



model **RD-521-IP**
1 hour — ceiling radiation damper
R-6.5 insulated duct board outlet box — butterfly style blade

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 1½" (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: ⅝" (16) deep × 1" (25) wide Std.

Closure Device: Fusible link.

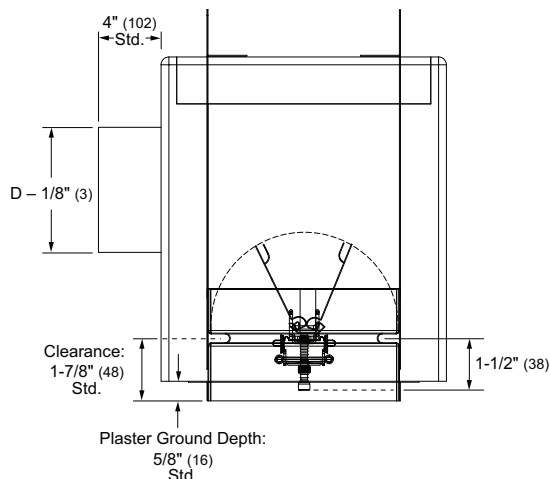
Fire Closure Temperature: 165°F (75°C).

Minimum Size: 4" × 6" (102 × 152)

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/Bottom
 - Side: ☐ W ☐ H ☐ P ☐ Q
- ☐ Alternate R-8.7 duct board outlet box
- ☐ Alternate Plaster Ground Options:
 - ☐ 1¼" (32) deep × 1¼" (32) wide
 - ☐ 1⅞" (48) deep × 1" (25) wide ☐ 4" (102) deep × 1" (25) wide
- ☐ Alternate 212°F (100°C) fire closure temperature.
- ☐ VC — volume control device factory mounted:
- ☐ WHI installation angle set:
 - 2 angles 1" × ½" × 28" long (25 × 13 × 711) × 20 ga. (1.0)
 - 2 angles 1" × ½" × 3" long (25 × 13 × 76) × 20 ga. (1.0)
- ☐ Boot rail installation set:
 - 2 pieces 25" (635) long.
- ☐ Hanger tab installation.



Ratings

UL 555C Fire Resistance Rating: 1 hour for installation in floor designs L-521, L-528, L-546, L-558, L-562, L-576, L-574, L-581, L-583, L-585, M-509, M-540 and in roof/ceiling designs P-522, P-533, P-538, P-545, P-547, P-579, and P-580.

Thermal Resistance: R-6.5 or R-8.7



Listings

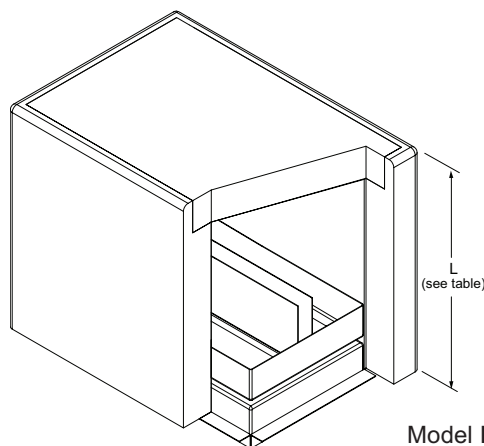
UL 555C listing: R14980

CSFM listing: 3226-1404:100

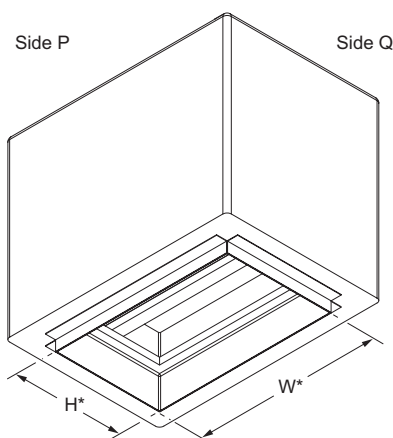
Warnock Hersey listing #: WHI-495-PSH-0177, -0178

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.



Outlet Box Height Table	
Duct Diameter	Outlet Box Height 'L'
D ≤ 8" (203)	11.875" (305)
8" (203) < D ≤ 12" (305)	16" (406)

RD-521-IP with optional **VC**, Hanger Tabs and Round Transition

Information is subject to change without notice or obligation.

NOTE: Dimensions in parentheses () are millimeters.