

## Product Data Section

# Flexible Modular Curtain Systems To Contain And Absorb Noise Without Compromising Access



*Typical BAC-110R HUSH FLEX™ curtain system (ceiling suspended) around a screw machine. Features include double track sliding panel access, viewing windows and overhead baffles.*

## Advantages:

- Economical alternative to rigid enclosures
- Easy to install without special tools
- Maximum application flexibility
- Allows quick access to equipment for operation and maintenance
- Washable and steam cleanable
- Custom designs with standard components
- Fire safe ratings meeting ASTM E-84, class A
- Durable construction with good oil and chemical resistance
- Outdoor/high temperature designs available
- High noise reduction performance up to 15 dBA with open top designs
- Can include the support structure, roof panels, air vents and other accessories.

## Applications:

- Metal working presses and equipment
- Generators and power equipment
- Dicers, granulators and pelletizers
- Compressors and pumps
- Fans and blowers
- Paper and corrugation machinery
- Foundry shakeouts
- Vibratory screeners and converters
- Dust collectors
- Pulverizers
- Hydraulic units
- Test areas
- Plant dividers
- Movable screens
- In-wall constructions
- Chillers and refrigeration equipment
- VAV boxes
- Packaged HVAC equipment
- Screw Machines

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### About BRD HUSH FLEX™ Curtain Systems:

BRD HUSH FLEX™ curtain systems combine absorber and barrier layers into composite panels that can be readily hung from or mounted to customer supplied pipe, angle iron, strut, track or wood frames. BRD also offers a 16-gauge track system with all components as needed for a turnkey project. Twelve gauge and heavy-duty structural steel framework are also available.

Several system models are offered in two distinct styles: the BAC (Barrier/Absorber Composite) and ABAC (Absorber/Barrier/Absorber Composite) models. The BAC systems are used where maximum abuse resistance is important and on movable panels. The ABAC systems are used where absorption on the outside of curtains is desired or where the panels are used to separate noise sources on both sides. For further information, see also the section on HUSH QUILT™ composites.

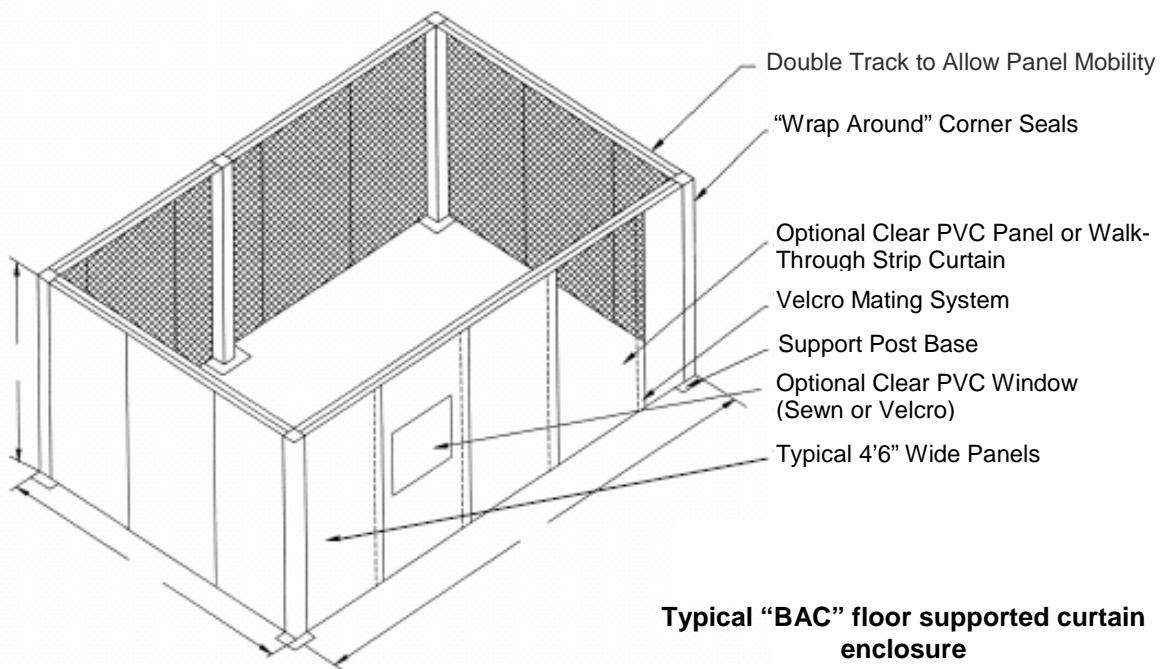


Type BAC Barrier/Absorber Composite panel material.



Type ABAC Absorber/Barrier/Absorber Composite panel material.

**CAD Assembly Drawings Furnished With Every Order!**



**Product Data Section**

**Acoustic Performance Test Results**

Model No.	Thickness (In.)	Wt. Lb./Ft. <sup>2</sup>	Sound Transmission Loss (dB) Octave Band Center Frequencies						STC
			125	250	500	1000	2000	4000	
BAC-110R	.75-1	1.3	11	16	24	30	35	35	27
BAC-210R	1.5-2	1.5	13	20	29	40	50	55	32
ABAC-111N	1.5-2	1.5	12	16	27	40	44	43	29
ABAC-121N	1.5-2	2.5	19	22	28	40	56	61	33
ABAC-R111N	2-2.5	2.6	19	20	28	42	56	62	31

Model No.	Sound Absorption Data Absorber Component Random Incident Sound Absorption						
	Octave Band Center Frequencies						
	125	250	500	1000	2000	4000	NRC
BAC Products	.12	.47	.85	.84	.64	.62	.70
ABAC & 2" BAC Products	.07	.27	.96	1.13	1.08	.99	.85

**NOTE:**

- 1) Acoustical testing per ASTM C-423-77, C-423-90A; ASTM E-90-75; E-90-90. Copies available upon request.
- 2) Actual noise reduction will vary with application, enclosure design, features and peak frequency of the sound source.



ABAC high temperature 12' high curtains protect a welder from brake and shear noise in a machine shop.



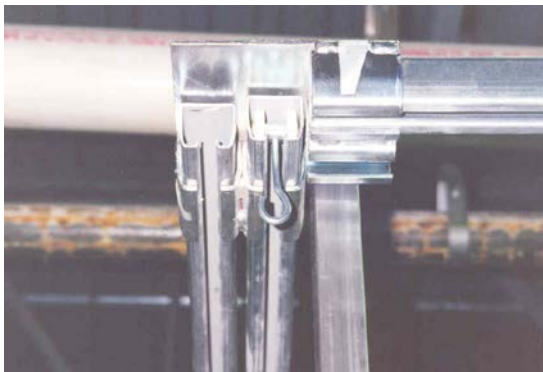
Typical double track design sliding panel access for compressor enclosure.



**Product Data Section**

**Typical Panel Construction:**

- Factory bound edges
- No. 8 brass grommets at top for hanging
- Velcro hook and loop fastening strips on vertical overlapping (2" standard) edges
- Optional corner strips
- Top edge reinforcing on BAC styles and when overall panel length dictates for ABAC styles
- Standard facing is vinyl coated fiberglass cloth good for service up to 180°F
- Optional silicone coated fiberglass cloth facing for high temperature applications or where there is exposure to UV rays (Temperature range is -90°F to 550°F)
- Heavy duty edge binding available for sliding panels
- Standard colors are gray, tan, white and black

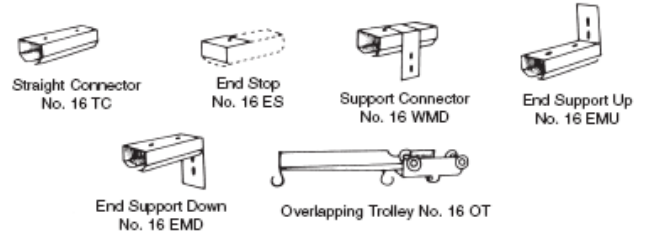


Double track rails with roller trolley. Corner rails slide in to seal open ends.

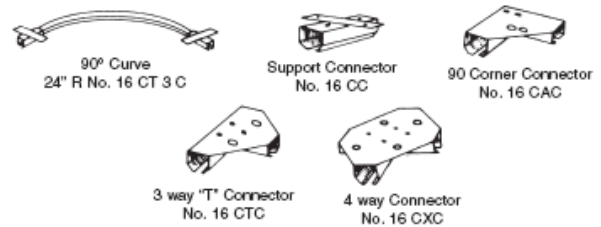


ABAC-111N panel with 4" corner strip hung on roller trolley and track system.

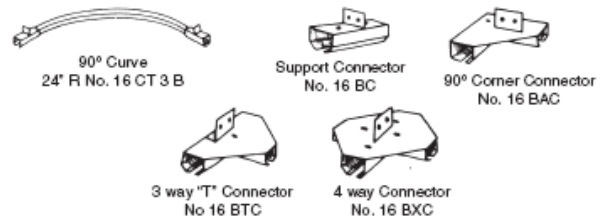
**Standard Type TC Framing and Hardware Components:**



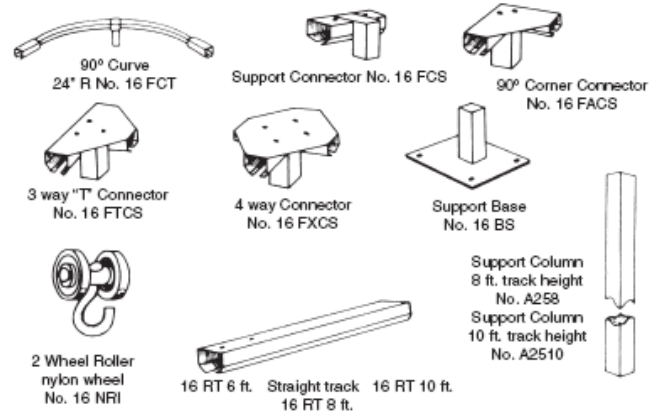
**CEILING MOUNTED**



**SUSPENSION OR BEAM MOUNTED**

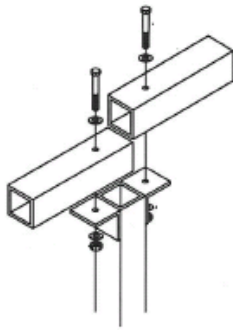


**FLOOR MOUNTED**

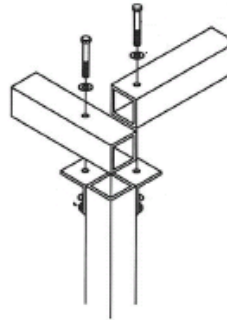
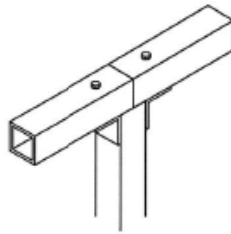


## Product Data Section

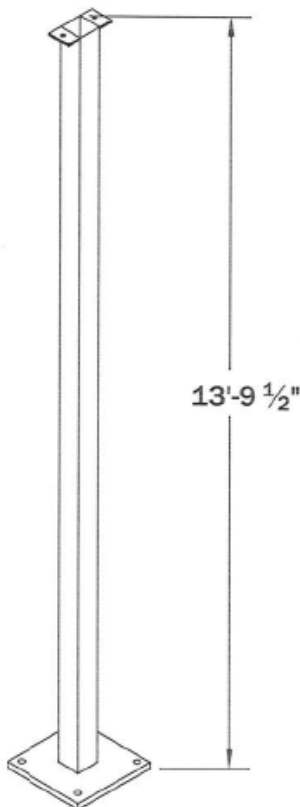
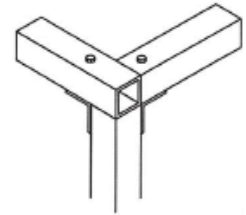
# HEAVY DUTY TYPE STS STRUCTURAL TUBE STEEL FRAMING SYSTEM



MID COLUMN



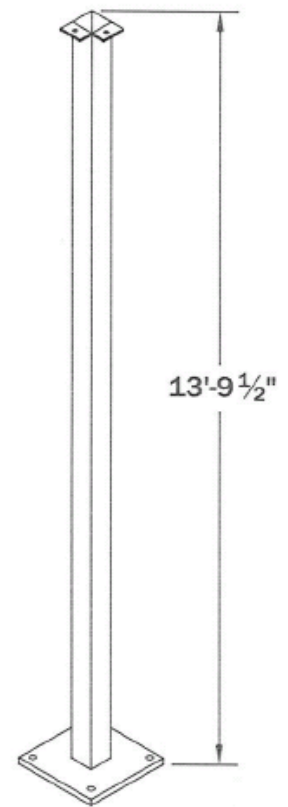
CORNER COLUMN



MID COLUMN

### Features/Applications:

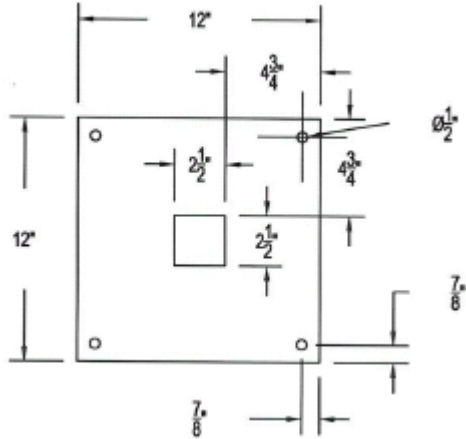
- Manufactured from 2½" x 2½" x 3/16" tube steel members (oil enamel painted)
- Best suited for enclosure or barrier wall heights exceeding 10'; mandatory for heights exceeding 12'.
- Can be used for outdoor applications; larger tube steel members may be required based on final layout and wind exposure.
- Easy bolt together design simplifies assembly and installation
- Standard track channels can be added to cross members where panel mobility is required.
- Preferred method of panel support and attachment is with STS adjustable clips (illustrated on next page)
- Allows for greater column spans; up to 15' for a 14' high curtain system. Fewer column supports reduces material costs, installation labor and minimizes potential column interferences at floor level



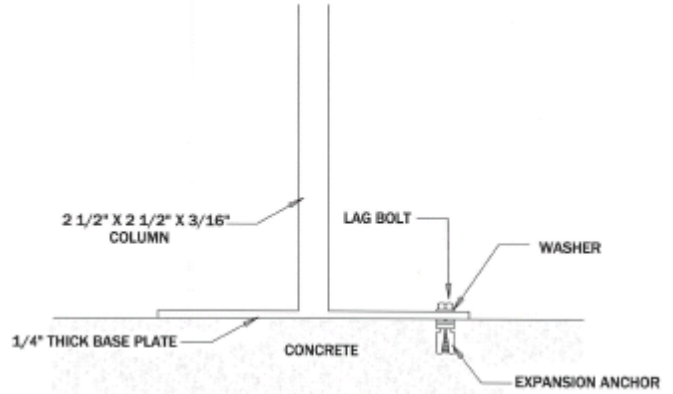
CORNER COLUMN

**Product Data Section**

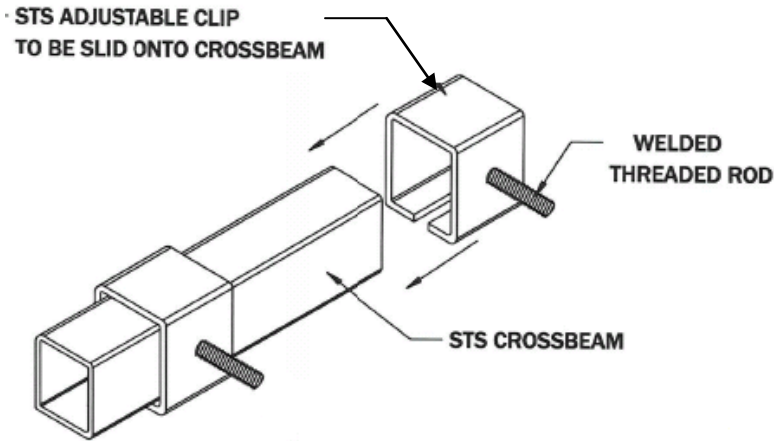
**STS Framing Details**



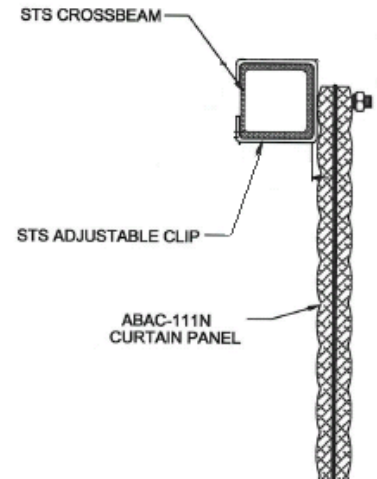
**Column Base Plate Detail**



**Base Plate Anchor Detail**

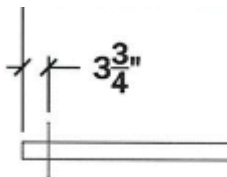


**STS Adjustable Clip Detail**

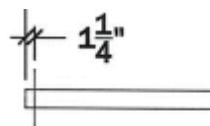


**Panel Attachment Detail**

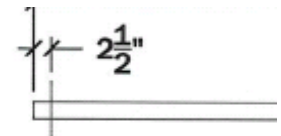
**Crossbeam End Drilling Details**



**Long Corner End**



**Short Corner End**



**Mid Column End**

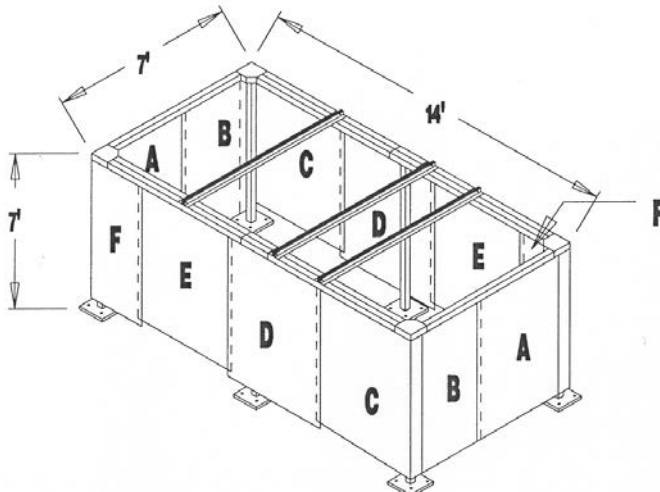
**Product Data Section**



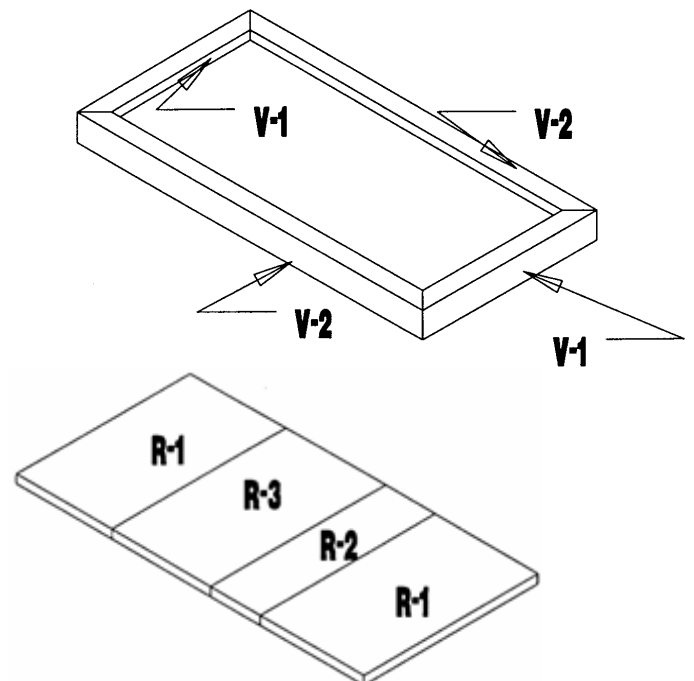
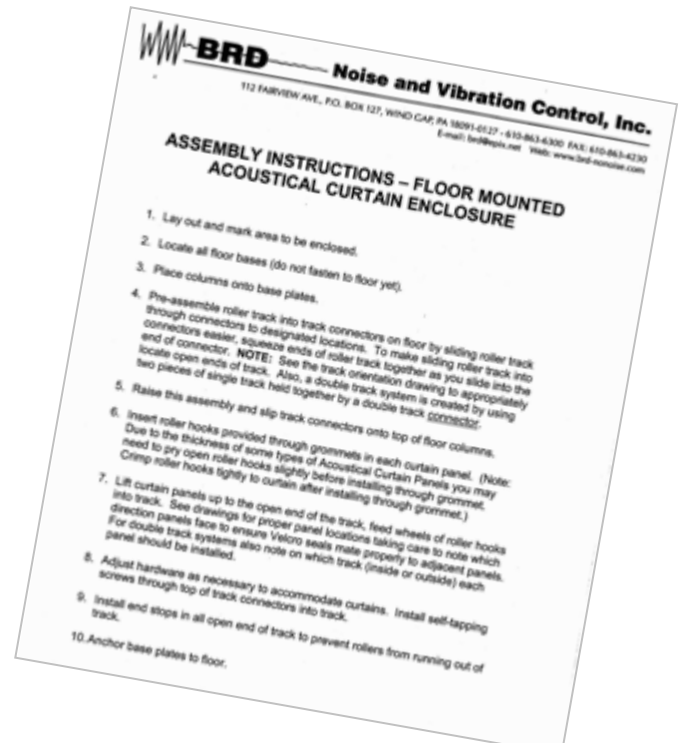
Step 1: Erect Framework



Step 2: Hang HUSH FLEX™ Curtains



**Quick & Easy  
Installation!**





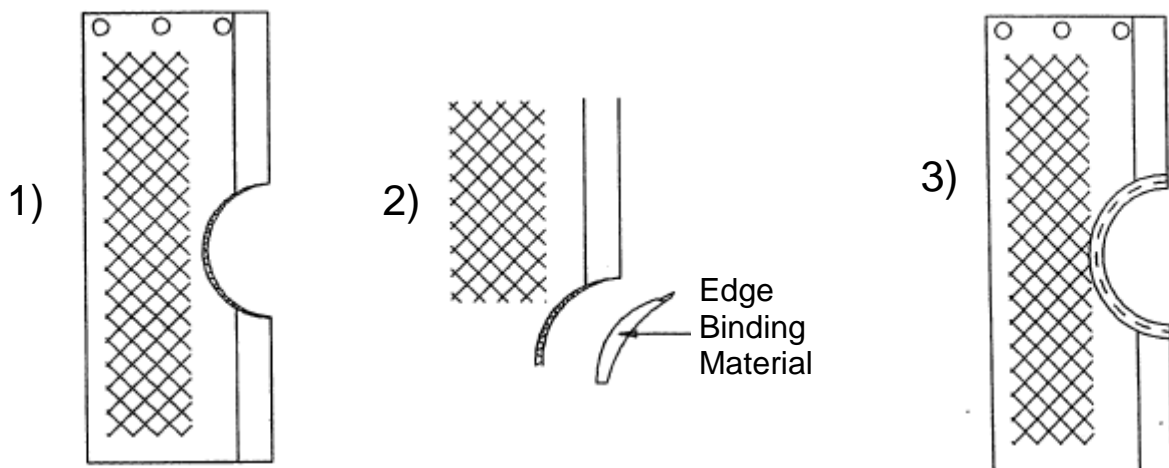
## Product Data Section

### FINISHING FIELD CUTS ON HUSH FLEX™ PANELS



#### Needed Tools & Materials

- Utility knife and shears
- Edge binding trim cloth to match panel quilted facing
- Tape measure
- Plier type staple gun
- Compass or scribe for radius or circular cut-outs



- 1) Cut panels with utility knife or shears to fit as snug as possible. Keep gaps to a minimum.
- 2) Fold edge binding material over edges, equal amounts on front and back. (Note: A few staples along cut edge will help compress material prior to installing edge binding.)
- 3) Staple bind edge binding material to panel, with staples every 2- 3 inches.





## Product Data Section

# HUSH FLEX™ Enclosure Access Options



### Infrequent Entry Access

Overlapping (2") Velcro closures are standard for all HUSH FLEX™ systems on maximum 48" centers for ABAC panels or 54" centers for BAC curtains. This provides quick and easy entry access points around the entire perimeter of the enclosure and at the corners. Heavy duty edge binding increases panel edge durability where repeated handling is expected. Applies to fixed and movable suspension/attachment to the support framework.



### Occasional Service/Entry Access

The BRD HUSH FLEX™ curtain system standard framework design is model STC Strut Track Channel with nylon wheel roller trolleys. When used with double track rail systems, curtain panels can be alternately suspended from the inside and outside track rails. Single or multiple curtain access clearance can be accomplished by disengaging the Velcro seams of the panel(s) and sliding it/them on the open track. Variations of this design include track wall extensions, corner radius tracks and triple/quad track layouts.

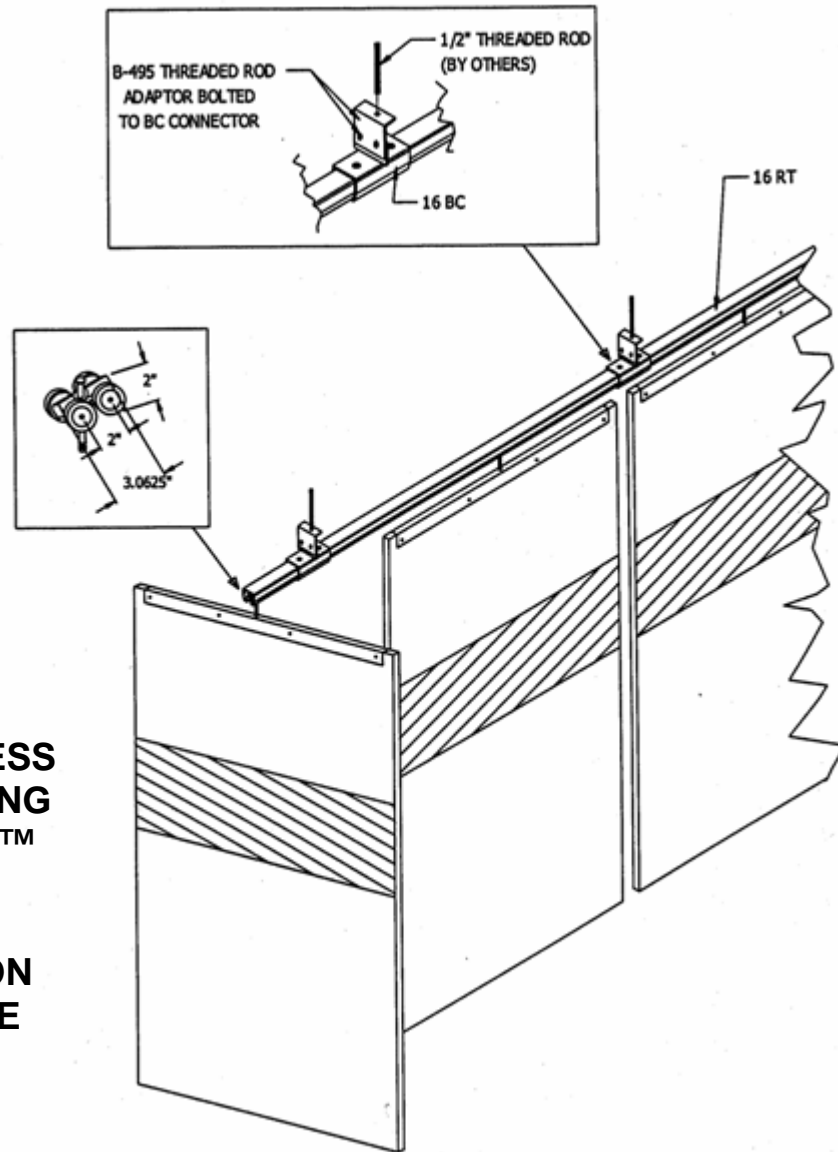


### Frequent Service/ Entry Access

Single or double panel access doors are designed with 8" to 12" of panel overlap at each edge of the required entry/service opening. This extended overlap compensates for the lack of Velcro to maintain acoustic performance while ensuring ease of movement/door operation. Sliding door panel features include cloth handles, heavy duty edge binding and optional viewing windows. When enclosure wall heights exceed 10', independently supported access doors of a more workable 7' to 8' height are recommended.

## Product Data Section

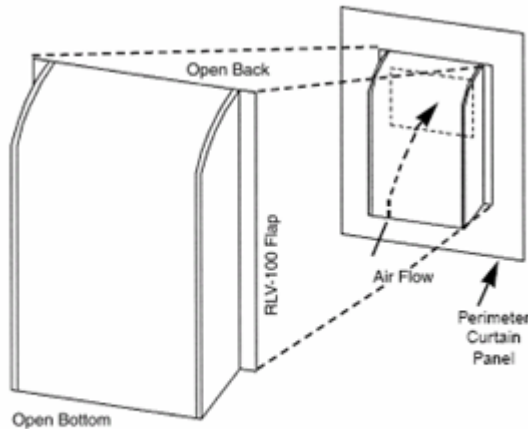
### CURTAIN PANEL ACCESS SYSTEM USING HUSH FLEX™ SWIVEL & STACK SUSPENSION HARDWARE



The swivel and stack hardware system includes a full width top mounted channel support connected to a single suspension steel wheel heavy duty roller trolley. As pictured above, the single suspension point (top middle of each panel) allows the panel to swivel 90° so that it is perpendicular to the track. Successive addition panels along the enclosure wall can be swiveled in a similar manner to create a full or partially open area with the panels stacked at one end. A curtain wall measuring about 20' long can be stacked to expose all but about 18". The curtain enclosure layout must provide about 2' of clearance on each side of the track in the area where the panels will be stacked/stored.

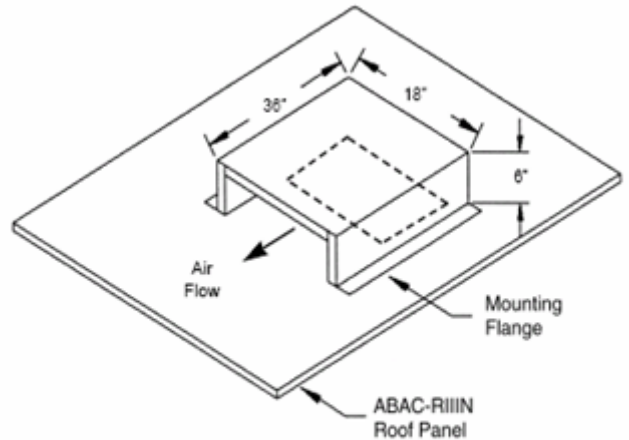
**Product Data Section**

**Curtain Panel  
Ventilation Baffle**



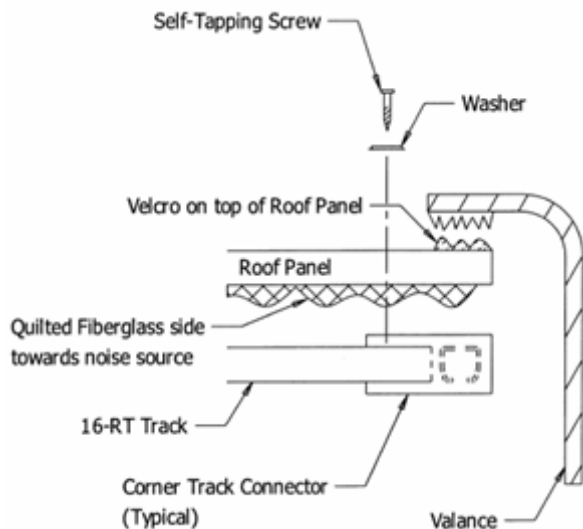
*BAC-110R composite material used to form an air flow vent baffle. Can be used as an intake or discharge (covers cutout in a panel).*

**Rooftop Ventilation  
Baffle**

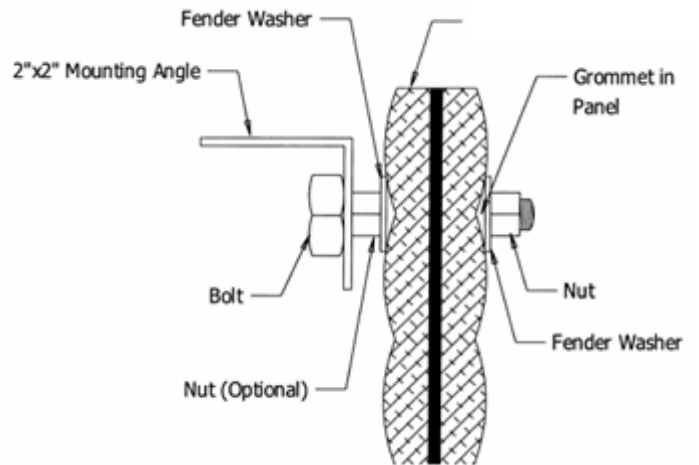


*16 gauge steel vent baffle with 1" thick faced acoustical foam liner. Can be used as an intake or discharge (covers cutout in roof panel).*

**Roof Panel  
And Valance**



**Fixed Mounting  
Angle Detail**





## Product Data Sheet

### HUSH FLEX™ Options And Accessories

- Laminated facing construction
- Sliding/retractable roof panels
- Custom hardware to suit
- Circular support frame designs
- Strip curtains for access
- Heavy duty edge binding for sliding panels
- Ventilation fans
- Lighting
- Windows
- Accordion fold curtains
- Access flaps
- Feed chute openings
- Portable frames

### Temporary Construction Barriers



- Model EBAC-110N-VCP construction
- Low cost HUSH FLEX™ construction for projects with typical life span of 3 – 5 years
- Non-reinforced vinyl barrier
- 2" thick exterior grade absorber
- Grommets and Velcro
- Rated at STC-32 and .85 NRC
- Contractor supplied framing
- Can be supplied in roll form or in custom size panels



**PLEASE REFER TO THE  
HUSH GUARD™ PRODUCT  
DATA SECTION FOR  
ADDITIONAL  
INFORMATION ON  
TEMPORARY OUTDOOR  
SOUND BARRIERS**

## Product Data Section

### Guidelines for Outdoor Curtain Systems, Enclosures and Acoustical Barrier Walls

Recommended Exterior  
HUSH FLEX™ Construction



- Model EBAC-110R-P
- RLV-100 Barrier
- Vinyl coated polyester absorber facing
- Tenera thread stitching
- Exterior grade velcro

### Fence Support Structures



Cooling tower curtain system attached to chain link fence.



Air-cooled screw chiller with HUSH FLEX™ curtain panels attached to chain link fence.



HUSH FLEX™ panels attached to wood planking fence.



Close-up of HUSH FLEX™ panels on inside of wood slat fence enclosure.



## Product Data Section

### Masonry/Brick Solid Wall Support Structures



Concrete/stucco wall structure with HUSH FLEX™ panels creates efficient chiller sound enclosure.



Brick wall attachment of HUSH FLEX™ panels.



CMU block wall enclosure with HUSH FLEX™ exterior grade curtain panels.



HUSH FLEX™ curtain panels attached to inside of existing non-acoustical metal screen walls.

### Turnkey STS Structural Tube Steel Systems

