

FIRE RATED PATTERN CEILING DIFFUSERS

- SQUARE NECK
- 3 HOUR RATING
- LOUVERED FACE
- HIGH CAPACITY
- LAY-IN

Models:

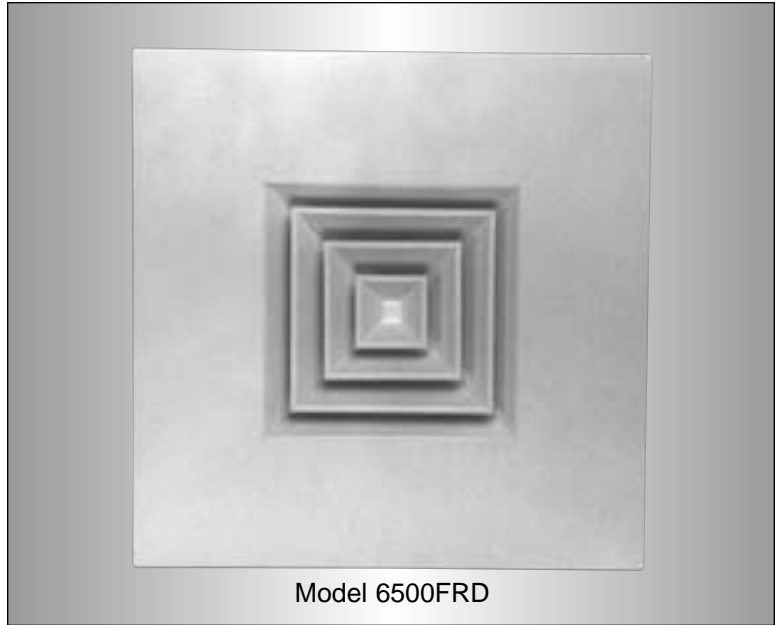
- 6500FRD** Fixed Pattern
- 6550FRD** Adjustable Pattern
- 6500IVFRD** Induction Vanes



CATEGORY
CABS



CATEGORY
40U18.2 &
40U18.2W



The **Nailor Models 6500FRD, 6550FRD** and **6500IVFRD** are UL/ULC Classified fire rated ceiling diffuser component assemblies. The ceiling damper and thermal blanket accessory are 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.

Nailor Pattern Ceiling Diffusers provide a high capacity louvered face directional diffuser that can supply large volumes of air at relatively low sound levels and pressure drops. Available in a variety of core styles and neck sizes, a combination can be selected to suit a specified air pattern and deliver the desired volume of air to suit any particular requirements.

All models provide a tight horizontal discharge pattern from maximum to minimum airflow, making this product ideally suited to VAV applications.

The **Model 6550FRD Adjustable Pattern Ceiling Diffuser** features four hinged, independently adjustable control vanes, providing continuous adjustment of the air discharge pattern from horizontal to vertical on each side of the diffuser.

The **Model 6500IVFRD Induction Vane Pattern Ceiling Diffuser** features induction vanes mounted behind the louvers that create counter-flowing jets of primary air that promote rapid mixing of the cool primary air with room air.

FEATURES:

- Spring-loaded core. Removable without the use of tools.
- Engineered air diffusion patterns for 1, 2, 3 or 4-way blow in a variety of square neck sizes.
- Clean lines with no unsightly visible screws.
- The fixed ceiling radiation damper

is standard. The adjustable model for balancing is optional.

- Removing the inner core assembly gives access to AV balancing option.
- 212°F (100°C) fusible link is standard (165°F (74°C) is optional).
- All models must be installed in accordance with the installation

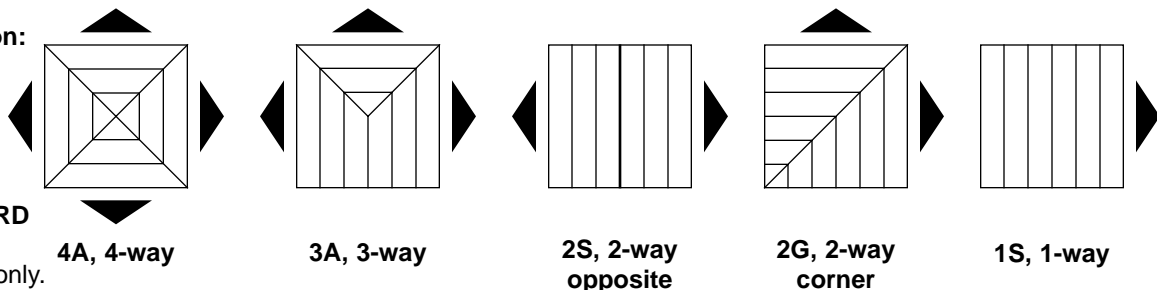
instructions for UL/ULC Classification.

Material: Corrosion-resistant steel.

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

Performance Data: See non-fire rated **Model 6500** on page D18 or **Model 6500IV** on page D38.

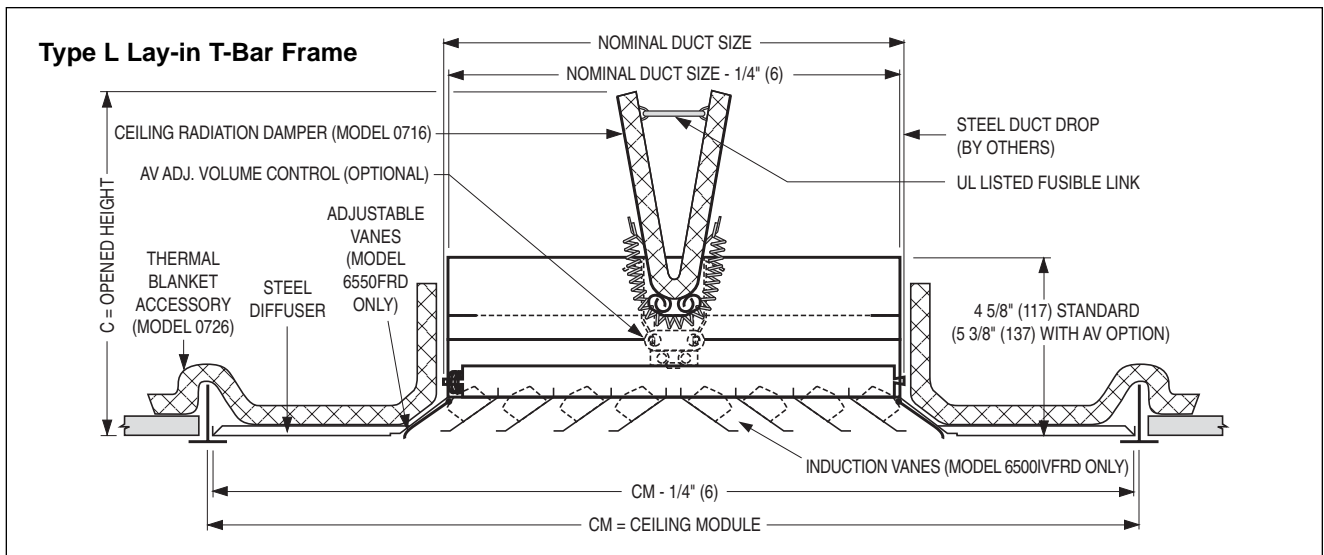
Core Selection:



Note:
Model 6550FRD
is available in
core style 4A only.

Dimensional Data

Models 6500FRD, 6550FRD and 6500IVFRD • Square Neck



Available Sizes and Dimensional Data

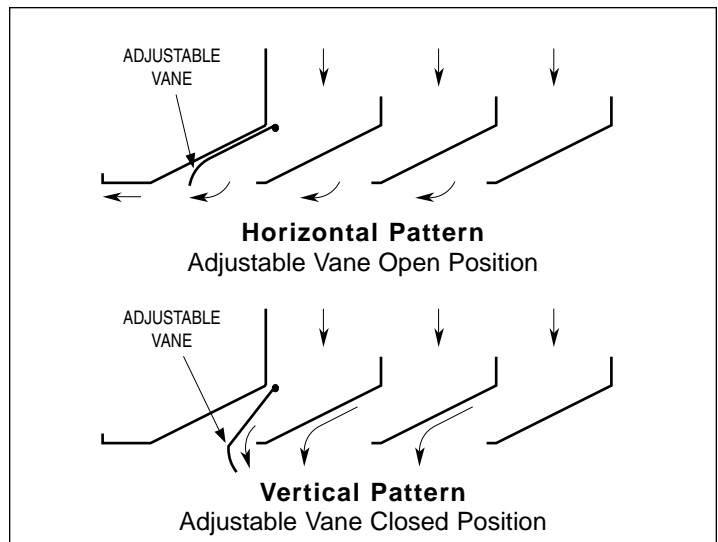
Ceiling Module CM	Nominal Duct Size (square)	Opened Height C	
		Standard	With AV Option
12 x 12 (305 x 305)	6 x 6 (152 x 152)	5 3/4 (146)	6 1/2 (165)
	9 x 9 (229 x 229)	7 1/4 (184)	8 (203)
24 x 24 (610 x 610)	6 x 6 (152 x 152)	5 3/4 (146)	6 1/2 (165)
	9 x 9 (229 x 229)	7 1/4 (184)	8 (203)
	12 x 12 (305 x 305)	9 (229)	9 3/4 (248)
	15 x 15 (381 x 381)	10 1/4 (260)	11 (279)
	18 x 18 (457 x 457)	11 3/4 (298)	N/A
	21 x 21 (533 x 533)	13 1/4 (337)	N/A

Dimensions are in inches (mm).

Note:

If the square ceiling module is more than 3" (76) larger than the duct size, a module sized extended panel is utilized.

Model 6550FRD Pattern Adjustment

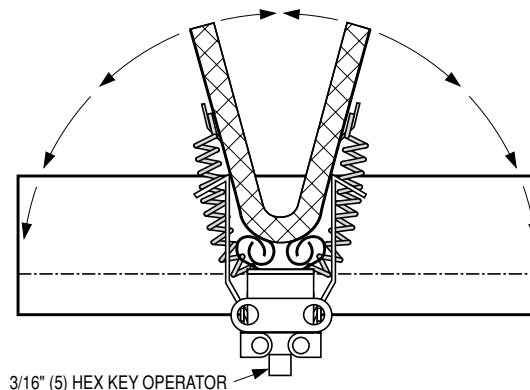


AV Fusible Link Adjustable Volume Control Option.

This UL Listed ceiling radiation damper (Model 0716A) 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.

Note: Maximum square duct size for this option is 15" x 15" (381 x 381).



FIRE RATED PATTERN CEILING DIFFUSERS

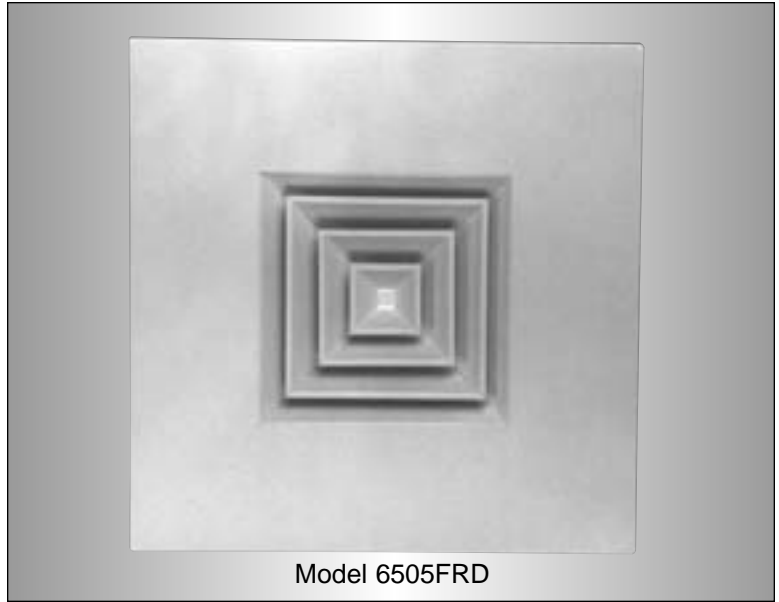
- ROUND NECK
- 3 HOUR RATING
- LOUVERED FACE
- HIGH CAPACITY
- LAY-IN

Models:

- 6505FRD** Fixed Pattern
- 6555FRD** Adjustable Pattern
- 6505IVFRD** Induction Vanes



CATEGORY
CABS



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FIRE RATED PRODUCTS

The **Nailor Models 6505FRD, 6555FRD** and **6505IVFRD** are UL Classified fire rated ceiling diffuser component assemblies. The ceiling damper and thermal blanket accessory are 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 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.

Nailor Pattern Ceiling Diffusers provide a high capacity louvered face directional diffuser that can supply large volumes of air at relatively low sound levels and pressure drops. Available in a variety of core styles and neck sizes, a combination can be selected to suit a specified air pattern and deliver the desired volume of air to suit any particular requirements.

All models provide a tight horizontal discharge pattern from maximum to minimum airflow, making this product ideally suited to VAV applications.

The **Model 6555FRD Adjustable Pattern Ceiling Diffuser** features four hinged, independently adjustable control vanes, providing continuous adjustment of the air discharge pattern from horizontal to vertical on each side of the diffuser.

The **Model 6505IVFRD Induction Vane Pattern Ceiling Diffuser** features induction vanes mounted behind the louvers that create counter-flowing jets of primary air that promote rapid mixing of the cool primary air with room air.

FEATURES:

- Spring-loaded core. Removable without the use of tools.
- Engineered air diffusion patterns for 1, 2, 3 or 4-way blow.
- Clean lines with no unsightly visible screws.
- Round neck permits use of flexible duct.
- The fixed ceiling radiation damper

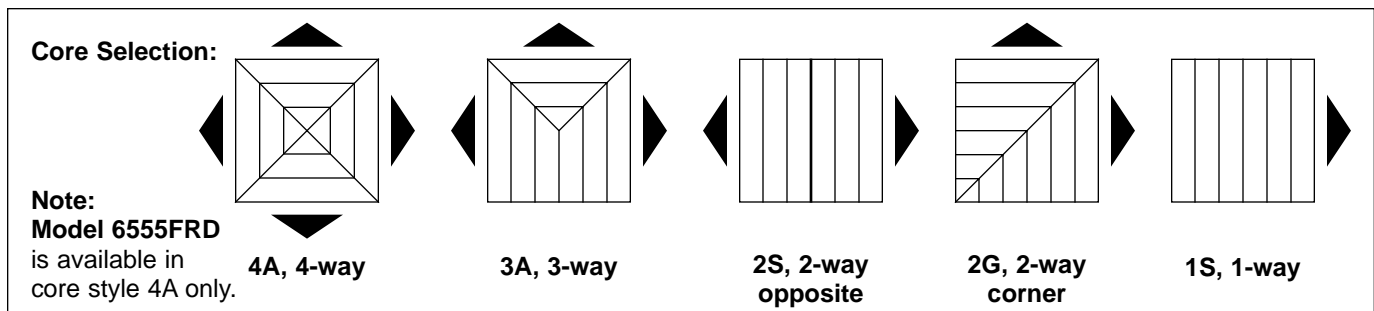
is standard. The adjustable model for balancing is optional.

- Removing the inner core assembly gives access to AV balancing option.
- 212°F (100°C) fusible link is standard. (165°F (74°C) is optional).
- All models must be installed in accordance with the installation instructions for UL Classification.

Material: Corrosion-resistant steel.

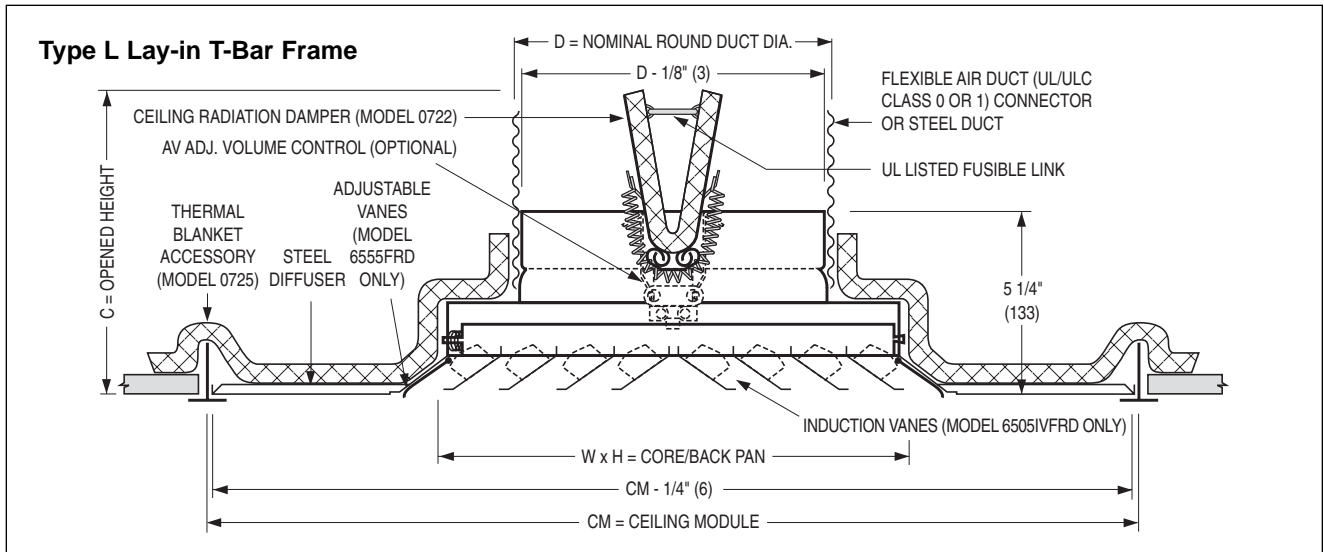
Finish: AW Appliance White baked enamel finish is standard. Other finishes are available.

Performance Data: See non-fire rated **Model 6500** on page D18 or **Model 6500IV** on page D38.



Dimensional Data

Models 6505FRD, 6555FRD and 6505IVFRD • Round Neck



Available Sizes and Dimensional Data

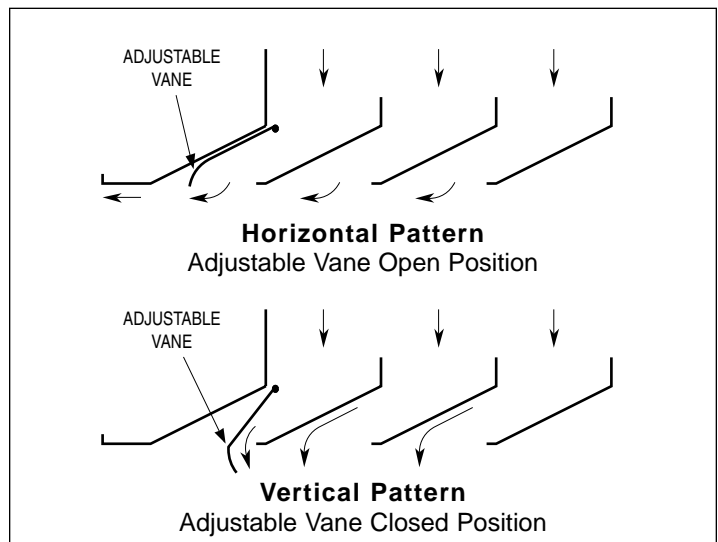
Ceiling Module CM	Core/Back Pan W x H	Round Neck D	Opened Height C
12 x 12 (305 x 305)	9 x 9 (229 x 229)	6 (152)	6 1/2 (165)
	9 x 9 (229 x 229)	8 (203)	7 1/2 (191)
24 x 24 (610 x 610)	12 x 12 (305 x 305)	8 (203)	7 1/2 (191)
	12 x 12 (305 x 305)	10 (254)	8 1/2 (216)
	15 x 15 (381 x 381)	12 (305)	9 1/2 (241)
	15 x 15 (381 x 381)	14 (356)	10 1/2 (267)
	18 x 18 (457 x 457)	12 (305)	9 1/2 (241)
18 x 18 (457 x 457)	14 (356)	10 1/2 (267)	

Dimensions are in inches (mm).

Note:

If the square ceiling module is more than 3" (76) larger than the duct size, a module sized extended panel is utilized.

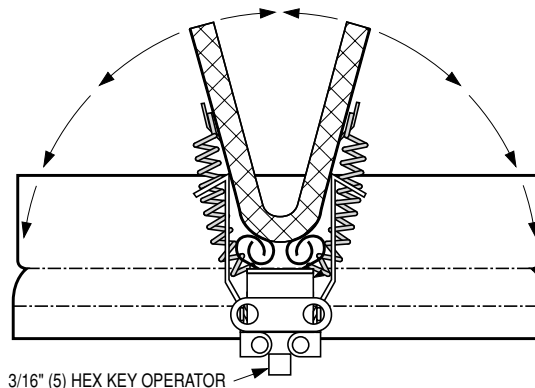
Model 6555FRD Pattern Adjustment



AV Fusible Link Adjustable Volume Control Option.

This UL Listed ceiling radiation damper (Model 0722A) option allows the ceiling radiation damper to be used as a balancing damper for volume control.

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



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FIRE RATED PRODUCTS