

SECTION 10 2239 - FOLDING PANEL PARTITIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Manually operated, acoustical panel partitions.
- 2. Electrically operated, acoustical panel partitions.

B. Related Requirements:

- 1. Section 055000 "Metal Fabrications" for supports that attach supporting tracks to overhead structural system.
- 2. Section 092900 "Gypsum Board" for fire-rated assemblies and sound barrier construction above the ceiling at track.
- 3. Electrical and communications Sections for electrical service and connections for motor operators, controls, and limit switches and for system disconnect switches.

1.3 DEFINITIONS

- A. NIC: Noise Isolation Class.
- B. NRC: Noise Reduction Coefficient.
- C. STC: Sound Transmission Class.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

B. LEED Submittals:

- 1. Product Data for Credit MR 4: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.
- 2. Certificates for Credit MR 7: Chain-of-custody certificates certifying that operable panel partitions comply with forest certification and chain-of-custody requirements. Include statement indicating cost for each certified wood product.
- 3. Product Data for Credit IEQ 4.4: For composite wood products, documentation indicating that products contain no urea formaldehyde.

- C. Shop Drawings: For operable panel partitions.
  - 1. Include plans, elevations, sections, details, numbered panel installation sequence, and attachments to other work.
  - 2. Indicate stacking and operating clearances. Indicate location and installation requirements for hardware and track, blocking, and direction of travel.
  - 3. Include diagrams for power, signal, and control wiring.
- D. Samples for Initial Selection: For each type of exposed material, finish, covering, or facing.
  - 1. Include Samples of accessories involving color selection.
- E. Samples for Verification: For each type of exposed material, finish, covering, or facing, prepared on Samples of size indicated below:
  - 1. Textile Facing Material: Full width by not less than 36-inch- (914-mm-) long section of [fabric] [carpet] from dye lot to be used for the Work, with specified treatments applied. Show complete pattern repeat.
  - 2. Panel Facing Material: Manufacturer's standard-size unit, not less than 3 inches (75 mm) square.
  - 3. Panel Edge Material: Not less than 3 inches (75 mm) long.
- F. Delegated-Design Submittal: For operable panel partitions.
  - 1. Include design calculations for seismic restraints.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
  - 1. Partition track, track supports and bracing, switches, turning space, and storage layout.
  - 2. Suspended ceiling components.
  - 3. Structural members to which suspension systems are attached.
  - 4. Size and location of initial access modules for acoustical tile.
  - 5. Items penetrating finished ceiling, including the following:
    - a. Lighting fixtures.
    - b. HVAC ductwork, outlets, and inlets.
    - c. Speakers.
    - d. Sprinklers.
    - e. Smoke detectors.
    - f. Access panels.
  - 6. Plenum acoustical barriers.
- B. Setting Drawings: For embedded items and cutouts required in other work, including support-beam, mounting-hole template.
- C. Qualification Data: For qualified Installer testing agency manufacturer and vendor.

- D. Seismic Qualification Certificates: For operable panel partitions, tracks, accessories, and components, from manufacturer. Include seismic capacity of partition assemblies to remain in vertical position during a seismic event and the following:
  - 1. Basis for Certification: Indicate whether certification is based on analysis, testing, or experience data, according to ASCE/SEI 7.
  - 2. Detailed description of partition anchorage devices on which the certification is based and their installation requirements.
- E. Product Certificates: For each type of operable panel partition.
  - 1. Include approval letter signed by manufacturer acknowledging Owner-furnished panel facing material complies with requirements.
- F. Product Test Reports: For each operable panel partition, for tests performed by a qualified testing agency.
- G. Field quality-control reports.
- H. Sample Warranty: For manufacturer's special warranty.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For operable panel partitions to include in maintenance manuals.
  - 1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:
    - a. Panel finish facings and finishes for exposed trim and accessories. Include precautions for cleaning materials and methods that could be detrimental to finishes and performance.
    - b. Seals, hardware, track, track switches, carriers, and other operating components.
    - c. Electric operator and controls.

#### 1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same production run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Panel Finish-Facing Material: Furnish full width in quantity to cover both sides of two panels when installed.

#### 1.8 QUALITY ASSURANCE

- A. Comply with the most current edition of the Northwestern University Design Standards.
- B. Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.
- C. Vendor Qualifications: A vendor that is certified for chain of custody by an FSC-accredited certification body.



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- a. Flame-Spread Index: 25 or less.
  - b. Smoke-Developed Index: 450 or less.
2. Fire Growth Contribution: Complying with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 265 Method B Protocol or NFPA 286.
- E. 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.

## 2.2 OPERABLE ACOUSTICAL PANELS

- A. Operable Acoustical Panels: Partition system, including panels, seals, finish facing, suspension system, operators, and accessories.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the ofocill

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- a. Recycled Content of Steel: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 25 percent by weight.
3. Steel Frame: Steel sheet, manufacturer's standard nominal minimum thickness for uncoated steel.

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2.4 PANEL FINISH FACINGS

- A. General: Provide finish facings for panels that comply with indicated fire-test-response

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- B. Comply with NFPA 70.
- C. Control Equipment: Comply with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6.
- D. Motor Electrical Characteristics:
  - 1. Horsepower: Manufacturer's standard.
  - 2. Volts: 120.
  - 3. Phase: Single.
  - 4. Hertz: 60.
- E. Control Stations: Two single-key-operated, constant-pressure control stations located remotely from each other on opposite sides and opposite ends of partition run.

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- e. Lock: Deadlock to receive cylinder, operable from both sides of door. See

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