MODEL A93

Ceiling Radiation Damper • Four Insulated Blades • Retangular Frame • For Static Systems • Galvanized Steel

Standard Materials and Construction

FRAME: 22-GA galvanized steel, one piece, 2²¹/₃₂" standard depth.

BLADES: 22-GA galvanized steel.

INSULATION: ½" thick gypsum.

FUSIBLE LINK: 165°F.

SPRING: Extension type.

FINISH: Mill.

Options

212°F Fusible Link

Thermal Blanket

Top Extension (see chart below)

Bottom Extension (see chart below)

Top and Bottom Extension (see chart below)

Notes

- 1. The larger dimension is always the width, and is parallel to the blades.
- 2. Dampers are provided 1/4" undercut on 1" increments.

Standard 1/4" undercut:

- A. For installation where the damper is to be installed inside a steel duct.
- B. For lay-in installation where the damper is to be installed directly into the tee bar grid of the ceiling.

Optional Exact Size (No undercut):

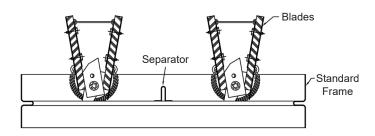
For surface mount ductless installation, where the damper is to be installed over the neck of a grille or lay-in diffuser.

3. This ceiling damper is used to provide the required fire and heat radiation protection of HVAC penetrations of floor, ceiling and roof-ceiling assemblies with restrained or unrestrained assembly Fire Resistance Ratings of 2 hour or less, in accordance with UL-263. Standard fire dampers (1½ hr. and 3 hr.) do not provide the necessary heat radiation protection. Ceiling dampers are also called Ceiling Fire Dampers, Radiation Dampers, and Radiation Shields. See our UL-Approved Installation Instructions for various installation requirements and procedures. Approved ceiling designs are illustrated by design number in UL's Fire Resistance Directory.

UNDERWRITERS LABORATORIES INC.® CLASSIFIED STATIC CEILING DAMPER FIRE RESISTANCE RATING 2 HR ARROW UNITED UNITED ARROW UNITED FILE # R16561

This ceiling radiation damper meets the construction and performance requirements of:

- Underwriters Laboratories Inc. Standards 555C
- National Fire Protection Association Standards 90A and 101
- New York City MEA Listing #110-99-M
- California State Fire Marshal Listing #3226-1328:105
- 1 hour Combustible Ceiling Assemblies
- 1 hour and 2 hour Non-Combustible Ceiling Assemblies

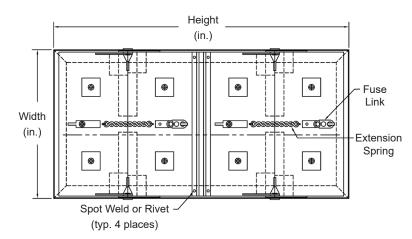


Damper Sizes

Horizontal (Ceiling) Mount Only						
Min Panel	Max Panel					
3¾"W x 18¾"H	24"W x 24"H (576 sq.in.)					

Frame Extension Chart

Min Panel	Heights: 18¾" - 20"	Heights: 20¾" - 24"		
Top Extensions	91/4"	91/4"		
Bottom Extensions	61/%"	61/4"		
Top & Bottom Extensions	91/4"	10¾"		



			Тор	Bottom	165°F	212°F				
Item #	Qty	Damper Size	Extensions		Fusible Link				<u>Union Made</u>	
Arch.	/ Eng.:				EDR:		ECN:		Job:	
Cont	ractor:									
P	roject:				Date:		DWN:		DWG:	

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