

INSTALLATION INSTRUCTIONS

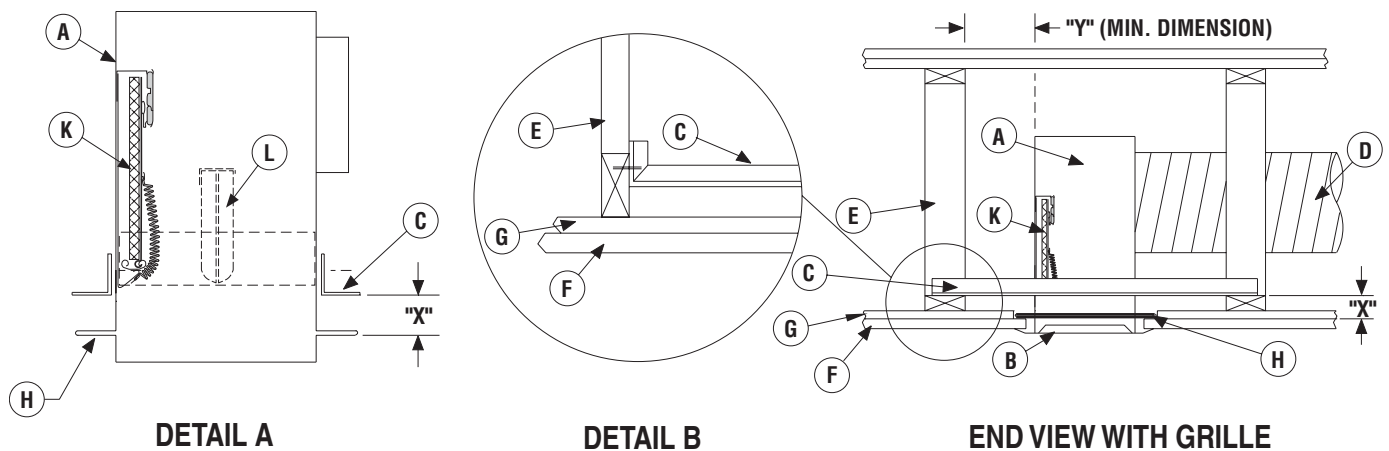
CEILING RADIATION DAMPERS FOR USE IN WOOD TRUSS ASSEMBLIES • UL DESIGN NUMBERS L550, P531

MODELS: 241FRD, 243FRD, 505RD, 507RD AND 509

- (A) Steel Register box (boot),
Min. 26 ga. (0.551) uninsulated.
Min. 28 ga. (0.474) insulated.
- (B) Steel frame Grille / Register, 26 ga.
(0.55) minimum, see note 5
- (C) 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61)
Support Angle (2 sides), see notes 1 & 2
- (D) Flex Duct UL Classified Air Duct
(Class 0 or 1)

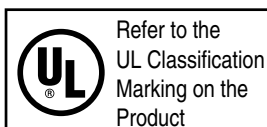
- (E) Wood Truss (refer to specific UL
Design No.)
- (F) 5/8" (16) Gypsum Wallboard
(refer to specific UL Design No.)
- (G) RC Channel
- (H) Plaster Flange
- (K) Ceiling Damper (1 blade)
- (L) Alternate Ceiling Damper (2 blades)

Model	"Y"
241FRD	2" (51)
243FRD	2" (51)
505RD	4" (102)
507RD	4" (102)
509	2" (51)



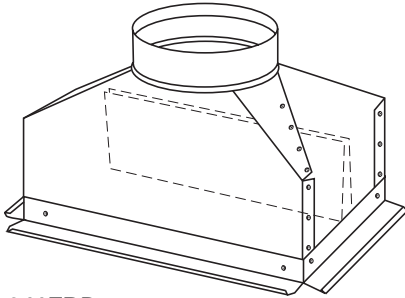
NOTES:

1. Attach 3/4" x 3/4" x 16 ga. (19 x 19 x 1.61) support angles to steel register box with a minimum of two #8 screws or 3/16" (5) dia. steel pop rivets or spot welds each side. Distance from bottom of angle to bottom of plaster flange (X) should be the combined thickness of the wood truss member and the RC channel (See Detail A).
Make sure fasteners do not interfere with damper operation.
2. Install assembly between trusses as shown in End View and attach support angles to truss lower members using 1 1/4" (32) long type S steel screws or similar. See Detail B for alternate support angle attachment method.
3. Ceiling penetrations should be located between adjacent trusses and RC channels. If required, a maximum of one RC channel may be cut or notched to enable proper damper location. The clearance between the damper assembly and the cutout in the ceiling material shall be a maximum of 1/8" (3) on any side.
4. Flex duct shall be UL Classified Air Duct Class 0 or Class 1 and shall be attached to the plenum collar with steel clamps, plastic straps, or minimum 18 gauge steel wire.
5. The grille / register frame shall be 26 gauge (0.55) minimum steel and shall be attached with a minimum of two #8 x 1 1/4" (32) min. screws through the ceiling material and into the plaster flange.
6. Refer to UL Fire Resistance Directory Vol. I for details on UL Floor / Ceiling Design No. L550 and Roof / Ceiling Design No. P531, 1 Hour Fire Rating.



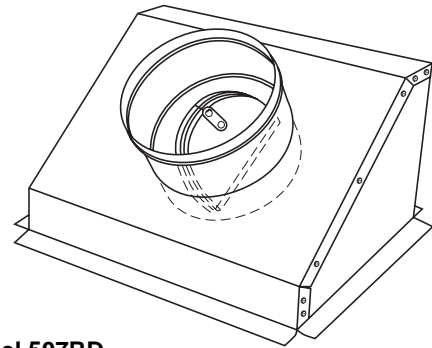
Dimensions are in inches (mm).

MODELS:



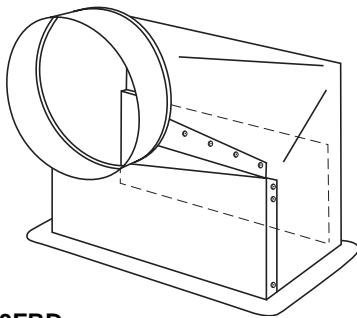
Model 241FRD

Top Inlet. Tapered Register Box
Rectangular ceiling damper.
Min. Size: 8" x 4" (203 x 102), 4" (102) dia. inlet
Max. size: 12" x 12" (305 x 305), 10" (254) dia. inlet



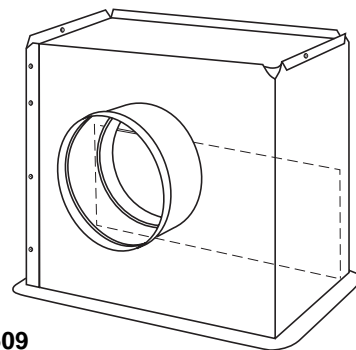
Model 507RD

45° Inlet. Insulated Register Box
Round ceiling damper in inlet collar.
Min. size: 8" x 4" (203 x 102), 5" (127) dia. inlet
Max. size: 14" x 6" (356 x 152), 8" (203) dia. inlet



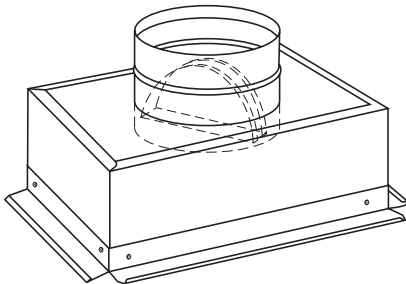
Model 243FRD

90° Side Inlet. Tapered Register Box
Rectangular ceiling damper
Min. size: 8" x 4" (203 x 102), 5" (127) inlet
Max. size: 14" x 8" (356 x 203), 10" (254) Inlet



Model 509

90° Side Inlet. Insulated Register Box
Rectangular ceiling damper.
Min. size: 8" x 4" (203 x 102), 4" (102) dia. inlet
Max. size: 12" x 12" (305 x 305), 10" (254) dia. inlet



Model 505RD

Top Inlet. Insulated Register Box
Round ceiling damper in inlet collar.
Min. size: 8" x 4" (203 x 102), 4" (102) dia. inlet
Max. size: 14" x 8" (356 x 203), 8" (203) dia. inlet

NOTES:

1. Models 241FRD, 243FRD and 509 incorporate a rectangular ceiling damper recessed a maximum of 2"(51) from the plaster flange.
2. Models 505RD and 507RD incorporate a round ceiling damper recessed in the inlet collar.
3. Internally Insulated models 505RD, 507RD and 509 use 1 1/2" (38) duct liner R-6.3.



Douglasville, GA
Tel: 770-489-8282
Fax: 770-489-8182

Dimensions are in inches (mm).