

## **ACOUSTI-SEAL® PREMIER® SERIES TECHNICAL DATA**

- Highly Flexible Single Panel System
- Single Panels Allow Multiple Room Setups, Changes in Pass Door and Work Surface Locations, and Remote Panel Storage
- Panel Moves Independently into Position
- Ideal for Applications Requiring Especially Tall Panels
- Suspension System Incorporates the Easy to Operate Smart Track™ Technology
- Smart Track Technology Makes Panel Storage Virtually Foolproof
- Right Angle Turn Layouts Available
- Used in Multipurpose Rooms, Exhibition Halls, and Commercial Buildings

### **Modernfold Model**

Acousti-Seal® Premier® Single Panel (931)

Flat Panels, Individual Operation

This specification along with product information and model details can be downloaded from [www.modernfold.com](http://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, individual 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 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. Preparation of the opening shall conform to the criteria set forth per ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
- D. 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 C1036 - Standard Specification for Flat Glass.
  4. ASTM C1048 - Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass.
  5. ASTM E84 - Surface Burning Characteristics of Building Materials.
  6. 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 -

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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. ANSI Z97.1 - Safety Glazing Materials Used in Buildings.
3. CPSC 16 CFR 1201 - Safety Standard for Architectural Glazing Materials.
4. NEMA LD3 - High Pressure Decorative Laminates.

### **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 sound 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.

- 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 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 product by the following:
  1. Modernfold, Inc.
- B. Panels to be manufactured in the U.S.A.
- C. Products: Subject to compliance with the requirements, provide the following product:
  1. Acousti-Seal Premier – Single Panel (931): Manually operated individual panel operable partition.

### **2.2 OPERATION**

- A. Acousti-Seal Premier – Single Panel (931): 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. Hinged panel closure.
  4. Enclose.

### **2.3 PANEL CONSTRUCTION**

- A. Nominal 3-inch (76mm) thick panels in manufacturer's standard 48-inch (1220mm) widths. All panel horizontal and vertical framing members fabricated from minimum 18-gage formed steel with overlapped and welded corners for rigidity. Top channel is reinforced to support suspension system components. Frame

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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 (select one):**

1. 1/2-inch (13mm) tackable 100% recycled gypsum board, class "A" rated single material or composite layers continuously bonded to panel frame. Acoustical ratings of panels with this construction (select one):
  - a. 28 STC
  - b. 47 STC
  - c. 50 STC
2. 1/2-inch (13mm) NAUF medium density fiberboard, single material or composite layers continuously bonded to panel frame. Acoustical ratings of panels with this construction (select one):
  - a. 28 STC
  - b. 47 STC
  - c. 50 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. 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. 28 STC - 6 lbs./square foot
2. 47 STC - 7 lbs./square foot
3. 50 STC - 8 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. 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).
6. Full height steel markerboard work surface.
7. Full height 1/4-inch (6.35 mm) natural cork tackboard with vinyl or fabric covering.
8. High pressure plastic laminate on MDF board.
9. Wood veneer on MDF board.
10. Uncovered 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 extruded vinyl bulb shape with pairs of non-contacting vinyl fingers to prevent distortion without the need for mechanically operated parts.

**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 (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 mm) roll-formed steel track, suitable for either direct mounting to a wood header or 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:
  - a. Right Angle Turn: Two carriers of low-friction polymer, reinforced with steel, that permit panels to traverse L, T, and X intersections without mechanical switching, on all panels except hinged closure panels.
  - b. "Smart Track™": Two all-steel trolleys with steel-tired ball bearing wheels.

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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: 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.

– OR –

**C. RT100 Suspension System: Multi-Directional**

1. Suspension Tracks: Precision heat-treated extruded aluminum. Track supported by pairs of 3/8-inch (9.5 mm) diameter threaded rods.
  - a. Exposed track soffit: Track soffit to be integral to track shape and shall be powder-coated off-white paint finish. Track must accommodate termination of plenum sound barriers on both sides of track for maximum sound control.
2. Carriers: Shall have horizontal counter-rotating wheels with heavy duty steel thrust bearings. Carriers permit panels to traverse L, T, or X intersections without mechanical switching.
3. Warranty period: Two (2) years.

– OR –

**D. RT200 Suspension System: Multi-Directional**

1. Suspension Tracks: Precision heat-treated extruded aluminum. Track to be supported by pairs of 3/8-inch (9.5 mm) diameter threaded rods.
  - a. Exposed track soffit: Track soffit to be integral to track shape and shall be

powder-coated off-white paint finish.  
Track must accommodate termination of plenum sound barriers on both sides of track for maximum sound control.

2. Carriers: Shall have horizontal counter-rotating wheels with oversized, steel reinforced, heavy duty steel thrust bearings. Carriers permit panels to traverse L, T, or X intersections without mechanical switching.
3. Warranty period: Two (2) years.

– OR –

- E. Modernfold Truss System:** Prefabricated, self-supporting header system for the support of operable partitions. (For complete specification see Modernfold Truss System brochure Form #2600)

### **2.7 OPTIONS**

**A. Single Pass Doors:**

1. Matching pass door same thickness and appearance as the panels. ADA-compliant pass door equipped with friction latch and flush pulls for panic operation. No threshold will be permitted.

**B. Double Pass Doors**

1. Matching pass door same thickness and appearance as the panels. No center post is permitted. Active leaf to be trimless and equipped with friction latch and flush pulls for panic operation. No threshold will be permitted.

**C. Hardware:**

1. Hand pull with push plate.
2. Lever handles both sides of door
3. Panic hardware with or without locking lever handle.
4. Automatic door closer.
5. Door viewer.
6. Self-Illuminated exit signs:
  - a. Chemical exit sign – recess mount
  - b. Chemical exit sign – surface mount
  - c. Photo luminescent exit sign – surface mount

**D. 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.
2. Tackboard: Minimum 1/4-inch (6.35mm) natural cork, covered with vinyl or fabric, with horizontal trim without exposed fasteners. Trim is not acceptable on vertical edges.

**E. Available Accessories/Options:**

1. Pocket Doors: Acousti-Seal Pocket Doors by Modernfold, Inc. (See supplement

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- specification.)
- a. Legacy pocket door
  - b. Premier pocket door
2. Finished end caps at 90°/135°.
  3. Intersecting partition interface.
  4. Window frame options:
    - a. Aluminum window frame, glazed or unglazed
    - b. Wood window frame, glazed or unglazed
  5. Inset window glazing options:
    - a. 1/4-inch clear tempered glass – aluminum or wood frame
    - b. 1/4-inch frosted tempered glass – aluminum or wood frame
    - c. 1/4-inch low iron tempered glass – aluminum or wood frame
    - d. 1/4-inch low iron frosted tempered glass – aluminum or wood frame
    - e. 1/4-inch Lexan – aluminum frame
    - f. 1/2-inch clear tempered glass – wood
    - g. 1/2-inch frosted tempered glass – wood
    - h. 1/2-inch low iron tempered glass – wood
    - i. 1/2-inch low iron tempered glass – wood frame
    - j. 1-inch insulated glass – wood frame

### 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.

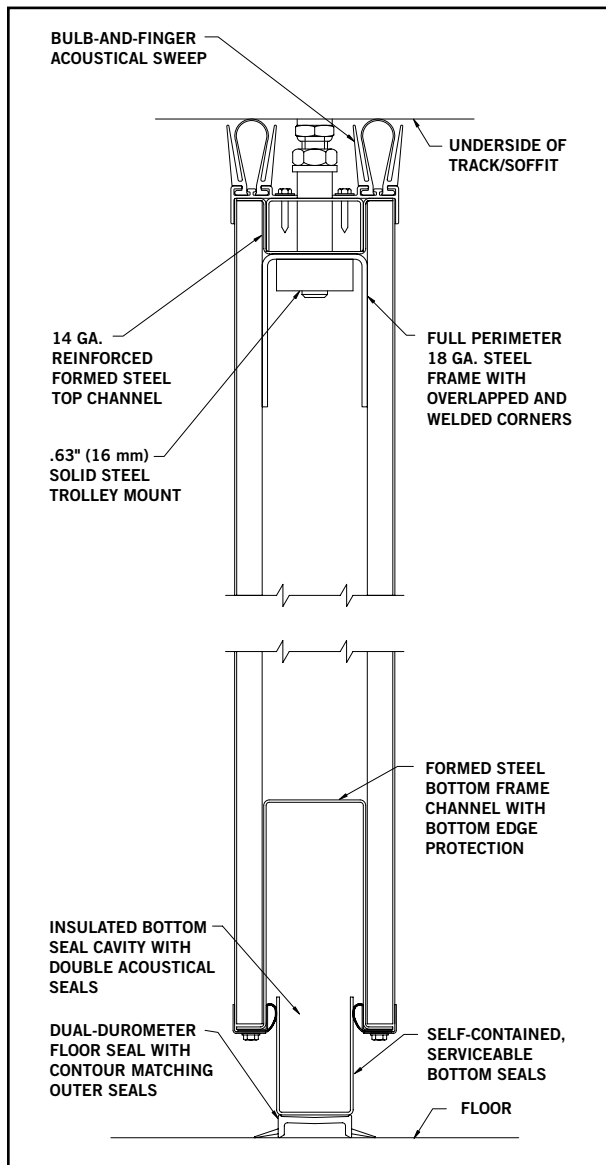
STC CONSTRUCTION AND TRACK SYSTEM HEIGHT LIMITATIONS			
ACOUSTI-SEAL® PREMIER SINGLE PANEL (931)	28 STC	47 STC	50 STC
#17 DIRECT MOUNTED SMART TRACK	14'-4" (4369 MM)	14'-4" (4369 MM)	12'-4" (3759 MM)
#17 BRACKET MOUNTED SMART TRACK	20'-4" (6198 MM)	20'-4" (6198 MM)	20'-4" (6198 MM)
#14 BRACKET MOUNTED SMART TRACK	24'-4" (7417 MM)	24'-4" (7417 MM)	24'-4" (7417 MM)
#17 DIRECT MOUNTED RIGHT ANGLE TRACK	10'-4" (3150 MM)	10'-4" (3150 MM)	10'-4" (3150 MM)
#17 BRACKET MOUNTED RIGHT ANGLE TRACK	10'-4" (3150 MM)	10'-4" (3150 MM)	10'-4" (3150 MM)
RT100 MULTI-DIRECTIONAL	16'-4"(4978 MM)	16'-4"(4978 MM)	16'-4"(4978 MM)
RT200 MULTI-DIRECTIONAL	20'-4"(6198 MM)	20'-4"(6198 MM)	20'-4"(6198 MM)



## ACOUSTI-SEAL® PREMIER® SERIES TECHNICAL DATA

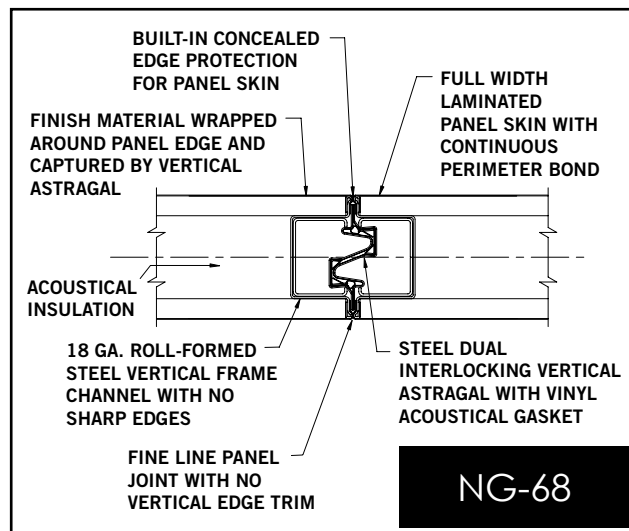
### Acousti-Seal® Premier® Single Panel (931) Panel Section Frame Details

PANEL DETAILS ARE NOT TO SCALE



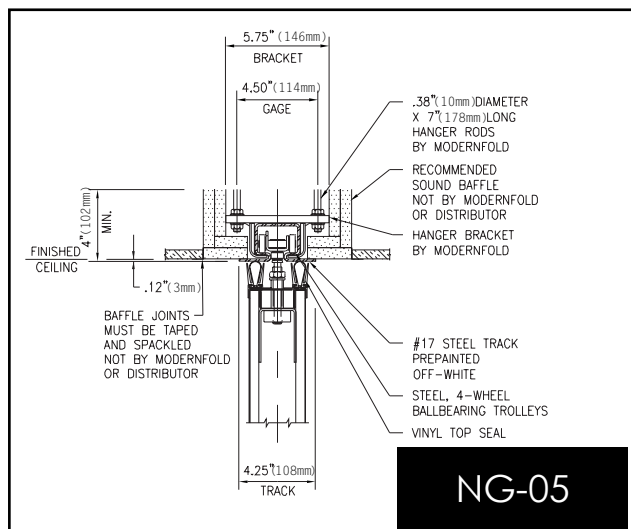
### Acousti-Seal® Premier® Single Panel (931) Standard Panel Joint

Roll-formed vertical frame channel provides added strength while eliminating any sharp edges. The outer covering is secured under the steel astragal to prevent peeling. The complete vertical edge of the panel is steel for maximum durability.

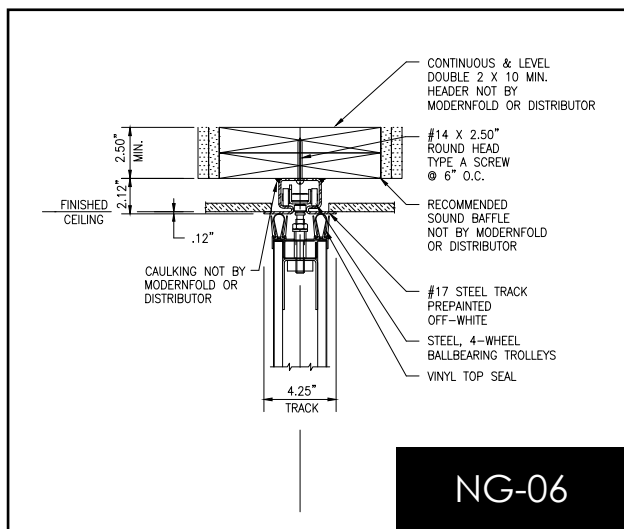


## ACOUSTI-SEAL® PREMIER® SERIES TECHNICAL DATA

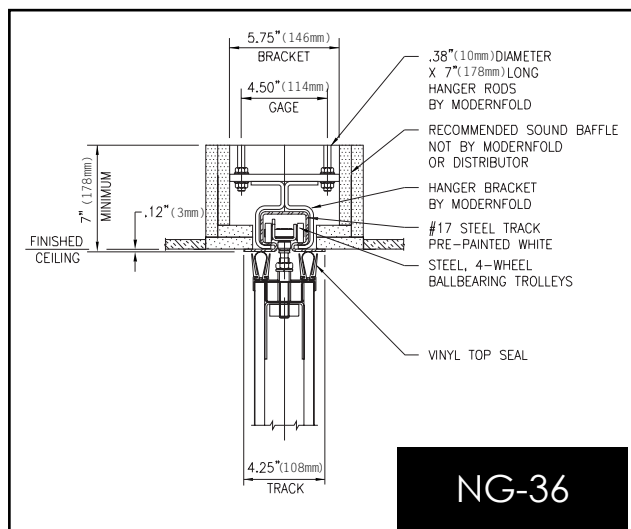
#17 Track System Bracket Mount  
 (Smart Track Shown)



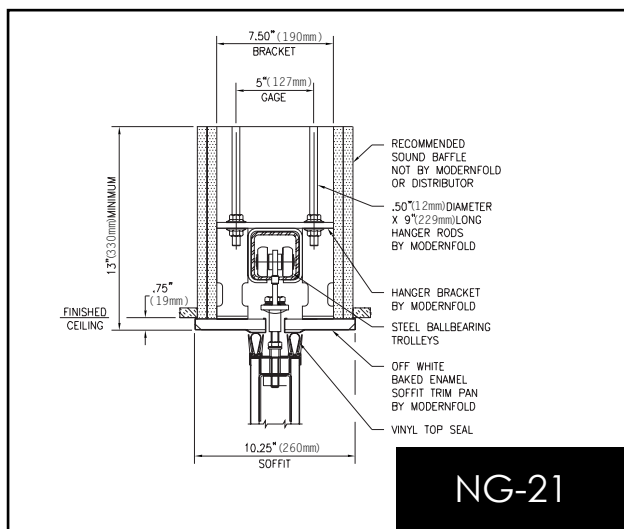
#17 Track System Direct Mount  
 (Right Angle Shown)



#17 Track System Bracket Mount  
 Heavy-Duty (Smart Track Shown)

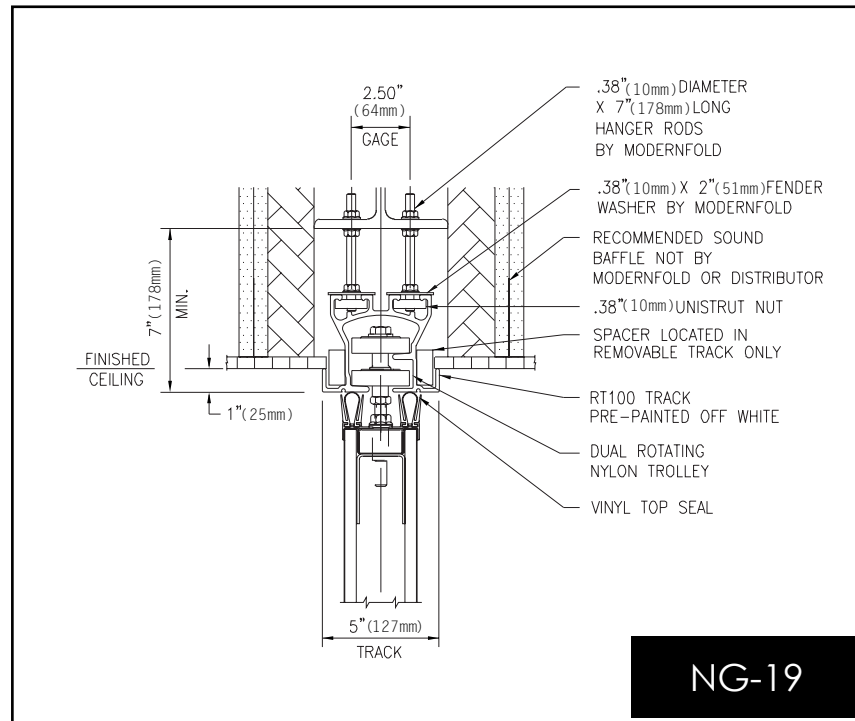


#14 Track System Bracket Mount  
 (Smart Track Shown)

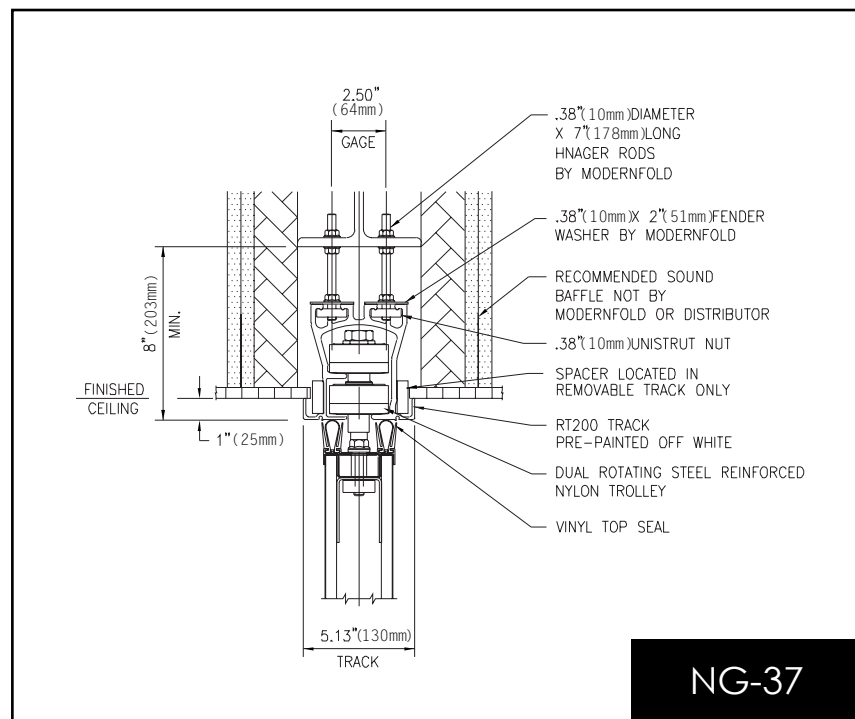


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### RT100 Multi-Directional Suspension System

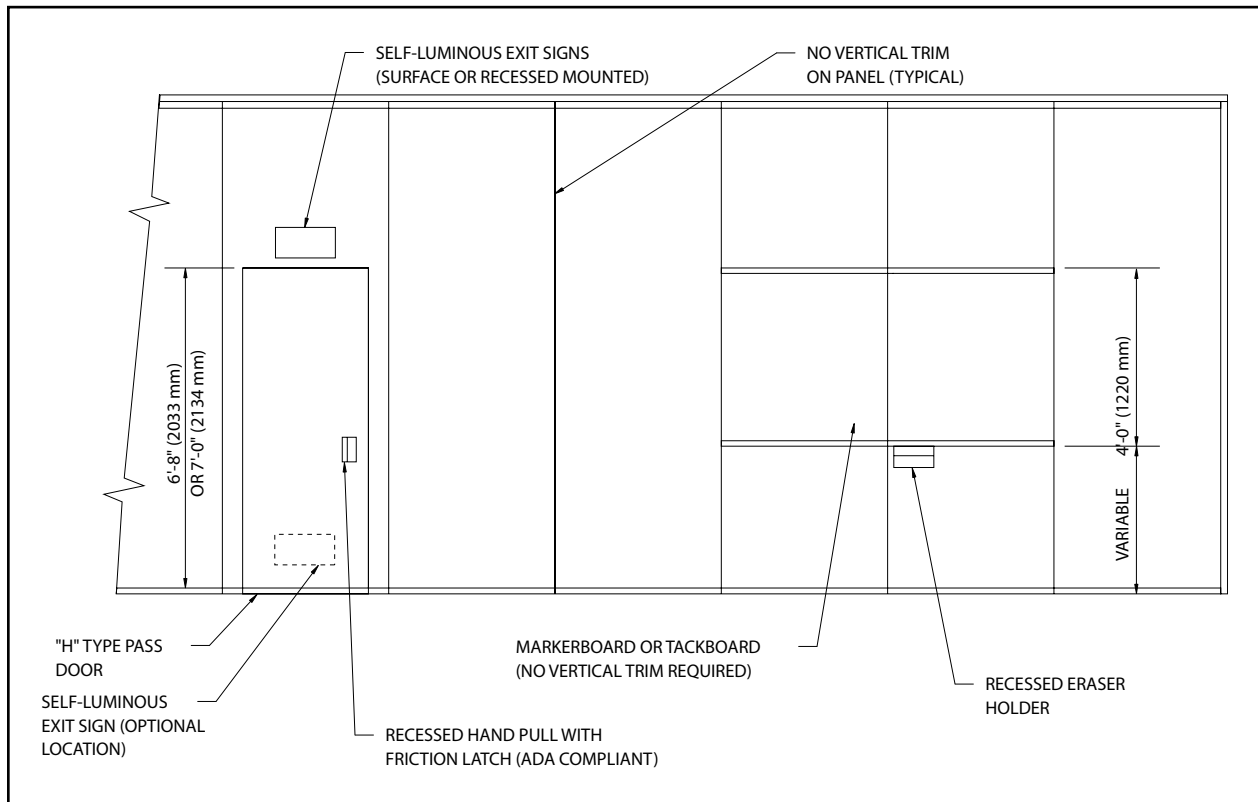


### RT200 Multi-Directional Suspension System



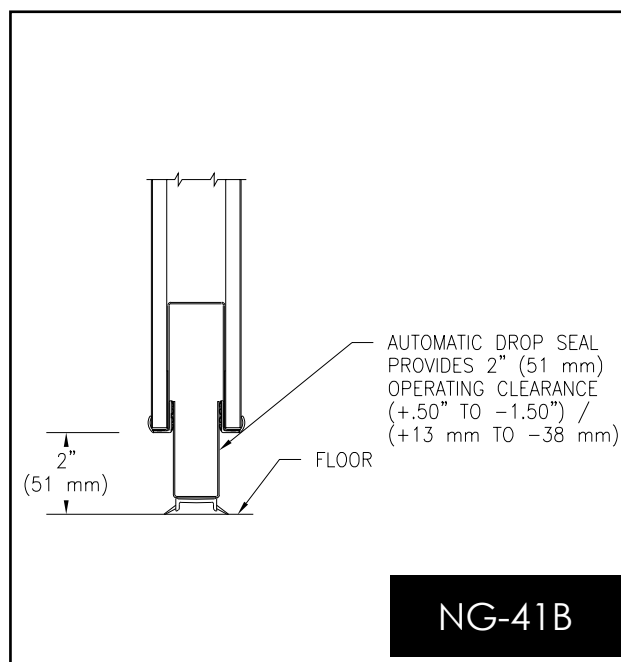


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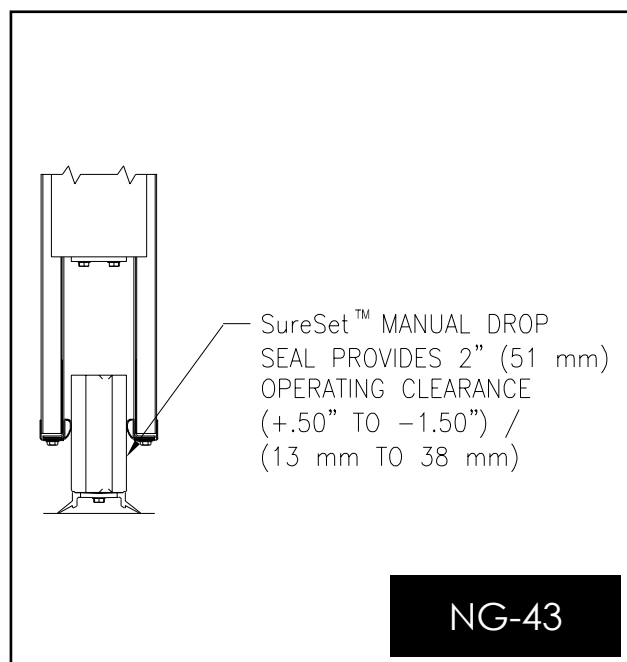


## FLOOR SEAL OPTIONS

### 2-inch Automatic Seal

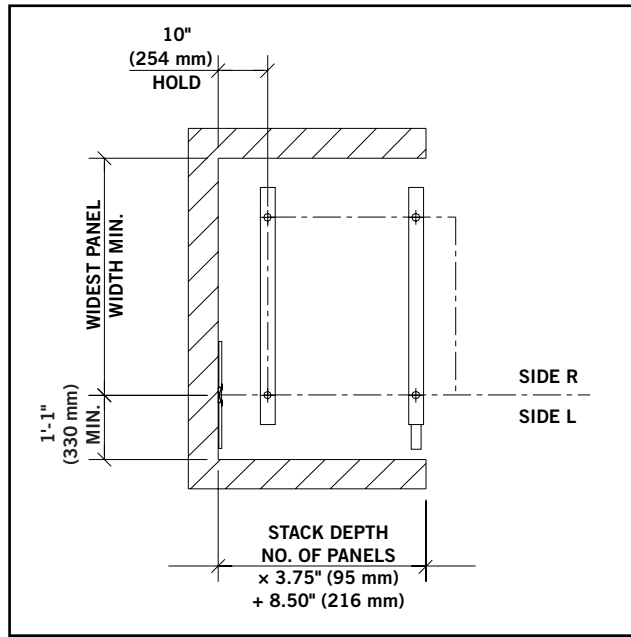


### 2-inch Manual Seal

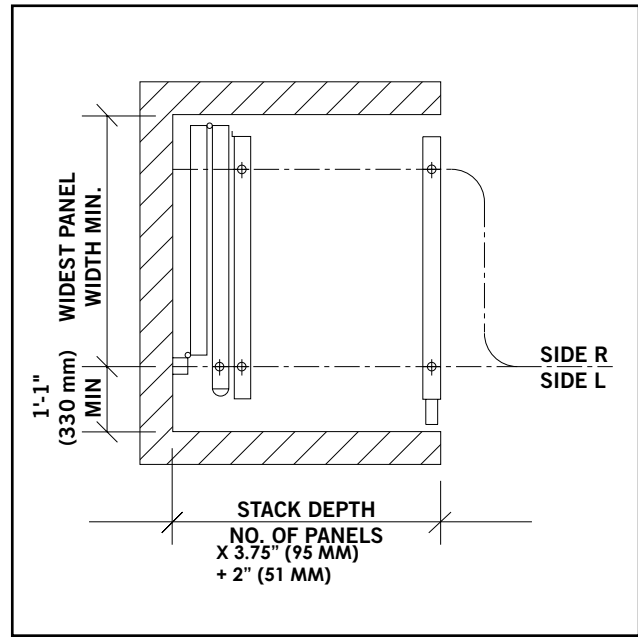


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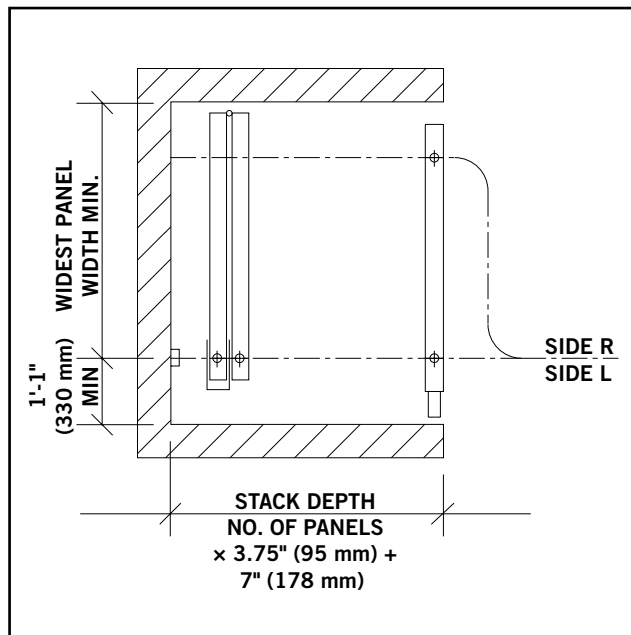
Enclose –  
 90° Side Stack Right Angle



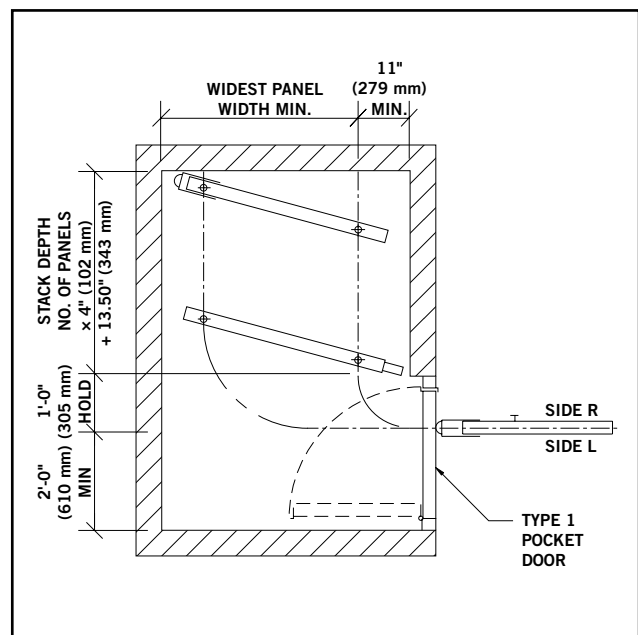
Bi-Fold Hinged Panel Closure –  
 (Flat Stack) Smart Track



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

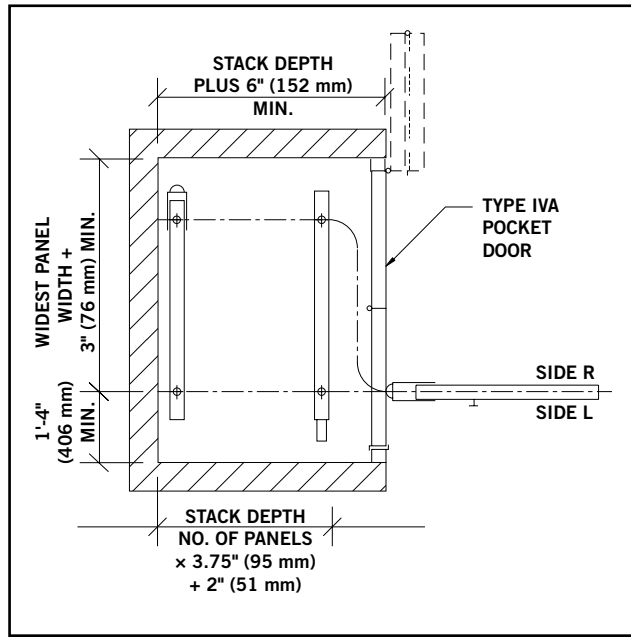


Remote Expandable Closure –  
 Parallel Stack (Angle Stack) Smart Track

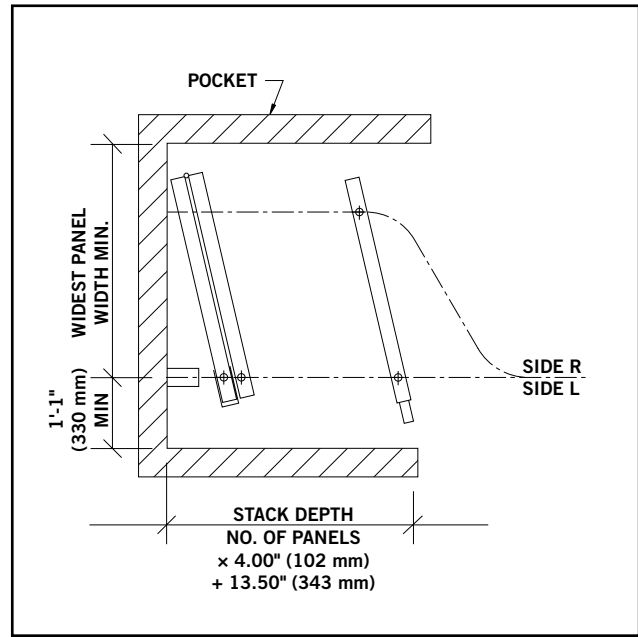


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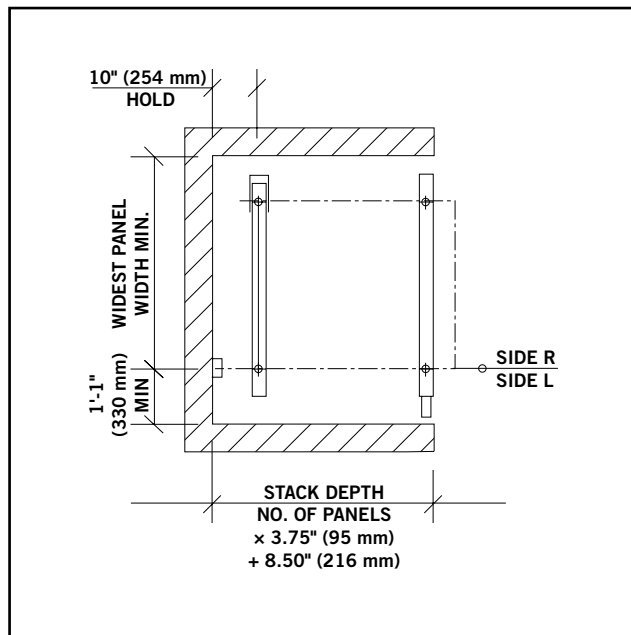
Remote Expandable Closure –  
 90° Side Stack (Flat Stack) Smart Track



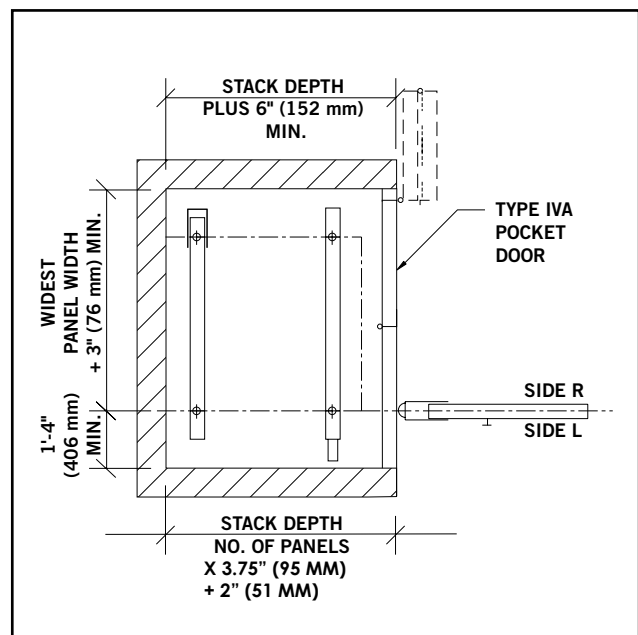
Bi-Fold Expandable Closure –  
 (Angle Stack) Smart Track



Expandable Closure –  
 90° Side Stack Right Angle

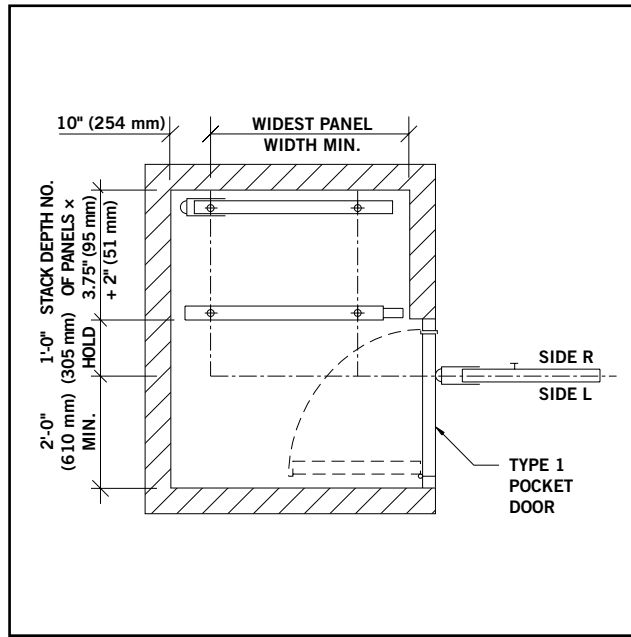


Remote Expandable Closure –  
 90° Side Stack Right Angle

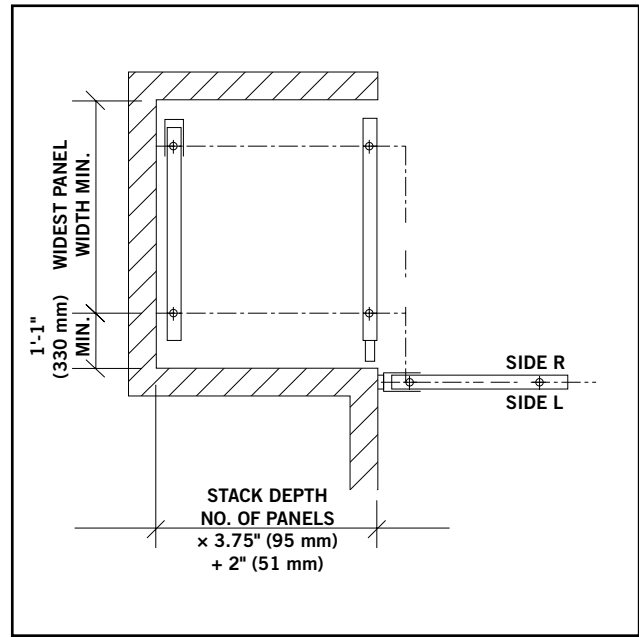


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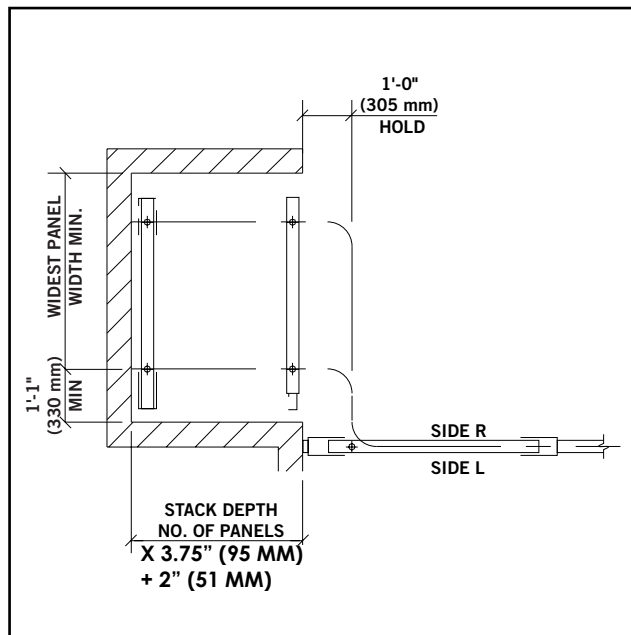
Remote Expandable Closure –  
Parallel Stack Right Angle



Remote Expandable Closure –  
Offset Stack Right Angle

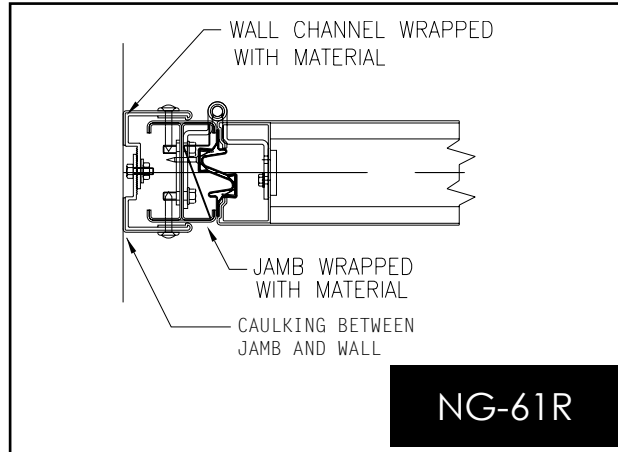


Double-Ended Expandable Panel  
Closure – Offset Stack Smart Track

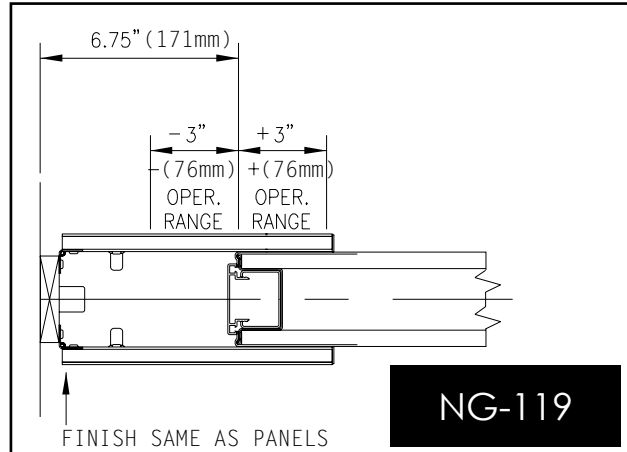


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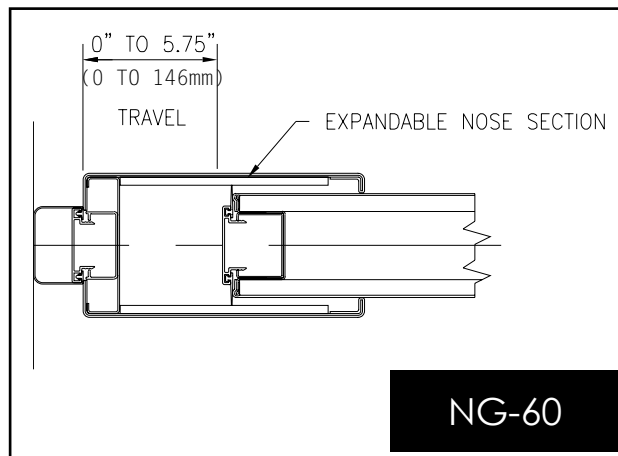
Hinged Jamb



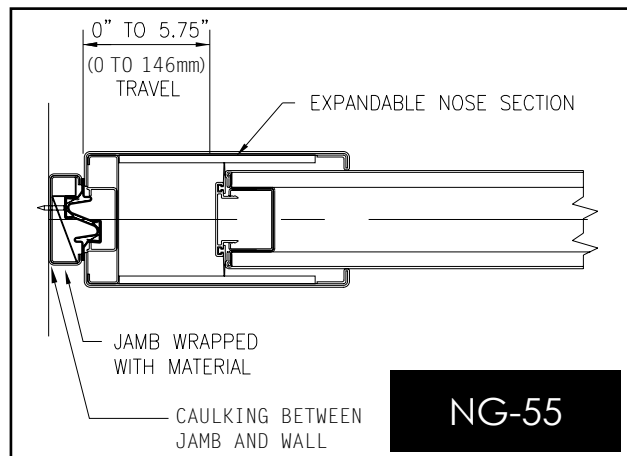
Enclose



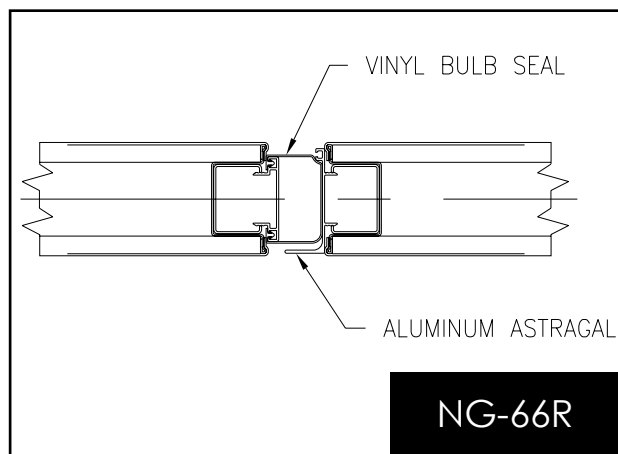
Expandable Panel w/Bulb Seal



Expandable Panel w/Jamb

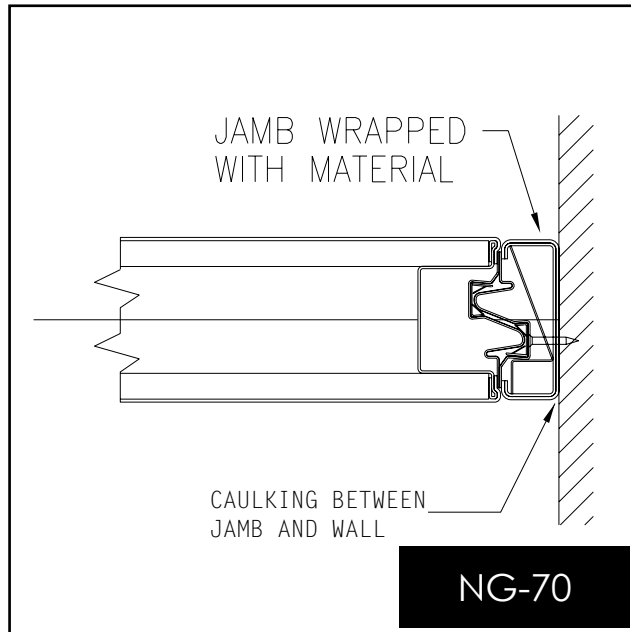


Hinged Panel Meeting w/Bulb Seal

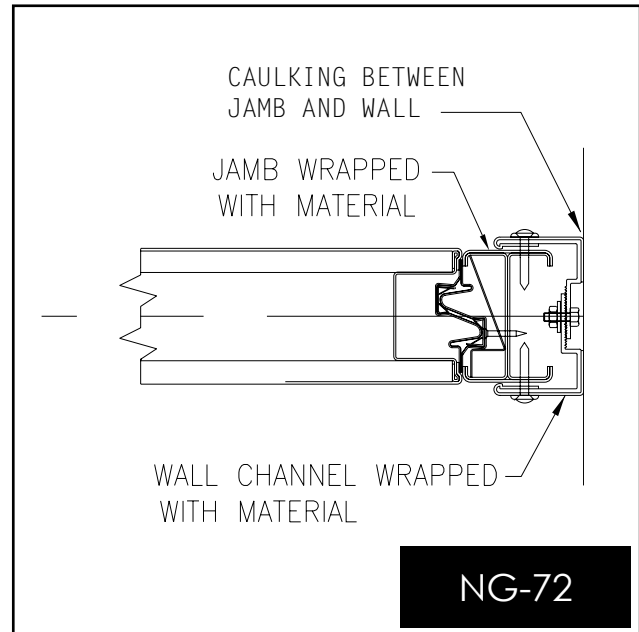


## ACOUSTI-SEAL® PREMIER® SERIES TECHNICAL DATA

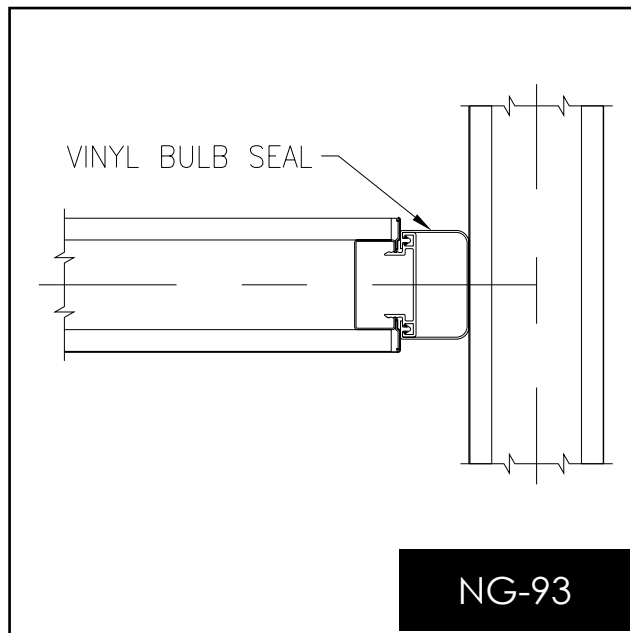
Nominal Fixed Jamb



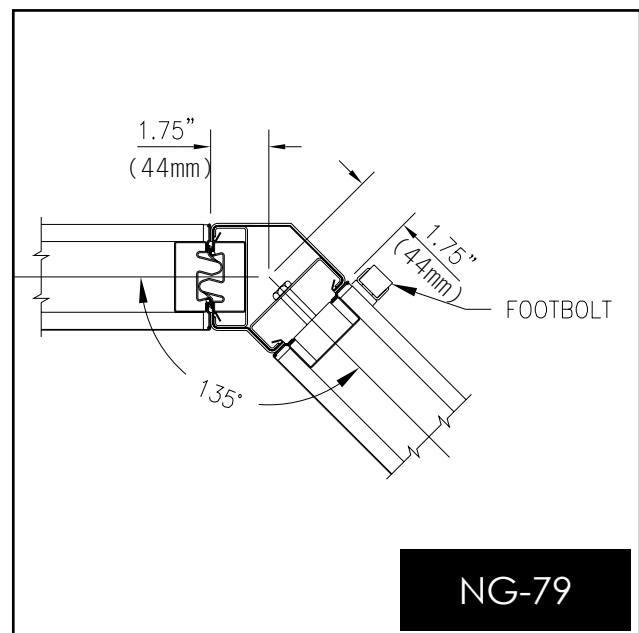
Variable Fixed Jamb



Bulb Seal and Intersection



135 Degree Angle Attachment





**Acousti-Seal® Premier®**  
**Single Panel (931) Technical Data**  
10 22 26 (10650) Operable Partitions



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