Bliss Nor-Am Windows & Doors "Historic Industrial" DECOR Series steel doors

PART 1 - GENERAL

1.01 Description

- A. Work Included: Furnish all labor and materials to complete the fabrication of windows as shown on architect's drawings and as specified herein. All windows covered by this specification shall be fabricated by Bliss Nor-Am Steel Windows & Doors. Other bidders must be approved by the architect at least ten days prior to the bid date, through submission of samples and evidence showing that the bidder has been fabricating window products of this type and quality for at least five years. All work shall include, but not be limited to, the following:
 - Steel doors, single or double leaf, inward or outward swinging.
 - 2. All door anchors, mullions, covers and trim.
 - 3. Factory applied finishes (optional).
- B. Related work specified elsewhere:

1.	Glass,	glazing and	d glazing	materials,	Section

- 2. Perimeter caulking, Section _____
- 3. Miscellaneous structural items, Section ___

1.02 Quality Assurance

- A. Manufacturer shall have not less than five years experience in fabrication of historic industrial doors.
- B. Doors shall be installed by experienced installers.
- C. Allowable tolerances: Size dimensions $\pm 1/16$ th inch.

1.03 Submittals

- A. Samples (as requested by architect):
 - 1. Typical door corner.
 - 2. Typical muntin section.
 - 3. Color sample of finish.
 - 4. Hardware.
- B. Shop drawings and manufacturers literature:
 - Submit for approval shop drawings showing door and installation details, including anchorage, fastening and sealing methods.
 - The manufacturer shall not commence any work until shop drawings have been approved and sizes guaranteed.
 - 3. Color charts of standard finishes.

1.04 Product Storage and Handling

- A. The General Contractor shall be responsible for the protection and storage of the doors after delivery to the site.
- B. Store in designated areas as close as possible to point of installation.

1.05 Guarantee

A. Guarantee all materials and workmanship furnished and installed to be free from defects for a period of 12 months from the date of final acceptance or from date of substantial completion, whichever may be earlier. Repair or replace, at manufacturers option and expense, any materials or workmanship found to be defective under conditions of normal use during this period.

PART 2 - PRODUCT

2.01 Materials

- A. Historic Industrial steel sections manufactured from solid hot rolled carbon steel shapes.
 - Sections made from new billet steel with flanges rolled integral at the mill except applied weathering sections which are cold formed.
 - Panel sections shall have glazing rebates providing an unobstructed glazing surface of at least 11/32" in height.
 - Sections to have a minimum thickness of 1/8" and a depth of 1 3/8".
- B. Muntins
 - 1. Steel Tee Muntins
 - a. Muntins shall be solid hot rolled from new billet steel with flanges rolled integral at the mill.
- C. Hardware shall be as follows:
 - 1. Single leaf Interior doors
 - i. Hinges
 - ii. Lockset
 - 2. Double leaf Interior doors
 - i. Hinges
 - ii. Pushbolts
 - iii. Lever Lockset
 - iv. Lever Dummyset

2.02 Fabrication

- A. Fabricate steel doors in accordance with approved shop drawings.
- B. Corners of door frame shall be solidly welded.
- C. Steel tee muntins shall extend continuous from head to sill and from jamb to jamb and shall be welded securely at intersections.
- D. Door panel width can not exceed 36". 3" minimum head panel and 4" minimum kick panel are mandatory.
- E. Glazing
 - Doors shall be designed for interior (optional exterior) putty glazing. Glass, putty and glazing clips to be furnished by others.
 - Optional; provide continuous steel snap-on, screw-on, or aluminum sloped snap-on glazing bead to suit 1/8" to 1/4" glass as specified.
- F. Operable Hardware: (specify)
 - 1. Doors
 - a. Doors shall be hung on not less than three heavy duty ball steel bearing hinges.
 - b. Provide four ball bearing hinges when door frame height exceeds 84".
 - c. Provide extension pushbolts on double doors when door frame height exceeds 90".
 - d. Provide surface (visible) interior mount extension pushbolt at head for all doors that exceed 96" in height.
 - e. All hardware to be shipped loose for field installation

2.03 Factory Finishing

- A. After fabrication, steel frames, doors, mullions, covers and trim shall receive a Grey Oxide primer finish.
- B. (Optional) After fabrication, steel frames, doors, mullions, covers and trim shall receive the following finishes:
 - Duracron or Duranar (Kynar) baked on enamel. Color shall be as selected by the architect from manufacturers standard colors. (Custom colors are also available, consult Bliss Nor-Am).

2.04 Accessories

- A. Advance Hinge
- B. Overhead Closer

PART 3 - EXECUTION

3.01 Inspection

- A. Door openings shall conform with details, dimensions and tolerance shown on the door manufacturers approved shop drawings.
- B. Conditions that may adversely affect the door installation must be corrected before installation commences.

3.02 Installation

- A. Doors specified under this section shall be installed by experienced personnel.
- B. Install doors in openings in strict accordance with approved shop drawings.
 - Set units plumb, level and true to line, without warp or rack of frames.
 - 2. Anchor units securely to surrounding construction with approved fasteners.
 - 3. The exterior joints between the door, trim and mullions shall be properly sealed watertight with an approved sealant and neatly pointed.
- C. Attach door hardware, as required, and adjust doors to operate smoothly free from twist and to be weather tight when closed.
- D. Repair any abraded areas of the factory finish with supplied touch-up paint.

3.03 Cleaning

A. Door installer shall leave window surfaces clean after installation and ready to receive glass and glazing. The installer will not be responsible for final cleaning.