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fire rated



fire rated



e

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PAR (FR)

PERFORATED RETURN CEILING APPLICATIONS

- UL classified fire rated diffuser
- Matches the appearance of the PAS-FR supply diffuser
- Can be either plenum mounted or return air duct connected

perforated ceiling diffusers (fr)



PAS (FR)

PERFORATED SUPPLY CEILING APPLICATIONS

- UL classified fire rated diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- 1-, 2-, 3-, or 4-way horizontal and vertical adjustable air discharge pattern can be adjusted before or after installation
- Protects the ceiling against smudging

PAGES: E9-E17



TMS (FR)

HIGH PERFORMANCE DIFFUSER

- UL classified fire rated ceiling diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- Delivers supply air in a true 360° pattern

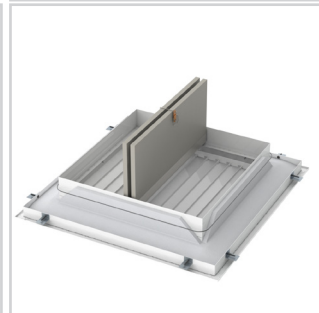


TMSA (FR)

HIGH PERFORMANCE ADJUSTABLE DIFFUSER

- UL classified fire rated ceiling diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- Delivers supply air in a true 360° pattern
- Adjustable vanes vary the air discharge pattern from horizontal to vertical

square ceiling diffusers (fr)



TDC (FR)

LOUVERED FACE - HIGH CAPACITY DIFFUSER

- UL classified fire rated ceiling diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- Capable of handling large amounts of air for a given pressure drop and noise level
- Harmonizes with various architectural details - especially modular ceilings



TDCA (FR)

LOUVERED FACE ADJUSTABLE - HIGH CAPACITY DIFFUSER

- UL classified fire rated ceiling diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- Handles large amounts of air for a given pressure drop and noise level
- Has movable vanes accessible from the face to adjust the air discharge pattern

PAGES: E18-E21



TBD (FR) / TBDR (FR)

PLENUM SLOT FIXED BLADE

- UL classified fire rated plenum slot diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- Aerodynamically curved blade design projects a tight blanket of air across the ceiling from minimum to maximum airflow
- Available in 1 or 2 slots
- TBDR-FR fire rated return has light baffle to prevent light transition from ceiling plenum into room

plenum slot diffusers (fr)



TBDI (FR)

PLENUM SLOT FIXED BLADE

- UL classified fire rated plenum slot diffuser
- For use in three-hour fire rated, exposed grid suspended ceilings
- Aerodynamically curved blade design projects a tight blanket of air across the ceiling from minimum to maximum airflow
- Internal insulation



Overview

fire rated

Titus fire rated diffusers are UL classified assemblies listed in Underwriters Laboratories Fire Resistance Directory and meet UL time-vs-temperature test criteria. They are tested in accordance with UL 263 and meet NFPA 90A requirements. All Titus fire rated diffusers are designed for use in three hour fire rated, exposed grid, suspended ceilings and must be installed per UL 263. Standard construction includes a non-asbestos fire damper and non-asbestos thermal insulating blanket and 212°F fusible link. Options include a 165°F fusible link and a UL listed fusible volume control that allows adjustment of the fire damper blades to balance airflow.

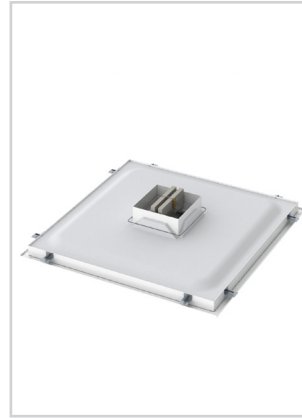


Fire Rated Three Hour Ceiling Diffusers

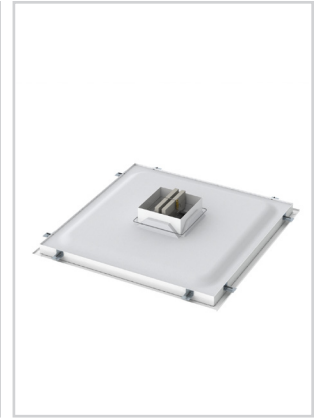
fire rated

PAS (FR) / PAR (FR)

- PAS-FR and PAR-FR are UL classified fire rated ceiling diffuser assemblies listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria, also NFPA 90A requirements.
- For use in three-hour fire rated, exposed grid, suspended ceilings
- These perforated ceiling diffusers are designed for both heating and cooling applications
- Tight, uniform, horizontal blanket of air from the PAS-FR supply diffuser protects the ceiling against smudging
- Discharge pattern (PAS-FR supply) can be adjusted to vertical as well as to 1-, 2-, 3- or 4-way horizontal. Can be adjusted before or after installation.
- Discharge pattern is easily adjusted by unlatching and dropping the perforated face, then rotating the pattern controllers
- Dropping the perforated face also gives access for adjusting the optional volume damper
- Non-asbestos thermal insulating blanket



PAS (FR)



PAR (FR)



fire rated



See website for Specifications

MODELS:

PAS-FR / Supply / Flush Face
PAR-FR / Return / Flush Face

FINISH:

Standard Finish - #26 White

OVERVIEW

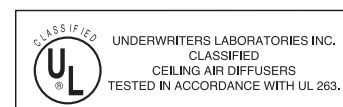
Perforated -1, 2, 3, or 4-way Adjustable Discharge Pattern

Titus fire rated diffusers are UL classified and listed in Underwriters Laboratories Fire Resistance Directory. These diffusers meets UL time vs. temperature test criteria and NFPA 90A requirements.

For Performance Data, please utilize the Perforated diffusers section of the catalog located in Section F. Use Performance Data only for available sizes.

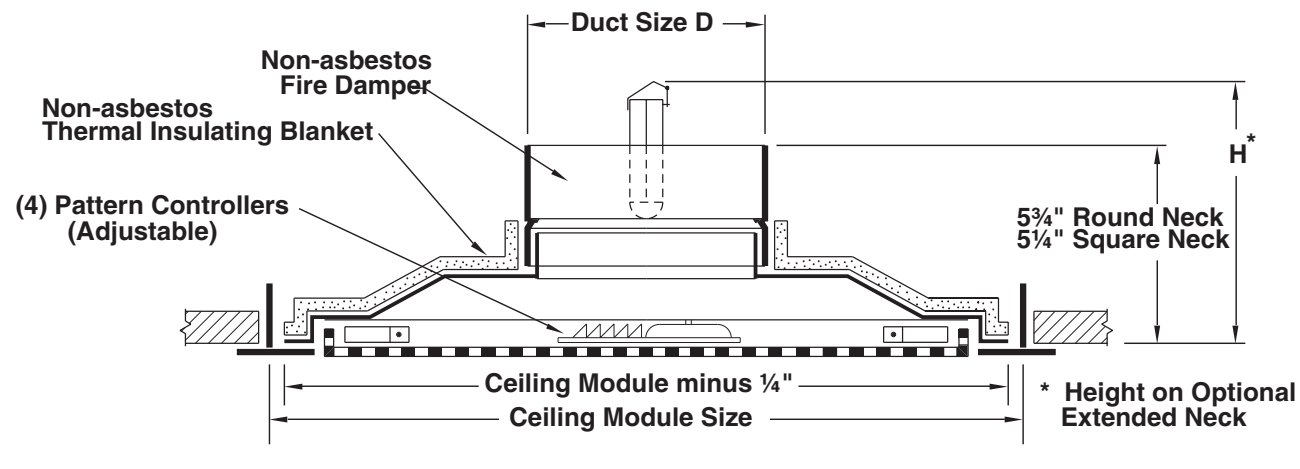
ADVANTAGES

- Perforated face has $\frac{3}{16}$ " diameter holes on $\frac{1}{4}$ " staggered centers with approximately 50 percent free area
- Must be installed in accordance with the installation instructions for UL classification
- PAR-FR return has the same face and border construction as the supply model for harmonious appearance in the room
- PAR-FR return can be either plenum mounted or return air duct connected
- Back pan material is heavy-gauge steel with steel perforated face

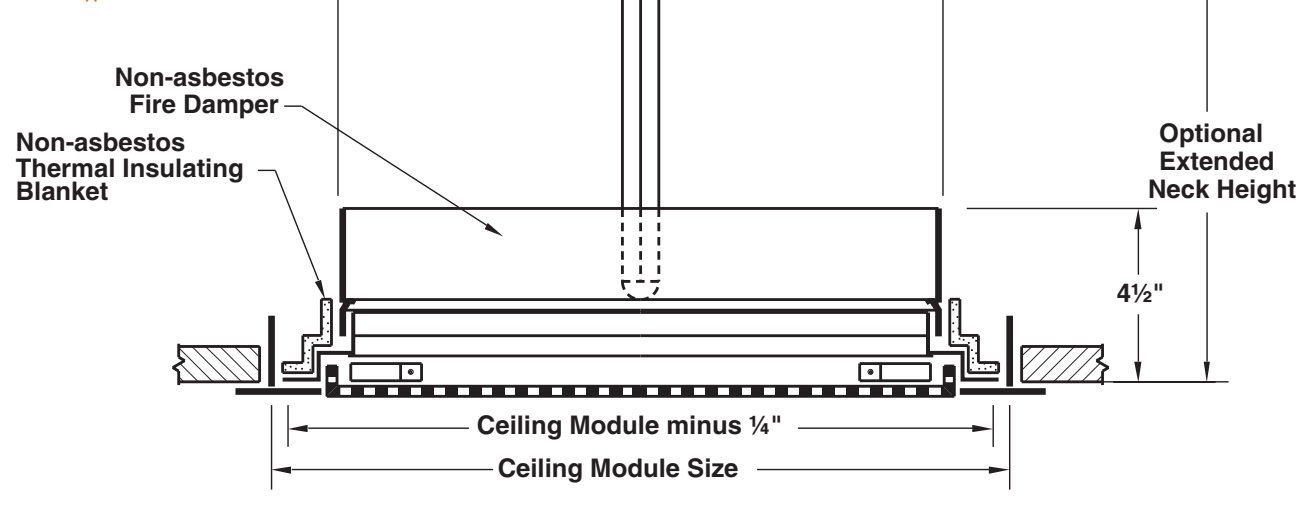


PAR (FR), PAS (FR) UNIT DIMENSIONS

PAS-FR
Border Type 3 (Lay-In)
With Fire Damper



PAR-FR
Lay-in with
Fire Damper
Border Type 3



Note: 212°F fusible link standard in fire damper (165°F optional)

Supply Model PAS-FR

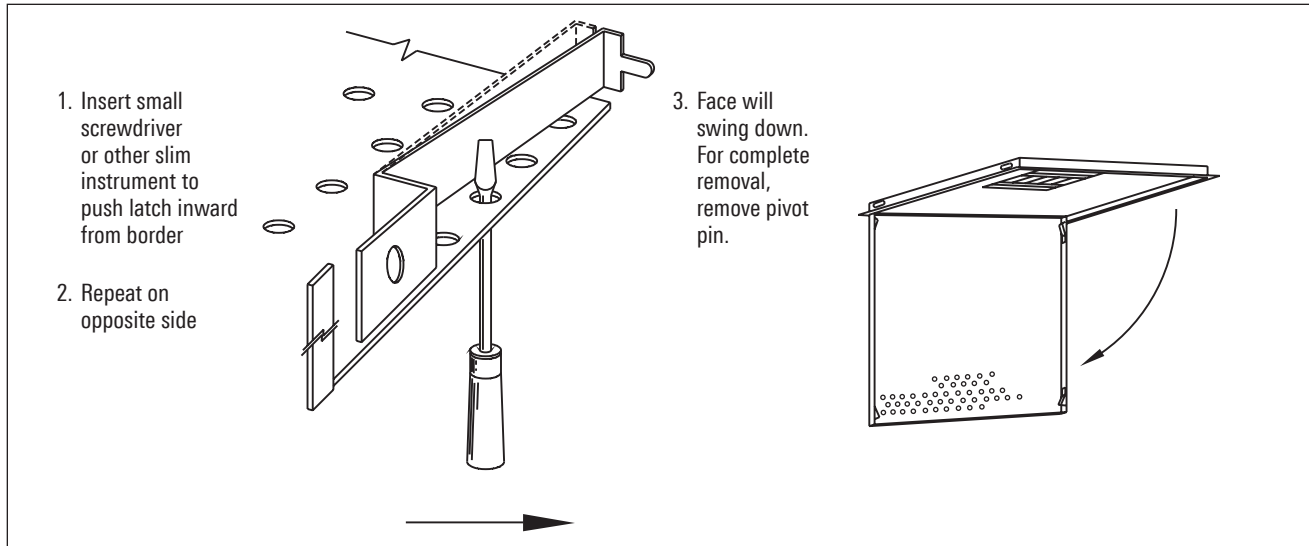
Duct Size D	Face or Ceiling Module Size		
	12 x 12	24 x 12	24 x 24
6 x 6	•	•	•
8 x 8			•
10 x 10			•
12 x 12			•
6" Dia.	•	•	•
8" Dia.			•
10" Dia.			•
12" Dia.			•
14" Dia.			•
16" Dia.			•

Return Model PAR-FR

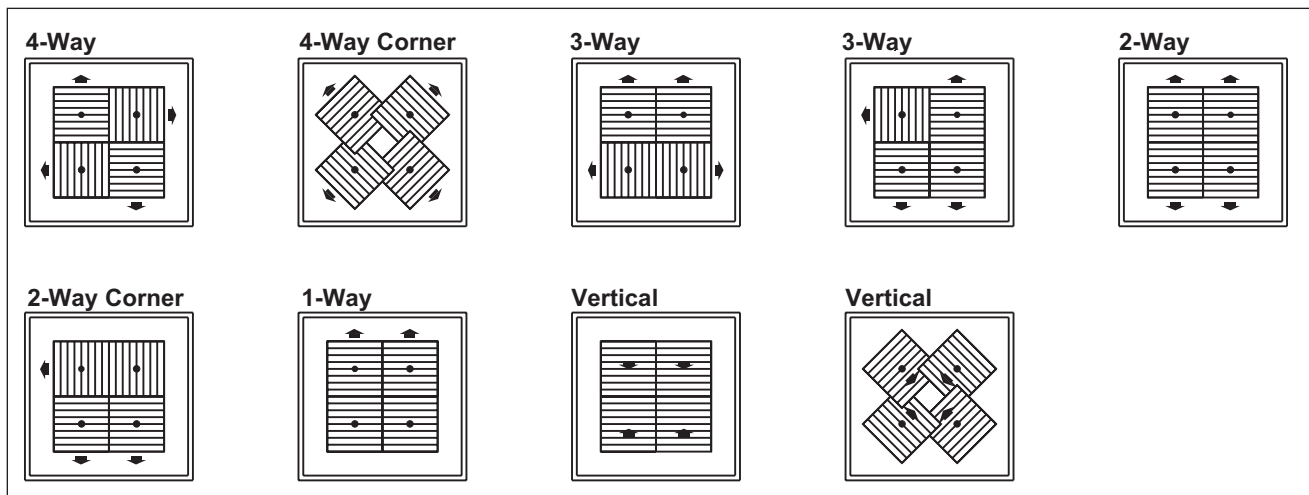
Duct Size D	Face or Ceiling Module Size
10 x 10	12 x 12
12 x 12	24 x 12
22 x 22	24 x 24

All dimensions are in inches

REMOVING THE PERFORATED FACE



ADJUSTING PATTERN CONTROLLERS ON MODEL PAS-FR

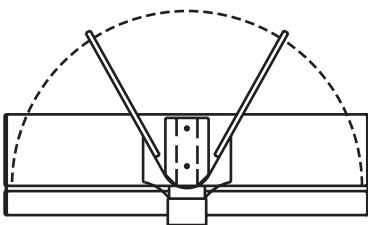


ACCESSORIES (OPTIONAL)

FIRE DAMPER WITH EXTENDED NECK

UL Listed Fusible Volume Adjustment Control

Allows adjustment of fire damper blades to balance airflow. A hex key (by others) is required for adjustment.



Model PAS-FR

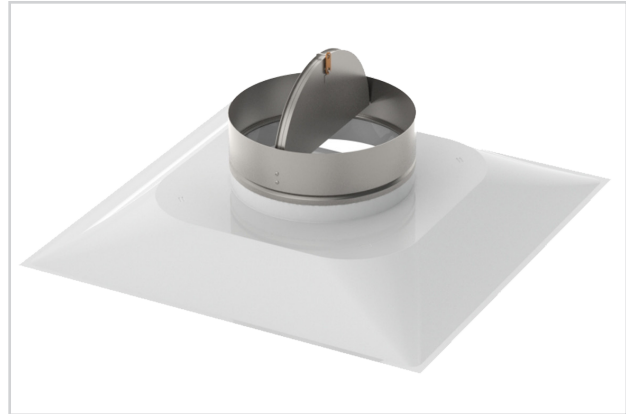
Duct Size D (Round/Square)	Optional Extended Neck Height (Round/Square)
6" Dia. / 6 x 6	8 ³ / ₄ " / 8 ¹ / ₄ "
8" Dia. / 8 x 8	8 ³ / ₄ " / 8 ¹ / ₄ "
10" Dia. / 10 x 10	8 ³ / ₄ " / 8 ¹ / ₄ "
12" Dia. / 12 x 12	10 ³ / ₄ " / 10 ¹ / ₄ "
14" Dia.	10 ³ / ₄ "
16" Dia.	13 ³ / ₄ "

Model PAR-FR

Duct Size D	Extended Neck Height
10 x 10	7 ¹ / ₂ "
22 x 10	12 ¹ / ₂ "
22 x 22	12 ¹ / ₂ "

TMS (FR)

- Model TMS-FR is a UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria, also NFPA 90A requirements
- For use in three-hour fire rated, exposed grid, suspended ceilings
- All sizes have three cones, giving a uniform appearance where different sizes are used in the same area
- Optional volume damper can be adjusted from the diffuser face without removing the inner cone
- Quick removal of the inner cone with a hex key
- All cones are die-stamped, one-piece construction. Smooth, clean surfaces with no corner joints
- Must be installed in accordance with the installation instructions for UL classification
- Material is heavy-gauge steel
- Non-asbestos thermal insulating blanket



TMS-FR



fire rated

MODEL:

TMS-FR

FINISH:

Standard Finish - #26 White

OVERVIEW

Square / Round Neck / High Performance

Titus fire rated diffusers are UL classified and listed in Underwriters Laboratories Fire Resistance Directory. These diffusers meets UL time vs. temperature test criteria and NFPA 90A requirements.

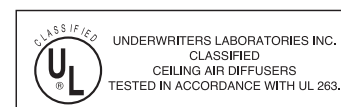
For Performance Data, please utilize the Square Ceiling diffusers section of the catalog located in Section F. Use Performance Data only for available sizes.

ADVANTAGES

- Delivers supply air in a true 360° pattern. Designed to protect ceilings from streaking and smudging.
- Excellent performance in variable air volume systems. The uniform, nearly horizontal jet from the outer cone maintains effective room air distribution even when the air volume varies over a considerable range.



See website for Specifications

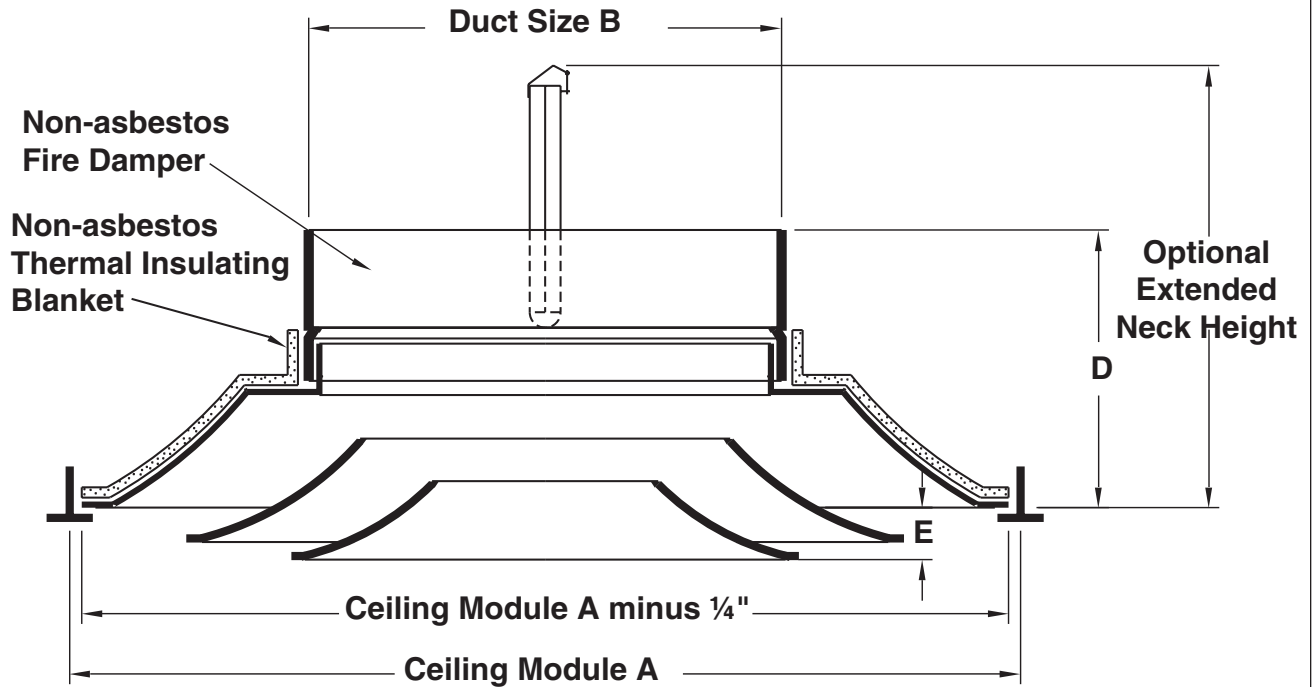


DIMENSIONS

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TMS (FR) UNIT DIMENSIONS

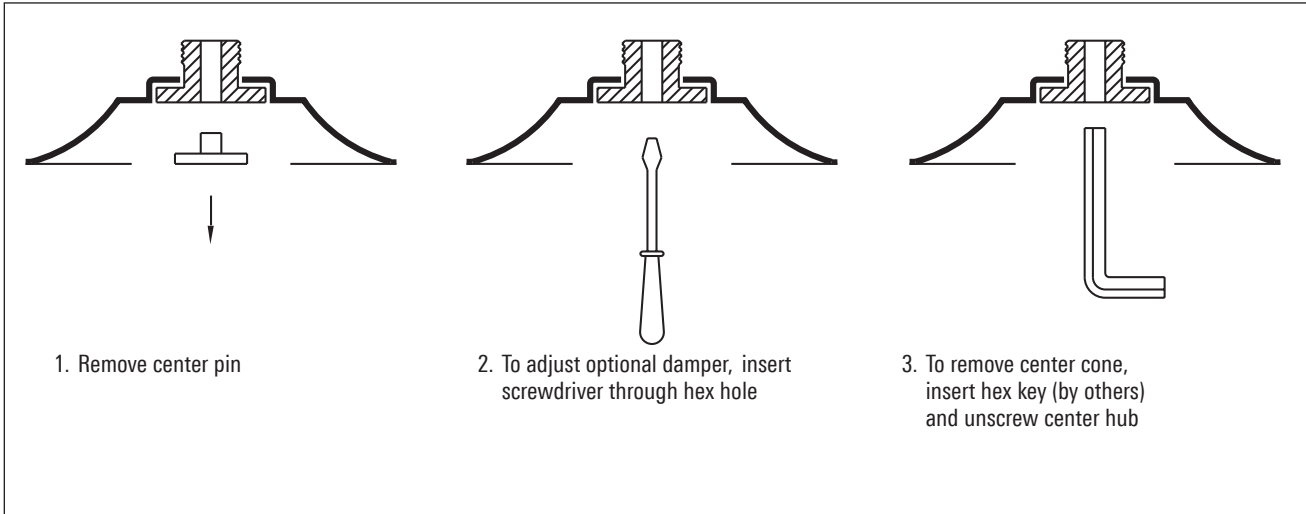
Border Type 3 (Lay-In) With Fire Damper - Full Face



Note: 212°F fusible link standard in fire damper (165°F optional)

Ceiling Module A	Round Duct Size B	D	E
12 x 12	6, 7	5	1 ¹ / ₈ "
	8	5 ¹ / ₄ "	1 ¹ / ₈ "
24 x 24	8	6 ⁵ / ₈ "	1 ¹ / ₄ "
	10, 12, 14, 15	6 ³ / ₄ "	1 ¹ / ₄ "

OPTIONAL VOLUME ADJUSTING DAMPER CONTROL - REMOVING CENTER CONE

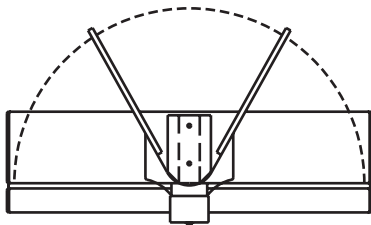


ACCESSORIES (OPTIONAL)

FIRE DAMPER WITH EXTENDED NECK

UL Listed Fusible Volume Adjustment Control

Allows adjustment of fire damper blades to balance airflow. A hex key (by others) is required for adjustment.

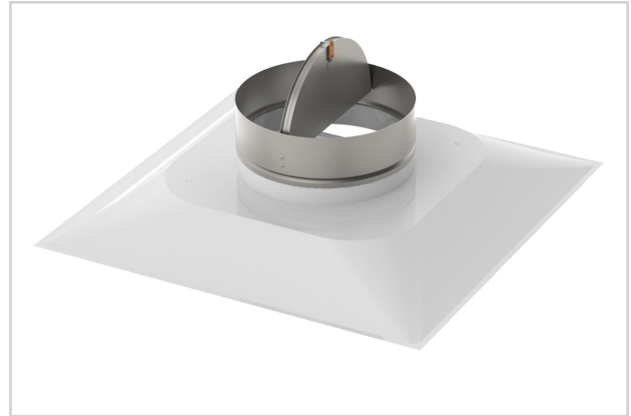


Model TMS-FR

Round Duct Size B	Extended Neck Height
6", 7"	8"
8"	8¼"
10"	9 ⁵ / ₈ "
12", 14", 15"	9 ³ / ₄ "

TMSA (FR)

- Model TMSA-FR is a UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria, also NFPA 90A requirements.
- For use in three-hour fire rated, exposed grid, suspended ceilings
- Adjustable vanes vary the discharge pattern from horizontal to vertical
- Delivers supply air in a true 360° pattern
- Excellent performance in variable air volume systems. The uniform, nearly horizontal jet from the outer cone maintains effective room air distribution even when the air volume varies over a considerable range.
- All sizes have three cones, giving a uniform appearance where different sizes are used in the same area
- Optional volume damper can be adjusted from the diffuser face without removing the inner cone
- Quick removal of the inner cone with a hex key
- All cones are die-stamped, one-piece construction. Smooth, clean surfaces with no corner joints.



TMSA (FR)

- Must be installed in accordance with the installation instructions for UL classification
- Material is heavy gauge steel
- Non-asbestos thermal insulating blanket



fire rated

MODEL:

TMSA-FR

FINISH:

Standard Finish - #26 White

OVERVIEW

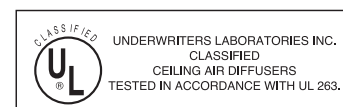
Square / Round Neck / High Performance / Adjustable Discharge Pattern

Titus fire rated diffusers are UL classified and listed in Underwriters Laboratories Fire Resistance Directory. These diffusers meets UL time vs. temperature test criteria and NFPA 90A requirements.

For Performance Data, please utilize the Square Ceiling diffusers section of the catalog located in Section F. Use Performance Data only for available sizes.

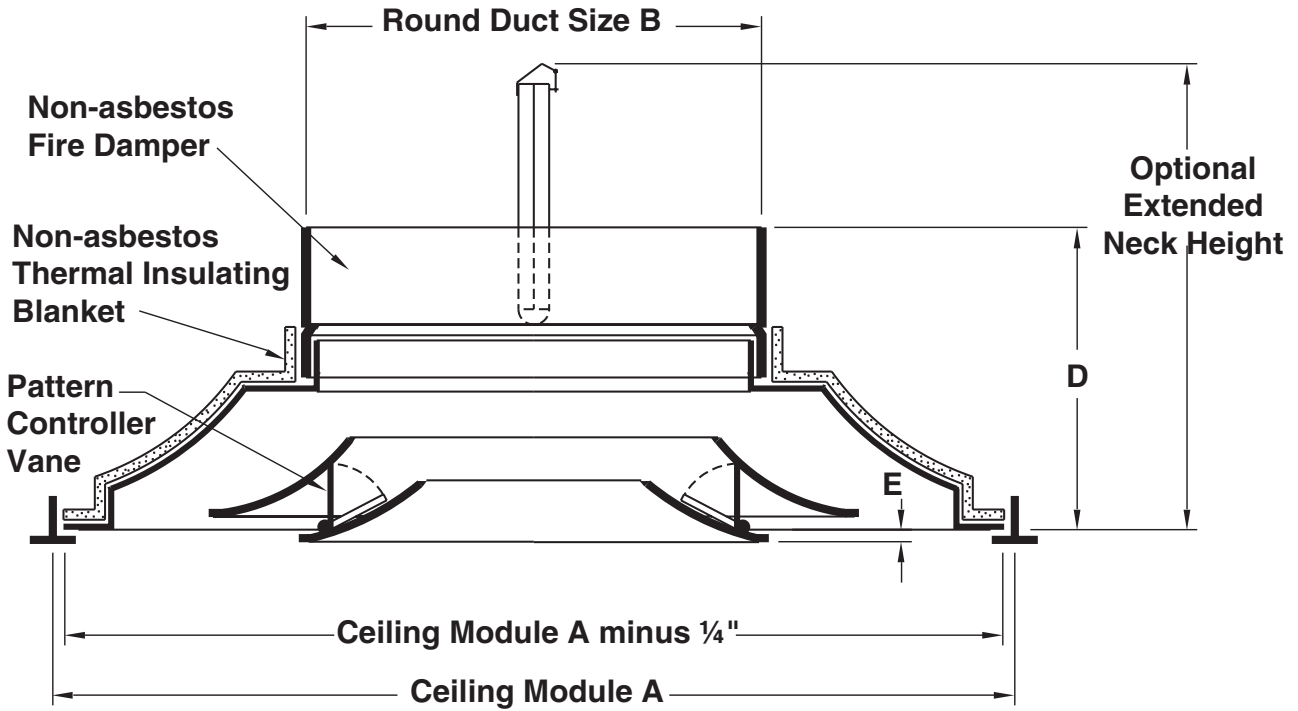


See website for Specifications



TMSA (FR) UNIT DIMENSIONS

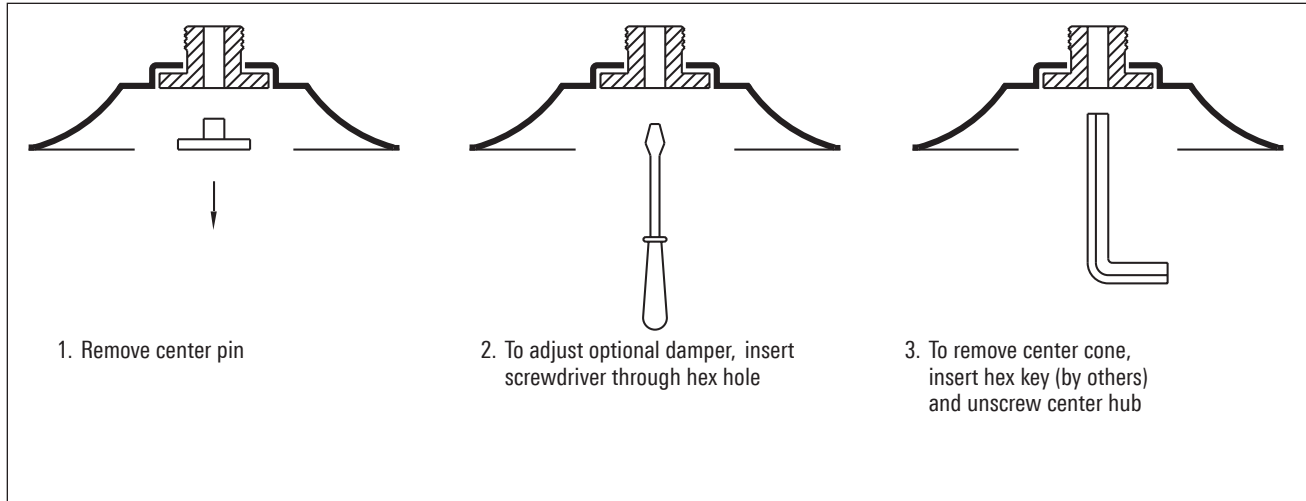
Border Type 3 (Lay-In) With Fire Damper - Full Face



Note: 212°F fusible link standard in fire damper (165°F optional)

Ceiling Module A	Round Duct Size B	D	E
12 x 12	6, 7	5 ⁷ / ₈ "	3 ³ / ₈ "
	8	5 ³ / ₄ "	3 ³ / ₈ "
24 x 24	8	7 ⁵ / ₈ "	1 ¹ / ₄ "
	10, 12, 14, 15	7 ³ / ₄ "	1 ¹ / ₄ "

OPTIONAL VOLUME ADJUSTING DAMPER CONTROL - REMOVING CENTER CONE

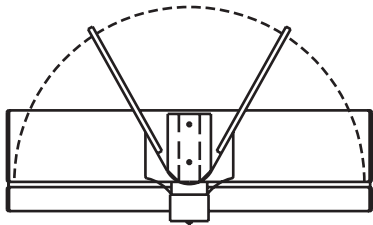


ACCESSORIES (OPTIONAL)

FIRE DAMPER WITH EXTENDED NECK

UL Listed Fusible Volume Adjustment Control

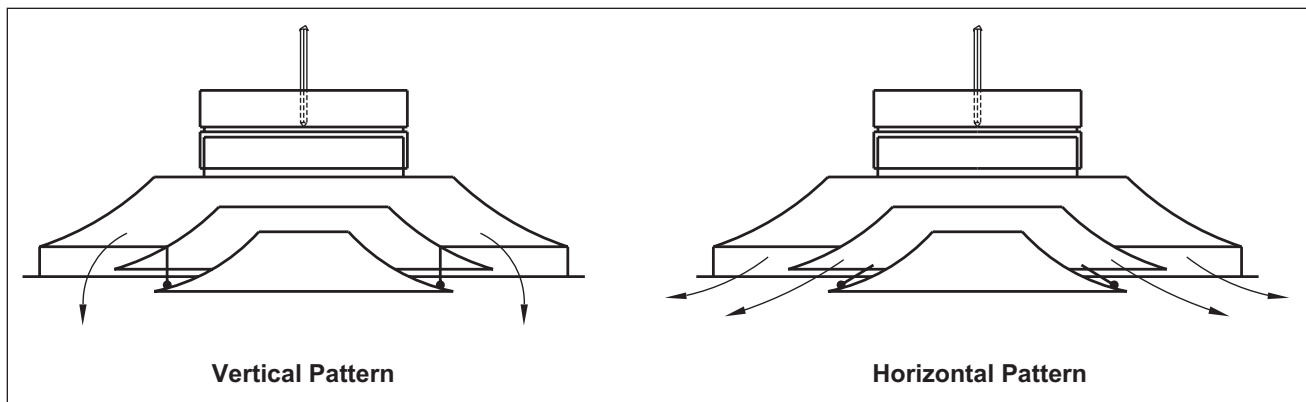
Allows adjustment of fire damper blades to balance airflow. A hex key (by others) is required for adjustment.



Model TMSA-FR

Round Duct Size B	Extended Neck Height
6", 7"	8 ⁷ / ₈ "
8"	8 ¹ / ₄ "
10"	10 ⁵ / ₈ "
12", 14", 15"	10 ³ / ₄ "

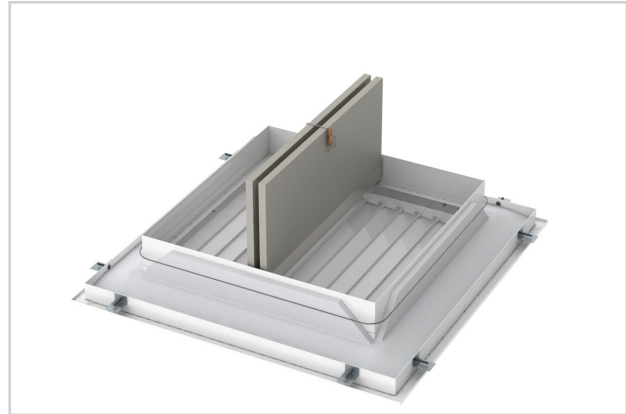
MODEL TMSA-FR DISCHARGE PATTERNS



Note: Pattern controller vanes are adjustable to provide vertical or horizontal airflow

TDC (FR) / TDCA (FR)

- The Titus Model TDC-FR and TDCA-FR are UL classified fire rated ceiling diffuser assemblies listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria, also NFPA 90A requirements
- For use in three-hour fire rated, exposed grid, suspended ceilings
- These ceiling diffusers handle an unusually large amount of air for a given pressure drop and noise level
- Pleasing appearance harmonizes with various architectural details - especially modular ceiling systems
- Maintains an unbroken horizontal flow pattern from maximum cfm down to minimum. Excellent performance in variable air volume systems.
- Core is easily removable from the face of the diffuser
- Extremely flexible, with cores available for 1-, 2-, 3- or 4-way horizontal flow (see the diagrams on the following page)
- Model TDCA has movable vanes, accessible from the face, to adjust the discharge pattern from horizontal to vertical
- Must be installed in accordance with the installation instructions for UL classification



TDC (FR) / TDCA (FR)

- Material is heavy gauge steel
- Per UL263
- Non-asbestos thermal insulating blanket



fire rated

MODELS:

TDC-FR / Fixed
TDCA-FR / Adjustable

FINISH:

Standard Finish - #26 White

OVERVIEW

Louvered Face / High Capacity / Square Neck / Steel Construction

Titus fire rated diffusers are UL classified and listed in Underwriters Laboratories Fire Resistance Directory. These diffusers meets UL time vs. temperature test criteria and NFPA 90A requirements.

For Performance Data, please utilize the Square & Rectangular diffusers section of the catalog located in Section F. Use Performance Data only for available sizes.



See website for Specifications

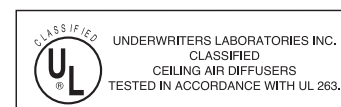
Model TDC-FR

Available Module Size	Minimum Duct Size	Maximum Duct Size
12 x 12	6 x 6	9 x 9
24 x 24	6 x 6	21 x 21

Note: Duct sizes are available in 3" increments and square necks only

Model TDCA-FR

Available Module Size	Minimum Duct Size	Maximum Duct Size
12 x 12	6 x 6	9 x 9
24 x 24	6 x 6	18 x 18

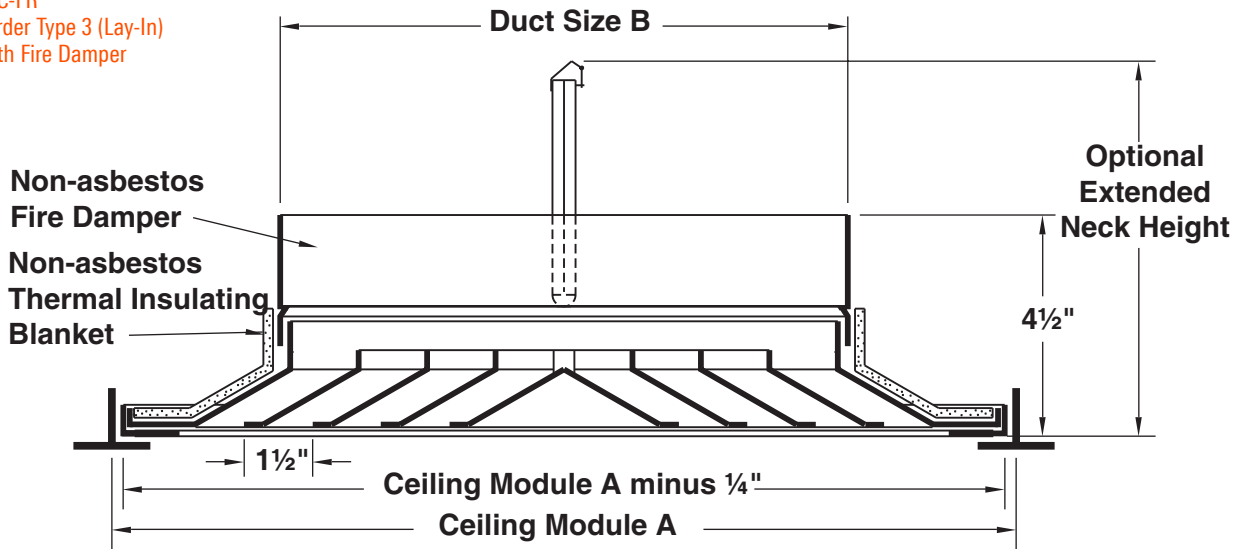


DIMENSIONS

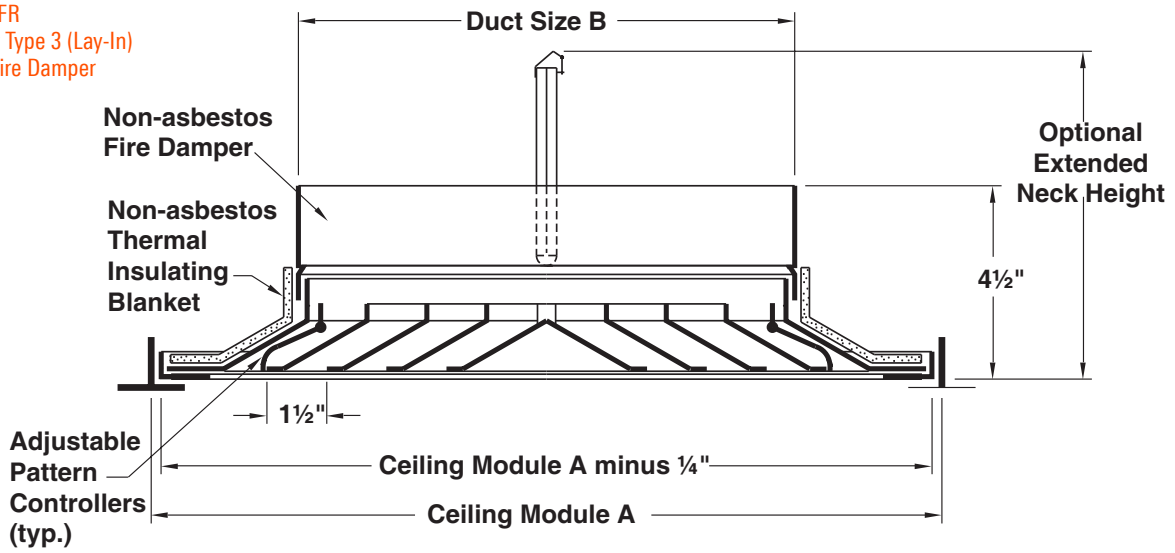
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TDC (FR), TDCA (FR) UNIT DIMENSIONS

TDC-FR
Border Type 3 (Lay-In)
With Fire Damper

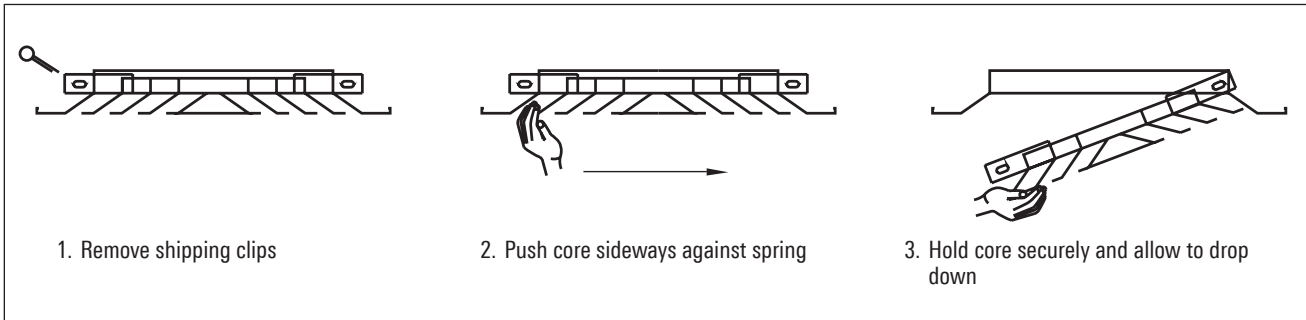


TDCA-FR
Border Type 3 (Lay-In)
With Fire Damper

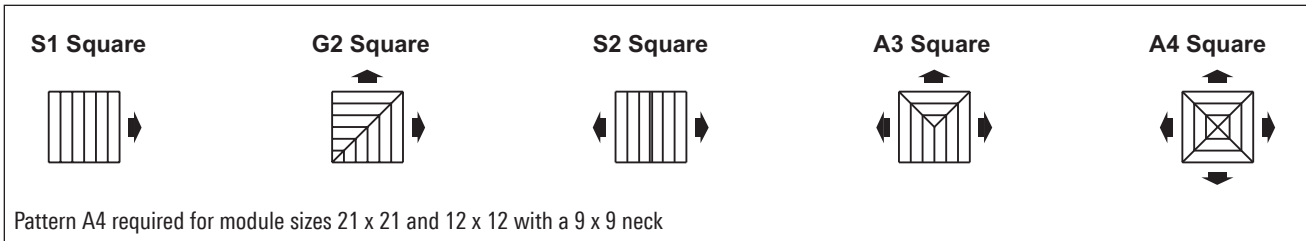


Note: 212°F fusible link standard in fire damper (165°F optional)

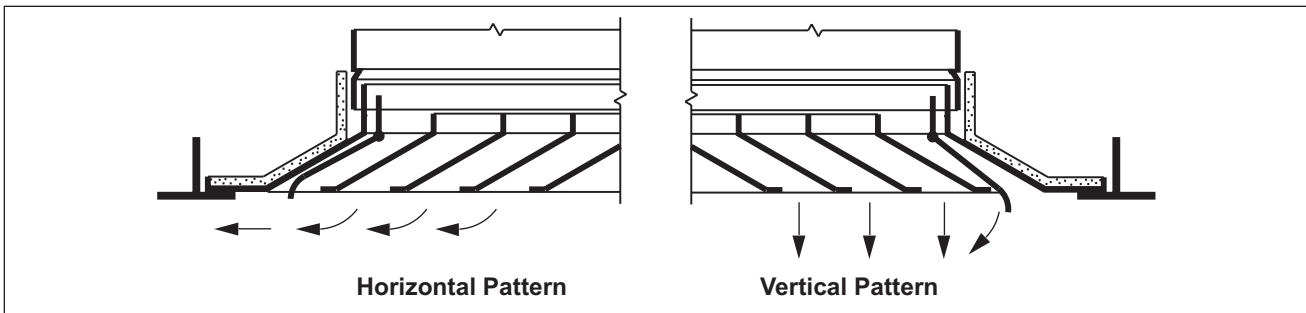
REMOVING CENTER CONE



OPTIONAL PATTERNS



ADJUSTING VERTICAL-TO-HORIZONTAL PATTERN / MODEL TDCA-FR

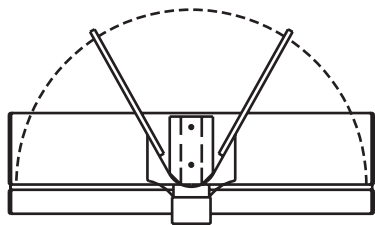


ACCESSORIES (OPTIONAL)

FIRE DAMPER WITH EXTENDED NECK

UL Listed Fusible Volume Adjustment Control

Allows adjustment of fire damper blades to balance airflow. A hex key (by others) is required for adjustment.



Duct Size B	Extended Neck Height
6" x 6"	7½"
9" x 9"	7½"
12" x 12"	9½"
15" x 15"	9½"
18" x 18"	12½"
21" x 21"	12½"

Note: 21 x 21" size is not available with the TDCA-FR

TBD (FR) / TBDI (FR)

- Model TBD-FR is a UL classified fire rated plenum slot diffuser assembly listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria, also NFPA 90A requirements.
- For use in three-hour fire rated, exposed grid, suspended ceilings
- Aerodynamically curved blade design projects a tight blanket of air across the ceiling, from minimum to maximum flow makes the TBD-FR an excellent choice for variable air volume systems
- Pattern controller blades are installed at the factory for a fixed airflow direction, as shown in the dimension drawing. The airflow of each blade can be changed to the opposite direction in the field.
- Design is qualified by UL for use with either hard or flex duct, also in ductless applications
- Choice of 3/4-, 1- or 1½" slot width, one or two parallel slots
- Available in nominal lengths of 24, 36 and 48 inches
- Optional internal insulation
- Must be installed in accordance with the installation instructions for UL classification



TBD (FR)



TBDI (FR)

- Material is heavy gauge steel
- Per UL263



fire rated

MODELS:

TBD-FR / 1 or 2 Slots
TBDI-FR / Insulated / 1 or 2 Slots

FINISHES:

Standard Finish - #26 White on center T-bars and optional side T-bars
#84 Black on exposed surfaces

OVERVIEW

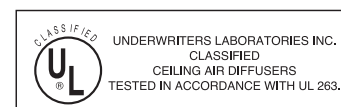
Plenum Slot / Fixed Blade / Field Adjustable

Titus fire rated diffusers are UL classified and listed in Underwriters Laboratories Fire Resistance Directory. These diffusers meets UL time vs. temperature test criteria and NFPA 90A requirements.

For Performance Data, please utilize the Plenum Slot diffusers section of the catalog located in Section D. Use Performance Data only for available sizes.

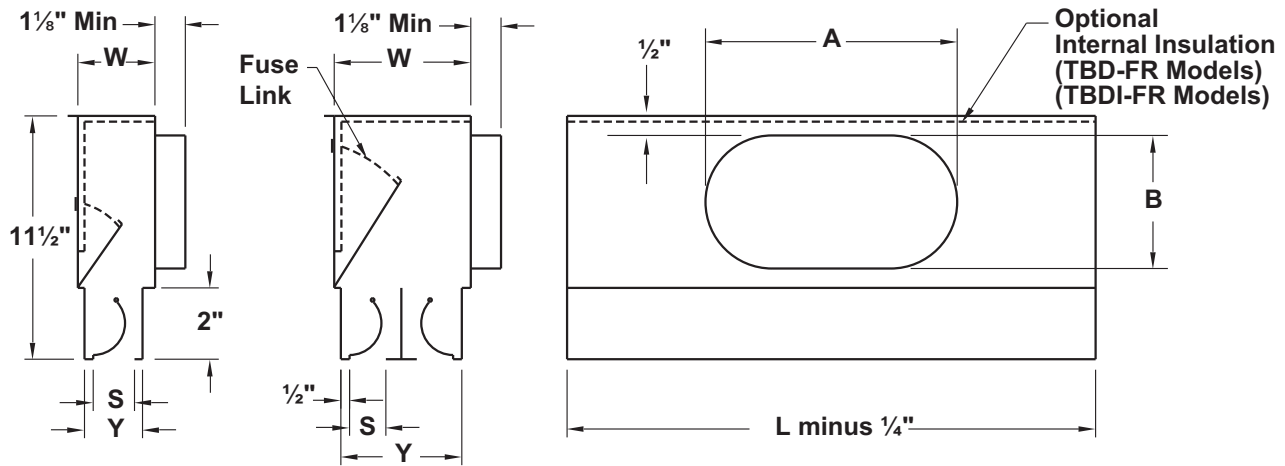


See website for Specifications



TBD (FR), TBDI (FR) UNIT DIMENSIONS

TBD-FR



Center T-bar by Titus. Outside T-bars (optional) by Titus or others

Note: 212°F fusible link standard in fire damper (165°F optional)

Model	Number of Slots	Slot Width S	W	Y
TBD-FR	1	3/4"	2 3/4"	1 3/4"
	2	3/4"	4 1/2"	3 1/2"
	1	1"	3"	2"
	2	1"	4 15/16"	3 15/16"
	1	1 1/2"	3 1/2"	2 1/2"
	2	1 1/2"	6 1/4"	5 1/4"

Available Inlet Sizes	A	B
5	4 7/8"	-
6 Round	5 7/8"	-
8 Round	7 7/8"	-
10 Oval	12 1/2"	5 1/4"
12 Oval	15 5/8"	5 1/4"

Available Length L	Available Inlet Sizes
24	6, 8, 10
36	6, 8, 10
48	6, 8, 10, 12

Note: The 2-slot, 1 1/2" slot width diffusers are not UL classified

TBDR (FR)

- Model TBDR-FR is a UL classified fire rated plenum slot return assembly listed in Underwriters Laboratories Fire Resistance Directory. This design meets UL time-vs-temperature test criteria, also NFPA 90A requirements.
- For use in three-hour fire rated, exposed grid, suspended ceilings
- Light baffle blocks the line of sight into the ceiling plenum and prevents light transmission from the ceiling plenum into the room
- Design is qualified by UL for use with either hard or flex duct, also in ductless applications
- Choice of ¾-, 1- or 1½" slot width, one or two parallel slots
- Available in nominal lengths of 24, 36 and 48 inches
- Optional internal insulation
- Must be installed in accordance with the installation instructions for UL classification
- Material is heavy gauge steel
- Per UL263



TBDR (FR)



fire rated

MODEL:

TBDR-FR / 1 or 2 Slots

FINISHES:

Standard Finish - #26 White on center T-bars and optional side T-bars
#84 Black on exposed surfaces

OVERVIEW

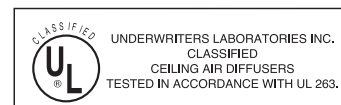
Plenum Slot Return / Fixed Blade / Field
Adjustable

Titus fire rated diffusers are UL classified and listed in Underwriters Laboratories Fire Resistance Directory. These diffusers meets UL time vs. temperature test criteria and NFPA 90A requirements.

For Performance Data, please utilize the Plenum Slot diffusers section of the catalog located in Section D. Use Performance Data only for available sizes.

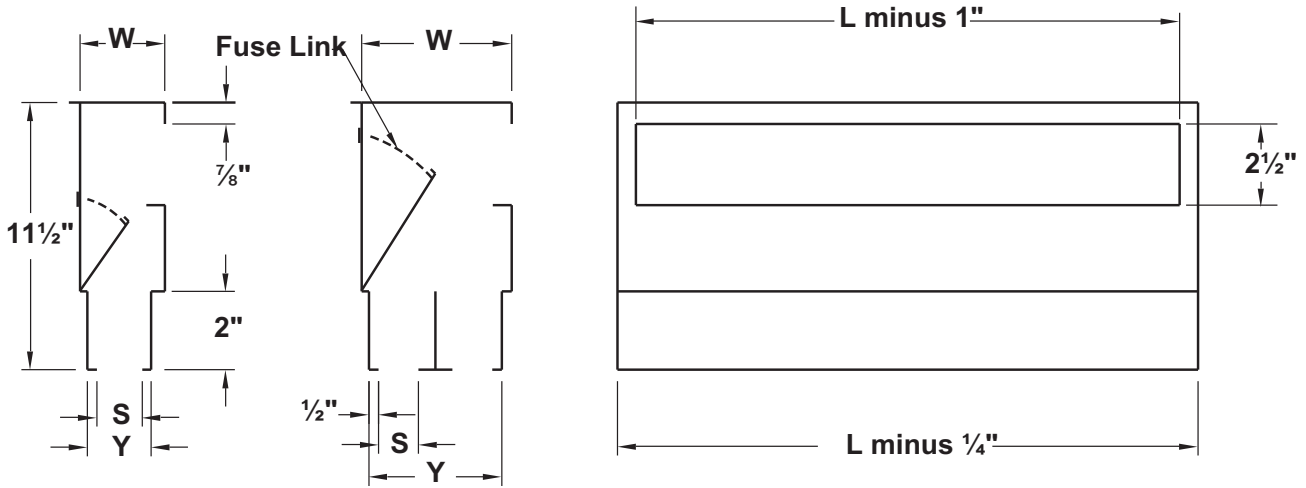


See website for Specifications



TBDR (FR) UNIT DIMENSIONS

TBDR-FR

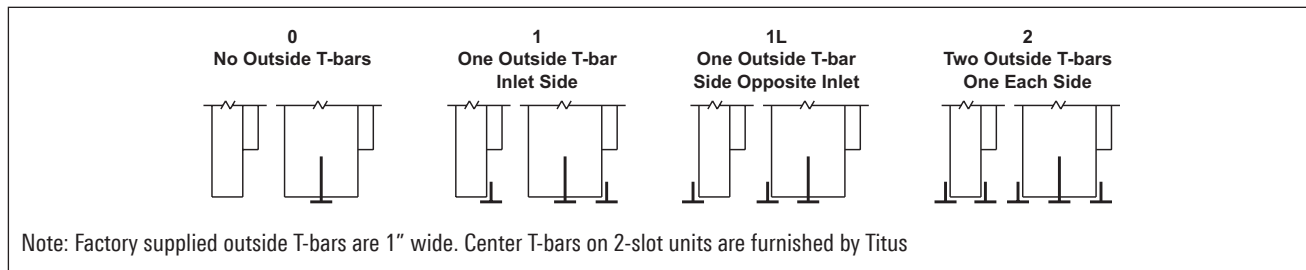


Center T-bar by Titus. Outside T-bars (optional) by Titus or others

Model	Number of Slots	Slot Width S	W	Y
TBDR-FR	1	3/4"	2 3/4"	1 3/4"
	2	3/4"	4 1/2"	3 1/2"
	1	1"	3"	2"
	2	1"	4 15/16"	3 15/16"
	1	1 1/2"	3 1/2"	2 1/2"
	2	1 1/2"	6 1/4"	5 1/4"

Note: 212°F fusible link standard in fire damper (165°F optional)

OPTIONAL FACTORY FURNISHED T-BARS



Note: The 2-slot, 1 1/2" slot width diffusers are not UL classified



Icons



for use in all applications that require UL Fire Resistance products

fire rated

