

FEATURES AND BENEFITS OF FILTA-MATIX HOLDING FRAMES

CONSTRUCTION

Standard holding frames are produced from aluminium but stainless steel holding frames can be provided upon request. Materials are selected to provide a strong and rigid structure even when higher than normal differential pressure levels are expected. Strategically placed joining holes are provided for multiple frame assembly.

RETAINER CLIPS

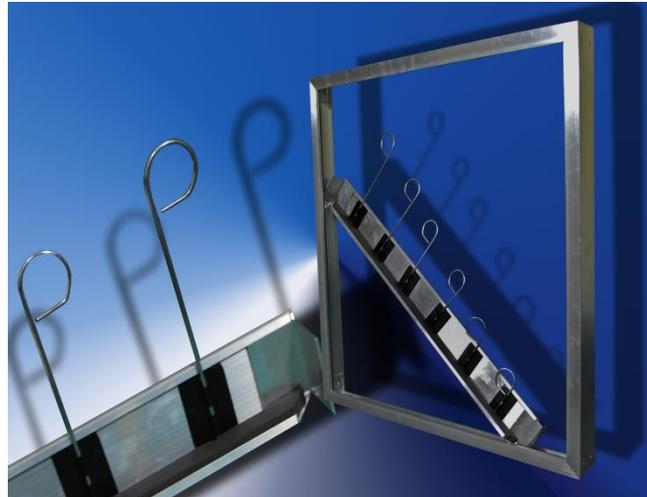
The retainer clips form an integral part of the frame and do not impede the filter as it is installed or removed from the holding frame. Retainer clips are fitted to the holding frames to suit the filters selected. Primary and secondary filters (or both) can be clamped into place when using the correct retainer clips.

GASKETING

A closed cell Neoprene gasket will be fitted into a pre-formed channel to provide a permanent and positive seal. The entire gasket area is free of obstruction and since the retainer clips do not come in contact with the gasket, an effective seal is provided.

SURROUND FRAMES

It is often necessary to provide a surround frame to newly constructed filter banks. The surround frame will seal off the perimeter of the opening so that unfiltered air cannot by-pass the filter plenum. As air will follow the path of least resistance, due care and attention must be provided to ensure that all openings are properly sealed off.



STIFFENING OF LARGE FILTER BANKS

Large filter banks will require a degree of stiffening especially when variable volume or surge flow conditions are prevalent. We recommend that support sections be fitted between every second holding frame in the vertical direction to provide a really robust and strong installation.

STANDARD SIZES

- 510 X 410
- 510 X 510
- 610 X 310
- 610 X 410
- 635 X 510
- 610 X 610

Non standard sizes available on request

Larger filter banks should be constructed using the following procedures to ensure that robust, strong and leak-free installations are provided.

SURROUND FRAME

A filter surround frame is generally constructed in four sections consisting of top, bottom and 2 side pieces. Ultimately, these four sections form a structure that houses the filter frames while also sealing off all the unwanted openings. Each structure consists of 2 heavy duty angle sections that will be bolted, riveted or welded to each other on site to form a level surround frame to which the holding frames can be fitted. The angle sections must be set prior to bolting, riveting or welding to each other to provide a square and level structure even if the pre-prepared opening is not completely square itself.

HOLDING FRAMES AND STIFFENERS

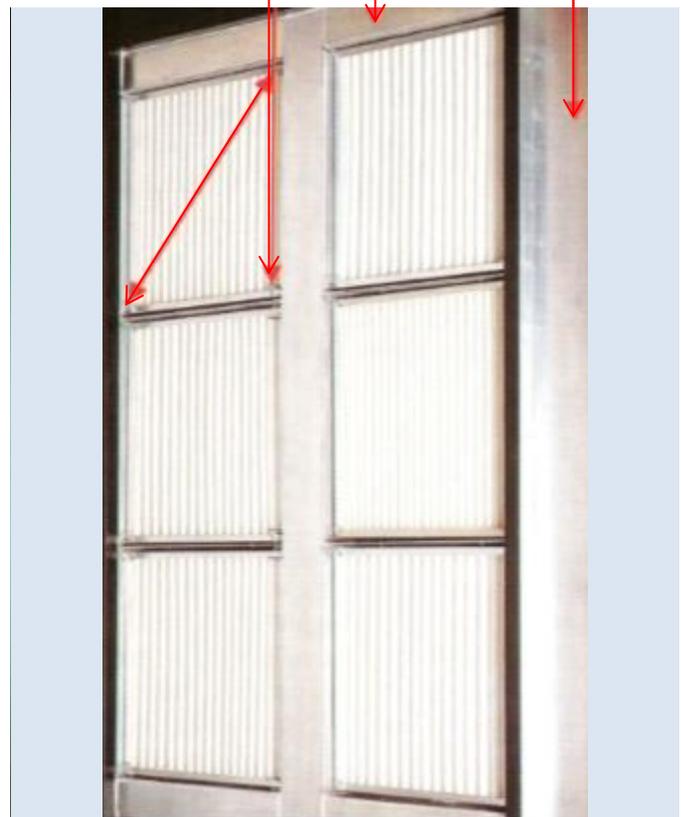
The multiple holding frame bank is formed by joining several frames to each other using strategically placed holes that are properly aligned for fixing purposes. Bolting, welding but preferably riveting, is recommended to fix the required number of frames to each other. Stiffeners are incorporated on a vertical plane after each two consecutive holding frames.

CHAULKING OFF PROCEDURE

A suitable sealant must be provided between each of the joining holding frames to avoid dirty air by-pass. A permanent and positive seal is then created for optimum indoor air quality standards.

Retainer Clips

Surround Frame



SERVICE BACKUP

Filta-Matix will gladly assist in any aspect of construction during the build up period or complete the project on behalf of the client using their own site crew.