

SHOP SUBMITTAL / DRAWING REVIEW RESPONSE



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Formerly **MEINHARDT** Consulting Engineers

Project Name: DPARD Admin Offices

From: Chuck Stringer

Project No: 13333

Description: 233300.01 Dampers Submittal

SW Associates Consulting Engineers	Engineer's review is for general compliance with the design concept and contract documents. Markings or comments or the lack thereof shall not be construed as relieving the Contractor from compliance with the project plans and specifications. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of construction, for performing this work in a safe manner and for coordinating his work with that of other trades
<input type="checkbox"/> No Exception Taken	This review does not constitute approval or acceptance of deviations from contract documents, such deviations if any must be requested in writing or clearly identified as deviations in accordance with contract documents.
<input type="checkbox"/> Make Corrections Noted	
<input type="checkbox"/> Revise and Submit	
<input checked="" type="checkbox"/> Rejected	
SWA Project No. 13333	Submittal No: 233300.01
Date: 08-09-18	Checked By: Chuck Stringer

Comments: Rejected / not reviewed due to city imposed redesign.

SUBMITTAL TRANSMITTAL

CONTRACTOR'S REVIEW STAMP

A/E REVIEW STAMP

**DENCO CONSTRUCTION SPECIALISTS
SHOP DRAWING AND SUBMITTAL REVIEW**

JOB NO. DPA-230000

DATE 7-23-18

REVIEWER Shawnee Hallmark

Corrections or comments made relative to submittals during this review do not relieve the subcontractor from compliance with the requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The subcontractor is responsible for conforming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of other trades and performing his work in a safe and satisfactory manner.

**THIS REVIEW DOES NOT INDICATE NOR IMPLY ANY APPROVAL
OF CHANGES TO TIME OR CHANGES IN COSTS**

SUBMITTAL DATA

Project Dallas Park & Rec Dept Admin Offices Location 10031 E. Northwest Highway Dallas, TX 75238

General Contractor DENCO CONSTRUCTION SPECIALISTS

Trade HVAC

Items Submitted Dampers

Supplier Total Refrigeration Phone 214-926-8260

Substitutions and Deviations _____

Remarks _____

I CERTIFY THAT THE ABOVE ITEM DESCRIBED IN THE ATTACHED SUBMITTAL COMPLIES WITH THE CONTRACT DOCUMENTS EXCEPT AS NOTED ABOVE.

<u>Shawnee Hallmark</u>	<u>972-226-2609 ext. 108</u>	<u>7-23-18</u>
NAME (TRADE)	PHONE NO.	DATE

Review Comments: _____



Submittal Data

06/21/2018

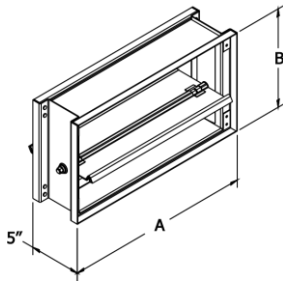
Job Name: Dallas Park & Recr. Dept	Submitted By: ADW Corporation
Engineer: SW Associates	Justin Zimmerman
Architect: Perkins + Will	1445 W. Beltline Rd.
Contractor: Total HVAC	Suite 104
Customer:	Carrollton, TX 75006

CD356

Low Velocity Commercial Control Damper, 3-V Blade

Main Product

CD356



This Control Damper incorporates the industries only one-piece steel frame construction, making it the engineer's preferred frame design. It promotes tighter leakage, and there are no bolts, screws or rivets that could fail over time. Frame corners are internally braced to reduce racking. V-groove blades are suitable for low and medium velocity applications. Blade edge seals are mechanically fastened to ensure years of dependable low leakage performance. Factory mounted and commissioned pneumatic and electric actuators are available options.

AXLES

1/2" (13mm) nominal hexagonal zinc plated steel.

PRESSURE

Up to 5" W.C. (1.2 kPa).

VELOCITY

Up to 3,000 FPM (15.3 m/s).

LEAKAGE

Superior to AMCA Class 2.

TEMPERATURE RANGE

Enhanced -45°F to +350°F (-43°C to +177°C).

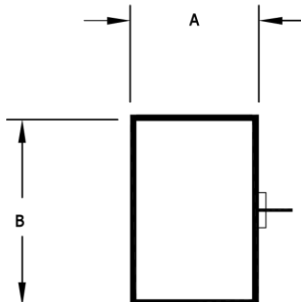
With silicone blade seals and stainless bearings.

*For images shown with Extended Shaft. If Extended Shaft is not selected, jackshaftering will not extend past the width of the damper.

Dimensions shown in parenthesis () indicate millimeters.

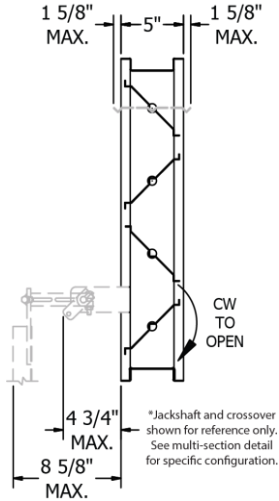
Construction Detail

SINGLE SECTION DETAIL



Construction Detail (continued)

CHANNEL FLANGE - OPPOSED BLADE



Option Group Schedule

SIZE Deduct 1/4
FRAME CHANNEL
BLADE ACTION OPPOSED
LINKAGE CONCEALED
BLADE SEALS STD.MATERIAL
JAMB SEALS STAINLESS
OPER.SHAFT EXTENDED
ACT TYPE ELECTRIC/120 VOLT
ACTUATOR TFB120
FAIL POS. OPEN
INSTALLATION OUT

SIDE PLATE YES
FRAME DEPTH 5 INCHES
FRAME GAUGE 16 GA.
FRM MATERIAL GALV.STEEL
BEARING TYPE STANDARD
BEARING MAT. STANDARD
LNKG. MATRL STANDARD
Slv/Tran None
CONSTRUCTION STANDARD GALV
HOLE PATTERN NO HOLES

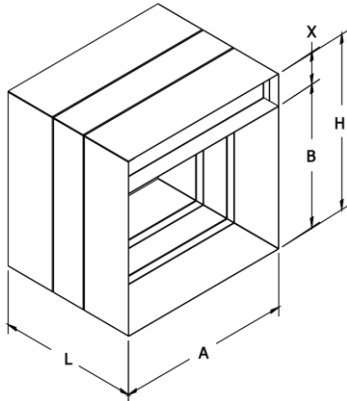
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3	1		14	5
4	2		18	5
5	1		30	5

DIBD20

UL 555 Classified 1-1/2 hr. Galvanized Steel Dynamic 12 in. Integral Sleeve Curtain Type Fire Damper

Main Product

DIBD20



This Fire Damper is a 1 1/2 hour UL classified dynamic (fans on) curtain style fire dampers for use in HVAC systems that remain in operation during a fire. Fire dampers are used for the protection of openings in walls, partitions, or masonry floors with fire resistance ratings of less than 3 hours and shall have a 1 1/2 hour fire protection rating. The Fire Damper can be installed vertically in walls and is rated for airflow in either direction.

DYNAMIC CLOSURE RATINGS

2000 fpm (10.2 m/s) vertical mount on all sizes.

4 in. w.g. (1 kPa) maximum pressure on all sizes.

FRAME AND BLADES

Galvanized steel (in gauges required by UL listing R-5531).

Blades out of air stream.

80 - 90% free area

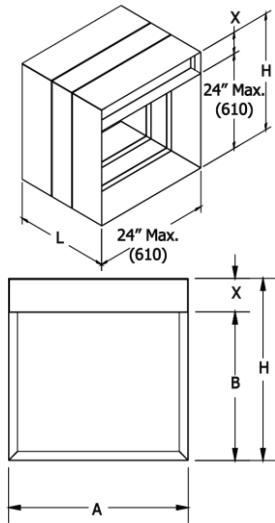
CLOSURE SPRINGS

301 stainless steel spring clip type.

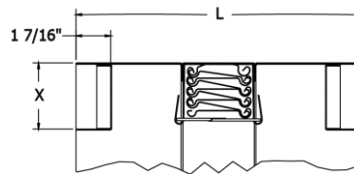
Dimensions shown in parentheses () indicate millimeters.

Construction Detail

1x1 B STYLE VERTICAL



B STYLE SECTION VIEW



Option Group Schedule

SIZE Deduct 1/4
FRAME B STYLE
MOUNTING VERTICAL
FUSELINK TEMP 165 DEGREES
CONSTRUCTION GALVANIZED
SLEEVE/TRANS SLEEVE
SLEEVE LENGTH 12 INCHES

SLEEVE GAUGE 22 GA.
SLV MATERIAL GALVANIZED
MOUNTING ANGLES PFMA 1.5 2 SIDES
ANGLE DIM/GA 1.5X1.5X20 GA
STATIC PRESSURE 4 INCHES
VELOCITY 2000 FPM
SEALED SLEEVE NO

ID	Quantity	Tag	WIDTH	HEIGHT
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Model Certifications

UL CLASSIFIED
 UL LISTED
 UL555 Classification R5531

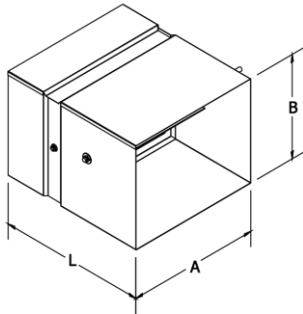
- National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B, and 101
- ICC International Building Codes
- CSFM California State Fire Marshal #3225-0245:0005
- New York City MEA 450-06-M

FSD36

UL 555, 555S Classified, Class II, 1-1/2 hr. Galvanized Steel Multi-Blade Combination Fire Smoke Damper

Main Product

FSD36



This combination fire and smoke damper provide point-of-origin fire and smoke containment. It includes high strength V-groove blade and control closure technology for flexibility in static or dynamic smoke management systems. This damper may be installed vertically in walls or horizontally in masonry floors and are rated for airflow and leakage in either direction.

FRAME

Integral sleeve and frame 20 (1.0) gauge galvanized single piece.

BLADES

Low profile aerodynamic shaped, double skin of 16 (1.6) and 20 (1.0) gauge galvanized steel.

BEARINGS

Stainless steel sleeve type, pressed into frame.

JAMB SEAL

Stainless steel, flexible metal compression type.

BLADE SEAL

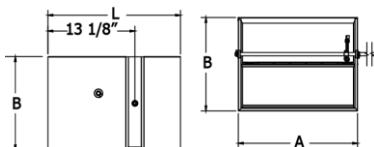
Stainless steel, flexible metal compression type.

Dimensions shown in parentheses () indicate millimeters.

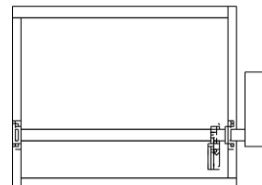
UL555S LKG. RTG.	UL555 HRLY. RTG.	MAX. VEL.	MAX. PRESS.	TEMP.
CLASS 2	1 1/2 HOUR	2000 FPM (10.2 m/s)	4 in. wg (1 kPa)	350°F(177°C)

Construction Detail

FSD36LP - FACE & SIDE VIEW



11-E001-1





Job Name Dallas Park & Recr. Dept
Architect Perkins + Will
Engineer SW Associates
Customer

Date 06/21/2018
Contractor Total HVAC
Preparer Justin Zimmerman

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

Option Group Schedule

SIZE Deduct 1/4	ACTUATOR FSTF120-RUS
CONST. TYPE FSD36LP	FAIL POS. CLOSE
FRAME C STYLE	INSTALLATION OUT
BLADE ACTION OPPOSED	SIDE PLATE NO
MOUNTING VERT./HORIZ.	SLEEVE/TRANS SLEEVE
CLOSURE TEMP 165 DEGREES	Sleeve Length 20 Inches
VELOCITY 2000 FPM	SLEEVE GAUGE 20 GA.
STATIC PRESSURE 4 INCHES	SLV MATERIAL GALVANIZED
ASSEMBLY TEMP 250 DEGREE	MOUNTING ANGLES PFMA 1.5 2 SIDES
ACT TYPE ELECTRIC/120 VOLT	ANGLE DIM/GA 1.5X1.5X20 GA

ID	Quantity	Tag	WIDTH	HEIGHT
1	1		12	5

Model Certifications

UL CLASSIFIED
 UL555 Listing R5531, UL555S Listing R5531

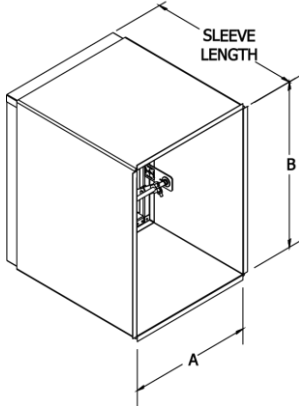
- National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B, 101 and 105
- ICC International Building Codes
- CSFM California State Fire Marshal Listing #3235-0245:0126, Listing #3235-0245:0129
- New York City MEA Listing 252-05-E

FSD36GA

UL555, 555S, Classified Class II, 1 1/2 hr. Galvanized Steel Multi-Blade Combination Fire Smoke Damper For Out of Wall & Grill Access Installation

Main Product

FSD36GA



This Leakage Class 2 model is an "out of the wall" Grille Access fire and smoke dampers. These dampers allow through the grille access to the damper, actuator and heat actuated components. The "GA" dampers may be installed vertically (in walls) in HVAC systems with airflow in either direction with velocities up to 2,000 fpm and pressures to 4" w.g.

FRAME

16 (1.6) gage, galvanized, hat-shaped channel, structurally superior to 13 (2.3) gage channel frame.

BLADES

Airfoil or triple vee groove shaped and approximately 6" (152) on center.

SLEEVE

17" x 20 gage (432 x 1.0) galvanized steel with 3/4" (19) flange on one end and factory installed thermal insulation on four sides.

SEALS

Blade edge is silicone material for smoke seals to 450°F (232°C) and galvanized steel for flame seal to 1900°F (1038°C). Jamb is stainless steel flexible metal compression type.

LINKAGE

Concealed in frame.

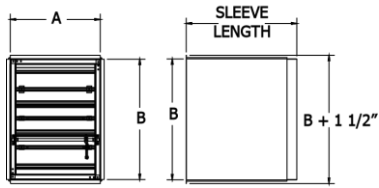
CONTROLLED CLOSURE DEVICE (HEAT-ACTUATED)

EFL 165°F (74°C) is standard. 212°F (100°C), 250°F (121°C), or 350°F (177°C) are options.
PFL 165°F (74°C) is standard. 212°F (100°C) or 285°F (141) are options.

Dimensions shown in parentheses () indicate millimeters.

Construction Detail

FACE & SIDE VIEW



Option Group Schedule

SIZE Actual Size	INSTALLATION IN
FRAME A STYLE	SLEEVE/TRANS SLEEVE
BLADE ACTION OPPOSED	Sleeve Length 17 Inches
MOUNTING VERTICAL	SLEEVE GAUGE 20 GA.
CLOSURE TEMP 165 DEGREES	SLV MATERIAL GALVANIZED
ACT TYPE ELECTRIC/120 VOLT	ASSEMBLY TEMP 250 DEGREE
ACTUATOR FSTF120-RUS	STATIC PRESSURE 4 INCHES
FAIL POS. CLOSE	VELOCITY 2000 FPM

ID	Quantity	Tag	WIDTH	HEIGHT
1	1		16	12

Model Certifications

UL CLASSIFIED
 UL555 Listing R5531, UL555S Listing R5531

- National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B, 101 and 105
- ICC International Building Codes
- CSFM California State Fire Marshal Listing #3235-0245:0124
- New York City MEA 252-05-E