



Application

The RD-521-IP ceiling radiation damper employs butterfly style blades for point-of-origin control of radiant heat in HVAC systems. The RD-521-IP is installed horizontally in the ceiling membrane of combustible floor-ceiling or roof-ceiling assemblies with fire resistance ratings up to and including 1 hour.

Standard Construction

Frame: 22 gauge (0.85) galvanized steel with integral 1 1/2" (38) thick fiberglass R-6.5 duct board outlet box.

Blades: 22 gauge (0.85) galvanized steel – butterfly. Insulated with ceramic refractory material for dampers larger than 114 in.² (735 cm²).

Transition: None (field adaptation required).

Plaster Ground: 5/8" (16) deep × 5/8" (16) wide (Std.).

Closure Device: Fusible link.

Fire Closure Temperature: 165°F (75°C).

Minimum Size: 4" × 4" (102 × 102)

Maximum Size: Square: 16" × 16" (406 × 406)
Rectangular: 24" (610) W or 20" (508) H
with a maximum area of 256 in.² (1652 cm²).

Options

- Transition Options:
 - Round Oval Square/Rectangular
 - Side: W H P Q
- Alternate R-8.7 duct board outlet box
- Alternate Plaster Ground Options:
 - 1 1/4" (32) deep × 1 1/4" (32) wide
 - 2" (51) deep × 5/8" (16) wide 4" (102) deep × 5/8" (16) wide
- Alternate 212°F (100°C) fire closure temperature.
- VC — volume control device factory mounted:
- WHI installation angle set:
 - 2 angles 1" × 1/2" × 28" long (25 × 13 × 711) × 20 ga. (1.0)
 - 2 angles 1" × 1/2" × 3" long (25 × 13 × 76) × 20 ga. (1.0)
- Boot rail installation set:
 - 2 pieces 25" (635) long.

Ratings

UL 555C Fire Resistance Rating: 1 hour for installation in floor designs L-521, L-546, L-558, L-562, L-576, L-574, L-581, L-583, L-585 and in roof/ceiling designs P-522, P-533, P-538, P-545 and P-547.

Thermal Resistance: R-6.5 or R-8.7

Listings

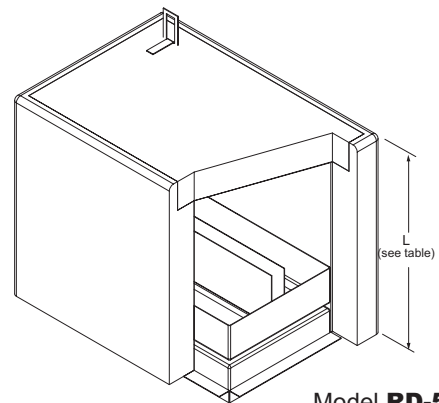
UL 555C listing: R14980

CSFM listing: 3226-1404:100

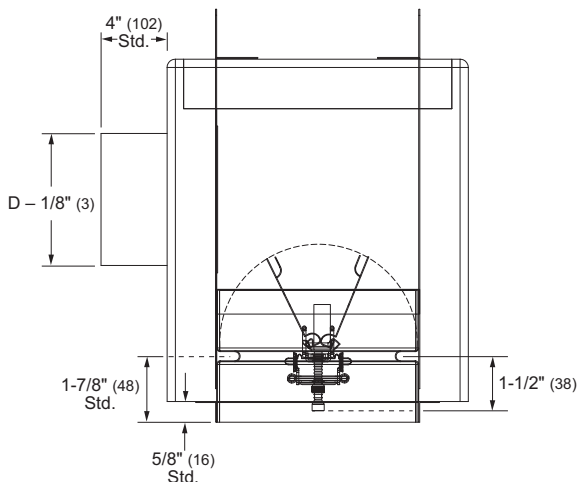
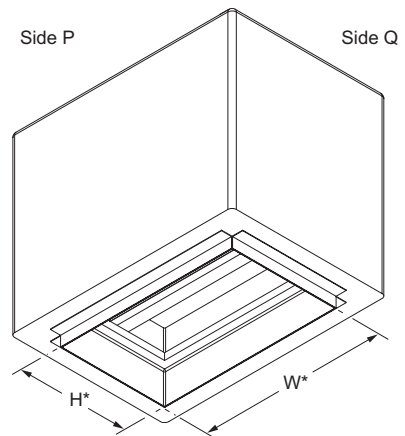
Warnock Hersey listing #: WHI-495-PSH-0177, -0178

Meets NFPA Standards: 90A and 101

Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC



Model RD-521-IP
(standard)
*Damper dimensions furnished approximately net O.D.



RD-521-IP with optional **VC** and Round Transition

Outlet Box Height Table	
Duct Diameter	Outlet Box Height 'L'
D ≤ 8" (203)	14" (356)
8" (203) < D ≤ 12" (305)	17" (432)