

SPECIFICATION – SECTION 10 22 26 (10650) OPERABLE 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 Selections apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Manually operated, paired panel operable partitions.
- B. Related Sections include the following:
 - 1. Division 03 Sections for concrete tolerances required.
 - 2. Division 05 Sections for primary structural support, including pre-punching of support members by structural steel supplier per operable partition supplier's template.
 - 3. Division 06 Sections for wood framing and supports, and all blocking at head and jambs as required.
 - 4. Division 09 Sections for wall and ceiling framing at head and jambs.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is certified in writing by the operable partition manufacturer, as qualified to install the manufacturer's partition systems for work similar in material design, and extent to that indicated for this Project.
- B. Acoustical Performance: Test operable partitions in an independent acoustical laboratory in accordance with ASTM E90 test procedure and classified in accordance with ASTM E413 to attain no less than the STC rating specified. Provide a complete and unedited written test report upon request.
- C. Fire Performance: The fire performance of the operable wall panels shall have been tested at Underwriters Laboratories per UL 10B or NFPA 252. The partition panels shall have received a one-hour (B) rating and be listed as such by Underwriters Laboratories.

- D. Preparation of the opening shall conform to the criteria set forth per ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
- E. The operable wall must be manufactured by a certified ISO-9001-2015 company or an equivalent quality control system.
- F. Indoor Air Quality: Operable partition, movable wall manufacturer's non-wood products must meet the SCS Indoor Advantage™ Gold Certification or equivalent. This approval guarantees conformance to indoor air concentrations meeting Indoor Advantage Gold Indoor Air Quality Certified to SCS-105 v4.2-2023 Conforms to ANSI/BIFMA M7.1 and X7.1 and the CDPH/EHLB Standard Method (CA 01350) v1.2-2017 conducted in an independent third-party air quality testing laboratory.

1.4 REFERENCE STANDARDS

- A. ASTM International
 - 1. ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
 - 2. ASTM E90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
 - 3. ASTM E84 – Surface Burning Characteristics of Building Materials
 - 4. ASTM E413 – Classification for Rating Sound Insulation
- B. Health Product Declaration Collaborative
 - 1. Health Product Declaration Open Standard v2.1
- C. International Standards Organization
 - 1. ISO 14021 – Environmental Labels and Declarations – Self-Declared Environmental Claims (Type II Environmental Labeling).
 - 2. ISO 14025:2011-10, Environmental Labels and Declarations – Type III Environmental Declarations – Principles and Procedures
 - 3. ISO 14040 :2009-11 Environmental Management – Life Cycle Assessment – Principles and Framework.

4. ISO 14044 :2006-10, Environmental Management – Life Cycle Assessment – Requirements and Guidelines.
5. ISO 21930 – Sustainability in Buildings and Civil Engineering Works – Core Rules for Environmental Product Declarations of Construction Projects and Services.

D. Other Standards

1. ADA – American Disabilities Act.
2. UL 10B – Standard for Fire Tests of Door Assemblies
3. NFPA 252 – Standard Methods of Fire Tests of Door Assemblies

1.5 SUBMITTALS

- A. Product Data: Material descriptions, construction details, finishes, installation details, and operating instructions for each type of operable partition, component, and accessory specified.
- B. Shop Drawings: Show location and extent of operable partitions. Include plans, elevations, sections, details, attachments to other construction, and accessories. Indicate dimensions, weights, conditions at openings, and at storage areas, and required installation, storage, and operating clearings. Indicate location and installation requirements for hardware and track, including floor tolerances required and direction of travel. Indicate blocking to be provided by others.
- C. Setting Drawings: Show imbedded items and cutouts required in other work, including support beam punching template.
- D. Samples: Color samples demonstrating full range of finishes available by architect. Verification samples will be available in same thickness and material indicated for the work.
- E. Reports: Provide a complete and unedited written fire test report indicating thickness and spacing in test specimen matches product as submitted.
- F. Create spaces that are healthy for occupants.
 1. Furnish products and materials with Health Product Declaration (HPD), Manufacturer Inventory, or other material health disclosure documentation. Products without an HPD or other disclosure documentation are not acceptable.
- G. Furnish materials that generate the least amount of pollution.
 1. Furnish products and materials that have third party verified Environmental Product Declarations (EPDs). Consider products and materials that have optimized environmental

performance (reduced life cycle impacts). Products without an EPD or other disclosure documentation are not acceptable.

- H. Buy American: Operable partition to be manufactured in the United States in compliance with applicable U.S. Federal Trade Commission (FTC) and U.S. Customs Service and Border Protections regulations and be labeled “Made in America”.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Clearly mark packages and panels with numbering systems used on Shop Drawings. Do not use permanent markings on panels.
- B. Protect panel and glazing materials during delivery, storage, and handling to comply with manufacturer’s direction and as required to prevent damage.

1.7 WARRANTY

- A. Provide written warranty by manufacturer of operable partitions agreeing to repair or replace any components with manufacturing defects.
- B. Warranty period: Two (2) years

PART 2 – PRODUCTS

2.1 MANUFACTURERS, PRODUCTS, AND OPERATION

- A. Manufacturers: Subject to compliance with requirements, provide products by the following:
 1. Modernfold, Inc.
- B. Panels to be manufactured in the U.S.A.
- C. Products: Subject to compliance with requirements, provide the following product:
 1. Acousti-Seal® Legacy® – Paired Panel “Fire Rated” (912) 1-Hour UL rated, manually operated individual panel operable partition

2.2 OPERATION

- A. Acousti-Seal® Legacy® – Paired Panel “Fire Rated” (912): series of paired flat panels hinged together in pairs, manually operated, top supported with operable floor seals.
- B. Final Closure
 1. Horizontally expanding panel edge with removable crank

2.3 PANEL CONSTRUCTION

- A. Nominal 3-inch (76mm) thick panels in manufacturer’s standard 48-inch (1220mm) widths. All pal horizontal and vertical framing members fabricated from minimum 16-gage formed steel with overlapped and welded corners for rigidity. Top channel is reinforced to support suspension system

components. Frame is designed so that full vertical edges of panels are of formed steel and provide concealed protection of the edges of the panel skin.

B. Panel Skin Options:

1. Roll-formed 21-gage steel wrapping around panel edge. Panel skins shall be lock formed and welded directly to the frame for unitized construction. Acoustical ratings of panels with this construction **(Select One)**:

- a. 50 STC
- b. 52 STC

C. Hinges for Panels, Closure Panels, Pass Doors, and Pocket Doors shall be:

1. Full leaf butt hinges, attached directly to panel frame with welded hinge anchor plates within panel to further support hinge mounting to frame. Lifetime warranty on hinges. Hinges mounted into panel edge or vertical astragal are not acceptable.

D. Panel Trim: No vertical trim required or allowed on edges of panels; minimal groove appearance at panel joints.

E. Panel Weights:

1. 50 STC – 8 lbs./square foot
2. 52 STC – 11 lbs./square foot

2.4 PANEL FINISHES

A. Panel face finish shall be (select as required):

1. Reinforced vinyl with woven backing weighing not less than 20 ounces (567 g) per lineal yard
2. Acoustical, non-woven needle punch carpet, with fused fibers to prevent unraveling or fray of material
3. Wall covering and upholstery fabric with surface treatment to resist stains
4. Customer's own material (subject to factory approval)
5. Full height steel markerboard work surface
6. Uncovered for field finishing (subject to field finish factory approval)
7. Primed for field finishing

B. Panel Trim: Exposed panel trim of one consistent color from manufacturer's standard offering **(Select One):**

1. Dark Bronze
2. Smoke Gray
3. Natural Choice
4. Black

2.5 SOUND SEALS

A. Vertical Interlocking Sound Seals between panels: Roll-formed steel astragals, with reversible tongue and groove configuration in each panel edge for universal panel operation. Rigid plastic or aluminum astragals or astragals in only one panel edge are not acceptable

B. Horizontal Top Seals: Continuous contact, vinyl wrapped ceramic

C. Horizontal Bottom Seals **(Select One):**

1. Modernfold IA2 Bottom Seal. Automatic operable seals providing nominal 2-inch (51 mm) operating clearance with an operating range of +1/2-inch (13 mm) to -1-1/2-inch (38 mm) which automatically drop as panels are positioned, without the need for tools or cranks.
2. SM2 – Manually activated seals providing nominal 2-inch (51 mm) operating clearance with an operating range of +1/2-inch (13 mm) to -1-1/2-inch (38 mm). Seal shall be operable from panel edge or face. Extended seal shall exert nominal 120 pounds (54 kg) downward force to the floor throughout operating range.
3. SM4 – Manually activated bottom seals providing nominal 4-inch (102 mm) operating clearance with an operating range of +1/2-inch (13 mm) to -3-1/2-inch (89 mm). Seal shall be operable from panel edge or face. Extended seal shall exert nominal 120 pounds (54 kg) downward force to the floor throughout operating range.

2.6 SUSPENSION SYSTEM **(Select One)**:

A. #17 Suspension System

1. Suspension Tracks: Minimum 11-gage, 0.12-inch (3.04 mm) roll-formed steel track, supported by adjustable steel hanger brackets, supporting the load-bearing surface of the track, connected to structural support by pairs of 3/8-inch (9.5 mm) diameter threaded rods. Aluminum track is not acceptable.
 - a. Exposed track soffit: Steel, integral to track, and pre-painted off-white.
2. Carriers: One all-steel trolley with steel-tired ball bearing wheels per panel (except hinged panels). Non-steel tires are not acceptable
3. Warranty period: Five (5) years

B. #14 Suspension System

1. Suspension Tracks: Minimum 7-gage, 0.18-inch (5mm) roll formed steel. Track shall be supported by adjustable steel hanger

brackets connected to structural support pairs of ½-inch (13mm) diameter threaded rods. Bracket must support the load bearing surface of the track.

- a. Exposed track soffit: Steel, removable for service and maintenance, attached to track bracket without exposed fasteners, and pre-painted off-white
2. Carriers: One all-steel trolley with steel-tired ball bearing wheels per panel (except hinged panels). Non-steel tires are not acceptable
3. Warranty period: Twenty (20) years

2.7 OPTIONS

A. Pass Doors:

1. Single Pass Doors:
 - a. Matching pass door same thickness and appearance as panels. ADA compliant pass door to be trimless and equipped for panic operation. No threshold will be permitted.
2. Hardware:
 - a. Automatic door closer (required)
 - b. Self-illuminated exit signs:
 - i. Chemical exit sign – surface mount
 - ii. Photo luminescent exit sign – surface mount
 - c. Recessed lever handle and panic hardware (required)

B. Work Surfaces:

1. Markerboard: White enamel on steel, bonded to the face of the panel with horizontal trim without exposed fasteners. Trim is not acceptable on vertical edges to provide uninterrupted work surface.

C. Available Accessories/Options:

1. Pocket Doors: Acousti-Seal® Pocket Doors by Modernfold, Inc., with Non-Fire Rated construction (see supplement specification)
 - a. Legacy pocket door
 - b. Premier pocket door
2. Intersecting partition interface

- B. Install operable partitions and accessories after other finish operations, including painting, have been completed.
- C. Match operable partitions by installing panels from marked packages in numbered sequence indicated on Shop Drawings.
- D. Broken, cracked, chipped, deformed, or unmatched panels are not acceptable.

3.2 CLEANING AND PROTECTION

- A. Clean partition surfaces upon completing installation of operable partitions to remove dust, dirt, adhesives, and other foreign materials according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions in a manner acceptable to the manufacturer and installer that ensure operable partitions are without damage or deterioration at time of Substantial Completion.

3.3 ADJUSTING

- A. Adjust operable partitions to operate smoothly, easily, and quietly, free from binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruptions, or malfunction, throughout the entire operation range. Lubricate hardware and other moving parts.

3.4 EXAMINATION

- A. Examine flooring, structural support, and opening, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of operable partitions. Proceed with installation only after unsatisfactory conditions have been corrected.

3.5 DEMONSTRATION

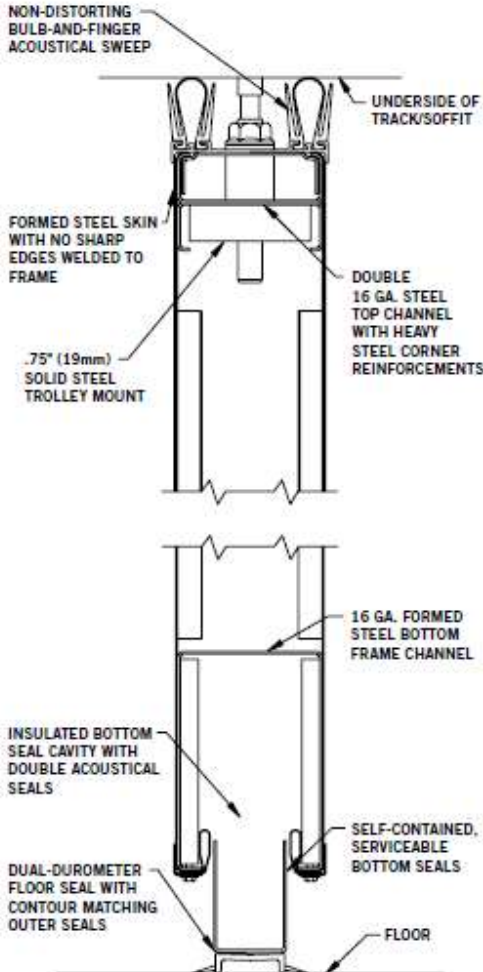
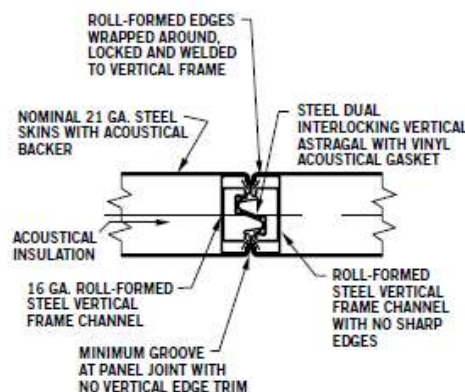
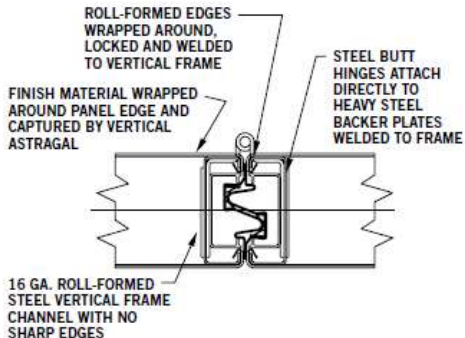
- A. Demonstrate proper operation and maintenance procedures to Owner's representative.
- B. Provide Operation and Maintenance Manual to Owner's representative.

PART 3 – EXECUTION

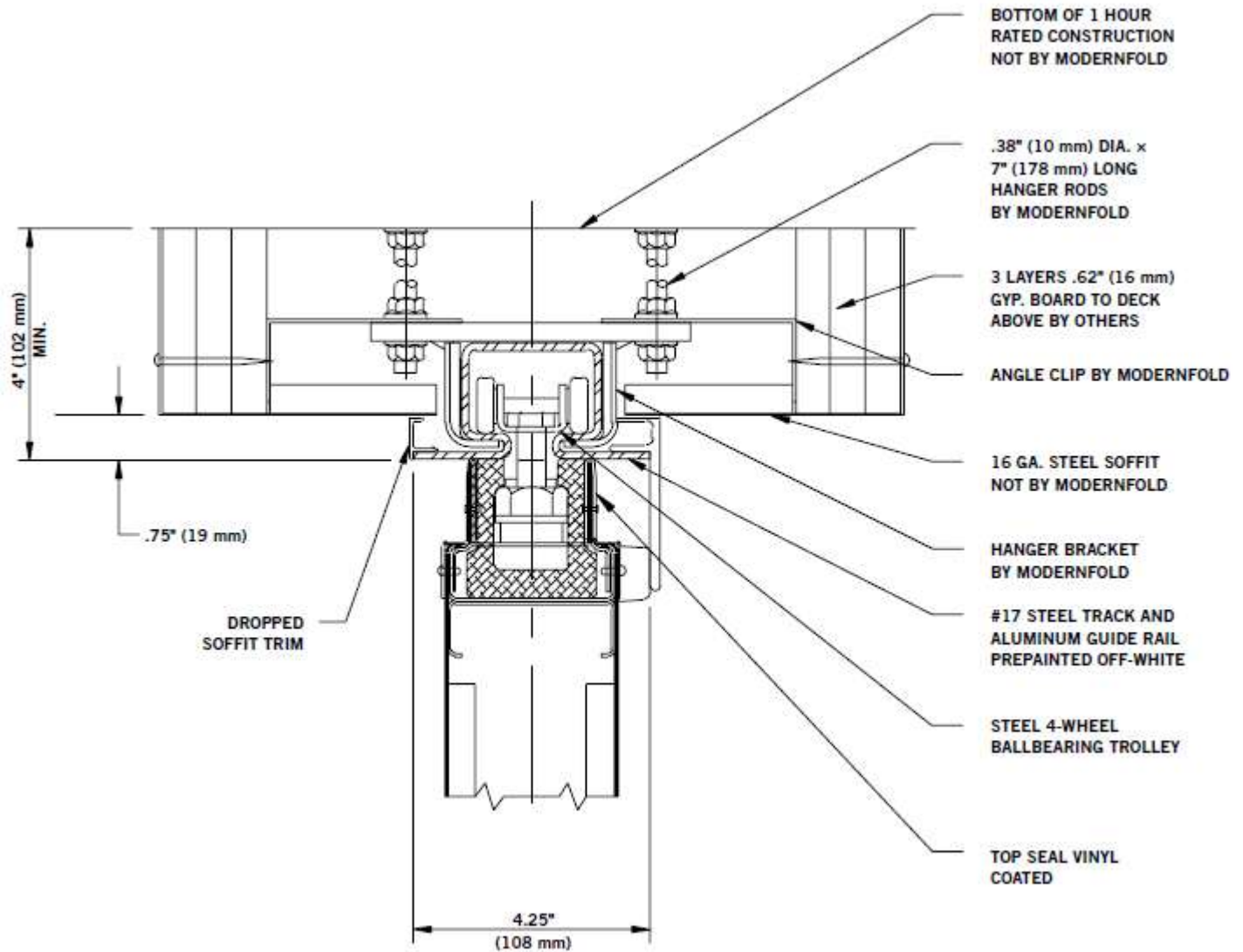
3.1 INSTALLATION

- A. General: Comply with ASTM E557, operable partition manufacturer's written installation instructions, drawings, and approved Shop Drawings.

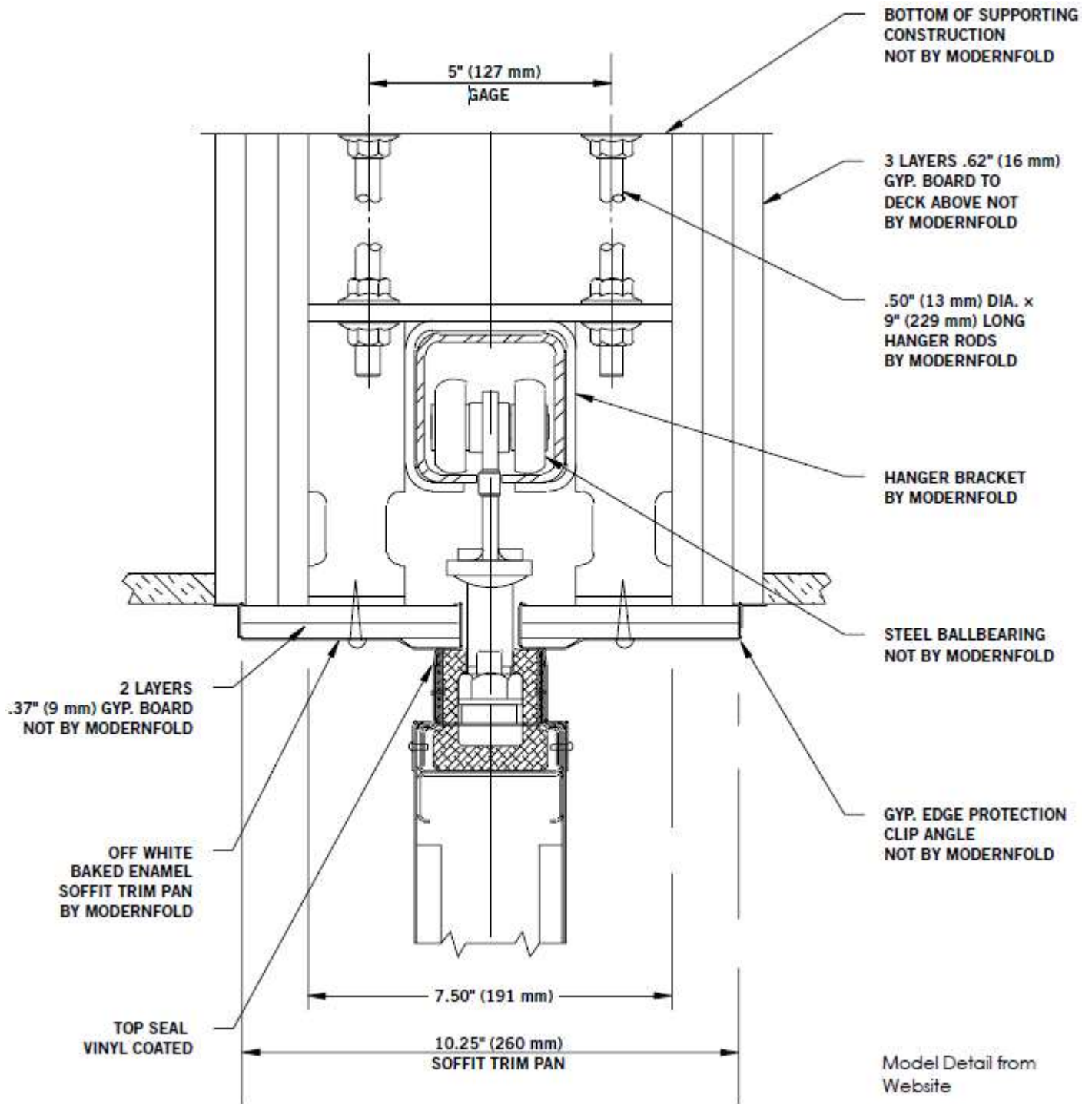
STEEL SKIN PANEL CONSTRUCTION

Acousti-Seal® Legacy® Paired Panel “Fire Rated” (912)	Acousti-Seal® Legacy® Paired Panel “Fire Rated” (912) Standard Joint
	<p>Roll-formed skin wraps completely around the edge of vertical 16 gage steel channel and is locked in place, eliminating any sharp edges and creating a unitized panel. The outer covering is secured under the steel astragal to prevent peeling.</p>  <p>Heavy steel hinges are mounted directly to the center of the vertical frame channel, not simply on the outside edge of the panel. Steel plates on the back of the channel prevent buckling or bending and provide the strongest hinge connection.</p> 

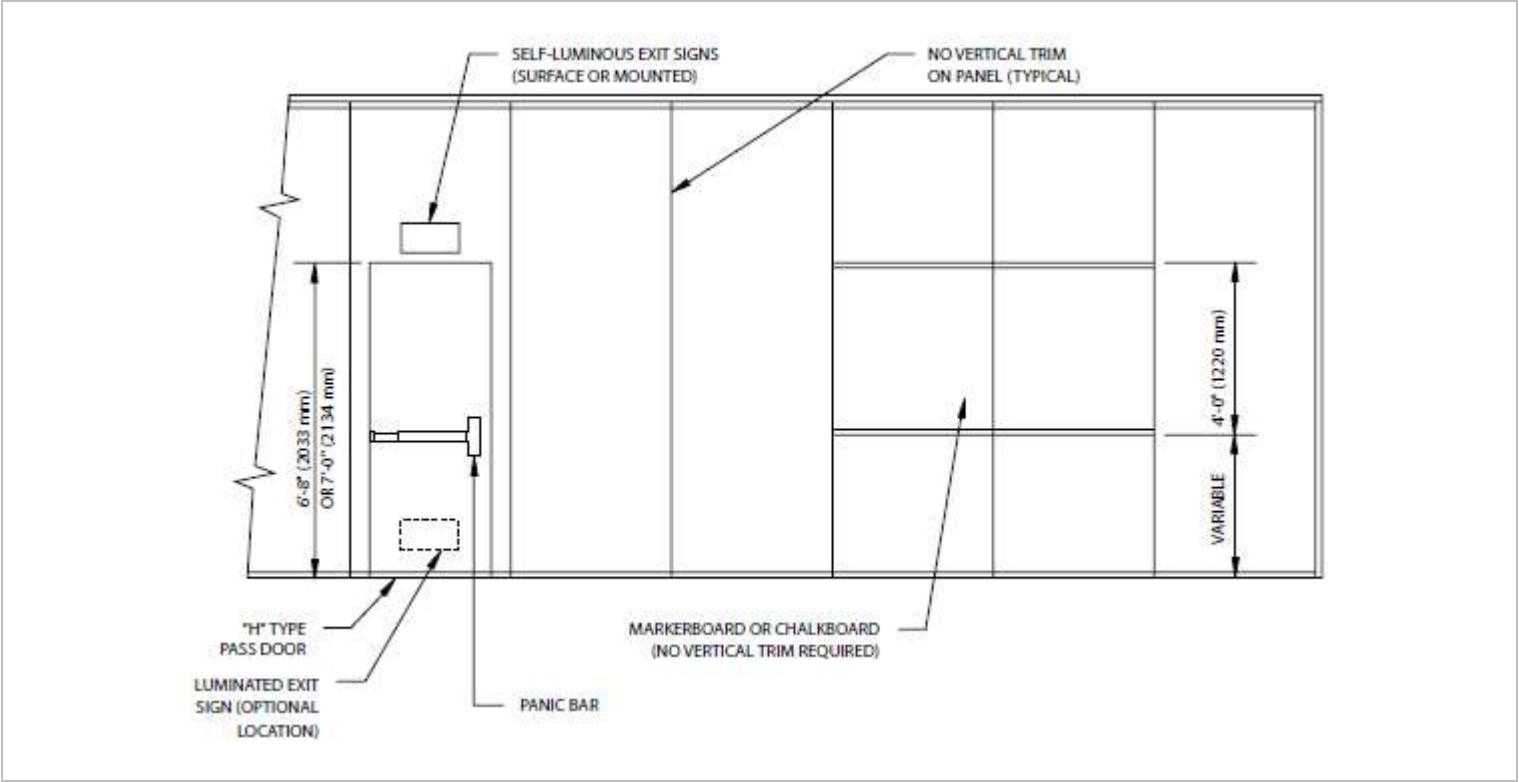
#17 Track System Bracket Mount



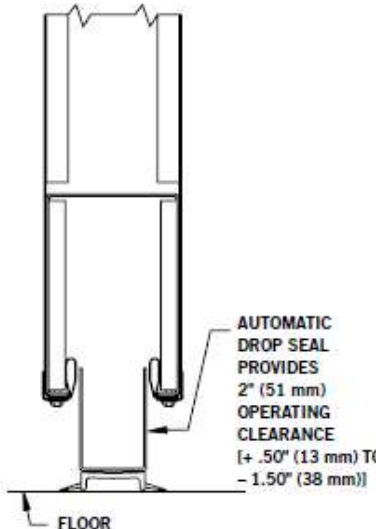
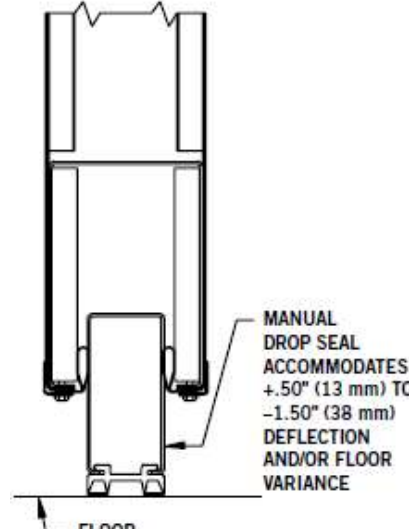
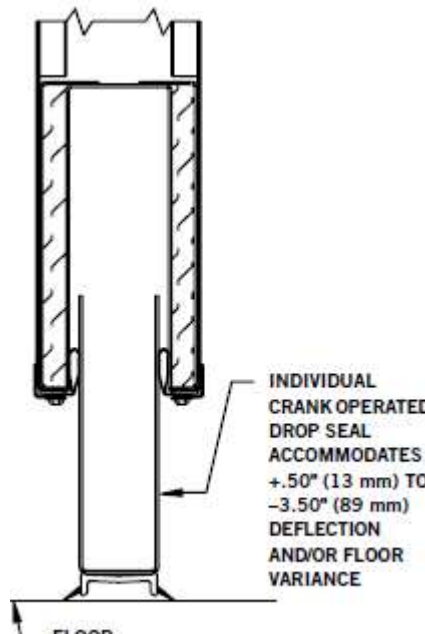
#14 Track System Bracket Mount



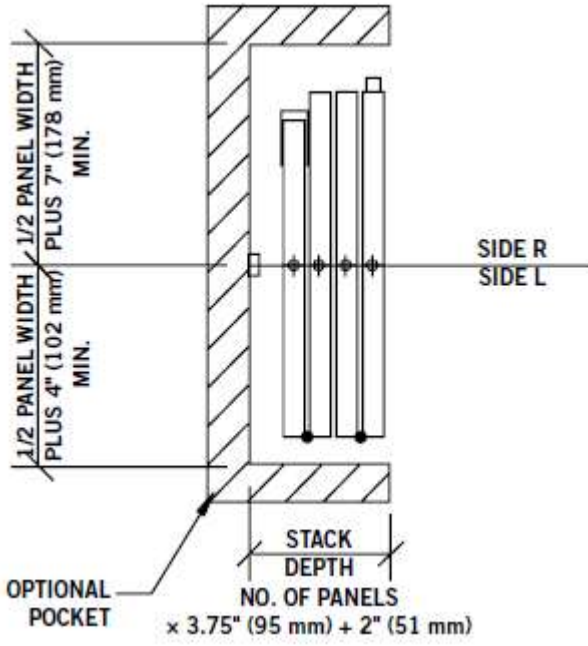
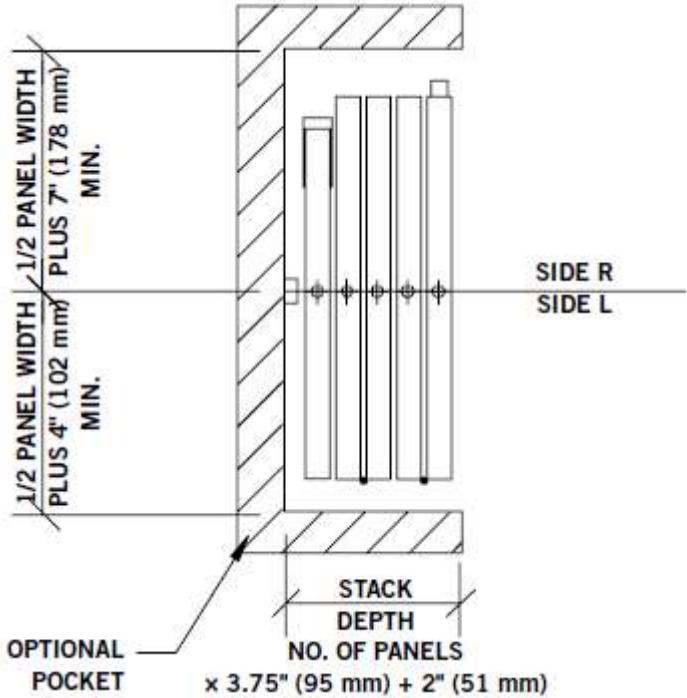
PANEL, WORK SURFACE, AND PASS DOOR OPTIONS



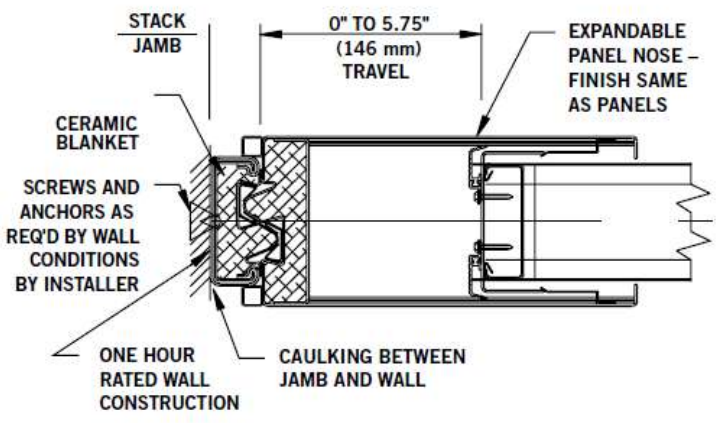
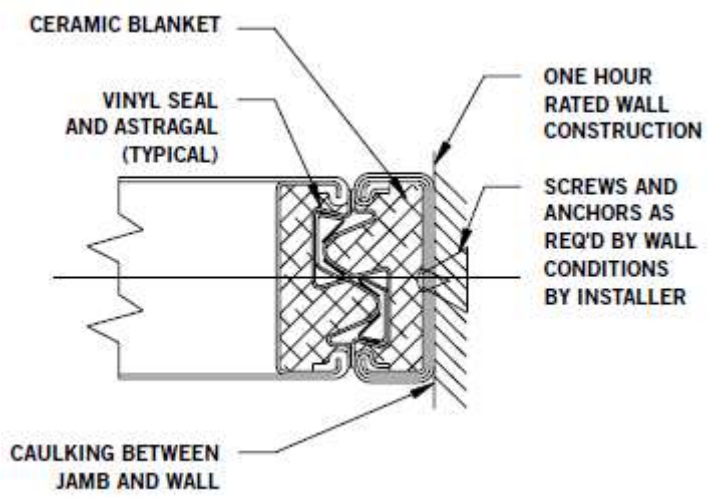
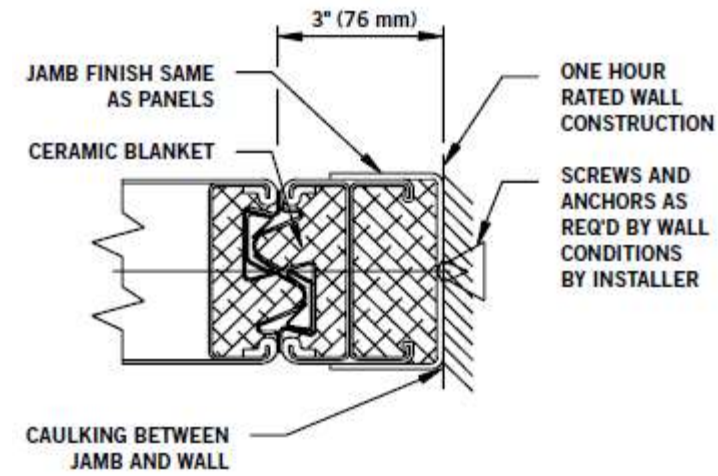
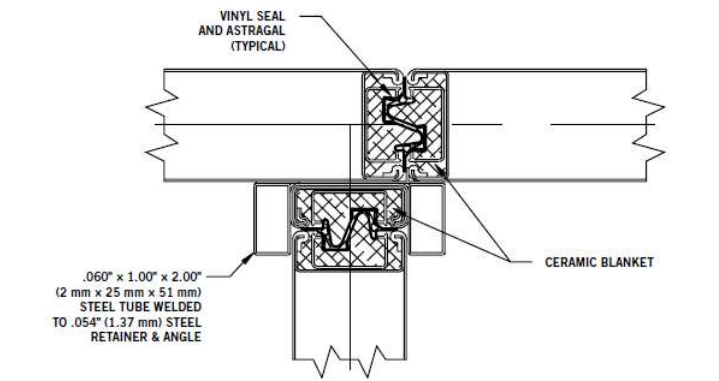
FLOOR SEAL OPTIONS

<p>2-Inch Automatic Seal</p>  <p>AUTOMATIC DROP SEAL PROVIDES 2" (51 mm) OPERATING CLEARANCE [+ .50" (13 mm) TO -.150" (38 mm)]</p> <p>FLOOR</p>	<p>2-Inch Manual Seal</p>  <p>MANUAL DROP SEAL ACCOMMODATES +.50" (13 mm) TO -.150" (38 mm) DEFLECTION AND/OR FLOOR VARIANCE</p> <p>FLOOR</p>
<p>4-Inch Manual Seal</p>  <p>INDIVIDUAL CRANK OPERATED DROP SEAL ACCOMMODATES +.50" (13 mm) TO -.350" (89 mm) DEFLECTION AND/OR FLOOR VARIANCE</p> <p>FLOOR</p>	

POCKET ENCLOSURE AND STACKING OPTIONS

Expandable Jamb Closure – Even Panel Quantity	Expandable Jamb Closure – Odd Panel Quantity
 <p>The diagram shows a cross-section of a wall with a jamb closure. The jamb is composed of multiple panels. The top and bottom edges of the jamb are labeled with dimensions: $\frac{1}{2}$ PANEL WIDTH PLUS 4" (102 mm) MIN. and $\frac{1}{2}$ PANEL WIDTH PLUS 7" (178 mm) MIN. The jamb is shown in two positions: SIDE R and SIDE L. The panels are stacked, and the stack depth is labeled as NO. OF PANELS \times 3.75" (95 mm) + 2" (51 mm). An OPTIONAL POCKET is indicated at the bottom left.</p>	 <p>The diagram shows a cross-section of a wall with a jamb closure. The jamb is composed of multiple panels. The top and bottom edges of the jamb are labeled with dimensions: $\frac{1}{2}$ PANEL WIDTH PLUS 4" (102 mm) MIN. and $\frac{1}{2}$ PANEL WIDTH PLUS 7" (178 mm) MIN. The jamb is shown in two positions: SIDE R and SIDE L. The panels are stacked, and the stack depth is labeled as NO. OF PANELS \times 3.75" (95 mm) + 2" (51 mm). An OPTIONAL POCKET is indicated at the bottom left.</p>

PANEL CROSS SECTIONS

<p>Expandable Panel with Jamb</p> 	<p>Nominal Fixed Jamb</p> 
<p>Variable Fixed Jamb</p> 	<p>Intersecting Wall</p> 

Form 2557

10/2024