



**IM-135**

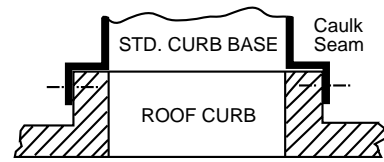
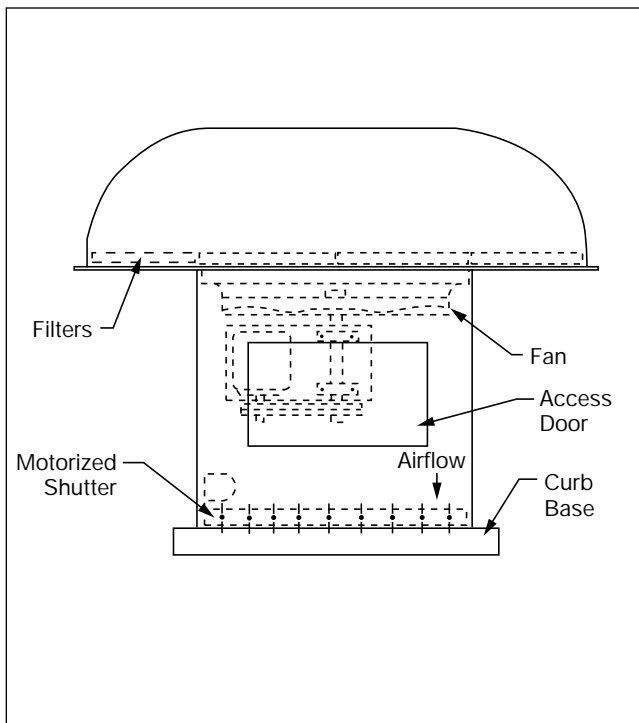
June 1997

**General Installation, Operation and Maintenance Instructions For Aerovent Products**

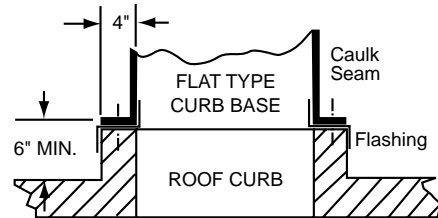
## Filtered Air Supply Fans

The roof mounted filtered air supply fan consists of two basic sections: the intake head with filters and the base. The standard base includes the belted panel fan and is

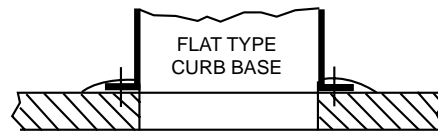
designed for curb mounting with a 4" turndown. Illustrations below show both curb and flat base type.



New Roof



New Roof

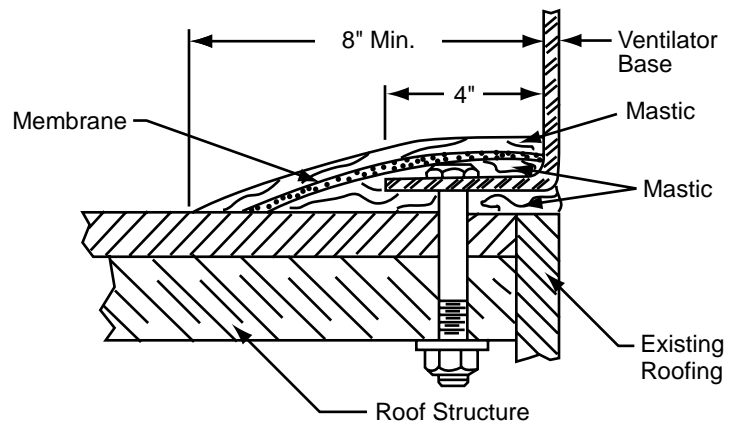


Existing Roof

### Detail Mounting of Flat Type Curb Base on Existing Roof

Use Hydro Shield and heavy-duty glass membrane — Addex Corporation (or equal).

1. Set ventilator curb base in mastic.
2. Apply mastic over curb base flange.
3. Work membrane into mastic.
4. Trowel mastic over membrane and work in.



## Care and Maintenance

The filtered air supply unit requires a minimum of attention to keep it operating properly. However, a certain amount is required to prolong its most efficient operation. The components requiring service are generally the moving parts which include bearings, propeller, belts and sheaves, motor and shutter. The maintenance for all of these items, with the exception of the propeller and filters, is covered in a separate installation and maintenance manual included with this shipment. Good fan maintenance requires regular and systematic inspection of all fan parts. Severity of the application should determine frequency of inspection and fan maintenance should include the following:

1. **PROPELLER:** When the fan wheel is handling clean air, as in the case of the filtered air supply unit, dirt build-up will be slight and very little unbalance will result. Air heavily laden with grease and dirt will deposit a great deal on propeller blades. Conditions should be observed and cleaning performed as required for smooth fan operation and, in the case of grease, removal of this fire hazard.  
One problem that often develops is the unbalance which occurs when particles of dirt and grease build up on the blades. This unbalance condition will naturally cause wear and noise. Cleaning should be accomplished, if possible, without removing the propeller from the shaft.
2. **V-BELT DRIVE:** Check V-belt drive for proper alignment and tension. (See General Installation and Maintenance Manual, IM 100.)
3. **FAN BEARINGS:** Lubricate the bearings as detailed in the ball bearing lubrication instructions. (See General Installation and Maintenance Manual, IM 100.)
4. **SCREWS AND BOLTS:** Check tightness of all screws and bolts throughout the assembly.
5. **SHUTTERS:** Periodically check damper blades and remove accumulated dirt. Also, check bronze damper bearings and motor linkage for smooth operation.

## Filters and Filter Care

The standard filters furnished with the Aerovent filtered air supply unit are permanent washable type and are designed for a face velocity of 520 feet per minute. These may be 16x20x2 inch, 16x25x2 inch or 20x25x2 inch.

Filters must be cleaned regularly to prevent undue resistance and a loss of filtering efficiency. Manometers and other warning devices are available to indicate when the filters are clogged but visual inspection at regular intervals is probably the best method for determining when it is time to clean and change filters. These filters can be removed with the hood in place.

## Filter Maintenance

Remove and flush filter with water containing ordinary detergent. Rinse with clean water. Drain and allow to dry. Then recoat the filter with filter coat adhesive such as RP Super Filter Coat Adhesive (Research Products Corporation, Madison, Wisconsin). Never replace these washable type filters without coating.

## Disposable Filters

Aerovent supplies two types of disposable filters. One has a permanent metal frame with disposable media and the other, Far 30-30, has a treated fiber frame which is completely disposable. Ordinary "throwaway" filters with a paper frame and face retainer tend to deteriorate from moisture, thereby causing the filters to fall out of the frame.

A permanent washable filter may be replaced with disposable type provided that the manufacturer's specifications call for a face velocity of 520 feet per minute and are of the same size and thickness.

In many cities, professional filter cleaning and replacement service is available. This is often a convenient and economical arrangement for filter care.

FAN SIZE	FILTERS	
	NO.	SIZE
24	8	16 x 20 x 2
30	14	16 x 20 x 2
36	22	16 x 20 x 2
42	22	16 x 25 x 2
48	28	16 x 25 x 2
54	44	16 x 20 x 2
60	12	20 x 25 x 2
	28	16 x 25 x 2



**Aerovent**

*A Twin City Fan Company*

5959 Trenton Lane · Minneapolis, MN 55442-3238  
Phone (612) 551-7500 · Fax (612) 551-7501 · Website [www.aerovent.com](http://www.aerovent.com)

