

FIRE RATED PERFORATED CEILING DIFFUSERS

- 1, 2, 3 OR 4-WAY ADJUSTABLE DISCHARGE PATTERN
- ROUND NECK
- 3 HOUR RATING
- LAY-IN

Supply Models:

4070, 4080 Flush Face
4075, 4085 Drop Face

Return Models:

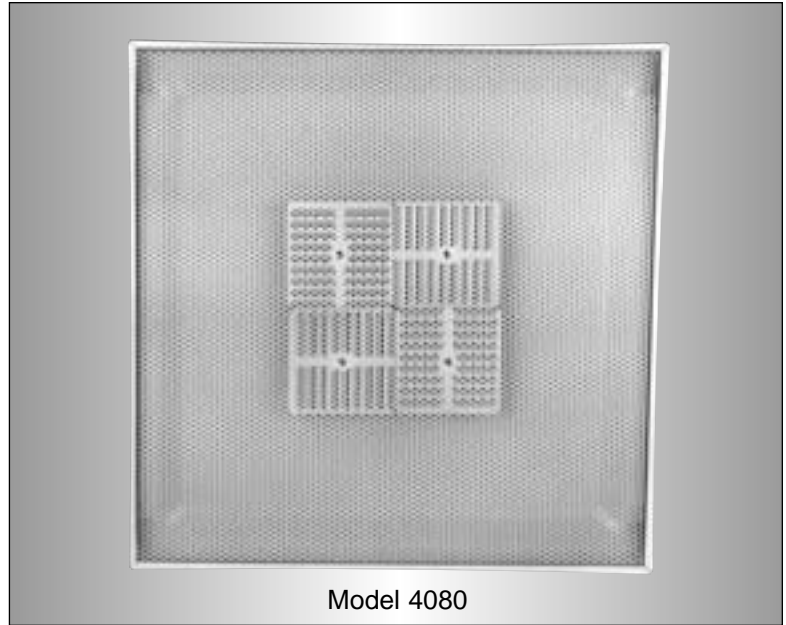
4070R, 4080R Flush Face
4075R, 4085R Drop Face



CATEGORY
BZZU



CATEGORY
40U18.1-1/2A



Model 4080

The **Nailor Series 4070** and **4080** are UL/ULC Classified fire rated ceiling diffuser assemblies listed in Underwriters Laboratories Fire Resistance Directory and Underwriters' Laboratories of Canada List of Equipment and Materials. 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 Fire Resistance Directory or ULC List of Equipment and Materials Vol. III Fire Resistant Ratings.

The **Nailor Fire Rated Perforated Ceiling Diffuser** has been designed to provide the unobtrusive appearance required for architectural excellence and the high engineering performance required for use in heating and cooling applications. They have excellent performance in variable air volume systems and provide a tight horizontal discharge pattern without marking the ceiling.

FEATURES:

- Hinged removable face plate with quick-release spring latches.
- Discharge pattern can adjust to vertical or 1, 2, 3 or 4-way horizontal, before or after installation.
- Discharge pattern is adjusted by dropping the perforated face and rotating the pattern controllers.
- Round necks permit use of flexible duct.
- The fixed ceiling radiation damper is standard. The adjustable ceiling radiation damper for balancing is optional.
- Dropping the perforated face gives access to this balancing feature.

- 212°F (100°C) fusible link is standard (165°F (74°C) is optional).
- Perforated face with 3/16" (5) diameter holes on staggered 1/4" (6) centers (51% free area).
- Return models have the same face and frame construction as the supply models to match appearance. The deflectors are omitted for return applications.
- All models must be installed in accordance with the installation instructions for UL/ULC Classification.
- Ductless returns are also available.

Material: Corrosion-resistant steel.

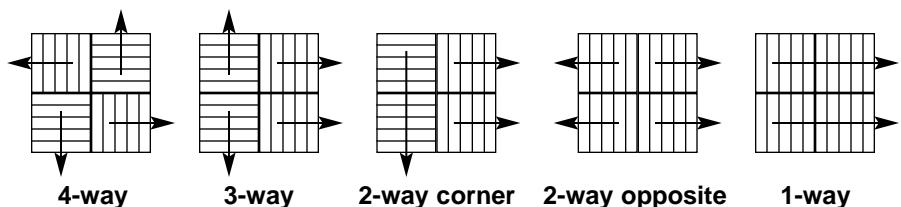
Finish: AW Appliance White baked enamel finish is standard. Other finishes are available.

Performance Data: See non-fire rated **Model 4320** (flush face) on page D141, **Model 4325** (drop face) on page D144 and **Models 4360** (flush face) and **4365** (drop face) on page D198.

FIRE RATED PRODUCTS

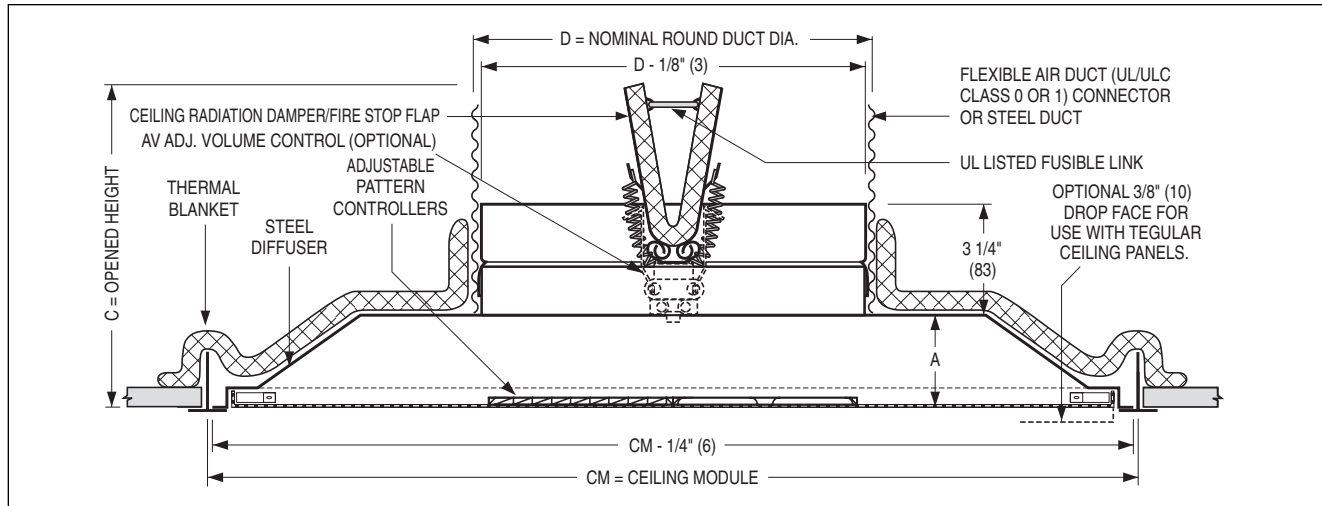
Available Air Patterns:

All diffusers are shipped with the standard 4-way pattern, but the air pattern can be simply field adjusted by lowering the hinged face and rotating the spring loaded pattern controllers.



Dimensional Data

Models 4070, 4075, 4080 and 4085



Available Sizes and Dimensional Data

	Imperial Modules						Metric Modules		
	Imperial Units (inches)			SI Units (mm)			SI Units (mm)		
Listed Neck Size	CM = 12 x 12			CM = 305 x 305			CM = 300 x 300		
	D	A	C	D	A	C	D	A	C
6	6		6 3/8	152	48	162	152	48	162
8	8	1 7/8	7 3/8	203		187	203		187
Listed Neck Size	CM = 24 x 24			CM = 610 x 610			CM = 600 x 600		
	D	A	C	D	A	C	D	A	C
6	6		6 7/8	152		175	152		175
8	8		7 7/8	203		200	203		200
10	10	2 3/8	8 7/8	254	60	225	254	60	225
12	12		9 7/8	305		251	305		251
14	14		10 7/8	356		276	356		276

Model Number Designation

Supply Models:

4070, Flush Face

4075, Drop Face

12 x 12 (300 x 300) module

Type L Lay-in Frame

4080, Flush Face

4085, Drop Face

24 x 24 (600 x 600) module

Type L Lay-in Frame

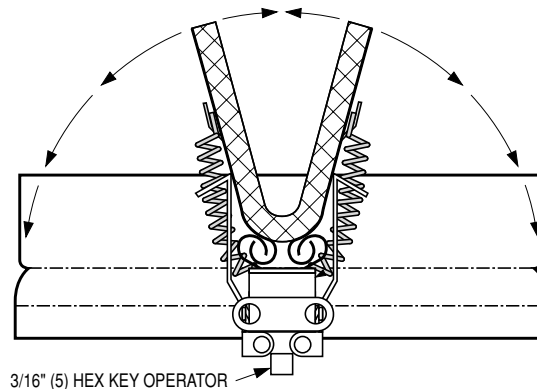
Return Models:

Add suffix 'R' to above model number.

AV Fusible Link Adjustable Volume Control Option.

This UL Listed ceiling radiation damper option allows the ceiling radiation damper to be used as a balancing damper for volume control.

The ceiling damper blades are adjusted with a hex key and perform like a butterfly damper.



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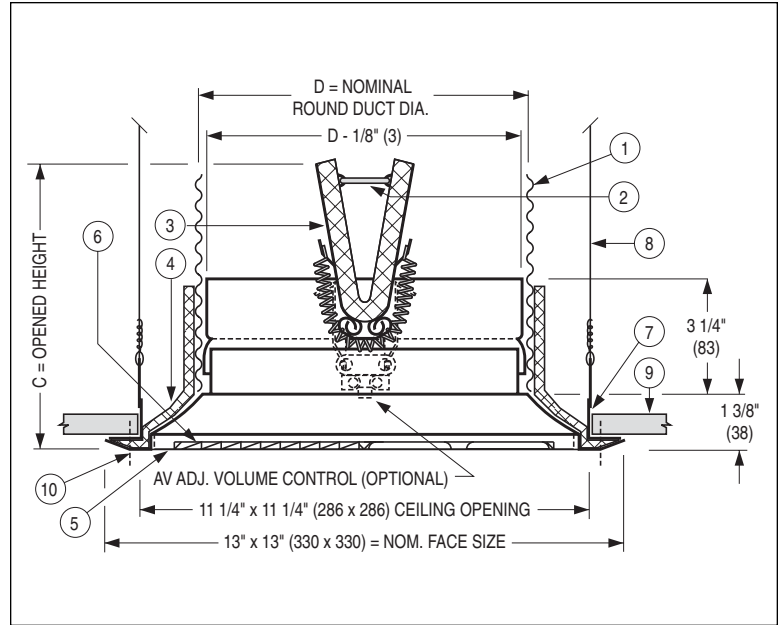
FIRE RATED PRODUCTS

FIRE RATED PERFORATED CEILING DIFFUSERS

- 1, 2, 3 OR 4-WAY ADJUSTABLE DISCHARGE PATTERN
- ROUND NECK
- 3 HOUR RATING
- SURFACE MOUNT



CATEGORY
40U18.1-1/2A



Supply Model:

4070-SM

12 x 12 (300 x 300) Module
Type S Surface Mount Frame

ITEMS:

- | | | |
|---|--|----------------------|
| 1. Flexible air duct (UL/ULC Class 0 or 1) connector or steel duct. | 4. Thermal blanket. | 9. Ceiling membrane. |
| 2. UL Listed fusible link. 212°F (100°C) standard. | 5. Corrosion-resistant steel diffuser. | 10. Mounting screws. |
| 3. Ceiling radiation damper/fire stop flap. | 6. Adjustable pattern controllers. | |
| | 7. Mounting support frame. | |
| | 8. Hanger wires (by others). | |

Classified by Underwriters' Laboratories of Canada (ULC) for use in ULC restrained or unrestrained floor/ceiling and or roof/ceiling assemblies which incorporate air ducts and a hard (gypsum board) ceiling membrane with up to a 3 hour rating. For details of fire rated assemblies, see the current ULC List of Equipment and Materials Vol. III Fire Resistant Ratings. The use of this product in fire rated ceilings with ceiling membrane protection and/or UL Classified assemblies in the U.S.A. requires local approval by the authority having jurisdiction. The discharge pattern is 1, 2, 3, or 4-way horizontal and is adjusted by dropping the perforated face and rotating the pattern deflectors. Removable face has spring clips for easy access to the damper.

OPTIONS:

- AV Fusible link adjustable volume control. Permits adjustment to damper blades for balancing.
- Non-standard temperature UL Listed fusible link (165°F (74°C)).

Finish: AW Appliance White baked enamel finish is standard. Other finishes are available.

Performance Data: See non-fire rated **Model 4320** on page D141.

Available Sizes and Dimensional Data

Listed Neck Size	Imperial Modules				Metric Modules	
	Imperial Units (inches)		SI Units (mm)		SI Units (mm)	
	D	C	D	C	D	C
	CM = 12 x 12		CM = 305 x 305		CM = 300 x 300	
6	6	5 7/8	152	149	152	149
8	8	6 7/8	203	175	203	175

FIRE RATED PERFORATED CURVED BLADE DIFFUSERS

- 4-WAY ADJUSTABLE DISCHARGE PATTERN (STANDARD)
- ROUND NECK
- 3 HOUR RATING
- LAY-IN

Supply Models:

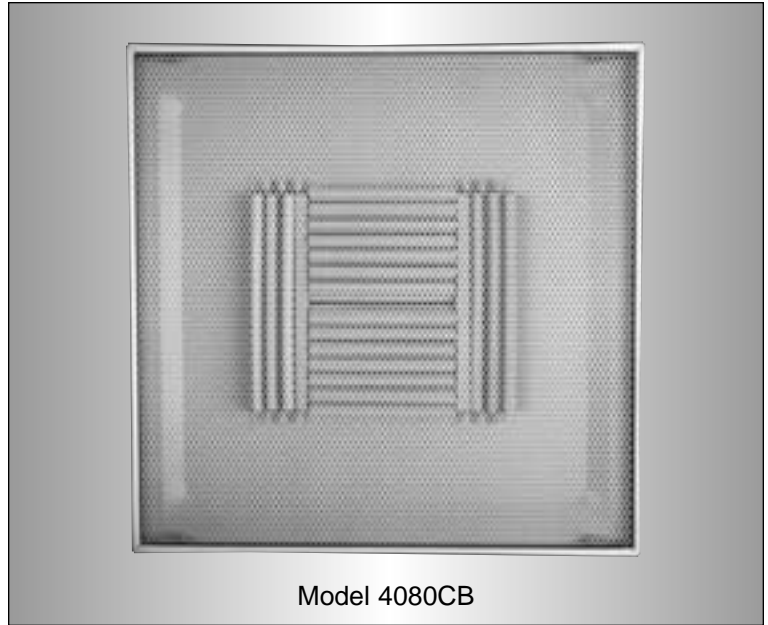
4070CB, 4080CB Flush Face
4075CB, 4085CB Drop Face



CATEGORY
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CATEGORY
40U18.1-1/2A



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FIRE RATED PRODUCTS

The **Nailor Series 4070CB** and **4080CB** are UL/ULC Classified fire rated ceiling diffuser assemblies listed in Underwriters Laboratories Fire Resistance Directory and Underwriters' Laboratories of Canada List of Equipment and Materials. 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 Fire Resistance Directory or ULC List of Equipment and Materials Vol. III Fire Resistant Ratings.

The **Nailor Curved Blade Perforated Diffusers** provide the unobtrusive, smooth appearance preferred by many architects with superior features and performance characteristics. Designed to maximize throw, this model features individually adjustable, friction pivoted curved blade deflectors mounted directly under the neck. They project a tight, uniform horizontal blanket of air over a wide range of air volumes and provide excellent performance in variable air volume systems.

These models feature a 4-way adjustable discharge pattern as standard. The deflector blades can be adjusted to control both the angle of discharge and hence throw from full horizontal to vertical in each direction and also damper the air volume. By closing off the deflectors in one or more directions, directional control can also be achieved. They are optionally available with a factory supplied 1, 2 or 3-way adjustable discharge pattern controller (see page D149).

The **4075CB** and **4085CB** feature a dropped (extended) face panel that is available to compliment regular tile ceiling systems, so that the panel remains flush with the ceiling line.

FEATURES:

- Hinged removable face plate with quick-release spring latches.
- Discharge pattern can be adjusted from horizontal to vertical, before or after installation.
- Discharge pattern is adjusted by dropping the perforated face and moving the curved blade deflectors.
- Round necks permit use of flexible duct.
- The fixed ceiling radiation damper is standard. The adjustable ceiling radiation damper for balancing is optional.
- Dropping the perforated face gives access to this balancing feature.
- 212°F (100°C) fusible link is standard (165°F (74°C) is optional).
- Perforated face with 3/16" (5) diameter holes on staggered 1/4" (6) centers (51% free area).
- All models must be installed in accordance with the installation instructions for UL/ULC Classification.
- Ductless returns are also available.

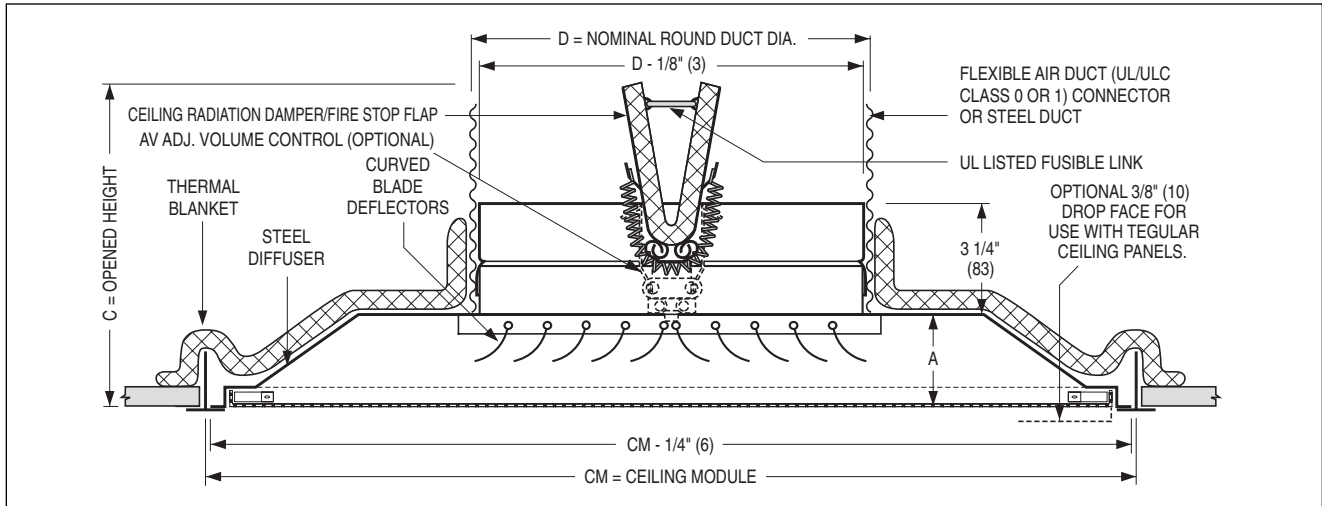
Material: Corrosion-resistant steel.

Finish: AW Appliance White baked enamel finish is standard. Other finishes are available.

Performance Data: See non-fire rated **Model 4320CB** on page D152.

Dimensional Data

Models 4070CB, 4075CB, 4080CB and 4085CB



Available Sizes and Dimensional Data

	Imperial Modules						Metric Modules			
	Imperial Units (inches)			SI Units (mm)			SI Units (mm)			
Listed Neck Size	CM = 12 x 12			CM = 305 x 305			CM = 300 x 300			
	D	A	C	D	A	C	D	A	C	
	6		6 3/8	152		162	152		162	
8	8	1 7/8	7 3/8	203	48	187	203	48	187	
Listed Neck Size	CM = 24 x 24			CM = 610 x 610			CM = 600 x 600			
	D	A	C	D	A	C	D	A	C	
	6		6 7/8	152		175	152		175	
	8		7 7/8	203		200	203		200	
	10	10	2 3/8	8 7/8	254	60	225	254	60	225
	12	12		9 7/8	305		251	305		251
14	14		10 7/8	356		276	356		276	

Model Number Designation

Supply Models:

4070CB, Flush Face

4075CB, Drop Face

12 x 12 (300 x 300) module

Adjustable Curved Blades

Type L Lay-in Frame

4080CB, Flush Face

4085CB, Drop Face

24 x 24 (600 x 600) module

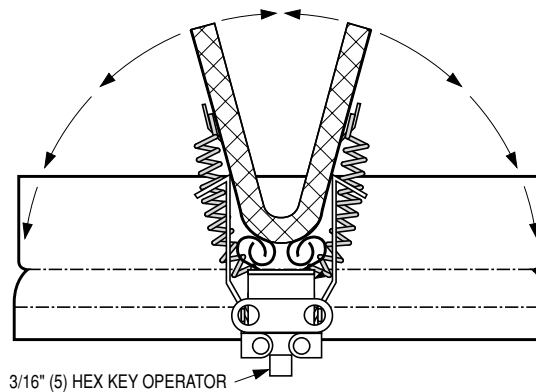
Adjustable Curved Blades

Type L Lay-in Frame

AV Fusible Link Adjustable Volume Control Option.

This UL Listed ceiling radiation damper option allows the ceiling radiation damper to be used as a balancing damper for volume control.

The ceiling damper blades are adjusted with a hex key and perform like a butterfly damper.



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FIRE RATED PRODUCTS