SECTION 08834

SMOKE AND FIRE CURTAINS

1. GENERAL
   1. SECTION INCLUDES
      1. Fire-protective Curtains as defined by UL10D; additionally investigated to ANSI/UL 1784
   2. REFERENCES
      1. Underwriters Laboratories (UL):
         1. UL 10D - Standard for Fire Tests of Fire Protective Curtain Assemblies
         2. ANSI/UL 1784 – Air Leakage Tests of Door Assemblies
   3. SUBMITTALS
      1. Product Data: Manufacturer's data sheets on each product to be used, including:
         1. Test reports.
         2. Preparation instructions and recommendations.
         3. Storage and handling requirements and recommendations.
         4. Installation methods:
            1. Instructions for install and wiring.
      2. Shop Drawings: Include system components and relevant options.
   4. QUALITY ASSURANCE
      1. Manufacturer Qualifications: Minimum 5 years experience manufacturing similar equipment.
   5. DELIVERY, STORAGE, AND HANDLING
      1. Store products indoors in secure locker manufacturer's unopened packaging. Minimize movement until ready for installation. Delicate aluminum and electronic components can be damaged easily and should be handled with extreme care.
   6. PROJECT CONDITIONS
      1. Product intended for indoor use. 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.
   7. WARRANTY
      1. Manufacture's standard limited warranty.
2. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Colt International GmbH, distributed by Fire Curtain Technologies; Canandaigua, NY 14424; Tel: 585-412-2179; Email: [info@firecurtaintech.com](mailto:info@firecurtaintech.com?subject=Fire%20Curtain%20Website&bcc=casandra@murcadom.com), www.firecurtaintechnologies.com
      2. Substitutions: Not permitted.
   2. AUTOMATIC SMOKE CURTAINS
      1. Basis of Design: SD Automatic Smoke Curtains by the Colt Group, and distributed by Fire Curtain Technologies.
         1. Electrically operated automatic smoke curtain, seals off an area on fire alarm, preventing smoke from spreading. The curtain gravity-falls in controlled manner from ceiling to floor for smoke containment.
         2. Performance Characteristics:
            1. Tested and in compliance with UL10D; additionally investigated to ANSI/UL 1784 for one and three hour ratings.
            2. Successful continuous performance test of 10,000 cycles
         3. Dimensions and Size Range: Provide size suitable for project requirements; refer to the Drawings.
         4. Curtain Type:
            1. Single Unit (type SI).

Width: Up to 177 in (4500mm)

Drop: Up to 236 in (6000mm).

* + - 1. Bottom Bar Type: ID bottom bar (fabric loop).
      2. Bottom Bar Type: U bottom bar (aluminum profile).
      3. Bottom Bar Type: UK bottom bar (aluminum profile).
      4. Bottom Bar Type: DP bottom bar (fabric loop).
      5. Fire Rating ***Options, a, b.***
         1. Smoke Rating: up to 1 hour, UL 10D/1784.
         2. Smoke Rating: up to 3 hours, UL 10D/1784.
      6. Control Type: Control panel with integrated microprocessor designed to operate automatic smoke- or fire curtains in a safe and correct manner. The control panel shall be prepared for connection to a fire alarm system and designed to enable the implementation of additional operational functions. ***Options a, b, c, d.***
         1. Power supply for 24V DC output for direct connection to the fire alarm system.
         2. Control panel can be wired to allow multiple curtains to operate as an integrated part of a smoke control and fire management system.
         3. An uninterruptible power supply (UPS) may be supplied and connected so that in event of power failure, the curtain remains retracted for a predetermined period (nominally 30 minutes). If signaled to descend during this time, the smoke curtain shall drop in a controlled manner to its fire operational position in a fail-safe manner.
         4. A key switch for manual operation can be connected to an uninterruptible power supply to maintain the curtains in their raised positions in the event of a main power outage.
      7. Fabrication:
         1. Fabricate frames to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints. Assemble units in factory to minimize field splicing and assembly.
         2. Disassemble units as necessary for shipping and handling limitations.
         3. Clearly mark units for reassembly and coordinated installation.
         4. Include anchors and accessories required for complete assembly.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates and openings have been properly prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect 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. Test for proper operation.
   4. PROTECTION
      1. After installation, clean as recommended by the manufacturer.
      2. Remove and legally dispose of construction debris from project site.
      3. Protect installed products until completion of project.
      4. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION