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1. **Design Criteria:**

- a. This standard discusses overhead coiling doors and overhead coiling fire doors.
- b. Exterior coiling doors to be insulated. (R-5 minimum).
- c. Exterior overhead coiling doors shall be motorized.
- d. Smoke Performance: Provide UL “S” label for doors required to be smoke-rated.
- e. Fire rated overhead doors shall be rated as required by code. UL Oversize Fire Door Label shall be required depending on the size of the door.
- f. Factory Mutual Approved: Required.
- g. Provide weather seals at exterior doors, located at bottom bar, guides and hood.
- h. For interior coiling doors, provide time delay release system, smoke detectors on both sides of door, and UL listing. FM Global approval for flame baffle, and audible and visible warnings for automatic closing.
- i. CATcard operation shall not be allowed for any overhead doors.

2. **References**

- a. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

3. **Required Submittals:**

- a. Product Data: Manufacturer’s data including instructions, recommendations, and restrictions.
 - i. Show jamb detail and interface of track and finishes.
 - ii. For each type and size of overhead coiling door and accessory.
 - 1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
 - 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.
- b. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
 - i. Include plans, elevations, sections, and mounting details.
 - ii. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.

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- iii. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
- iv. For exterior components, include details of provisions for assembly expansion and contraction and for excluding and draining moisture to the exterior.
- v. Show locations of controls, locking devices, and other accessories.
- vi. Include diagrams for power, signal, and control wiring.
- c. Verification Samples: $\geq 6 \times 6$ inches of door curtain.
- d. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
 - i. Include similar Samples of accessories involving color selection.

4. **Products, Materials & Equipment:**

- a. Source Limitations: Obtain overhead coiling doors from a single source from a single manufacturer.
 - i. Obtain operators and controls from overhead coiling door manufacturer.
- b. MANUFACTURERS:
 - i. Cookson Company, www.cooksondoor.com
 - ii. Cornell Iron Works, Inc., www.cornelliron.com
 - iii. McKeon Rolling Steel Door Company, Inc., www.mckeondoor.com.
 - iv. Overhead Door Corporation, www.overheaddoor.com
 - v. Raynor Garage Doors, www.raynor.com
- c. Counterbalance systems shall be torsion springs with size to counterbalance door curtain weight.
- d. Operation Cycles: Door components and operators capable of operating for 50,000 cycles minimum. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.
 - i. Do not provide standard 20,000 cycles.
 - ii. Alternate systems will be permitted after review by the UVM Project Manager.
- e. Curtain Accessories: Equip door with automatic closing device, push/pull handles, and pull hook.
 - i. Automatic-Closing Device for Fire-Rated Doors: Equip each fire-rated door with an automatic-closing device or holder-release mechanism and governor unit complying with NFPA 80 and an easily tested and reset release

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mechanism. Testing for manually operated doors shall allow resetting by opening the door without re-tensioning the counterbalancing mechanism. Automatic-closing device shall be designed for activation by the following:

1. Building fire-detection, smoke-detection, and alarm systems.
 2. Governor: Provide a viscous governor to regulate the rate of descent of door in a quiet manner. Use an engagement type that is not engaged during normal door operation, but after cable release, will retard the speed during automatic door closure to under 24 inches per second and not less than 6 inches per second per NFPA 80.
- f. Equip each fire-rated door with replaceable smoke-seal perimeter gaskets or brushes for smoke and draft control as required for door listing and labeling by a qualified testing agency.
- g. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

5. **Installation, Fabrication, and Construction:**

- a. Coordinate door installation with fire alarm system when doors are connected.

6. **Warranties:**

- a. Manufacturer's standard warranty on parts and equipment.
- b. Installer's standard one-year warranty on installation and workmanship.