HD Industrial Grade
Heavy Duty, Spun Glass and Synthetic Disposable Filters

General

The HD Industrial Grade filters are designed for use in any application where disposable panel filters are recommended. They can be relied upon for superior performance since they are specifically designed for heavy workloads. A wide range of standard face sizes are available, plus nearly any "special" size.

Construction

The HD Industrial Grade filters are designed with a one-piece moisture-resistant chipboard frame enclosing progressive-density media. Standard frames are nominal 1 inch thick (¾ inch actual) and nominal 2 inches thick (1-5/8 inches actual).

The fiberglass media filter consists of continuous-filament fibers approximately 21 micrometers in diameter, bonded together with thermosetting resin. The media is formed in a progressive-density pattern such that the fiber density increases from the upstream (dirty) side to the downstream side where a "skin" or mat is formed.

Each square foot of nominal 1 inch thick fiberglass media weighs approximately 26 grams; nominal 2-inch thick media weighs approximately 35 grams. These weights include a coating of colorless, odorless, nondrying filter adhesive which helps retain dirt particles on the filter surfaces, thus enhancing performance.

The synthetic media filter consists of 100% high bulk polyester fibers that are thermo bonded with a fire retardant resin.

Support grilles of perforated corrosion resistant steel or expanded metal are provided on both sides of the filter. The media pads and support grilles are continuously glued to the inside perimeter of the frame, resulting in exceptional strength and rigidity. This design virtually eliminates the possibility of media sag within the frame.
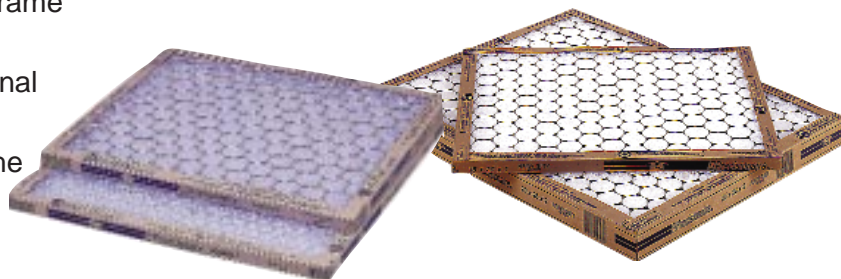
Physical Data

Frame: One-piece moisture-resistant chipboard

Media: Progressive-density fiberglass or synthetic coated with colorless, odorless, non-drying adhesive

Support Grille: Perforated corrosion-resistant steel or expanded wire on both sides of the filter

Sealant: Hot-melt resin

- One-piece moisture-resistant chipboard frame prevents broken corners
- Support grilles on both sides for exceptional strength
- Media and grilles continuously glued to the inside perimeter of the frame for rigidity
- Filters are UL 900 Class 2 listed
- Special sizes available upon request

Spun Glass   **Synthetic**

Standard Sizes   Performance Data

Nominal Size (in.)	Actual Size H x W x D (in)	cfm @ 300 fpm	Quantity per Carton	Weight per Carton (lbs.)
10x10x1	9-7/8 x 9-7/8 x 3/4	208	12	3.3
10x20x1	9-7/8 x 19-7/8 x 3/4	417	12	5.2
10x24x1	9-7/8 x 23-7/8 x 3/4	500	12	6.1
10x25x1	9-7/8 x 24-7/8 x 3/4	521	12	6.5
10x30x1	9-7/8 x 29-7/8 x 3/4	625	12	7.0
12x12x1	11 -7/8 x 11 -7/8 x 3/4	300	12	4.0
12x20x1	11 -7/8 x 19-7/8 x 3/4	500	12	5.8
12x24x1	11 -7/8 x 23-7/8 x 3/4	600	12	6.7
12x25x1	11 -7/8 x 24-7/8 x 3/4	625	12	7.5
12x30x1	11 -7/8 x 29-7/8 x 3/4	749	12	8.0
14x14x1	13-7/8 x 13-7/8 x 3/4	408	12	5.2
14x20x1	13-7/8 x 19-7/8 x 3/4	583	12	6.2
14x24x1	13-7/8 x 23-7/8 x 3/4	700	12	7.3
14x25x1	13-7/8 x 24-7/8 x 3/4	729	12	7.7
14x30x1	13-7/8 x 29-7/8 x 3/4	875	12	10.5
15x20x1	14-7/8 x 19-7/8 x 3/4	625	12	6.7
15x25x1	14-7/8 x 24-7/8 x 3/4	781	12	6.8
16x16x1	15-7/8 x 15-7/8 x 3/4	533	12	6.3
16x20x1	15-3/4 x 19-1/2 x 3/4	667	12	6.9
16x24x1	15-7/8 x 23-7/8 x 3/4	800	12	8.5
16x25x1	15-3/4 x 24-5/8 x 3/4	833	12	8.3
18x20x1	17-7/8 x 19-7/8 x 3/4	750	12	8.0
18x24x1	17-7/8 x 23-7/8 x 3/4	900	12	9.0
18x25x1	17-7/8 x 24-7/8 x 3/4	938	12	9.6
19x27x1	18-7/8 x 26-7/8 x 3/4	1069	12	11.8
20x20x1	19-5/8 x 19-5/8 x 3/4	833	12	7.9
20x24x1	19-7/8 x 23-7/8 x 3/4	1000	12	9.5
20x25x1	19-5/8 x 24-5/8 x 3/4	1042	12	9.5
20x30x1	19-7/8 x 29-7/8 x 3/4	1250	12	12.5
22x22x1	21-7/8 x 21-7/8 x 3/4	1008	12	9.5
24x24x1	23-7/8 x 23-7/8 x 3/4	1200	12	11.3
24x30x1	23-7/8 x 29-7/8 x 3/4	1500	12	14.3
25x25x1	24-7/8 x 24-7/8 x 3/4	1302	12	13.5
10x10x2	9-7/8 x 9-7/8 x 1-5/8	208	12	3.9
10x20x2	9-7/8 x 19-7/8 x 1-5/8	417	12	6.6
12x24x2	11-1/2 x 23-1/2 x 1-5/8	600	12	8.0
14x20x2	13-7/8 x 19-7/8 x 1-5/8	584	12	9.1
14x25x2	13-7/8 x 24-7/8 x 1-5/8	730	12	10.5
15x20x2	14-7/8 x 19-7/8 x 1-5/8	625	12	9.6
16x20x2	15-3/4 x 19-1/2 x 1-5/8	667	12	9.6
16x24x2	15-3/4 x 23-1/2 x 1-5/8	800	12	11.6
16x25x2	15-3/4 x 24-1/2 x 1-5/8	834	12	11.6
18x24x2	17-7/8 x 23-7/8 x 1-5/8	900	12	12.8
20x20x2	19-1/2 x 19-1/2 x 1-5/8	834	12	11.9
20x24x2	19-1/2 x 23-1/2 x 1-5/8	1000	12	14.2
20x25x2	19-1/2 x 24-1/2 x 1-5/8	1042	12	14.0
24x24x2	23-1/2 x 23-1/2 x 1-5/8	1200	12	16.0
25x25x2	24-7/8 x 24-7/8 x 1-5/8	1302	12	17.2

Notes:

1. Initial (clean) pressure drop at nominal cfm is 0.07 in. w.g. for 1 in. filters and 0.10 in. w.g. for 2 in. filters.

2. Recommended final resistance is 0.50 in. w.g., but the system design may dictate a lower change out point.

Guide Specifications

1.0 General

1.1   Disposable filters shall be Model HD Industrial Grade filters.

1.2   Filters shall be UL 900 Class 2 listed.

2.0 Filter Construction

2.1   Filters shall be constructed of progressive-density fiberglass or synthetic media (as specified) enclosed in a one-piece chipboard frame.

2.2   Perforated corrosion resistant steel or expanded metal support grilles shall be furnished on both entry and exit sides of the filter.

2.3   Media and grilles shall be continuously glued to the inside perimeter of the frame.

3.0 Performance

3.1   The average arrestance of fiberglass is 80% for 1in. filters and 82% for 2 in. fiberglass filters as determined by the ASHRAE Standard test method; Synthetic is 82% for 1 in. filters and 84% for 2 in. filters.

3.2   The manufacturer shall guarantee performance as stated in its literature within tolerances as outlined in Section 7.4 of ARI Standard 850.