work. Note that such work may be done by others as an extension of asphalt pavement marking work. Include the following statement as appropriate:*

*"Painting of zone / traffic line layouts on exterior concrete surfaces to be (by others) in accordance with **MPI** Painting Manual requirements, approved drawings and Section [insert appropriate section number]."*

.4 **Cementitious Composition Board Surfaces:** (vertical surfaces, horizontal soffits)

EXT 3.3A	Latex [insert gloss level] finish.
EXT 3.3B	Alkyd [insert gloss level] finish.
EXT 3.3C	Water based light industrial [insert gloss level] coating.
EXT 3.3D	Epoxy-modifed latex finish.
EXT 3.3E	Epoxy finish.
EXT 3.3F	Polyurethane, pigmented finish (over epoxy).
EXT 3.3G	Latex [insert gloss level] [insert texture type] aggregate finish.
EXT 3.3H	High-build latex finish.
EXT 3.3J	Latex [insert gloss level] finish (over alkali resistant primer).

.5 **Clay Masonry Units:** (pressed and extruded brick)

EXT 4.1A	Latex [insert gloss level] finish.
EXT 4.1B	Latex [insert gloss level] [insert texture type] aggregate finish.
EXT 4.1C	Water based light industrial [insert gloss level] coating.
EXT 4.1D	Epoxy finish. [for smooth brick]
EXT 4.1F	Water repellent (non-paintable) finish.
EXT 4.1G	Water repellent (paintable) finish.
EXT 4.1H	High-build latex finish.
EXT 4.1J	Polyurethane, pigmented finish (over epoxy).

SPEC NOTES:

.1 Note that the application of water repellent sealers to exterior clay and concrete masonry surfaces may be by others in accordance with clay or concrete masonry specification requirements. When such surfaces are also required to be painted after the application of a water repellent sealer, ensure that a paintable sealer is used. Ensure this work is coordinated or included in the appropriate section of work.

.2 When EXT 4.1F, 4.1G, 4.2H and 4.2J systems are not part of the work under these sections include the following statement:

"The application of water repellent sealers to exterior clay masonry or concrete masonry surfaces shall be done by others in accordance with the requirements of Section [insert appropriate section number]."

.6 **Concrete Masonry Units:** (smooth and split face block and brick).

EXT 4.2A	Latex [insert gloss level] finish (over latex block filler).
EXT 4.2B	Latex [insert gloss level] [insert texture type] aggregate finish.
EXT 4.2C	Water based light industrial [insert gloss level] coating. [for moderate chemical resistance]
EXT 4.2D	Elastomeric coating.
EXT 4.2E	Epoxy finish.
EXT 4.2G	Polyurethane, pigmented finish (over high build epoxy).
EXT 4.2H	Water repellent (non-paintable) finish. [not for use on light weight block]
EXT 4.2J	Water repellent (paintable) finish. [not for use on light weight block]
EXT 4.2K	High-build latex finish.
EXT 4.2L	Latex [insert gloss level] finish (over alkali resistant primer).

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SPEC NOTE: *When EXT 4.2H or 4.2I systems are not part of the work under this section include the following statement:*

"The application of water repellent sealers to exterior concrete masonry surfaces shall be done by others in accordance with the requirements of Section 04200."

.7 **Structural Steel and Metal Fabrications:**

EXT 5.1A	Quick dry enamel [insert gloss level] finish.
EXT 5.1B	Water based light industrial [insert gloss level] coating (over inorganic zinc primer).
EXT 5.1C	Water based light industrial [insert gloss level] coating (over alkyd primer).
EXT 5.1D	Alkyd [insert gloss level] finish (over alkyd primer).
EXT 5.1F	Epoxy (over H.B. epoxy) finish.
EXT 5.1G	Polyurethane, pigmented finish (over epoxy zinc rich primer and high build epoxy).
EXT 5.1H	Polyurethane, pigmented finish (over epoxy).
EXT 5.1J	Polyurethane, pigmented finish (over high build epoxy).
EXT 5.1K	Aluminum paint finish.
EXT 5.1L	Polyurethane, pigmented finish (over inorganic zinc primer and high build epoxy).
EXT 5.1M	Water based light industrial [insert gloss level] coating (over rust inhibitive primer).
EXT 5.1N	Water based light industrial [insert gloss level] coating (over epoxy primer).
EXT 5.1P	Polyurethane, pigmented finish (over epoxy zinc rich primer).
EXT 5.1Q	Alkyd [insert gloss level] finish (over surface tolerant primer).
EXT 5.1R	Water based light industrial [insert gloss level] coating (over H. B. epoxy).
EXT 5.1S	Epoxy (over self-priming epoxy).
EXT 5.1T	Polyurethane, pigmented finish (over H.B. self-priming epoxy).
EXT 5.1V	Epoxy deck coating finish (over epoxy primer and epoxy high build) (with SRA).
EXT 5.1X	Epoxy finish (with SRA) (over H.B. self-priming epoxy).

.8 **Steel - High Heat:** (heat exchangers, breeching, pipes, flues, stacks, etc., with temperature range as noted)

EXT 5.2A	Heat resistant enamel finish, maximum 400° F (205° C)
EXT 5.2B	Heat resistant enamel, aluminum finish, maximum 800° F (427° C).
EXT 5.2C	Inorganic zinc rich coating, maximum 750° F (400° C).
EXT 5.2D	High heat resistant coating, maximum 1100° F (593° C).

.9 **Galvanized Metal:** (not chromate passivated)
For high contact / high traffic areas (doors, frames, railings, misc. steel, pipes, etc.)
For low contact / low traffic areas (overhead decking, ducts, gutters, flashing, etc.)

EXT 5.3A	Latex [insert gloss level] finish.
EXT 5.3B	Alkyd [insert gloss level] finish.
EXT 5.3C	Epoxy finish. [for use on high contact / high traffic areas]
EXT 5.3D	Polyurethane, pigmented finish (over vinyl wash and epoxy primer). [for use on high contact / high traffic areas]
EXT 5.3E	Bituminous finish. [for use on low contact / low traffic areas, e.g. unexposed galvanized metal next to concrete, masonry, etc.]
EXT 5.3F	Aluminum paint finish. [for use on low contact / low traffic areas only]
EXT 5.3G	Water based light industrial [insert gloss level] coating. [for moderate chemical resistance]
EXT 5.3H	Latex [insert gloss level] finish (over water based primer). [for low contact / low traffic areas - do not use flat finish on doors]
EXT 5.3J	Water based light industrial [insert gloss level] coating (over water based primer). [for moderate chemical resistance]
EXT 5.3K	Water based light industrial [insert gloss level] coating (over epoxy).
EXT 5.3L	Polyurethane, pigmented finish (over epoxy primer) [for use on high contact / high traffic areas]

SPEC NOTES:

.1 Particular attention should be paid to the durability of zinc coated surfaces on exterior high contact / high traffic areas such as doors, frames, railings, misc. steel, etc. Do not use EXT 5.3E and 5.3F in these areas.

.2 High contact / high traffic areas to include doors, frames, railings, misc. steel, pipes, etc.

.3 Low contact / low traffic areas to include overhead decking, ducts, pipes, gutters, flashing, misc. steel, etc.

.10 **Aluminum:** (sash, sills and frames, flashing, posts and railings, downpipes, etc.)

EXT 5.4A	Alkyd [insert gloss level] finish (over vinyl wash primer and quick dry primer).
EXT 5.4B	Polyurethane, pigmented finish (over epoxy).
EXT 5.4C	Aluminum paint finish.
EXT 5.4D	Bituminous finish. [for unexposed aluminum next to concrete, masonry, etc.]
EXT 5.4E	Epoxy finish (over vinyl wash primer).
EXT 5.4F	Alkyd [insert gloss level] finish (over quick dry metal primer).
EXT 5.4G	Water based light industrial [insert gloss level] coating (over quick dry metal primer).
EXT 5.4H	Latex [insert gloss level] finish (over quick dry metal primer).

.11 **Copper:** (excluding roofs)

EXT 5.5A	Alkyd [insert gloss level] finish (over vinyl wash primer).
EXT 5.5B	Polyurethane, pigmented finish (over epoxy).
EXT 5.5C	Aluminum paint finish.
EXT 5.5D	Bituminous finish. [for unexposed copper next to concrete, masonry, etc.]
EXT 5.5E	Epoxy finish.
EXT 5.5F	Alkyd [insert gloss level] finish (over alkyd primer). [for properly prepared surfaces only]
EXT 5.5G	Water based light industrial [insert gloss level] coating.
EXT 5.5H	Latex [insert gloss level] finish.

.12 **Stainless Steel:** (unpolished)

EXT 5.6A	Alkyd [insert gloss level] finish.
EXT 5.6B	Polyurethane, pigmented finish.
EXT 5.6C	Aluminum paint finish.
EXT 5.6D	Epoxy finish.
EXT 5.6F	Latex [insert gloss level] finish.
EXT 5.6G	Water based light industrial [insert gloss level] coating.

.13 **Glue Laminated Beams and Columns:**

EXT 6.1A	Latex [insert gloss level] finish (over alkyd/oil primer).
EXT 6.1B	Alkyd [insert gloss level] finish (over alkyd/oil primer).
EXT 6.1C	Solid color stain finish (over alkyd/oil primer).
EXT 6.1D	Varnish [gloss] [semi-gloss] finish (over stain).
EXT 6.1E	Polyurethane, clear, 2 component finish (over stain).
EXT 6.1F	Fire retardant, pigmented coating.
EXT 6.1G	Fire retardant penetrating wood preservative, clear coating.
EXT 6.1H	Polyurethane, clear, 2 component finish.
EXT 6.1J	Polyurethane, pigmented finish.
EXT 6.1K	Varnish [gloss] [semi-gloss] finish.
EXT 6.1L	Latex [insert gloss level] finish (over latex primer).
EXT 6.1M	Varnish, water based [insert gloss level].

.14 **Dimension Lumber:** (columns, beams, exposed joists, underside of decking, siding, fencing, etc.)

EXT 6.2A	Latex [insert gloss level] finish (over alkyd/oil primer).
EXT 6.2B	Solid color, water based stain finish (over alkyd/oil primer).
EXT 6.2C	Alkyd [insert gloss level] finish (over alkyd/oil primer).
EXT 6.2D	Solid color stain finish (over alkyd/oil primer).
EXT 6.2E	Varnish [gloss] [semi-gloss] finish (over stain).
EXT 6.2F	Fire retardant, pigmented [insert gloss level] coating.
EXT 6.2G	Fire retardant penetrating wood preservative, clear coating.
EXT 6.2H	Polyurethane, clear, 2 component finish.

EXT 6.2J Polyurethane, pigmented finish.
EXT 6.2K Varnish [gloss] [semi-gloss] finish.
EXT 6.2L Semi-transparent stain finish.
EXT 6.2M Latex [insert gloss level] finish (over latex primer).
EXT 6.2N Varnish, water based [insert gloss level] finish.
EXT 6.2P Stain, Semi-Transparent, water based.

.15 **Dressed Lumber:** (doors, door and window frames, casings, battens, smooth facias, etc.)

EXT 6.3A Latex [insert gloss level] finish (over alkyd/oil primer). [do not use flat finish on doors]
EXT 6.3B Alkyd [insert gloss level] finish (over alkyd/oil primer). [do not use flat finish on doors]
EXT 6.3C Solid color stain finish (over alkyd/oil primer). [do not use on high contact areas or on doors]
EXT 6.3D Semi-transparent stain finish. [do not use on doors]
EXT 6.3E Varnish [gloss] [semi-gloss] finish (over stain).
EXT 6.3F Varnish [gloss] [semi-gloss] finish.
EXT 6.3G Polyurethane, clear, 2 component finish.
EXT 6.3H Polyurethane, pigmented finish.
EXT 6.3J Water based light industrial [gloss] [semi-gloss] coating. [for doors and frames only]
EXT 6.3K Solid color stain, water based finish. [do not use flat for doors and frames]
EXT 6.3L Latex [insert gloss level] finish (over latex primer). [do not use flat finish on doors]
EXT 6.2M Varnish, water based [insert gloss level] finish.
EXT 6.2N Stain, semi-transparent, water based.

.16 **Wood Paneling:** (plywood siding, fascias, soffits, etc.)

EXT 6.4A Solid color stain, water based finish (over alkyd/oil primer).
EXT 6.4B Alkyd [insert gloss level] finish (over alkyd/oil primer).
EXT 6.4C Solid color stain finish (over alkyd/oil primer).
EXT 6.4D Semi-transparent stain finish.
EXT 6.4E Fire retardant, pigmented coating.
EXT 6.4F Fire retardant penetrating wood preservative, clear coating.
EXT 6.4G Latex [insert gloss level] finish (over alkyd primer).
EXT 6.4H Varnish [gloss] [semi-gloss] finish.
EXT 6.4J Varnish [gloss] [semi-gloss] finish (over stain).
EXT 6.4K Latex [insert gloss level] finish (over latex primer).
EXT 6.2L Stain, semi-transparent, water based.

.17 **Wood Decks and Stairs / Steps:** (using spaced lumber) ***– (SRA Optional for all Systems)***

EXT 6.5A Latex porch and floor [gloss] [low gloss] finish [with SRA] (over alkyd primer).
EXT 6.5B Alkyd floor enamel [gloss] [low gloss] finish [with SRA].
EXT 6.5C Alkyd floor enamel [gloss] [low gloss] finish [with SRA] (over wood preservative). [for untreated wood].
EXT 6.5D Deck stain (over wood preservative).
EXT 6.5E Latex porch and floor [gloss] [low gloss] finish [with SRA] (over latex primer).
EXT 6.5F Deck stain finish.
EXT 6.5G Latex deck coating. [for plywood decks]

SPEC NOTE: *If pressure treated wood material is to be stained or painted after installation the chemical formulation of the treatment MUST be ascertained so that the correct stain or paint can be chosen. Obtain this information from the supplier or manufacturer (treatment plant) and send to the Painting Association for analysis and compatibility with paint or stain to be used.*

.18 **Wood Shingles and Shakes:** (excluding roofs)

EXT 6.6A Latex [insert gloss level] finish (over alkyd/oil primer).
EXT 6.6B Alkyd [insert gloss level] finish (over alkyd/oil primer).
EXT 6.6C Solid color stain finish (over alkyd/oil primer).
EXT 6.6D Solid color stain, water based finish (over alkyd/oil primer).
EXT 6.6E Latex [insert gloss level] finish (over latex primer).
EXT 6.6F Semi-transparent stain finish.

.19 **Fiberglass:** (panels, trims, fabrications, etc.)

EXT 6.7A	Latex [insert gloss level] finish.
EXT 6.7B	Alkyd [insert gloss level] finish.
EXT 6.7C	Water based light industrial [insert gloss level] coating.
EXT 6.7D	Polyurethane, pigmented finish (over epoxy).
EXT 6.7E	Epoxy-modified latex finish..
EXT 6.7F	Epoxy finish.

.20 **Plastic:** (vinyl siding and windows including related trims, ABS / PVA / PVC materials, fabrications, etc.)

EXT 6.8A	Latex [insert gloss level] finish.
EXT 6.8B	Alkyd [insert gloss level] finish.
EXT 6.8C	Water based light industrial [insert gloss level] coating.

.21 **Stucco:** (walls and soffits)

EXT 9.1A	Latex [insert gloss level] finish
EXT 9.1B	Water based light industrial [insert gloss level] coating.
EXT 9.1C	Elastomeric coating.
EXT 9.1D	Epoxy finish.
EXT 9.1F	Water repellent (non-paintable) finish.
EXT 9.1G	Water repellent (paintable) finish.
EXT 9.1H	High-build latex finish.
EXT 9.1J	Latex [insert gloss level] finish (over alkali resistant primer).

.22 **Canvas and Cotton Coverings:** (pipes, ductwork, etc.)

EXT 10.1A	Latex [insert gloss level] finish.
EXT 10.1B	Water based light industrial [insert gloss level] coating.
EXT 10.1C	Alkyd [insert gloss level] finish.
EXT 10.1D	Aluminum paint finish.

.23 **Bituminous Coated Surfaces:** (cast iron pipe, concrete, etc.)

EXT 10.2A	Latex [insert gloss level] finish (over w.b. rust-inhibitive primer).
EXT 10.2B	Latex [insert gloss level] [insert texture type] aggregate finish.
EXT 10.2C	Alkyd [insert gloss level] finish (over w.b. rust-inhibitive primer).
EXT 10.2D	Aluminum paint finish (over w.b. rust-inhibitive primer).

3.5 Interior Paint and Coating Systems:

Paint interior surfaces in accordance with the following ***MPI*** Painting Manual requirements:

.1 **Asphalt Surfaces:** (zone / traffic marking of interior drive and parking areas)

INT 2.1A	Latex zone / traffic marking finish.
INT 2.1B	Alkyd zone / traffic marking finish.

SPEC NOTES:

.1 Determine if painting of zone / traffic or game lines on asphalt surfaces is or is not included under work of this section and ensure this work is co-ordinated or included in the appropriate section of work. Include the following statements as appropriate:

*.2 Painting of zone / traffic line layouts on interior asphalt surfaces to be (by others) in accordance with approved drawings, Section 02740 and **MPI** Painting Manual requirements.*

*.3 Painting of game line layouts on interior asphalt surfaces to be (by others) in accordance with approved drawings, Section 02740 and **MPI** Painting Manual requirements.*

.2 **Concrete Vertical Surfaces:** (including horizontal soffits)

INT 3.1A	Latex [insert gloss level] finish (over alkali-resistant primer).
INT 3.1B	Latex [insert gloss level] finish over [insert texture type] latex aggregate.
INT 3.1C	High performance architectural latex [insert gloss level] finish.
INT 3.1D	Alkyd [insert gloss level] finish.
INT 3.1E	Latex [insert gloss level] finish.
INT 3.1F	Epoxy (tile-like) finish. [for smooth concrete]
INT 3.1G	Epoxy-modified latex finish [for smooth concrete]
INT 3.1H	Multicolor finish.
INT 3.1J	Water repellent paintable finish.
INT 3.1K	Concrete stain finish.
INT 3.1L	Water based light industrial [insert gloss level] coating.
INT 3.1M	Institutional low odor / low VOC [insert gloss level] finish.
INT 3.1N	Latex [insert gloss level] [insert texture type] aggregate coating.
INT 3.1P	Epoxy high build low gloss finish (over epoxy high build low gloss).
INT 3.1Q	Epoxy high build gloss finish (over epoxy high build gloss).

SPEC NOTES:

.1 Note that the application of a clear sealer on interior concrete surfaces may be by others in accordance with concrete finishes specification requirements. When such surfaces are also required to be painted after the application of a water repellent sealer, ensure that a paintable sealer is used. Ensure this work is coordinated or included in the appropriate section of work.

.2 When INT 3.1J or 3.1K systems are not part of the work under this section include the following statement:

"The application of a [clear water repellent sealer][concrete stain] to interior concrete vertical surfaces shall be done by others in accordance with the requirements of Section 03300."

.3 **Concrete Horizontal Surfaces:** (floors and stairs)

INT 3.2A	Latex floor enamel [gloss] [low gloss] finish.
INT 3.2B	Alkyd floor enamel [gloss] [low gloss] finish.
INT 3.2C	Epoxy finish.
INT 3.2D	Pigmented polyurethane finish.
INT 3.2E	Concrete stain finish.
INT 3.2F	Concrete floor sealer finish.
INT 3.2G	Concrete floor sealer, water based finish.
INT 3.2H	Latex zone / traffic marking finish. [for parking lines, etc]
INT 3.2J	Alkyd zone / traffic marking finish. [for parking lines, etc]
INT 3.2K	Polyurethane, Clear (2 component) finish.
INT 3.2L	Epoxy high build low gloss finish (over epoxy high build low gloss).
INT 3.2M	Epoxy high build gloss finish (over epoxy high build gloss).

SPEC NOTE: *Determine if painting of zone / traffic lines on interior concrete surfaces is or is not included under work of this section and ensure this work is co-ordinated or included in the appropriate section of work. Note that such work may be done by others as an extension of asphalt pavement marking work. Include the following statement as appropriate:*

*"Painting of zone / traffic line layouts on interior concrete surfaces to be (by others) in accordance with approved drawings, Section 02740 and **MPI** Painting Manual requirements."*

.4 **Cementitious Composition Board Surfaces:**

INT 3.3A	Latex [insert gloss level] finish.
INT 3.3B	High performance architectural latex [insert gloss level] finish.
INT 3.3C	Alkyd [insert gloss level] finish.
INT 3.3D	Epoxy-modified latex finish.
INT 3.3E	Epoxy (tile like) finish.
INT 3.3F	Multicolor finish.

INT 3.3G	Institutional low odor / low VOC [insert gloss level] finish.
INT 3.3H	Water based light industrial [insert gloss level] coating.

.5 **Clay Masonry Units:** (pressed and extruded brick)

INT 4.1A	Latex [insert gloss level] finish.
INT 4.1B	Latex [insert gloss level] [insert texture type] aggregate coating.
INT 4.1C	Water based light industrial [insert gloss level] coating.
INT 4.1D	Alkyd [insert gloss level] finish.
INT 4.1F	Epoxy (tile like) finish. [for smooth concrete]
INT 4.1G	Epoxy-modified latex finish. [for smooth surfaces]
INT 4.1H	Multicolor finish.
INT 4.1J	Water repellent, clear (paintable) finish.
INT 4.1K	Polyurethane, clear, 2 component finish.
INT 4.1L	High performance architectural latex [insert gloss level] finish.
INT 4.1M	Institutional low odor / low VOC [insert gloss level] finish.

SPEC NOTES:

.1 Note that the application of water repellent and clear finishes to interior clay and concrete masonry surfaces may be by others in accordance with clay or concrete masonry specification requirements. When such is the case, include the following statement:

"The application of a water repellent and/or clear finishes to interior clay and/or concrete masonry surfaces shall be done by others in accordance with the requirements of Section [insert appropriate section numbers]."

.2 Consider also, if such surfaces will be painted at some future date then a paintable water repellent finish should be selected.

.6 **Concrete Masonry Units:** (smooth and split face block and brick)

INT 4.2A	Latex [insert gloss level] finish.
INT 4.2B	Latex [insert gloss level] [insert texture type] aggregate coating.
INT 4.2C	Alkyd [insert gloss level] finish.
INT 4.2D	High performance architectural latex [insert gloss level] finish.
INT 4.2E	Institutional low odor / low VOC [insert gloss level] finish.
INT 4.2F	Epoxy (tile-like) finish. [for dry environments]
INT 4.2G	Epoxy (tile-like) finish. [for wet environments]
INT 4.2H	Multicolor finish.
INT 4.2J	Epoxy-modified latex finish. [for dry environments].
INT 4.2K	Water based light industrial [insert gloss level] coating.
INT 4.2L	Water repellent (non-paintable) finish. [do not use on light weight block]
INT 4.2M	Water repellent (paintable) finish. [do not use on light weight block]
INT 4.2N	Alkyd [insert gloss level] finish (over latex sealer).
INT 4.2P	High performance architectural latex finish (over alkali resistant primer).
INT 4.2Q	Polyurethane, clear, 2 component finish.
INT 4.2R	Epoxy high build low gloss finish (over epoxy high build low gloss).
INT 4.2S	Epoxy high build gloss finish (over epoxy high build gloss).

.7 **Structural Steel and Metal Fabrications:** (columns, beams, joists, etc.)

INT 5.1A	Quick dry enamel [gloss] [semi-gloss] finish.
INT 5.1B	Water based light industrial [insert gloss level] coating.
INT 5.1C	Water based dry fall finish.
INT 5.1CC	Water based dry fall finish (over quick dry shop primer). [for dry locations only]
INT 5.1D	Alkyd dry fall finish.
INT 5.1DD	Alkyd dry fall finish (over quick dry shop primer). [for dry locations only]
INT 5.1E	Alkyd [insert gloss level] finish.
INT 5.1F	Polyurethane, pigmented finish (over epoxy primer).
INT 5.1G	Polyurethane, pigmented finish (over high-build epoxy).
INT 5.1H	Polyurethane, pigmented finish (over inorganic zinc primer and epoxy).

INT 5.1J	Polyurethane, pigmented finish (over epoxy zinc rich primer and epoxy).
INT 5.1K	Epoxy-modified latex finish.
INT 5.1L	Epoxy finish.
INT 5.1LL	Epoxy Deck Coating finish (over epoxy primer).
INT 5.1M	Aluminum paint finish.
INT 5.1N	Water based light industrial [insert gloss level] coating (over epoxy primer).
INT 5.1P	High build epoxy (over epoxy zinc rich primer).
INT 5.1Q	Latex [insert gloss level] finish (over alkyd primer).
INT 5.1R	High performance architectural latex [insert gloss level] finish.
INT 5.1S	Institutional low odor / low VOC [insert gloss level] finish.
INT 5.1T	Alkyd [insert gloss level] finish (over surface tolerant primer).
INT 5.1U	Polyurethane, pigmented finish (over self-priming epoxy).
INT 5.1V	Epoxy finish (over self-priming epoxy).
INT 5.1W	Alkyd [insert gloss level] finish (over quick dry shop primer). [for dry locations only]
INT 5.1X	Latex [insert gloss level] finish (over quick dry shop primer). [for dry locations only]
INT 5.1Y	Epoxy high build low gloss finish (over primer)
INT 5.1Z	Epoxy high build gloss finish (over epoxy primer).
INT 5.1QDS	Quick dry shop paint finish (for dry locations only). [do not topcoat]

SPEC NOTE: *Refer to Spec Notes - Painting Systems in regard to type and compatibility of primers for structural steel and miscellaneous metals.*

.8 **Steel - High Heat:** (boilers, furnaces, heat exchangers, breeching, pipes, flues, stacks, etc., with temperature range as noted)

NT 5.2A	Heat resistant enamel finish, maximum 400° F (205° C).
INT 5.2B	Heat resistant enamel, aluminum paint finish, maximum 800° F (427° C).
INT 5.2C	Inorganic zinc rich coating, maximum 750° F (400° C).
INT 5.2D	High heat resistant coating, maximum 1100° F (593° C).

.9 **Galvanized Metal:** (doors, frames, railings, misc. steel, pipes, overhead decking, ducts, etc.)

INT 5.3A	Latex [insert gloss level] finish.
INT 5.3B	Water based light industrial [insert gloss level] coating.
INT 5.3C	Alkyd [insert gloss level] finish (over cementitious primer).
INT 5.3D	Epoxy finish (over epoxy primer).
INT 5.3E	Epoxy finish (over vinyl wash primer and epoxy primer).
INT 5.3F	Alkyd dry fall finish. [for use on low contact / low traffic areas only]
INT 5.3G	Aluminum paint finish.
INT 5.3H	Water based dry fall finish. [for use on low contact / low traffic areas only]
INT 5.3J	Latex [insert gloss level] finish (over water based primer).
INT 5.3K	Water based light industrial [insert gloss level] coating (over water based primer).
INT 5.3L	Alkyd [insert gloss level] finish (over non-cementitious primer).
INT 5.3M	High performance architectural latex [insert gloss level] finish.
INT 5.3N	Institutional low odor / low VOC [insert gloss level] finish.

SPEC NOTES:

.1 Particular attention should be paid to the durability of zinc coated surfaces on interior high contact / high traffic areas such as doors, frames, railings, misc. steel, etc. Do not use a dry fall finish (INT 5.3F or INT 5.3H) in these areas.

.2 High contact/traffic areas to include doors, frames, railings, misc. steel, pipes, etc.

.3 Low contact/traffic areas to include overhead decking, ducts, pipes, gutters, flashing, misc. steel, etc.

.10 **Aluminum:** (unanodized)

INT 5.4A	Alkyd (over vinyl wash primer) [insert gloss level] finish.
INT 5.4B	Epoxy finish.

INT 5.4C Polyurethane,pigmented finish.
INT 5.4D Aluminum paint finish. [for exposed aluminum]
INT 5.4E Water based light industrial [insert gloss level] coating.
INT 5.4F High performance architectural latex [insert gloss level] finish.
INT 5.4G Institutional low odor / low VOC [insert gloss level] finish.
INT 5.4H Latex [insert gloss level] finish (over quick dry primer for aluminum).
INT 5.4J Alkyd [insert gloss level] finish (over quick dry primer for aluminum).

.11 **Copper:**

INT 5.5A Alkyd [insert gloss level] finish.
INT 5.5B Epoxy finish.
INT 5.5C Polyurethane, pigmented finish.
INT 5.5D Aluminum paint finish.
INT 5.5E Water based light industrial [insert gloss level] coating.
INT 5.5F High performance architectural latex [insert gloss level] finish.
INT 5.5G Institutional low odor / low VOC [insert gloss level] finish.
INT 5.5H Latex [insert gloss level] finish.

.12 **Stainless Steel:** (unpolished)

INT 5.6A Water based light industrial [insert gloss level] coating (over bonding primer).
INT 5.6B Alkyd [insert gloss level] finish.
INT 5.6C Epoxy finish.
INT 5.6D Polyurethane, pigmented finish.
INT 5.6E Aluminum paint finish.
INT 5.6F Water based light industrial [insert gloss level] coating (over quick dry primer).
INT 5.6G High performance architectural latex [insert gloss level] finish.
INT 5.6H Latex [insert gloss level] finish.

.13 **Glue Laminated Beams and Columns:**

INT 6.1A Latex [insert gloss level] finish (over alkyd primer).
INT 6.1B Alkyd [insert gloss level] finish.
INT 6.1C Alkyd varnish [insert gloss level] finish.
INT 6.1D Polyurethane varnish [insert gloss level] finish.
INT 6.1E Polyurethane, pigmented [insert gloss level] finish.
INT 6.1F Water based varnish, clear [insert gloss level] finish.
INT 6.1G Semi transparent stain finish.
INT 6.1H Alkyd solid color stain finish.
INT 6.1J Polyurethane varnish [gloss] [satin] finish (over stain).
INT 6.1K Alkyd varnish [insert gloss level] finish (over stain).
INT 6.1L Epoxy finish.
INT 6.1M Latex [insert gloss level] finish (over latex primer).
INT 6.1N High performance architectural latex [insert gloss level] finish.
INT 6.1P Alkyd varnish [insert gloss level] finish (over stain and sealer).
INT 6.1Q Institutional low odor / low VOC [insert gloss level] finish.
INT 6.1R Water based varnish, clear [insert gloss level] finish (over stain).
INT 6.1S Polyurethane, clear, moisture cured [gloss] [flat] finish (over stain).
INT 6.1T Latex solid color stain finish.
INT 6.1U Fire retardant, pigmented coating [insert gloss level] (ULC rated).
INT 6.1V Fire retardant, clear coating [insert gloss level] (ULC rated).
INT 6.1W Polyurethane, clear, 2 component finish.

.14 **Dimension Lumber:** (columns, beams, exposed joists, underside of decking, etc.)

INT 6.2A Latex [insert gloss level] finish (over alkyd primer).
INT 6.2B High performance architectural latex [insert gloss level] finish.
INT 6.2C Alkyd [insert gloss level] finish.

INT 6.2D	Latex [insert gloss level] finish (over latex primer).
INT 6.2E	Multicolor finish.
INT 6.2F	Fire retardant, pigmented [insert gloss level] coating (ULC rated).
INT 6.2G	Fire retardant, clear [insert gloss level] coating (ULC rated).
INT 6.2H	Polyurethane varnish [insert gloss level] finish.
INT 6.2J	Polyurethane varnish [insert gloss level] finish (over stain).
INT 6.2K	Alkyd varnish [insert gloss level] finish (over stain and sealer).
INT 6.2L	Institutional low odor / low VOC [insert gloss level] finish.
INT 6.2M	Water based varnish, clear [insert gloss level] finish (over stain).
INT 6.2N	Polyurethane,clear, moisture cured [gloss] [flat] finish (over stain).
INT 6.2P	Alkyd varnish [insert gloss level] finish.
INT 6.2Q	Polyurethane, clear, 2 component finish.

.15 **Dressed Lumber:** (including doors, door and window frames, casings, molding, etc.)

INT 6.3A	High performance architectural latex [insert gloss level] finish.
INT 6.3B	Alkyd [insert gloss level] finish.
INT 6.3BB	Alkyd, water based gloss finish. [interior doors and frames in non-humid locations only]
INT 6.3C	Semi-transparent stain finish. [do not use on doors]
INT 6.3D	Alkyd varnish [insert gloss level] finish (over stain).
INT 6.3E	Polyurethane varnish [insert gloss level] finish (over stain).
INT 6.3F	Lacquer [insert gloss level] finish (over stain).
INT 6.3G	Lacquer, pigmented [insert gloss level] finish.
INT 6.3H	Lacquer, clear [insert gloss level] finish.
INT 6.3J	Alkyd varnish [insert gloss level] finish.
INT 6.3K	Polyurethane varnish [insert gloss level] finish.
INT 6.3L	Epoxy finish.
INT 6.3M	Danish oil finish.
INT 6.3N	Multicolor finish.
INT 6.3P	Water based light industrial [insert gloss level] coating.
INT 6.3Q	Water based varnish, clear [insert gloss level] finish.
INT 6.3R	Fire retardant, pigmented [insert gloss level] finish (ULC rated).
INT 6.3S	Fire retardant, clear finish (ULC rated).
INT 6.3T	Latex [semi-gloss] [gloss] finish (over latex primer).
INT 6.3U	Latex [semi-gloss] [gloss] finish (over alkyd primer).
INT 6.3V	Institutional low odor / low VOC [insert gloss level] finish.
INT 6.3W	Water based varnish, clear [insert gloss level] finish (over stain).
INT 6.3X	Polyurethane, clear, moisture cured [gloss] [flat] finish.
INT 6.3Y	Polyurethane, clear, moisture cured [gloss] [flat] finish (over stain).
INT 6.3Z	Polyurethane, clear, 2 component finish.

.16 **Wood Paneling and Casework:** (partitions, panels, shelving, millwork, etc.)

INT 6.4A	Latex [insert gloss level] finish (over alkyd sealer).
INT 6.4B	Alkyd [insert gloss level] finish (over alkyd sealer).
INT 6.4C	Semi-transparent stain finish.
INT 6.4D	Alkyd varnish [insert gloss level] finish (over stain).
INT 6.4E	Polyurethane varnish [insert gloss level] finish (over stain).
INT 6.4F	Lacquer [insert gloss level] finish (over stain).
INT 6.4G	Alkyd varnish [insert gloss level] finish.
INT 6.4H	Lacquer, pigmented [insert gloss level] finish.
INT 6.4J	Polyurethane varnish [insert gloss level] finish.
INT 6.4K	Danish oil finish.
INT 6.4L	Multicolor finish.
INT 6.4M	Water based, varnish clear [insert gloss level] finish.
INT 6.4N	Water based light industrial [insert gloss level] coating.
INT 6.4P	Fire retardant, pigmented [insert gloss level] coating (UL/ULC rated).
INT 6.4Q	Fire retardant, clear coating (UL/ULC rated).
INT 6.4R	Latex [semi-gloss] [gloss] finish (over latex primer).

INT 6.4S	High performance architectural latex [insert gloss level] finish.
INT 6.4T	Institutional low odor / low VOC [insert gloss level] finish.
INT 6.4U	Water based varnish, clear [insert gloss level] finish (over stain).
INT 6.4V	Polyurethane, clear moisture cured [gloss] [flat] finish (over stain).
INT 6.4W	Lacquer [insert gloss level] finish (over stain).
INT 6.4X	Lacquer, pigmented [insert gloss level] finish.
INT 6.4Y	Lacquer, clear [insert gloss level] finish.

.17 **Wood Floors and Stairs:** (including hardwood flooring, etc.) ***(SRA optional for all systems)***

INT 6.5A	Alkyd floor enamel [low gloss] [gloss] finish.
INT 6.5B	Polyurethane varnish [gloss] finish (over stain).
INT 6.5C	Polyurethane varnish [gloss] finish.
INT 6.5E	Alkyd game line marking.
INT 6.5F	Epoxy game line marking.
INT 6.5G	Latex porch and floor [low gloss] [gloss] enamel finish.
INT 6.5J	Polyurethane, moisture cured [gloss] finish (over stain).
INT 6.5K	Polyurethane, moisture cured [gloss] finish.
INT 6.5M	Polyurethane, clear, 2 component finish.

SPEC NOTE: *Painting of interior game line layouts is usually by others in accordance with gymnasium hardwood flooring specification requirements. When not included under work of this section add the following:*

"Painting of interior game line layouts to be by others in accordance with requirements of Section [09640]."

.18 **Wood Shingles and Shakes:** (wall covering)

NT 6.6A	Latex [insert gloss level] finish.
INT 6.6B	Alkyd [insert gloss level] finish.
INT 6.6C	Semi-transparent stain finish.
INT 6.6D	Alkyd solid color stain finish.
INT 6.6E	Latex solid color stain finish.
INT 6.6F	Latex [insert gloss level] finish (over latex primer).
INT 6.6G	Fire retardant, pigmented [insert gloss level] coating (UL/ULC rated).
INT 6.6H	Fire retardant, clear [insert gloss level] coating (UL/ULC rated).

.19 **Fiberglass:** (panels, trims, fabrications, etc.)

INT 6.7A	Latex [insert gloss level] finish.
INT 6.7B	Alkyd [insert gloss level] finish.
INT 6.7C	Water based light industrial [insert gloss level] coating.
INT 6.7D	Epoxy finish.
INT 6.7E	Polyurethane, pigmented finish.
INT 6.7F	Epoxy-modified latex [insert gloss level] finish.
INT 6.7G	Multicolor finish.
INT 6.7H	High performance architectural latex [insert gloss level] finish.
INT 6.7J	Institutional low odor / low VOC [insert gloss level] finish.

.20 **Plastic:** (lumber, panels, trims, fabrications, vinyl wall covering, PVA / PVC materials, etc.)

INT 6.8A	High performance architectural latex [insert gloss level] finish.
INT 6.8B	Alkyd [insert gloss level] finish.
INT 6.8C	Water based light industrial [insert gloss level] coating.
INT 6.8D	Multicolor finish.
INT 6.8E	Latex [insert gloss level] finish.
INT 6.8F	Institutional low odor / low VOC [insert gloss level] finish.

.21 **Spray Textured Surfaces:** (ceilings)

INT 9.1A	Latex, flat finish [for spray application only].

INT 9.1B	Latex [insert gloss level] finish (over alkyd sealer).
INT 9.1C	Alkyd, flat finish.
INT 9.1D	Alkyd [insert gloss level] finish (over alkyd sealer).
INT 9.1E	Latex finish. [for spray application only]

.22 **Plaster and Gypsum Board:** (gypsum wallboard, drywall, “sheet rock type material”, etc., and textured finishes)

INT 9.2A	Latex [insert gloss level] finish (over latex sealer).
INT 9.2B	High performance architectural latex [insert gloss level] finish.
INT 9.2C	Alkyd [insert gloss level] finish (over latex sealer).
INT 9.2E	Epoxy (tile-like) finish.
INT 9.2F	Epoxy-modified latex (tile-like) finish.
INT 9.2G	Multicolor finish.
INT 9.2H	Fire retardant coating [clear or pigmented] (UL/ULC rated).
INT 9.2J	Water based fire retardant coating (UL/ULC rated).
INT 9.2K	Latex [insert gloss level] finish (over alkyd primer). [use on plaster surfaces only]
INT 9.2L	Water based light industrial [insert gloss level] coating.
INT 9.2M	Institutional low odor / low VOC [insert gloss level] finish.
INT 9.2N	Epoxy high build low gloss finish (over latex sealer).
INT 9.2P	Epoxy high build gloss finish (over latex sealer).

SPEC NOTE: *Refer to Spec Note in regard to levels of gypsum board finish and the application of a high gloss paint finish.*

.23 **Acoustic Panels and Tiles:**

INT 9.3A	Latex, flat finish.
INT 9.3B	Latex [insert gloss level] finish (over alkyd sealer).
INT 9.3C	Alkyd, flat finish.
INT 9.3D	Institutional low odor / low VOC [insert gloss level] finish.
INT 9.3E	High performance architectural latex [insert gloss level] finish.

.24 **Canvas and Cotton Coverings:**

INT 10.1A	Latex [insert gloss level] finish.
INT 10.1B	Alkyd [insert gloss level] finish.
INT 10.1C	Aluminum paint finish.
INT 10.1D	Institutional low odor / low VOC [insert gloss level] finish.

.25 **Bituminous Coated Surfaces:** (cast iron pipe, concrete, etc.)

INT 10.2A	Latex [insert gloss level] finish.
INT 10.2B	Alkyd [insert gloss level] finish.
INT 10.2C	Aluminum paint finish.

SPEC NOTE: *When not included under work of this section include the following:*

.26 Painting of interior game line layouts with colors as noted on approved game line layout drawing on interior resilient [gymnasium] flooring to be by others in accordance with [insert specification Section] [***MPI*** Painting Manual requirements].

3.6 Mechanical / Electrical Equipment and Related Surfaces:

SPEC NOTE: *Co-ordinate painting of mechanical and electrical equipment, piping, conduit, system Identification with appropriate Mechanical and Electrical specification sections.*

.1 Unless otherwise specified or noted, paint all “unfinished” conduits, piping, hangers, ductwork and other mechanical and electrical equipment with color and texture to match adjacent surfaces, in the following areas:

.a where exposed-to-view in all exterior and interior areas.
.b in all interior high humidity interior areas.

.c in all boiler room, mechanical and electrical rooms.

.2 In unfinished areas leave exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment in original finish and touch up scratches and marks.

.3 Touch up scratches and marks on factory painted finishes and equipment with paint as supplied by manufacturer of equipment.

.4 Do not paint over nameplates.

.5 Paint the inside of all ductwork where visible behind louvers, grilles and diffusers for a minimum of 460 mm (18") or beyond sight line, whichever is greater, with primer and one coat of matt black (non-reflecting) paint.

.6 Paint the inside of light valances gloss white.

.7 Paint disconnect switches for fire alarm system and exit light systems in red enamel.

.8 Paint [red] or band all fire protection piping and sprinkler lines in accordance with mechanical specification requirements. Keep sprinkler heads free of paint.

.9 Paint [yellow] or band all natural gas piping in accordance with mechanical specification requirements.

.10 Backprime and paint face and edges of plywood service panels for telephone and electrical equipment before installation [gray, semi-gloss] [to match adjacent wall surface]. Leave equipment in original finish except for touch-up as required, and paint conduits, mounting accessories and other unfinished items.

.11 Paint exterior steel electrical light standards. Do not paint outdoor transformers and substation equipment.

3.7 Field Quality Control / Standard of Acceptance:

.1 All surfaces, preparation and paint applications shall be inspected.

.2 Painted exterior and interior surfaces shall be considered to lack uniformity and soundness if any of the following defects are apparent to the Painting Inspection Agency inspector:

.a brush / roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, and foreign materials in paint coatings.
.b evidence of poor coverage at rivet heads, plate edges, lap joints, crevices, pockets, corners and re-entrant angles.
.c damage due to touching before paint is sufficiently dry or any other contributory cause.
.d damage due to application on moist surfaces or caused by inadequate protection from the weather.
.e damage and/or contamination of paint due to blown contaminants (dust, spray paint, etc.).

.3 Painted surfaces shall be considered unacceptable if any of the following are evident under natural lighting source for exterior surfaces and final lighting source (including daylight) for interior surfaces:

.a visible defects are evident on vertical surfaces when viewed at normal viewing angles from a distance of not less than 1000 mm (39").
.b visible defects are evident on horizontal surfaces when viewed at normal viewing angles from a distance of not less than 1000 mm (39").
.c visible defects are evident on ceiling, soffit and other overhead surfaces when viewed at normal viewing angles.
.d when the final coat on any surface exhibits a lack of uniformity of color, sheen, texture, and hiding across full surface area.

.4 Painted surfaces rejected by the inspector shall be made good at the expense of the Contractor. Small affected areas may be touched up; large affected areas or areas without sufficient dry film thickness of paint shall be repainted. Runs, sags of damaged paint shall be removed by scraper or by sanding prior to application of paint.

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3.8 Protection:

.1 Protect all exterior surfaces and areas, including landscaping, walks, drives, all adjacent building surfaces (including glass, aluminum surfaces, etc.) and equipment and any labels and signage from painting operations and damage by drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.

.2 Protect all interior surfaces and areas, including glass, aluminum surfaces, etc. and equipment and any labels and signage from painting operations and damage by drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.

.3 Erect barriers or screens and post signs to warn of or limit or direct traffic away or around work area as required.

3.9 Clean-Up:

.1 Remove all paint where spilled, splashed, splattered or sprayed as work progresses using means and materials that are not detrimental to affected surfaces.

.2 Keep work area free from an unnecessary accumulation of tools, equipment, surplus materials and debris.

.3 Remove combustible rubbish materials and empty paint cans each day and safely dispose of same in accordance with requirements of authorities having jurisdiction.

.4 Clean equipment and dispose of wash water / solvents as well as all other cleaning and protective materials (e.g. rags, drop cloths, masking papers, etc.), paints, thinners, paint removers / strippers in accordance with the safety requirements of authorities having jurisdiction.

3.10 Repainting of Existing Finishes:

.1 Refer to ***MPI*** Maintenance Repainting Manual and Section [insert appropriate section number] for repainting of existing finishes.

.2 Use finish coat of respective new surface paint system for minor repair of existing finishes. Use system primer where existing finishes are damaged down to bare surface.

END OF SECTION

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