

ADDENDUM NO: 003

TO:	Southwest Construction
FROM:	Parkhill
PROJECT NAME:	Regence Health Network Plainview Clinic
PROJECT NO.:	03.7614.20
DATE:	May 21, 2021

Attention of all Prospective Proposers/Plan Holders is directed to the following modifications to the referenced Drawings and Project Manual. This Addendum becomes a part of the Contract Documents and modifies the original Contract Documents dated April 28, 2021 as noted below:

This Addendum consists of () pages.

I. CHANGES TO PRIOR ADDENDUM:

1. Verbiage for Sheet M-111, P-111 and P501 was left out.
 - a. ADD:
Sheet M-111: modify ductwork as shown to accommodate changes made.
Sheet P-111: modify restroom as shown. Change vacuum to 2" main line.
Sheet P-501: update riser to reflect new restroom layout.

II. CHANGES TO PROJECT MANUAL:

1. SPEC SECTION 08 45 23
 - a. Add in its entirety.
2. SPEC SECTION 28 10 00
 - a. Add in its entirety.
3. Hardware Set 00.01 – Miscellaneous
 - a. Add in its entirety.

III. CHANGES TO DRAWINGS:

1. NONE

END OF ADDENDUM 003



5/21/2021



SECTION 08 45 23 - FIBERGLASS-SANDWICH-PANEL ASSEMBLIES

05/18/2021

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes the insulated translucent sandwich panel skylight system and accessories as shown and specified. Work includes providing and installing:
 - 1. Flat factory prefabricated structural insulated translucent sandwich panels.
 - 2. Aluminum installation system.
 - 3. Aluminum flashing attached to skylights.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to the Work of this Section.

1.2 SUBMITTALS

- A. Submit manufacturer's product data. Include construction details, material descriptions, profiles and finishes of skylight components.
- B. Submit shop drawings. Include elevations and details.
- C. Submit manufacturer's color charts showing the full range of colors available for factory-finished aluminum.
 - 1. When requested, submit samples for each exposed finish required, in same thickness and material indicated for the work and in size indicated below. If finishes involve normal color variations, include sample sets consisting of two or more units showing the full range of variations expected.
 - a. Sandwich panels: 14 inch x 28 inch units
 - b. Factory finished aluminum: 5 inch long sections
- D. Submit Installer Certificate, signed by installer, certifying compliance with project qualification requirements.
- E. Submit product reports from a qualified independent testing agency indicating each type and class of panel system complies with the project performance requirements, based on comprehensive testing of current products. Previously completed reports will be acceptable if for current manufacturer and indicative of products used on this project.
 - 1. Reports required are:
 - a. International Building Code Evaluation Report
 - b. Flame Spread and Smoke Developed (UL 723) – Submit UL Card
 - c. Burn Extent (ASTM D 635)
 - d. Color Difference (ASTM D 2244)
 - e. Impact Strength (UL 972)
 - f. Bond Tensile Strength (ASTM C 297 after aging by ASTM D 1037)
 - g. Bond Shear Strength (ASTM D 1002)
 - h. Beam Bending Strength (ASTM E 72)
 - i. Fall Through Resistance (ASTM E 661)
 - j. Insulation U-Factor (NFRC 100)
 - k. NFRC System U-Factor Certification (NFRC 700)
 - l. Solar Heat Gain Coefficient (NFRC or Calculations)
 - m. Condensation Resistance Factor (AAMA 1503)
 - n. Air Leakage (ASTM E 283)
 - o. Structural Performance (ASTM E 330)
 - p. Water Penetration (ASTM E 331)
 - q. Class A Roof Covering Burning Brand (ASTM E 108)

1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications
 - 1. Material and products shall be manufactured by a company continuously and regularly employed in the manufacture of specified materials for a period of at least ten consecutive years and which can show evidence of those materials being satisfactorily used on at least six projects of similar size, scope and location. At least three of the projects shall have been in successful use for ten years or longer.
 - 2. Panel system must be listed by an ANSI accredited Evaluation Service, which requires quality control inspections and fire, structural and water infiltration testing of sandwich panel systems by an accredited agency.
 - 3. Quality control inspections shall be conducted at least once each year and shall include manufacturing facilities, sandwich panel components and production sandwich panels for conformance with AC177 "Translucent Fiberglass Reinforced Plastic (FRP) Faced Panel Wall, Roof and Skylight Systems" as issued by the ICC-ES.
- B. Installer's Qualifications: Installation shall be by an experienced installer, which has been in the business of installing specified skylight systems for at least two consecutive years and can show evidence of satisfactory completion of projects of similar size, scope and type.

1.4 PERFORMANCE REQUIREMENTS

- A. The manufacturer shall be responsible for the configuration and fabrication of the complete skylight panel system.
 - 1. When requested, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - 2. Standard skylight system shall have less than 0.01 cfm/ft² air leakage by ASTM E 283 at 6.24 PSF (50 mph) and no water penetration by ASTM E 331 at 15 PSF; and structural testing by ASTM E 330.
 - 3. Structural Loads; Provide skylight system capable of handling the following loads:
 - a. Live Load: See Drawings.
 - b. Snow Load: See Drawings
 - c. Wind Load: See Drawings.

1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver panel system, components and materials in manufacturer's standard protective packaging.
- B. Store panels on the long edge; several inches above the ground, blocked and under cover in accordance with manufacturer's storage and handling instructions.

1.6 WARRANTY

- A. Submit manufacturer's and installer's written warranty agreeing to repair or replace panel system work, which fails in materials or workmanship within one year of the date of delivery. Failure of materials or workmanship shall include leakage, excessive deflection, deterioration of finish on metal in excess of normal weathering, defects in accessories, insulated translucent sandwich panels and other components of the work.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. Kalwall.

2.2 PANEL COMPONENTS

A. Face Sheets

1. Translucent faces: Manufactured from glass fiber reinforced thermoset resins, formulated specifically for architectural use.
 - a. Thermoplastic (e.g. polycarbonate, acrylic) faces are not acceptable.
 - b. Face sheets shall not deform, deflect or drip when subjected to fire or flame.
2. Interior face sheets:
 - a. Flame spread: Underwriters Laboratories (UL) listed, which requires periodic unannounced retesting, with flame spread rating no greater than 50 and smoke developed no greater than 250 when tested in accordance with UL 723.
 - b. Burn extent by ASTM D 635 shall be no greater than 1 inch.
3. Exterior face sheets:
 - a. Color stability: Full thickness of the exterior face sheet shall not change color more than 3 CIE Units DELTA E by ASTM D 2244 after 5 years outdoor South Florida weathering at 5 degrees facing south, determined by the average of at least three white samples with and without a protective film or coating to ensure long-term color stability. Color stability shall be unaffected by abrasion or scratching.
 - b. Strength: Exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact minimum of 70 ft. lbs. without fracture or tear when impacted by a 3-1/4 inch diameter, 5 lb. free-falling ball per UL 972.
4. Appearance:
 - a. Exterior face sheets: Smooth, .070 inch thick and white in color.
 - b. Interior face sheets: Smooth, .045 inch thick and white in color.
 - c. Face sheets shall not vary more than ± 10 percent in thickness and be uniform in color.

B. Grid Core

1. Thermally broken composite I-beam grid core shall be of 6005-T5 alloy and temper with provisions for mechanical interlocking of muntin-mullion and perimeter. Width of I-beam shall be no less than 7/16 inch.
2. I-beam Thermal break: Minimum 2 inch, thermoset fiberglass composite.

C. Laminate Adhesive

1. Heat and pressure resin type adhesive engineered for structural sandwich panel use, with minimum 25-years field use. Adhesive shall pass testing requirements specified by the International Code Council "Acceptance Criteria for Sandwich Panel Adhesives".
2. Minimum tensile strength of 750 PSI when the panel assembly is tested by ASTM C 297 after two exposures to six cycles each of the aging conditions prescribed by ASTM D 1037.
3. Minimum shear strength of the panel adhesive by ASTM D 1002 after exposure to four separate conditions:
 - a. 50 percent Relative Humidity at 68 degrees F: 540 PSI

- b. 182 degrees F: 100 PSI
- c. Accelerated Aging by ASTM D 1037 at room temperature: 800 PSI
- d. Accelerated Aging by ASTM D 1037 at 182 degrees F: 250 PSI

2.3 PANEL CONSTRUCTION

- A. Provide sandwich panels of flat fiberglass reinforced translucent face sheets laminated to a grid core of mechanically interlocking I-beams. The adhesive bonding line shall be straight, cover the entire width of the I-beam and have a neat, sharp edge.
 - 1. Thickness: 4 inch.
 - 2. Light transmission: 11 percent.
 - 3. Solar heat gain coefficient .06.
 - 4. Panel U-factor by NFRC certified laboratory: 4 inch thermally broken grid 0.15_____.
 - 5. Grid pattern: Nominal size 12 inch x24 inch; pattern Shoji.
- B. Standard panels shall deflect no more than 1.0 inch at 30 PSF in 10 feet 0 inches span without a supporting frame by ASTM E 72.
- C. Standard panels shall withstand 1200 degrees F fire for minimum one hour without collapse or exterior flaming.
- D. Thermally broken panels: Minimum Condensation Resistance Factor of 85 by AAMA 1503 measured on the bond line.
- E. Skylight System:
 - 1. Skylight system shall pass Class A Roof Burning Brand Test by ASTM E 108.
- F. Skylight System shall meet the fall through requirements of OSHA 1910.23 as demonstrated by testing in accordance with ASTM E661, thereby not requiring supplemental screens or railings.

2.4 BATTENS AND PERIMETER CLOSURE SYSTEM

- A. Closure system:
 - 1. Extruded aluminum 6063-T6 and 6063-T5 alloy and temper clamp-tite screw type closure system.
 - 2. Skylight perimeter closures at curbs shall be factory sealed to panels.
- B. Sealing tape: Manufacturer's standard, pre-applied to closure system at the factory under controlled conditions.
- C. Fasteners: 300 series stainless steel screws for aluminum closures, excluding final fasteners to the building.
- D. Finish:
 - 1. Manufacturer's factory applied finish, which meets the performance requirements of AAMA 2604. Color to be selected from manufacturer's standards.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Installer shall examine substrates, supporting structure and installation conditions.
- B. Do not proceed with panel installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Metal Protection:
 - 1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
 - 2. Where aluminum will contact concrete, masonry or pressure treated wood, protect against corrosion by painting contact surfaces with bituminous paint or method recommended by manufacturer.

3.3 INSTALLATION

- A. Install the skylight system in accordance with the manufacturer's suggested installation recommendations and approved shop drawings.
 - 1. Anchor component parts securely in place by permanent mechanical attachment system.
 - 2. Accommodate thermal and mechanical movements.
 - 3. Set perimeter framing in a full bed of sealant compound, or with joint fillers or gaskets to provide weather-tight construction.
- B. Install joint sealants at perimeter joints and within the panel system in accordance with manufacturer's installation instructions.

3.4 FIELD QUALITY CONTROL

- A. Water Test: Installer to test skylights according to procedures in AAMA 501.2.
- B. Repair or replace work that does not pass testing or that is damaged by testing and retest work.

3.5 CLEANING

- A. Clean the skylight system interior and exterior, immediately after installation.
- B. Refer to manufacturer's written recommendations.

END OF SECTION

Note:

Mobile credential access control requested by owner. Wireless exits/mortise locks acceptable at interior locations only. Basis of design is hard-wired card readers and electronic hardware.

Hardware Set 00.01 - MISCELLANEOUS

Doors: MISC Each to receive:

1	EA	Power Supply	AQL6-B100R8E1	SU
1	EA	Module	D8P	SU
1	EA	Power Supply	AQL6-E1	SU

Hardware Set 00.02 CYL ONLY AS REQ

Doors: 008, 029, 052

NOTE: VERIFY CYLINDER TYPE, CAM, AND RING REQUIRED WITH DOOR SUPPLIER.

DOOR 052 TO HAVE ACCESS CONTROL, VERIFY ELECTRONIC HARDWARE TYPE WITH DOOR SUPPLIER.

Each to receive:

1	EA	Mortise Cylinder	11 41 101 US32D MK	SA
---	----	------------------	--------------------	----

Hardware Set 01.02 EXTERIOR CARD READER

Doors: 028, 059, 081, 082

NOTE: CARD READER AND CONTROL UNITS BY SECURITY.

Each to receive:

1	EA	Continuous Hinge	CFM83HD1 EL-EPT	PE
1	EA	Rim Exit Device	11 LD 43 55 8806 ETP US32D MK	SA
1	EA	Electric Strike	9400-LBSM 630	HS
1	EA	Surface Closer	TB 351 CPS EN	SA
1	EA	Kit	581-2 EN	SA
1	EA	Drop Plate	351D EN	SA
1	EA	Door Stop	RM857 EXP US15	RO
1	EA	Position Switch	DPS-M-GY	SU

Hardware Set 02.01 CARD READER WITH PANIC

Doors: 017C, 041

Each to receive:

3	EA	Hinge, Full Mortise, Hvy Wt	T4A3786 5" x 4-1/2" US26D	MK
1	EA	Rim Exit Device	11 LD 43 55 8806 ETP US32D MK	SA
1	EA	Electric Strike	9600-LBSM 630	HS
1	EA	Surface Closer	351 PS EN	SA
1	EA	Kick Plate	K1050 10" x 40" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 18'	PE
1	EA	Position Switch	DPS-M-GY	SU

Hardware Set 02.02 CARD READER WITH LOCK

Doors: 017A

Each to receive:

3	EA	Hinge, Full Mortise, Hvy Wt	T4A3786 5" x 4-1/2" US26D	MK
1	EA	Storeroom/Closet Lock	11 8204 LNP US26D MK	SA
1	EA	Electric Strike	1500C-LMS 630	HS
1	EA	Surface Closer	351 PS EN	SA
1	EA	Kick Plate	K1050 10" x 40" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 18'	PE

Hardware Set 02.03 CARD READER WITH PANIC

Doors: 020A

Each to receive:

3	EA	Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2" US26D	MK
1	EA	Rim Exit Device	11 LD 43 55 8806 ETP US32D MK	SA
1	EA	Electric Strike	9600-LBSM 630	HS
1	EA	Surface Closer	351 PS EN	SA
1	EA	Kick Plate	K1050 10" x 34" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 17'	PE
1	EA	Position Switch	DPS-M-GY	SU

Hardware Set 02.04 CARD READER WITH LOCK

Doors: 011, 020B, 070

Each to receive:

3	EA	Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2" US26D	MK
1	EA	Storeroom/Closet Lock	11 8204 LNP US26D MK	SA
1	EA	Electric Strike	1500C-LMS 630	HS
1	EA	Surface Closer	1431 UO EN	SA
1	EA	Kick Plate	K1050 10" x 34" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 17'	PE

Hardware Set 02.05 CARD READER WITH LOCK

Doors: 001, 018, 022

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	MK
1	EA	Storeroom/Closet Lock	11 8204 LNP US26D MK	SA
1	EA	Electric Strike	1500C-LMS 630	HS
1	EA	Surface Closer	1431 UO EN	SA
1	EA	Kick Plate	K1050 10" x 34" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
3	EA	Silencer	608-RKW	RO

Hardware Set 02.06 CARD READER WITH LOCK

NOTE: VERIFY BARN DOOR AS DRAWN, HARDWARE SPECIFIED FOR SWINGING DOOR AND CARD READER.

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	MK
1	EA	Storeroom/Closet Lock	11 8204 LNP US26D MK	SA
1	EA	Electric Strike	1500C-LMS 630	HS
1	EA	Surface Closer	1431 UO EN	SA
1	EA	Kick Plate	K1050 10" x 46" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
3	EA	Silencer	608-RKW	RO

Hardware Set 02.07 CARD READER WITH LOCK

Doors: 013, 019, 023, 030, 032, 035, 042, 043, 044, 060, 062, 064

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	MK
1	EA	Storeroom/Closet Lock	11 8204 LNP US26D MK	SA
1	EA	Electric Strike	1500C-LMS 630	HS
1	EA	Wall Stop	RM861 US32D	RO
3	EA	Silencer	608-RKW	RO

Hardware Set 03.01 RR/EXAM

Doors: 003, 026, 031, 034, 037, 038, 046, 056, 061, 063, 067, 071

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	MK
1	EA	Privacy Lock	V20 8265 VN1P US26D	SA
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 17'	PE

Hardware Set 03.02 RR/EXAM

Doors: 025, 033, 051, 057, 068

Each to receive:

3	EA	Hinge, Full Mortise, Hvy Wt	T4A3786 5" x 4-1/2" US26D	MK
1	EA	Privacy Lock	V20 8265 VN1P US26D	SA
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 18'	PE

Hardware Set 03.03 PUBLIC RR

Doors: 015, 016

Each to receive:

3	EA	Hinge, Full Mortise, Hvy Wt	T4A3786 5" x 4-1/2" US26D	MK
1	EA	Privacy Lock	V20 8265 VN1P US26D	SA
1	EA	Surface Closer	1431 UO EN	SA
1	EA	Kick Plate	K1050 10" x 40" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
1	EA	Gasketing	S773BL 18'	PE

Hardware Set 04.01 DRAW

Doors: 053A, 053B

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	MK
1	EA	Office/Entry Lock	11 8255 LNP US26D MK	SA
1	EA	Wall Stop	RM861 US32D	RO
3	EA	Silencer	608-RKW	RO

Hardware Set 04.02 PROCEDURE

Doors: 047

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 5" x 4-1/2" US26D	MK
1	EA	Office/Entry Lock	11 8255 LNP US26D MK	SA
1	EA	Surface Closer	1431 UO EN	SA
1	EA	Kick Plate	K1050 10" x 40" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
3	EA	Silencer	608-RKW	RO

Hardware Set 04.03 STERILE

Doors: 006A, 048A, 048B, 085

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	MK
1	EA	Storeroom/Closet Lock	11 8204 LNP US26D MK	SA
1	EA	Surface Closer	1431 UO EN	SA
1	EA	Kick Plate	K1050 10" x 34" US32D BEV CSK	RO
1	EA	Wall Stop	RM861 US32D	RO
3	EA	Silencer	608-RKW	RO

28 10 00
ACCESS CONTROL SYSTEM

28.11.00 Access Control Applications:

This document includes a general description, functional requirements, operational characteristics, and criteria for the Access Control System (ACS).

28.12.00 General Requirements:

28.12.01 This shall document the general description, functional requirements, operational characteristics, and criteria for the Access Control System (ACS).

28.12.02 The Codes and Regulations listed below form a part of this specification to the extent referenced. Work shall be performed in accordance with the applicable international, federal, state, and local codes or standards current at the commencement of installation. The following list summarizes applicable standards:

- A. *UL 294, UL 1076, ULC*
- B. CE
- C. FCC – Part 15, Part 68
- D. NFPA 70, NEC
- E. IEEE, RS 170 variable standard
- F. Microsoft® Open Database Connectivity (ODBC) interface)
- G. ISO Software Coding Standards
- H. RoHS

28.12.04 Where more than one code or regulation is applicable, the more stringent shall apply.

28.12.05 Cable installation, identification and termination shall be performed in addition to the applicable codes above.

28.13.00 Access Control Software and Database Management:

28.13.11 Access Control Software shall be Access Control System shall be *Access It! Universal.NET from RS2 Technologies* no substitutions shall be acceptable. The ACS shall use a single seamlessly integrated Microsoft SQL relational database for all functions utilizing a fully multi-tasking multi-threading Microsoft Windows operating system.

Equal product by Salto Systems with wire-free locks at interior acceptable.

28 10 00
ACCESS CONTROL SYSTEM

- A. Annual Software Maintenance Fees shall not be acceptable. Access Control Software shall be supported by the manufacturer to the authorized reseller at no annual fee. The current major version of the released version and the previous released version of the software and all sub-versions of the current and previous major version shall be supported.
- B. Reader License charges. There shall be no Reader License Fees, software having Reader License Fees based on the number of readers supported by the software package shall be unacceptable, except for mobile credentials which may have an initial or low annual cost.
- C. Upgrades or expansion of the ACS to a larger size system in scale shall not require installation of a different and or new ACS application or require the administrator / operator to learn a different and or new interface from the previous version.
- D. The ACS shall be written using recognized standard software coding techniques. The ACS shall be written to support multiple languages without re-engineering. The ACS software shall be written to Microsoft's published standards for User Interface Design, Secure Coding Practices and Database Implementation Guidelines.
- E. The ACS software developer shall be a Microsoft Certified Independent Software Vendor.
- F. The ACS shall support N-Tier architecture where the expansion of the system architecture will allow for end-user deployment based upon their system architectural needs. The ACS shall allow but not require the separation of the database, application server, web server, and client interface. The ACS shall require that all connections to the database are performed through a trusted link from the client or internet browser interface.
(*Project Scope to include up to 2 Concurrent Client Users)
- G. The ACS shall support Centralized distribution (publishing) of applications using Windows Terminal Server, Citrix, or utilizing IIS for the web client using a standard internet browser such as Internet Explorer, Mozilla Firefox, Google Chrome, Apple Safari, and/or by means of a mobile computing platform using a Tablet PC, PDA device, or Smart Phone.
(*Project Scope to include Web Client Capability)
- H. The ACS architecture shall support Microsoft Windows Clustering, Hot-Standby, Fault Tolerant Servers, Fault Tolerant Hot Standby Servers, and Virtual Servers.
- I. The ACS shall only be able to connect to and interface with data sources utilizing a Windows Service.

28 10 00
ACCESS CONTROL SYSTEM

- J. The ACS shall require the default Administration password be changed on the first login after installation of the ACS software package.
- K. The ACS shall be capable of importing or updating Cardholder data using the following source types.
 - 1. Microsoft Access
 - 2. Microsoft Excel
 - 3. Microsoft SQL Server
 - 4. Active Directory
 - 5. ASCII Text (delimited file)
- L. The ACS RS2 Access It! Universal.NET shall be capable of supporting
 - 1. Up to or including:
 - 2. 1000 System Control Panels (SCP)
 - 3. Support for 256 Tasks per SCP
 - 4. 64,000 Access Control Readers, 64 readers per SCP.
 - 5. 512,000 Inputs, 512 per SCP
 - 6. 512,000 Outputs 512 per SCP
 - 7. Supports multi-drop OSDP readers with EP/LP SIO devices.
 - 7. Unlimited Cardholders
 - 8. Multiple Cards per Cardholder
 - 9. 32,737 Access Levels
 - 10. 128 Access Levels per Card
 - 11. 255 Timezones, with 12 start/stop intervals each
 - 12. 255 Holidays, across 8 Holiday Groups/Types
 - 13. Elevator Control using 64 Floors with 255 Floor Codes
 - 14. Support for KONE destination dispatch elevator control.
 - 15. Support for OTIS destination dispatch elevator control
 - 16. Support for Schindler destination dispatch elevator control.
 - 15. Anti-Passback with Occupancy Counting
 - 16. Virtualization Support

28 10 00
ACCESS CONTROL SYSTEM

17. Video Integration Support
 18. Zenitel Intercom integration support.
 19. Biometric Integration Support
 20. Web Client / Thin Client Support
 21. Fully Integrated Graphical Mapping (Floor Plans with Active ICONs)
 22. Definable Report Support, with the ability to Hyperlink recorded video directly from with-in a Report to play back recorded video in a single step operation.
 23. Workstation can be used for other tasks while reports are being generated.
 24. User Definable Macro Support.
 25. Macro Utilization report.
 26. Calendar display on Macro screen.
 27. Outlook ICS files may be imported for Macro Schedules
 28. Macros may be set to automatically delete after scheduled execution.
 29. Macros may be pinned to the Ribbon Bar for immediate access. Pinned Macros may have a friendly (custom) icon assigned on the Ribbon Bar.
 30. Macros may be placed on Graphic Floor Plans (Maps) for immediate access.
 31. Unassigned Access Level Interval and Timezone report assists with system organization and clean up.
 32. Windows Authentication allows log in without entering separate password.
 33. Diagnostics permits viewing all Access It! Universal.NET messages in Windows Event Viewer.
 34. System Status screen has direct links to filtered views such as Unlocked Doors, Active Cards, Installed SCPs, SIOs, Readers, Inputs, Outputs, Unlocked Doors, and other System Status Categories.
 35. Ability to create a mandatory custom drop down database field for cardholder information
 36. Advanced Hardware Filter Views.
 37. Dynamic Search capabilities
 38. Lifesafety power integration
- M. Lock Integration support for:
1. Salto – Sallis SX4 & SVN (The SX4 line and the Salto Virtual Network - Data on Card line).

28 10 00
ACCESS CONTROL SYSTEM

- N. ACS Software and Field Hardware Warranty. The ACS Software shall be warranted for a period of 90 Days from the date of shipment from the manufacturer to be free of defects and will function in substantial accordance to the published specification.
1. ACS Field Hardware shall be warranted for a period of three (3) years from the date of shipment from the manufacturer, will be free from defects and will function in general accordance with the product specifications.
 2. ACS Third Party Device warranties are transferred from the manufacturer to the contractor, which may then transfer third party warranties to the owner. Specific third party warranty details, terms and conditions, remedies and procedures, are either expressly stated on, or packaged with, or accompany such products. The warranty period may vary from product to product. These products include but are not limited to devices that are directly interconnected to the SMS field hardware or computers and are purchased directly from the SMS manufacturer. Examples may include but not be limited to; Credential Printers, Reader Heads, Biometric Devices, Computers etc.
- O. The Access Control System shall use one of the following Operating Systems, Windows 8 Professional/Enterprise, Windows 8.1 Professional/Enterprise, Windows 10 Professional/Enterprise, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016. Other Operating Systems such as but not limited to - Windows Home editions, Linux, Unix, Sun, or Apple shall not be acceptable.
1. The ACA shall use Microsoft SQL Server 2017 Express, Standard or Enterprise Editions as the database engine. SQL Server 2017 Express shall be included with Access It! Universal.NET CD-ROM, SQL Server 2016 Express, Standard, or Enterprise Editions, SQL Server 2014 Express, Standard or Enterprise Editions, SQL Server 2012 R2, Express, Standard, Enterprise Editions are supported. Other Substitutions shall not be acceptable.
- P. The ACS shall be capable of utilizing a Web client. The Web client shall be capable of being utilized via any standard Browser to include but not limited to Microsoft Internet Explorer, Mozilla Firefox, Google Chrome, Opera, Apple Safari, IOS Browser, and Android Browser. The Web client shall be device aware such that it shall display according to the device it is being used from with larger buttons on a mobile device such as a Tablet or Phone. The Web client shall require the User to log in and shall utilize User Groups to allow commands / functions available to the User if at a Desktop (i.e. change reader mode, find, a cardholder/card, interact with cardholder/card, execute a Macro, change an Access Level,

28 10 00
ACCESS CONTROL SYSTEM

Q. ACS Software Interface

1. The ACS Software shall be Microsoft Windows compliant having a Microsoft “Outlook” type structure, having the following features / functions:
2. The ACS shall display a “Ribbon Bar” (Tool Bar) at the top of the screen containing buttons for the functions which may be utilized pertaining to the current selected Menu / screen.
3. When the Advanced Window Control is enabled the ACS shall allow all screens to be moved independently. The ACS shall support multiple monitors when Windows is utilizing an Extended Desktop and has multiple display monitors present.
4. The ACS shall permit advanced device commands to be shown or to be hidden at the option of the user.
5. The ACS shall have a user selectable setting to determine the number of Traced Card/Cardholder/Reader events to pull from the database for display in the tracking screen on startup from 1 – 100.
6. The ACS shall permit Users to select that screens to be displayed in a Tab format (Advanced Window Control) permitting a User to quickly and easily move between screens without requiring one screen to be closed prior to moving to the next screen.
7. The ACS shall permit a User to relocate Tabs and to separate Tabs (screens) for most efficient use.
8. The ACS shall be capable of allowing a User to only work with a single Site (Segment) at a time or to work with multiple Site(s) (Segments) at the same time, as the User’s password permissions dictate.
9. The ACS shall be capable of permitting the use of “Non-Modal dialogs” via a menu selectable check box.
10. The ACS shall be capable of tracking Cardholders, Cards, or Readers in a separate Tracking Screen\Window for those items being Tracked (watched).
 - a. The ACS shall be capable of permitting a User to set the number of historical Tracking events to search for and display when the workstation is started (signed in/logged in) allowing the User to immediately view the last X (up to 100) Tracked / Watched item events without creating and running a report.

28 10 00
ACCESS CONTROL SYSTEM

- R. The ACS shall have a User selectable real time “Mustering” screen. This screen shall permit the User to select the “Ares(s)” of interest, the Refresh Interval (which will continue to update the selected area(s) of interest every X selected seconds, Omit cards not used in X hours from being shown, and Print Reports from the Mustering screen.
- T. Data Matrix and QR barcodes are supported.
- U. Access It! Universal.NET RESTful web API with API keys, available.
- V. Operating Modes, permitting real-time changes to access levels. (Operating Mode, may be modified manually using keyboard input, Operating Modes may be changed as the trigger to a Task, or be changed as a Step (result of a Task).
- Y. System shall support an email/sms text based notification functionality.
(*Must include the S-NOTIFY System Wide License)
- Z. ACS System Software Training – Must include one session of 4-hour end user application training by a factory certified technician. Sessions to be scheduled within 4 weeks upon final completion of the project.

28.14.00 Access Control System Hardware:

- 28.14.11 The ACS shall communicate with, monitor, and use open architecture System Control Processor (SCPs), which shall support 64 controlled openings per, LP – 1502, LP – 2500, LP – 4502 & LP 1501. The LP-1501 (SCP) shall support a total of 17 openings. The ACS shall be capable of communicating with a minimum of 1,000 SCPs concurrently for a minimum of 64,000 controlled openings. The ACS shall not employ reader licenses which limit the number of Readers the ACS shall control. The ACS shall be capable of communicating with the SCPs using Hardwire (direct RS-232, or RS-485), Dialup modem, and TCP/IP network communications. Each SCP shall be capable of maintaining in its memory a Real-time clock, 256 Holidays, 128 TimeZones each having 12 start\stop Time Intervals, 32,000 Access Levels, 256 Tasks (predefined routines with 256 steps per Task), 16 Card Formats (up to 19 digit card codes, 16 Facility codes, supports Open Supervised Device Protocol (OSDP) multi-drop support with series 3 Mercury hardware, supports Anti-Passback (areas, hard, soft, timed, nested), occupancy count rules, device configurations for the devices (Readers, Inputs, Outputs) controlled by the SCP, and a minimum of 50,000 event transactions if the SCP is unable to communicate to the ACS, the SCP stores Card numbers for entry decisions.
- 28.14.12 The ACS shall communicate with, monitor, and use open architecture System Control Processor BRIDGE Products from HID. These Bridge products will aide in the migration from legacy proprietary hardware/software platforms currently deployed.

28 10 00
ACCESS CONTROL SYSTEM

- 28.14.13 System Input Output (SIO), such as the MR-50 single (opening) reader interface, MR-52 dual opening or single opening with in out reader interface control, and MR-51E single opening control supports dual readers for IN \ OUT control or the Series 3 MR-50, MR-52, MR-62e.

(*System shall utilize the MS Series Hardware for legacy system replacement where applicable)
- 28.14.14 System shall have the ability to make individual reader(s) beep when the reader has a forced/held/pre-alarm state, via a selectable check box.
- 20.14.15 The ability to designate a Responsible person on the Auditing screen, and display that column on the readers grid.
- 28.14.16 System Input Output (SIO), 16 dry contact Input modules with 2 Form C output relays, and 16 form C relay Output modules, such as the MR-16IN, or the MR-16OUT or the series 3 MR-16IN, MR 16-OUT, SIO devices.

(*System shall utilize the MS Series Hardware for legacy system replacement where applicable)
- 28.14.17 The ACS shall also have the capability to integrate \ communicate with wireless \ IP locksets, Intrusion Systems, and Biometrics.
- 28.14.18 The ACS shall be capable of utilizing PVC/Composite badge printer having a Windows compliant \ capable Windows Driver for the Operating System being utilized for the ACS Workstation Software. The ACS shall utilize standard Dot Matrix, Laser, and Ink jet printers for report purposes having a Windows Driver for the workstation the printer is connected to.

28.15.00 Access Control Hardware Devices:

- 28.15.11 WaveLynx, Farpoint, Salto Mifare/Desfire
- 28.15.13 Smart Cards (13.56MHz) and Mobile Credential

28.16.00 Access Control Interfaces:

- 28.16.15 Video Surveillance Interfaces:
- A. The ACS shall be capable of having the following integration interfaces at a minimum.
1. CCTV – The ACS shall have the ability to send an ASCII command via RS-232 to a video switcher.

28 10 00
ACCESS CONTROL SYSTEM

2. DVR / NVR – The ACS shall have the ability to have an interface to authorized DVR / NVR units listed below, to pull live video or recorded video to the ACS. The ACS shall not store or manipulate the video, the ACS shall only request the video stream, in order to maintain any watermarking, and or chain of custody for legal uses.
3. American Dynamics
4. Avigilon (Avigilon Control Center version Client\Server v.7.x)
5. Digital Watchdog (Digital Watchdog Spectrum 2.5 and up)
6. eXacq (eXacqVision Enterprise VMS-Hybrid Z Server/Client 8.8)
7. VideoInsight

28.17.00 Access Control Identification Management System:

The ACS shall have a seamlessly integrated ID Management System module capable of producing PVC credentials.

- A. The ACS ID Management System module shall use the same SQL database as the ACS.
- B. There shall be a minimum of 32 User Definable database fields for Cardholder Credential purposes. The ACS ID Management module shall have the capability to add an unlimited number of additional User Definable fields to the database.
- C. Each ACS ID Management module, User definable field shall be capable of being a Text field, Pull down list field, Date Combo field, or Text field with Required entry.
- D. The ACS ID Management module shall have the capability to capture Photo's from a web (USB) camera having a suitable windows driver, a camera or scanner with a TWAIN interface, import images from BMP, JPG, JPEG, GIF, and PNG file types.
- E. The ACS ID Management module shall have the capacity to have an unlimited number of Badge forms (templates). Badge forms (templates) may contain graphics, any and all Cardholder data fields, static text, photo (image), and may contain those items only when specific criteria is met as defined using a "IF" statement. Fields shall be capable of being printed as a Barcode when the Badge Type (template) is printed or viewed.
- F. The ACS shall be capable of integrating with the following Visitor Management Systems.
 1. STOPware

28 10 00
ACCESS CONTROL SYSTEM

2. HID - EasyLobby
3. SPLAN
4. SoloInsight
5. Savance