

**CEILING DAMPER, DIFFUSER AND THERMAL BLANKET ASSEMBLY
FOR LAY-IN INSTALLATION WITH FLEXIBLE OR STEEL DUCT****QUALIFICATIONS:**

- UL 555C Classified Ceiling Damper. (File # 9660).
- CAN4-S112.2 Ceiling Firestop Flap Assemblies.
- California State Fire Marshal: Fire Damper Listing No. 3225-0935:102.
- City of New York Board of Standards and Appeals. Cal. No. 460-88-SA.
- Meets the requirements for NFPA 90A, IBC, BOCA, SBCCI, UBC, NBC (Canada) and associated local building codes.

**NOTES:**

1. Follow carefully the installation procedure shown on page 2 for flexible duct and page 3 for hard duct.
2. Before installing, open damper blades and install link between spring loaded wire clips. Do not bend or deform clips after assembly. If dampers are provided with link tabs instead of wire clips, install link and bend tabs to secure link in position.
3. The end tabs of the 2'-0" (610) cross T-Bar shall be bent back against the web of the 4'-0" (1219) cross T-Bars. The 4'-0" (1219) cross T-Bars must have slots in the web for connection of the 2'-0" (610) cross T-Bar.
4. Use No. 12 SWG galvanized steel hanger wires to independently support the ceiling T-Bars to the structural members of the floor or roof above. Ensure hanger wires are plumb and straight.
5. Maximum distance from face of ceiling to face of damper blade is 4" (102).
6. Maximum size of the Ceiling Damper/Ceiling Air Diffuser neck is 12" x 12" (305 x 305) for square hard duct and 14" (356) dia. for flexible duct installations.
Larger neck sizes require the duct to be independently supported. See IOM pages 5.050-5.051.
The Flexible Duct shall be Class 0 or 1 bearing the UL Classification marking. The maximum length of the duct shall not exceed 14'-0" (4267) in length. No portion of the duct shall rest on the back surface of the ceiling panels or tiles and a minimum of 4" (102) clearance must be maintained. Where the duct must be supported, use straps or No. 12 SWG steel hanger wires 4'-0" (1219) to 6'-0" (1829) o.c.
7. Caution should be observed so that the duct does not interfere with the operation of the Classified Ceiling Damper of the Ceiling Air Diffuser assembly.
8. No Diffuser shall be located in an adjacent 24" x 48" (610 x 1219) ceiling grid module.
9. Ceiling Damper/Ceiling Air Diffuser assemblies are for use in lieu of the hinged blade, sheet metal damper in steel ducts as specified in the "Design Information Section - General", and in the individual floor and roof ceiling design(s) being used, as illustrated and described in the current UL "Fire Resistance Directory".

**CEILING DAMPER, DIFFUSER AND THERMAL BLANKET ASSEMBLY
FOR LAY-IN INSTALLATION WITH FLEXIBLE DUCT.
MODELS: 0722 & 0722A.**

Slip ceiling damper over neck of diffuser and install screws (item 5) on equally spaced centers.

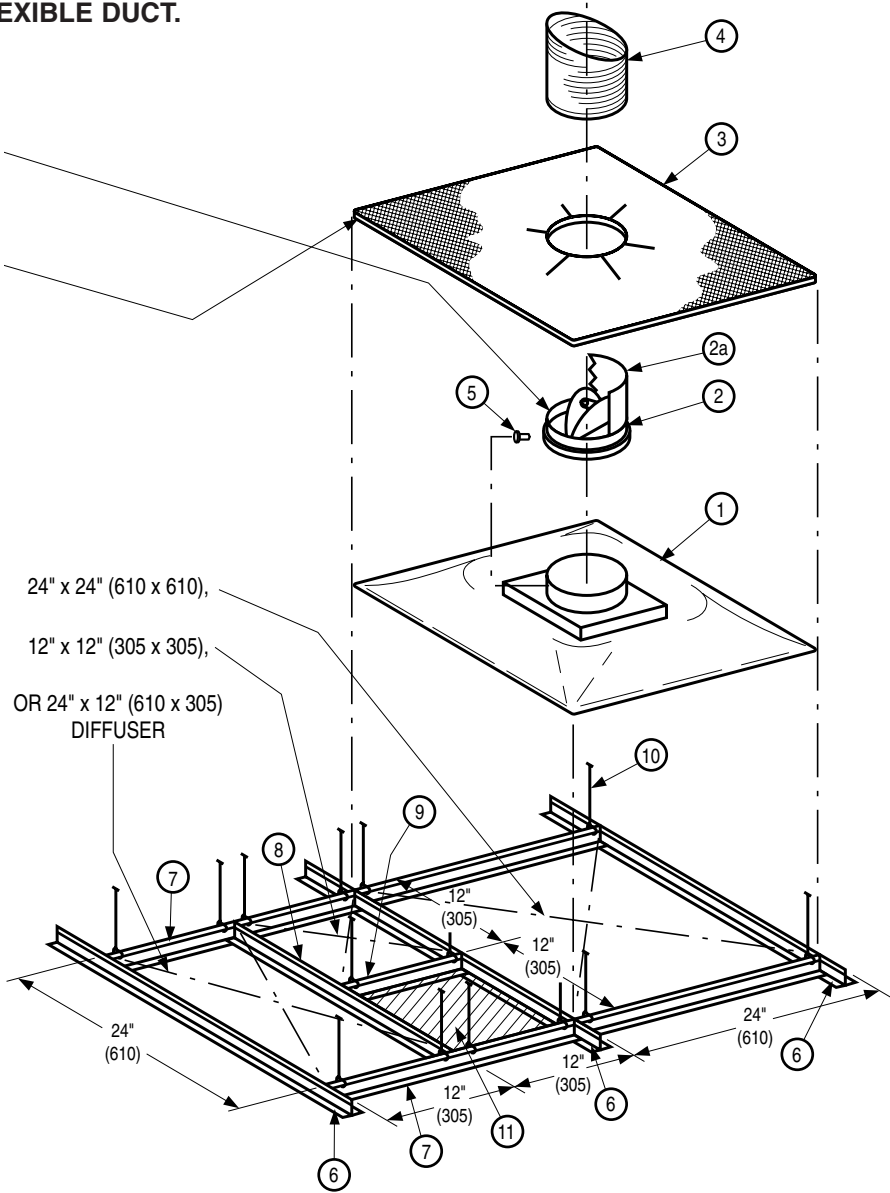
Place thermal blanket over ceiling damper and diffuser neck and set square with ceiling grid. Cut corners of blanket to clear hanger wires (item 10).

ITEMS:

1. Lay-in type steel diffuser with round neck or square-to-round adapter. (24 gauge minimum).
2. Ceiling damper.
- 2a. Ceiling damper with top extension.
3. Thermal blanket. (Model 0725).
4. UL Listed flexible duct.
5. #8 x 1/2" (13) sheet metal screws; equally spaced. Three required for 10" (254) dia. or less. Four required for 12" (305) and 14" (356) dia.
6. Main T-bar runner.
7. 4'-0" (1219) cross T-bar.
8. 2'-0" (610) T-bar.
9. 1'-0" (305) T-bar.
10. The 4 corners of the grid module in which the lay-in diffuser is installed shall have a hanger wire support.
11. Ceiling panel or tile set in ceiling grid.

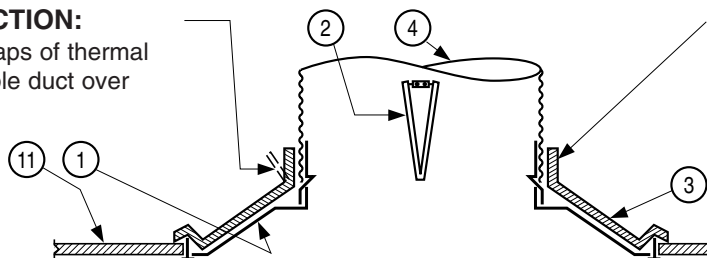
Combined diagram of typical ceiling grid layouts to suit 12" x 12" (305 x 305), 24" x 12" (610 x 305) or 24" x 24" (610 x 610) diffuser sizes as noted.

No diffusers shall be located in adjacent modules. Refer to notes on page 5.060.



DUCT CONNECTION:

Fold back neck flaps of thermal blanket, slip flexible duct over diffuser neck.



THERMAL BLANKET ATTACHMENT:

Replace neck flaps of thermal blanket over duct and fasten duct to neck over blanket using 18 SWG min. steel wire or steel clamp in accordance with duct manufacturer's installation instructions. Do not use bolts, screws or rivets.

CEILING DAMPER, DIFFUSER AND THERMAL BLANKET ASSEMBLY FOR LAY-IN INSTALLATION WITH RECTANGULAR STEEL DUCT. MODELS: 0714, 0716, 0716A, 0716-4, 0716-4A & 0720.

Slip ceiling damper over neck of diffuser and install screws (item 5) on equally spaced centers.

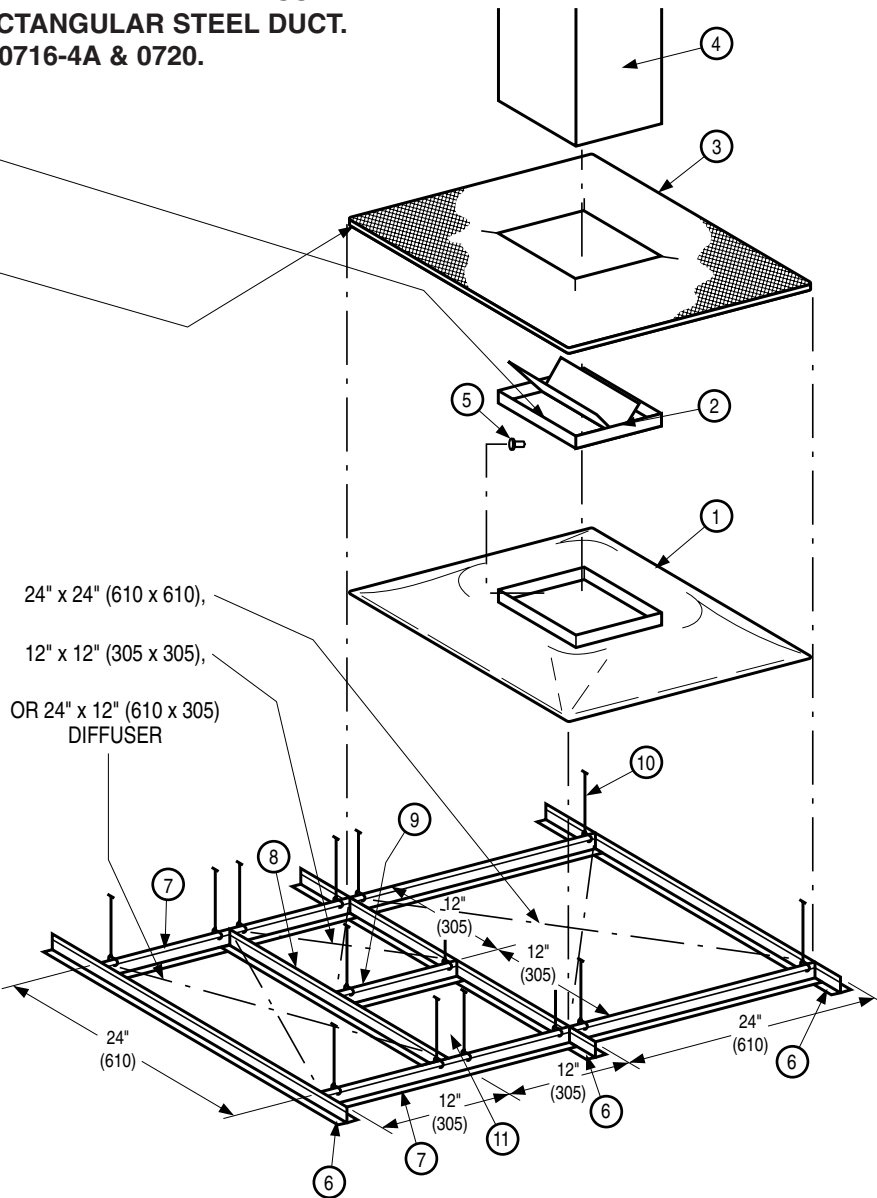
Place thermal blanket over ceiling damper and diffuser neck and set square with ceiling grid. Cut corners of blanket to clear hanger wires (item 10).

ITEMS:

1. Lay-in type steel diffuser with square or rectangular neck. (24 gauge min.).
2. Ceiling damper.
3. Thermal blanket. (Model 0726).
4. Steel duct drop.
5. #8 x 1/2" (13) sheet metal screws; equally spaced at 8" (203) o.c. maximum with at least one screw per side.
6. Main T-bar runner.
7. 4'-0" (1219) cross T-bar.
8. 2'-0" (610) T-bar.
9. 1'-0" (305) T-bar.
10. The 4 corners of the grid module in which the lay-in diffuser is installed shall have a hanger wire support.
11. Ceiling panel or tile set in ceiling grid.

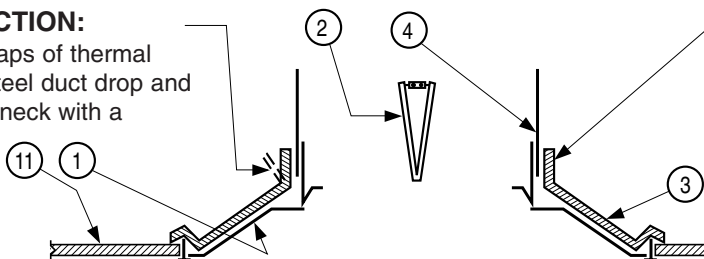
Combined diagram of typical ceiling grid layouts to suit 12" x 12" (305 x 305), 24" x 12" (610 x 305) or 24" x 24" (610 x 610) diffuser sizes as noted.

No diffusers shall be located in adjacent modules. Refer to notes on page 5.060.



DUCT CONNECTION:

Fold back neck flaps of thermal blanket, slip on steel duct drop and fasten to diffuser neck with a minimum of four #8 sheet metal screws, one per side.



THERMAL BLANKET ATTACHMENT:

Replace neck flaps of thermal blanket over duct and fasten using 18 SWG steel wire.



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