

BuildingName
The Description of the Project
P00000000 0000

ARCHITECTURE & ENGINEERING
326 East Hoover, Mail Stop B
Ann Arbor, MI 48109-1002
Phone: 734-764-3414
Fax: 734-936-3334

SPECIFICATION DIVISION 10

NUMBER SECTION DESCRIPTION

DIVISION 10 SPECIALTIES

SECTION 102239 - FOLDING PANEL PARTITIONS

END OF CONTENTS TABLE

DIVISION 10 SPECIALTIES
SECTION 102239 - FOLDING PANEL PARTITIONS

1.1 SUMMARY

- A. This Section includes manually operated, acoustically rated assemblies, consisting of the following:

SELECT APPROPRIATE TYPE BELOW, USUALLY CONTINUOUS SEQUENCE.

1. Individual, unlinked panels.
 2. Panels hinged in pairs.
 3. Panels hinged in continuous sequence.
- B. Related Sections: The following sections contain requirements that relate to this Section:
1. Division 05 Section "Metal Fabrications" for miscellaneous framing and supports.
 2. Plenum barriers are specified in Division 09 Section "Gypsum Board Assemblies"

1.2 SUBMITTALS

- A. Product data on physical characteristics, durability, resistance to fading, and flame spread characteristics for each type of folding fabric partition and accessory specified.
- B. Shop drawings showing location and extent of folding panel partitions. Include plans, elevations, large-scale details of anchorages, and accessory items. Indicate unit conditions at openings, typical and special details, and location and installation requirements for hardware. Indicate direction of travel and static and dynamic loading on the building structure.
- C. Template drawings prepared by manufacturer showing location of items supported or anchored by permanent construction.
- D. Samples for verification purposes of each type of material exposed to view. Include samples of each panel facing material selected.
- E. Acoustical Certification from an independent testing agency stating that product and materials furnished comply with specified requirements. Include certified laboratory testing data indicating that panels and materials meet specified test requirements. Include STC and NRC ratings and square foot weight of panel.
- F. Affidavits of Compliance to be included in final inspection manual:
1. Provide manufacturer's letter of certification showing compliance with finish testing and classification requirements referenced by current adopted NFPA 101 "Life Safety Code".
 2. Letter shall include project number, project name, and building name.

1.3 SYSTEM PERFORMANCE REQUIREMENTS

A. Acoustical Performance: Provide folding panel partitions tested by independent testing laboratory acceptable to Owner, for the following acoustical properties, according to the test methods indicated:

1. Sound Transmission Requirements: Folding panel partition assembly tested in a full-scale opening (14 feet by 9 feet) for laboratory sound transmission loss performance in accordance with ASTM E 90, determined by ASTM E 413 and rated for a STC plus or minus 1 as indicated:

INSERT APPLICABLE RATING.

2. Sound Transmission Class (STC): 49.

3. Noise Reduction Requirements: Folding panel partition assembly tested by a qualified independent laboratory for compliance with ASTM C 423 and rated for a NRC as indicated:

INSERT APPLICABLE RATING.

a. Noise Reduction Coefficient (NRC): INSERT .

1.4 QUALITY ASSURANCE

A. Single-Source Responsibility: Provide units and accessories of a single manufacturer.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to project site in original factory wrappings and containers, clearly labeled with identification of manufacturer, brand name, quality or grade, and lot number.

B. Store panels only on edge, blocked off ground to prevent sagging and warping in original undamaged packages and containers, inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.

C. Comply with instructions and recommendations of manufacturer for special delivery, storage, and handling requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products of one of the following:

- Folddoor/Holcomb and Hoke Mfg. Co.
- Hufcor, Inc. (Hough Mfg. Corp.)
- Modernfold, Inc.
- Panelfold, Inc.

2.2 PANEL CONSTRUCTION

- A. Face Sheets: Top reinforcing as required to support suspension components. Internal insulation as required to achieve specified acoustical rating.

THE FOLLOWING VARY WITH MANUFACTURER - CONSULT AIA MASTERSPEC FOR GENERIC MINIMUM VALUES.

1. Face Sheets for Steel Frames: Minimum 0.838 inch (21 gage) cold-rolled steel welded to minimum 1.390 inch (16 gage) steel channel frame, factory-fabricated panels, free of joints in faces.
2. Panel Thicknesses: 3 inches.
3. Panel Weight: 12 psf maximum as determined by panel construction, surface covering, and accessories.
4. Hardware: Manufacturers standard, finished to match exposed hardware on partition.

2.3 SUSPENSION SYSTEMS

- A. Carriers: Four wheel at lead post and two wheel at intermediate spacing as required for size and weight of partition for ease of operation.
- B. Suspension Tracks: Heavy-duty steel or aluminum, with overhead supports of adjustable steel hanger rods; heavy-duty, ball-bearing, trolley system supports specifically designed for use with size and type folding panel partition assembly indicated. Track deflection independent of structural support system no more than 1/360th of opening width.

2.4 FINISH SURFACE

- A. Finish Face: Manufacturer's standard primed steel.
- B. Materials: Manufacturer's standard mildew resistant vinyl, complying with FS CCC-W-408A for Type 1 material.

2.5 POSTS AND SEALS

- A. Lead posts and jamb posts formed to provide rigidity for partition and light seal at adjacent construction.
1. Post Type: Floating or attached multiple meeting post with 2-way meeting arrangements.
- B. Sound Seals: Perimeter sweep strips for each side, top, and bottom; providing continuous contact with head and sill surfaces for positive light and sound seal. Include manufacturer's standard male and female sound and light seal at lead posts and jambs.
- C. Vertical Seals: Deep nesting, interlocking astragals with continuous vinyl acoustical seal.
- D. Horizontal Top Seals: continuous contact extruded vinyl or mechanical retractable vinyl-faced seal exerting positive pressure on track when extended.

- E. Horizontal Bottom Seals: Retractable seal exerting positive pressure downward assuring horizontal and vertical sealing and resisting panel movement. Minimum clearance between retractable seal and floor finish shall be 1 inch.
 - 1. Extension/retraction of bottom seal by operating handle or built-in operating mechanism. Holes in panel faces not permitted. Include 2 handles per partition.
- F. Final Closure: Positive mechanical closure expanding from panel edge to create positive acoustical seal.
 - 1. Type: Jamb hinged closure.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine flooring for compliance with requirements for installation tolerances and other conditions affecting performance of folding partitions. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install folding panel partitions and accessories in compliance with ASTM E 557 after other finishing operations including painting, have been completed.
- B. Install folding panel partitions in conformance with drawings and approved shop drawings and in strict compliance with manufacturer's written installation instructions.
- C. Match folding panel partitions for color and pattern by installing partitions from cartons in same sequence as manufactured and packaged, if so numbered. Broken, cracked, chipped or deformed partitions are not acceptable.
- D. Repair or replace folding panel partitions within areas where test results indicate partitions do not comply with requirements and retest partitions.

3.3 ADJUSTING

- A. Lubricate bearings and sliding parts; adjust to ensure smooth, easy operation.

3.4 CLEANING

- A. Clean all folding partition surfaces and clean adjacent surfaces soiled by work of this section. Avoid use of abrasive cleaners or solutions containing corrosive solvents. Use cleaning materials recommended by manufacturer.

END OF SECTION 102239