

Application

The RD-521-90 ceiling radiation damper employs butterfly style blades for point-of-origin control of radiant heat in HVAC systems. The RD-521-90 is installed horizontally in the ceiling membrane of combustible and non-combustible assemblies with a fire-resistance rating up to and including 1 hour.

Standard Construction

Frame: 22 gauge (0.85) galvanized steel.

Plenum Outlet Box: 28 gauge (0.47) galvanized steel.

Blades: 22 gauge (0.85) galvanized steel – butterfly insulated with ceramic refractory material for dampers larger than 80 in.² (516 cm²).

Plaster Ground: 5/8" (16) deep × 1" (25) wide.

Fire Closure Device: Fusible link.

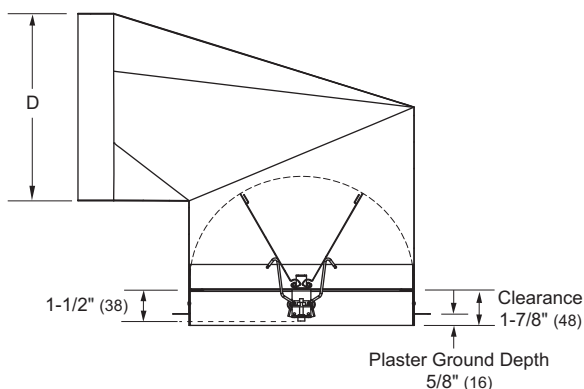
Fire Closure Temperature: 165°F (75°C).

Minimum Size: Grille Opening — 4" × 6" (102 × 152)
Duct — 4" Ø (102 Ø).

Maximum Size: Grille Opening — Square: 12" × 12" (305 × 305)
Rectangular: 14" (356) W × 10" (254) H (90° plenum)
10" (254) W × 14" (356) H (end plenum)
with a maximum area of 144 in.² (929 cm²).
Duct - 10" Ø (254 Ø)

Options

- ☐ Alternate 212°F (100°C) fire closure temperature.
- ☐ VC — volume control device factory mounted.
- ☐ Boot rail installation set:
2 pieces 25" (635) long.
- ☐ Optional 1" (25) deep × 1" (25) wide plaster ground



RD-521-90 with optional VC

Outlet Box Height Table	
Outlet Diameter 'D'	Assembly Height 'T'
4" (102)	10 5/8" (270)
5" (127)	11 5/8" (295)
6" (152)	12 5/8" (321)
7" (178)	13 5/8" (346)
8" (203)	14 5/8" (371)
9" (229)	15 5/8" (397)
10" (254)	16 5/8" (422)

Ratings

UL 555C Fire Resistance Rating: 1 hour (horizontal, for use in UL assemblies L-521, L-528, L-546, L-558, L-562, L-574, L-576, L-581, L-583, L-585, M-509, M-540, P-522, P-533, P-538, P-545 and P-547).

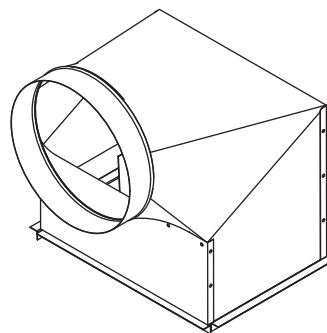
Listings

UL 555C listing: R14980

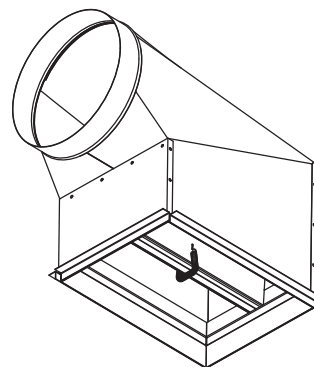
CSFM listing: 3226-1404:100

Meets NFPA Standards: 90A and 101

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



Model RD-521-90
(standard 90° plenum)
Damper dimensions furnished approximately 1/8" (3) undersized.
Boot outlet provided on longest side for 90° plenum.
Boot outlet provided on shortest side for end plenum.



RD-521-90
(optional end plenum)

