

Acousti-Seal® Legacy® Single Panel “Fire Rated” (911) Technical Data

10 22 26 (10650) Operable Partitions



ACOUSTI-SEAL® LEGACY® SERIES TECHNICAL DATA

- Provide the ultimate in flexibility
- Each panel is moved independently into position
- Ideal for applications that require especially tall panels
- Each panel is supported by two carriers
- Single panels are often used in multipurpose rooms, exhibition halls, and commercial buildings where maximum flexibility is required
- Suspension system incorporates the easy to operate switch and curve Smart Track™
- Smart Track technology, with programmable trolleys and automatic panel positioning, makes panel storage almost foolproof
- May be fabricated to satisfy right angle turn layouts
- Single panels allow multiple room setups, changes in the location of pass doors and work surfaces, and remote panel storage

Modernfold Model

Acousti-Seal® Legacy® Single Panel (911)

Fire Rated, Flat Panels, Individual Operation

This specification along with product information and model details can be downloaded from www.modernfold.com
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 Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Manually operated, single 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 by the testing laboratory 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.

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

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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 Products and Services.
- D. Other Standards
1. ADA – Americans with 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 clearances. 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 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 (EPD's). Consider products and materials that have optimized environmental performance (reduced life cycle impacts). Products without an EPD or other disclosure documentation are not acceptable.

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 panels 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. Products: Subject to compliance with the requirements, provide the following product:
1. Acousti-Seal Legacy – Single Panel “Fire Rated” (911) 1-Hour UL rated, manually operated individual panel operable partition.

2.2 OPERATION

- A. Acousti-Seal Legacy – Single Panel “Fire Rated” (911): Series of individual flat panels, manually operated, top supported with operable floor seals.
- B. Final Closure (select one):
1. Horizontally expanding panel edge with removable crank.
 2. Dual horizontally expanding panel edges with removable crank.
 3. Horizontally expanding panel edge with hinged panel closure and removable crank.

2.3 PANEL CONSTRUCTION

- A. Nominal 3-inch (76 mm) thick panels in manufacturer's standard 48-inch (1220 mm)

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widths. All panel 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 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. 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:

Steel Skin

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 21 ounces (595 g) per lineal yard.
2. Reinforced heavy-duty vinyl with woven backing weighing not less than 30 ounces (850 g) per lineal yard.
3. Acoustical, non-woven needle punch carpet, with fused fibers to prevent unraveling or fray of material.
4. Wall covering and upholstery fabric with surface treatment to resist stains.
5. Customer's own material (subject to factory approval), must have UL classification.
6. Full height steel markerboard work surface.
7. Uncovered for field finishing (subject to field finish factory approval).
8. Primed for field finishing.

B. Panel trim: Exposed panel trim of one consistent color from manufacturer's standard offering.

1. Dark Bronze

2. Smoke Gray
3. Natural Choice

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. A2 - Automatic operable seals providing nominal 2-inch (51 mm) operating clearance with an operating range of +1/2-inch (13mm) 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 (265 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 (265 kg) downward force to the floor throughout operating range.

2.6 SUSPENSION SYSTEM (select one)

A. #17 Suspension System - Smart Track™

1. Suspension Tracks: Minimum 11-gage, 0.12-inch (3 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: Two all-steel trolleys with steel-tired ball bearing wheels. Non-steel tires are not acceptable. Suspension system shall provide automatic indexing of panels into stack area using preprogrammed switches and trolleys without electrical, pneumatic, or mechanical

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activation.

3. Warranty period: Five (5) years.

- OR -

B. #14 Suspension System - Smart Track™

1. Suspension Tracks: Minimum 7-gage, 0.18-inch (5 mm) roll formed steel. Track shall be supported by adjustable steel hanger brackets connected to structural support pairs of 1/2-inch (13 mm) diameter threaded rods. Brackets 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: Two all-steel trolleys with steel-tired ball bearing wheels. Non-steel tires are not acceptable. Suspension system shall provide automatic indexing of panels into stack area using preprogrammed switches and trolleys without electrical, pneumatic, or mechanical activation.
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 the panels. ADA compliant pass door to be trimless and equipped for panic operation. No threshold will be permitted.
2. Double Pass Doors:
 - a. Matching pass door same thickness and appearance as the panels. No center post is permitted. Two active leaf doors to be trimless and equipped for panic operation. No threshold will be permitted.
3. Hardware:
 - a. Automatic door closures (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.
2. Intersecting partition interface.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. General: Comply with ASTM E557, operable partition manufacturer's written installation instructions, Drawings and approved Shop Drawings.
- B. Install operable partitions and accessories after other finishing 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, disruption, or malfunction, throughout entire operational 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.

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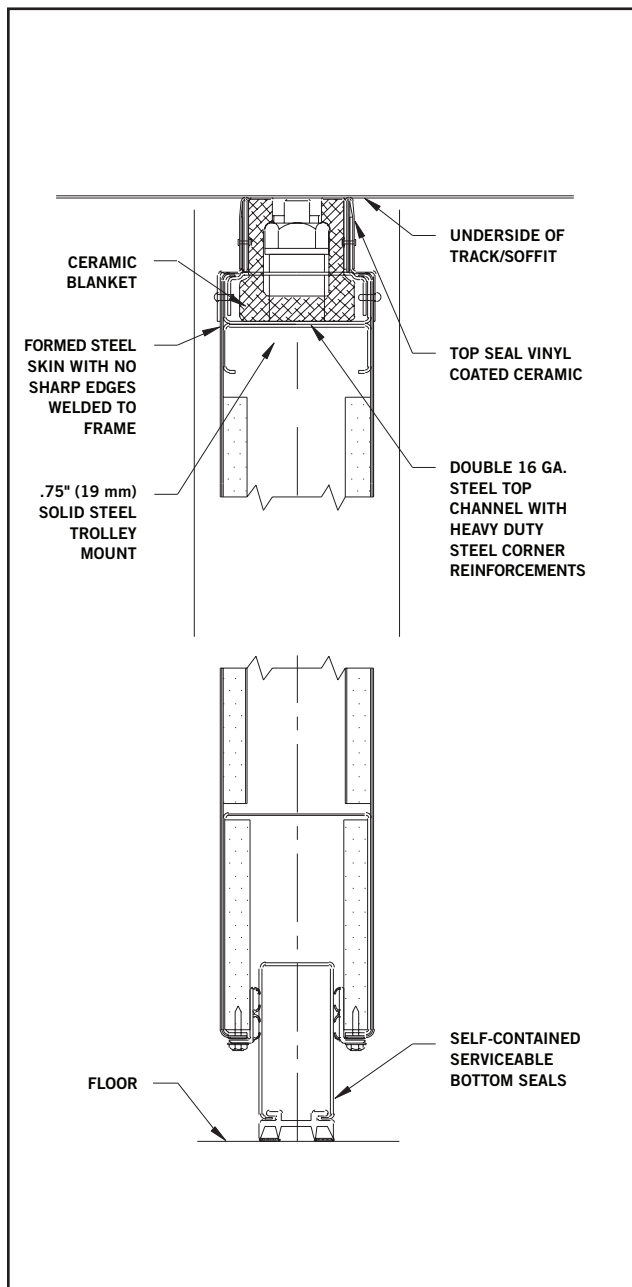
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ACOUSTI-SEAL® LEGACY® SERIES TECHNICAL DATA STEEL SKIN PANEL CONSTRUCTION

Acousti-Seal® 911
Panel Section Frame Details

STC CONSTRUCTION AND TRACK SYSTEM HEIGHT LIMITATIONS

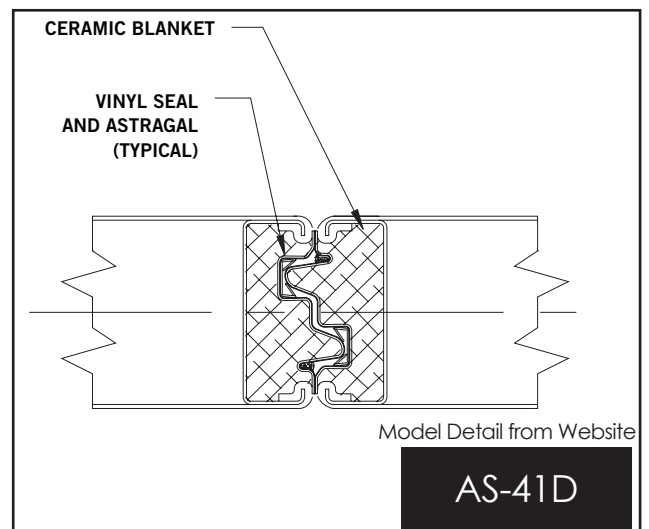
PANEL DETAILS ARE NOT TO SCALE



Acousti-Seal® 911	Welded Steel Skin Max Height	
	50 STC	52 STC
#17 Bracket Mounted Smart Track	18'-4"	16'-4"
#14 Bracket Mounted Smart Track	28'-4"	28'-4"
#17 Bracket Mounted Right Angle Track	10'-4"	8'-4"

Acousti-Seal® 911 Standard Panel Joint

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.



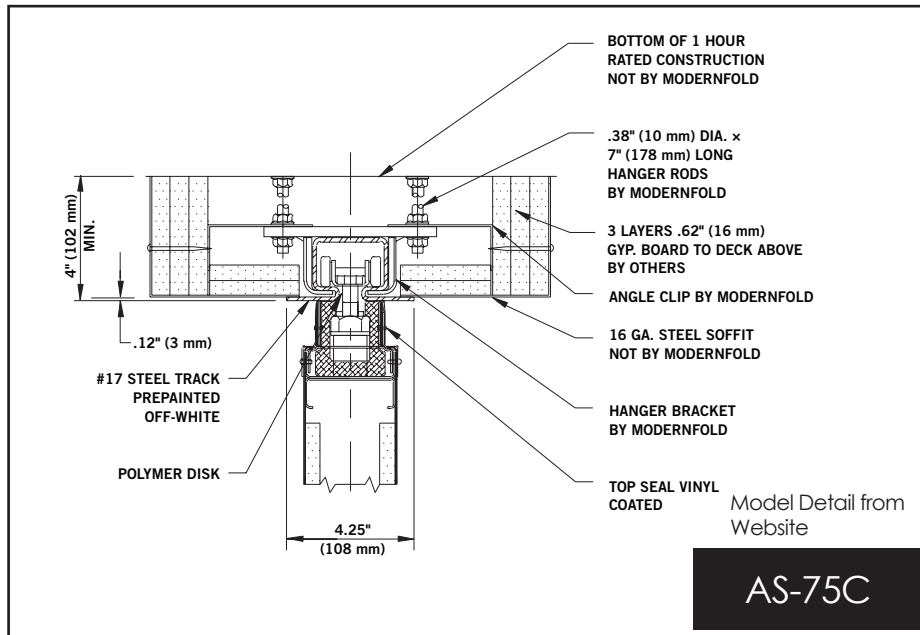
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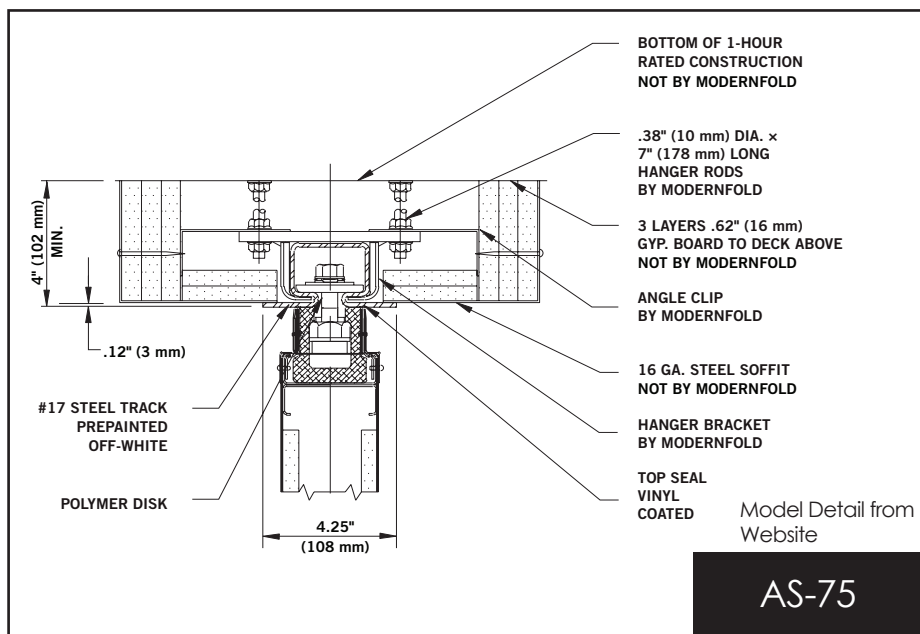
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ACOUSTI-SEAL® LEGACY® SERIES TECHNICAL DATA
SUSPENSION SYSTEM OPTIONS

#17 Track System Bracket Mount (Smart Track Shown)



#17 Track System Bracket Mount (Right Angle Shown)



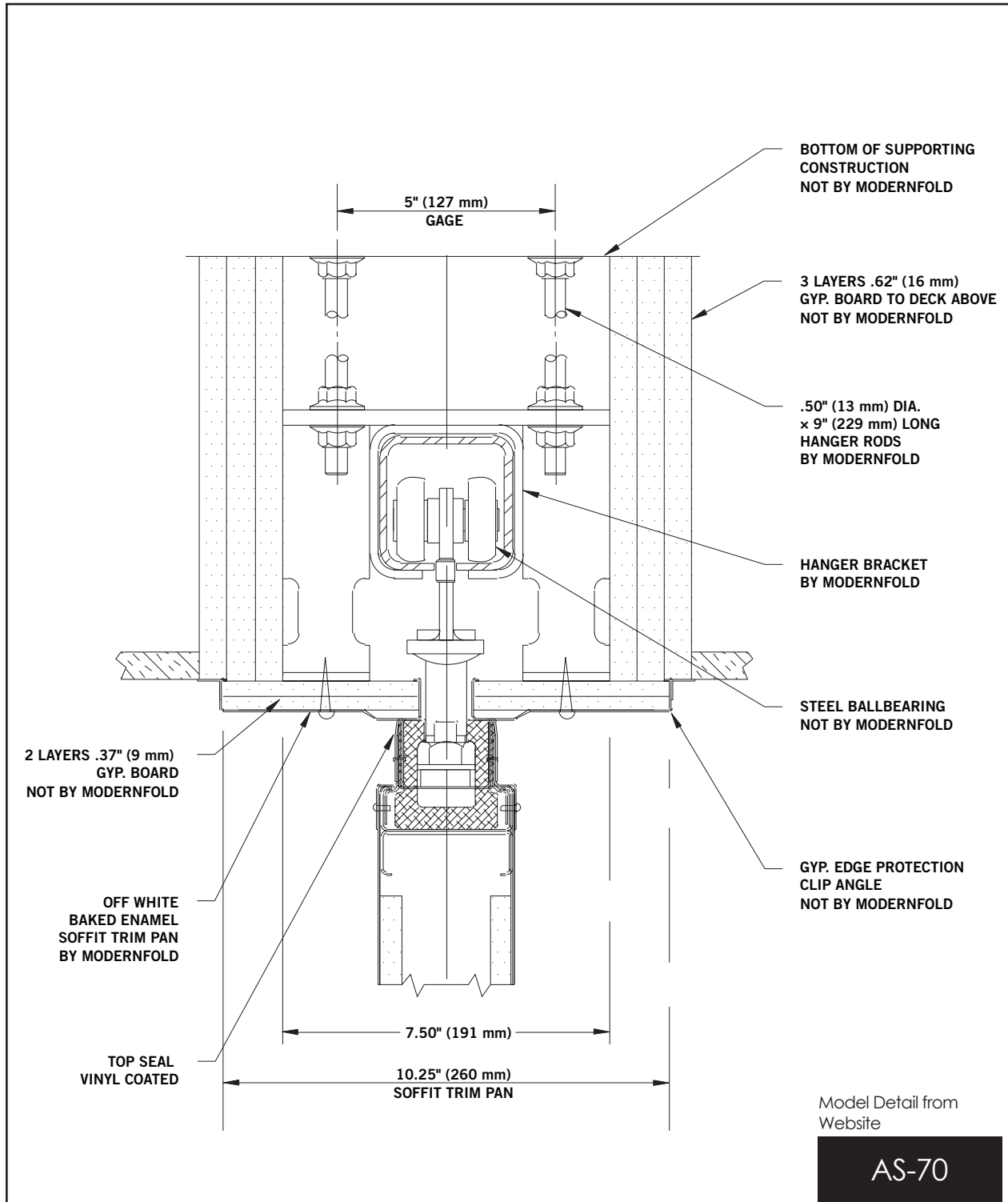
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SUSPENSION SYSTEM OPTIONS

#14 Track System Bracket Mount (Smart Track Shown)

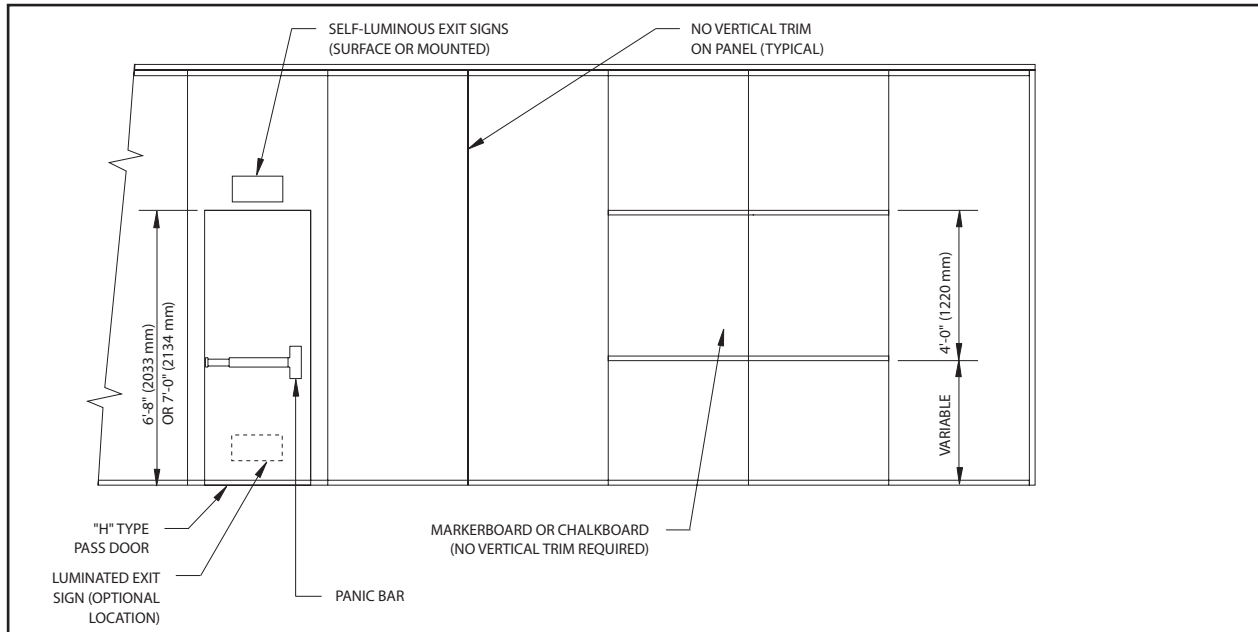


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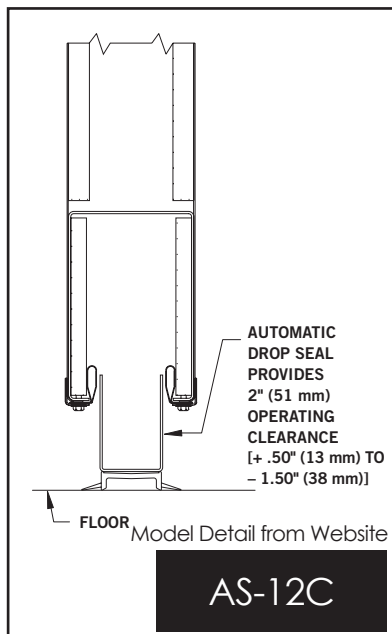
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ACOUSTI-SEAL® LEGACY® SERIES TECHNICAL DATA PANEL, WORK SURFACE, AND PASS DOOR OPTIONS

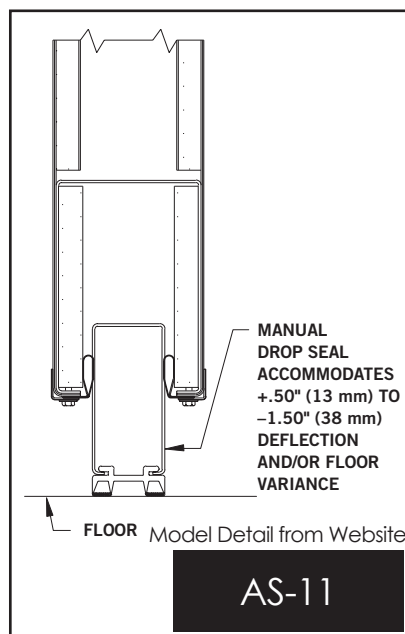


FLOOR SEAL OPTIONS

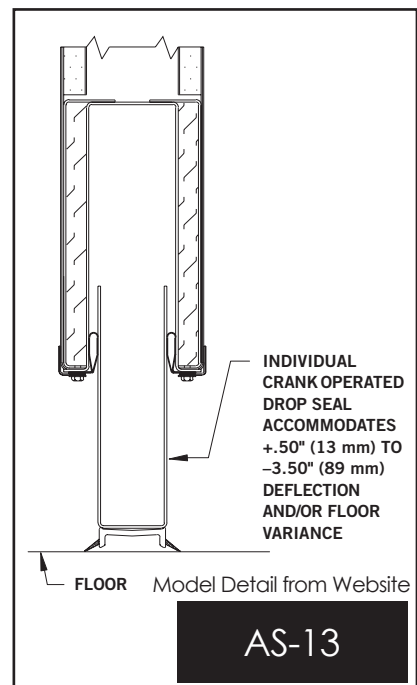
2-inch Automatic Seal



2-inch Manual Seal

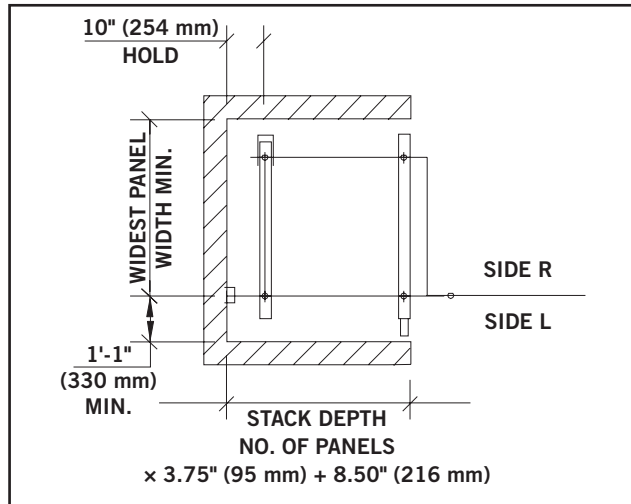


4-inch Manual Seal

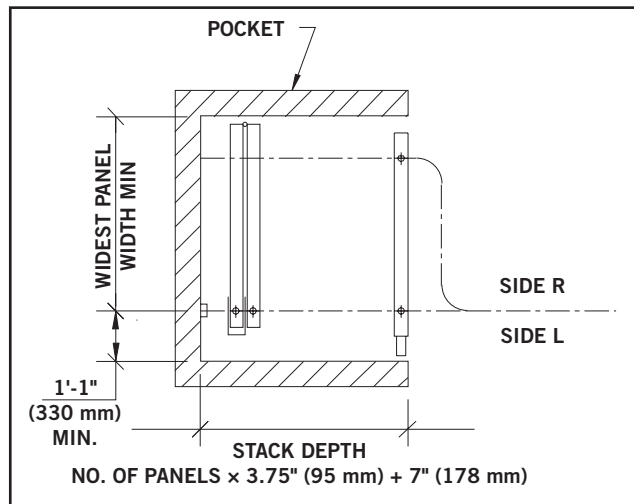


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POCKET ENCLOSURE AND STACKING OPTIONS

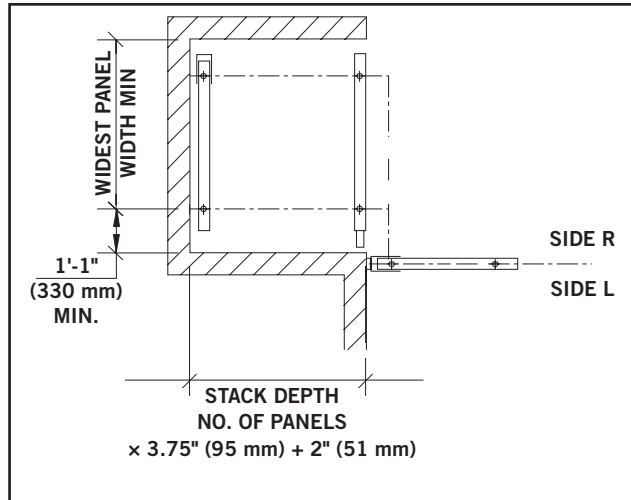
Expandable Closure –
 90 Degree Side Stack Right Angle



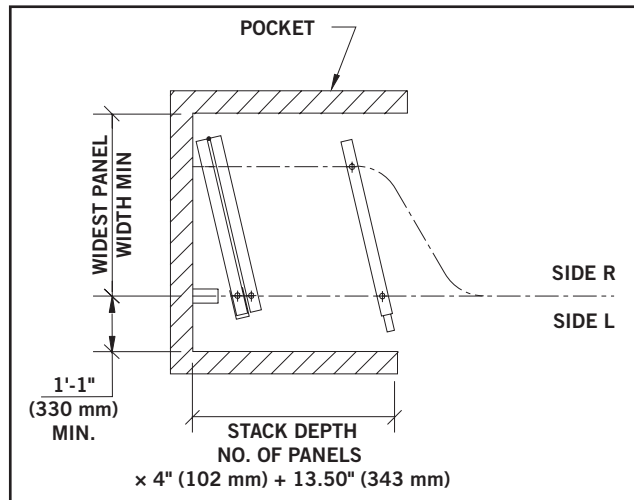
Bi-fold Expandable Closure –
 (Flat Stack) Smart Track



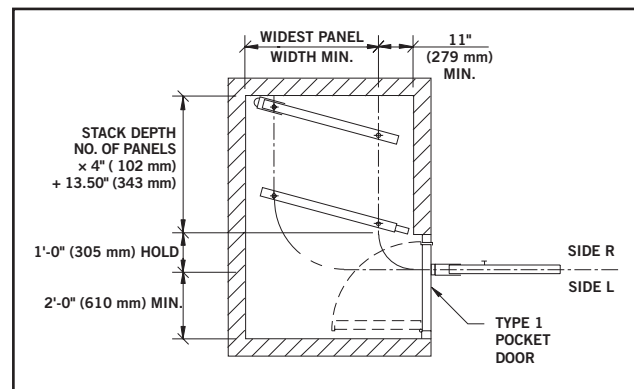
Remote Expandable Closure –
 Offset Stack Right Angle



Bi-fold Expandable Closure –
 (Angle Stack) Smart Track

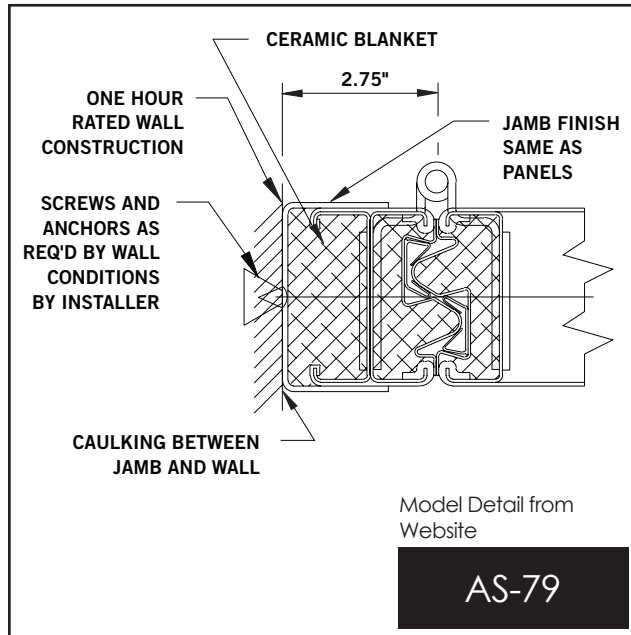


Remote Expandable Closure –
 Parallel Stack
 (Angle Stack) Smart Track

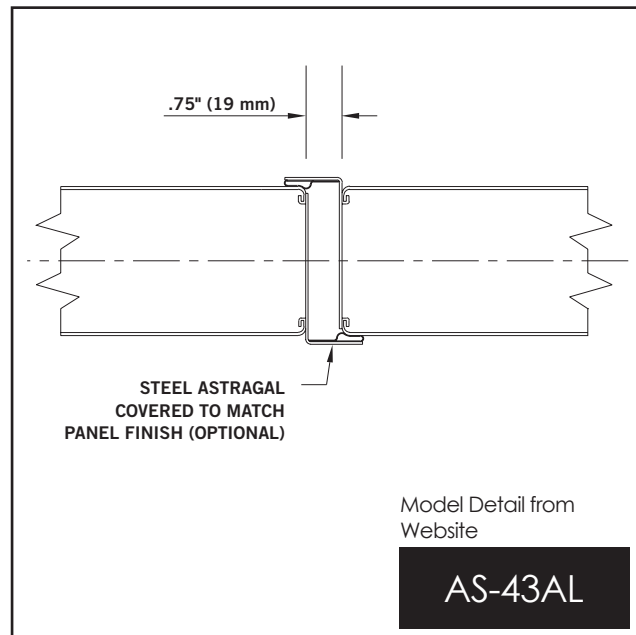


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PANEL CROSS SECTIONS

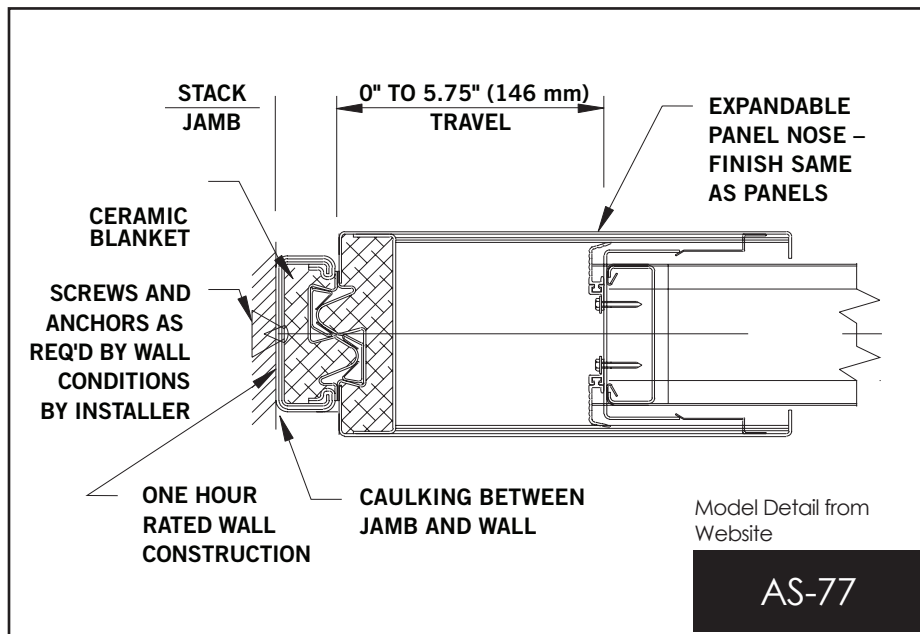
Hinged Jamb



Hinged Panel Meeting w/ Pass Door Astragal



Expandable Panel w/ Jamb

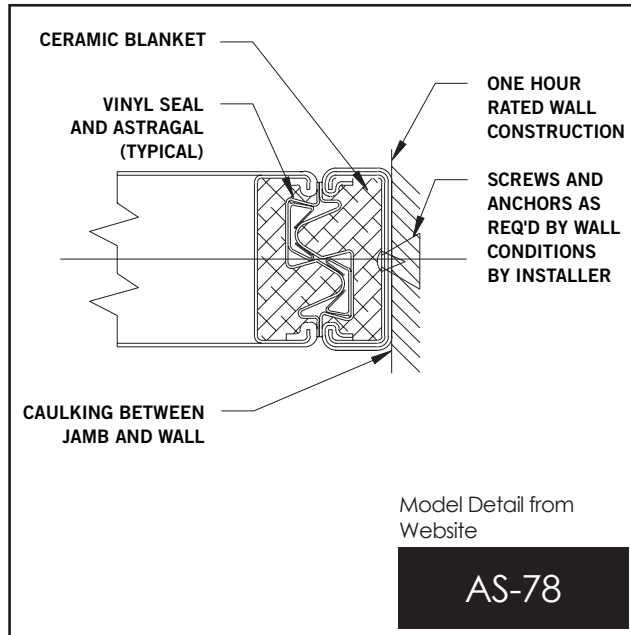


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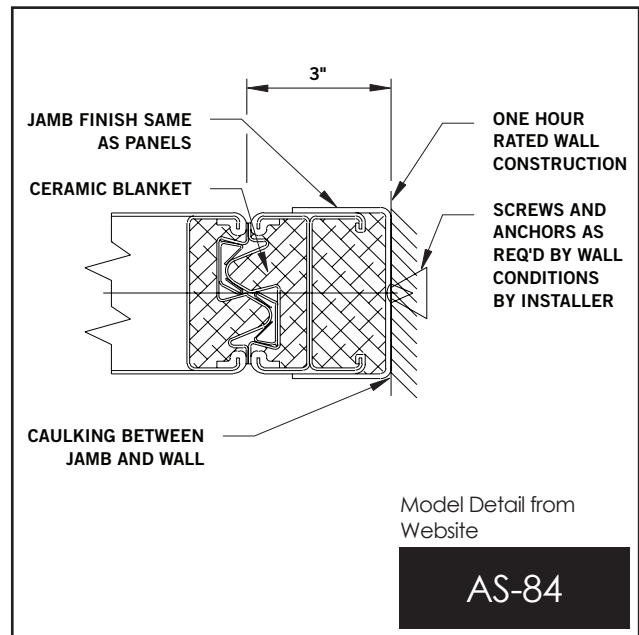
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PANEL CROSS SECTIONS

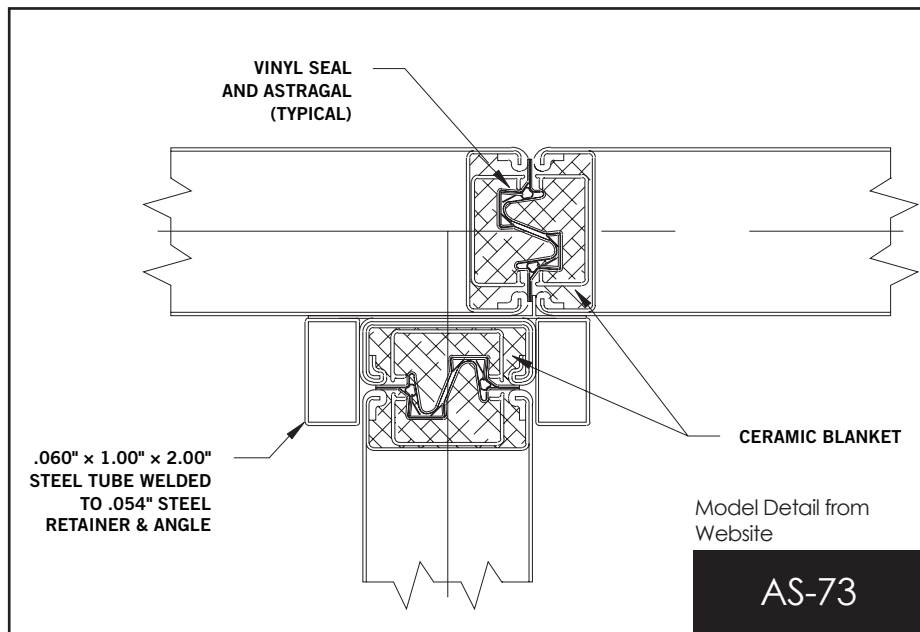
Nominal Fixed Jamb



Variable Fixed Jamb



Intersecting Wall



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