FIRE RATED DUCTLESS RETURN FILTER GRILLES

Model Series 4100 Ductless Return Air Filter Grilles have been designed to compliment the Nailor range of fire rated supply diffusers. These grilles are manufactured to accommodate a throw away filter by others. The grilles have been tested and classified for use without the requirement of duct work or supplementary support, they simply lay in place. The filter grilles are available in two styles, a louvered face or an eggcrate face.

Louvered Face -

Models 4121, 4122, 4123

Eggcrate Face -

Models 4124, 4125, 4126



FIRE RATED DUCTLESS RETURN CEILING DAMPERS FOR **OPTIONAL GRILLE**

A unique Nailor product that features a raised ceiling radiation damper mounted on an extended support frame above the ceiling line. It will accommodate any type of return air grille, filter grille or register manufactured from steel or aluminum. This allows the design engineer greater flexibility.

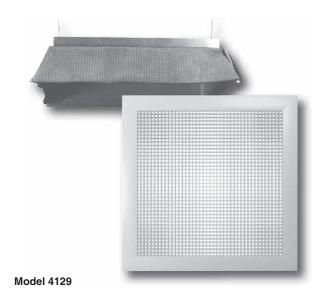
Optional Grilles -

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Models 4127, 4128, 4129

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FIRE RATED OPEN FACE PLENUM DIFFUSERS

Nailor 5200 Series Fire Rated Plenums are designed for lay-in T-Bar. They can accommodate steel or aluminum grilles, registers or linear type slot diffusers and bar grilles. A turned in leg design is available to suit lay-in type cores and a hemmed leg design is available to accommodate concealed mounting angles.

Turned In Leg -Model 5200 Type L Hemmed Leg -

Model 5200 Type S



Nailor 5500 Series Plenum Slot Diffusers are designed for lay-in T-Bar. They are available for supply and return air. The supply air models feature pattern controllers that are available in three performance styles, four slot widths, and up to four parallel slots. The return models are designed to match the look of the supply air models.

'Wiper Blade' Pattern Controller -

FIRE RATED PLENUM SLOT DIFFUSERS

Models 5550WB, 5575WB, 5510WB, 5515WB Page E56 'Ice Tong' Pattern Controller -Models 5550T, 5575T, 5510T Page E59

'Flip Flop' Pattern Controller -

Model 5575 Page E62

Return Air -

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Models 5550R, 5575R, 5510R, 5515R Page E62



E

FIRE RATED OPEN FACE PLENUM DIFFUSERS

- FOR USE WITH LINEAR TYPE DIFFUSERS
- 3 HOUR RATING
- FOR LAY-IN CEILINGS

Model: 5200

- Plenum Type L
 Flat Leg (Lay-in)
- Plenum Type S Hemmed Leg (Surface Mount)



Model 5200

Model Series 5200 is a UL Classified Fire Rated "Air Terminal Unit" listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria and NFPA 90A requirements.

All diffusers are classified for use in UL/ULC restrained or unrestrained floor/ceiling and or roof/ceiling assemblies which incorporate an exposed grid suspended ceiling (lay-in T-Bar) with up to a 3 hour rating. For details of fire rated assemblies, see the current UL or ULC Fire Resistance Directory.

A maximum of 20 lineal ft. (6096) of 2" (51) wide throat opening, 10 lineal ft. (3048) of 4" (102) wide throat opening, or 5 lineal ft. (1524) of 6" (152) and 8" (203) width throat opening is allowed for each 113 sq. inch (72,903 mm²) duct outlet area permitted in specific design.

The 5200 Series provides flexibility, in that a variety of steel or aluminum grilles, registers or linear type slot diffusers and bar grilles may be used.

STANDARD FEATURES:

- Tested in accordance with ANSI/UL Standard 263, "Fire Tests of Building Construction and Materials" and CAN/ ULC Standard S101 "Fire Endurance Tests of Building Construction and Materials".
- Available in 20", 24", 30", 36", 48" and 60" (500, 600, 750, 900, 1200 and 1500) nominal lengths to suit both imperial and metric ceiling systems.
- 6", 8", 10" or 12" (152, 203, 254 or 305) inlet sizes are available.
- Plenum casing width (throat) dimension is variable and fabricated to suit required grille or diffuser.

Minimum = $1 \ 11/16$ " (43). Maximum = 8" (203).

- Plenum Type L features a flat leg for lay-in type cores.
- Plenum Type S features a hemmed leg for surface mounting a grille or diffuser with Type C concealed mounting straps.
- 212°F (100°C) fusible link is standard (165°F [74°C] is optional).
- All models must be installed in accordance with installation instructions for UL Classification.

CONSTRUCTION MATERIAL:

 Corrosion-resistant steel plenum and damper blades. Non-asbestos UL Classified insulation.

FINISH OPTIONS:

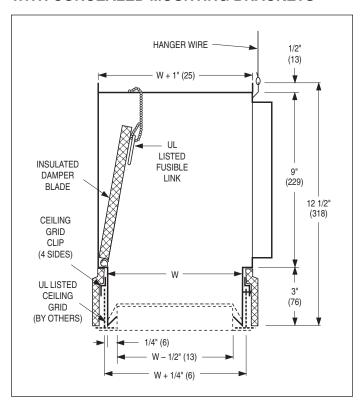
Exposed surfaces are finished in BK Black.

DIMENSIONAL DATA:

MODEL SERIES 5200 – TYPE L FLAT LEG • LAY-IN DIFFUSER CORE

HANGER WIRE 1/2" (13)W + 1" (25)LISTED **INSULATED FUSIBLE** DAMPER LINK (229)BLADE 12 1/2" (318)**CEILING** GRID CLIP (4 SIDES) THERMAL 3" SHROUD (76)15/32" (12) W - 15/16" (24) W + 1/4" (6)

MODEL SERIES 5200 – TYPE S HEMMED LEG • SURFACE MOUNT DIFFUSER WITH CONCEALED MOUNTING BRACKETS



 'W' Dimension (throat) is variable and manufactured to suit required grille or diffuser.

Minimum 'W' = 1 11/16" (43). Maximum 'W' = 8" (203).

 Type L design is for flangeless lay-in core styles. e.g. Eggcrate Core Model 51EC
 Type C Core Only or Linear Slot Diffuser
 Model Series 5000, Frame Type M. Unit is installed by diagonally inserting it into plenum opening and allowing it to sit back on plenum flanges.

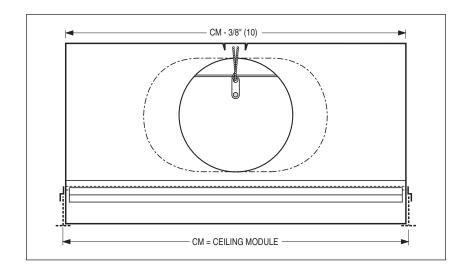
 Type S design is for flanged diffusers with concealed mounting straps which locate in hemmed plenum leg. e.g. Linear Slot Diffuser – Model Series 5000, Frame Types C and D. · Available inlet sizes:

Round sizes are: 5", 6", 7" and 8" (127, 152, 178 and 203).

Flat oval sizes are: 9", 10" and 12" (229, 254 and 305).

Available Lengths

Nominal Length (CM)
20" (508)
24" (610)
30" (762)
36" (914)
48" (1219)
60" (1524)



B

HOW TO ORDER OR TO SPECIFY

FIRE RATED OPEN FACE PLENUM DIFFUSERS MODEL 5200

EXAMPLE: 5200 - S - 48" x 2" - 08 - 212 - ID - EX - T1

1. Model

5200

2. Plenum Type

L Flat Leg for Lay-in Diffuser Core S Hemmed Leg for Surface Mount

3. Nominal Length

Imperial

inches (mm)

20", 24", 30", 36", 48", 60"

(508, 610, 762, 914, 1219, 1524)

Metric

mm

500, 600, 750, 900, 1200, 1500

4. Nominal Width

Minimum 1 11/16" (43) to Maximum 8" (203)

5. Neck Size

Imperial

05 5" (127) Round

06 6" (152) Round

07 7" (178) Round

08 8" (203) Round

09 9" (229) Flat Oval

10 10" (254) Flat Oval

12 12" (305) Flat Oval

6. Fusible Link Temperature

212 212°F (100°C) (default)

165 165°F (74°C)

7. Damper

ID Inlet Balancing Damper with Hand Locking Quadrant

8. External Insulation

EX External Foil-Back Insulation, installed - R-4.2

9. Supplementary T-Bars

T0 One - Opposite Inlet

T1 One Inlet Side

T2 Both Sides

Note:

1. Consult individual model as to limitations of module and neck size combination.

SUGGESTED SPECIFICATION:

Furnish and install Nailor Model 5200 Fire Rated Open Face Plenum Diffusers (Lay-in) of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser plenum and damper blades shall be constructed from corrosion-resistant steel and the installation shall be non-asbestos UL Classified. Model 5200 Plenum Type L features a flat lip for lay-in type cores and Plenum Type S features a hemmed leg for surface mounting a grille or diffuser with Type C concealed mounting straps. Exposed surfaces shall be finished in Black. Diffusers shall be UL/ULC Classified fire rated ceiling diffuser assemblies as listed in the UL/ULC Fire Resistance (Certifications) Directory. Diffusers shall be tested in accordance with UL Standard 263 (field assembled diffusers with ceiling dampers tested to UL Standard 555C are not acceptable) and meet all of the requirements of NFPA 90A. Diffusers shall be classified for use in restrained or unrestrained floor/ceiling and or roof/ceiling assemblies which incorporate an exposed grid suspended ceiling with up to a 3 hour rating.