

UL-CLASSIFIED
CEILING DAMPER
For 2-Hr. Designs

MODEL A93

RECTANGULAR
FOUR-BLADE / INSULATED

MATERIALS AND CONSTRUCTION

FRAME: One-Piece, roll-formed 22-Ga. galvanized steel. ($2^{21}/_{32}$ " standard depth).

BLADES: 22-Ga. galvanized steel.

INSULATION: $1/2$ " thick gypsum.

FUSIBLE LINK: 165°F Standard (212°F Optional).

SPRING: Extension type.

FINISH: Mill.

OPTIONAL THERMAL BLANKET for lay-in diffuser/grille installations: $1/4$ " thick ceramic fiber, (8 lbs./cu. ft. density).

UNDERWRITERS LABORATORIES INC.®

CLASSIFIED



CEILING DAMPERS

FIRE RESISTANCE CLASSIFICATION
DESIGN NO.'S. — SEE PRODUCT CATEGORY
IN UL FIRE RESISTANCE DIRECTORY

Arrow United Industries
A Mestek Company

California State Fire Marshal Listing No.:
3225-1328:105

1-hr. Combustible Ceiling Assemblies

1-hr. & 2-hr. Non-Combustible Ceiling Assemblies

DIMENSIONAL DATA

Maximum Size: 576 Sq. in.

Width: $3^{3}/_{4}$ " Minimum; 24" Maximum

Height: $18^{3}/_{4}$ " Minimum; 24" Maximum

The smaller dimension is *always* the *width*, and is *parallel* to the *blades*.

OPTIONAL FRAME EXTENSIONS

To facilitate various installations, a damper frame extension can be provided for the top of the frame, the bottom of the frame, or both the top and bottom of the frame, and, depending on the *HEIGHT* of the damper, will result in the following *total frame depths*:

	Heights: 18 ³ / ₄ "-20"	Heights: 20 ¹ / ₂ "-24"
Top Extension:	<u>9¹/₄"</u>	<u>9¹/₄"</u>
Bottom Extension:	6 ¹ / ₈ "	6 ¹ / ₈ "
Top and Bottom Extension:	9 ¹ / ₄ "	10 ³ / ₄ "

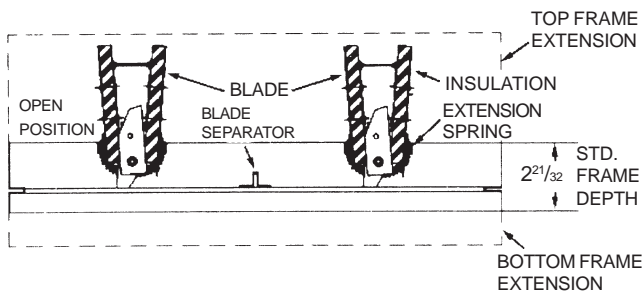
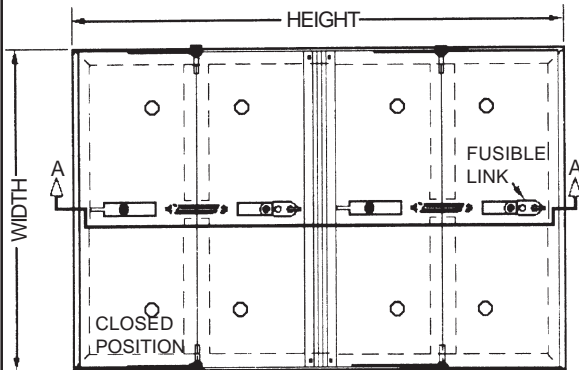
CEILING DAMPERS - FUNCTION AND APPLICATION

This ceiling damper is used to provide the required fire and heat radiation protection of HVAC penetrations of Floor-Ceiling and Roof-Ceiling Assemblies having a Restrained or Unrestrained Assembly Fire Resistance Rating of 2 hours or less, in accordance with UL-263. Standard Fire Dampers (1¹/₂-hr. & 3-hr.) do not provide the necessary heat radiation protection. Ceiling Dampers are also called Ceiling Fire Dampers, Radiation Dampers, and Radiation Shields. See Arrow's UL-approved Installation Instructions for various installation requirements and procedures. Approved Ceiling Designs are illustrated by Design Number in UL's Fire Resistance Directory.

CONTRACTOR:

PO NUMBER:

DATE:



PROJECT:
LOCATION:
ARCHITECT:
ENGINEER:



Arrow United Industries
A Division of Mestek, Inc.
314 Riverside Drive • Wyalusing, PA 18853
Ph: (570)-746-1888 Fax: (570)-746-9286
www.arrowunited.com

IN THE INTEREST OF PRODUCT DEVELOPMENT, ARROW UNITED
RESERVES THE RIGHT TO MAKE CHANGES WITHOUT NOTICE.