**CEILING RADIATION DAMPER**
FOR WOOD TRUSS CEILING ASSEMBLIES
GRILLE/DIFFUSER MOUNT • STEEL OR FIBERGLASS PLENUM BY OTHERS
**MODEL: 0757**

**QUALIFICATIONS:**

- **UL 263 CLASSIFIED CEILING RADIATION DAMPER. Category CABS. (File # R9660).**
- **1 hour rated for use in UL floor/ceiling design numbers L528/ L546/L550/L558/L562/L574/L576/L579/L581/L583/L585/M501/ M503 and roof/ceiling design numbers P531/P533/P538/P545/ P547/P552. (Other proprietary UL design numbers may be similar. Local approval by AHJ is required to use a Nailor design when not specified).**
- **Meets NFPA 90A requirements.**

## DESCRIPTION:

Ceiling dampers are designed to function as a heat barrier in air handling openings penetrating fire resistive membrane ceilings. Model Series 0757 has been especially designed and tested to provide protection and simple installation in specific UL design wood truss ceiling assemblies.

Model 0757 rectangular ceiling damper requires a field fabricated steel or fiberglass plenum (boot/register box) by others, that accommodates a steel grille, register or diffuser.

## STANDARD CONSTRUCTION:

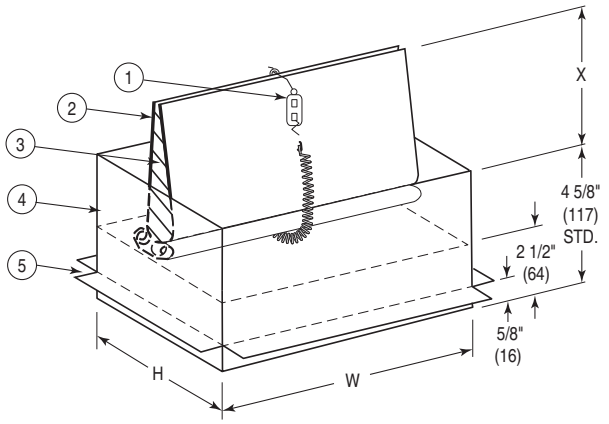
1. **Fusible Link:** UL Listed, 212°F (100°C), standard.
2. **Blades:** 22 ga. (0.85) G60 roll-formed galv. steel.
3. **Blade Insulation:** Non-asbestos UL Classified.
4. **Damper Frame:** 24 ga. (0.70) galvanized steel.
5. **Flange:** 7/8" (22) plaster flange.

## OPTIONS:

1. Non-standard temp. UL listed fusible link
   - ❑ **165** 165°F (74°C)
2. Damper Style:
   - ❑ **0716** Butterfly (Two Blades) Damper standard
   - ❑ **0714** Single Blade Damper
3. Installation Support Angles**.** 26" (660) long.
   - ❑ **ISA** 2 @ 3/4" x 3/4" x 16 ga. (19 x 19 x 1.6) or
   - ❑ **ISB** 2 @ 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85)

## NOTES:

1. See page 2 for Field Supplied Steel or Fiberglass Plenum construction details.
2. Shipped loose, the ceiling damper is a component of damper/ plenum box assembly.
3. See Models 0756 and 0757-CB/DB/EB for Factory Supplied Steel Plenum (by Nailor).




**NOTE:**
X = 1/2 THE LISTED HEIGHT – 1 7/8" (48)

**Note:**
0716 style damper shown. 0714 Single Blade, which places the damper out of the airstream, is also available.

## AVAILABLE SIZES:

Minimum: 6" W x 4" H (152 x 102).

Maximum with Steel Plenum:
16" W x 12" H, 12" W x 12" H or 14" W x 8" H (406 x 305, 305 x 305 or 356 x 203) dependent on plenum type.

Maximum with Fiberglass Plenum:
21" W x 18" H (533 x 457).

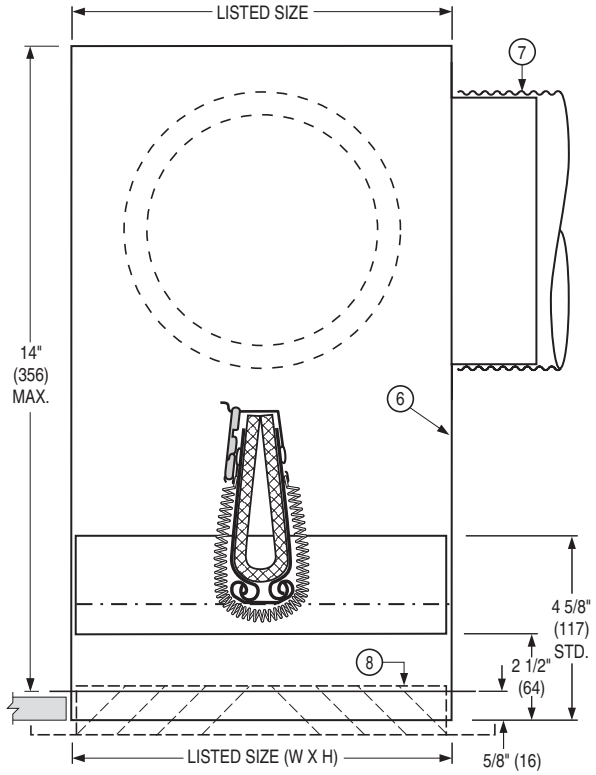
W x H = Nominal Grille/Register Size

For installation instructions, see IOM-CRD0757INST.

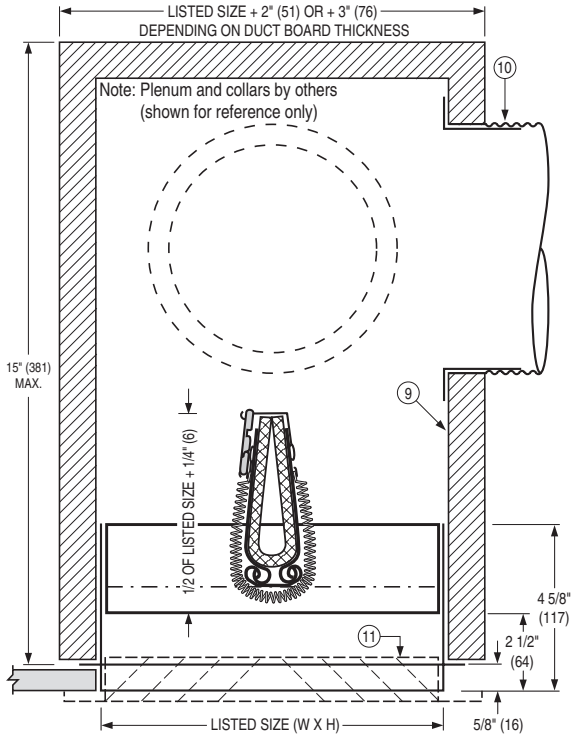
| | | | | |
|---|---|---|---|---|
| **SCHEDULE TYPE:** | Page 1 of 2<br>Dimensions are in inches (mm). | | | |
| **PROJECT:** | | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **2 - 4 - 22** | **0700** | **9 - 13 - 21** | **0757** |

**CEILING RADIATION DAMPER**
FOR WOOD TRUSS CEILING ASSEMBLIES
GRILLE/DIFFUSER MOUNT
STEEL OR FIBERGLASS PLENUM BY OTHERS
**MODEL: 0757**

❑ Steel Plenum (by OTHERS) (Type A shown)




❑ Fiberglass Plenum (by OTHERS)




| Plenum Construction | Plenum Type | Description/ Installation | Min. Damper Size | Max. Damper Size | Max. No. of Collars |
|---|---|---|---|---|---|
| Steel | A | 90° Side Inlet | 6 x 4 (152 x 102) | 16 x 12 (406 x 305) | 5 |
| | C | 90° Side Inlet, Insulated | 8 x 4 (203 x 102) | 12 x 12 (305 x 305) | 1 |
| | D | 90° Side Inlet, Tapered | 8 x 4 (203 x 102) | 14 x 8 (356 x 203) | 1 |
| | E | Tapered, Top Inlet | 8 x 4 (203 x 102) | 12 x 12 (305 x 305) | 1 |

## STEEL PLENUM

### CONSTRUCTION DETAILS:

6. Steel plenum/sub-frame:

   Uninsulated: 26 ga. (0.55) min. galv. steel with round connection collar.

   Insulated: 28 ga. (0.47) min. galv. steel

   Insulation: Semi rigid Type R-6, 1 1/2" (28) or Type R-8, 2" (51) fiberglass duct liner, min. density 1.5 pcf.

7. UL Classified Class 0 or I Flexible Air Duct connection by others.
8. Steel grille/register/diffuser, 26 ga. (0.55) min., (by Nailor or others). Bottom of damper sub-frame is flush with ceiling. Standard depth for grille clearance is 2 1/2" (64).

| Plenum Construction | Plenum Type | Description/ Installation | Min. Damper Size | Max. Damper Size | Max. No. of Collars |
|---|---|---|---|---|---|
| Fiberglass | A | 90°□ Side Inlet | 6 x 4 (152 x 102) | 21 x 18 (533 x 457) | 5 |

## FIBERGLASS PLENUM

### CONSTRUCTION DETAILS:

9. Fiberglass plenum/sub-frame:

   Duct Board: 1" - 1 1/2" (25 - 38), rigid (R4 - R6)

10. Cutting and Installation of collar for UL Classified Class 0 or I Flexible Air Duct connection by others.
11. Steel grille/register/diffuser, 26 ga. (0.55) min., (by Nailor or others). Bottom of damper sub-frame is flush with ceiling. Standard depth for grille clearance is 2 1/2" (64).

### NOTES:

1. See minimum/maximum damper size restriction by Plenum Construction/Plenum Type, above.
2. Refer to document IOM-CRD0757INST for Supplementary Installation Instructions for Field Fabrication of Steel or Fiberglass Plenums (by others).

For installation instructions, see IOM-CRD0757INST.

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|---|---|---|---|---|
| **SCHEDULE TYPE:** | Page 2 of 2<br>Dimensions are in inches (mm). | | | |
| **PROJECT:** | | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **2 - 4 - 22** | **0700** | **9 - 13 - 21** | **0757** |

# CEILING RADIATION DAMPER
FOR WOOD TRUSS CEILING ASSEMBLIES
DUCTED
STEEL OR FIBERGLASS PLENUM BY OTHERS
**MODEL: 0757D**

**QUALIFICATIONS:**

- **UL 263 CLASSIFIED CEILING RADIATION DAMPER. Category CABS. (File # R9660).**
- **1 hour rated for use in UL floor/ceiling design numbers L528/ L546/L550/L558/L562/L574/L576/L579/L581/L583/L585/M501/ M503 and roof/ceiling design numbers P531/P533/P538/P545/ P547/P552. (Other proprietary UL design numbers may be similar. Local approval by AHJ is required to use a Nailor design when not specified).**
- **Meets NFPA 90A requirements.**

## DESCRIPTION:

Ceiling dampers are designed to function as a heat barrier in air handling openings penetrating fire resistive membrane ceilings. The Model Series 0757D has been especially designed and tested to provide protection and simple installation in specific UL design wood truss ceiling assemblies.

Model 0757D is designed for installation in the supply (or return) ductwork take-off from an AHU where it penetrates the ceiling and provides a single or multiple-outlet plenum to feed Model 0757 supply ceiling damper grille/diffuser assemblies. May also be used as a return.

Model 0757D rectangular ceiling damper requires a field fabricated steel or fiberglass plenum with up to five outlet collars by others.

## STANDARD CONSTRUCTION:

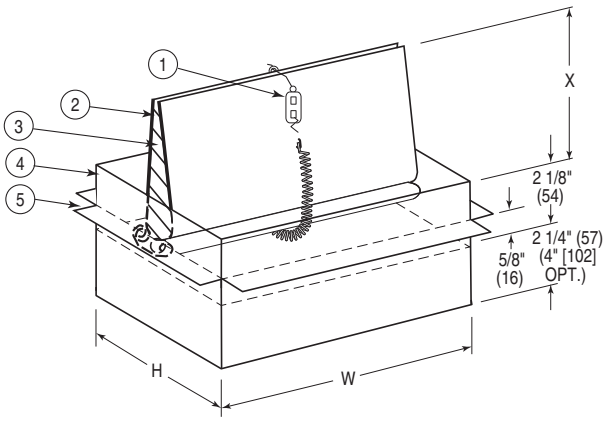
1. **Fusible Link:** UL Listed, 212°F (100°C), standard.
2. **Blades:** 22 ga. (0.85) G60 roll-formed galv. steel.
3. **Blade Insulation:** Non-asbestos UL Classified.
4. **Damper Frame:** 24 ga. (0.70) G60 galvanized steel.
5. **Flange:** 7/8" (22) plaster flange.

## OPTIONS:

1. Non-standard temp. UL listed fusible link
   - ❑ **165** 165°F (74°C)
2. Plaster Ground Extension:
   - ❑ **PG2** 2 1/4" (57) standard
   - ❑ **PG4** 4" (102) optional
3. Damper Style:
   - ❑ **0716** Butterfly (Two Blades) Damper standard
   - ❑ **0714** Single Blade Damper
   - ❑ **0720** Low Profile Curtain Damper
4. Installation Support Angles**.** 26" (660) long.
   - ❑ **ISA** 2 @ 3/4" x 3/4" x 16 ga. (19 x 19 x 1.6) or
   - ❑ **ISB** 2 @ 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85)

## NOTES:

1. See page 2 for Field Supplied Steel or Fiberglass Plenum (by others) construction details.
2. Ceiling damper is a component of damper/plenum box assembly.




**NOTE:**
X = 1/2 THE LISTED HEIGHT – 1 7/8" (48)

**Note:**
0716 Butterfly Type damper shown is standard. 0714 Single Blade or 0720 Low Profile Curtain Damper also available.

## AVAILABLE SIZES:

Minimum: 6" W x 4" H (152 x 102).

Maximum with Steel Plenum:
18" W x 18" H (457 x 457).

Maximum with Fiberglass Plenum:
21" W x 18" H (533 x 457).

W x H = Listed Size

For installation instructions, see IOM-CRD0757INST.

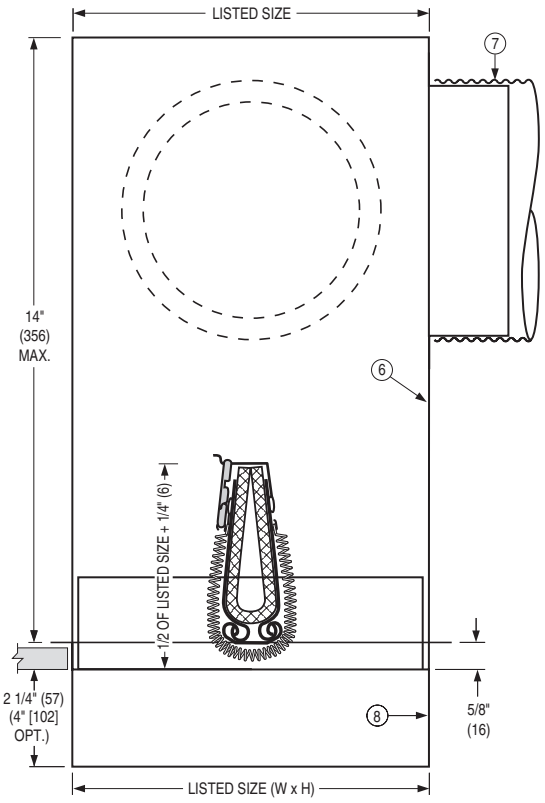
| | | | | |
|---|---|---|---|---|
| **SCHEDULE TYPE:** | Page 1 of 2<br>Dimensions are in inches (mm). | | | |
| **PROJECT:** | | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **1 - 21 - 22** | **0700** | **11 - 30 - 21** | **0757D** |

# Nailor Industries Inc.

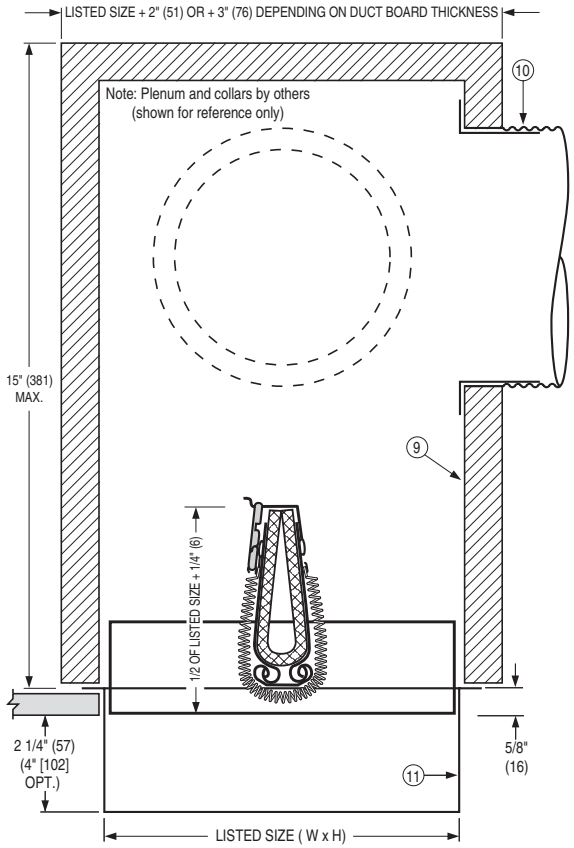
## CEILING RADIATION DAMPER
FOR WOOD TRUSS CEILING ASSEMBLIES
DUCTED
STEEL OR FIBERGLASS PLENUM BY OTHERS
**MODEL: 0757D**

CLASSIFIED C UL US

❑ Steel Plenum (by OTHERS) (Type B shown)




❑ Fiberglass Plenum (by OTHERS)




| Plenum Construction | Plenum Type | Description/ Installation | Min. Damper Size | Max. Damper Size | Max. Number of Collars[2] |
|---|---|---|---|---|---|
| Steel | B | Ducted, 90° Side Outlet | 6 x 4 (152 x 102) | 18 x 18 (457 x 457) | 5 |

| Plenum Construction | Plenum Type | Description/ Installation | Min. Damper Size | Max. Damper Size | Max. Number of Collars[2] |
|---|---|---|---|---|---|
| Fiberglass | B | Ducted, 90° Side Outlet | 6 x 4 (152 x 102) | 21 x 18 (533 x 457) | 5 |

## STEEL PLENUM

### CONSTRUCTION DETAILS:

6. Steel plenum/sub-frame:

   Uninsulated: 26 ga. (0.55) min. galv. steel with round connection collar.

7. UL Classified Class 0 or I Flexible Air Duct connection by others.
8. Damper sleeve is extended below ceiling for ducted connection.

## FIBERGLASS PLENUM

### CONSTRUCTION DETAILS:

9. Fiberglass plenum/sub-frame:

   Duct Board: 1" - 1 1/2" (25 - 38), rigid (R4 - R6)

10. Cutting and Installation of collar for UL Classified Class 0 or I Flexible Air Duct connection by others.
11. Damper sleeve is extended below ceiling for ducted connection.

### NOTES:

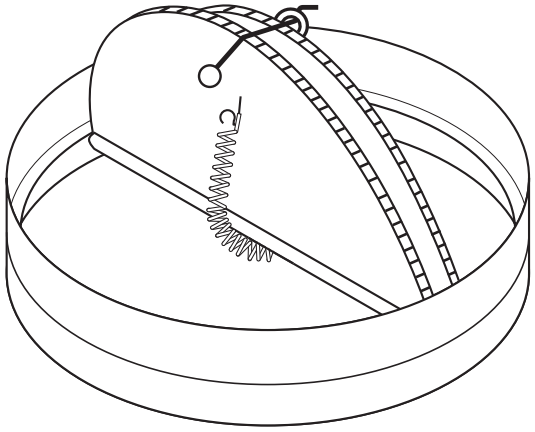
1. See minimum/maximum damper size restriction by Plenum Construction/Plenum Type, above.
2. Refer to document IOM-CRD0757INST for Supplementary Installation Instructions for Field Fabrication of Steel or Fiberglass Plenums (by others).

| | | | | |
|---|---|---|---|---|
| **SCHEDULE TYPE:** | Page 2 of 2 | | | |
| **PROJECT:** | Dimensions are in inches (mm). | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **1 - 21 - 22** | **0700** | **11 - 30 - 21** | **0757D** |

# CEILING RADIATION DAMPER
FOR WOOD TRUSS CEILING ASSEMBLIES
GRILLE/DIFFUSER MOUNT • INSULATED
STEEL PLENUM BY OTHERS
**MODEL: 0763**

**QUALIFICATIONS:**

- **UL 263 CLASSIFIED CEILING RADIATION DAMPER. Category CABS. (File # R9660).**
- **1 hour rated for use in UL floor/ceiling design numbers L528/L546/L550/L558/L574/L576/L579/L581/L583/L585/ M503 and roof/ceiling design numbers P531/P533/P545/ P547/P552. (Other proprietary UL design numbers may be similar. Local approval by AHJ is required to use a Nailor design when not specified).**
- **Meets NFPA 90A requirements.**



## DESCRIPTION:

Ceiling dampers are designed to function as a heat barrier in air handling openings penetrating fire resistive membrane ceilings. Model Series 0763 has been especially designed and tested to provide protection and simple installation in specific UL design wood truss ceiling assemblies.

The 0763 assembly consists of a ceiling damper mounted in the round inlet collar of an internally insulated field fabricated sheet metal plenum (boot/register box), by others, that accommodates a steel grille, register or diffuser.

## STANDARD CONSTRUCTION:

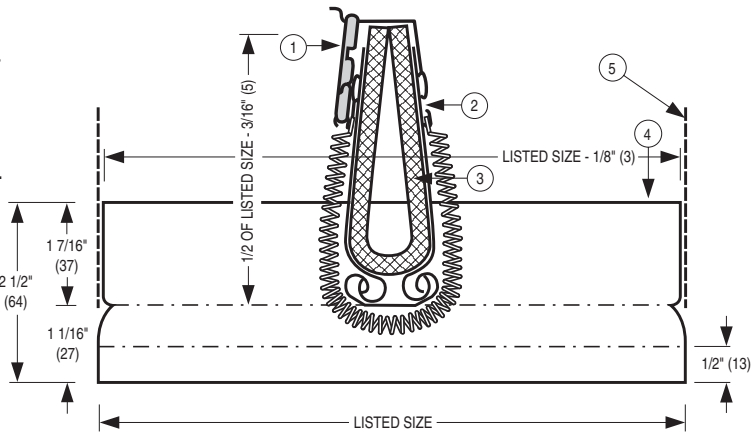
| | |
|---|---|
| **1. Fusible Link:** | UL Listed, 212°F (100°C), standard. |
| **2. Blades:** | 22 ga. (0.85) G60 roll-formed galvanized steel. |
| **3. Blade Insulation:** | Non-asbestos UL Classified. |
| **4. Damper Frame:** | 22 ga. (0.85) G60 galv. steel. |
| **5. Plenum Collar:** | By others. |

## OPTIONS:

1. Non-standard temp. UL listed fusible link
   - ❑ **165** 165°F (74°C)
2. Installation Support Angles**.** 26" (660) long.
   - ❑ **ISA** 2 @ 3/4" x 3/4" x 16 ga. (19 x 19 x 1.6) or
   - ❑ **ISB** 2 @ 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85)

## NOTES:

1. See page 2 for Field Supplied Steel or Fiberglass Plenum construction details.
2. Shipped loose, the ceiling damper is a component of damper/plenum box assembly.
3. See Models 0763-FB/GB for Factory Supplied Steel Plenum (by Nailor).




## AVAILABLE SIZES:

4", 5", 6", 7", 8" (102, 127, 152, 178, 203) diameter.

For installation instructions, see IOM-CRD0763INST.

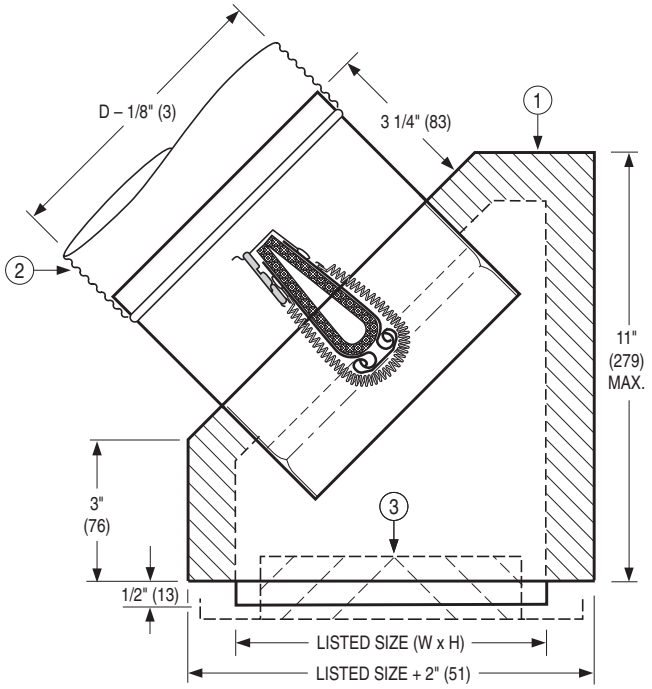
| | | | | |
|---|---|---|---|---|
| **SCHEDULE TYPE:** | Page 1 of 2 | | | |
| **PROJECT:** | Dimensions are in inches (mm). | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **9 - 13 - 21** | **0700** | **7 - 11 - 16** | **0763** |

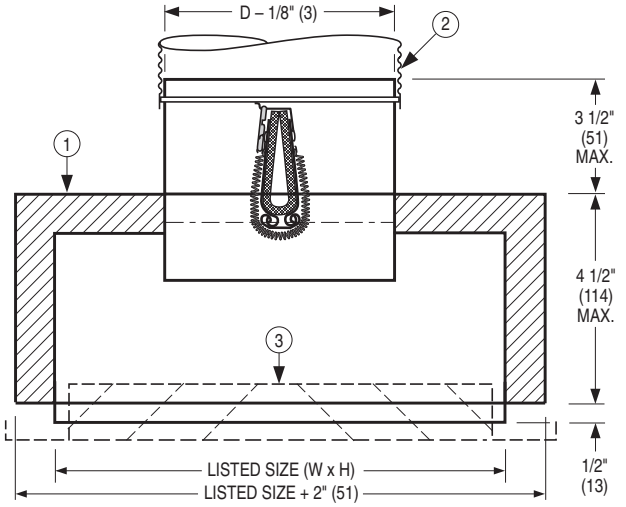
# CEILING RADIATION DAMPER
FOR WOOD TRUSS CEILING ASSEMBLIES
GRILLE/DIFFUSER MOUNT
INSULATED STEEL PLENUM BY OTHERS
**MODEL: 0763**

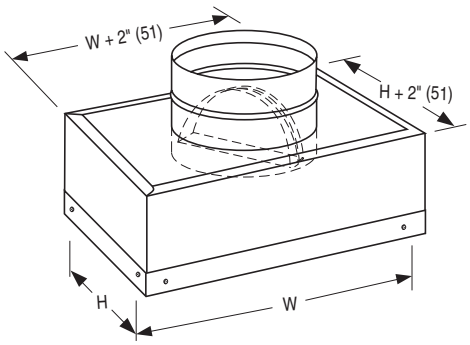
Nailor Industries Inc.

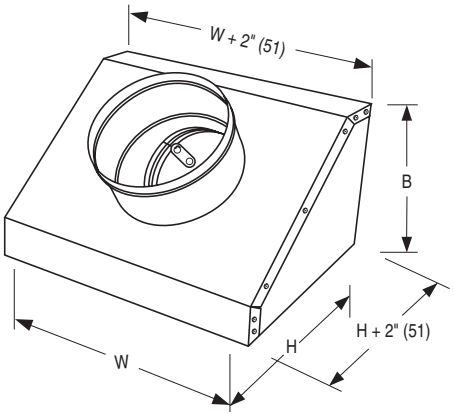
CLASSIFIED C UL US

❑ 45° Inlet, Insulated Type F Steel Plenum (by OTHERS) ❑ Top Inlet, Insulated Type G Steel Plenum (by OTHERS)




| Plenum Construction | Plenum Type | Description/ Installation | Min. Size | Min. Damper Size | Max. Size | Max. Damper Size | Max. No. of Collars |
|---|---|---|---|---|---|---|---|
| Steel, Insulated | F | 45° Inlet | 8 x 4 (203 x 102) | 4 (102) | 14 x 6 (356 x 152) | 8 (203) Dia. | 1 |
| | G | Top Inlet | 8 x 4 (203 x 102) | 4 (102) | 14 x 8 (356 x 203) | 8 (203) Dia. | 1 |

## PLENUM CONSTRUCTION DETAILS:

Steel plenum/sub-frame:

1. 28 ga. (0.47) minimum galvanized steel, Insulation: Semi rigid Type R-6, 1 1/2" (28) or Type R-8, 2" (51) fiberglass duct liner, minimum density 1.5 pcf.
2. UL Classified Class 0 or I Flexible Air Duct connection by others.
3. Steel grille/register/diffuser, 26 ga. (0.55) minimum. Bottom of damper sub-frame is flush with ceiling. Standard depth for grille clearance is 2" (51).

## NOTES:

1. See minimum/maximum damper size restriction by Plenum Construction/Plenum Type, above.
2. Refer to document IOM-CRD0763INST for Supplementary Installation Instructions for Field Fabrication of Steel Plenums (by others).

For installation instructions, see IOM-CRD0763INST.

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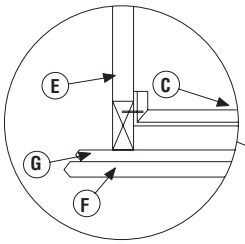
|---|---|---|---|---|
| **SCHEDULE TYPE:** | Page 2 of 2<br>Dimensions are in inches (mm). | | | |
| **PROJECT:** | | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **9 - 13 - 21** | **0700** | **7 - 11 - 16** | **0763** |

**INSTALLATION INSTRUCTIONS**
CEILING RADIATION DAMPERS
FOR USE IN WOOD TRUSS ASSEMBLIES
UL DESIGN NUMBERS L528, L546, L550, L558, L562, L574, L576, L579, L581, L583, L585, M501, M503, P531, P533, P538, P545, P547, P552
**MODELS: 0757 AND 0757D**

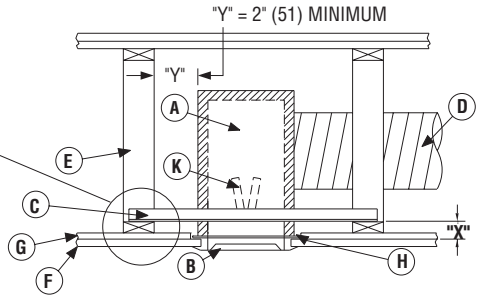
FIBERGLASS DUCTBOARD PLENUM:

- (A) Fiberglass ductboard plenum, by others.
- (B) Steel frame Grille/Diffuser, 26 ga. (0.55) minimum, see note 6
- (C) 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) or 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85) Support Angle (2 sides), see notes 2 & 3
- (D) Flex Duct UL Classified Air Duct (Class 0 or 1)
- (E) Wood Truss (refer to specific UL Design No.)
- (F) 5/8" (16) Gypsum Wallboard (refer to specific UL Design No.)
- (G) RC Channel
- (H) Plaster Flange
- (I) 1" x 1" x 22 ga. (25 x 25 x .85) Retaining Angle (min.) on all 4 sides
- (J) Air Duct
- (K) Ceiling Damper (1 or 2 blades, or curtain type)

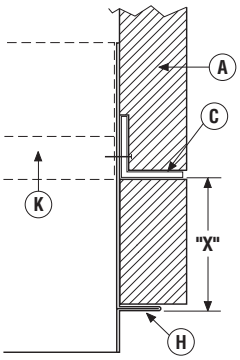
Refer to the UL Classification Marking on the Product



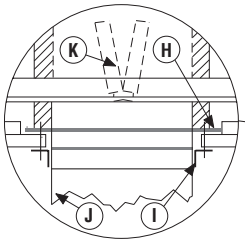

**DETAIL B**



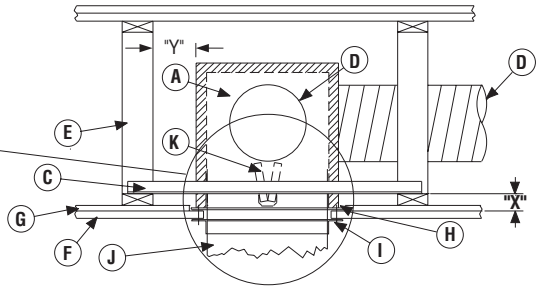

**END VIEW WITH GRILLE** (0757)



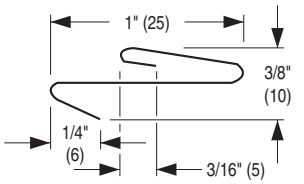

**DETAIL A**




**DETAIL C**




**END VIEW WITH DUCT** (0757D)




**Standard 26 Ga. Boot Rail**

**Alternate installation using standard boot rail.**
**Model 0757 only with 1 or 2 blade or curtain type damper.**

Damper may be installed using standard boot rail.
Rails to be installed on opposite sides of boot and attached to the bottom cord of the truss using 16D nails or screws a minimum of 2" (51) long. Max. size 14" x 8" (356 x 203).

**Opening Sizes:**

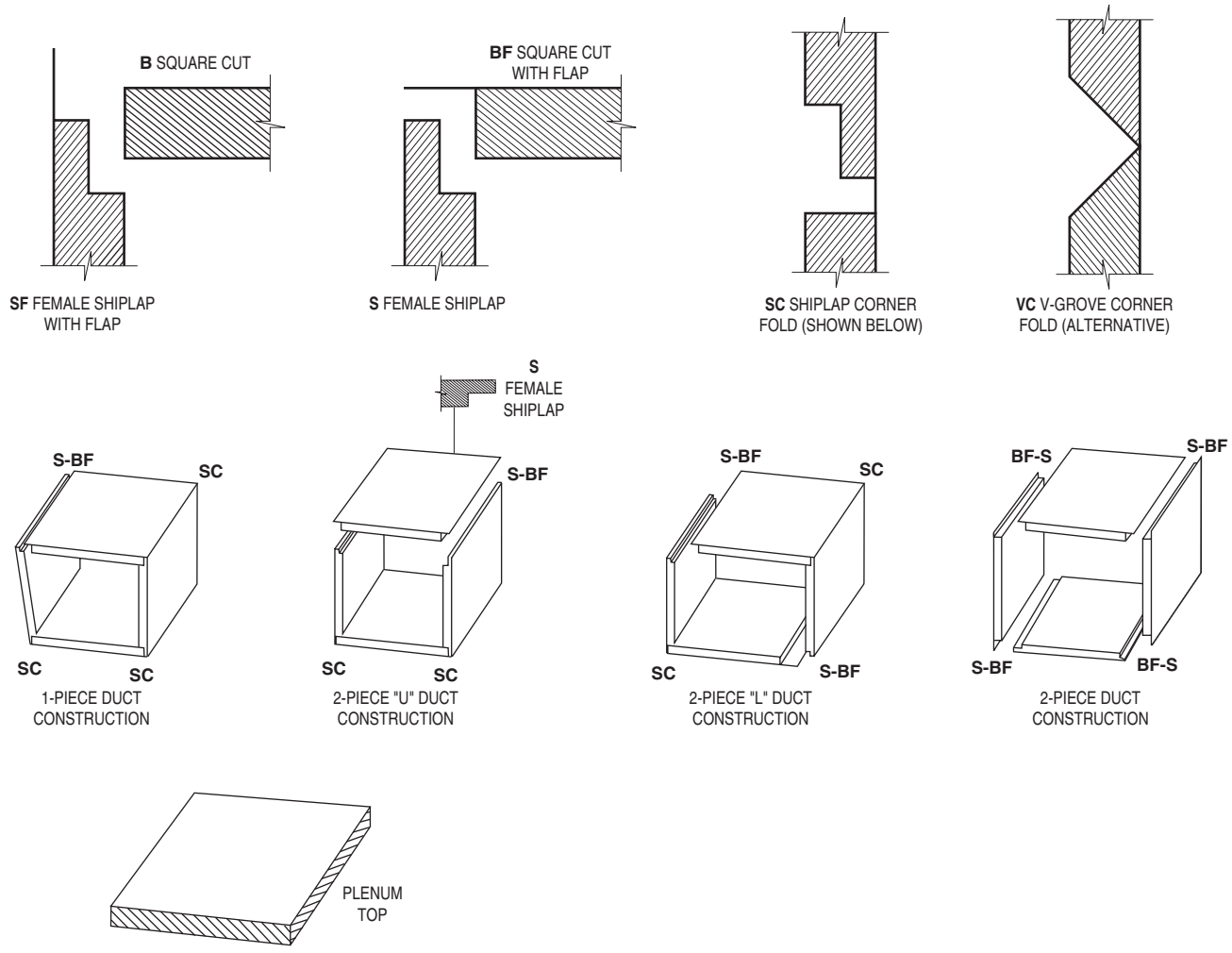
| Minimum | Maximum |
|---|---|
| 6" W x 4" H (152 x 102) | 21" W x 18" H (533 x 457) |

**NOTES:**

1. Before installing, open damper blades and install fusible 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.
2. Attach 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) or 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85) support angles to sub-frame with a minimum of two #8 screws or 3/16" (5) dia. steel pop rivets or spot welds each side. Distance from bottom of angle to bottom of plaster flange (X) should be the combined thickness of the wood truss member and the RC channel (See Detail A). **Make sure fasteners do not interfere with damper operation.**
3. Install assembly between trusses as shown in End View and attach support angles to truss lower members using 1 1/4" (32) long type S steel screws or similar. See Detail C for alternate end view with duct (0757D). See Detail B for alternate support angle attachment method. Minimum clearance (Dimension "Y") between damper assembly and wood truss is 2" (51).
4. Ceiling penetrations should be located between adjacent trusses and RC channels. If required, a maximum of one RC channel may be cut or notched to enable proper damper location. The clearance between the damper assembly and the cutout in the ceiling material shall be a maximum of 1/8" (3) on any side.
5. Flex duct shall be UL Classified Air Duct Class 0 or Class 1 and shall be attached to the plenum collar with steel clamps, plastic straps, or minimum 18 gauge steel wire.
6. Grille Mount Installation: The grille/diffuser frame shall be 26 ga. (0.55) minimum steel and shall be attached with a minimum of two #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange.
7. Ducted Installation: Retaining angles shall be attached with a minimum of two #8 screws per side into the damper sleeve or into the plaster flange.
8. Refer to UL Fire Resistance Directory Vol. I for details on UL Floor/Ceiling Design No.'s L528, L546, L550, L558, L562, L574, L576, L579, L581, L583, L585, M501, M503 and Roof/Ceiling Design No.'s P531, P533, P538, P545, P547, P552, 1 Hour Fire Rating.

Dimensions are in inches (mm).

## SUPPLEMENTARY INSTALLATION INSTRUCTIONS
FABRICATION OF FIBERGLASS DUCTBOARD PLENUM

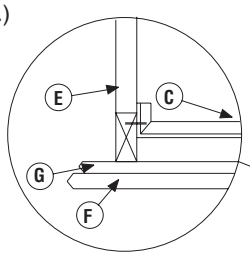



### NOTES:

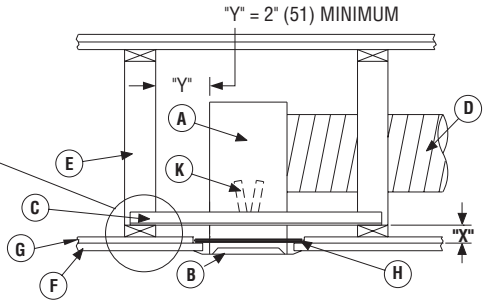
1. Fiberglass ductboard shall be UL 181 listed and have a density of 4 lbs. per cubic foot and a minimum thickness of 7/8" (22).
2. Edge and corner preparation shall be in accordance with details shown above. Plenum top shall be fabricated and attached using similar method, S-BF or BF-S.
3. Corner sealing tape shall be UL 181 listed and a minimum of 2" (51) wide.
4. Plenum shall be attached to the ceiling damper sub-frame using UL 181 listed tape.
5. Refer to page 1 of 6, for ceiling damper installation detail.
6. The 0757(D) Series ceiling Radiation Damper is classified for use in specific wood truss ceiling assemblies. See UL Fire Resistance Directory for Floor/Ceiling design No.'s L528, L546, L550, L558, L562, L574, L576, L579, L581, L583, L585, M501, M503 and Roof/Ceiling design No.'s P531, P533, P538, P545, P547, P552.

STEEL PLENUM:

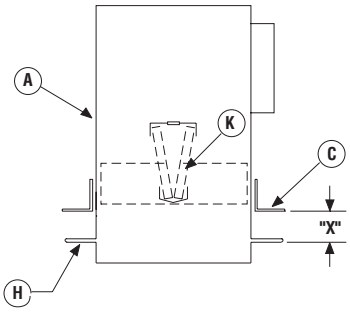
- (A) Steel Plenum, (Register Boot/Box), by others, Min. 26 ga. (0.55) galvanized steel uninsulated Min. 28 ga. (0.47) galvanized steel insulated
- (B) Steel frame Grille/Diffuser, 26 ga. (0.55) min., see note 6
- (C) 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) or 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85) Support Angle (2 sides), see notes 2 & 3
- (D) Flex Duct UL Classified Air Duct (Class 0 or 1)
- (E) Wood Truss (refer to specific UL Design No.)
- (F) 5/8" (16) Gypsum Wallboard (refer to specific UL Design No.)
- (G) RC Channel
- (H) Plaster flange
- (I) 1" x 1" x 22 ga. (25 x 25 x .85) Retaining Angle (min.) on all 4 sides
- (J) Air Duct
- (K) Ceiling Damper (1 or 2 blades, or curtain type)



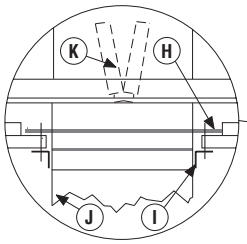

**DETAIL B**



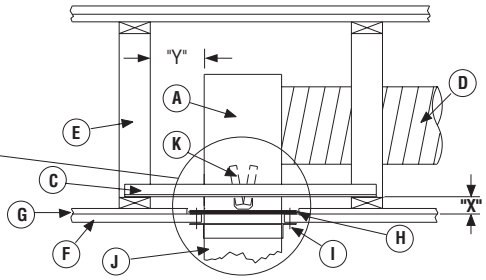

**END VIEW WITH GRILLE** (0757)




**DETAIL A**




**DETAIL C**




**END VIEW WITH DUCT** (0757D)

**NOTES:**

1. Before installing, open damper blades and install fusible 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.
2. Attach 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) or 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85) support angles to steel plenum with a minimum of two #8 screws or 3/16" (5) dia. steel pop rivets or spot welds each side. Distance from bottom of angle to bottom of plaster flange (X) should be the combined thickness of the wood truss member and the RC channel (See Detail A). **Make sure fasteners do not interfere with damper operation.**
3. Install assembly between trusses as shown in End View and attach support angles to truss lower members using 1 1/4" (32) long type S steel screws or similar. See Detail C for alternate end view with duct (0757D). See Detail B for alternate support angle attachment method. Minimum clearance (Dimension "Y") between damper assembly and wood truss is 2" (51).
4. Ceiling penetrations should be located between adjacent trusses and RC channels. If required, a maximum of one RC channel may be cut or notched to enable proper damper location. The clearance between the damper assembly and the cutout in the ceiling material shall be a maximum of 1/8" (3) on any side.
5. Flex duct shall be UL Classified Air Duct Class 0 or Class 1 and shall be attached to the plenum collar with steel clamps, plastic straps, or minimum 18 gauge steel wire.
6. Grille Mount Installation: The grille/diffuser frame shall be 26 ga. (0.55) minimum steel and shall be attached with a minimum of two #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange.
7. Ducted Installation: Retaining angles shall be attached with a minimum of two #8 screws per side into the damper sleeve or into the plaster flange.
8. The grille/diffuser frame shall be 26 gauge (0.55) minimum steel and shall be attached with a minimum of two #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange.
9. See table on page 4 of 6 for sizing details.
10. Refer to UL Fire Resistance Directory Vol. I for details on UL Floor/Ceiling Design No.'s L528, L546, L550, L558, L562, L574, L576, L579, L581, L583, L585, M501, M503 and Roof/Ceiling Design No.'s P531, P533, P538, P545, P547, P552, 1 Hour Fire Rating.

Dimensions are in inches (mm).

## SUPPLEMENTARY INSTALLATION INSTRUCTIONS
FABRICATION OF STEEL PLENUM

1 OR 2 BLADE STYLE DAMPERS:

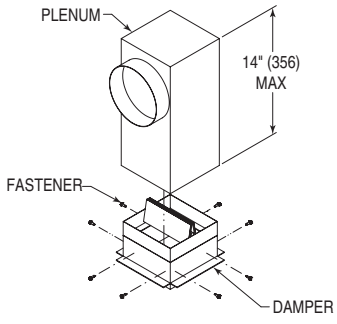



**FIGURE 1A**
MODEL 0757 - TYPE A PLENUM

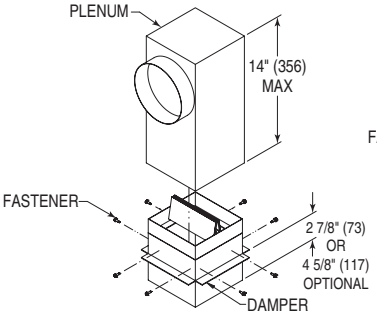
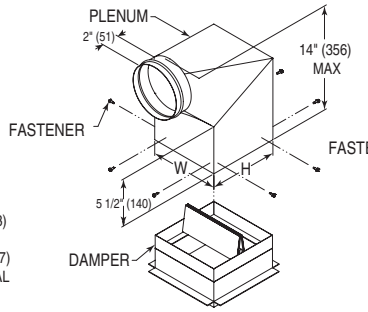
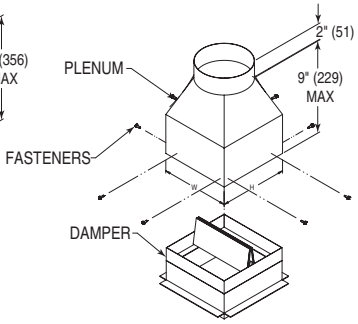



**FIGURE 1B**
MODEL 0757D - TYPE B PLENUM

ALTERNATE PLENUM DETAILS:




MODEL 0757 - TYPE D PLENUM




MODEL 0757 - TYPE E PLENUM

CURTAIN STYLE DAMPERS:

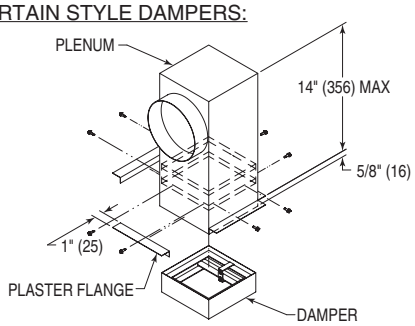



**FIGURE 2A**
MODEL 0757 - TYPE A PLENUM

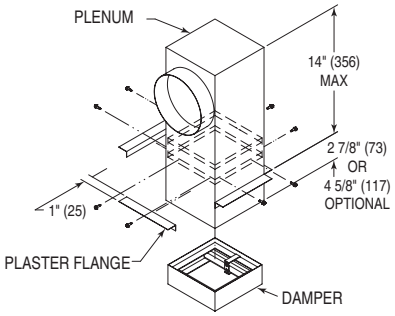



**FIGURE 2B**
MODEL 0757D - TYPE B PLENUM

INSULATED PLENUM DETAILS (DAMPER NOT SHOWN):

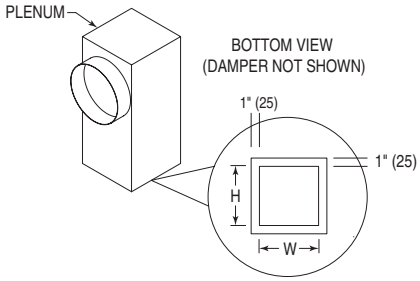
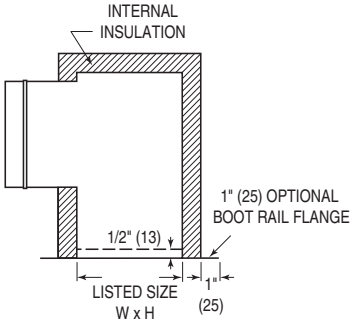



**FIGURE 3**
MODEL 0757 - TYPE C INSULATED PLENUM




| Plenum Type | Description/ Installation | Min. Inside Plenum Dim. | Max. Damper Size | Max. Inside Plenum Dim. | Max. Inlet/Outlet Collar Size | Max. Number of Collars | Max. Overall Height |
|---|---|---|---|---|---|---|---|
| **A** | Grille Mount | 6 x 4 (152 x 102) | 16 x 12 (406 x 305) | 16 x 12 (406 x 305) | 10 (254) Dia. | 5 | 14 (356) |
| **B** | Ducted | 6 x 4 (152 x 102) | 18 x 18 (457 x 457) | 18 x 18 (457 x 457) | 10 (254) Dia. | 5 | 14 (356) |
| **C** | Insulated, 90° Side Inlet | 8 x 4 (203 x 102) | 12 x 12 (305 x 305) | 12 x 12 (305 x 305) | 10 (254) Dia. | 1 | 14 (356) |
| **D** | Tapered, 90° Side Inlet | 8 x 4 (203 x 102) | 14 x 8 (356 x 203) | 14 x 8 (356 x 203) | 10 (254) Dia. | 1 | 14 (356) |
| **E** | Tapered, Top Inlet | 8 x 4 (203 x 102) | 12 x 12 (305 x 305) | 12 x 12 (305 x 305) | 10 (254) Dia. | 1 | 11 (279) |

**NOTES:**

1. The steel plenum box and top shall be a minimum of 26 ga. (0.55) galvanized steel for uninsulated plenums, or minimum of 28 ga. (0.47) for insulated plenums, fastened together per SMACNA HVAC Duct Construction Standards, 4" (102) max. OC. In addition, the plenum top must be fastened 1" (25) max. from each side edge.
2. The inside dimensions (W x H) of the steel plenum shall be sized no greater than 1/8" (3) larger than the damper frame.
3. Duct outlet collars shall be round, oval, square, or rectangular, 78 1/2 sq. in. (50.6 sq. cm.) maximum per outlet per side with a maximum of 5 outlets with a combined area of 236 sq. in. (152 sq. cm.) for Plenum Type A or B, see chart above for alternate plenum type details. Outlet collars are not permitted on plenum box top for Type A or B plenums.
4. The damper is to be attached to the steel plenum box using steel rivets, spot welds, lock forms, or sheet metal screws 4" (102) max. OC, equally spaced around the circumference of the plenum box collar. Make sure fasteners do not interfere with damper operation.
5. For insulated plenums (Type C), attach the damper plaster flange to the bottom side of the plenum box, see Figure 3 above details. Fasten damper to plenum using self-piercing steel rivets, 4" (102) max. OC, equally spaced around the plenum box.
6. For insulated plenums (Type C), insulation shall be semi rigid Type R-6, 1 1/2" (28) or Type R-8, 2" (51) fiberglass duct liner, minimum density 1.5 pcf. Insulation is self-supporting within plenum box. All internal surfaces must be lined with insulation, excluding outlet collar. The bottom edge of the insulation is trapped by a lip that is formed on the plenum box that extends a min. of 1" (25) from the inner edge of the opening to the outer edge of the box and extends a min. of 1/2" (13) up into the opening. See detail above.
7. Optionally, Plenum Types D & E can also be insulated per requirements in note 5 & 6.
8. For curtain style ceiling dampers, a 1" x 1" x 22 ga. (25 x 25 x 0.85) min. plaster flange is secured to the plenum box using spot welds, self-piercing steel rivets, or sheet metal screws, spaced max. 6" (152) max. OC, 2" (51) from each corner (See Figure 2A or 2B).
9. Refer to page 3 of 6, document IOM-CRD0757INST for ceiling damper installation detail.
10. The 0757(D) Series Ceiling Radiation Damper is classified for use in specific wood truss ceiling assemblies. See UL Fire Resistance Directory for Floor/Ceiling design No.'s L528, L546, L550, L558, L562, L574, L576, L579, L581, L583, L585, M501, M503 and Roof/Ceiling design No.'s P531, P533, P538, P545, P547, P552.

Nailor® Industries Inc.

**Houston, Texas**
Tel: 281-590-1172
Fax: 281-590-3086

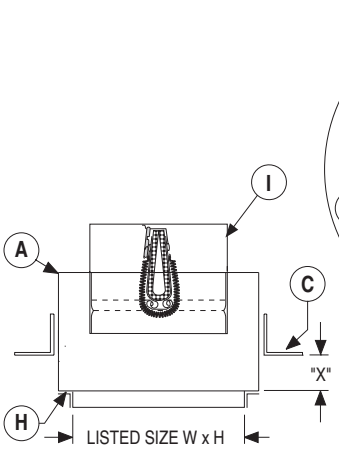
**Las Vegas, Nevada**
Tel: 702-648-5400
Fax: 702-638-0400

**Toronto, Canada**
Tel: 416-744-3300
Fax: 416-744-3360

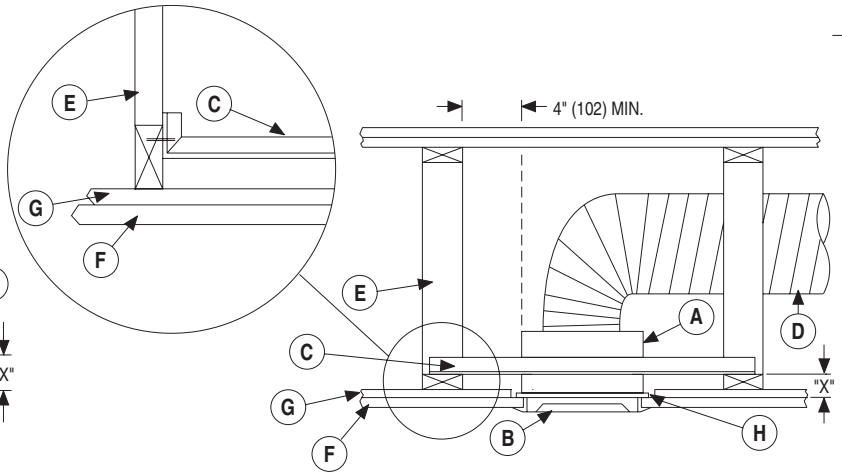
**Calgary, Canada**
Tel: 403-279-8619
Fax: 403-279-5035

**INSTALLATION INSTRUCTIONS**
CEILING RADIATION DAMPERS
FOR USE IN WOOD TRUSS ASSEMBLIES
UL DESIGN NUMBERS L528, L546, L550, L558, L574, L576, L579, L581, L583, L585, M503, P531, P533, P545, P547, P552
**MODEL: 0763**

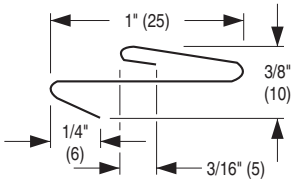
- (A) Steel Register box (boot), by others, Min. 28 ga. (0.474) insulated.
- (B) Steel frame Grille/Register, 26 ga. (0.55) minimum, see note 6
- (C) 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) or 1 1/2" x 1 1/2" x 22 ga (38 x 38 x 0.85) Support Angle (2 sides), see notes 2 & 3
- (D) Flex Duct UL Classified Air Duct (Class 0 or 1)
- (E) Wood Truss (refer to specific UL Design No.)
- (F) 5/8" (16) Gypsum Wallboard (refer to specific UL Design No.)
- (G) RC Channel
- (H) Plaster Frame
- (I) Round Ceiling Damper




**DETAIL B**




**END VIEW WITH GRILLE**




**Std. 26 Ga. Boot Rail**

**Alternate installation using standard boot rail. Model 0763.**

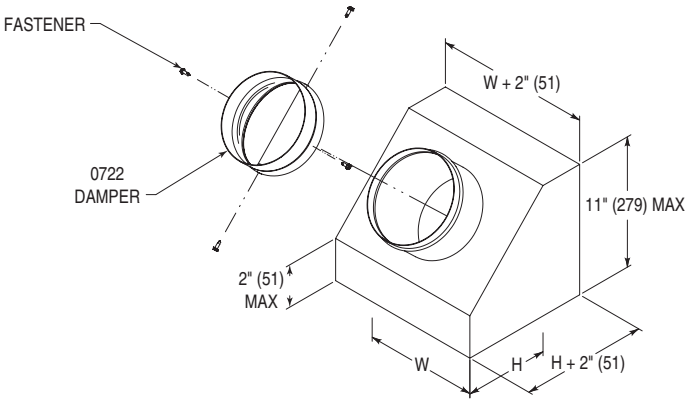
Damper may be installed using standard boot rail. Rails to be installed on opposite sides of boot and attached to the bottom cord of the truss using 16D nails or screws a minimum of 2" (51) long. Maximum size 14" x 8" (356 x 203).

## NOTES:

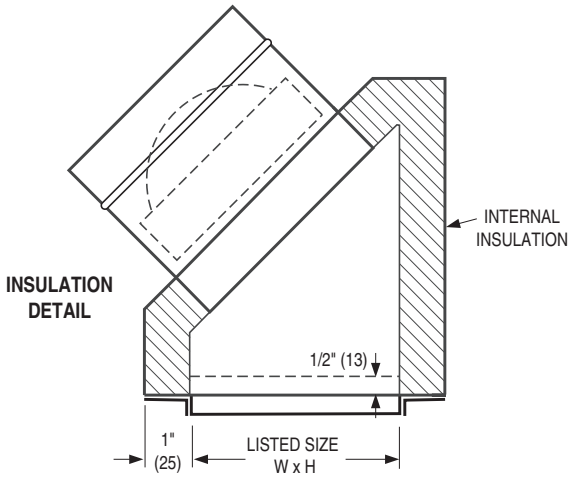
1. Before installing, open damper blades and install fusible link between spring loaded wire clips. Do not bend or deform clips after assembly. If dampers are provided with link tabs instead of wire clips, install link and bend tabs to secure link in position.
2. Attach 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) or 1 1/2" x 1 1/2" x 22 ga. (38 x 38 x 0.85) support angles to steel register box with a minimum of two #8 screws or 3/16" (5) dia. steel rivets or spot welds each side. Distance from bottom of angle to bottom of plaster flange (X) should be the combined thickness of the wood truss member and the RC channel (See Detail A). **Make sure fasteners do not interfere with damper operation.**
3. Install assembly between trusses as shown in End View and attach support angles to truss lower members using 1 1/4" (32) long type S steel screws or similar. See Detail B for alternate support angle attachment method.
4. Ceiling penetrations should be located between adjacent trusses and RC channels. If required, a maximum of one RC channel may be cut or notched to enable proper damper location. The clearance between the damper assembly and the cutout in the ceiling material shall be a maximum of 1/8" (3) on any side.
5. Flex duct shall be UL Classified Air Duct Class 0 or Class 1 and shall be attached to the plenum collar with steel clamps, plastic straps, or minimum 18 gauge steel wire.
6. The grille/register frame shall be 26 gauge (0.55) minimum steel and shall be attached with a minimum of two #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange.
7. Refer to UL Fire Resistance Directory Vol. I for details on UL Floor/Ceiling Design No.'s L528, L546, L550, L558, L574, L576, L579, L581, L583, L585, M503 and Roof/Ceiling Design No.'s P531, P533, P545, P547, P552, 1 Hour Fire Rating.

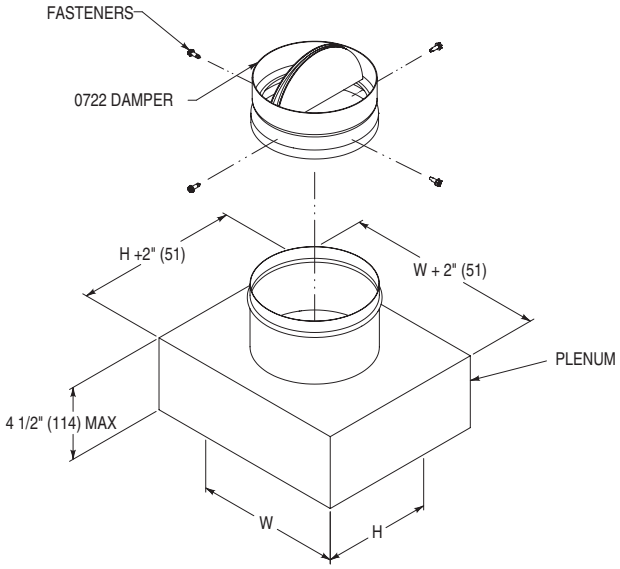
CLASSIFIED UL Refer to the UL Classification Marking on the Product

**SUPPLEMENTARY INSTALLATION INSTRUCTIONS**
FABRICATION OF STEEL PLENUM

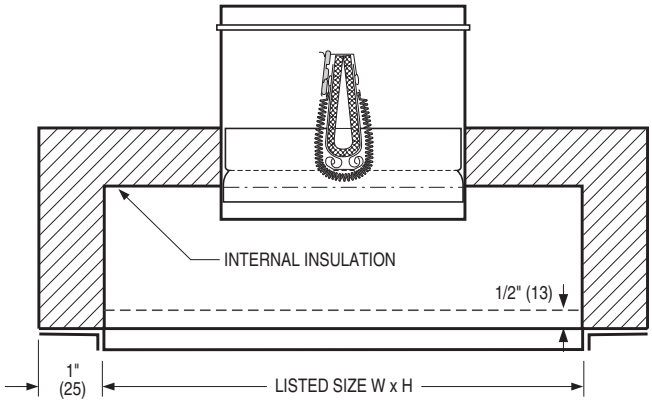



**Type F Plenum**
45° Inlet. Insulated Register Box
Round ceiling damper in inlet collar.
Min. size: 8" x 4" (203 x 102), 5" (127) dia. inlet
Max. size: 14" x 6" (356 x 152), 8" (203) dia. inlet
Max. Overall Height: 11" (279)




**Type G Plenum**
Top Inlet. Insulated Register Box
Round ceiling damper in inlet collar.
Min. size: 8" x 4" (203 x 102), 4" (102) dia. inlet
Max. size: 14" x 8" (356 x 203), 8" (203) dia. inlet
Max. Overall Height: 8" (200)




## NOTES:

1. The steel plenum box and top shall be a minimum of 28 ga. (0.47) galvanized steel fastened together per SMACNA HVAC Duct Construction Standards, 4" (102) OC.
2. The outlet collar shall be 28 ga. (0.47) and shall be undersized 1/8" (3) small than the diameter of the damper frame.
3. The damper shall be attached to the plenum box collar using steel rivets, spot welds, lock forms, or sheet metal screws, 4" (102) max. OC, equally spaced around the circumference of the collar. **Make sure fasteners do not interfere with damper operation.**
4. Insulation shall be semi rigid Type R-6, 1 1/2" (28) or Type R-8, 2" (51) fiberglass duct liner, minimum density 1.5 pcf. Insulation is self-supporting within plenum box. All internal surfaces must be lined with insulation, excluding outlet collar. The bottom edge of the insulation is trapped by a lip that is formed on the plenum box that extends a min. of 1" (25) from the inner edge of the opening to the outer edge of the box and extends a min. of 1/2" (13) up into the opening. See detail above.
5. Refer to page 1 of 2 of document IOM-CRD0763INST for ceiling damper installation detail.
6. The 0763 Series Ceiling Radiation Damper is classified for use in specific wood truss ceiling assemblies. See UL Fire Resistance Directory for Floor/Ceiling design No.'s L528, L546, L550, L558, L574, L576, L579, L581, L583, L585, M503 and Roof/Ceiling design No.'s P531, P533, P538, P545, P547, P552.



Nailor® Industries Inc.

**Houston, Texas**
Tel: 281-590-1172
Fax: 281-590-3086

**Las Vegas, Nevada**
Tel: 702-648-5400
Fax: 702-638-0400

**Toronto, Canada**
Tel: 416-744-3300
Fax: 416-744-3360

**Calgary, Canada**
Tel: 403-279-8619
Fax: 403-279-5035