



model RD-521-BT 1 hour— ceiling radiation damper R-6.3 insulated outlet box — butterfly style blade

Application

The RD-521-BT ceiling radiation damper employs butterfly style blades for point-of-origin control of radiant heat in HVAC systems. The RD-521-BT 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: 30 gauge (0.40) galvanized steel outlet box with 1 1/2" (38) thick fiberglass R-6.3 insulation.

Blades: 22 gauge (0.85) galvanized steel – butterfly.

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

Fire Closure Device: Fusible link.

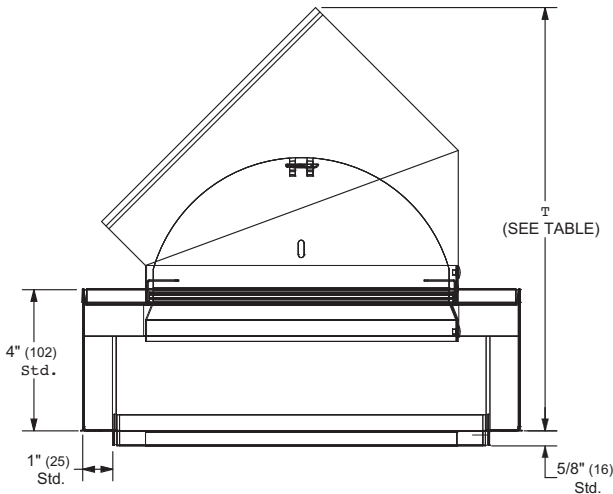
Fire Closure Temperature: 165°F (75°C).

Minimum Size: Grille Opening — 4" x 4" (102 x 102)
Duct — 4" Ø(102 Ø).

Maximum Size: Grille Opening — Square: 12" x 12" (305 x 305)
Rectangular: 24" (610) W or 24" (610) H
with a maximum area of 144 in.² (929 cm²).
Duct - 10" Ø (254 Ø)

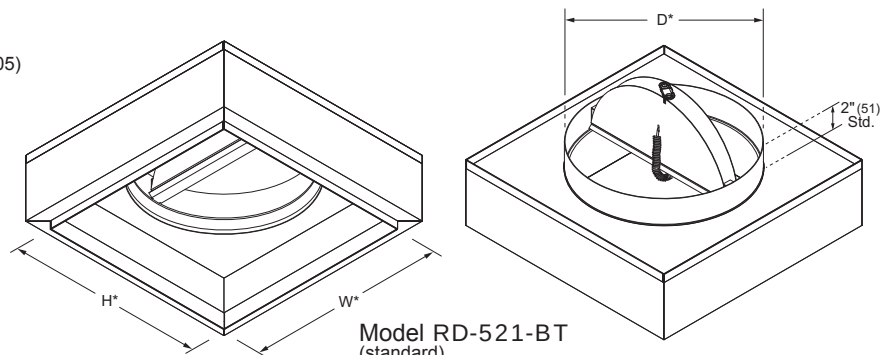
Option

- ☐ Optional 45° collar
- ☐ Optional R-8.0 outlet box
- ☐ 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 x 1" (25) wide plaster ground

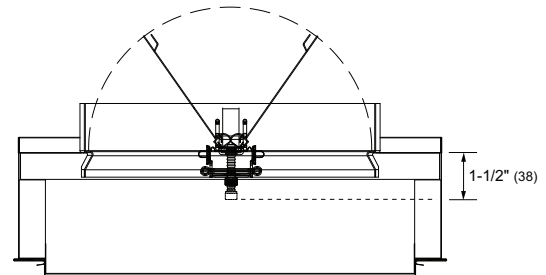


RD-521-BT with optional 45° Collar

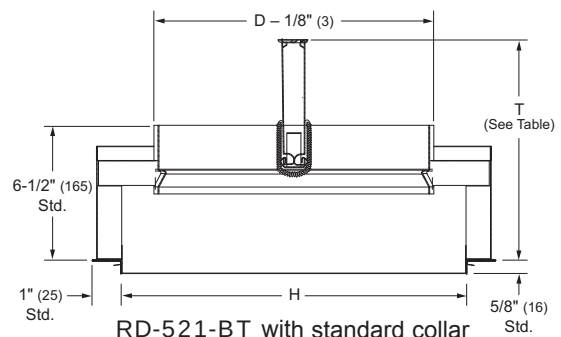
Outlet Box Height Table 45° Collar	
Damper Diameter 'D'	Assembly Height 'T'
4" (102)	8 3/4" (222)
5" (127)	9 1/4" (235)
6" (152)	9 7/8" (251)
7" (178)	10 1/2" (267)
8" (203)	11" (279)
9" (229)	11 1/2" (292)
10" (254)	12 1/8" (308)



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



RD-521-BT with optional VC



RD-521-BT with standard collar

Outlet Box Height Standard Table	
Damper Diameter 'D'	Assembly Height 'T'
4" (102) to 6" (152)	6 1/2" (165)
7" (178)	7" (178)
8" (203)	7 1/2" (191)
9" (229)	8" (203)
10" (254)	8 1/2" (216)



Ratings

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

Thermal Resistance: R-6.3 or 8.0

Listings

UL 555C listing: R14603

CSFM listing: 3226-0368:104

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

Meets NFPA Standards: 90A and 101

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