

# PERFORATED CEILING DIFFUSERS

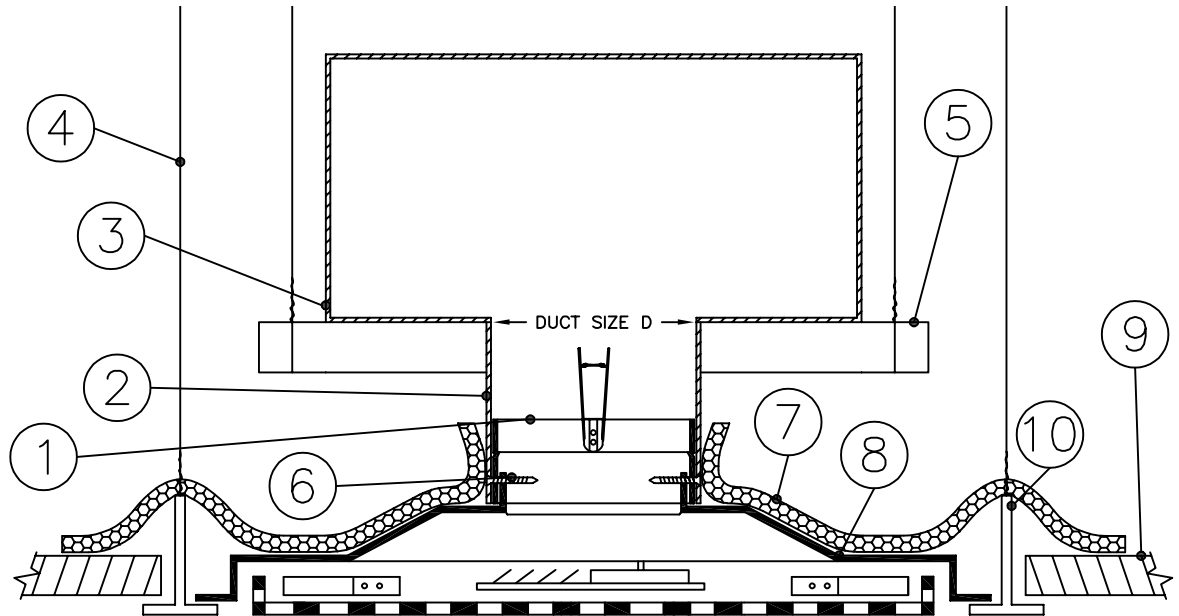
## STEEL. FIRE RATED DAMPER (UL R.10967). LAY-IN FACE.



UNDERWRITERS LABORATORIES INC.  
CLASSIFIED  
CEILING RADIATION DAMPERS  
TESTED IN ACCORDANCE WITH UL 263

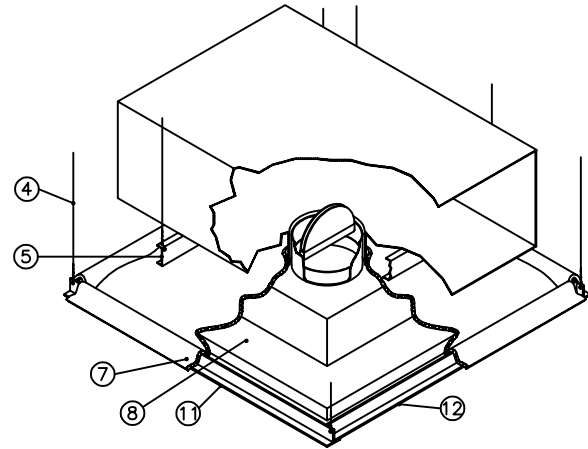
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24"X24" SUPPLY/RETURN CEILING MODULE
DUCT SIZE D
6" DIA / 6" DIA
8" DIA / 8" DIA
10" DIA / 10" DIA
12" DIA / 12" DIA
14" DIA / 14" DIA



### PARTS:

1. MODEL 616 (ROUND) CEILING DAMPER (UL FILE R.10967)
2. STEEL DUCT DROP
3. STEEL DUCT
4. 12 SWG HANGER WIRES (4 REQUIRED)
5. SUPPORT CHANNEL OR ANGLE (2 REQUIRED)
6. MOUNTING SCREWS, BOLTS OR RIVETS
7. 30" X 30" CERAMIC FIBER BLANKET (1/2" THICK, 4 PCF)
8. LAY-IN TYPE STEEL DIFFUSER (0.027" MIN. THICKNESS) WITH ROUND NECK OR SQUARE TO ROUND ADAPTER
9. LAY-IN TYPE ACOUSTICAL PANEL (BEARING THE UL CLASSIFICATION MARKING)
10. MAIN T-BAR RUNNER
11. 4'-0" SUSPENSION CROSS TEE OF GRID MODULE
12. 2'-0" SUSPENSION CROSS TEE OF GRID MODULE



### NOTES:

1. BEFORE INSTALLING DAMPER (MODEL 616) OPEN BLADES AND HOOK FUSIBLE LINK OVER CATCH ON OPPOSITE BLADE. BEND DOWN LINK CATCH TO SECURE LINK IN POSITION.
2. SUPPORT THE DUCT WITH 2 16-GAUGE COLD-ROLLED STEEL SUPPORT CHANNELS OR ANGLES. 1 1/2" OR 2" DEEP, WITH 1/2" FLANGES. PLACE THE SUPPORT CHANNELS AT THE BOTTOM OF THE DUCT ADJACENT TO BOTH SIDES OF THE DUCT DROP. USE 12 SWG GALVANIZED STEEL HANGER WIRE. SUPPORT CHANNELS FROM THE STRUCTURAL MEMBERS OF THE FLOOR OR ROOF ABOVE. THE HANGER WIRES SHALL NOT BE CROSSED AND MUST HANG STRAIGHT (PLUMB).
3. THE END TABS OF THE 2'-0" CROSS TEE FORMING THE GRID MODULE FOR THE INSTALLATION OF THE ASSEMBLY SHALL BE BENT BACK AGAINST THE WEB OF THE 4'-0" CROSS TEES. THE 4'-0" CROSS TEES MUST HAVE A SLOT AT MID-LENGTH OF THE WEB FOR CONNECTION OF THE 2'-0" CROSS TEES.
4. MAXIMUM NECK SIZE OF THE CEILING DIFFUSER IS 14 INCHES DIAMETER.
5. NO DIFFUSER SHALL BE LOCATED IN AN ADJACENT 24" X 48" CEILING GRID MODULE.
6. INSTALL THE CEILING DAMPER IN THE DUCT DROP USING 3/16" DIA. X 1/2" LONG STEEL BOLTS, NO.8 X 1/2" STEEL SHEET METAL SCREWS OR 3/16" DIA. STEEL RIVETS AT 6" O.C. AND A MINIMUM OF 3 PLACES.
7. THE CLEARANCE BETWEEN THE CEILING DAMPER AND THE DUCT DROP SHALL BE 1/8" MAXIMUM.
8. PLACE CERAMIC BLANKET OVER DIFFUSER NECK AND SET SQUARE WITH CEILING GRID. BLANKET TO HAVE 1" VERTICAL COVERAGE OF NECK.
9. SLIP THE DIFFUSER INTO THE DUCT DROP AND INSTALL NO.8 X 1/2" SHEET METAL SCREWS AT 6 INCHES O.C. AND A MINIMUM OF 3 PLACES.
10. CUT BACK CORNERS OF THERMAL BLANKET TO ALLOW CLEARANCE FOR HANGER WIRES.

**PB616, PBR616, PR615, SCF616**

CEILING DIFFUSER TO RIGID DUCT  
INSTALLATION INSTRUCTIONS

NOTE: ALL DRAWINGS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



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# PERFORATED CEILING DIFFUSERS

## STEEL. FIRE RATED DAMPER (UL R.10967). LAY-IN FACE.

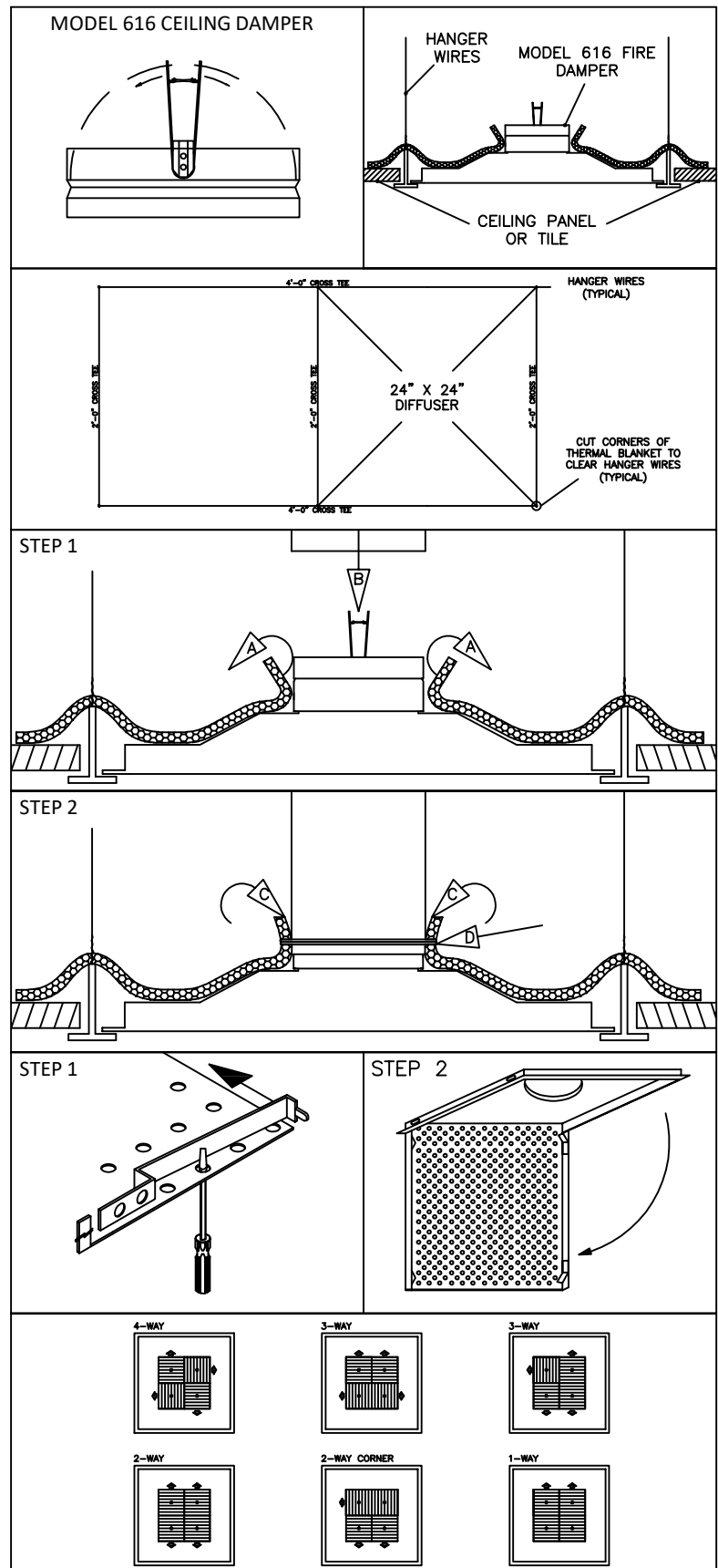


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### CEILING GRID LAYOUT:

1. NO DIFFUSER SHALL BE LOCATED IN AN ADJACENT 24" X 48" CEILING GRID MODULE.
2. CUT BACK CORNERS OF THERMAL BLANKETS TO ALLOW CLEARANCE FOR HANGER WIRES.



### INSTALLATION INSTRUCTIONS

**STEP 1:**  
FOLD BACK NECK FLAPS OF THERMAL BLANKET (A). SLIP ON STEEL DUCT DROP AND FASTEN TO THE DIFFUSER NECK WITH FOUR NO.8 SHEET METAL SCREWS (B). THE SCREWS MUST NOT INTERFERE WITH THE CLOSING OF THE DAMPER BLADES.

**STEP 2:**  
FOLD THE NECK FLAPS OF THE THERMAL BLANKET BACK OVER THE DUCT DROP (C) AND FASTEN USING 16 SWG STEEL WIRE (D). DO NOT USE BOLTS, SCREWS OR RIVETS.

### REMOVING PERFORATED FACE

**STEP 1:**  
USE A SMALL SCREWDRIVER OR OTHER INSTRUMENT TO PUSH LATCH INWARD FROM BORDER. REPEAT ON OPPOSITE SIDE.

**STEP 2:**  
FACE WILL SWING DOWN WITH THE TWO REMAINING LATCHES ACTING AS HINGES. FOR COMPLETE REMOVAL, RELEASE 2 REMAINING LATCHES.

### ADJUSTING PATTERN CONTROLLERS

ALL DIFFUSERS ARE SHIPPED WITH A 4-WAY SETTING. PATTERNS CAN BE ADJUSTED BEFORE OR AFTER INSTALLATION

**PB616, PBR616, PR615, SCF616**

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