

General

Surecarb 90 Side Access Carbon Filter Housings are designed to remove gas/vapor contaminants and to provide odor control for air purification. They are factory assembled flanged units suitable for installation in a duct or next to an air handling unit.

Standard carbon trays are constructed of high-temperature plastic with internal dividers to maintain even distribution of the activated carbon. Each 24 in. x 24 in. housing section contains 12 trays holding approximately 90 lb of CTC 60% virgin carbon.

Surecarb 90 systems are the total-detention type which effects a higher removal rate of contaminants than low-efficiency partial bypass-type systems.

Versatility

Carbon trays and prefilters are easily removed from either side of the unit when the access doors are opened. The side access design eliminates the requirement for either upstream or downstream duct access.

Housings are designed for either indoor or outdoor use. Units are manufactured in sizes up to a nominal 8 ft. high and 12 ft. wide.

Important Features

Units are constructed of durable 16 ga. galvanized steel

"Z" channel support members reinforce all four corners and carbon tray tracks

All tracks and doors are fully gasketed

Carbon trays are polystyrene or optional steel

Construction

Surecarb 90 housings are constructed of 16 ga. galvanized steel with upstream and downstream outwardly turned flanges. Units include "Z" channel vertical-support members on all four corners to support the weight of the carbon trays. The standard 2 in. prefilter tracks and the carbon tray tracks are manufactured of extruded aluminum and are gasketed with replaceable polypropylene pile air seals.

Housings are equipped with two access doors that are sealed with neoprene gasketing on the perimeter. Doors are equipped with 1-1/2 in. easy-grip positive-sealing knobs made of UV-resistant plastic with corrosion-resistant brass insert. These knobs fasten positive-pressure adjustable latches.

Construction of the top pan allows rainwater to drain off easily so that additional weatherproofing is rarely required.

Options

Double-walled insulation on doors only

Double-walled insulation on the entire housing

Perforated-steel carbon trays

Four in. thick prefilter tracks

Aluminum or 304 stainless steel construction



Performance Data

Cfm Capacities and Dimensions							
Height Code	Overall Height (inches)	Width Code					
		10W	20W	30W	40W	50W	60W
		Overall Width (in.)					
		23-3/8	46-3/4	70-1/8	93-1/2	116-7/8	140-1/4
05H	15	1000	2000	3000	4000	5000	6000
10H	27	2000	4000	6000	8000	10000	12000
15H	39	3000	6000	9000	12000	15000	18000
20H	51	4000	8000	12000	16000	20000	24000
25H	62-7/8	5000	10000	15000	20000	25000	30000
30H	74-7/8	6000	12000	18000	24000	30000	36000
35H	86-7/8	7000	14000	21000	28000	35000	42000
40H	98-7/8	8000	16000	24000	32000	40000	48000

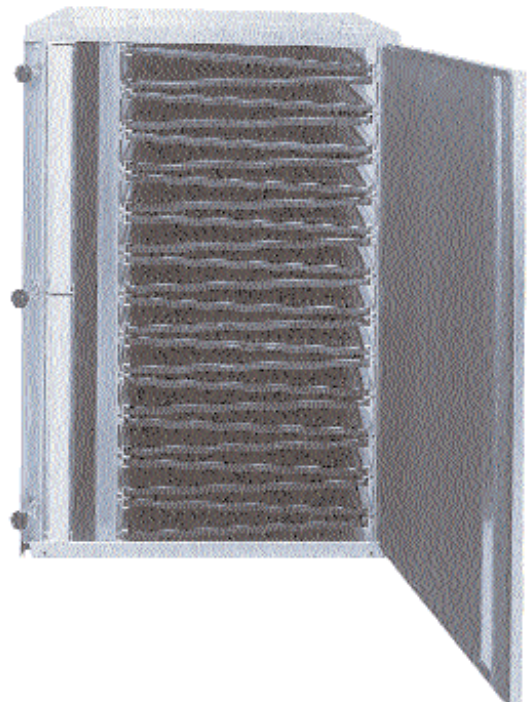
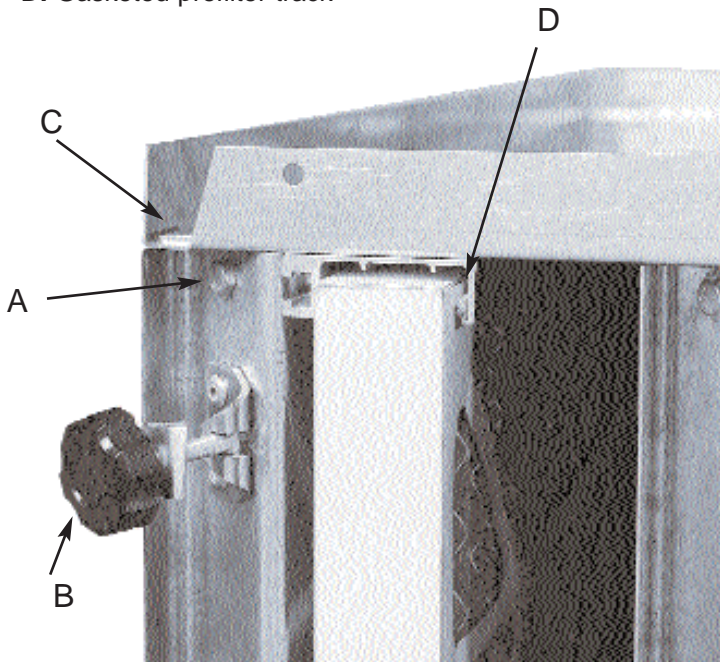
Notes:

1. Height and Width Code: The first numeral represents the number of 24 in. x 24 in. filters high or wide. If 24 in. x 12 in. filters are also used in the height or width, the second numeral is "5".
2. Dimensions are based on using nominal 24 in. x 24 in. and 12 in. x 24 in. carbon cells for all sizes. Contact factory if other size housings are required.
3. Pressure drop at 500 fpm with loaded carbon trays is .45 in. w.g.
4. Use Prepleat or 62R pleated panel prefilters to protect carbon trays from dust loading.
5. Use 500 fpm design face velocity for light commercial non-critical duty. Use lower velocities for other applications.

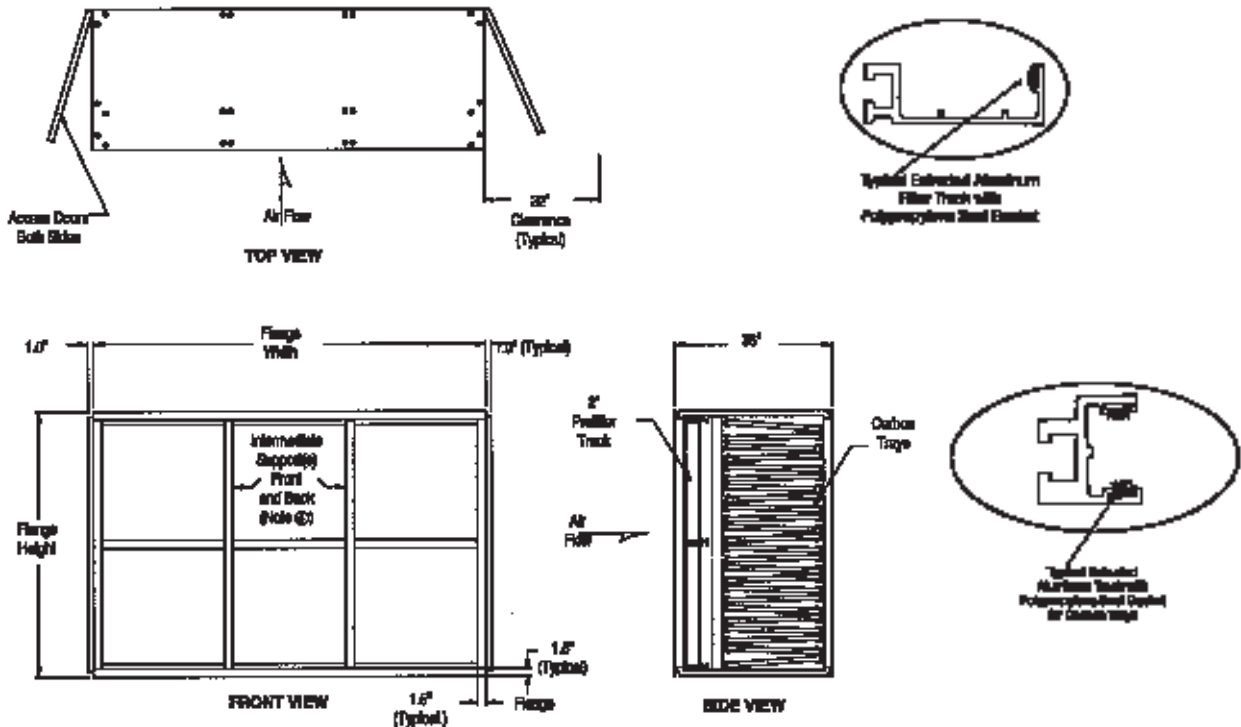
Surecarb 90 Features

- A. Bolted Z channel in each corner
- B. Easy-grip knob for positive sealing to door latch
- C. Notched top flange to prevent rain from collecting
- D. Gasketed prefilter track

Gaskets in tracks and foam blanket inside door for sealing carbon trays and prefilters.



Construction Details



Notes:

1. Standard construction: 16 ga. galvanized steel frame and casing; extruded aluminum prefilter tracks and carbon tray tracks with replaceable polypropylene pile gaskets; and positive-sealing door latches with easy-grip knobs.
2. Allow 32 in. minimum clearance on one or preferably both sides for filter installation.
3. Prefilter tracks are for 2 in. panel type filters.
4. Intermediate supports furnished on housings over 4 ft. wide.

Guide Specifications

1.0 Filter Housings

- 1.1 Side access carbon filter housings shall be Surecarb 90 as manufactured by Flanders Precisionaire, Inc.
- 1.2 Units shall be factory-assembled housings with upstream and downstream outwardly-turned flanges for installation in the ductwork or next to an air handler.

2.0 Construction

- 2.1 Housing construction shall be of 16 ga. galvanized steel, with "Z" channel vertical support members on all four corners. Metal-to-metal joints shall be sealed with silicone compound.
- 2.2 Prefilter tracks and carbon tray tracks shall be extruded aluminum with replaceable polypropylene pile gaskets to prevent air bypass.
- 2.3 Leakage shall be prevented between the carbon cells and access doors by factory-installed polyfoam blankets.

- 2.4 Access doors shall have continuous neoprene gasketing on the perimeter and be equipped with positive-pressure adjustable latches with easy-grip knobs.

3.0 Carbon Trays

- 3.1 Trays shall be nominal 24 in. x 24 in. x 1 in. thick and constructed of high-temperature high-strength plastic with internal dividers.
- 3.2 Each tray shall be factory-loaded with approximately 7 1/2 lbs. of virgin activated carbon with a minimum CTC rating of 60.
- 3.3 Trays shall be capable of being reactivated in the field through refill slots.

4.0 Features

- 4.1 Model number and capacities shall be as specified and/or shown on the drawings.
- 4.2 Provide options as specified.