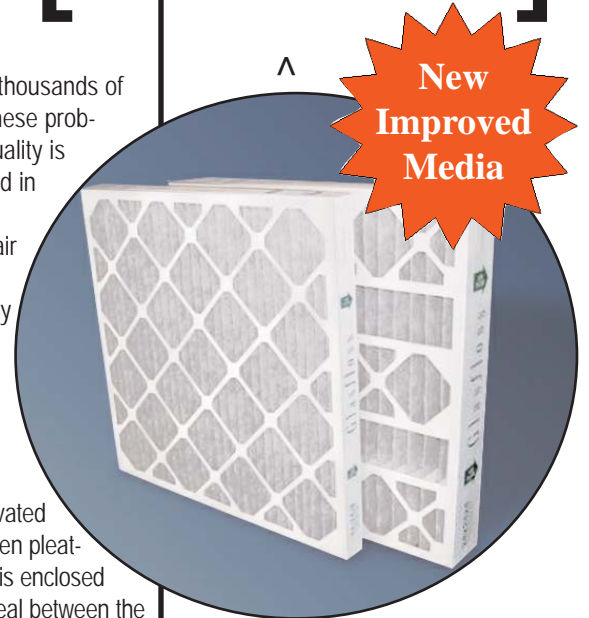




# Z-LINE® SERIES

## CARBOTRON®

**New  
Improved  
Media**



### FEATURES

Cigarette smoke, vehicle exhaust, cooking odors, along with thousands of other activities generate unpleasant odors. The solution to these problems and many offensive odors associated with Indoor Air Quality is the Z-Line Series Carbotron Pleat. The activated carbon used in the Carbotron Pleat has millions of tiny openings that adsorb odorous gas molecules from the air, so clean fresh smelling air remains. The Carbotron Pleat is offered in a wide range of standard and special sizes that allow installation in almost any Air Conditioning, Heating or Ventilating application.

### CONSTRUCTION

The Glasfloss Z-Line Series Carbotron Pleat features a unique, gradient density media. The media combines electrostatically enhanced, thermally bonded, synthetic filtration media with activated carbon. The media is supported by a metal support grid and then pleated to increase effective surface area. The pleated media pack is enclosed in a moisture resistant, beverage board frame insuring a total seal between the media and the frame. Z-Line Series Carbotron pleats are sealed in protective plastic bags to guard against contamination prior to installation.

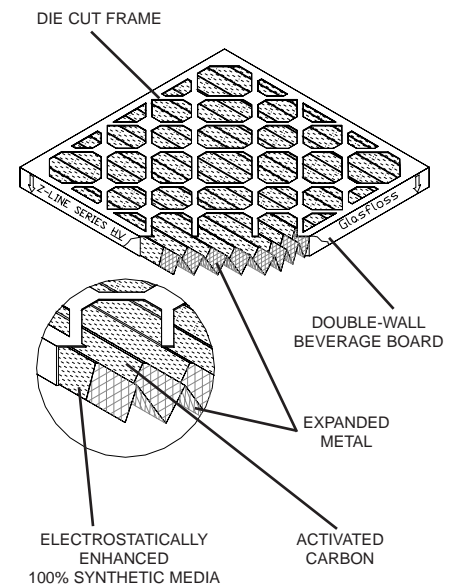
### APPLICATIONS

The Glasfloss Z-Line Series Carbotron comes in a variety of sizes to directly replace the filters you are currently using with no modification to your system. Some activated carbon filters only have an activated carbon layer with no particulate filter media and others require some modification to the unit's filter framework.

- MERV 7
- Reduces Odors
- Electrostatically Enhanced, 100% Synthetic Media
- Heavy-duty, Moisture Resistant Construction
- Galvanized Expanded Metal Backing
- Standard Size 4" Filters Incorporate Media Separators

### SPECIFICATIONS

The Glasfloss Z-Line Series Carbotron air filter is an extended surface pleated media type filter. The gradient density media combines particulate filtration with odor control in a single filter unit. The media shall be pleated in a tapered radial configuration. An expanded metal reinforcement shall be laminated to the air leaving side of the media by a thermo-setting adhesive to maintain continuity of the radial pleats. The expanded metal shall be galvanized to resist rust and corrosion. The pleated cartridge shall be bonded to the peripheral interior of the outer frame. A heavy-duty, moisture resistant, beverage board shall be utilized for an encasing frame. The frame face shall be internally laminated to the pleated cartridge apexes. Z-Line Carbotron filters shall be rated to withstand temperatures of 180 degrees Fahrenheit. Z-Line Carbotron filters shall be rated Class 2 under U.L. std. 900. The Z-Line Carbotron shall have an average efficiency of 25-30% when tested in accordance with the ASHRAE 52.1 Test Standard. The Z-Line Carbotron shall be rated MERV 7 when tested in accordance with the ASHRAE 52.2 Test Standard. The recommended final pressure drop shall be 1.00" w.g.





# Z-LINE® SERIES

## CARBOTRON®

### Z-LINE SERIES CARBOTRON STANDARD SIZE FILTERS

MODEL NUMBER	SIZE W x H x D NOMINAL	SIZE W x H x D EXACT	RATED VELOCITY FPM	INITIAL RESIST. IN. W.G.	MEDIA SQUARE FEET	SIZE W x H x D NOMINAL MM	RATED VELOCITY M/H	INITIAL RESIST. PASCALS
ZLN101014AC	10 x 10 x 1	9-1/2 x 9-1/2 x 7/8	300	0.17	1.61	254 x 254 x 26	5490	42.3
ZLN102014AC	10 x 20 x 1	9-1/2 x 19-1/2 x 7/8	300	0.17	2.67	254 x 508 x 26	5490	42.3
ZLN121214AC	12 x 12 x 1	11-1/2 x 11-1/2 x 7/8	300	0.17	2.06	305 x 305 x 26	5490	42.3
ZLN122014AC	12 x 20 x 1	11-1/2 x 19-1/2 x 7/8	300	0.17	3.29	305 x 508 x 26	5490	42.3
ZLN122414AC	12 x 24 x 1	11-3/8 x 23-3/8 x 7/8	300	0.17	3.96	305 x 610 x 26	5490	42.3
ZLN142014AC	14 x 20 x 1	13-1/2 x 19-1/2 x 7/8	300	0.17	3.91	356 x 508 x 26	5490	42.3
ZLN142414AC	14 x 24 x 1	13-1/2 x 23-1/2 x 7/8	300	0.17	4.70	356 x 610 x 26	5490	42.3
ZLN142514AC	14 x 25 x 1	13-1/2 x 24-1/2 x 7/8	300	0.17	4.90	356 x 635 x 26	5490	42.3
ZLN143014AC	14 x 30 x 1	13 5/8 x 29-5/8 x 7/8	300	0.17	6.56	356 x 762 x 26	5490	42.3
ZLN152014AC	15 x 20 x 1	14-1/2 x 19-1/2 x 7/8	300	0.17	4.11	381 x 508 x 26	5490	42.3
ZLN1530K14AC	15 x 30-5/8 x 1	14-5/8 x 30-1/4 x 7/8	300	0.17	10.57	381 x 777 x 26	5490	42.3
ZLN162014AC	16 x 20 x 1	15-1/2 x 19-1/2 x 7/8	300	0.17	4.32	406 x 508 x 26	5490	42.3
ZLN162414AC	16 x 24 x 1	15-1/2 x 23-1/2 x 7/8	300	0.17	5.20	406 x 610 x 26	5490	42.3
ZLN162514AC	16 x 25 x 1	15-1/2 x 24-1/2 x 7/8	300	0.17	5.41	406 x 635 x 26	5490	42.3
ZLN163014AC	16 x 30 x 1	15-5/8 x 29-5/8 x 7/8	300	0.17	6.67	406 x 762 x 26	5490	42.3
ZLN182014AC	18 x 20 x 1	17-1/2 x 19-1/2 x 7/8	300	0.17	4.94	457 x 508 x 26	5490	42.3
ZLN182414AC	18 x 24 x 1	17-1/2 x 23-1/2 x 7/8	300	0.17	5.94	457 x 610 x 26	5490	42.3
ZLN182514AC	18 x 25 x 1	17-1/2 x 24-1/2 x 7/8	300	0.17	6.19	457 x 635 x 26	5490	42.3
ZLN202014AC	20 x 20 x 1	19-1/2 x 19-1/2 x 7/8	300	0.17	5.55	508 x 508 x 26	5490	42.3
ZLN202414AC	20 x 24 x 1	19-3/8 x 23-3/8 x 7/8	300	0.17	6.68	508 x 610 x 26	5490	42.3
ZLN202514AC	20 x 25 x 1	19-1/2 x 24-1/2 x 7/8	300	0.17	6.96	508 x 635 x 26	5490	42.3
ZLN203014AC	20 x 30 x 1	19-5/8 x 29-5/8 x 7/8	300	0.17	8.23	508 x 726 x 26	5490	42.3
ZLN242414AC	24 x 24 x 1	23-3/8 x 23-3/8 x 7/8	300	0.17	7.92	610 x 610 x 26	5490	42.3
ZLN243014AC	24 x 30 x 1	23-5/8 x 29-5/8 x 7/8	300	0.17	9.90	610 x 762 x 26	5490	42.3
ZLN252514AC	25 x 25 x 1	24-1/2 x 24-1/2 x 7/8	300	0.17	8.51	635 x 635 x 26	5490	42.3
ZLN102024AC	10 x 20 x 2	9-1/2 x 19-1/2 x 1-3/4	500	0.26	6.24	254 x 508 x 51	9150	64.6
ZLN122024AC	12 x 20 x 2	11-3/8 x 23-3/8 x 1-3/4	500	0.26	7.20	305 x 508 x 51	9150	64.6
ZLN122424AC	12 x 24 x 2	11-3/8 x 23-3/8 x 1-3/4	500	0.26	8.66	305 x 610 x 51	9150	64.6
ZLN142024AC	14 x 20 x 2	13-1/2 x 19-1/2 x 1-3/4	500	0.26	8.64	356 x 508 x 51	9150	64.6
ZLN142524AC	14 x 25 x 2	13-1/2 x 24-1/2 x 1-3/4	500	0.26	10.83	356 x 635 x 51	9150	64.6
ZLN152024AC	15 x 20 x 2	14-1/2 x 19-1/2 x 1-3/4	500	0.26	9.12	381 x 508 x 51	9150	64.6
ZLN161624AC	16 x 16 x 2	15-1/2 x 15-1/2 x 1-3/4	500	0.26	7.66	406 x 406 x 51	9150	64.6
ZLN162024AC	16 x 20 x 2	15-1/2 x 19-1/2 x 1-3/4	500	0.26	9.60	406 x 508 x 51	9150	64.6
ZLN162424AC	16 x 24 x 2	15-1/2 x 23-1/2 x 1-3/4	500	0.26	11.55	406 x 610 x 51	9150	64.6
ZLN162524AC	16 x 25 x 2	15-1/2 x 24-1/2 x 1-3/4	500	0.26	12.03	406 x 635 x 51	9150	64.6
ZLN182024AC	18 x 20 x 2	17-1/2 x 19-1/2 x 1-3/4	500	0.26	11.04	457 x 508 x 51	9150	64.6
ZLN182424AC	18 x 24 x 2	17-1/2 x 23-1/2 x 1-3/4	500	0.26	13.28	457 x 610 x 51	9150	64.6
ZLN182524AC	18 x 25 x 2	17-1/2 x 24-1/2 x 1-3/4	500	0.26	13.84	457 x 635 x 51	9150	64.6
ZLN202024AC	20 x 20 x 2	19-1/2 x 19-1/2 x 1-3/4	500	0.26	12.00	508 x 508 x 51	9150	64.6
ZLN202424AC	20 x 24 x 2	19-3/8 x 23-3/8 x 1-3/4	500	0.26	14.43	508 x 610 x 51	9150	64.6
ZLN202524AC	20 x 25 x 2	19-1/2 x 24-1/2 x 1-3/4	500	0.26	15.04	508 x 635 x 51	9150	64.6
ZLN242424AC	24 x 24 x 2	23-3/8 x 23-3/8 x 1-3/4	500	0.26	17.61	610 x 610 x 51	9150	64.6
ZLN252524AC	25 x 25 x 2	24-1/2 x 24-1/2 x 1-3/4	500	0.26	18.65	635 x 635 x 51	9150	64.6
ZLN122444AC	12 x 24 x 4	11-3/8 x 23-3/8 x 3-3/4	500	0.22	13.61	305 x 610 x 102	9150	54.7
ZLN162044AC	16 x 20 x 4	15-1/2 x 19-1/2 x 3-3/4	500	0.22	15.43	406 x 508 x 102	9150	54.7
ZLN162544AC	16 x 25 x 4	15-1/2 x 24-1/2 x 3-3/4	500	0.22	19.34	406 x 635 x 102	9150	54.7
ZLN182444AC	18 x 24 x 4	17-1/2 x 23-1/2 x 3-3/4	500	0.22	21.03	457 x 610 x 102	9150	54.7
ZLN202044AC	20 x 20 x 4	19-1/2 x 19-1/2 x 3-3/4	500	0.22	18.52	508 x 508 x 102	9150	54.7
ZLN202444AC	20 x 24 x 4	19-3/8 x 23-3/8 x 3-3/4	500	0.22	22.27	508 x 610 x 102	9150	54.7
ZLN202544AC	20 x 25 x 4	19-1/2 x 24-1/2 x 3-3/4	500	0.22	23.20	508 x 635 x 102	9150	54.7
ZLN242444AC	24 x 24 x 4	23-3/8 x 23-3/8 x 3-3/4	500	0.22	27.21	610 x 610 x 102	9150	54.7

Tolerances shall be +/- 1/8" for height, width and +/- 1/16" for depth. Recommended final resistance is 1.00" w. g. All special sizes will be undersized by 1/8" unless specified otherwise.

#### Pleats Per Lineal Foot

DEPTH	CARBOTRON
1"	16
2"	15
4"	11

#### Media Area to Face Area Ratio

DEPTH	CARBOTRON
1"	1.97
2"	4.40
4"	6.80

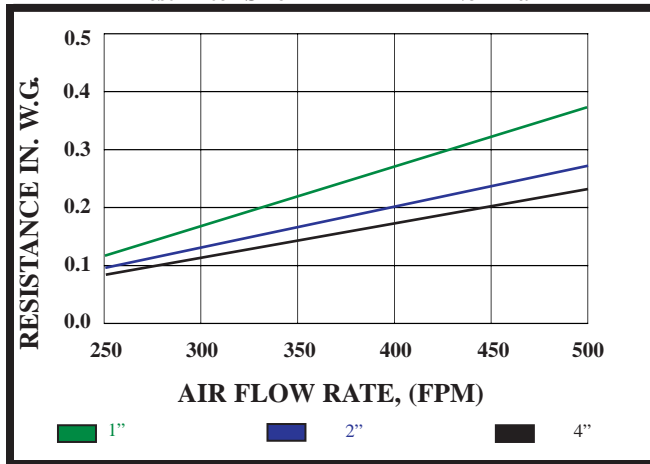


The Glasfloss Z-Line Carbotron pleated filter offers MERV 7 particulate filtration combined with odor control in a single unit. The Z-Line Carbotron pleated filter helps reduce unpleasant odors created by cooking, cigarette smoke and numerous other unpleasant odors in the air. The gradient density media is supported by a galvanized expanded metal that maintains the pleated media pack. The media pack is sealed with a heavy-duty beverage board, die-cut frame.

The Z-Line Carbotron is used in a wide range of residential, commercial and institutional applications and comes in a wide variety of standard and special sizes in 1", 2" and 4" depths. The Z-Line Carbotron is rated U.L. Class 2 under std. 900.

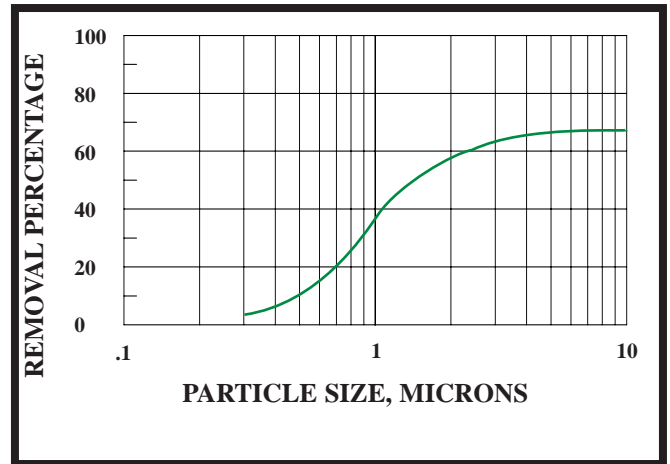
### STANDARD PRESSURE DROP

Test Filter Size 24" x 24" x 2" Nominal

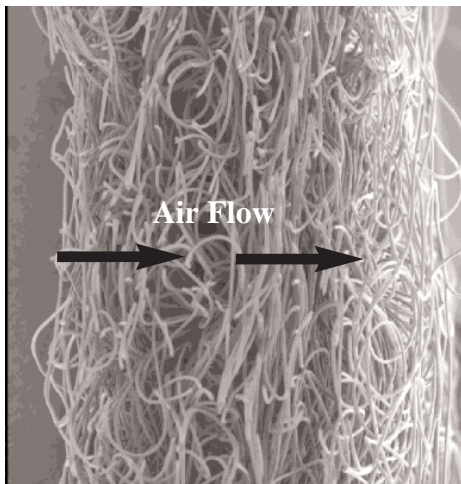


### MINIMUM PARTICLE SIZE EFFICIENCY

Test Filter Size 24" x 24" x 2" Nominal



## CARBOTRON MEDIA FEATURES



Cross Section View of Engineered Gradient Structure  
Magnified 30x Photo Provided by Kimberly-Clark

- 100% Synthetic Fibers
- Engineered Gradient Structure
- Stable Media Charge
- High Initial Efficiency
- Thermally Bonded
- Fibers Resist Shedding
- Media Does Not Absorb Moisture
- Continuous Fibers
- No Chemical Binders



**Z-LINE<sup>®</sup> SERIES**  
**CARBOTRON<sup>®</sup>**



**Z-LINE SERIES CARBOTRON FEATURES**

- MERV 7
- Electrostatically Charged Fibers Increase Initial Efficiency
- Activated Carbon Reduces Odors
- High Dust Holding Capacity
- Thermally Bonded, 100% Synthetic Fibers
- Heavy-duty Beverage Board Frame Construction
- Wide Range of Standard & Special Sizes
- U.L. Class 2