# Section 08300 Architectural Specification
# UltraClean High Speed Industrial Door

**SECTION 08300**
**HIGH-SPEED ROLLING DOORS**

## PART 1 – GENERAL

1.01 SECTION INCLUDES

A. High-speed roll up doors.

B. Wiring from electric circuit disconnect to operator to control station.

1.02 RELATED SECTIONS

A. None.

1.03 REFERENCES

A. NEMA – National Electrical Manufacturers Association.

B. UL – Underwriters Laboratory Incorporated.

1.04 SYSTEM DESCRIPTION

A. Electrical motor operated unit with manual override in case of power failure.

1.05 SUBMITTALS

A. Submit the following:

a. Shop Drawings: Indicate pertinent dimensioning.
b. Product Data: Provide general construction, component connections and details, electrical equipment and operation instructions.
c. Samples: Submit color samples of door panels for selection by owner.
d. Manufacturer's Installation: Indicate installation sequence and procedures, adjustment and alignment procedures.

1.06 REGULARTORY REQUIREMENTS

A. Electrical components UL listed.

B. Electrical enclosure NEMA approved.

1.07 QUALITY ASSURANCE

A. Furnish high-speed roll doors and all components and accessories by one manufacturer.

1.08 FIELD MEASUREMENTS

A. Verify field measurements are as indicated on shop drawings.

1.09 COORDINATION

A. Coordinate the work with installation of electric power and locations and sizes of conduit.

1.10 WARRANTY

A. One year parts and labor limited warranty.

B. No springs allowed.

**PART 2 – PRODUCTS**

2.01 PRODUCTS

A. Albany Door Systems UltraClean high speed industrial door.

B. No substitutions permitted.

2.02 MATERIALS

A. Door Panel:

a. Standard 2-ply material is woven monofilament polyester impregnated with PVC. Design allows for easy panel replacement.
b. 40 ounce replaceable vinyl panel sections connected by pocketed extruded aluminum ribs. (Optional)
c. Standard color is Blue, optional colors available.

B. Side Frames and Head Member:

a. Side frames to be 304 stainless steel. Side frames to be two piece design to allow side column to be taken apart and properly cleaned.
b. Top corner brackets to be 304 stainless steel.
c. Stainless steel shafts fastened to aluminum drum. (Optional)
d. Roll and motor cover to be 304 stainless steel. (Optional)
e. Head frame to be provided with NSF vinyl seal. (Optional)
f. Door must have no visible air gaps along the side or top of the door when the door panel is in the closed or down position.

C. Drive System:

a. Minimum 1.5HP in-line hollow shaft worm drive with three phase variable speed AC drive.

D. Control Panel:

   a. UltraSmart controller housed in a NEMA 4 enclosure.
   b. Controls must include a variable frequency drive system capable of infinitely variable speed control in both the up and down directions. Fused 24V AC power for the door controller and optional activators.
   c. All interior control panel components must be touch-safe (protected from high voltage when control panel door is open). NO EXPOSED HIGH VOLTAGE CONTACTS.
   d. All door operational parameters must be set on the outside face of the control panel. No fixed or rotary limit switches. No exceptions.
   e. Controller comes with factory set default parameters, a two line display that shows functional information during normal operation and will advise if maintenance is required for abnormal situations.
   f. Controller and panel must be fully modular. Separate modules for activation, safety, drive, controls, operation and all other options. Must be expandable to accommodate additional modules for desired inputs and outputs.
   g. Controls must be fully self diagnostic.
   h. Door must be provided with an absolute encoder.
   i. Control Panel must have a rotary disconnect.

E. Bottom Bar:

   a. 304 stainless steel bottom bar.
   b. Releases from side frames in either direction upon impact.
   c. Upon impact, door operation is stopped. Controller must indicate problem encountered and instruct operator on what steps should be taken to fix the problem.
   d. Bottom bar must be self-repairing. Door must automatically reset itself after impact by pressing a button on control panel, no tools required.
   e. Door to be provided with failsafe electric safety edge. No pneumatic edges allowed.
   f. Bottom bar and door operation must be totally wireless. No coil cords allowed. All faults registering from the wireless device must be displayed on the control panel.
   g. Wireless controller must not be exposed in any way on the surface of the door. Must be integrated inside the bottom bar.
   h. Bottom bar wireless system battery life must last a minimum of three years.

F. Safety Features:

   a. Safety light curtain must be located inside of the side frame material, cover area up to a height of no less than six feet, and must have a minimum of 96 infrared thru-beam optical sensors. (Optional)
   b. Door to be provided with two remote mounted sets of thru-beam photo eyes.
   c. Photo eye brackets to be stainless steel.
   d. Control panel must indicate in written visible English each time the photo eye is broken.
   e. Door to be provided with failsafe electric safety edge. Door controller must indicate if the safety edge is not operable.
   f. Door must be provided with a full width bottom bar.

G. Speed:

   a. Door to operate at a variable speed up to 100" per second in the up direction. Door must operate at a variable speed in the down direction.

H. All components furnished by factory.

**PART 3 – EXECUTION**

3.01 EXAMINATION

A. Verify that opening sizes, tolerances and conditions are acceptable.

3.02 INSTALLATION

A. Install door assembly in accordance with manufacturer's instructions.

B. Use anchorage devices to securely fasten assembly to wall constructions and building framing without distortion or stress.

C. Fit and align assembly including hardware; level and plumb to provide smooth operation.

D. Coordinate installation of electrical service. Complete wiring from disconnect to unit components.

E. Seal opening around door frame and header.

3.03 ADJUSTING

A. Adjust door and operating assemblies.

B. Test and adjust door, if necessary, for proper operations.

3.04 CLEANING

A. Clean door and components.

END OF SECTION