

---

**Miami Tech Inc.**

**MODEL 616**  
**CEILING DAMPER**  
INSTALLATION INSTRUCTIONS



The City of New York 909-89-SM  
California State Fire Marshall 3225-1382:100

**Stock ID: IOM-616**

January, 2001

©2005 Miami Tech Inc

Miami, FL • Part No. PX-00-0122

---

1/2001

## Foreword

This publication details the installation requirements for ceiling dampers as manufactured by Miami Tech. Use of this manual for systems or products not manufactured or supplied by Miami Tech shall not be applicable.

All products covered by this manual have been tested in accordance with UL555C and are authorized to bear the UL classification mark for ceiling dampers. Specific Ceiling Damper model numbers and their corresponding UL file numbers may be found in UL's Fire Resistance Directory.

For specific ceiling damper location requirements, duct construction and connection or installation practices, refer to the following codes or standards:

**NFPA Publications:**

NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilation Systems

**UL Publications:**

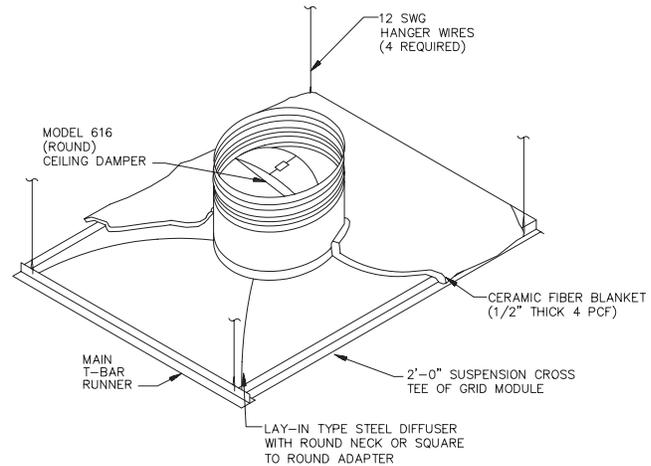
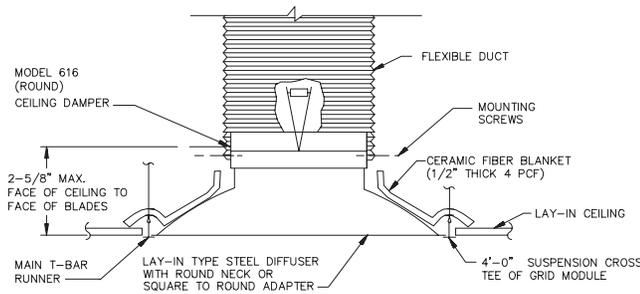
UL555C - Standard for Safety, Ceiling Dampers

**SMACNA Publications:**

Fire, Smoke and Radiation Damper Installation Guide for HVAC Systems Guide  
HVAC Duct Construction Standards - Metal and Flexible

The Installation Instructions found within this manual have been specifically drawn and detailed to meet the requirements of UL555C. Some jurisdictions may require additional or different installation methods; therefore, consult with the authority having jurisdiction for specific differences. For these cases, the requirements defined by the authority having jurisdiction will take precedence over the documents contained herein.

Model 616 (Round) • Ceiling Damper



Fusible Link – 165°F, 212°F Alternate

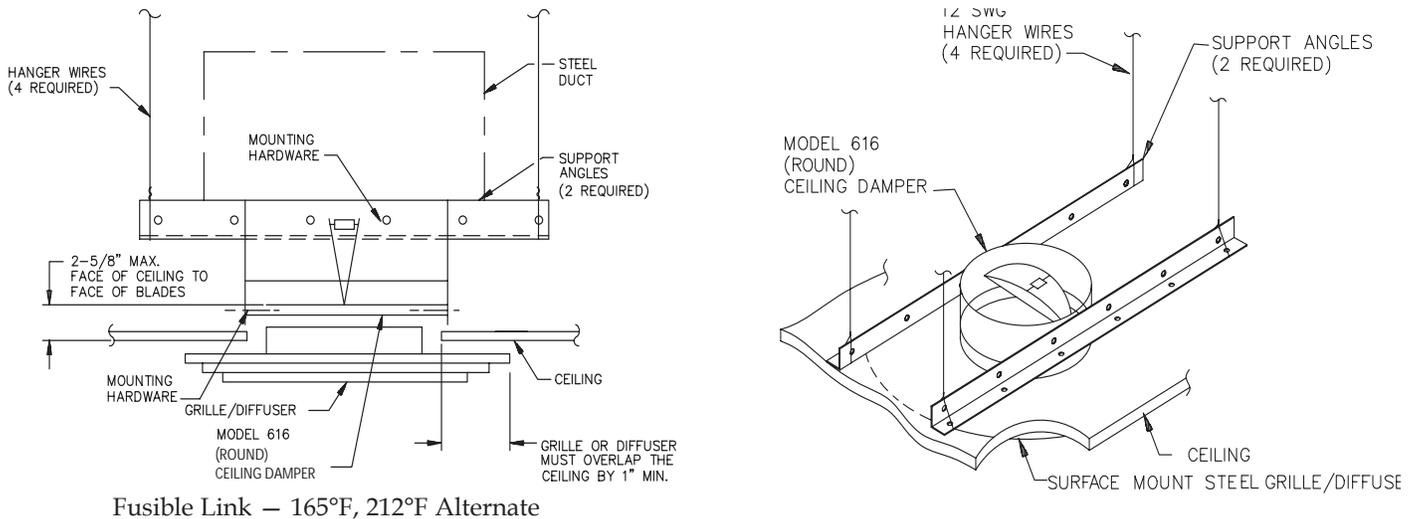


NOTES:

1. Before installing damper Model 616, open blades and hook fusible link over link catch on opposite blade. Bend down link catch to secure link in position.
2. 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.
3. Use 12 SWG steel hanger wires at the corners of the grid modules containing the assembly to support the assembly from the joists or beams of the floor or roof above. Wires must hang vertically, not slantwise.
4. Maximum neck size of the ceiling diffuser is 12" diameter (14" diameter damper may be used if 12 SWG hanger wires are mounted to Item 3 in addition to shown).
5. The flexible duct shall be Class 0 or Class 1, bearing the UL classification marking. The maximum length of the duct shall not exceed 14' 0" in length. No portion of the duct shall rest on the back surface of the ceiling panel and minimum of 4" clearance must be maintained. Where the duct is supported, use 12 SWG steel hanger wires. Caution should be observed so that the duct does not interfere with the operation of the ceiling damper.
6. No diffuser shall be located in an adjacent 24" x 48" ceiling grid module.
7. Slip the damper over the neck of the diffuser and install 8 x 1/2" sheetmetal screws. Three required for 10" diameter or less, and four required for larger diameters, equally spaced.
8. Place ceramic blanket over diffuser neck and set square with ceiling grid. Cut corners of blanket to clear hanger wires.
9. For duct connection, fold back ceramic blanket, slip flexible duct over diffuser neck. Unfold ceramic blanket over duct and fasten duct to neck over blanket with steel flexduct clamp or 16 gauge galvanized steel wire.
10. Maximum size of Model 616 is 24" diameter.
11. Refer to SMACNA and ASHRAE duct installation guidelines for duct requirements.

1/2001

## Model 616 • Ceiling Damper (Alternate Mounting Option)



### NOTES:

1. Before installing damper Model 616, open blades and hook fusible link over link catch on opposite blade. Bend down link catch to secure link in position. If single blade damper is used, link catch must be mounted to the duct drop after installation of the damper as follows.
2. Support the duct with 2, 16 gauge galvanized steel support angles, 1 1/2" x 1 1/2" with holes. Place the support angles at the bottom of the duct adjacent to both sides of the duct drop. Use 12 SWG galvanized steel hanger wire to independently support angles from the structural members of the floor or roof above.
3. Install the ceiling damper in the duct drop using 3/16" diameter by 1/2" long steel bolts, No. 8 by 1/2" long sheetmetal screws, or 3/16" diameter steel rivets at 6" on center with a minimum of three per angle. Fasteners shall not interfere with the operation of the ceiling damper.
4. The clearance between each side of the ceiling damper and the duct drop shall be 1/8" maximum.
5. Duct outlets in lay-in ceilings should be located in the field of an acoustical ceiling panel or tile. Where it is necessary to cut a main runner or cross tee, each cut end shall be supported by a vertical 12 SWG hanger wire. A 1/2" clearance shall be maintained between the duct drop and each cut end of the main runner or cross tee. The duct outlet shall be located so that no more than one runner or cross tee is cut when penetrating the ceiling membrane.
6. Maximum size of Model 616 is 24" diameter.
7. Refer to SMACNA and ASHRAE duct installation guidelines for duct requirements.