

DAWSON DOORS

SECTION 08 41 00

TRANSCEND ULTRA-NARROW STILE BALANCED THERMALLY BROKEN ENTRANCES

PART I – GENERAL

1.01 DESCRIPTION

- A. Work includes all entrance and vestibule doors and frames. “Swing Door” units consisting of doors, frames, related sidelite and transom areas (where applicable), thresholds, operating mechanisms, and finished hardware as shown on drawings or specified.

1.02 RELATED WORK

- A. Section [07 92 00], joint sealants between frames and masonry at interface of entrance assemblies and other building components.
- B. Section [08 44 00], curtain wall and glazed assemblies for surrounding framing.
- C. Section [08 71 00], door hardware other than what was specified as part of entrance assemblies, cylinders, and coordination with security system.
- D. Section [08 81 00], glass glazing, types, quality, and requirements.
- E. Section [05 10 00], structural metal framing.
- F. Section [26 00 00], electrical requirements and coordination with security and fire alarm systems.
- G. ANSI/NFRC 100-2020 – Procedure for Determining Fenestration Product U-factors, thermal simulation calculations.

1.03 QUALITY ASSURANCE

- A. Manufacturer shall have been regularly engaged in manufacturing swing doors and frames for a period of fifty (50) years.
- B. Doors and frames shall be engineered and fabricated by the same manufacturer.
- C. The manufacturer must have a quality system registered to the ISO9001:2015 standard.

1.04 SUBMITTALS

- A. Shop drawings shall include elevation views, plan views, sections, and details clearly defining the scope of work. Drawings shall include glass and metal thicknesses, joining details, field connections, anchorage, concealed and exposed fastening methods, door and frame reinforcements, and metal finishes. Drawings shall indicate compliance with specified design criteria.
- B. Visual samples of project material finish samples (4” x 6”) shall be submitted per customer specifications to indicate texture to be expected in finished work.
- C. Instructions for general maintenance, cleaning, and repair of surfaces and finishes shall be provided.

1.05 WARRANTY

- A. All finished hardware not fabricated by door manufacturer to carry hardware manufacturer’s standard warranty.
- B. Glass provided by door manufacturer to carry glass manufacturer’s standard warranty – insulated glass with holes as required for hardware shall not receive a warranty.

- C. Door manufacturer's materials furnished and installed to these specifications shall be warranted against defective materials and workmanship beginning at completion of installation.
1. Transcend System: five (5) years
 2. Balanced Hardware: ten (10) years
 3. Warranty is not intended to cover adjustments made necessary by shifting or settling of building structure.
 4. This warranty does not cover the breakdown of protective coatings furnished and applied by others. Material will be crated and protected against damage during shipment to the job site. Door manufacturer will accept no responsibility for discoloration of any type after date of delivery to the job site. This responsibility must rest with whoever has control or supervision of areas where this material is stored or installed.
 5. All labor required for replacement or repair of warranted products not fabricated by door manufacturer is to be by others.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be packed, unloaded, stored, and protected to avoid abuse and damage.
- B. Protect finished surfaces with wrapping and/or strippable coating.
- C. When unloading, remove all paper type wrappings that are wet or may become wet.
- D. Store inside if possible, in clean, well-drained area free of dust and corrosive fumes.
- E. Stack vertically or on edge so that water cannot accumulate on or within materials. Use wood or plastic shims between components to provide water drainage and air circulation.
- F. Cover materials with tarpaulins or plastic hung on frames to provide air circulation.
- G. When installing, protect materials from lime, mortar, run-off from concrete and copper, weld splatter, acids, roofing tar, solvents, and abrasive cleaners.

PART II – PRODUCTS

2.01 MANUFACTURER

- A. Dawson Doors, a division of Dawson Metal Company, Inc.
825 Allen Street, Jamestown, NY 14701
Phone: (716) 664-3811 Fax: (716) 661-3722
E-mail: info@dawsondoors.com
Website: www.dawsondoors.com

2.02 BASIS OF DESIGN – SWING DOORS

- A. Sub-structure fabricated from extruded 6063-T6 aluminum with Urethane thermal break. Sub-structure to be covered by chemically bonding 16 gauge / .060" (1.5mm) thick sheet metal to match finish specifications.
1. Maximum Door Height = 10' 0" (3048mm)
 2. Maximum Door Width = 3' 9" (1143mm)
 - a. Aspect ratio will determine warranty availability
 3. Fixed Stile Thickness = 2-3/8" (60.3mm)
 4. Fixed Stile Width = 1-1/2" (38.1mm)
 5. Fixed Rail Thickness = 2-1/4" (57.2mm)
 6. Rail Size Limitations
 - a. Minimum Top Rail = 5-1/4" (133.4mm)
 - b. Maximum Top Rail = 12" (304.8mm)
 - c. Minimum Bottom Rail = 6" (152.4mm)
 - d. Maximum Bottom Rail = 12" (304.8mm)
 - e. Standard Bottom Rail = 10" (254mm) to meet ADA
 7. Specified Sizes

- a. Door Height = []
 - b. Door Width = []
 - c. Stile Width = 1-1/2" (38.1mm)
 - d. Top Rail = []
 - e. Bottom Rail = []
- B. Glass to be structurally glazed into assembly at the factory by the door manufacturer.
- 1. 1" Insulated Glass Unit is required
 - a. 1/4" exterior pane, 1/2" space, 1/4" interior pane
 - b. Various options for low-e coatings – consult factory for availability
 - c. 1/2" air space or Argon space
 - d. Option for low-iron glass – consult factory for availability

2.03 MATERIALS AND FINISHES

A. Materials

- 1. Type 304 Stainless Steel
- 2. Type 316 Stainless Steel
- 3. Galvannealed Steel (painted)
- 4. Aluminum (painted)
- 5. Alloy #464 Naval Brass
- 6. Alloy #280 Muntz Metal
- 7. Alloy #220 Commercial Bronze

B. Finishes

- 1. #4 Satin
- 2. #6 Fine Satin
- 3. #8 Mirror
- 4. Non-directional (Angel Hair)
- 5. Powder Coat per Specification
- 6. Wet Paint per Specification
- 7. Statuary finish and/or clear lacquer coating shall be furnished and applied by others upon completion of installation.

2.04 HARDWARE

A. Swing hardware shall be as specified in section [08 06 70]

- 1. Dawson balanced hardware system
 - a. Hinge tube to be concealed within door jamb.
 - b. System to include integrated overhead closer concealed within door header.
- 2. Automatic operators
 - a. Record 8100 concealed within door header.
 - b. Surface mounted operators to match specifications.

B. Weather-stripping shall be manufacturer's standard brush sweep

- 1. Occurs vertically at meeting, hinge, and lock stiles
- 2. Occurs horizontally concealed in top and bottom rails (Adjustable)
 - a. Where hardware permits

2.05 SHOP INSPECTION

- A. Prior to leaving the factory, all doors and frames shall be inspected per ISO9001:2015 standards and documents.

PART III – EXECUTION

3.01 EXAMINATION

- A. The installer/erector shall examine substrates, supports, and conditions under which this work is to be performed and notify the contractor in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with work until unsatisfactory conditions are corrected.
- B. The floor material shall be solid (not susceptible to either deterioration or heaving), smooth, and level. The adjacent work shall be in its proper place prior to the installation of the entrance system.
- C. Coordinate dimensions, tolerances, and method of attachment with other work.
- D. Verify electric power is available and of correct characteristics when required.

3.02 INSTALLATION / ERECTION

- A. Install entrance systems in accordance with approved shop drawings, plumb, level, and true to line within specified tolerances. Install frames without use of exposed fasteners, except where indicated on shop drawings.
- B. Before anchoring to structure, shim and brace work plumb, level, and in designated location.
- C. Caulk perimeter of threshold using exterior sealant.
- D. Install doors and hardware in accordance with manufacturer's product data. Adjust hardware for desired operation.
- E. All materials shall be installed in strict accordance with the approved shop drawings and instructions provided by Dawson and these specifications.
- F. All doors shall be adjusted after glazing contractor completes his work and readjusted as necessary prior to owner's acquisition of the building.

3.03 CLEANING

- A. Remove stains or material having adverse effect on components and finishes as work progresses.
- B. Just prior to Date of Substantial Completion, clean entire system, including interior and exterior metal and glass. Comply with door manufacturer's product data for cleaning. Flush with clean water.
- C. It is strongly recommended any oxidized finish and/or lacquer coating shall be applied by a professional finisher after the job is erected. That finisher shall be contacted to perform regular maintenance and refinishing of the final product.

3.04 PROTECTION

- A. Protect metal surfaces from contact with lime, mortar, cement, acids, and other harmful elements.
- B. Protect metal surfaces from careless handling, storage, or machining.