GENERAL PRODUCT OVERVIEW

Since 1971, Nailor Industries has been committed to the innovation and development of life safety products such as the 0700 Series Ceiling Dampers. This commitment has helped foster industry standards, as well as provide worry free fire protection solutions that benefit today's building designers, owners and occupants. Standard UL 555C tested ceiling dampers are approved for use in lieu of hinged door type dampers in UL floor/ceiling or roof/ceiling assemblies, the Nailor 0700 Series provides a fire and heat barrier that has been tested and qualified to the most exacting standards. For square and rectangular applications, Model 0716 is available with standard blade construction or low profile blades, Model 0716-4. Round duct applications are covered by Model 0722. Nailor Model 0720 features a spring loaded curtain design that maximizes free area while providing a low overall profile. Options such as adjustable volume control are ideal for balancing at the grille/diffuser. Specialty UL 263 tested Models 0755 thru 0763 are specifically for use in wood truss ceiling assemblies and have been developed to meet specific requirements in today's building systems.

MODELS 0716, 0716-4, 0714 & 0722 FOR SQUARE, RECTANGULAR OR ROUND DUCTS

Nailor ceiling dampers, or ceiling radiation dampers as they are commonly called, are designed to function as a fire and heat barrier in air duct openings penetrating fire resistive membrane ceilings. Models 0716, 0716-4 and 0714 are for use in square or rectangular applications and Model 0722 is for use in round applications, in lieu of hinged door type dampers in any UL floor/ceiling or roof/ceiling assembly with up to a 3 hour fire resistance rating where air ducts are allowed.



Models 0716 & 0722



Models 0722A & 0716A

MODELS 0716A, 0716-4A & 0722A ADJUSTABLE VOLUME CONTROL FOR SQUARE. RECTANGULAR OR ROUND DUCTS

Nailor ceiling dampers with adjustable volume control option are designed to function as a fire and heat barrier in air duct openings penetrating fire resistive membrane ceilings. The adjustable volume control mechanism allows the blades to be adjusted for balancing of airflow through the diffuser. Under fire conditions the fusible link will close the damper, regardless of volume setting. Models 0716A and 0716-4A are for use in square or rectangular applications and Model 0722A is for use in round applications, in lieu of hinged door type dampers in any UL floor/ceiling or roof/ceiling assembly with up to a 3 hour fire resistance rating where air ducts are allowed.

MODEL 0720 CURTAIN TYPE

FOR SQUARE OR RECTANGULAR DUCTS

Model 0720 ceiling radiation damper, which functions as a fire and heat barrier in air duct openings that penetrate fire resistive membrane ceilings, is for use in lieu of hinged door type dampers in any UL floor/ceiling assembly with up to a 3 hour fire resistance rating where air ducts are permitted. Model 0720 features a specially designed 'pull across' insulated curtain that provides a low overall profile, making it ideal for use in applications where the available duct drop height for installation is limited. The compact curtain design also maximizes free area in the open position.



Model 0720



Models 0725 & 0726

MODELS 0725 & 0726 THERMAL INSULATING BLANKETS

Models 0725 and 0726 Thermal Blankets are designed to insulate the exposed back pan area of a steel ceiling diffuser that may be used in UL Classified floor/ceiling or roof/ceiling assemblies with up to a 3 hour rating. The insulation protects the floor/roof structure above from the intense heat that radiates through the diffuser pan during fire conditions. A thermal blanket is used in conjunction with a ceiling radiation damper that protects the neck opening of the diffuser, to provide complete protection of the opening in the ceiling membrane. Model 0725 thermal blanket is for use with 0722 ceiling damper models in round neck applications. Model 0726 thermal blanket is for use with 0714, 0716 and 0720 ceiling damper models in square neck applications.

CEILING DAMPER BASICS

Definition of a Ceiling Damper (per NFPA Standard 90A):

"A device installed to limit radiant heat transfer through an air outlet or air inlet opening in the ceiling of a floor-or roof-ceiling assembly having not less than a 1 hour fire resistance rating."

What is the difference between a Ceiling Damper and a standard Fire Damper?

In order to comprehend the difference we must first understand some of the theory behind fire-rated ceilings. A fire-rated ceiling's primary function is to protect the structure above it from excessive heat and potential subsequent collapse by providing a fire and heat retardant barrier between the fire area and the structural floor above.

Without any openings in the fire-rated ceiling, it would perform as designed by limiting the transfer of heat through the floor above it. Problems arise when we pierce the protective ceiling with big holes to accommodate environmental control devices such as grilles and diffusers. To close these openings should a fire occur, devices called Ceiling Dampers (also commonly called radiation dampers or firestop flaps in Canada) have been developed. If the openings were to remain unobstructed during a fire. generated heat would tend to rapidly flow through in concentration due to a 'funnel effect' created at the openings as the hot combustion gases expand and rise. This focuses the intense heat into the structure area directly above the openings, potentially causing severe structural damage (See Figure 1). Ceiling dampers are specifically designed to protect against this phenomenon by firstly, closing the opening to stop any air flow and secondly, by reducing the amount of heat that is conducted and, most importantly, radiated through the device. This is most important, as a regular fire damper although fine for stopping flame and migratory air flow, is virtually transparent to heat and therefore ineffective in this application.

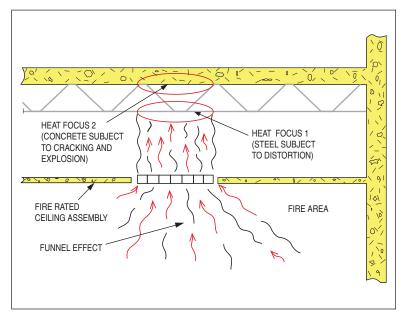


FIGURE 1

- Ceiling Dampers are tested by Underwriter's Laboratories to the strict criteria of UL 555C, Safety Standard for Ceiling Dampers which includes tests for:
 - 1. Fire Endurance
 - 2. Closing Reliability
 - 3. Salt-Spray Exposure
 - 4. Spring Closing Force (if applicable)
- Ceiling Dampers are not assigned hourly ratings themselves, but rather are listed for use as a component in an assembly designated for use in fire resistance assemblies having specific hourly ratings.
- All Nailor Ceiling Dampers are classified (Category CABS/CABS7) for use in any UL floor/ceiling or roof/ceiling restrained or unrestrained type assembly with up to a 3 hour fire resistance rating.

For a more in depth look into ceiling dampers, see pages C6 – C9.

LOOKING TO SAVE TIME, MONEY AND HASSLES?

As an alternative to assembling separate components,

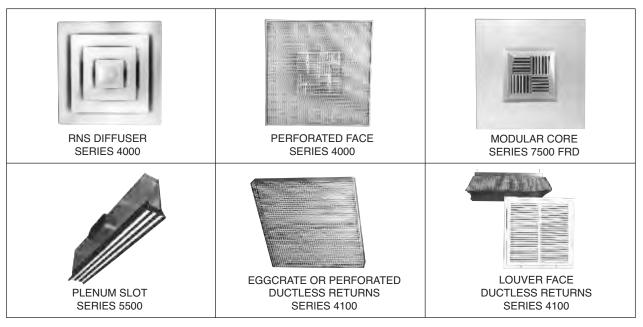
LOOK TO NAILOR FIRE-RATED DIFFUSER AND GRILLE PACKAGES.

As a manufacturer of both **Air Distribution Products** (grilles, diffusers, etc.) and **Air Control Products** (fire dampers, control dampers, louvers, etc.) Nailor can offer **Fire-Rated Packages** as an alternative to assembling separate components from potential separate manufacturers. Nailor is unique in that we can supply **Fire-Rated Packages** at a competitive price, all manufactured at the same facilities for fast lead times and guaranteed Nailor quality . . . no out-sourcing like other major manufacturers.

FEATURES AND BENEFITS:

- Complete package, including ceiling damper, grille, diffuser etc., factory assembled to save on installation time (and money!) and ensures proper assembly.
- Wide variety of quality Nailor diffuser and grille styles to choose from.
- UL and ULC Classified assemblies for use in restrained or unrestrained ceilings incorporating an exposed grid with up to a 3 hour rating.
- · Surface Mount package available for hard ceilings.
- · Approved for use with Class 0 or 1 Flexible Duct.
- Ductless Return Air grilles can be installed with no connecting ductwork, ideal for use when ceiling space is used for return air.

SOME OF THE NAILOR FIRE-RATED PACKAGES AVAILABLE:



SEE THE NAILOR AIR DISTRIBUTION PRODUCTS CATALOG FOR A COMPLETE SELECTION OF FIRE-RATED PACKAGES.

- ACCESSORY FOR CEILING DAMPERS
- FOR ROUND AND SQUARE NECK DIFFUSERS
- · UL CLASSIFIED

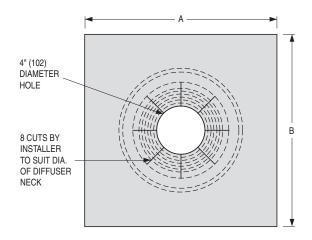
Models:

0725 For Round Neck Steel Diffusers0726 For Square Neck Steel Diffusers



Models 0725 & 0726

Models 0725 and 0726 Thermal Blankets are designed to insulate the exposed back pan area of a steel ceiling diffuser that may be used in UL Classified floor/ceiling or roof/ceiling assemblies with up to a 3 hour rating. The insulation protects the floor/roof structure above from the intense heat that radiates through the diffuser pan during fire conditions. A thermal blanket is used in conjunction with a ceiling radiation damper that protects the neck opening of the diffuser, to provide complete protection of the opening in the ceiling membrane. Model 0725 thermal blanket is for use with 0722 ceiling damper models in round neck applications. Model 0726 Thermal Blanket is for use with 0714, 0716 and 0720 ceiling damper models in square neck applications.



Model 0725: For round applications

| | ← A — ▶ | |
|---|----------------|---|
| 4" x 4" (102 x 102) HOLE | | |
| 4 CUTS BY INSTALLER TO SUIT SIZE — OF DIFFUSER NECK | | B |

Model 0726: For square applications

| Ceiling Diffuser Nominal Size (W x H) | | Blanket Size (A x B) | |
|---------------------------------------|----------------|----------------------|----------------|
| Imperial Modules | Metric Modules | Imperial Modules | Metric Modules |
| inches | mm | inches | mm |
| 12 x 12 | 305 x 305 | 16 x 16 | 406 x 406 |
| 24 x 12 | 610 x 305 | 28 x 16 | 711 x 406 |
| 24 x 24 | 610 x 610 | 28 x 28 | 711 x 711 |

NOTES:

- 1. Insulation: Non-asbestos UL Classified.
- 2. For use on the back of steel lay-in diffusers up to 24" x 24" (610 x 610) nominal face size.
- Installer to make cuts, as shown, to the desired size of the diffuser neck.

HOW TO ORDER

MODELS: 0725, 0726

THERMAL BLANKET ACCESSORY FOR STEEL DIFFUSERS - UL

EXAMPLE: 0725 - 24" x 24"

1. Models

0725 Thermal Blanket for Round Neck,

Steel Diffuser

0726 Thermal Blanket for Square Neck, Steel Diffuser 2. Ceiling Module Size

Width x Height or Diameter (inches [mm's])

12" x 12" (300 x 300) 24" x 12" (600 x 300)

24" x 24" (600 x 600)