

Combination Fire/Smoke Damper • 1½ Hr. Rated • Airfoil Blade • Leakage Class II • 250°F or 350°F Rated • Out-of-Barrier • Galvanized Steel

Standard Construction and Materials**FRAME:** 5½" x 7⁄8" x 16 GA. galvanized steel hat channel.**BLADES:** 20 GA. galvanized steel, double skinned (equal to 14 GA.), parallel action**AXLES:** Square plated solid steel stub.**BEARINGS:** Oil impregnated bronze.**LINKAGE:** Plated steel angle and crank plates with stainless steel pivots, in-jamb type.**STOPS:** 20 GA. galvanized steel angles at head and sill**BLADE SEALS:** Silicone.**JAMB SEALS:** Stainless steel.**SLEEVE:** 20 GA. galvanized steel by 15" long (1½" grille clearance) or 17" long (3½" grill clearance) with 1³⁄₁₆" front flange.**INSULATION:** Factory installed 0.2" thick intumescent insulation on top and both sides (vertical mount) or all four sides (horizontal mount).**CAULKING:** Hardcast Irongrip 601 or UL-listed equivalent.**ACTUATOR:** Electric with heat response device (EHRD) or pneumatic with heat response device (PHRD), factory-installed for Power-Open/Spring-Close (fail close) operation, internally mounted and accessible from grille side, or mounted externally or internally for continuous duct applications.**FINISH:** Mill or galvanized steel.**UNDERWRITERS LABORATORIES INC.®**

CLASSIFIED DYNAMIC FIRE AND SMOKE DAMPER

FIRE RESISTANCE RATING 1½ HR

LEAKAGE RESISTANCE CLASS II



FILE # R6462



This combination fire/smoke damper meets the construction and performance requirements of:

- Underwriters Laboratories Inc. Standards 555 and 555S
- National Fire Protection Association Standards 80, 90A, 92, 101, 105
- ICC's International Building Code
- New York City MEA Listing #111-99-M
- California State Fire Marshal Listing #3225-1328:118
- Underwriters Laboratories Inc. Approved for dual direction airflow and dynamic conditions.
- Underwriters Laboratories Inc. Classified for use in fire resistive ratings of less than 3 hours.
- Underwriters Laboratories Inc. Classified for use in smoke control systems for Leakage Class II and 250°F or 350°F.
- Actuators must be arranged to operate automatically, must fail closed upon loss of power, and must be controlled by a smoke detection system.

Options

Integral Dual Position Indication (IDPI) Switches
 Sensotherm Re-Openable Heat Response Device (ESOT) for Electric Actuator
 Sensotherm Re-Openable Heat Response Device (ESOP) for Pneumatic Actuator
 Model SM-501 Flow-rated smoke detector

- Shipped Loose

Model 2D51 No-flow smoke detector (14" Minimum Damper Height)

Tab-Lock retaining angles

Stainless steel bearings

Copper tubing (for Pneumatic Actuators)

Sleeves of various gauge thicknesses

Round or oval transitions

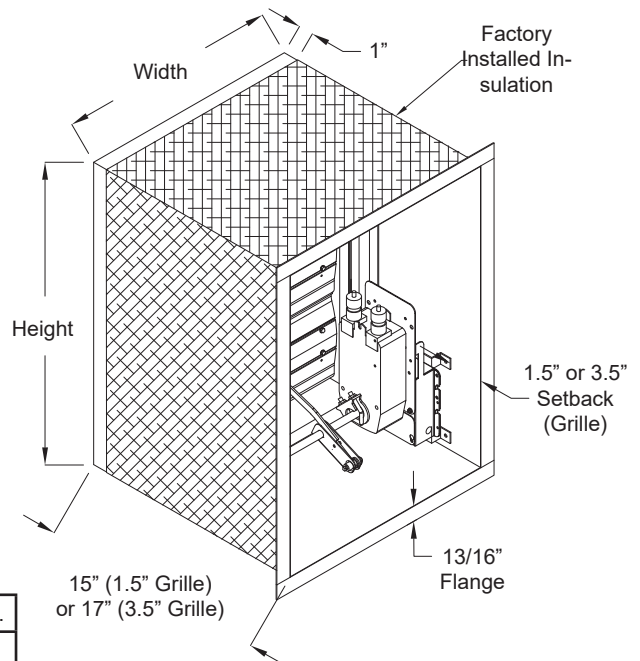
Short-width (less than 10") and/or short-height (less than 10") transitions

Notes

1. Damper frames are provided approximately ¼" undersized. The addition of a sleeve and insulation will increase the size of the assembly. See SI-FAGM or SI-FACD for sizing openings.
2. Dampers smaller than minimum frame size require a transition. Refer to SD-TRFS. When transitioned on one-side only (which will be a damper supplied with a transition on the non-jackshafted side only), the grille size should be selected to match the damper frame size, not the transition collar size.
3. Damper with smoke detector must have a minimum sleeve of 16" (1½" setback) or 18" (3" setback).
4. Dampers for horizontal installation can only be mounted in a fire barrier constructed of masonry/concrete materials.

Damper Sizes

		2000 fpm, 4 in. w.g.	4000 fpm, 6 in. w.g.
Orientation	Hor & Vert	Hor & Vert	Hor & Vert
Panel	Min Panel	Max Panel	Max Panel
Rectangular	10"W x 8"H (10"W x 8"H frame)	32"W x 42"H	24"W x 20"H
Round	6" dia. (10"W x 8"H frame)	30" dia.	18" dia.
Oval	8"W x 6"H (10"W x 8"H frame)	30"W x 40"H	22"W x 18"H



For handwritten orders, use the schedule block on page 2.

In the interest of product development, CESCO Products reserves the right to make changes without notice.



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Installation Configurations

<u>CA</u>	<u>2</u>	<u>G</u>	<u>2</u>
I	II	III	IV

I. Base Model

CA = Airfoil Blade Fire-Smoke Damper
 CG = Single-Thickness Blade Fire-Smoke Damper
 15MA = Airfoil Blade Dynamic Multi-Blade Fire Damper
 15MD = Single Thickness Blade Dynamic Multi-Blade Fire Damper
 15MS = Single Thickness Blade Static Multi-Blade Fire Damper

II. Leakage Class (Fire-Smoke Dampers Only)

1 = UL Class-I Leakage
 2 = UL Class-II Leakage
 Blank = Leakage Class Not Applicable (Fire Dampers)

III. Installation Configuration

D = Out-of-barrier Horizontal Grille Application, 3½" Grille Clearance
 E = Out-of-barrier Horizontal Grille Application, 1½" Grille Clearance
 F = Out-of-barrier Vertical Grille Application, 3½" Grille Clearance
 G = Out-of-barrier Vertical Grille Application, 1½" Grille Clearance
 J = Out-of-barrier Horizontal, Continuous Duct
 K = Out-of-barrier Vertical, Continuous Duct

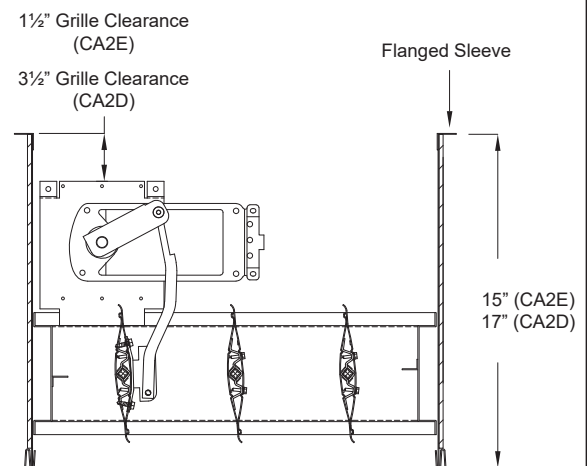
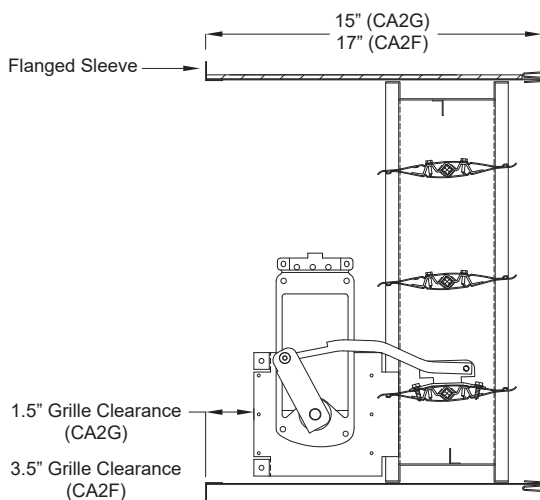
IV. Temperature Rating (Fire-Smoke Dampers Only)

2 = 250°F
 3 = 350°F
 Blank = Temperature Rating Not Applicable (Fire Dampers)

NOTE

- All Installations must be in accordance with SI-FAGM or SI-FACD
- Horizontal installations are only approved for masonry/concrete.

Grille Access Applications



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■ Continuous Duct Applications

