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ADDENDUM

Date:	May 30, 2018
Addendum No:	02
Project:	LDS Sandy FM Group Crescent 1, 16 & 24
Project Location:	275 East 10600 South
Owner:	Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints A Utah corporation sole. Sandy FM Group 625 East 8400 South, Ste. A Sandy, UT
Architect:	Douglas Oldham 2264 North 390 East Provo, UT
Project Number:	517-9971
This addendum forms a part of the Contract Documents and modifies the original Bidding Documents and/or prior Addenda as noted below. All conditions, requirements, materials and workmanship are to be as described in the Contract Documents unless specifically stated otherwise.	

The following items are revisions to the drawings and/or specifications as owner directed changes or corrections to the previously submitted drawings

NARRATIVE:

Addition of specification section 08 4113 – ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

REVISIONS TO SPECIFICATIONS:

1. Add section 08 4113 – ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

SECTION 08 4113**ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS****PART 1 - GENERAL****1.1 SUMMARY**

- A. Includes But Not Limited To:
1. Furnish and install aluminum storefront entry and window systems, including hardware, glazing, and caulking, as described in Contract Documents and including the following:
 - a. Low energy swinging operators for ADA compliance.
- B. Related Requirements:
1. Section 01 1100: 'Summary Of Work' for cores for High Security Cylinders are excluded from Contract and provided by Owner. This specification establishes quality of materials and installation of those items for information of Contractor, Architect, and Owner's Representatives.
 2. Section 06 1100: 'Wood Framing':
 - a. Pre-installation conference held jointly with Section 08 4113.
 3. Section 07 9213: 'Elastomeric Joint Sealant' for quality of sealants.
 4. Section 08 7103: 'Securing Devices' for furnishing of locking cylinders.
 5. Section 08 8100: 'Glass Glazing' for quality of glass glazing.
 6. Division 26: 'Electrical' for power source, raceway, boxes, wiring for controls and operator.

1.2 REFERENCES

- A. Association Publications:
1. American Architectural Manufacturers Association (AAMA):
 - a. AAMA SFM 1-14, 'Aluminum Store Front and Entrance Manual'.
 - b. AAMA 501-15, 'Methods of Test for Exterior Walls'.
 - c. AAMA 609 & 610-15, 'Cleaning and Maintenance Guide for Architecturally Finished Aluminum' (combined documents).
 - d. AAMA 611-14, 'Voluntary Standards for Anodized Architectural Aluminum'.
 - e. AAMA 2605-17, 'Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels'.
- B. Definitions:
1. Glass Surface:
 - a. Insulated glass unit:
 - 1) Surface 1: Exterior surface of outer lite.
 - 2) Surface 2: Interspace-facing surface of outer lite.
 - 3) Surface 3: Interspace-facing surface of inner lite.
 - 4) Surface 4: Interior surface of inner lite.
 - b. Monolithic glass:
 - 1) Surface 1: Exterior surface.
 - 2) Surface 2: Interior surface.
- C. Reference Standards:
1. American National Standards Institute / Builders Hardware Manufacturers Association:
 - a. ANSI/BHMA A156.19-2013, 'Power Assist & Low Energy Operated Doors'.
 2. ASTM International:
 - a. ASTM B221-14, 'Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes'.
 - b. ASTM B456-17, 'Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium'.

- c. ASTM B633-15, 'Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel'.
- d. ASTM C920-14a, 'Standard Specification for Elastomeric Joint Sealants'.
- e. ASTM C1184-14, 'Standard Specification for Structural Silicone Sealants'.
- f. ASTM E283-04(2012), 'Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen'.
- g. ASTM E330/E330M-14, 'Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference'.
- h. ASTM E331-00(2016), 'Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference'.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Conference:
 - 1. Participate in MANDATORY pre-installation conference as specified in Section 06 1100.
 - a. Schedule pre-installation conference one (1) week before scheduled installation of storefront system.
 - b. In addition to requirements of Section 01 3100, review following:
 - 1) Review rough opening requirements:
 - a) Make certain rough openings are within tolerances required for installation of factory-fabricated frames.
 - b) These dimensions have been agreed upon between Owner and Manufacturer and are shown on Standard Plan Drawings.
 - 2) Review rough opening requirements:
 - a) Existing Building:
 - (1) Field verify rough openings before fabrication of storefront entrances.
 - 3) Review installation scheduling, coordination, placement of doors.
 - 4) Review low-energy door operator location and requirements.
 - 5) Review delivery, storage, and handling requirements.
 - 6) Review 'Examination' requirements before sliding door installation.
 - 7) Review 'Finish' door and hardware requirements.
 - 8) Review 'Protection' responsibilities.
 - 9) Review 'Cleaning' responsibilities.

1.4 SUBMITTALS

- A. Action Submittals:
 - 1. Product Data:
 - a. Manufacturer's literature.
 - 1) Storefront entry system.
 - 2) Low-energy door operator.
 - b. Color and finish.
 - 2. Shop Drawings:
 - a. Clearly mark components to identify their location in Project.
 - b. Show locations, sizes, etc, of hardware reinforcing.
- B. Informational Submittals:
 - 1. Qualification Statement:
 - a. Installer:
 - 1) Provide Qualification documentation if requested by Architect or Owner.
- C. Closeout Submittals:
 - 1. Include following in Operations And Maintenance Manual specified in Section 01 7800:
 - a. Operations and Maintenance Data:
 - 1) Maintenance, adjustment, and repair instructions.
 - b. Warranty Documentation:

- 1) Final, executed copy of Warranty.
 - a) Storefront warranty.
 - b) Storefront closers.
 - c) Low-energy door operator.
- c. Record Documentation:
 - 1) Manufacturers documentation:
 - a) Manufacturer's literature or cut sheets for storefront system and for each item of hardware.
 - b) Manufacturer's literature of cut sheets for low-energy door operators.
 - c) Color and finish selections.
 - d) Parts lists.

1.5 QUALITY ASSURANCE

- A. Regulatory Agency Sustainability Approvals:
 1. Storefront System Performance Requirements:
 - a. Provide test reports from AAMA accredited laboratories certifying performances if requested:
 - 1) Air Leakage: Meet requirements of ASTM E283.
 - 2) Limit air leakage through assembly to **0.06 CFM/min/sq ft (.00003 m3/sm2)** of wall area at **6.24 PSF (300 Pa)** as measured in accordance with ASTM E283.
 - 3) Water Resistance: No water leakage when measured in accordance with ASTM E331 with static test pressure of **8PSF (384 Pa)** as defined by AAMA 501.
 - 4) Dynamic Water Resistance: No water leakage, when measured in accordance with AAMA 501 with dynamic test pressure of **8 PSF (384 Pa)**.
 - 5) Limit mullion wind load deflection of L/175 with full recovery of glazing materials, when measured in accordance with ASTM E330/E330M.
 - 6) System shall not deflect more than **1/8 inch (3 mm)** at center point, or **1/16 inch (1.58 mm)** at enter point of horizontal member, once dead load points have been established.
 - 7) System shall accommodate expansion and contraction movement due to surface temperature differential of **180 deg F (82 deg C)**.
 - 8) Seismic testing shall conform to AAMA recommended static test method for evaluating performance of curtain walls and storefront wall systems due to horizontal displacements associated with seismic movements and building sway.
 2. Provide wind load and impact testing by testing laboratory when required by local codes and jurisdictions:
- B. Qualifications: Requirements of Section 01 4301 applies, but not limited to following:
 1. Manufacturer Qualifications:
 - a. Provide aluminum entrances and storefront systems produced by firm experienced in manufacturing systems that are similar to those indicated for this project and have record of successful in-service performance.
 2. Fabricator Qualifications:
 - a. Provide aluminum entrances and storefront systems fabricated by a firm experienced in producing systems that are similar to those indicated for this Project, and have record of successful in-service performance.
 - b. Fabricator shall have sufficient production capacity to produce components required without causing delay in progress of the Work.
 3. Installer Qualifications:
 - a. Minimum three (3) years experience in storefront installations.
 - b. Minimum five (5) satisfactorily completed projects of comparable quality, similar size, and complexity in past three (3) years before bidding.
 - c. Upon request, submit documentation.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery And Acceptance Requirements:

1. Deliver all parts of door, together with hardware, in original, unopened packages with labels intact to Project at same time.
- B. Storage And Handling Requirements:
1. Store in clean, dry location, indoors in Manufacturer's unopened packaging until ready for installation and in accordance with Manufacturer's instructions.
 2. Stack framing components in a manner that will prevent bending and avoid significant or permanent damage.
 3. Protect materials and finish from damage during storage, handling and installation.

1.7 WARRANTY

- A. Manufacturer Warranty:
1. Storefront Entrances:
 - a. Manufacturer's Warranty to be free of defects in material and workmanship.
 - b. Manufacturer's Warranty against deterioration or fading.
 - c. Manufacturer's Lifetime Warranty for Door Construction for normal use.
 2. Closers:
 - a. Closer Manufacturer's standard warranty, 10 years minimum.
 3. Low-Energy Door Operator:
 - a. Manufacturer's standard warranty.

PART 2 - PRODUCTS

2.1 ASSEMBLIES

- A. Manufacturers:
1. Category One VMR Approved Manufacturers. See Section 01 6200 for definitions of Categories:
 - a. Arcadia Inc., Vernon CA www.arcadiainc.com.
 - 1) Contact Information: Ken Martinek, (602) 734-5327 kmartinek@arcadiainc.com.
 - b. Kawneer North America, Norcross, GA, www.kawneer.com/kawneer/north_america.
 - 1) Contact Information: Bart Daniels cell (385) 214-4650 bart.daniels@alcoa.com.
- B. General:
1. In addition to requirements shown or specified, comply with:
 - a. Applicable provisions of AAMA SFM 1, 'Aluminum Store Front and Entrance Manual' for design, materials, fabrication and installation of component parts.
- C. Design Criteria:
1. Storefront System suitable for outside or inside glazing.
- D. Materials:
1. Framing Components and Accessories:
 - a. Aluminum Extrusions:
 - 1) 6063-T6 aluminum alloy or meet requirements of ASTM B221, alloy GS 10a T6.
 - 2) Anchors, Clips, and Accessories:
 - a) Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated (properly isolated steel from aluminum).
 - 3) Fasteners:
 - a) Aluminum, nonmagnetic stainless steel or other materials to be non-corrosive and compatible with aluminum window members, trim hardware, anchors, and other components.
 - 4) Glazing Gasket:
 - a) Compression-type design with replaceable extruded EPDM rubber.

- 5) Reinforcing Members:
 - a) Aluminum, nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.
 - 6) Sills:
 - a) Match height of door bottoms.
 - 7) Sealant:
 - a) Structural Sealant meeting requirements of ASTM C1184 for fabrication within storefront system:
 - (1) Permanently elastic, non-shrinking, and non-migrating type for joint size and movement.
 - (2) Single-component neutral-curing silicone formulation compatible with system components specifically formulated and tested for use as structural sealant and approved by structural-sealant manufacturer for use in aluminum-framed systems indicated.
 - (3) Color: Black.
 - b) Joint Sealants used at perimeter of storefront framing system: Elastomeric Sealant as specified in Section 07 9213.
 - c) Provide sealants for use inside of the weatherproofing system that have a VOC content of 250 g/L or less when required by local codes or AHJ.
 - 8) Tolerances:
 - a) Tolerances for wall thickness and other cross-sectional dimensions of storefront members in compliance with AA Aluminum Standards and Data.
 - b. Storefront Framing System:
 - 1) Brackets and Reinforcements:
 - a) Manufacturer's standard high-strength aluminum with non-staining, nonferrous shims for aligning system components.
 - 2) Fasteners and Accessories:
 - a) Manufacturer's standard corrosion-resistant, non-staining, non-bleeding fasteners and accessories compatible with adjacent materials.
 - 3) Perimeter Anchors:
 - a) When steel anchors are used, provide insulation between steel material and aluminum material to prevent galvanic action.
 - c. Finish:
 - 1) Match doors.
 - d. Category Four Approved Products. See Section 01 6200 for definitions of Categories:
 - 1) Non-Thermal, **2 inch (50 mm)** Sightline:
 - a) Double Stack header at exterior doors only if shown on Contract Drawings.
 - b) Single Glazed:
 - (1) AR450 by Arcadia.
 - (2) Trifab VG 450 by Kawneer.
 - c) Double Glazed:
 - (1) AG451 by Arcadia.
 - (2) Trifab VG 451 by Kawneer.
2. Manually Operated Doors:
 - a. Aluminum:
 - 1) 6063-T6 aluminum alloy or meet requirements of ASTM B221, alloy GS 10a T6.
 - b. Stiles:
 - 1) **3-1/2 inches by 1-3/4 inches by 0.125 inches (89 mm by 45 mm by 3.175 mm)** thick nominal.
 - c. Top Rails:
 - 1) **3-1/2 inches minimum by 1-3/4 inches by 0.125 inches (89 mm minimum by 45 mm by 3.175 mm)** thick nominal.
 - d. Bottom Rails:
 - 1) **10 inches minimum by 1-3/4 inches by 0.125 inches (254 mm minimum by 45 mm by 3.175 mm)** thick nominal.
 - e. Construction:
 - 1) Manufacturer's standard.

- f. Glazing Stops:
 - 1) Snap-in type with neoprene bulb-type glazing. Units shall be glazed from exterior side.
 - g. Weatherstripping:
 - 1) Neoprene bulb-type.
 - 2) Category Four Approved Products. See Section 01 6200 for definitions of Categories:
 - a) Peri-Plus Seal (PPS) by Arcadia.
 - b) Sealair by Kawneer.
 - h. Framing System Gaskets and Sealants:
 - 1) Manufacturer's standard, recommended by manufacturer for joint type:
 - 2) Sealants: As specified in Framing Components and Accessories.
 - i. Factory Finishing:
 - 1) Dark Bronze Finish (match existing):
 - a) Class I Color Anodic Finish: AA-M12C22A42/44 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; integrally colored or electrolytically deposited color coating 0.70 mils (0.01778 mm) or thicker), complying with AAMA 611.
3. Glazing:
- a. Glazing as specified in Section 08 8100: 'Glass Glazing'.
 - b. Glazing Gaskets:
 - 1) Compression-type design with replaceable extruded EPDM rubber.
 - c. Spacers and Setting Blocks: Elastomeric.
 - d. Bond-Breaker (Sealer) Tape: Standard TFE-fluorocarbon or polyethylene material to which sealants will not develop adhesion.
 - e. Glazing Sealant:
 - 1) Structural Sealant meeting requirements of ASTM C1184:
 - a) Permanently elastic, non-shrinking, and non-migrating type for joint size and movement.
 - b) Single-component neutral-curing silicone formulation compatible with system components specifically formulated and tested for use as structural sealant and approved by structural-sealant manufacturer for use in aluminum-framed systems indicated.
 - c) Color: Black.
 - 2) Weather Sealant:
 - a) ASTM C 920 for Type S, Grade NS, Class 25, Uses NT, G, A, and O; single-component neutral-curing formulation that is compatible with structural sealant and other system components with which it comes in contact; recommended by structural-sealant, weather seal sealant, and aluminum-framed-system manufacturers for this use.
 - b) Color: Match structural sealant.
 - 3) Provide sealants for use inside of the weatherproofing system that have a VOC content of 250 g/L or less when required by local codes or AHJ.
4. Hardware:
- a. Hinging:
 - 1) Top and bottom offset, ball bearing pivots per door leaf.
 - b. Exit Devices:
 - 1) Entry Doors:
 - a) Operation:
 - (1) Entry shall be by key. Device shall be locked by cylinder from outside. Key shall be removable when cylinder is in locked or unlocked position.
 - (2) Dogging operation shall be by manufacturer's accessible thumbturn cylinder function.
 - (3) Exterior Trim: Lever Handle or Pull equal to Kawneer CO-9 or Arcadia OPR-9.
 - (4) Types: Rim Type. Provide type of strike that will allow installation of specified panic devices on storefront system specified.
 - 2) Color:
 - a) Equivalent to medium bronze anodized.
 - 3) Category Four Approved Products. See Section 01 6200 for definitions of Categories:
 - a) Apex Series by Precision.
 - b) 80 Series by Sargent.

- c) 98 or 99 Rim Series by Von Duprin.
- c. Thresholds:
 - 1) Exterior:
 - a) Design Criteria: Meet handicap accessibility requirements.
 - b) Exterior to Carpet Tile: Similar to Pemko 273 Profile.
 - 2) Interior:
 - a) Design Criteria: Meet handicap accessibility requirements.
 - b) Carpet Tile / Carpet to Carpet: Similar to Pemko 236.
- d. Sweep Strips:
 - 1) Class Two Quality Standard:
 - a) Entrance Manufacturer's standard (cover cap with no exposed fasteners).
 - b) Pemko 293100 N8.
- e. Push / Pulls:
 - 1) Category Four Approved Products. See Section 01 6200 for definitions of Categories:
 - a) PBR and OPR-9 by Arcadia.
 - b) Kawneer CP and CO-9, medium bronze (match existing) anodized.
- f. High Security Cylinders And Cores (verify with owner: either new cores provided by owner to be as follows are to match existing):
 - 1) ASSA Instacores with LDS-62 profile key system:
 - a) Church And Factory Authorized Distributor:
 - (1) Clark Security Products, 135 West 2950 South, Salt Lake City, UT.
 - (a) Local: (801) 487-3227.
 - (b) Other: (800) 453-6430.
 - (c) FAX: (801) 487-3254.
 - 2) Medeco cores with Level Six HUK-IC keying system with special Church keyway:
 - a) Church And Factory Authorized Distributors:
 - (1) Intermountain Lock & Supply Co, 3106 South Main, Salt Lake City, UT:
 - (a) Utah: (801) 486-0079.
 - (b) Other: (800) 453-5386.
 - (c) FAX: (801) 485-7205.
 - (2) Clark Security Products, 135 West 2950 South, Salt Lake City, UT.
 - (a) Local: (801) 487-3227.
 - (b) Other: (800) 453-6430.
 - (c) FAX: (801) 487-3254.
 - 3) Schlage cores with Primus Level 4+ keying system with special Church side bit milling:
 - a) Church And Factory Authorized USA Distributors:
 - (1) Architectural Building Supply, P O Box 65678, Salt Lake City, UT 84165-0678 or 2965 South Main St, Salt Lake City, UT 84115.
 - (a) (801) 486-3481.
 - (b) FAX: (801) 484-6817.
- g. Kick Plates:
 - 1) Push side of Door only.
 - 2) 10 inches (254 mm) high by width of door less 3/4 inch (19 mm) on each side.
 - 3) Material: 0.050 inch (1.27 mm) thick Stainless Steel.
 - 4) Type Two Acceptable Manufacturers:
 - a) Glynn-Johnson, Indianapolis, IN www.glynn-johnson.com.
 - b) Hager, St Louis, MO (800) 255-3590 or (314) 772-4400 www.hagerhinge.com.
 - c) Ives, Wallingford, CT www.iveshardware.com.
 - d) Rockwood Manufacturing Co, Rockwood, PA www.rockwoodmfg.com.
 - e) Equal as approved by Architect before bidding. See Section 01 6200.

E. Fabrication:

- 1. Construction shall meet Manufacturer's recommendations.
- 2. Fabricate components that, when assembled, have following characteristics:
 - a. Profiles sharp, straight, and free of defects or deformations.
 - b. Accurately fit joints; make joints flush, hairline and weatherproof.
 - c. Means to drain water passing joints, condensation within framing members, and moisture migrating within system to exterior.
 - d. Physical and thermal isolation of glazing from framing members.

- e. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
 - f. Provisions for field replacement of glazing.
 - g. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
 - h. Framing members shall be internally reinforced and secured at head and sill as necessary for structural performance requirements and for hardware attachment.
3. Fabricate in factory to dimensions required to fit framed openings detailed on Contract Documents. Joints shall be tightly closed.
 4. Mortise in manner to give maximum hardware-door connection strength and neatness of appearance. Adequately reinforce with back plates or rivnuts to hold pivots and closers.
 5. Mechanically Glazed Framing Members: Fabricate for flush glazing without projecting stops.
 6. Structural-Sealant-Glazed Framing Members: Include accommodations for using temporary support device to retain glazing in place while structural sealant cures.
 7. Storefront Framing: Fabricate components for assembly using manufactures standard installation instructions.
 8. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.
- F. Hardware Finishes:
1. Finishes for steel, brass, or bronze hardware items shall match existing.
 2. Materials other than steel, brass, or bronze shall be finished to match the appearance of satin chromium plated.

PART 3 - EXECUTION

3.1 INSTALLERS

- A. Performance Standard Installers: See Section 01 6200 for definitions of Categories. See Section 01 4301 and 'Quality Assurance' in Part 1 'General' for Installer Qualifications of this specification:
1. General Contractor responsible for Installer(s), verification of qualifications, and performance. Contact VMR Approved Manufacturer's Representative specified in Part 2 'Products' of this specification for potential installers if desired.

3.2 EXAMINATION

- A. Verification Of Conditions:
1. Verify that framed openings comply with Contract Document requirements.
 2. Verify floor is level across entire width of automatic door opening.
 3. Verify sill conditions are level and/or sloped away from openings as specified.
 4. Verify wall framing is dry, clean, sound, and free of voids and offsets, construction debris, sharp edges or anything that will prevent a successful installation of storefront system.
 5. Notify Architect and Owner in writing if framed openings are not as agreed upon.
 - a. Do not install storefront entry and window frames until deficiencies in framed openings have been corrected to allow installation of standard entries and windows.
 - b. Commencement of Work by installer is considered acceptance of substrate.

3.3 INSTALLATION

- A. General:
1. Installation shall meet or exceed all applicable federal, state and local requirements, referenced standards and conform to codes and ordinances of authorities having jurisdiction.
 2. All installation shall be in accordance with manufacturer's published recommendations and in accordance with approved shop drawings.

3. Do not install damaged components. Fit frame joints tight, free of burrs and distortion. Rigidly secure non-movement joints.
 4. Isolate metal surfaces in contact with incompatible metal or corrosive substrates, including wood, by applying sealer tape to prevent electrolytic action.
- B. Set plumb, square, level, and in correct alignment and securely anchor to following tolerances:
1. Variation from plane: Limit to **1/8 inch (3 mm)** in **12 feet (3.6 meters)**; **1/4 inch (6 mm)** over total length.
 2. Offset from Alignment: For surfaces abutting in line, limit offset to **1/16 inch (1.6 mm)**.
 3. Offset at Corners: For surfaces meeting at corner, limit offset to **1/32 inch (0.8 mm)**.
 4. Diagonal measurements: Limit difference between diagonal measurements to **1/8 inch (3 mm)**.
- C. Install doors without warp or rack. Adjust doors and hardware to provide ninety (90) degree operation, tight fit at contact points and smooth operation.
- D. Install exterior window units with through wall sill flashing.
- E. Thresholds:
1. Accurately cut thresholds to fit profile of storefront frame. Bed exterior thresholds in specified sealant at contact points with floor and make watertight.
- F. Sealants:
1. Apply in accordance with Section 07 9213 'Elastomeric Joint Sealant' requirements.
 2. Caulk joints between frames and walls, both interior and exterior to provide weather tight installation.
- G. Glazing Characteristics:
1. Interior Vestibule Glazing: Clear.
 2. Exterior Storefront Doors And Sidelights Opening Into Foyers And Corridors:
 - a. Clear interior pane and Clear exterior pane with Low E treatment on surface 2.

3.4 FIELD QUALITY CONTROL

- A. Field Tests And Inspections:
1. Pull test doors, especially pairs of single doors separated by permanent mullions, to ensure security of opening.
 2. Make all necessary final adjustments to attain normal operation of each door and its mechanical hardware.
- B. Non-Conforming Work: Non-conforming work as covered in the General Conditions applies, but is not limited to the following:
1. Correct any work found defective or not complying with contract document requirements including removal and replacement of glass that has been broken, chipped, cracked, abraded, or damaged during construction period at no additional cost to the Owner.

3.5 ADJUSTING

- A. Adjust swing doors for proper operation after glazing entry. After repeated operation of completed installation, re-adjust door for optimum operating condition and safety if required.

3.6 PROTECTION

- A. During Installation:
1. Installer's Responsibility:
 - a. During installation, all adjacent work shall be protected from damage.

- B. After Installation:
 - 1. General Contractor's Responsibility:
 - a. Institute protective measures required throughout remainder of construction period to ensure that aluminum entrances and storefronts will be without damage or deterioration, other than normal weathering, at time of acceptance.

3.7 CLEANING

- A. General:
 - 1. Installer's Responsibility:
 - a. Follow Manufacturer's written recommendations for cleaning and maintenance or guidelines of AAMA 609 & 610 'Cleaning and Maintenance Guide for Architecturally Finished Aluminum' (combined documents). Avoid damaging protective coatings and finishes.
 - b. Clean glass and aluminum surfaces, inside and out, promptly after installation. Remove excess glazing and sealant compounds, dirt, and other substances. Exercise care to avoid damage to coatings.
 - c. Remove nonpermanent labels, protective films, and clean surfaces following recommended procedures.
 - 1) Do NOT remove permanent AAMA/CSA or NFRC labels.
- B. Waste Management:
 - 1. Upon completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION