ADDENDUM NUMBER 4

ISSUED Sept 16, 2010

To the CONTRACT DOCUMENTS for:

WASHINGTON COUNTY SERVICE AUTHORITY
MIDDLE FORK WTP UPGRADE TO 12 MGD

Prepared by: Olver - A CHA Company
1116 South Main Street
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Olver Project No.: 12367.13

The following revisions, additions, and clarifications are hereby made part of the Contract Documents and Technical Specifications for the above-referenced project and shall be taken into account in the preparation of all bids and the execution of all Work. Bidders shall acknowledge receipt of the addendum in the appropriate space on the Bid Form.

GENERAL REVISIONS AND CLARIFICATIONS:

Ad1-1 **Note the bid opening date is Tuesday, September 21, 2010 and not on Thursday as noted in addendum number 3.**

Ad1-2 **On plan sheet C102R in the storm structure schedule, delete structure # 7 and revise all area inlets to DI-1 type inlets.**

Ad1-3 **An Asbestos and Lead Based Paint Inspection Report is available for reference.**

Ad1-4 **On plan sheet C102R several steps are shown along the sidewalks of the Intermediate Booster Pump Station and the Chemical Feed Building. Provide steps at these locations noted meeting the detail requirements shown on sheet C001 and addendum number 2.**

Ad1-5 **The existing retaining wall at the northwest corner of the existing filter building is to remain.**

Ad1-6 **Sheet A140, Sheet A170** Ceramic tile as indicated in finish schedule is to 6'-0" AFF, typical.

Ad1-7 **Sheet A142:** Contractor to provide one under counter dishwasher in location indicated. Model #: Labconco Steam Scrubber Model # 6921-08A or equal.

Ad1-8 **Sheet A142:** Contractor to provide one 30" stainless steel cooktop range in location indicated. Model # Samsung FE-N300 30in. Induction Cooktop Range or equal.

Ad1-9 **Sheet A160**, Delete column 'HDW'. See Builders Hardware Schedule revisions below.

Ad1-10 **Sheet A220:** Contractor to provide laminated dock bumpers as indicated. Provide (2) 6" x 12" x 36" at door #38.

Ad1-11 Dampproofing per **specification section 07162** is required on exterior walls below grade, typically.

Ad1-12 **Specification section 07210 2.1 D.** Foam insulation is required at all CMU exterior walls, typically.

Ad1-13 Delete Specification Section 08411. Replace with the attached.

Ad1-14 **Add Specification section 08351 Folding Doors.** One folding door is located in the Water Treatment Plant Conference Room, Room 109.

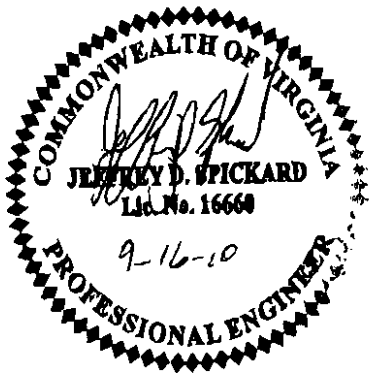
Ad1-15 Delete specification section 08800 and replace with the attached.

Ad1-16 Revise Specification section 08700 as follows:

Builders Hardware Schedule, revise all door hardware sets indicated as follows:

Set #3: Doors 06, 07, 08
Set #4: Doors 09, 11, 14, 15, 30 (WTP)
Set #5: Doors 10, 12, 13,23, 45
Set #6: Doors 16, 17, 18, 19
Set #7: Doors 04, 21, 22, 24, 25
Set #11: Doors 31 (WTP) 35, 36
Set #12: Doors 30 (Chem Feed), 31 (Chem Feed), 32, 32, 33, 34, 40, 41, 42, 43, 60

END OF ADDENDUM



Douglas B. Hudgins, P.E.
Project Manager

SECTION 08351 - FOLDING DOORS

1.1 GENERAL

A. Submittals: Submit product data and shop drawings for each folding door, samples of facing or outer covering material indicated, and door schedule that includes folding doors.

1.2 PRODUCTS

A. Accordion Folding Doors: Top-supported, horizontal-sliding, manually operated folding doors with chain controlling the spacing and extension of pantographic or X-type accordion folding frames.

1. Hufcor Series 4100 with STC rating of 40, or equal.

a. Outer Covering: Color and pattern as selected by architect. Fabric weighing not less than 16 oz. per linear yard, treated to resist stains.

2. Tracks: Extruded-aluminum or steel track with factory-applied, corrosion-resistant finish; recessed or surface-mounted channel track as indicated.
3. Hardware: Manufacturer's standard heavy-duty, manually operated clear-anodized aluminum pulls and latches.
4. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Hufcor, Inc.
b. Modernfold, Inc.
c. Holcomb & Hoke Mfg. Co., Inc. (FolDoor)

1.3 EXECUTION

A. Installation: Comply with manufacturer's printed installation instructions. Install track in one piece. Provide 1/4- to 3/4-inch maximum clearance above floor finish.

B. Adjust units as necessary to ensure smooth, quiet operation without warping or binding. Check and readjust operating hardware so that latches engage accurately and securely without forcing or binding.

END OF SECTION 08351

SECTION 08411 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Exterior and interior aluminum-framed storefronts.

a. Glazing is retained mechanically with gaskets on four sides

2. Exterior and interior manual-swing aluminum doors.
3. Exterior and interior aluminum door frames.

1.2 PERFORMANCE REQUIREMENTS

A. General: Provide aluminum-framed systems, including anchorage, capable of withstanding, without failure, the effects of the following:

1. Structural loads.
2. Thermal movements.
3. Movements of supporting structure indicated on Drawings including, but not limited to, story drift and deflection from uniformly distributed and concentrated live loads.
4. Dimensional tolerances of building frame and other adjacent construction.
5. Failure includes the following:

a. Deflection exceeding specified limits.
b. Thermal stresses transferred to building structure.
c. Framing members transferring stresses, including those caused by thermal and structural movements, to glazing.
d. Glazing-to-glazing contact.
e. Noise or vibration created by wind and thermal and structural movements.
f. Loosening or weakening of fasteners, attachments, and other components.
g. Sealant failure.
h. Failure of operating units to function properly.

B. Structural Loads:

1. Refer to structural Drawings.

C. Temperature Change (Range): Systems accommodate 120 deg F, ambient; 180 deg F, material surfaces.

D. Water Penetration Under Static Pressure: Systems do not evidence water penetration through fixed glazing and framing areas when tested according to ASTM E 331 at a minimum static-air-pressure difference of 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft. (300 Pa).

E. Condensation Resistance: Fixed glazing and framing areas of systems have condensation-resistance factor (CRF) of not less than 53 when tested according to AAMA 1503.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

1. Include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
2. For entrances, include hardware schedule and indicate operating hardware types, functions, quantities, and locations.

C. Samples: For each exposed finish.

D. Preconstruction Sealant Test Reports: For structural-sealant-glazed systems.

E. Product test reports.

F. Field quality-control test and inspection reports.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Acceptable to manufacturer and capable of preparation of data for aluminum-framed systems including Shop Drawings based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.

1.5 WARRANTY

A. Special Assembly Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of aluminum-framed systems that do not comply with requirements or that deteriorate as defined in this Section within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Structural failures including, but not limited to, excessive deflection.
b. Noise or vibration caused by thermal movements.
c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
d. Adhesive or cohesive sealant failures.
e. Water leakage through fixed glazing and framing areas.
f. Failure of operating components to function properly.

2. Warranty Period: Five years from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components on which finishes fail within specified warranty period. Warranty does not include normal weathering.

1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

C. Basis-of-Design Product: The design for aluminum-framed systems **for doors 01, 20 and 26** is based on Kawneer TriFab451 T thermally broken system. For interior **doors 02, 03 and 05** it is Kawneer TriFab 450 non thermal system. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
1. EFCO Corporation.
2. Kawneer.
3. Tubelite Inc.
4. Vistawall Architectural Products.
5. YKK AP America Inc.

2.2 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

1. Sheet and Plate: ASTM B 209 (ASTM B 209M).
2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221 (ASTM B 221M).
3. Extruded Structural Pipe and Tubes: ASTM B 429.
4. Structural Profiles: ASTM B 308/B 308M.

B. Steel Reinforcement: With manufacturer's standard corrosion-resistant primer.

1. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M.
2. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M.
3. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

2.3 FRAMING SYSTEMS

A. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.

1. Construction: Framing members are composite assemblies of two separate extruded-aluminum components permanently bonded by an elastomeric material of low thermal conductance.

B. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.

C. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.

1. Where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration, use self-locking devices.
2. Reinforce members as required to receive fastener threads.
3. Use exposed fasteners with countersunk Phillips screw heads, finished to match framing system.

D. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts complying with ASTM A 123/A 123M or ASTM A 153/A 153M requirements.

E. Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing compatible with adjacent materials. Form exposed flashing from sheet aluminum finished to match framing and of sufficient thickness to maintain a flat appearance without visible deflection.

F. Framing System Gaskets and Sealants: Manufacturer's standard recommended by manufacturer for joint type.

2.4 GLAZING SYSTEMS

A. Glazing: As specified in Division 8 Section "Glazing." Doors 01, 20 and 26 1" IG, doors 02, 30 and 05 ¼" cleartempered.

B. Glazing Gaskets: Manufacturer's standard compression types, replaceable, molded or extruded, that maintain uniform pressure and watertight seal.

C. Spacers and Setting Blocks: Manufacturer's standard elastomeric types.

D. Bond-Breaker Tape: Manufacturer's standard TFE-fluorocarbon or polyethylene material to which sealants will not develop adhesion.

2.5 DOORS

A. Doors: Manufacturer's standard glazed doors, for manual swing operation.

1. Door Construction: 1-3/4-inch overall thickness, with minimum 0.125-inch-thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deep penetration and fillet welded or that incorporate concealed tie rods.

a. Thermal Construction: High-performance plastic connectors separate aluminum members exposed to the exterior from members exposed to the interior.

2. Door Design: As indicated, Wide stile; 5-inch nominal width.

a. Accessible Doors: Smooth surfaced for width of door in area within above floor or ground plane.

3. Glazing Stops and Gaskets: Beveled, snap-on, extruded-aluminum stops and preformed gaskets.

a. Provide nonremovable glazing stops on outside of door.

2.6 DOOR HARDWARE

A. General: Provide heavy-duty units in sizes and types recommended by entrance system and hardware manufacturers for entrances and uses indicated.

B. Scheduled Door Hardware: Provide door hardware according to the Door Hardware Schedule at the end of Part 3.

1. Named Manufacturer's Products: Product designation and hardware manufacturer are listed in the Door Hardware Schedule at the end of Part 3 to establish minimum requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware.
   a. Named products are basis-of-design products. Provide named hardware manufacturer's products or comparable products that are equivalent in function and quality and that are recommended and supplied by entrance system manufacturer.

C. Cylinders: As specified in Division 8 Section "Door Hardware."

D. Cylinder Keying: Master key system. Permanently inscribe each key with a visual key control number and include notation "DO NOT DUPLICATE".

E. Strikes: Provide strike with black-plastic dust box for each latch or lock bolt; fabricated for aluminum framing.

F. Weather Stripping: Manufacturer's standard replaceable components.

1. Compression Type: Made of ASTM D 2000, molded neoprene, or ASTM D 2287, molded PVC.
2. Sliding Type: AAMA 701, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.

G. Weather Sweeps: Manufacturer's standard exterior-door bottom sweep with concealed fasteners on mounting strip.

H. Silencers: BHMA A156.16, Grade 1.

2.7 ACCESSORY MATERIALS

A. Insulating Materials: As specified in Division 7 Section "Building Insulation."

B. Joint Sealants: For installation at perimeter of aluminum-framed systems, as specified in Division 7 Section "Joint Sealants."

C. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos, formulated for 30-mil thickness per coat.

2.8 FABRICATION

A. Form aluminum shapes before finishing.

B. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.

C. Framing Members, General: Fabricate components that, when assembled, have the following characteristics:

1. Profiles that are sharp, straight, and free of defects or deformations.
2. Accurately fitted joints with ends coped or mitered.
3. Means to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.
4. Physical and thermal isolation of glazing from framing members.
5. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
6. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.

D. Mechanically Glazed Framing Members: Fabricate for flush glazing (without projecting stops).

E. Door Frames: Reinforce as required to support loads imposed by door operation and for installing hardware.

1. At exterior doors, provide compression weather stripping at fixed stops.
2. At interior doors, provide silencers at stops to prevent metal-to-metal contact. Install three silencers on strike jamb of single-door frames and two silencers on head of frames for pairs of doors.

F. Doors: Reinforce doors as required for installing hardware.

1. At pairs of exterior doors, provide sliding weather stripping retained in adjustable strip mortised into door edge.
2. At exterior doors, provide weather sweeps applied to door bottoms.

G. Hardware Installation: Factory install hardware to the greatest extent possible. Cut, drill, and tap for factory-installed hardware before applying finishes.

H. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

2.9 ALUMINUM FINISHES

A. Clear Anodic Finish: Class II, clear anodic coating complying with AAMA 611.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General:

1. Fit joints to produce hairline joints free of burrs and distortion.
2. Rigidly secure nonmovement joints.
3. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration.
4. Seal joints watertight, unless otherwise indicated.

B. 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 or installing nonconductive spacers as recommended by manufacturer for this purpose.
2. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.

C. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.

D. Set continuous sill members and flashing in full sealant bed as specified in Division 7 Section "Joint Sealants" and to produce weathertight installation.

E. Install components plumb and true in alignment with established lines and grades, without warp or rack.

F. Install glazing as specified in Division 8 Section "Glazing."

G. Entrances: Install to produce smooth operation and tight fit at contact points.

1. Exterior Entrances: Install to produce tight fit at weather stripping and weathertight closure.
2. Field-Installed Hardware: Install surface-mounted hardware according to hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.

H. Install insulation materials as specified in Division 7 Section "Building Insulation."

I. Install perimeter joint sealants as specified in Division 7 Section "Joint Sealants" and to produce weathertight installation.

J. Erection Tolerances: Install aluminum-framed systems to comply with the following maximum tolerances:

1. Location and Plane: Limit variation from true location and plane to 1/8 inch in 12 feet; 1/4 inch over total length.
2. Alignment:

a. Where surfaces abut in line, limit offset from true alignment to 1/16 inch.

b. Where surfaces meet at corners, limit offset from true alignment to 1/32 inch.

3. Diagonal Measurements: Limit difference between diagonal measurement to 1/8 inch.

3.2 DOOR HARDWARE SCHEDULE

Door Hardware Set No. 1 Provide full weatherstripping at exterior doors
Double Door No. 1, double door 20, single door 26: each door to have the following:

1	Cylinder	By hardware supplier		
1 ea.	Closing Devices	SC61	Dor-O-Matic	
1	Thresholds	½" x 6 ¾" x width aluminum	Kawneer	US26D
1 ea.	Single Acting Push/Pulls	CO-12/CP-11	Kawneer	US26D
3	Number of butt hinges, as specified.			

Door Hardware Set No. 2
Double Door No. 2, single doors 03 and 05: each door to have the following:

1 ea.	Closing Devices	SC61	Dor-O-Matic	
1 ea.	Single Acting Push/Pulls	CO-12/CP-11	Kawneer	US26D
3	Number of butt hinges, as specified.			

END OF SECTION 08411

SECTION 08800 – GLAZING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:

1. Windows, Doors, Borrowed Lites and Side Lites.

1.3 SUBMITTALS

A. Product Data: For each glass product and glazing material indicated.

B. Glazing Schedule: Use same designations indicated on Drawings.

1.4 QUALITY ASSURANCE

A. Safety Glazing Products: Comply with testing requirements in 16 CFR 1201 and, for wired glass, ANSI Z97.1.

B. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.

1. IGMA Publication for Insulating Glass: SIGMA TM-3000, "Glazing Guidelines for Sealed Insulating Glass Units."

C. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of the Insulating Glass Certification Council.

1.5 WARRANTY

A. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form, made out to Owner and signed by insulating-glass manufacturer agreeing to replace insulating-glass units that deteriorate as defined in "Definitions" Article, f.o.b. the nearest shipping point to Project site, within specified warranty period indicated below.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GLASS PRODUCTS

A. Annealed Float Glass: ASTM C 1036, Type I (transparent flat glass), Quality-Q3; of class indicated.

1. Ultra-Clear (Low-Iron) Float Glass: Class I (clear); with a minimum 91 percent visible light transmission and a minimum solar heat gain coefficient of 0.87.

B. Heat-Treated Float Glass: ASTM C 1048; Type I (transparent flat glass); Quality-Q3; of class, kind, and condition indicated. (Safety Glazing)

C. Insulating-Glass Units, General: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, and complying with ASTM E 774 for Class CBA units and with requirements specified in this Article and in Part 2 "Insulating-Glass Units" Article.

1. Overall Unit Thickness and Thickness of Each Lite: Dimensions indicated for insulating-glass units are nominal and the overall thicknesses of units are measured perpendicularly from outer surfaces of glass lites at unit's edge.
2. Sealing System: Dual seal.
3. Spacer Specifications: Manufacturer's standard spacer material and construction.

D. Wired Glass: ASTM C 1036, Type II (patterned and wired flat glass), Class 1 (clear), Quality-Q-6; and of form and mesh pattern specified.

E. Leaded Glass (radiation shielding): Leaded Glass meeting Federal Specification #DD-G-451.

2.2 GLAZING GASKETS

A. Compression Gaskets: Molded or extruded gaskets of material indicated below, complying with standards referenced with name of elastomer indicated below, and of profile and hardness required to maintain watertight seal:

1. Neoprene, ASTM C 864.

2.3 GLAZING SEALANTS

A. Elastomeric Glazing Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

1. Single-Component Neutral-Curing Silicone Glazing Sealant.

a. Type and Grade: S (single component) and NS (nonsag).
b. Class: A
c. Use Related to Exposure: NT (nontraffic).
d. Uses Related to Glazing Substrates: M, G, A, and, as applicable to glazing substrates indicated, O.

2.4 GLAZING TAPES

A. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800 for the following types:

1. Type 1, for glazing applications in which tape acts as the primary sealant.
2. Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.5 MISCELLANEOUS GLAZING MATERIALS

A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.

B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.

C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.

D. Spacers: Elastomeric blocks or continuous extrusions with a Shore, Type A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.

2.6 FABRICATION OF GLAZING UNITS

A. Fabricate glazing units in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.

2.7 GLASS UNITS

A. Low-E Insulating-Glass Unit IG-1 – Location : All Exterior storefront windows

1. 1" insulated tempered glass: ¼"– ½" – ¼".
2. Interspace Content: Argon

3. Outdoor Lite Tint Color: As selected from manufacturer's Standard Range.
   a. Low-Maintenance Coating: Pyrolytic coating on second surface.
4. Indoor Lite: ¼" (Clear)

B. Insulating-Glass Unit IG-2 – Location: All Interior Storefront windows
1. Overall Unit Thickness and Thickness of Each Lite: 1" and 6.0 mm.
2. Interspace Content: Argon

C. Tempered Safety Glass

1. Thickness of Lite: 1/4"
2. Uncoated, fully tempered float glass (Kind FT)

PART 3 - EXECUTION

3.1 GLAZING

A. General: Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.

1. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
2. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction sealant-substrate testing.
3. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
4. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
5. Provide spacers for glass lites where length plus width is larger than 50 inches.
6. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

B. Tape Glazing: Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.

C. Gasket Glazing (Dry): Fabricate compression gaskets in lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.

1. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
2. Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer. Install gaskets so they protrude past face of glazing stops.

D. Sealant Glazing (Wet): Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.

1. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
2. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.2 CLEANING AND PROTECTION

A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels, and clean surfaces. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended by glass manufacturer.

B. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.

END OF SECTION 08800