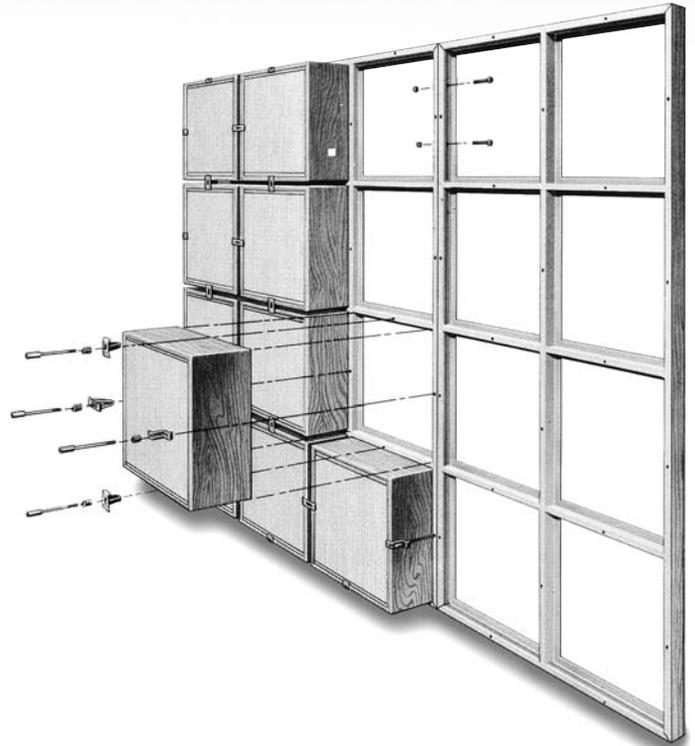




Better Air is Our Business®

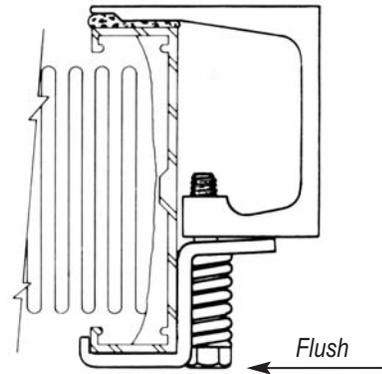
AmericanAirFilter® Welded Bevel Seal Frame

Installation, Operation and Maintenance Instructions

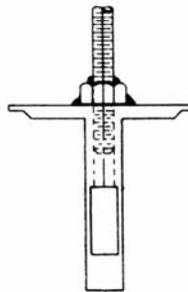


Bevel Seal Frame

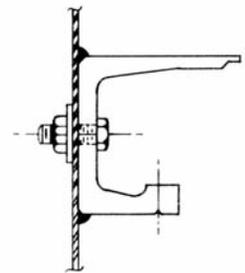
1. The patented AAF Bevel Seal Frame is designed to prevent accidental over-compression of filter gaskets and preserve the elastic memory of the standard 1/4" x 3/4" closed cell neoprene gasket. This frame will accommodate any non-proprietary filter of equal size.
2. Non-directional, the frame may be installed for upstream or downstream filter loading, either as a horizontal or vertical bank.
3. The welded aluminum frames are modular and made for fast field bolt-up. Bolts are 1/4"-20 @ 12" centers.
4. Support the frame on nominal 4'0" centers, using 1/4"-20 threaded rods.
5. Edge attachments should be fastened on 12" centers, site conditions will govern.
6. Caulk all joints, seams and penetrations with two coats of quality sealant such as RTV-732 Silicone Caulking or EC-800 Ductseal.



Perimeter Clamp



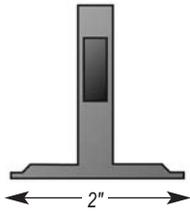
Bottom Access Suspension
(See Note 4)



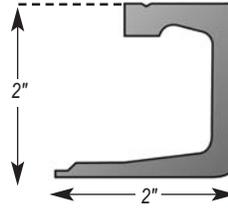
Termination at Sheet Metal
(See Note 6)

Grid Installation

There are two mill finish extrusions utilized in Welded Bevel Seal Frames.

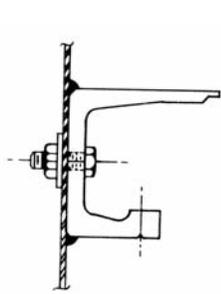


Main Runner, T-Section

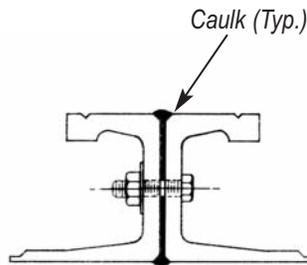


Perimeter Extrusion
Perimeter Section — Type H

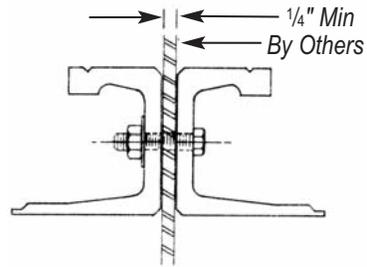
Suggested Edge Details



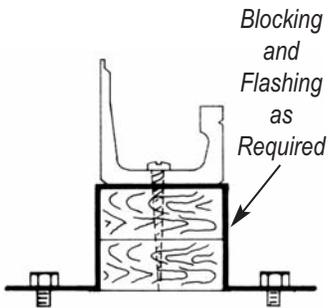
At Sheet Metal/Duct



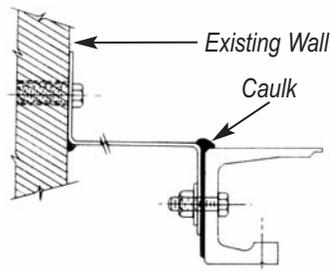
Module/Module Joint



Vertical Stiffener



Floor Detail



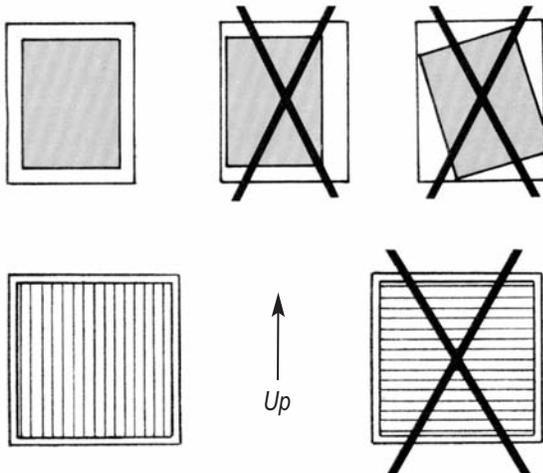
Zee Bar Saffing

Setting Filters

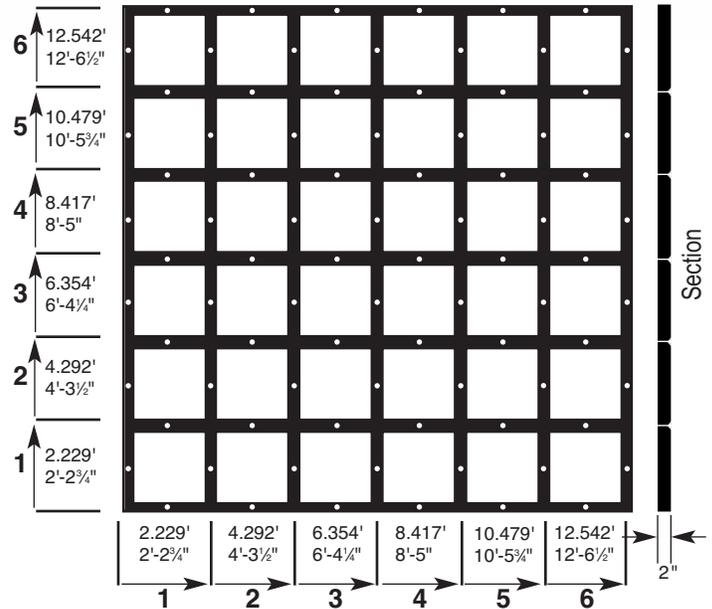
1. For maximum service life, do not consider setting Astrocel® HEPA filters until the system has been cleaned and blown down with the prefilters in place. The area should be clean and ready for occupancy and beneficial use.
2. Inspect the installation for integrity; all seams, crevices and penetrations must be sealed smoke tight using an RTV silicone caulking compound, EC-800 Ductseal or approved substitute.
3. Visually check the grid filter sealing surfaces and wipe clean of dust and foreign material.
4. Bring Astrocel HEPA filters (in factory-sealed cartons) and clamp hardware to area.
5. Open filter carton by slitting taped seams with a sharp knife, carefully lift out the Astrocel Filter utilizing the cardboard inner wrap as a protective lifting device.

NOTE: HEPA Filter handling is a two-man job.

6. Examine both faces of the filter for shipping and handling damage. Note condition of gaskets and inspect the corners for splits or adhesive fractures. Questionable filters should be set aside for closer scrutiny. The owner may elect to bench test all filters before final installation.
7. Position the filter and carefully insert into the frame avoiding damage to the delicate filter medium. Center the filter evenly in the grid opening with sides parallel to the frame.
8. On horizontal airflow installations where separator type filters are "on edge," be certain the separators are positioned **vertically**. The separators may sag if installed horizontally and ruin the filter.
9. Install appropriate clamps and tighten as indicated.



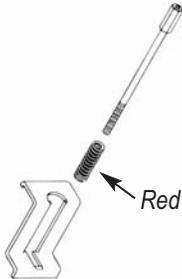
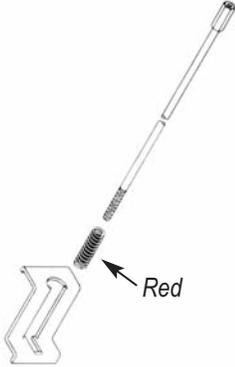
Dimensions: Bevel Seal Frame Bank (for 24" x 24" AstroCel HEPA Filters)



NOTE: Filter banks larger than four filters in both the height and width will be made in two sections. The overall height or width of the assembled bank will be 2" greater than indicated above; i.e., 6 x 6 bank would be 12'-6-1/2" x 12'-8-1/2".

AmericanAirFilter® Welded Bevel Seal Frame

Visual Control Filter Clamps

| | 5 ⁷ / ₈ " AstroCel I Filter | 11 ¹ / ₂ " AstroCel I Filter |
|------------------------------------|--|--|
| Single Filter Clamps (100# Spring) |  |  |
| Double Filter Clamps (200# Spring) |  |  |

The filter clamp springs are color coded to assure proper clamping pressure depending on filter thickness and clamp style.

1. The patented AAF clamps are designed to work with any conventional HEPA filter. Located approximately two feet apart, the spring-loaded clamps maintain up to 100 lbs. thrust against the filter at each clamping point. This assures a continuous pressure against the filter gasket.
2. No special tools are required for proper clamp installation, just tighten until the bolt head is flush with the clamp face.
3. Where one clamp anchors two filters, use the heavier (200 lb.) spring. For single filter contact, use the lighter (100 lb.) spring. Springs are color-coded as shown in the illustrations.
4. The welded frames are tapped for 1/4-20 clamps. Clamp combinations vary depending on filter thickness and number of filters anchored per clamp.

