

07920.17 WARRANTY:
A. MANUFACTURER'S WARRANTY:
1. SEALANT - PROVIDE MANUFACTURER'S STANDARD FIVE (5) YEAR MATERIAL WARRANTY FOR SEALANT PRODUCTS WITH EQUAL OR SUPERIOR CHARACTERISTICS AND JOINTS IN WALLS AND WINDOWS.
B. CONTRACTOR'S WARRANTY - PROVIDE WRITTEN WARRANTY AGAINST LEAKAGE AND DEFECTS IN WORKMANSHIP FOR A PERIOD OF TWO (2) YEARS FROM DATE OF FINAL COMPLETION.

07920.22 PRODUCTS:
07920.21 MANUFACTURER:
A. THE DRAWINGS WERE PREPARED AND THIS SPECIFICATION WRITTEN ON THE BASIS OF USING THE PRODUCTS OF PECCORA CORPORATION, HARLEYSVILLE, PENNSYLVANIA.
SUCH IS INTENDED TO ESTABLISH MINIMUM QUALITY STANDARDS. NOT TO LIMIT COMPETITIVE BIDDING. PRODUCTS WITH EQUAL OR SUPERIOR CHARACTERISTICS BY OTHER MANUFACTURERS ARE ACCEPTABLE UNDER CONDITIONS OF THE SPECIFICATIONS.

07920.22 MATERIALS:
A. EXTERIOR SEALANT - POLYURETHANE SEALANT
1. SINGLE COMPONENT, NON-FLAMMABLE, NON-STAINING, NON-BLEEDING.
2. COLOR - AS SELECTED BY OWNER
3. ACCEPTABLE PRODUCTS
A. DYNATROL 1 PECCORA CORPORATION
B. SONOLASTIC NP1, SONNEBORN BUILDING PRODUCTS
C. SKRALFLEX-1A, SICA CORPORATION
Interior Sealant - Compound used throughout job, either:
1. "BC-158" one-part butyl rubber sealant; FS TT-S-001657, Type 1.
2. "AC-209" one-part acrylic latex caulk; ASTM C834-76
C. Interior Mildew Resistant Silicone Sealant (Restrooms, Kitchens, and Food Service Areas)
One-part mildew resistant silicone sealant formulated with fungicide. Intended for sealing joints with substrates subject to in-service exposure to conditions of high humidity and temperature extremes.
1. "SCS 1702 Sealant," manufactured by General Electric Co.
2. "883" manufactured by Peccora Corp.
D. Fire-resistant Joint Sealant (If required by building codes or authorities): One-part fire-stopping sealant system formulated for use in through-penetration sealing of openings, cables, conduit pipes, and penetrations through walls and floors.
1. "3M Fire Barrier Caulk CP-25" by Electrical Products Division, 3M Company.
2. "Dow Corning Fire-Stop" by Dow Corning Corporation.
E. Kitchen Exhaust Hoods to Stainless Steel Wall Panels.
1. "3M Fire Barrier" 2000
F. Primer - Non-staining type, recommended by sealant manufacturer, to suit application.
G. Joint Cleaner - Non-corrosive and non-staining, recommended by sealant manufacturer, compatible with joint forming materials.
H. Joint Backing
1. Closed cell non-gassing polyethylene foam rod, over sized 30 to 50 percent for joint size, compatible with sealant, sized and shaped to provide proper compression upon insertion in accordance with manufacturer's recommendations.
2. Acceptable Products:
a. "Nonstick Sintered Rubber Rod" by Sonneborn
b. "SoftRod" by Neraco
I. Bond Breaker - Pressure sensitive tape recommended by sealant manufacturer to suit application.
J. Masking Tape - FS U-U-106

07920.23 C.O.L.O.R.S:
A. General Contractor to provide Owner with samples for approval.

07920.3 EXECUTION:
07920.31 GENERAL:
A. Do not use interior sealant for exterior conditions. Gun apply compound with nozzle of proper size to fill width of joint indicated; force sealant into joint with sufficient pressure to expel air and fill groove solidly.

07920.32 DELIVERY, STORAGE AND HANDLING:
A. Deliver materials in original containers with seals unbroken and labels intact.
B. Store materials in a single lockable area of project site.
C. Protect materials from extreme temperatures and exposure. Store in accordance with manufacturer's recommendations.

07920.33 INSPECTION:
A. Verify that surfaces and joint openings are ready to receive work and field measurements are as shown on Drawings and recommended by sealant manufacturer. Beginning of installation means installer accepts existing conditions as appropriate for work.

07920.34 CONDITIONS:
A. Exterior. Apply sealants when temperature is between 40° and 100° F.
B. Interior. Do not install solvent curing sealants in enclosed building spaces. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

07920.35 PREPARATION:
A. Perform in accordance with ASTM D804 for solvent release and C790 for latex based sealants. Remove loose materials and foreign matter that might impair adhesion of sealant. Clean and prime joints in accordance with manufacturer's instructions. Verify that joint backing and release tapes are compatible with sealant. Protect elements surrounding work of this Section from damage or discoloration.

07920.36 FIELD SAMPLE:
A. Construct field sample joints, 4 feet long, illustrating sealant type, color, and tooling surface. Locate where desired accepted sample may remain as part of the Work.

07920.37 INSTALLATION:
A. General. Conform to SWI requirements for installation and with manufacturer's instructions. Measure joint dimensions and size materials to achieve required width/depth ratios.
B. Joint Backing. Install to achieve depth dimension no greater than 1/2 joint width.
C. Release Backing. Install where joint backing is not used. Three-sided adhesion will not be permitted.
D. Masking Tape. Place on finish surface on one or both sides of joint to protect adjacent finish surfaces from compound smudges. Remove within 10 minutes after joint has been filled and toolled.
E. Priming:
1. Prime joint substrates where indicated or where recommended by sealant manufacturer based upon preconstruction sealant substrate tests and prior experience.
2. Apply primer to comply with joint sealant manufacturer's recommendations.
3. Coatse primer. Store in area of joint sealant bond. Do not allow spillage or migration onto adjoining surfaces.
F. Sealants:
1. Use fresh compounds from previously unopened containers bearing manufacturer's seal. Install sealant from bottom of joint upward and outward, using sufficient force to fill joint; free of air pockets, foreign matter, ridges and sags. Draw nozzle of applicator device across joint during installation to leave flush surface.
2. Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates.
3. Provide uniform cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
4. Tool joints to required configuration in accordance with manufacturer's recommendations.
5. Tooling Non-sag Sealants:
a. Immediately after sealant application and prior to line skimming or curing begins, tool sealants to form smooth, uniform beads of configuration required.
b. Eliminate air pockets and ensure contact and adhesion of sealant with sides of joint.
c. Remove excess sealant from surfaces adjacent to joint.
d. Do not use tooling agents that discolor sealants, adjacent surfaces or that are not approved by manufacturer.

07920.38 FINISHING:
A. Tool joints slightly concave unless shown otherwise on the Drawings. When tooling white or light color sealant, use dry or water wet tool.

07920.39 CLEANING AND REPAIRING:
A. Remove masking tapes and clean adjacent solid surfaces. Repair or replace defaced or damaged finishes caused by work of this Section.
B. Eliminate any excess sealant from adjacent surfaces immediately after contact with xylo-toluene.

07920.39.1 PROTECTION:
A. Protect joint sealants during and after curing period from contact with contaminating substances or from damage by construction operations or other causes so that they are without deterioration or damage at time of Final Completion.

07920.39.2 CLEAN-UP:
A. Upon completion of work of this Section, remove related debris from premises.

END OF SECTION

DIVISION 8 DOORS AND WINDOWS
SECTION 08100 STEEL DOORS AND FRAMES

08100.11 RELATED DOCUMENTS:
A. Drawings, Specifications Division 1, and contract.
B. See drawings for extent of doors and frames finish and installation installed by contractor

08100.12 DESCRIPTION OF WORK:
A. Extent of standard steel doors and frames is shown and scheduled on drawings.
B. PROVISIONS AND ASSURANCE:
1. Provide core flush wood doors with medium density overlay faces.
2. Deco Finish: Do not apply.
3. Provide following:
a. Solid core flush wood doors with medium density overlay faces.
b. Deco Finish: Do not apply.

08100.14 DELIVERY, STORAGE AND HANDLING:
A. Deliver hardware items wrapped or crated to provide protection during transit and job storage.
B. Store doors and frames in building site under cover in vertical position. Place units on wood sills and provide adequate spacing between each unit.

08100.2 PRODUCTS:
08100.21 MATERIALS:
A. Provide standard steel doors and frames by one of the following:
1. Anwel Building Products Division (Anwel)
2. Ceco Corporation
3. SteelCraft Manufacturing Company
B. Hot Rolled Steel Sheets: Commercial quality carbon steel pickled and oiled.
C. Cold Rolled Steel Sheets: Commercial quality carbon steel.

D. Galvanized Steel Sheets: Zinc-coated carbon steel sheets of commercial quality.
E. Fabricate supports and anchors of not less than 18 gauge galvanized sheet steel.
F. Inserts, Bolts, and Fasteners: Manufacturer's standard units except hot-dip galvanized items built into exterior walls. Provide hot-dip galvanized units at all conditions in high humidity areas similar to Florida and Hawaii.
G. Shop Applied Primer: Rust inhibitive enamel or paint suitable as a base for specified finish paints.

08100.22 FABRICATION:
A. General:
1. Fabricate steel door and frame units rigid, neat in appearance and free from defects, warp or buckle.
2. Fabricate exposed faces of doors and panels from only cold rolled steel.
3. Fabricate frames, concealed stiffeners, reinforcement, and edge channels, from either cold-rolled or hot-rolled steel (at fabricator's option).
4. Fabricate exterior doors, panels, and frames from galvanized sheet steel. Close top and bottom edges of doors with flush channel as integral part of door construction.
5. Fabricate all doors, panels, frames, components, fasteners, and related items from hot-dip galvanized steel in high humidity areas similar to Florida and Hawaii.
6. Unless otherwise indicated, provide counter-sunk flat Phillips heads for exposed screws and bolts.
B. Finish Hardware Preparation:
1. Prepare doors and frames to receive mortised and concealed finish hardware in accordance with finish hardware manufacturer's recommendations.
2. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be performed at project site.
3. Locate finish hardware in accordance with "Recommended Locations for Builders' Hardware", published by Door and Hardware Institute and local codes.
C. Shop Painting:
1. Clean, treat and paint exposed surfaces of steel door and frame units, including galvanized surfaces.

08100.23 STANDARD STEEL DOORS:
A. Provide metal doors equal to Ceco Regent for full flush type design with 16 gauge skins and stiffened with one-piece resin impregnated full honeycomb core. Provide flush top and bottom channels. In snow locations, fill door with thermal insulation equivalent to R-19.

08100.24 STANDARD STEEL FRAMES:
A. Provide 16 gauge metal frames for doors and other openings, of sizes shown on drawings with concealed fastenings, unless otherwise:
1. Fabricate frames with mitered corners, welded construction for exterior applications and interior applications. Ship welded frames to site with removable steel spreader at bottom. Do not remove spreader until completion of wall construction.
B. Provide two (2) silencers on strike jacks of single-swing frames.

08100.3 EXECUTION:
08100.31 INSPECTION:
A. Examine substrate and conditions where steel doors and frames are installed and notify architect of any conditions detrimental to proper and timely completion of work.

08100.32 INSTALLATION:
A. Install standard steel doors, frames, and accessories in accordance with manufacturer's data, and as herein specified.
B. Placing Frames:
1. Comply with provision of "Recommended Erection Instructions for Steel Frames", unless otherwise indicated.
2. Place frames prior to construction of enclosing walls and ceilings. Set frames accurately in position, plumb and aligned, and brace securely until permanent anchors are set.
a. Locate three (3) concealed wall anchors of proper design for wall condition per joint, one each at hinge and strike levels. Provide angle floor clip for each jamb with floor fastener to suit floor construction.
C. Door Installation:
1. Fit hollow metal doors accurately in frames, within clearances specified in "Recommended Specifications Standard Steel Doors and Frames".
D. Adjust and Clean:
1. After erection, sand smooth all rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.
2. Check and readjust operating finish hardware items, leaving steel doors and frames in proper operating condition.

END OF SECTION

08100.21 MATERIALS:
A. Provide standard steel doors and frames by one of the following:
1. Anwel Building Products Division
2. Ceco Corporation
3. SteelCraft Manufacturing Company
B. Hot Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled.
C. Cold Rolled Steel Sheets: Commercial quality carbon steel.
D. Galvanized Steel Sheets: Zinc-coated carbon steel sheets of commercial quality.
E. Inserts, Bolts, and Fasteners: Manufacturer's standard units except hot-dip galvanized items built into exterior walls. Provide hot-dip galvanized units at all conditions in high humidity areas similar to Florida and Hawaii.
F. Shop Applied Primer: Rust inhibitive enamel or paint suitable as a base for specified finish paints.

08100.22 FABRICATION:
A. General:
1. Fabricate steel door and frame units rigid, neat in appearance and free from defects, warp or buckle.
2. Fabricate exposed faces of doors and panels from only cold rolled steel.
3. Fabricate frames, concealed stiffeners, reinforcement, and edge channels, from either cold-rolled or hot-rolled steel (at fabricator's option).
4. Fabricate exterior doors, panels, and frames from galvanized sheet steel. Close top and bottom edges of doors with flush channel as integral part of door construction.
5. Fabricate all doors, panels, frames, components, fasteners, and related items from hot-dip galvanized steel in high humidity areas similar to Florida and Hawaii.
6. Unless otherwise indicated, provide counter-sunk flat Phillips heads for exposed screws and bolts.
B. Finish Hardware Preparation:
1. Prepare doors and frames to receive mortised and concealed finish hardware in accordance with finish hardware manufacturer's recommendations.
2. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be performed at project site.
3. Locate finish hardware in accordance with "Recommended Locations for Builders' Hardware", published by Door and Hardware Institute and local codes.
C. Shop Painting:
1. Clean, treat and paint exposed surfaces of steel door and frame units, including galvanized surfaces.

08100.23 STANDARD STEEL DOORS:
A. Provide metal doors equal to Ceco Regent for full flush type design with 16 gauge skins and stiffened with one-piece resin impregnated full honeycomb core. Provide flush top and bottom channels. In snow locations, fill door with thermal insulation equivalent to R-19.

08100.24 STANDARD STEEL FRAMES:
A. Provide 16 gauge metal frames for doors and other openings, of sizes shown on drawings with concealed fastenings, unless otherwise:
1. Fabricate frames with mitered corners, welded construction for exterior applications and interior applications. Ship welded frames to site with removable steel spreader at bottom. Do not remove spreader until completion of wall construction.
B. Provide two (2) silencers on strike jacks of single-swing frames.

08100.3 EXECUTION:
08100.31 INSPECTION:
A. Examine substrate and conditions where steel doors and frames are installed and notify architect of any conditions detrimental to proper and timely completion of work.

08100.32 INSTALLATION:
A. Install standard steel doors, frames, and accessories in accordance with manufacturer's data, and as herein specified.
B. Placing Frames:
1. Comply with provision of "Recommended Erection Instructions for Steel Frames", unless otherwise indicated.
2. Place frames prior to construction of enclosing walls and ceilings. Set frames accurately in position, plumb and aligned, and brace securely until permanent anchors are set.
a. Locate three (3) concealed wall anchors of proper design for wall condition per joint, one each at hinge and strike levels. Provide angle floor clip for each jamb with floor fastener to suit floor construction.
C. Door Installation:
1. Fit hollow metal doors accurately in frames, within clearances specified in "Recommended Specifications Standard Steel Doors and Frames".
D. Adjust and Clean:
1. After erection, sand smooth all rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.
2. Check and readjust operating finish hardware items, leaving steel doors and frames in proper operating condition.

END OF SECTION

SECTION 08210 WOOD DOORS

08210.11 RELATED DOCUMENTS:
A. Drawings, Specifications Division 1, and contract.
08210.12 DESCRIPTION OF WORK:
A. Provide following:
1. Solid core flush wood doors with medium density overlay faces.
2. Deco Finish: Do not apply.

08210.14 DELIVERY, STORAGE AND HANDLING:
A. Deliver hardware items wrapped or crated to provide protection during transit and job storage.
B. Store doors and frames in building site under cover in vertical position. Place units on wood sills and provide adequate spacing between each unit.

08210.2 PRODUCTS:
08210.21 MATERIALS:
A. Provide standard steel doors and frames by one of the following:
1. Anwel Building Products Division (Anwel)
2. Ceco Corporation
3. SteelCraft Manufacturing Company
B. Hot Rolled Steel Sheets: Commercial quality carbon steel pickled and oiled.
C. Cold Rolled Steel Sheets: Commercial quality carbon steel.

08210.32 INSTALLATION:
A. Condition doors to average prevailing humidity in installation area prior to hanging, by exposure to site for 4 (4) days prior to installation.
B. SET UP AND HANGING: Doors shall be hung in accordance with manufacturer's instructions and as indicated.
C. Align doors to frames for proper fit and uniform clearance at each edge and machine for hardware. Seal out surfaces after fitting and machining.
D. Level doors 1/8" to 2" at lock and hinged edges.
E. Provide clearances of 1/16" at jamba and heads, and 1/4" from bottom of door to top of decorative floor finish or covering. Undercut by 1" for HVAC where indicated.

08210.33 ADJUST AND CLEAN:
A. Re-hang or replace doors which do not swing or operate freely, as directed by Owner's Representative.

END OF SECTION

SECTION 08410 - ALUMINUM ENTRANCES AND STOREFRONTS

PART 1 - GENERAL
1.01 SECTION INCLUDES:
A. Framing system
B. Doors and hardware
C. Anchors, brackets and attachments
D. Protection and cleaning
E. Related Sections

1.02 RELATED SECTIONS:
A. Section 07920 "Sealants and Caulking"
B. Section 08110 "Finish Hardware"
C. Section 08800 "Glazing"
D. Section 08811 "Glass"

1.03 ENGINEERING DESIGN:
A. Structural Properties:
1. Loads: Design and size members to withstand dead loads and live loads caused by pressure and suction of wind as calculated in accordance with applicable codes, measured in accordance with ANSIRAM E-230.
2. Deflection: Limit mullion deflection to 1/175, or flexure limit of glass with full recovery of glazing materials, whichever is less.
B. Thermal Movement: System to provide for expansion and contraction within system components caused by a cycling temperature range of 150 F degrees without causing detrimental effects to system or components.
C. Water Leakage: Design systems to deny water leakage, when measured in accordance with ASTM E-331 with a test pressure difference of 8 PSF. Drain water entering joints, condensation occurring in glazing channels, or migrating moisture occurring within system.
D. Air Infiltration: Limit air infiltration through assembly to 0.06 cu ft/min/sq ft of assembly surface area, measured at a reference differential pressure across assembly of 03 inches water gauge, measured in accordance with ANSIRAM E-292.
E. Movement: System to accommodate, without damage to system or components, or deterioration of perimeter seal. Movement within system, movement between system and perimeter framing components, dynamic loading and release of loads, and deflection of structural support framing.

1.04 REFERENCE STANDARDS:
A. American Society for Testing Materials (ASTM)
B. American National Standards Institute (ANSI)
C. Federal Specifications (FS)

1.05 SUBMITTALS:
A. General: Submit shop drawings of system proposed. Owner's acceptance is required prior to start of fabrication and/or shipment.
B. Shop Drawings: Base on details shown on the Drawings. Show system and component dimensions, components within assembly, framing opening requirements, concealed seal and tolerances, anchorage and fasteners, glass and inlets, door hardware requirements, and affected related work. Include manufacturer's installation instruction. Detail to serve as installation drawings.
C. Samples: Submit two 12 inch long sections of each member type proposed complete with specified aluminum surface finish and one full size corner construction mock-up.

PART 2 - PRODUCTS
2.01 MANUFACTURER:
A. The Drawings were prepared and this Specification written on the basis of using the products of Kawneer Company, Inc., Norcross, Georgia. It is not the intent to limit competitive bidding. Products of equal characteristics by other manufacturers are acceptable under the conditions of these specifications.

2.02 STOREFRONT FRAMING:
A. System: Trifab VG 450 (4 1/2 inch) for single glazing and Trifab 451 (4 1/2 inch) for insulating glass, screw apply assembled, flush glazed, extruded aluminum having properties of 6063-T5 Alloy.
B. Interior Reinforcing: If required by Engineering design, rolled steel, 16 gauge or heavier if required.
C. Fasteners: Manufacturer's standard; either aluminum or stainless steel.

2.03 DOORS AND HARDWARE:
A. DOORS: KAWNEER SERIES AS INDICATED ON DRAWINGS - PANNING HARDWARD - EXTRUDED ALUMINUM HAVING PROPERTIES OF 6063-T5 ALLOY. ALL CLEAR TEMPERED GLASS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
B. FASTENERS: MANUFACTURER'S STANDARD, EITHER MINIMUM OR MAXIMUM STAINLESS STEEL.
C. HARDWARE: AS INDICATED ON DRAWINGS (HARDWARE SCHEDULE).
D. WEATHER STRIPPING AND SILL SWELLS: EITHER FACTORY OR FIELD TYPE TO SUIT APPLICATION.

2.04 FINISHES:
A. EXPOSED ALUMINUM: KAWNEER "EMERALD" COATINGS. THIS IS NOTED ON DRAWINGS.
B. CONCEALED STEEL: EITHER GALVANIZED IN ACCORDANCE WITH ANSIRAM E-286 TO 2.0 G/100 FT. OR PRIMA WITH RECOAT WITH RECOAT OXIDE PAINT.
C. DISSIMILAR MATERIAL: HEAVY BODIED BITUMINOUS.

2.05 FABRICATION:
A. Storefront Framing: Fabricate and assemble in shop to greatest extent possible. Cut carefully and accurately. Compress joints between vertical and horizontal mullions, with gun, non-hardening epoxy compound. Place standard water dam, in accord with commercial and horizontal members and seal with liquid butyl sealant, make seal tight. Provide vision and spandrel areas with drainage to outside of horizontal mullion. Sizes of components and necessary field connections are shown on drawings. Permit easy assembly by means of standard construction equipment and tools, without use of special apparatus or appliances.
B. Doors: Fabricate doors, panels, and hardware joints where rails are fitted against sills, and fasten by means of tension bolts in top and bottom rails. Provide adjusting mechanism in top rail to provide minor clearance adjustments. Glass stops, snap-in-type with both type glazing strips. Weatherstripping, pile. Provide adjustable pile weatherstrip on one side at meeting slabs of pairs of doors.

PART 3 - EXECUTION
3.01 DELIVERY AND STORAGE:
A. Deliver, store and handle components in manner to avoid damage. Store materials inside plastic, damaged materials, including marred finishes, with new materials at no additional cost to Owner.

3.02 INSPECTION:
A. Verify wall openings and adjoining air and vapor seal materials are ready to receive work of this Section. Beginning of installation means acceptance of existing conditions.

3.03 FABRICATION:
A. Where aluminum surfaces contact steel, other incompatible metals or cementitious materials, protect aluminum by one of the following methods:
1. Coat incompatible metal or cementitious materials with coating of heavy bodied bituminous paint.
2. Paint incompatible metal or other suitable protective coating, exclude those containing lead pigmentation.
3. Nonabsorptive gaskets.
4. Caulking between aluminum and incompatible metals.
5. If drainage from incompatible metal passes over aluminum, paint incompatible metal by method No. 2 above.

3.04 INSTALLATION:
A. General: Install in accord with manufacturer's instructions true to line, plumb, level, square, and in proper planes with other work. Install free from sags, waves, bumps, or other objectionable defects. Securely attach frame assembly to structure to resist stresses. Coordinate attachment and seal of air and vapor barrier materials. Install flashings. Pack fibrous insulation in thin spaces at perimeter of assembly to maintain continuity of thermal barrier.
B. Hardware: Fit in accord with manufacturer's instructions using templates provided. Install doors to operate smoothly and quietly after adjustment. Adjust door closing devices immediately prior to final inspection. Install thresholds in two full beads of sealant compound (one along each edge) and fasten with color matching machine screws and expansion shields, one anchor for each 24 inches of threshold length. Adjust operating hardware.
C. Glass and Glazing: Reference Section 08811 "Glass". Glass as scheduled on the Drawings.

3.05 SEALING:
A. As specified in Section 07920 "Sealants and Caulking".

3.06 CLEANING:
A. Remove protective material from unfinished aluminum surfaces. Wash down exposed surfaces using solution of mild detergent in warm water, applied with clean, wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean. Remove excess sealant by moderate use of mineral spirits or other solvents acceptable to both sealant and systems manufacturers. Contractor is responsible for damages resulting from the use of cleaning materials not approved by system manufacturer.

3.07 PROTECTION OF COMPLETED WORK:
A. Protect exposed portions of work from damage.

3.08 CLEAN-UP:
A. Upon completion of work of this Section, remove related debris from premises.

END OF SECTION

SECTION 08700 FINISH HARDWARE

08700.1 GENERAL:
08700.11 RELATED DOCUMENTS:
A. "Finish Hardware" includes items known commercially as builders' hardware which are required for swinging sliding and folding doors. Types of items in this section include (but are not limited to):
1. Hinges,
2. Locks, lock cylinders, and keys;
3. Fall devices;
4. Push-pull units;
5. Closers (brass).
6. Door trim units;
7. Weather stripping and threshold for exterior doors.

08700.12 QUALITY ASSURANCE:
A. "Finish Hardware" includes items known commercially as builders' hardware which are required for swinging sliding and folding doors. Types of items in this section include (but are not limited to):
1. Hinges,
2. Locks, lock cylinders, and keys;
3. Fall devices;
4. Push-pull units;
5. Closers (brass).
6. Door trim units;
7. Weather stripping and threshold for exterior doors.

08700.13 INTENT (SAFETY OF PERSONS):
A. It shall be the responsibility of the glazing subcontractor to comply with all safety laws, ordinances and regulations, etc. which control type of glass related to safety of persons. The drawings and specifications attempt to comply with all such laws, etc., but in case of failure to comply, the most restrictive requirement shall govern the work of this section.
B. The drawings and specifications attempt to comply with all such laws, etc., but in case of failure to comply, the most restrictive requirement shall govern the work of this section.
CBA, ASTM E-774-83

08700.14 DELIVERY, STORAGE AND HANDLING:
A. Deliver hardware items wrapped or crated to provide protection during transit and job storage.
B. Store doors and frames in building site under cover in vertical position. Place units on wood sills and provide adequate spacing between each unit.

08700.2 PRODUCTS:
08700.21 MATERIALS:
A. Provide standard steel doors and frames by one of the following:
1. Anwel Building Products Division (Anwel)
2. Ceco Corporation
3. SteelCraft Manufacturing Company
B. Hot Rolled Steel Sheets: Commercial quality carbon steel pickled and oiled.
C. Cold Rolled Steel Sheets: Commercial quality carbon steel.

08700.13 QUALITY ASSURANCE:
A. Obtain each kind of hardware (latch, and lock set, hinges, closers, & related items) from only one manufacturer.
B. SET UP AND HANGING: Doors shall be hung in accordance with manufacturer's instructions and as indicated.
1. ANSI H117.1.

08700.14 JOB CONDITIONS:
Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function.

08700.22 PRODUCTS:
08700.21 SCHEDULED HARDWARE:
A. Products are identified by using hardware designation numbers of one manufacturer for each hardware type required. All items (except locks) are listed by Manufacturer for the purpose of establishing minimum requirements.
1. Supply locks and lock cylinders only by the listed manufacturer and supplier.
2. Provide all other hardware from listed alternate manufacturers.

08700.22 MATERIAL AND FABRICATION:
A. The drawings show the direction of swing or hand of each door. Furnish each item of hardware for proper installation and operation of the door movement as shown.
B. Produce hardware units of the base metal and forming method using the manufacturer's standard.
C. Conform manufactured hardware to published templates, generally prepared for machine screw installation.
D. Furnish screws for installation, with each hardware item. Provide Phillips flathead screws with finish of exposed (exposed under any condition), screws to match the hardware finish.
E. Provide concealed fasteners for hardware units which are exposed when the door is closed, except to the extent no standard units of the type specified are available with concealed fasteners.

08700.23 HINGES, BUTTS:
See hardware schedule in construction documents.

08700.24 LOCKS, LOCK CYLINDERS, AND KEYING:
See hardware schedule in construction documents.

08700.25 PANIC DEVICES AND ASTRAEGALS:
See hardware schedule in construction documents.

08700.26 CLOSERS AND DOOR CONTROL DEVICES:
See hardware schedule in construction documents.

08700.27 DOOR TRIM UNITS:
See hardware schedule in construction documents.

08700.28 WEATHER-STRIPPING AND THRESHOLDS:
See hardware schedule in construction documents.

08700.29 HARDWARE FINISHES:
See hardware schedule in construction documents.

08700.3 EXECUTION:
08700.31 INSTALLATION:
A. Mount hardware units at heights indicated in "Recommended Locations for Hardware".
B. Shop Drawings: Base on details shown on the Drawings. Show system and component dimensions, components within assembly, framing opening requirements, concealed seal and tolerances, anchorage and fasteners, glass and inlets, door hardware requirements, and affected related work. Include manufacturer's installation instruction. Detail to serve as installation drawings.
C. Samples: Submit two 12 inch long sections of each member type proposed complete with specified aluminum surface finish and one full size corner construction mock-up.
D. Set units level, plumb and true to line and locations. Reinforce adjacent substrate as necessary for proper installation and operation.
E. Drill and counter sink units which are not factory prepared for storage fasteners.

END OF SECTION

SECTION 08800 - GLAZING

1.01 GENERAL:
1.01 SECTION INCLUDES:
A. Glazing materials and glazing system.
B. Installation of glass in prepared openings.
C. Flashing and sealant.

1.02 RELATED SECTIONS:
A. Section 08811 "Glass"

1.03 REFERENCE PUBLICATION AND STANDARDS:
A. American Glass Association, "Glazing Manual" latest edition (FGJA). Glazing subcontractor shall determine and be responsible for actual system's materials to be used in the work of this Section. In all instances, the FGJA "Glazing Manual" shall govern details and general conditions of systems to be considered for use intended on the drawings.

1.04 SUBMITTALS:
A. Submit Shop Drawings per Section 01300 "Submittals", of glazing system's proposed.
B. Acceptance is required prior to start of glazing.

1.05 SCHEDULING:
A. Schedule the work of this section to coincide with delivery of glass to be installed as part of the work of this section.

08800.2 PRODUCTS:
08800.21 MANUFACTURER:
A. The drawings were prepared and portions of this specification written on the basis of using the products of Pecora Corporation, Harleysville, Pennsylvania. It is not the intent to limit competitive bidding. Products with equal characteristics by other manufacturers are acceptable under the conditions of these specifications.

08800.22 BASIC MATERIALS:
A. The following list of materials is submitted to establish minimum quality standards for the work of this Section. It is not intended to dictate or define systems to be used.
1. Glazing Compound.
a. "962" one-part architectural silicone sealant
2. Furring and Bracing Members: Of same material as studs; thickness to suit purpose.
3. Tracks and Headers: Galvanizing to G90 coating class.
4. Accessories: Same finish as framing members.

PART 2 - PRODUCTS
2.01 MANUFACTURER:
A. The drawings were prepared and portions of this specification written on the basis of using the products of Pecora Corporation, Harleysville, Pennsylvania. It is not the intent to limit competitive bidding. Products with equal characteristics by other manufacturers are acceptable under the conditions of these specifications.

08800.3 EXECUTION:
08800.31 INSTALLATION (GLAZING):
A. Install all glazing units in complete accord with shop drawings and the FGJA "Glazing Manual" recommendations including but not limited to:
1. Flashing of glazing units.
2. Application of compounds, tapes, etc.
3. Installation of setting blocks and spacer shims.
4. Final sealing.

08800.34 CLEANING:
A. Clean all glazing units and remove all labels, protection markings, etc. prior to acceptance of building by Owner. Replace all cracked, broken, scratched, and improperly set glazing units at time of cleaning without additional cost to the Owner.

08800.35 PROTECTION:
A. Protect each installed transparent glazing units by means of tape "X" or other suitable means to protect persons and materials. System used shall comply with any or all governing codes, ordinances, regulations, etc.

08800.36 CLEAN-UP:
A. Upon completion of work of this section remove related debris from premises.

END OF SECTION

SECTION 08811 GLASS

08811.1 GENERAL:
08811.11 SECTION INCLUDES:
A. Float Glass
B. Tempered Glass
C. Insulating Glass
D. Mirror Glass

08811.2 RELATED SECTIONS:
A. Section 08800 "Glazing"

08811.13 INTENT (SAFETY OF PERSONS):
A. It shall be the responsibility of the glazing subcontractor to comply with all safety laws