SECTION 08 33 23

OVERHEAD COILING DOORS

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\*\* NOTE TO SPECIFIER \*\* Albany Doors; high performance industrial doors.  
This section is based on the products of Albany Doors, which is located at:13850 101 St., Suite BKenosha, WI 53142Toll Free Tel: 800-459-1930Email: [request info (Tony.desalvo@4frontes.com)](https://arcat.com/rfi?action=email&company=Albany%252BDoors&message=RE%253A%2520Spec%2520Question%2520(08330ald)%253A%2520&coid=30254&spec=08330ald&rep=&fax=)  
Web: <https://www.albanydoors.us>   
 [ [Click Here](https://arcat.com/company/albany-doors-30254) ] for additional information.  
As the world leading manufacturer of high speed-doors and high-performance doors, Albany provides sophisticated products that are designed for a wide range of applications in various industries.  
We have built our success on core values of creativity, enthusiasm, commitment, and the ability to understand our customers' high-speed door needs. Years of experience and knowledge, combined with the power of global research and development, enable us to build superior products that maximize safety, security, savings, and productivity for our end users.  
Albany is part of the global 4Front Engineered Solutions business in entrance automation. 4Front North America is a complete business partner in entrance automation, combining long-established brands Kelley, Serco, and Dynaco. 4Front products are sold through an extensive network of trained dealers who provide superior installation and service. In North America the distributor network extends throughout the US, Canada, and Mexico.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Interior high-speed roll up doors. (RR300) (RR400)
    2. High-speed, interior, or exterior roll up doors. (HS8010P) (HS8020P)
    3. Exterior high-speed roll up doors. (Ultrafast)
    4. Rigid exterior doors. (RR3000) (RR3000 Vision)
    5. Rubber exterior doors. (UltraTough) (RR1500) (Ultrabig)
    6. Cold storage doors. (RR300 Chill) (RR300 Freeze)
    7. Cleanroom doors. (RR300 Clean)
    8. Exterior flexible fold-up doors. (TR450) (TR460)
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 05 50 00 - Metal Fabrications. Support framing and framed opening.
    2. Section 08 33 13 - Coiling Counter Doors.
    3. Section 26 27 16 - Electrical Cabinets and Enclosures. Conduit from electric circuit to door operator and from door operator to control station.
    4. Section 26 05 00 - Common Work Results for Electrical. Power to disconnect.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. Association of Electrical Equipment and Medical Imaging Manufacturers (NEMA):
       1. NEMA 4 - Enclosure Rating.
       2. IP-55 - Enclosure Classification
    2. ASTM International (ASTM):
       1. ASTM A513 - Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing.
    3. European Commission; Good Manufacturing Practice (GMP)
       1. GMP: Class C
    4. European Standards (EN):
       1. EN 146441-1 - Cleanrooms and associated controlled environments - Part 1: Classification of air cleanliness by particle concentration.
    5. International Organization of Standards (ISO):
       1. ISO Class 5 - Cleanroom classification.
    6. Underwriters Laboratories USA (UL):
       1. UL 508A - Standard for Industrial Control Panels.
       2. UL Listed.
    7. Underwriters Laboratories Canada (cUL):
       1. cUL Listed.
    8. United States Federal Standard (FS):
       1. FS209E Class 100 - Airborne Particulate Cleanliness Classes in Cleanrooms and Cleanzones.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
    2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Single-Source Responsibility: Provide doors, guides, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
     4. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
    2. Sequencing:
       1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
       2. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, excessive temperature, and construction operations.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions, temperature, humidity, and ventilation, within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  4. WARRANTY
     1. Provide with manufacturer's standard 5 year prorated limited warranty for motors and gearboxes - The General Conditions of Contract requires the GC to Warrant the Project for 12 months after substantial Completion, so we only include extended warranties here beyond 12 months.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Albany Doors, which is located at:13850 101 St., Suite BKenosha, WI 53142Toll Free Tel: 800-459-1930Email: [request info (Tony.desalvo@4frontes.com)](https://arcat.com/rfi?action=email&company=Albany%252BDoors&message=RE%253A%2520Spec%2520Question%2520(08330ald)%253A%2520&coid=30254&spec=08330ald&rep=&fax=);Web: <https://www.albanydoors.us>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. INTERIOR ROLL UP DOORS

\*\* NOTE TO SPECIFIER \*\* The Albany RR300 is the most versatile high speed door on the market. This single product can be easily customized for a range of interior applications - high traffic areas, clean and hygienic spaces, high pressure zones and much more. Select from a variety of fabrics, window panel options and top roll cover materials to create the perfect, fast-opening door for your facility. Delete if not required.

* + 1. Basis of Design: Model RR300. Modular High Performance Interior Rollup Doors as manufactured by Albany Doors.
       1. Speeds:
          1. Opening Speed: 80 inches (2032 mm) per second.
          2. Closing Speed: 24 inches (610 mm) per second.
       2. Door Dimensions:
          1. Width Range: 3 to 14 ft (914 to 4267 mm).
          2. Height Range: 3 to 14 ft (914 to 4267 mm).
       3. Safety Features:
          1. Photo Eye: Standard through-beam photo eye.
          2. Reversing edge-type wireless electric contact edge.
       4. Door Panel:
          1. Self-Repairing Breakaway: Bring panel to front, push button.
          2. Operating Noise: Less than 70 dBA.
          3. Applicable Agency Approvals: UL508A.
          4. Door Curtain Construction: Captured Panel: 2-ply PVC Fabric with wind knobs, RollText and 40 oz. vinyl.

\*\* NOTE TO SPECIFIER \*\* The three following paragraphs are optional. Delete options not required.

* + - * 1. Wind ribs.
        2. Replaceable full-width vision panels.

Vision Section: 30 inch (762) tall full width clear vision section.

* + - * 1. Windows: 27 x 20 inch (686 x 508 mm) clear windows (no wind ribs in curtain panel).
      1. Wind Resistance:
         1. Static Wind Load: 50 mph (80.5 kph).
         2. Static Pressure Load: 6 psf (287.3 Pa).
         3. Operating Wind Load: 30 mph (48.3 kph).
         4. Operating Pressure Load: 2.3 psf (110.1 Pa).
      2. Door Components:
         1. Side Frame Construction: Low profile anodized aluminum.
         2. Bottom Beam Construction: Padded aluminum with high-visibility yellow loop seal.
         3. Top Roll Construction: Extruded aluminum with steel axles.
         4. Roll Cover Construction: 22 gauge steel powder-coated black; RAL 9005.
         5. Motor Cover Construction: 22 gauge steel powder-coated black; RAL 9005.
      3. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.
         2. Input Voltage: 208 V, 3 Ohms, plus or minus 10 percent.
         3. Input Voltage: 230 V, 3 Ohms, plus or minus 10 percent.
         4. Input Voltage: 460 V, 3 Ohms, plus or minus 10 percent.
         5. Input Voltage: 575 V, 3 Ohms, plus or minus 10 percent.
         6. Motor: Up to 2.0 Hp, helical worm gearmotor.
         7. Operating Temperature Range:

Standard: 40 to 110 degrees F (4 to 43 degrees C).

Extended: 32 to 140 degrees F (0 to 60 degrees C).

* + - * 1. Controls Environmental Rating: NEMA-4.
        2. Motor Environmental Rating: IP-55.
        3. Warranty Terms:

Drive Motor: 5 years, or 1 million cycles.

All Other Mechanical and Electrical: 2 years.

\*\* NOTE TO SPECIFIER \*\* The RR400 is designed for interior environments, incorporating MULTI-COMPOSITE STRUCTURE. The side-guides and header assembly (shaft, end-brackets and covers) are all made of ultra-strong, smooth surfaced and non-corrosive multi-composite material, with ultra-clean side frame and head designs. Delete if not required.

* + 1. Basis of Design: Model RR400. Modular High Performance Interior Flexible Rollup Doors as manufactured by Albany Doors.
       1. Maximum Size (WxH): 14 x 15 ft (4.267 x 4.572 m).
       2. Speed: Standard door, depending on curtain dimensions.
          1. Opening: Up to 50 inches (1270 mm) per second.
          2. Closing: Up to 24 inches (610 mm) per second.
       3. Door Operation: Gravity driven with flexible soft bottom edge.
       4. Curtain (WxH): 144 x 156 inches (3658 x 3962 mm).

\*\* NOTE TO SPECIFIER \*\* Delete stiffener option not required. Stiffeners at 30 inches are standard.

* + - * 1. Stiffeners:Every 30 inches (762 mm).
        2. Stiffeners: Every 20 inches (508 mm).
        3. Material: 27 oz. Reinforced PVC with flexible weighted soft bottom edge design.

\*\* NOTE TO SPECIFIER \*\* Delete curtain color options not required.

* + - * 1. Curtain Color: Yellow RAL 1003.
        2. Curtain Color: Orange RAL 2004.
        3. Curtain Color: Red RAL 3001.
        4. Curtain Color: Blue RAL 5002.
        5. Curtain Color: Green RAL 6005.
        6. Curtain Color: Grey RAL 7038.
        7. Curtain Color: Brown RAL 8017.
        8. Curtain Color: White RAL 9010.
        9. Curtain Color: Black RAL 9005.

\*\* NOTE TO SPECIFIER \*\* Delete the windows options not required.

* + - * 1. Windows: 1 Row. Panoramic transparent windows.
        2. Windows: 2 Rows. Panoramic transparent windows.
        3. Windows: Maxi-Vision. Panoramic transparent windows.
      1. Structure: Multi-composite structure including side guides, fixing junction brackets, rolling rod, half open crossbeam cover. Color: Grey.
      2. Door operator.
      3. Power Requirements: UL compliant. VFD driven. NEMA 4.

\*\* NOTE TO SPECIFIER \*\* Delete motor options not required.

* + - 1. Motor: 1 HP. 208 V. 2 poles without brake.
      2. Motor: 1 HP. 230 V. 2 poles without brake.
      3. Motor: 1 HP. 460 V. 2 poles without brake.
      4. Motor: 1 HP. 3 Phase: 208 V 60 Hz.
      5. Motor: 1 HP. 3 Phase: 230 V 60 Hz.
      6. Motor: 1 HP. 3 Phase: 460 V 60 Hz.
      7. Motor: 1 HP. 3 Phase: 575 V 60 Hz.
      8. Motor: 1 HP. Single-phase: 110 V (size dependent) 208 V 60 Hz.
      9. Motor: 1 HP. Single-phase: 110 V (size dependent) 230 V 60 Hz.
      10. Motor: 1 HP. Single-phase: 110 V (size dependent) 460 V 60 Hz.
      11. Motor: 1 HP. Single-phase: 110 V (size dependent) 575 V 60 Hz.
      12. Frequency: 50-60 to Hz.
          1. Circuit Breakers Provided by Customer: 10 to 20 A for 1 HP.
      13. Gearbox: Size 80 for a motor of 1 HP and gear reduction ratio 1/28.

\*\* NOTE TO SPECIFIER \*\* Select one of the following two paragraphs for auxiliary manual operation and delete the one not required.

* + - 1. Powerless Opening: Manual ratchet.
      2. Powerless Opening: Crank handle.
      3. Control Box: Control panel to contain a variable frequency drive, Solid State electronic programmable controller, emergency stop button, photo eye module, and a wireless reversing edge receiver.
      4. Safety Features:
         1. Bottom Edge Detector: WRE or Wireless reversing edge. During closing cycle, reverses door when it hits an obstacle. Positioned at bottom part of curtain.

Wireless Detection System: Consisting of a transmitter in the bottom bag of the door and a receiver in the control box.

System Operation: "Open loop" principle. When the sensor encounters an obstacle, the transmitter leaves standby mode and sends a signal to the receiver that immediately opens the door.

* + - * 1. Infrared Photocell Detection: Thru-beam detection system in the side guides to detect the presence of a pedestrian, vehicle, or obstacle.

Upon Activation: Door opens immediately and stays open as long as the presence is detected.

Standard Photocell Mounting Height: 12 inches (305 mm) from finished floor.

* + - * 1. Soft bottom edge.
      1. Options:
         1. Additional Photo Cells: 24 VDC PNP XX inches from floor; Safety.
         2. Wash Down: One half drum cover and over-roll feature allowing access to fully wash the curtain and drum after the wash down button on the control box is activated. Allows curtain to unwrap for access to the drum.
         3. Steel Control Box with Disconnect: 22 x 13 x 7 inches (559 x 330 x 178 mm)
         4. Control Box, 304 Stainless Steel, NEMA 4x: 22 x 13 x 7 inches (559 x 330 x 178 mm).
         5. Horn: 24 Vac. Remote. NEMA 4x.

Function: \_\_\_\_\_\_\_\_.

* + - * 1. Strobe Light: 24 Vac. Remote. Color: Amber.
        2. Orange Flashing Light: 24 V. Remote. Color: Amber. NEMA 12.

Activates during opening and closing of door.

Warning before closing.

Door Opening: Two orange lights activate.

Door is Fully Opened: Orange lights cut off.

Door Closing: Lights activate for two seconds (adjustable) before door begins to close. Lights remain active without interruption until door is completely closed.

* + - * 1. Traffic Lights: 24 Vac. LED Green and Red. Set.
        2. SafePass LED Signaling System as an accessory for any Albany door.

Available with 2 or 4 light bars.

* + - * 1. Airlock Function: Can only be achieved between multiple Albany doors.

Each Door: Will have its own control box and opening commands.

Either Door: Will only open when the companion door is closed.

Any two doors used in the airlock function do not accommodate equal control boxes.

One is a slave to the other and programmed differently.

During Submittal Process: The door and control box that takes priority must be designated.

* + - * 1. Labo Curtain and Seal Package: Additional seal at top of drum and curtain, limit air leakage for room operating pressures up to 5.8 psi (40 Pa).
        2. Sealing Kit on Header: Rear side only.
        3. Sealing Kit on Header: Front side only.
        4. Curtain, 27 oz: Extra stiffeners spaced approx. 30 inches (762 mm); standard.
        5. Curtain, 27 oz: Extra stiffeners spaced approx. 20 inches (508 mm).

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. HIGH-SPEED, HEAVY-DUTY INTERIOR AND EXTERIOR ROLL UP DOORS

\*\* NOTE TO SPECIFIER \*\* Albany HS8010P and Albany HS8020P high-speed doors are designed for exterior and interior openings in medium-sized heavy-duty operations. The Albany HS series doors feature a flexible door curtain for maximum safety, tight seals for protection against humidity, dust and dirt, fast speeds for improved traffic flow, and a unique direct drive system for smooth, consistent operation.

* + 1. The Albany HS8010P and Albany HS8020P high-speed doors provide superior protection and improved efficiency for personnel and equipment. The flexible door curtain is designed without rigid components and features a soft bottom edge that yields when contacted, eliminating damage to products and protecting workers from injury. Fast openings speeds of up to 96 inches per second also ensure efficient operations in high traffic environments. Delete basis of design options not required.
    2. Basis of Design: Model HS8010P. High-speed, heavy-duty interior and exterior roll up doors as manufactured by Albany Doors.
       1. Fast speeds improve operation and traffic flow while limiting air infiltration and reducing energy costs. Self-resetting door curtain is accident forgiving and can self-reset after an accidental impact.
       2. Operating Speed: Up to 96 inches (2438 mm) per sec.
       3. Door Dimensions:
          1. Width Range: 3 to 18 ft (914 to 5486 mm).
          2. Height Range: 7 to 18 ft (2134 to 5486 mm).
       4. Safety Features:
          1. Photo Eye: Standard through-beam photo eye.
          2. Wireless Safety System: No coil cords.
       5. Door Panel: Flexible curtain with no rigid parts and soft bottom door edge helps to ensure safety for personnel and equipment.
          1. PVC Fabric Panel: 0.028 inches (0.7 mm) thick.

\*\* NOTE TO SPECIFIER \*\* Delete color options not required.

* + - * 1. Color: Blue (RAL 5002).
        2. Color: Black (RAL 9005).
        3. Color: Grey (RAL 7038).
        4. Color: Green (RAL 6005).
        5. Color: Red (RAL 3001).
        6. Color: Orange (RAL 2004).
        7. Color: Yellow (RAL 1003).
        8. Color: Brown (RAL 8017).
        9. Color: White (RAL 9010).

\*\* NOTE TO SPECIFIER \*\* The following three paragraphs are optional. Delete custom printing is optional. Delete if not required.

* + - * 1. Vision Section: 15 inch (381 mm) tall full width clear vision section.
        2. Vision Section: 31 inch (787 mm) tall full width clear vision section.
        3. Windows: 24 x 24 inch (610 x 610 mm) clear windows.
      1. Wind Resistance: Reinforcement is installed around the side guide to increase wind load resistance and prevent curtain from being pulled out of side guides.
         1. Static Wind Load: Up to 95 mph (152.9 kph).
         2. Static Pressure Load: Up to 23 psf (1.10 kPa).
      2. Door Components: Weather tight seals around full door perimeter reduce energy loss and keep out dust, dirt, and humidity.
         1. Side Frames: Galvanized steel structural channel side guides. Inner side guides in Polyethylene; PE-UHMS 1000.

Frame: 3 mm thick galvanized steel tubes.

Side Columns: Are part of frame containing the header box.

The side columns are connected directly to the wall.

Flexible rubber seals.

Tension springs.

Wind reinforcement.

* + - * 1. Fabric Roll: Installed in header box above door curtain with gear drive system that guides the door curtain up and down the tracks.
        2. Soft Bottom Edge: No rigid components. Includes wireless reversing sensor.
        3. Manual Egress: Hand crank.

\*\* NOTE TO SPECIFIER \*\* The following two paragraphs are optional. Delete option if not required.

* + - * 1. Header Cover: Enclose the fabric roll and/or the operator.
        2. Side columns covers.
      1. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208 V.
        2. Input Voltage: 230 V.
        3. Input Voltage: 460 V.
        4. Input Voltage: 575 V.
        5. Motor: 2.0 Hp, 3 phase, 50/60 Hz
        6. Motor Enclosure: NEMA 4, UL/cUL Listed.
        7. Warranty: One year parts and labor.
    1. Basis of Design: Model HS8020P. High-speed, heavy-duty interior and exterior roll up doors as manufactured by Albany Doors.
       1. Fast speeds improve operation and traffic flow while limiting air infiltration and reducing energy costs. Self-resetting door curtain is accident forgiving and can self-reset after an accidental impact.
       2. Operating Speed: Up to 96 inches (2438 mm) per sec.
       3. Door Dimensions:
          1. Width Range: 3 to 18 ft (914 to 5486 mm).
          2. Height Range: 7 to 18 ft (2134 to 5486 mm).
       4. Safety Features:
          1. Photo Eye: Standard through-beam photo eye.
          2. Wireless Safety System: No coil cords.
       5. Door Panel: Flexible curtain with no rigid parts and soft bottom door edge helps to ensure safety for personnel and equipment.
          1. PVC Fabric Panel: 0.028 inches (0.7 mm) thick.

\*\* NOTE TO SPECIFIER \*\* Delete color options not required.

* + - * 1. Color: Blue (RAL 5002).
        2. Color: Black (RAL 9005).
        3. Color: Grey (RAL 7038).
        4. Color: Green (RAL 6005).
        5. Color: Red (RAL 3001).
        6. Color: Orange (RAL 2004).
        7. Color: Yellow (RAL 1003).
        8. Color: Brown (RAL 8017).
        9. Color: White (RAL 9010).

\*\* NOTE TO SPECIFIER \*\* The following three paragraphs are optional. Delete custom printing is optional. Delete if not required.

* + - * 1. Vision Section: 15 inch (381 mm) tall full width clear vision section.
        2. Vision Section: 31 inch (787 mm) tall full width clear vision section.
        3. Windows: 24 x 24 inch (610 x 610 mm) clear windows.
      1. Wind Resistance: Reinforcement is installed around the side guide to increase wind load resistance and prevent curtain from being pulled out of side guides.
         1. Static Wind Load: Up to 110 mph (177 kph).
         2. Static Pressure Load: Up to 32 psf (1.53 kPa).
      2. Door Components: Weather tight seals around full door perimeter reduce energy loss and keep out dust, dirt, and humidity.
         1. Side Frames: Galvanized steel structural channel side guides. Inner side guides in Polyethylene; PE-UHMS 1000.

Frame: 0.118 inch (3 mm) thick galvanized steel tubes.

Side Columns: Are part of frame containing the header box.

The side columns are connected directly to the wall.

Flexible rubber seals.

Tension springs.

Wind reinforcement.

* + - * 1. Fabric Roll: Installed in header box above door curtain with gear drive system that guides the door curtain up and down the tracks.
        2. Soft Bottom Edge: No rigid components. Includes wireless reversing sensor.
        3. Manual Egress: Hand crank.

\*\* NOTE TO SPECIFIER \*\* The following two paragraphs are optional. Delete option if not required.

* + - * 1. Header Cover: Enclose the fabric roll and/or the operator.
        2. Side columns covers.
      1. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed .

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208 V.
        2. Input Voltage: 230 V.
        3. Input Voltage: 460 V.
        4. Input Voltage: 575 V.
        5. Motor: 2.0 Hp, 3 phase, 50/60 Hz.
        6. Motor Enclosure: NEMA 4, UL/cUL Listed.
        7. Warranty: One year parts and labor.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. EXTERIOR HIGH-SPEED ROLL UP DOORS

\*\* NOTE TO SPECIFIER \*\* The Albany UltraFast delivers high speeds of up to 60 inches per second and a superior design for optimal productivity, reliability, and safety.

* + 1. Fast speeds and a true breakaway bottom beam provides efficiency for high traffic areas. High wind load resistance and tight seals provide protection for exterior applications. Albany is part of the global 4Front Engineered Solutions business in entrance automation. The Albany UltraFast saves on energy costs, increases productivity and keeps workers safe.
    2. Basis of Design: RapidRoll UlfraFast as manufactured by Albany Doors.
       1. Opening and Closing Speeds:
          1. Opening: Up to 60 inches (1524 mm) per second.
          2. Closing: Up to 24 inches (610 mm) per second.
       2. Door Dimensions:
          1. Max Height 16 ft. (4,876 mm).
          2. Max Width 16 ft. (4,876 mm).
          3. Min Height 7 ft. (2,133 mm).
          4. Min Width 3 ft. (914 mm).
       3. Safety Features:
          1. Photo Eye.
          2. Safety Light Curtain: Full through-beam light curtain up to six feet tall.
          3. Wireless Safety System: No coil cords.
          4. Bottom Beam Padded: Soft bottom bar has fail-safe electric safety edge.
          5. Egress Safety System: Break release raises door during power outage.
       4. Door Panel:

\*\* NOTE TO SPECIFIER \*\* Delete material option not required. PVC is standard.

* + - * 1. Material: 2-ply Woven monofilament polyester impregnated PVC.
        2. Material: Vinyl. 40 oz replaceable panel.
        3. Full Width Vision Panel: Full door width x 30 inch (762 mm) high PVC vision panel.

\*\* NOTE TO SPECIFIER \*\* The following three paragraphs are optional. Delete options not required.

* + - * 1. Rolltex Premium. Manufactured by ASSA ABLOY for the Albany brand.
        2. Full Width Screen Panel.
      1. Door Components:
         1. Side Frames: Self-supporting 5 x 6 inch (127 x 152 mm) aluminum.
         2. Breakaway Auto-Reset System Door: Automatically resets after impact.

Breakaway Soft Bottom Bar: Soft, breakaway bottom bar automatically repairs itself after accidental impact and protects against injuries.

* + - * 1. Weather Seals: Sealing Double seals on top frame and side frames.

Top frame and side frames seal when door is closed, reducing energy loss, and maintaining climate control.

\*\* NOTE TO SPECIFIER \*\* Covers are optional. Delete covers if not required.

* + - * 1. Covers: Optional: Top roll and motor covers.
      1. Control and Drive System:
         1. ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208 to 240 V.
        2. Input Voltage: 440-480 V.
        3. Input Voltage: 575-600 V.
        4. Motor: Up to 3.0 Hp (2.24 kW), 3 phase, 50/60 Hz.
        5. Limits Adjustment : At keypad interface.
        6. Protection: NEMA 4.
      1. Wind Resistance:
         1. Wind Rib Reinforcement: 1.5 inch (38 mm) aluminum profiles.
         2. High Wind Applications: 4 inch (102 mm) high strength aluminum profiles.
         3. Wind Rating: Wind class 2,

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. RIGID EXTERIOR DOORS

\*\* NOTE TO SPECIFIER \*\* With bold, sleek styling, the Albany RR3000 is constructed of low-profile, anodized, double-walled aluminum for durability, security, and smooth performance. Rapid opening speeds and innovative mechanical design lets traffic and materials get in and out quickly, easily, and safely, without waiting for the door to open or close. Delete if not required.

* + 1. Basis of Design: Model RR3000 as manufactured by Albany Doors.
       1. Low-profile, anodized, double-walled aluminum for durability, security, and smooth performance.

\*\* NOTE TO SPECIFIER \*\* Delete door models not required.

* + - 1. Door Dimensions: RR3000R.
         1. Width: 7 ft to 20 ft (2,134 to 6096 mm).
         2. Height: 9 ft - 7.55 in (2,935 mm) maximum.
      2. Door Dimensions: RR3000.
         1. Width: 7 ft to 16 ft - 4 inch (2,134 to 4978 mm).
         2. Height: 16 ft - 2.29 in. (4,935 mm) maximum.
      3. Speeds:
         1. Opening Speed: Up to 80 inches (2032 mm) per sec.
         2. Closing Speed: Approximately 24 inches (610 mm) per sec.
      4. Door Curtain Construction:
         1. Anodized Aluminum Slats. EPDM rubber connection.
         2. UltraLife Belts: Individual slats are mounted to a high-strength belt with no hinges or rollers. Door continues to operate when slat is missing. Slats can be replaced quickly and easily while the door remains operational.
         3. Counterbalanced.

\*\* NOTE TO SPECIFIER \*\* The following two paragraphs are optional. Delete options not required.

* + - * 1. Insulated panels.
        2. Ventilated panels.
      1. Door Components:
         1. Side Frames: 11 gauge galvanized steel.
         2. Manual release.
         3. Disc Drive: Reduces wear, vibration, and noise.
         4. Top Roll: Powder coated steel.
      2. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208-240 V.
        2. Input Voltage: 440-480 V.
        3. Input Voltage: 575-600 V.
        4. Motor: 1.5 Hp, 3 phase, 50/60 Hz.
        5. Protection: NEMA-4.

\*\* NOTE TO SPECIFIER \*\* The clear impact-resistant polycarbonate slats on the Albany RR3000 Vision door panel let in plenty of daylight for additional energy savings. Natural light creates a warm, high quality environment for both employees and customers. Plus, the vision panels provide a clear view of traffic on both sides of the door for increased safety. Delete if not required.

* + 1. Basis of Design: Model RR3000 Vision as manufactured by Albany Doors.
       1. Low-profile, anodized, double-walled aluminum for durability, security, and smooth performance.
       2. Door Dimensions: RR3000 Vision.
          1. Width: 7 to 18 ft (2,134 x 5,486 mm).
          2. Height: 16 ft - 2.29 in. (4,935 mm).
       3. Speeds:
          1. Opening Speed: Up to 80 inches (2032 mm) per sec.
          2. Closing Speed: Approximately 24 inches (610 mm) per sec.
       4. Door Curtain Construction:
          1. Anodized Aluminum Slats. EPDM rubber connection.
          2. UltraLife Belts: Individual slats are mounted to a high-strength belt with no hinges or rollers. Door continues to operate when slat is missing. Slats can be replaced quickly and easily while the door remains operational.
          3. Counterbalanced.
          4. Vision panels: Clear impact-resistant polycarbonate slats let in daylight for additional energy savings and provide a clear view of traffic on both sides of door for increased safety.
       5. Door Components:
          1. Side Frames: 11 gauge galvanized steel.
          2. Manual release.
          3. Disc Drive: Reduces wear, vibration, and noise.
          4. Top Roll: Powder coated steel.
       6. Control and Drive System:
          1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208-240 V.
        2. Input Voltage: 440-480 V.
        3. Input Voltage: 575-600 V
        4. Motor: 1.5 Hp, 3 phase, 50/60 Hz
        5. Protection: NEMA-4.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. RUBBER EXTERIOR DOORS

\*\* NOTE TO SPECIFIER \*\* When the going gets tough, you need the Albany UltraTough high-performance door. The Albany UltraTough can take a hit and hold up in the most rugged industrial applications, while flimsy conventional doors buckle under conditions.

* + 1. Basis of Design: UltraTough Rubber exterior doors as manufactured by Albany Doors.
       1. Opening Speeds:
          1. Springless System: Opening up to 36 inches (914 mm) per second; size dependent.
          2. Counterbalanced System: 60 inches (1524 mm) per second; size dependent.
       2. Door Dimensions:
          1. Width: 8 to 30 ft (2438 to 9144 mm).
          2. Height: 8 to 30 ft (2438 to 9144 mm).
       3. Safety Features:
          1. Photo eye.
          2. TruckGuard Light Curtain: 40 Infrared through-beam optical sensors.

\*\* NOTE TO SPECIFIER \*\* Delete door panel options not required. SBR is standard.

* + - 1. Door Panel: Two layers Styrene Butadiene Rubber (SBR) with polyester cord center.
         1. Warranty: Lifetime.
      2. Door Panel: EPDM.
      3. Door Panel: MSHA.
      4. Static Wind Resistance:
         1. Windlock and Guide System: 20 psf (0.96 kPa) at 88 mph (141.6 kph).

Continuous Windlok handles high wind loads, positive and negative air pressures, and can compress during accidental impact without damage.

A near airtight seal for climate control and energy savings in harsh environments.

* + - * 1. Wind Gussets 30 psf (1.44 kPa) at 110 mph (177 kph).
      1. Door Components:
         1. Springless System: Direct drive unit.
         2. Counterbalanced Systems: 100,000 cycle torsion springs.
         3. Side Frames: Self-supporting, heavy-duty painted steel.
         4. Idler Tube: 4 inch (102 mm) diameter. Length: 134 inch (3404).
         5. Door Roll: 8-5/8 inch (219 mm) diameter. Tube thickness: 0.188 inch (4.77 mm). Comply with ASTM A513.
         6. Bottom Bar: Steel construction.
         7. Manual Egress: Chain hoist.
      2. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208-240 V, 3 phase.
        2. Input Voltage: 440-480 V, 3 phase.
        3. Input Voltage: 575-600 V, 3 phase.
        4. Motor: Up to 3.35 Hp, 3 phase, 60 Hz.
        5. Protection NEMA 4/12. cUL listed.
      1. Warranty:
         1. Limited Warranty: 5 year or 1,000,000 cycles.
         2. Mechanical and Electrical Components: Two years.
         3. Labor: One year.

\*\* NOTE TO SPECIFIER \*\* When the going gets tough, you need the Albany RR1500 Tough high-performance door. The Albany RR1500 Tough can take a hit and hold up in the most rugged industrial applications, while flimsy conventional doors buckle under conditions.

* + 1. Basis of Design: RR1500 Rubber exterior doors as manufactured by Albany Doors.
       1. Opening Speeds:
          1. Springless System: Opening up to 48 inches (1219 mm) per second; size dependent.
       2. Door Dimensions:
          1. Width: 5 to 24 ft (1524 to 7315 mm).
          2. Height: 5 to 20 ft (1524 to 6096 mm).
       3. Safety Features:
          1. Photo eye.
          2. TruckGuard Light Curtain: 40 Infrared through-beam optical sensors.

\*\* NOTE TO SPECIFIER \*\* Delete door panel options not required. SBR is standard.

* + - 1. Door Panel: Two layers Styrene Butadiene Rubber (SBR) with polyester cord center.
         1. Warranty: Lifetime.
      2. Door Panel: EPDM.
      3. Door Panel: MSHA.
      4. Static Wind Resistance:
         1. Windlock and Guide System: 20 psf (0.96 kPa) at 88 mph (141.6 kph).

Continuous Windlok handles high wind loads, positive and negative air pressures, and can compress during accidental impact without damage.

A near airtight seal for climate control and energy savings in harsh environments.

* + - * 1. Wind Gussets 30 psf (1.44 kPa) 110 mph (177 kph).
      1. Door Components:
         1. Springless System: Direct drive unit.
         2. Side Frames: Self-supporting, heavy-duty painted steel.
         3. Idler Tube: 4.5 inch (114 mm) diameter. Length: 134 inch (3404 mm).
         4. Door Roll: 8-5/8 inch (219 mm) diameter. Tube thickness: 0.188 inch (4.77 mm). Comply with ASTM A513.
         5. Bottom Bar: Steel construction.
         6. Manual Egress: Chain hoist.
      2. Control and Drive System:

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208-240 V, 3 phase.
        2. Input Voltage: 440-480 V, 3 phase.
        3. Input Voltage: 575-600 V, 3 phase.
        4. Motor: Up to 3.35 Hp, 3 phase, 60 Hz.

\*\* NOTE TO SPECIFIER \*\* Delete PLC controller options not required.

* + - * 1. Controller: ACS100. VFD system.

Limited Warranty: 5 year or 1,000,000 cycle on RR1500 drive systems.

* + - * 1. Protection NEMA 4/12 cUL listed.
      1. Warranty:
         1. Mechanical and Electrical Components: Two years.
         2. Labor: One year.

\*\* NOTE TO SPECIFIER \*\* From forklifts to heavy equipment, the Albany UltraBig high-speed rubber door handles openings as large as 50' x 35' with speed and reliability in the harshest environments.

* + 1. Basis of Design: Ultrabig Rubber exterior doors as manufactured by Albany Doors.
       1. Opening Speeds:
          1. Counterbalanced system: Opening up to 12 inches (305 mm) per sec; size dependent.
       2. Door Dimensions:
          1. Width: 30 ft, 1 inch to 50 ft (9169 to 15240 mm).
          2. Height: 30 ft, 1 inch to 35 ft (9169 to 10668 mm).
       3. Safety features:
          1. Photo eye.
          2. Bottom Beam: Failsafe auto stop and reverse self-monitoring safety edge.
       4. Door Panel: Double layers of Styrene Butadiene Rubber (SBR) with polyester cord center MSHA curtain material.
          1. Breaking Strength: 1100 lbs per inch per ply.
          2. Operational Temperature Extremes: Minus 40 to 176 degrees F (Minus 40 to 80 degrees C.
       5. Door Panel: EPDM.
       6. Wind Resistance: Continuous Windlock Up to 20 psf (0.96 kPa) at 128 mph (206 kph); near airtight seal.
       7. Door Components:
          1. Counterbalanced Systems: 50k cycle torsion springs.
          2. Side Frames: Heavy-duty steel, painted.

\*\* NOTE TO SPECIFIER \*\* Coating is optional Delete if not required.

Corrosion and chemical resistant coating.

* + - * 1. Idler: 6 inch (152 mm) diameter. Wall Thickness: 1/4 inch (6).
        2. Door Roll: 12 inch (305 mm) diameter. Tube Thickness: 0.188 inch (4.77 mm). Comply with ASTM A513.
        3. Bottom Bar: Steel construction.
        4. Manual Egress: Chain hoist.

\*\* NOTE TO SPECIFIER \*\* The following two paragraphs are optional. Delete options not required.

* + - * 1. Hood.
        2. Windows: 10 x 18 inches (254 x 457 mm).
      1. Control and drive system:

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. PLC single speed.
        2. Input Voltage: 208-240 V.
        3. Input Voltage: 440-480 V.
        4. Input Voltage: 575-600 V.
        5. Motor: Up to 3.7 kW, 3 phase, 60 Hz, 20 amps.
        6. Limits Adjustment: From drive.
        7. Protection: NEMA 4/12, IP-56.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. COLD STORAGE DOORS

\*\* NOTE TO SPECIFIER \*\* The Albany RR300 Chill and Albany RR300 Freeze combine fast speeds and a reliable thermal barrier to protect product quality in critical temperature zones. These innovative solutions eliminate the compromise between temperature control, energy costs and productivity.

* + 1. The Albany RR300 Chill and Albany RR300 Freeze are specially designed to meet the unique needs of cold storage areas, which require an extremely durable and reliable door that can open and close hundreds of times a day, provide fast access and minimize ice and frost buildup. The Albany RR300 Chill and Albany RR300 Freeze are resilient solutions for frequent operation in challenging environments. They're outfitted with sophisticated cellular insulation which prevents ice and condensation build-up on the door panel.
    2. Basis of Design: Model RR300 Chill. Modular High Performance Interior Rollup Doors as manufactured by Albany Doors.
       1. Model RR300 Chill: For high traffic areas where temperatures in cold storage areas are above 32 degrees F (0 degrees C).
       2. Speeds:
          1. Opening Speed: 120 inches (3048 mm) per second. Speed varies with door size.
          2. Closing Speed: 24 inches (610 mm) per second.
       3. Door Dimensions:
          1. Width Range: 3 to 12 ft (914 to 3658 mm).
          2. Height Range: 7 to 20 ft (2133 to 6096 mm).
       4. Safety Features:
          1. Photo Safety Type: Light curtain.
          2. Reversing Edge Type: Failsafe wireless electric contact edge.

\*\* NOTE TO SPECIFIER \*\* Egress is optional. Delete if not required.

* + - * 1. Egress: Chain hoist system for manual operation of door during power outage.
      1. Door Panel:
         1. Panel Material: Climatex - 22 oz composite vinyl panel sections hot welded with 3 layers of double reflective, heavy duty polyethylene air pocketed insulation.
         2. Self-Repairing Breakaway: Yes. Push a button.
      2. Door Components:
         1. Side Frame Construction: Low profile anodized aluminum.
         2. Bottom Beam Construction: Insulated and padded.

Padded, breakaway bottom bar automatically repairs itself after accidental impact and protects against injuries.

* + - * 1. Top Roll Construction: Extruded aluminum with steel axles.
      1. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed .

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208 V, 3 Ohms, plus or minus 10 percent.
        2. Input Voltage: 230 V, 3 Ohms, plus or minus 10 percent.
        3. Input Voltage: 460 V, 3 Ohms, plus or minus 10 percent.
        4. Input Voltage: 575 V, 3 Ohms, plus or minus 10 percent.
        5. Motor: Up to 3.0 Hp, 3 Phase. 50/60 Hz.
        6. Controls Environmental Rating: NEMA-4.
        7. Motor Environmental Rating: IP-55.
    1. Basis of Design: Model RR300 Freeze. Modular High Performance Interior Rollup Doors as manufactured by Albany Doors.
       1. Model RR300 Freeze: For dual climate facilities where temperatures below minus 20 degrees F (minus 6.7 degrees C) open into ambient temperatures. Can be equipped with heated side frames and energy-saving, room temperature airflow systems to prevent frost buildup in high humidity.
       2. Speeds:
          1. Opening Speed: 120 inches (3048 mm) per second. Speed varies with door size.
          2. Closing Speed: 24 inches (610 mm) per second.
       3. Door Dimensions:
          1. Width Range: 3 to 12 ft (914 to 3658 mm).
          2. Height Range: 7 to 20 ft (2133 to 6096 mm).
       4. Safety Features:
          1. Photo Safety Type: Light curtain.
          2. Reversing Edge Type: Failsafe wireless electric contact edge.

\*\* NOTE TO SPECIFIER \*\* Egress is optional. Delete if not required.

* + - * 1. Egress: Chain hoist system for manual operation of door during power outage.
      1. Door Panel:
         1. Panel Material: Climatex, 22 oz composite vinyl panel sections hot welded with 3 layers of double reflective, heavy duty polyethylene air pocketed insulation.
         2. Self-Repairing Breakaway: Yes. Push a button.
      2. Door Components:
         1. Side Frame Construction: Low profile anodized aluminum.

\*\* NOTE TO SPECIFIER \*\* Heating elements are optional. Delete if not required.

Heating elements. For side frames.

* + - * 1. Bottom Beam Construction: Insulated and padded.

Padded, breakaway bottom bar automatically repairs itself after accidental impact and protects against injuries.

* + - * 1. Top Roll Construction: Extruded aluminum with steel axles.

\*\* NOTE TO SPECIFIER \*\* Blowers are optional. Delete if not required.

* + - * 1. Blowers: Freeze model can be equipped with blowers to resist ice build-up and prevent dangerous conditions.
      1. Control and Drive System:
         1. Control Panel: ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208 V, 3 Ohms, plus or minus 10 percent.
        2. Input Voltage: 230 V, 3 Ohms, plus or minus 10 percent.
        3. Input Voltage: 460 V, 3 Ohms, plus or minus 10 percent.
        4. Input Voltage: 575 V, 3 Ohms, plus or minus 10 percent.
        5. Motor: Up to 3.0 Hp, 3 Phase. 50/60 Hz.
        6. Controls Environmental Rating: NEMA-4.
        7. Motor Environmental Rating: IP-55.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. CLEANROOM DOORS

\*\* NOTE TO SPECIFIER \*\* Albany RR300 Clean. Minimize cleanroom risk with maximum particle and pressure control. From Albany Doors, the global leader in door opening solutions, the Albany RR300 Clean helps you gain greater control over particle concentration and air changes while maintaining stringent cleanroom requirements, including ISO Class 5 (US Federal Standard 209E Class 100) and GMP Class C.

* + 1. Basis of Design: Model RR300 Clean as manufactured by Albany Doors. Control particles and pressure.
       1. Opening and Closing Speeds:
          1. Opening: Up to 80 inches (2031 mm) per second.
          2. Closing: Up to 40 inches (1016 mm) per second.
       2. Cleanroom Class:
          1. ISO Class 5.
          2. US Federal Standard 209E Class 100.
          3. EN 146441-1.
          4. GMP: Class C.
       3. Leakage: 20 cu m per hour for door size of (1500 x 2000 mm).
       4. Door Dimensions:
          1. Height: 3.2 to 11.5 ft (1000 to 3500 mm).
          2. Width: 3.2 to 11.5 ft (1000 to 3500 mm).
       5. Safety Features:
          1. Photo eye.
          2. Bottom Beam: Insulated, soft bottom bar automatically reverses. Minuscule gap between bottom profile and side columns minimizes pressure loss when door is closed.
          3. Egress safety system:

\*\* NOTE TO SPECIFIER \*\* the following two paragraphs are optional. Delete options not required.

UPS battery backup in case of power outage.

Contactless actuator.

* + - 1. Door Panel:
         1. FDA Approved PVC with white or blue reinforcement strips.
      2. Door Components:
         1. Side Frames: Stainless steel. Minimal side columns offer added installation flexibility for confined areas; while minuscule curtain guide gap ensures lowest possible pressure loss.
         2. Bottom Beam: Stainless steel.
         3. Top Roll Cover: Stainless steel.
         4. Motor Cover: Stainless steel.
         5. Motor Cover: Stainless steel.
      3. Control and Drive System:
         1. ACS100 CONTROLLER Variable frequency drive with soft start, soft stop, and positioning encoder. 24V DC, cUL listed . Boosts speed with less energy delivering fast, smooth operation with minimal wear and maintenance.

\*\* NOTE TO SPECIFIER \*\* Monitoring systems are optional. Delete if not required.

Remote monitoring systems.

\*\* NOTE TO SPECIFIER \*\* Delete input voltage options not required.

* + - * 1. Input Voltage: 208-240 V.
        2. Input Voltage: 440-480 V.
        3. Input Voltage: 575-600 V.
        4. Motor 1.0 Hp, 3 phase, 60 Hz, 10 amps.
        5. Protection: IP-55, NEMA 4.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly constructed and prepared.
      2. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
      3. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions.
      2. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
      3. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
      4. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph for electric operation of coiling doors and delete if not required.

* + 1. Coordinate installation of electrical service with Section 26 05 00 - Common Work Results for Electrical. Complete wiring from disconnect to unit components.
    2. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07 90 00 - Joint Protection.
    3. Install perimeter trim and closures.
    4. Instruct Owner's personnel in proper operating procedures and maintenance schedule.
  1. FIELD QUALITY CONTROL
     1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.
     2. Startup Service:
        1. Engage a factory-authorized service representative to perform startup service.
           1. Perform installation and startup checks according to manufacturer's written instructions.
           2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.
     3. Adjusting:
        1. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
        2. Adjust hardware and operating assemblies for smooth and noiseless operation.
        3. Adjust seals to provide tight fit around entire perimeter.
  2. CLEANING
     1. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
     2. Remove labels and visible markings.
     3. Touch-up, repair or replace damaged products before Substantial Completion.
  3. DEMONSTRATION
     1. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain high performance overhead coiling doors.
  4. PROTECTION
     1. Protect installed products until completion of project.
  5. SCHEDULES

\*\* NOTE TO SPECIFIER \*\* Retain Paragraph below if required to suit project requirements. Identify products by name on the Drawings or use this paragraph to define the location of each type of material to be used. The following are some examples of schedule references. Edit as required to suit project or delete and identify products on the Drawings.

* + 1. :
    2. :

END OF SECTION