

SHOP DRAWING TRANSMITTAL

To: Daniel Cusimano Architect Inc.
185 Bridgeland Ave.
Suite 107
Toronto, ON M6A 1Y7

Att: Stacey Melville

Project: **Shopper's Drug Mart #1112**
5050 Tecumseh Road East, Building 3
Windsor, Ontario

From: Kyle McCallum
Date: January 24, 2025
File No: 7320.pt

We have reviewed the attached contractor's equipment shop drawings for general conformity with the design documents and are forwarding them to you for your use in association with the above noted project.

The documents are sent by: Courier • Hand • Pick-up • Facsimile • **E-Mail**

<u>Qty</u>	<u>Shop Drawings</u>	<u>Notes</u>
1	Grilles & Diffusers (Titus)	Reviewed: Verify length for return linear slot diffuser tagged R-7 prior to ordering. Fire-rated door grille FD-DG : Coordinate colour with architect prior to ordering. Verify grilles & diffusers count prior to ordering.
1	Transfer Fans (Broan)	Reviewed: No comment.
1	Fire Damper (Ruskin)	Reviewed: No comment.

**ENSURE COPIES OF FINAL SHOP DWGS ARE
INSERTED INTO MAINTENANCE MANUALS.**



54 Audia Court, Unit 2
Concord, ON L4K 3N5
(905)-738-1400

Submittal 24-283-003 Rev. 1

PROJECT NAME	PROJECT ADDRESS	DATE SUBMITTED
SDM 1112 WINDSOR 24-283	5050 TECUMSEH RD EAST, BUILDING 3, WINDSOR, ONTARIO	Jan 16, 2025

TO	FROM
JEREMY DAVIS	PAUL LEDDY
COMPANY	COMPANY
LESTER CONSTRUCTION GROUP INC.	Consult Mechanical Inc.
EMAIL	EMAIL
jeremy@lestergroup.ca	paul.l@consultmechanical.com
ADDRESS	ADDRESS
3445 Wheelton Road, Unit 130, Windsor, Ontario N8W 5A6	54 Audia Court, Unit 2 Concord, ON L4K 3N5

Title

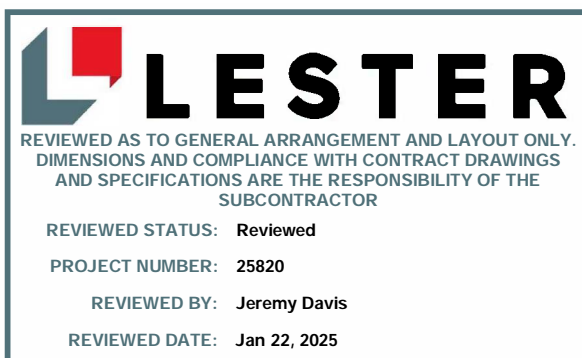
Grills Registers and Diffusers

Description

Grills Registers and Diffusers for SDM Windsor

Package Items

SPEC	SUBSECTION	ITEM	TYPE
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INTEGRATED ENGINEERING			
REVIEW OF THIS DRAWING IS FOR GENERAL CONFORMITY WITH THE DESIGN ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIREMENTS OF THE INSTALLATION.			
PROJ No.	7320	REVIEWED	<input checked="" type="checkbox"/>
DATE	25.01.24	REVISED	<input type="checkbox"/>
BY	KJM	RESUBMIT	<input type="checkbox"/>

SEE NOTES & COMMENTS
ON TRANSMITTAL



5 Sandhill Court, Unit C
Brampton, ON L6T 5J5
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SHOP DRAWING PACKAGE COVER

Date: JANUARY 22 2025

Project Name: SHOPPERS DRUG MART #1112

Project Address: 4990 TECUMSETH ROAD EAST
WINDSOR, ONTARIO

REVISED & RESUBMITTED

Contractor: CONSULT MECHANICAL

Engineer: INTEGRAL ENGINEERING

Attention: MOHAMMED LODHI

Enclosed are the submittal drawings for the above referenced project.
Please return one approved or corrected copy of each drawing.

Number of copies: 1

Airex Contact: Ed Morson

ed.morson@airex.ca

- Notes:
- ☐ For records only.
 - ☐ Orders released to the factory upon receipt of approved shop drawings.
 - ☒ Orders released to the factory upon receipt of approved shop drawings & authorization from the contractor to proceed.
 - ☐ Orders released for fabrication at the request of the contractor.

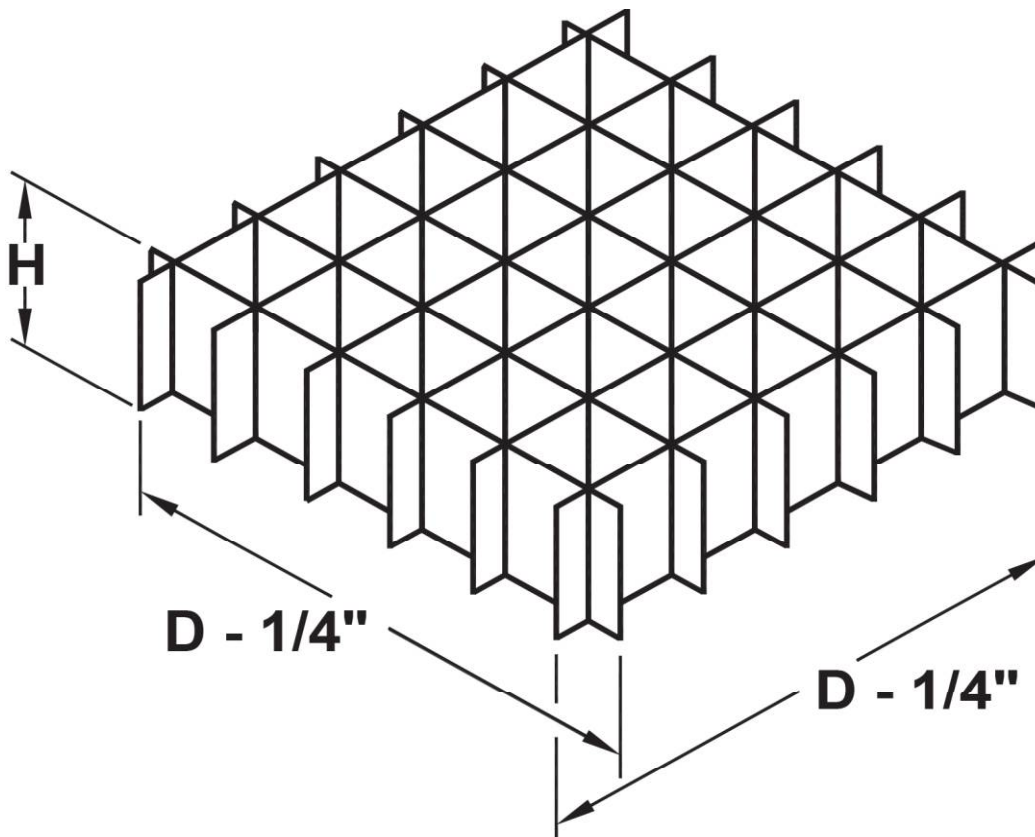
50F

Eggcrate return, aluminum border and aluminum grid.

Main Product

50F-1 (2)

50F



A Core border with 1/2 x 1/2 x 1/2 Aluminum Grid

Duct Width	Duct Height	Core OA Width	Core OA Height
24	6	23.75	5.75
24	12	23.75	11.75
24	24	23.75	23.75

General Description

50F-1 (2)

- Insect and debris screens are not available when damper are fitted.
- #8 x 1 1/4" lg. Phillips flat head sheet metal screws painted white.
- All dimensions are $\pm 1/16"$
- Material: Aluminum

Project SDM WINDSOR
Architect
Engineer
Contractor
Designation



Date 01/16/2025
Office Airex Inc.
Preparer MOHAMMED
Version 2014.0.566

Option Schedule

50F-1 (2)

ID	Quantity	Tag	WIDTH IN INCHES	HEIGHT IN INCHES
5	5	R2	24	6
6	20	R3	24	12
7	2	R4	24	24

MODULE SIZE NONE

BORDER 8 - CORE ONLY

FINISH 26 - WHITE

FASTENING N - NO SCREW HOLES

DAMPER MODEL 0 - NONE

EGGCRATE CORE CORE A (BORDER 8)

ACCESSORY 2 NONE

ACCESSORY 3 NONE

50F

Eggcrate return, aluminum border and aluminum grid.

Main Product

50F-1

50F

Technical drawing of the 50F eggcrate return. The drawing shows a side view of the unit with a series of vertical slats. Key dimensions are labeled:
 - Overall width: D plus 1 3/4"
 - Width of the slatted section: D minus 3/4"
 - Mounting flange width on the left: 1 1/4"
 - Mounting flange width on the right: 3/16"
 - Total height: J
 - Nominal Duct Size (D)
 The unit is shown mounted on a surface with brackets.

Surface mount with 1/2 x 1/2 x 1/2 Aluminum Grid

Duct Width	Duct Height	Grille OA Width	Grille OA Height	J
10	6	11.75	7.75	1 1/4"
12	12	13.75	13.75	1 1/4"
24	24	25.75	25.75	1 1/4"
8	8	9.75	9.75	1 1/4"
24	12	25.75	13.75	1 1/4"

General Description	50F-1
<ul style="list-style-type: none"> • Insect and debris screens are not available when damper are fitted. • #8 x 1 1/4" lg. Phillips flat head sheet metal screws painted white. • All dimensions are $\pm 1/16"$ • Material: Aluminum 	

Option Schedule					50F-1
ID	Quantity	Tag	WIDTH IN INCHES	HEIGHT IN INCHES	
1	5	E1	10	6	
2	4	E2	12	12	
3	2	E3	24	24	
4	3	R1	8	8	
5	3	R3	24	12	
<div><div><div>MODULE SIZE NONE</div><div>BORDER 1 - SURFACE MOUNT</div><div>FINISH 26 - WHITE</div><div>FASTENING A - SCREW HOLES</div></div><div><div>DAMPER MODEL 0 - NONE</div><div>EGGCRATE CORE CORE A (BORDER 1 OR 3)</div><div>ACCESSORY 2 NONE</div><div>ACCESSORY 3 NONE</div></div></div>					

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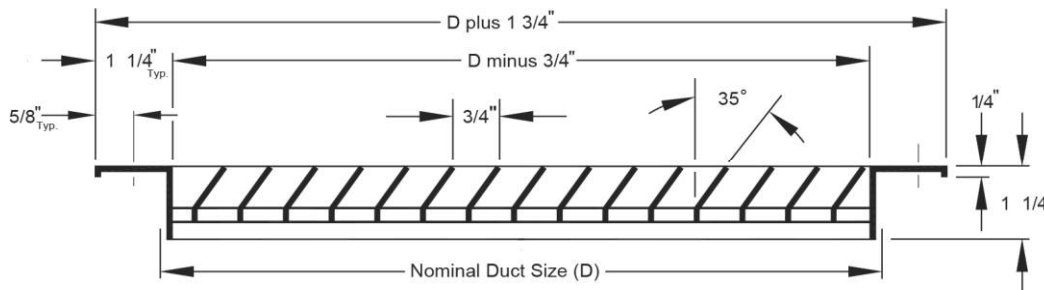
350RL

Louvered Return Grille, 35° Deflection, 3/4" Spacing, blades parallel to long dimension, Steel.

Main Product

350RL-1

350RL



Screw Hole Fastening, Grille Mounting Detail



Duct Width	Duct Height	Grille OA Width	Grille OA Height
26	18	27.75	19.75
8	4	9.75	5.75

General Description

350RL-1

- Louvers are horizontal to width with 3/4" spacing at a 35 degree deflection.
- Optional opposed blade damper has screwdriver adjustment accessible through face of register.
- Odd and fractional sizes are available at additional cost.
- Sizes larger than 48" x 48" are shipped in multiple sections with joining strips for field assembly.
- Screw hole fastening includes #8 x 1 1/4" lg. Phillip's flat head sheet metal screws painted color of grille.
- Wall or duct opening should be duct size $\pm 1/8"$.
- All dimensions are $\pm 1/16"$
- Material: Steel

Option Schedule

350RL-1

ID	Quantity	Tag	WIDTH IN INCHES	HEIGHT IN INCHES
1	1	R5	26	18
3	1	R8	8	4

MODULE SIZE NONE

BORDER 1 - SURFACE MOUNT

FINISH 26 - WHITE

FASTENING A - SCREW HOLES

DAMPER MODEL 0 - NONE

ACCESSORY 1 NONE

ACCESSORY 2 NONE

ACCESSORY 3 NONE

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Option Schedule (continued)

30RL-1

MODULE SIZE NONE

BORDER 1 - SURFACE MOUNT

FINISH 26 - WHITE

FASTENING A - SCREW HOLES

DAMPER MODEL AG-35 - STEEL OBD

ACCESSORY 1 NONE

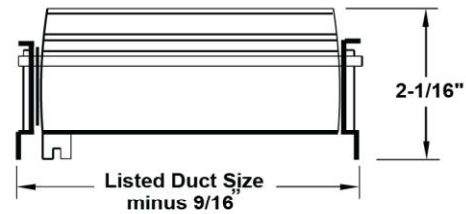
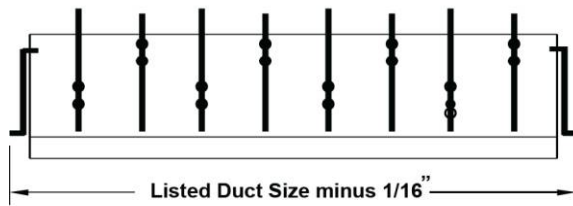
ACCESSORY 2 NONE

ACCESSORY 3 NONE

Accessories

30RL-1

Damper: AG-35 Type-1 common drawing, see above for material and finish used:



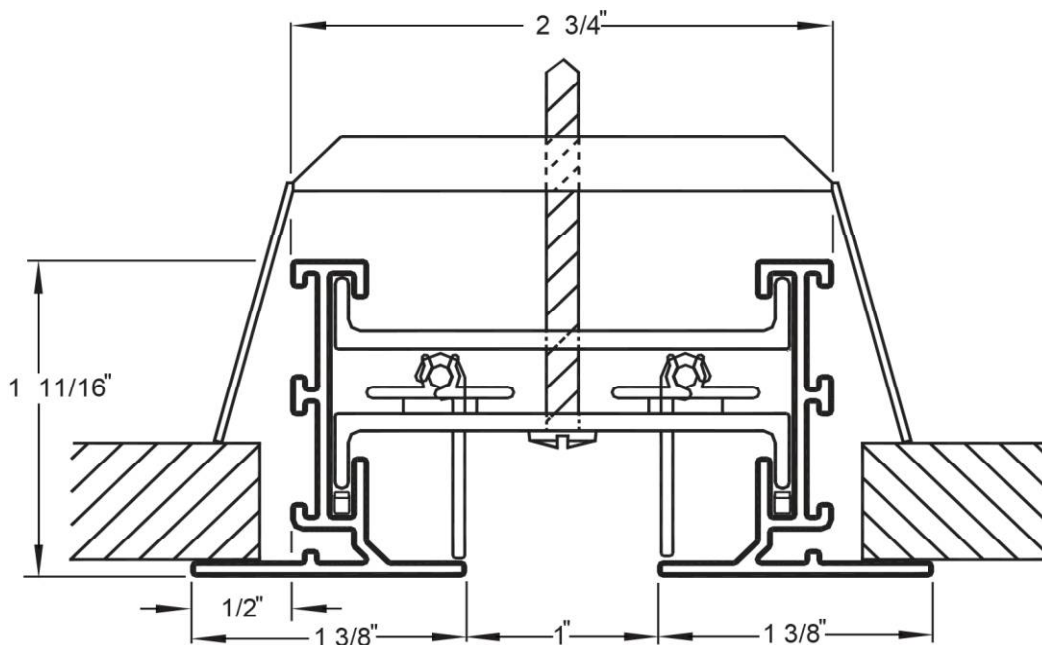
FL-10

Architectural Linear diffuser, aluminum, 1" slot.

Main Product

FL10-1

FL-10

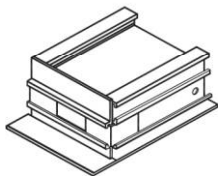
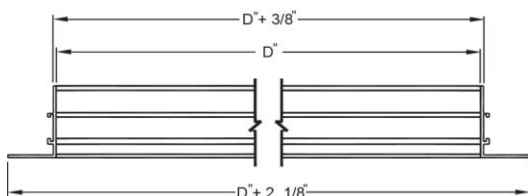


Border Type 77

FL SLOTS	Duct Length	Cutout Width
1 SLOT	276	3"

End Fabrication: **SXX**

SXX (Straight) End Borders



Duct Length	OverAll Length (O)	C
276	278.125	276.375

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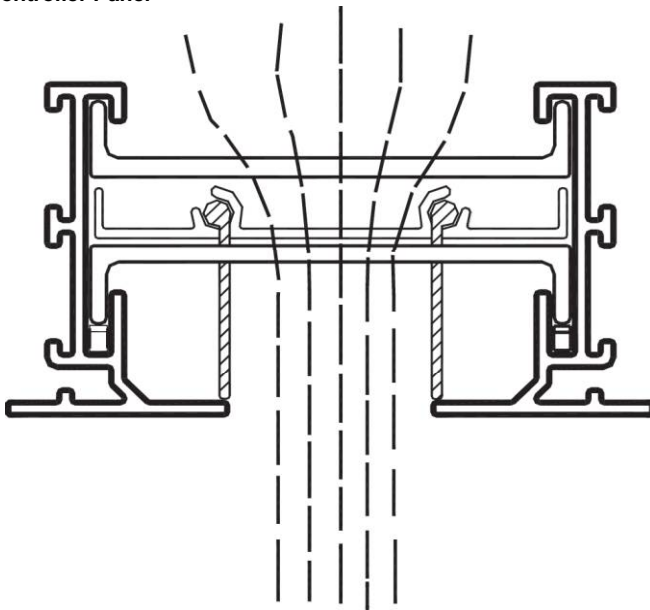


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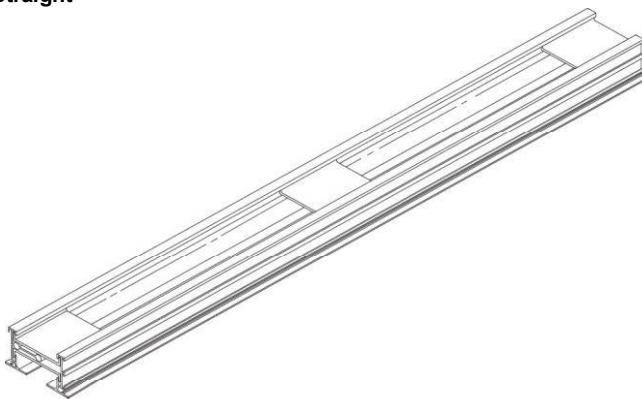
Main Product (continued)

FL10-1

Jet-Throw Controller Panel



FlowBar is Straight



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Option Schedule

FL10-1

ID	Quantity	Tag	LINEAR LENGTH INCHES
1	1	R7	276

FL SLOTS 1 SLOT

FL END BORDER SXX - END BORDERS

BORDER BORDER 77

FINISH 26 - WHITE

PATTERN CONTROLLER JT - JET THROW

ANGLE CUT NO CUT (DEFAULT)

ACCESSORY 1 S72 - Straight-72 inch segment

ACCESSORY 2 NONE

ACCESSORY 3 NONE

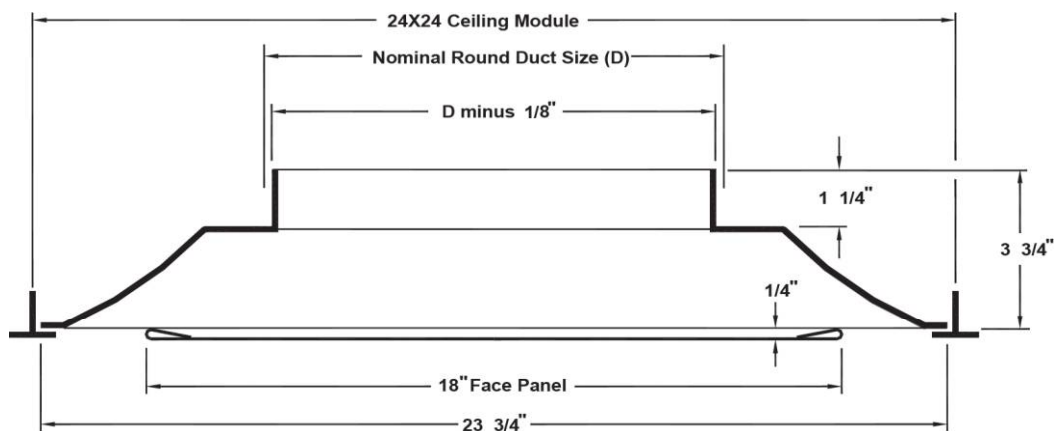
OMNI

Architectural Ceiling Diffusers
 Square Cone • Plaque Face
 Round Neck • Steel

Main Product

OMNI-1

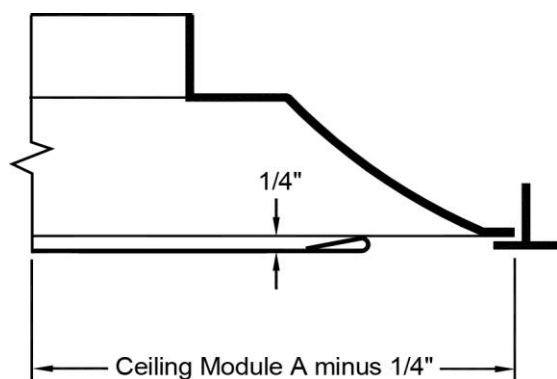
OMNI



Border Type 3 (Lay-In) Full Face

Nominal Duct Size (D)	Neck Size
6" Dia.	5 7/8" Dia.
8" Dia.	7 7/8" Dia.

Lay-in:



General Description

OMNI-1

- The TITUS OMNI diffuser is designed to satisfy architectural as well as engineering criteria. Its strong, clean, unobtrusive lines harmonize with the ceiling system, without sacrificing performance.
- The curvature of the OMNI backpan works with the formed edges of the face panel to deliver a 360 tight horizontal air pattern, without excessive noise or pressure drop.
- The OMNI diffuser is an excellent choice for variable volume systems. The air pattern remains tight and horizontal for effective room air distribution, even when the air volume varies over a wide range.
- The edges of the face panel are formed to a radius for solid, crisp appearance. The formed edges also stiffen the face panel and assure a straight and level surface.
- The panel can be removed from backpan for easy access to an optional damper.

Option Schedule

OMNI-1

ID	Quantity	Tag	DIM 1 NECK SIZE
1	11	S1	6" DIAMETER
2	3	S2	8" DIAMETER

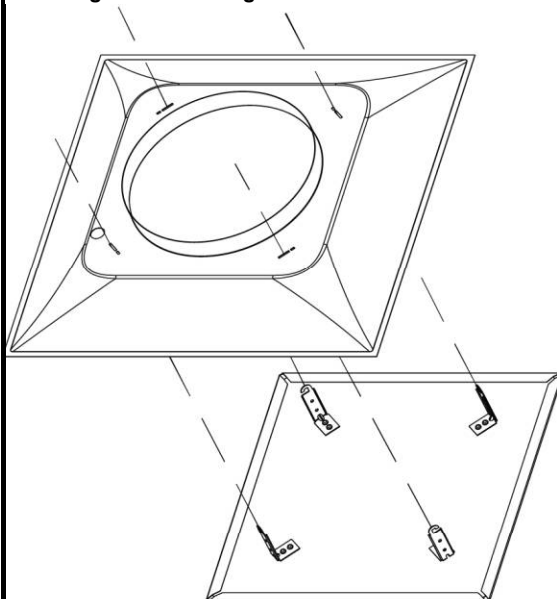
MODULE SIZE 24X24
BORDER 3 - LAY-IN
FINISH 26 - WHITE
DAMPER MODEL 0 - NONE

ACCESSORY 1 NONE
ACCESSORY 2 NONE
ACCESSORY 3 NONE

Accessories

OMNI-1

Installing and Removing Face Panel



Installing Face Panel

1. Insert the hook brackets into the slots in the backpan.
2. Rotate the face panel clockwise until...
3. the hooks positively engage in the secondary slots in the backpan.

Removing Face Panel

1. Lift the faceplate towards the backpan to disengage the hook brackets from the backpan slots
2. Rotate the faceplate counter-clockwise
3. Lower the faceplate away from the backpan.

Adjusting Optional Damper

1. Remove face panel as above.
2. Use flat blade screwdriver to turn operator shaft at center of damper.
3. Replace face panel.

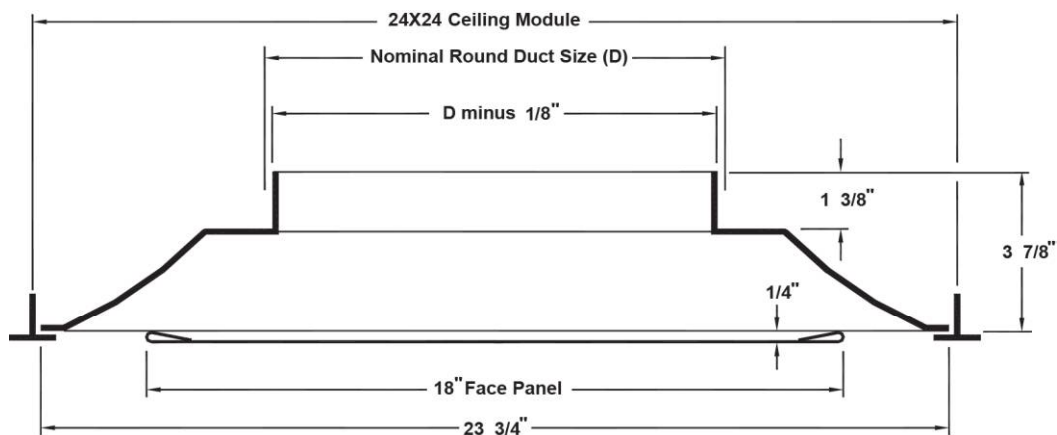
OMNI

Architectural Ceiling Diffusers
 Square Cone • Plaque Face
 Round Neck • Steel

Main Product

OMNI-1 (2)

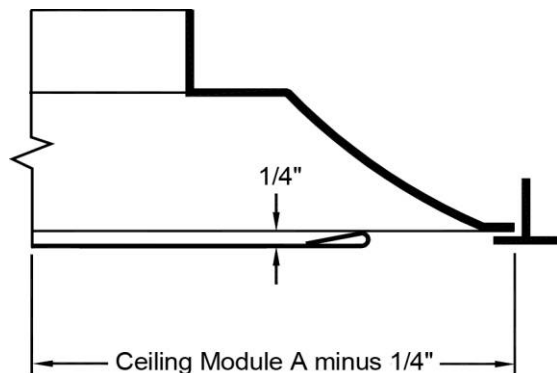
OMNI



Border Type 3 (Lay-In) Full Face

Nominal Duct Size (D)	Neck Size
10" Dia.	9 7/8" Dia.
14" Dia.	13 7/8" Dia.

Lay-in:



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Date 01/22/2025
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Version 2014.0.566

General Description

OMNI-1 (2)

- The TITUS OMNI diffuser is designed to satisfy architectural as well as engineering criteria. Its strong, clean, unobtrusive lines harmonize with the ceiling system, without sacrificing performance.
- The curvature of the OMNI backpan works with the formed edges of the face panel to deliver a 360 tight horizontal air pattern, without excessive noise or pressure drop.
- The OMNI diffuser is an excellent choice for variable volume systems. The air pattern remains tight and horizontal for effective room air distribution, even when the air volume varies over a wide range.
- The edges of the face panel are formed to a radius for solid, crisp appearance. The formed edges also stiffen the face panel and assure a straight and level surface.
- The panel can be removed from backpan for easy access to an optional damper.

Option Schedule

OMNI-1 (2)

ID	Quantity	Tag	DIM 1 NECK SIZE
3	36	S3	10" DIAMETER

MODULE SIZE 24X24
BORDER 3 - LAY-IN
FINISH 26 - WHITE
DAMPER MODEL 0 - NONE

ACCESSORY 1 NONE
ACCESSORY 2 NONE
ACCESSORY 3 NONE

ID	Quantity	Tag	DIM 1 NECK SIZE
4	2	S4	14" DIAMETER

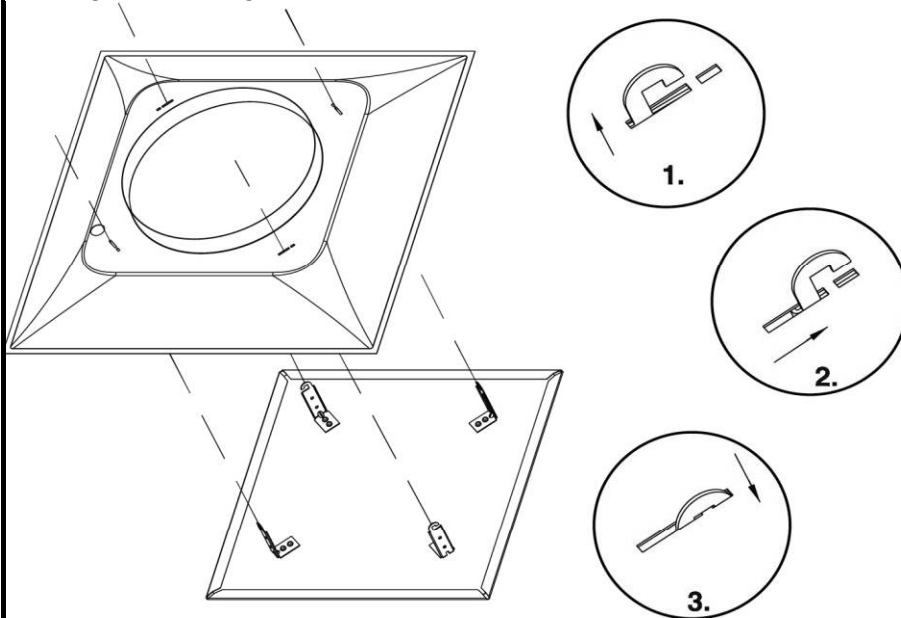
MODULE SIZE 24X24
BORDER 3 - LAY-IN
FINISH 26 - WHITE
DAMPER MODEL AG-75 - DUCT MOUNTED ROUND OBD

ACCESSORY 1 NONE
ACCESSORY 2 NONE
ACCESSORY 3 NONE

Accessories

OMNI-1 (2)

Installing and Removing Face Panel



Installing Face Panel

1. Insert the hook brackets into the slots in the backpan.
2. Rotate the face panel clockwise until...
3. the hooks positively engage in the secondary slots in the backpan.

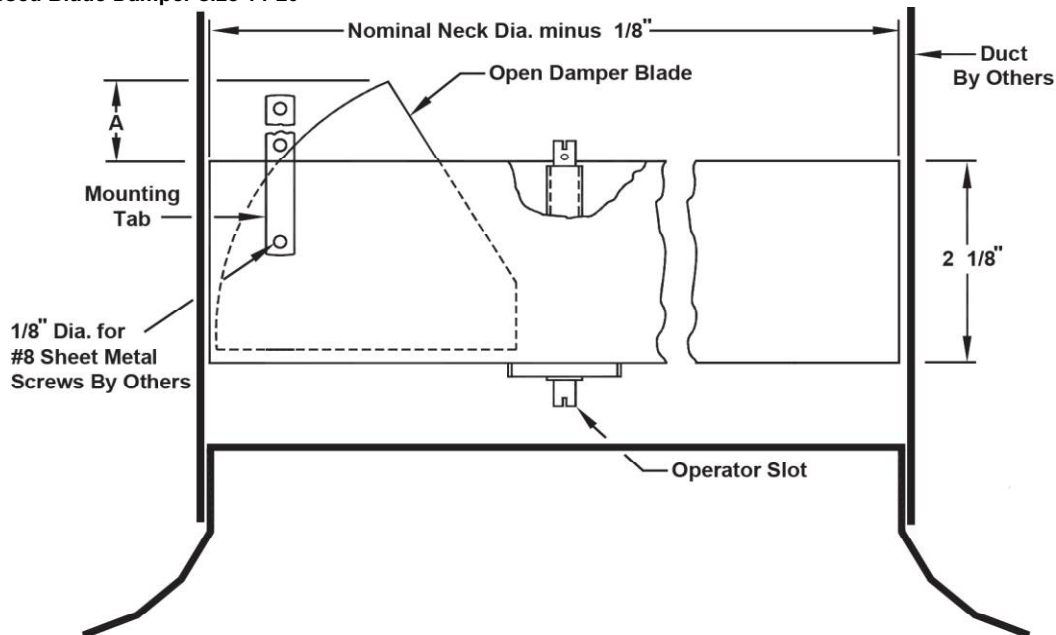
Removing Face Panel

1. Lift the faceplate towards the backpan to disengage the hook brackets from the backpan slots
2. Rotate the faceplate counter-clockwise
3. Lower the faceplate away from the backpan.

Adjusting Optional Damper

1. Remove face panel as above.
2. Use flat blade screwdriver to turn operator shaft at center of damper.
3. Replace face panel.

AG-75 Opposed Blade Damper size 14-20



Standard Finish: Mill

- The Opposed Blade Damper mounts inside of a round duct neck.
- Gang operated blades(4) distribute air evenly through the diffuser or duct. Not recommended for flexible duct applications
- Adjustable at screwdriver operator slot.
- Shipped loose for field installation.
- Material: Galvanized steel.

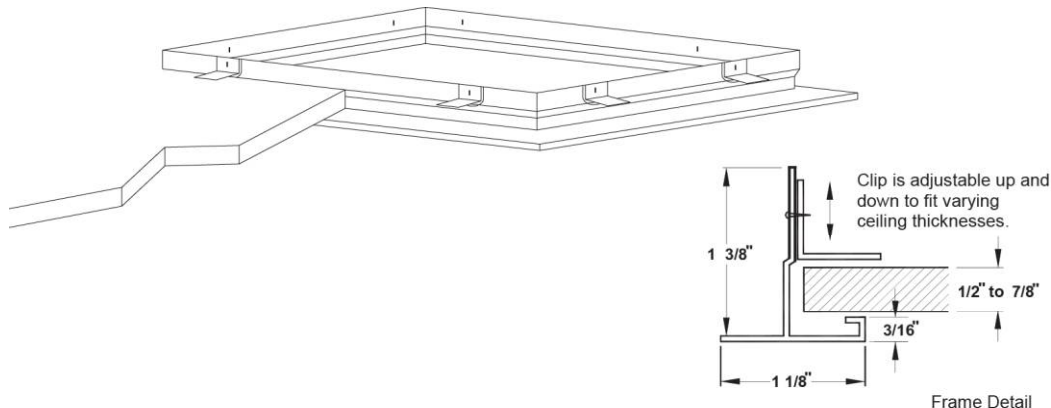
TRM

Aluminum Rapid Mount Frame/Plaster-Frame.

Main Product

TRM-1

TRM



MODULE SIZE	Opening Cutout
24X24	24 1/2" x 24 1/2"

General Description

TRM-1

- Model TRM TITUS Rapid Mount Frame allows T-bar, lay-in type diffusers (border Type 3) to be installed in surface mounting applications (border Type 1).
- TRM frame is installed in opening and secured in place using security clips. Screws are mounted flush in frame mounting holes.
- Rapid Mount Frame can be mounted in plaster or sheet rock ceiling.
- The TRM can be used to access ceiling plenum. Diffuser with flex connection can be lifted out of frame to access ceiling space.
- Material is aluminum with steel fasteners.

Option Schedule

TRM-1

ID	Quantity	Tag	MODULE SIZE
1	2	S4	24X24

FINISH 26 - WHITE

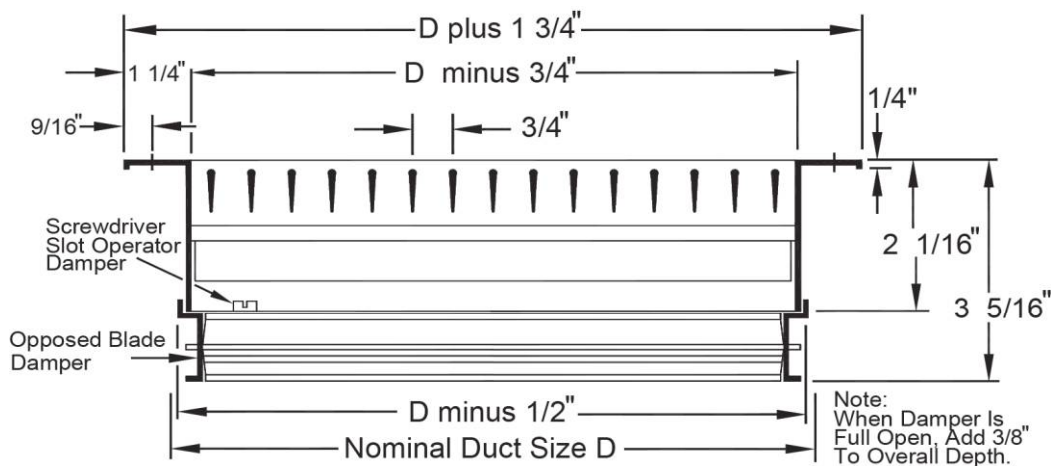
300FL

Double Deflection Supply Grille, $\frac{3}{4}$ " Spacing, front blades parallel to long dimension, Aluminum.

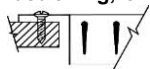
Main Product

300FL-1

300FL



Screw Hole Fastening, Grille Mounting Detail



Duct Width	Duct Height	Grille OA Width	Grille OA Height
14	8	15.75	9.75
8	4	9.75	5.75

General Description

300FL-1

- Front louvers are horizontal to width.
- Front and rear louvers are individually adjustable.
- Screw hole fastening includes #8 x $1 \frac{1}{4}"$ lg. Phillip's flat head sheet metal screws painted color of grille.
- Sizes larger than 48" x 48" are shipped in multiple sections with joining strips for field assembly.
- Odd and fractional sizes are available at additional cost.
- Optional opposed blade damper has screwdriver adjustment accessible through face of register.
- Insect and debris screens are not available when dampers are fitted.
- All dimensions are $\pm \frac{1}{16}"$
- Material: Aluminum

Option Schedule

300FL-1

ID	Quantity	Tag	WIDTH IN INCHES	HEIGHT IN INCHES
1	4	S5	14	8
2	1	S6	8	4

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Version 2014.0.566

Option Schedule (continued)

300FL-1

MODULE SIZE NONE

BORDER 1 - SURFACE MOUNT

FINISH 26 - WHITE

FASTENING A - SCREW HOLES

DAMPER MODEL AG-15 - STEEL OBD

ACCESSORY 1 NONE

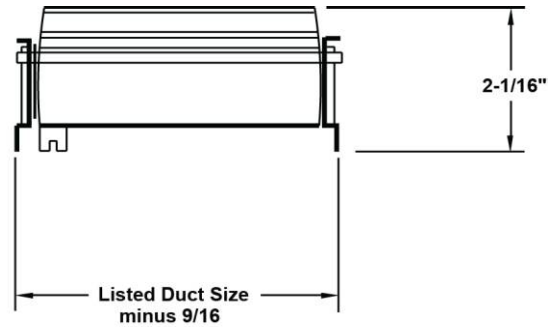
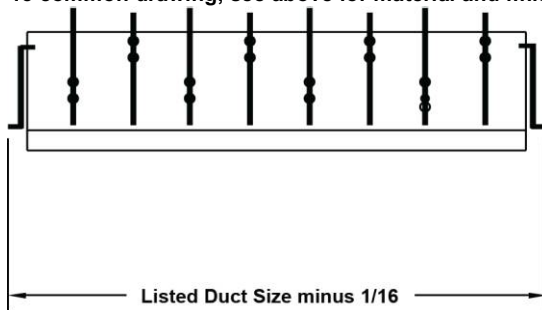
ACCESSORY 2 NONE

ACCESSORY 3 NONE

Accessories

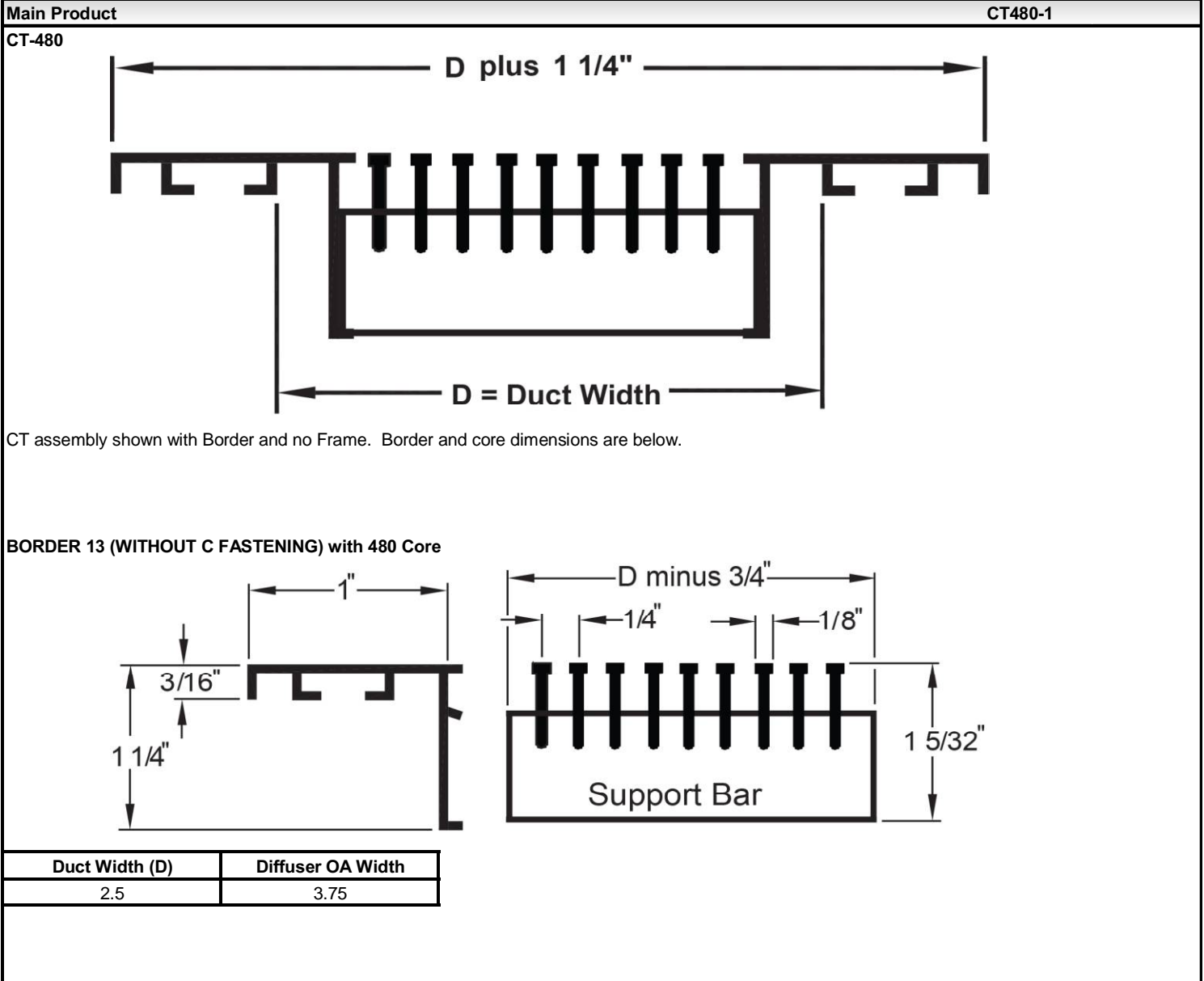
300FL-1

Damper: AG-15 common drawing, see above for material and finish



CT-480

Linear bar Diffuser, 1/4" bar spacing, 1/8" bars, zero degree deflection, Aluminum



General Description	CT480-1
<ul style="list-style-type: none"> · TITUS linear bar diffusers are designed for both supply and return applications. · Lengths greater than 6 feet are furnished in multiple sections, the number and size determined by the factory. · Sections can be joined end-to-end for continuous appearance, using standard alignment strips or alignment pins. · All deflection bars are fixed and are parallel to the long dimension. · Fixed Bars are extruded aluminum. 	

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Option Schedule

CT480-1

ID	Quantity	Tag	LINEAR LENGTH INCHES	WIDTH IN INCHES
1	2	S7	48	2.5

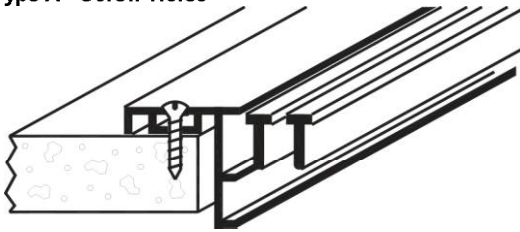
END BORDER XX - TWO END BORDERS
CT FRAME & BORDER BORDER 13 (WITHOUT C FASTENING)
FINISH 26 - WHITE
FASTENING A - SCREW HOLES

DAMPER MODEL 0 - NONE
ACCESSORY 1 NONE
ACCESSORY 2 NONE
ACCESSORY 3 NONE

Accessories

CT480-1

Fastening: Type A • Screw Holes



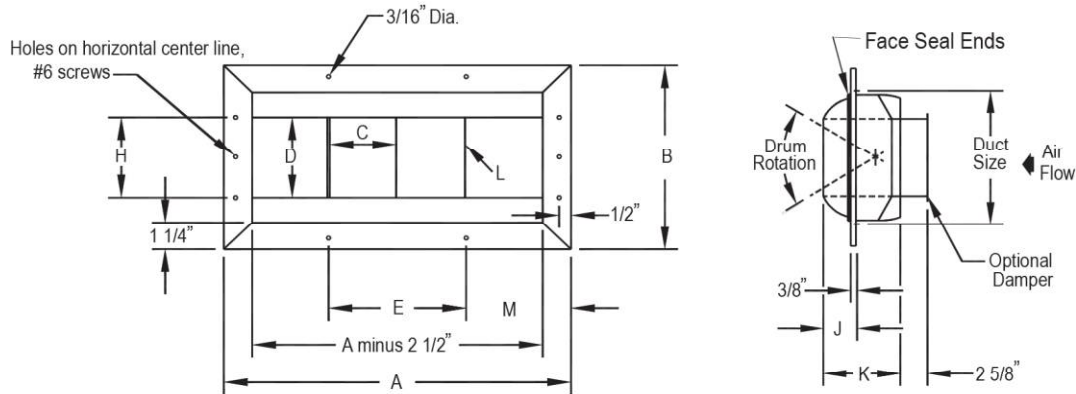
DL

Long throw, high capacity supply grille with rotating drum.

Main Product

DL-1

DL



Selected Sizes

Grille	Min. Duct Opening	OA Width(A)	OA Height(B)	J	Screw Qty(ea.)
70 x 12	71 1/8 x 12 5/8	72 11/16	13 15/16	3 15/16"	30

General Description

DL-1

- Designed to handle large air capacity requirements and long throws.
 - Well suited for installations where the conditioned space is large, and where it is impractical to bring the duct work close to the occupants.
- Examples being shopping malls, coliseums, field houses, air terminals, factories and warehouses
- Adjustable horizontal and vertical throw direction via a rotatable drum and pivoting blades.
 - Felt seal between the drum and border to stop leakage and hold the drum securely in the position selected.
 - Optional heavy duty opposed blade damper with a screwdriver operator accessible through the face
 - Aluminum Drum with aluminum end caps for extra strength in an aluminum frame.
 - Can be operated at high discharge velocities. However, if at these velocities the static pressure across the drum louver itself is more than 0.25"wg, the optional opposed blade damper is not recommended.

Dimension for Sizes Selected

DL-1

Grille	C	D	E	H	J	K	L	M	N
70 x 12	5	6 7/8	5	6 1/16"	3 15/16"	6"	22	6 11/32"	4 7/32"

Option Schedule

DL-1

ID	Quantity	Tag	WIDTH IN INCHES	HEIGHT IN INCHES
1	1	S8	70 INCHES	12 INCHES

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Option Schedule (continued)

DL-1

BORDER 1 - SURFACE MOUNT
FINISH 26 - WHITE

DAMPER MODEL AS - Air Scoop
ACCESSORY 1 0 - NONE

L14



FIRE-RATED ADJUSTABLE Z-BLADE LOUVER: 1900A REV B

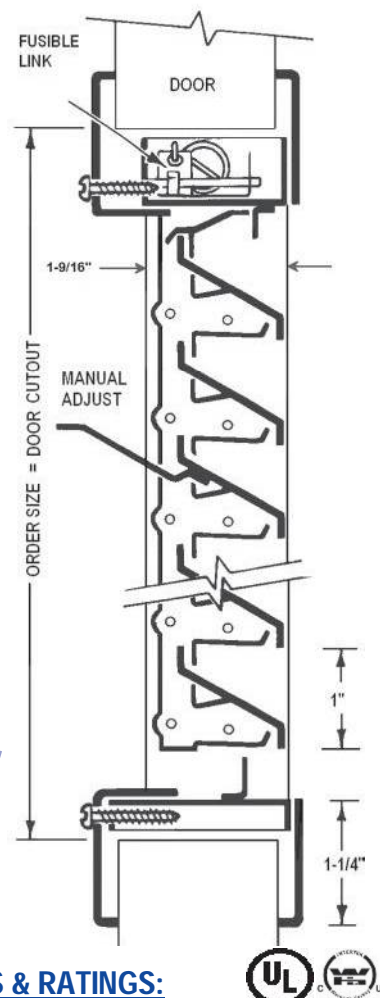
This Adjustable Z-Blade Louver with Fusible Link is Ideal for Use in Fire Doors up to 1-1/2 Hour Rating.
Ideal for Installation in Existing Door Cutouts.



SPECIFICATIONS:

Material:	16 gauge CRS frame and louver blades. Min size 10" x 6", Max 24" x 24".
Construction:	Louver: Z-blade louvers riveted to operating bar and frame at 1" intervals to welded 1-9/16" deep frame. Mechanical stop holds blades open. Frame: Mitered and welded corners; screws fastened through prepared frame into louver core leaving corridor side of frame free of fasteners.
Operation:	Adjustable blades of 16 gauge CRS pivot on cadmium-plated steel rivets. The blades are operated by a manual adjusting lever. A spring loaded fusible link mechanism is incorporated into the design. Upon melting of the link at 165° F, the action bar is actuated, thereby closing and locking all of the blades.
Door :	For 1-3/4" door. Door cutout = order size.
Fasteners:	#8 x 3/4" Phillips flathead screws to match finish.
Powder Coat Finishes:	(B) Mineral Bronze (standard color) ___ (G) Gray ___ (BK) Black ___ (FBK) Flat Black ___ (W) White ___ (SB) SC Beige ___ (SI) Silver ___ (S) Sand ___ (AB) AMS Beige ___ (R) Red ___ (GH) Gray Hammettone Color Samples Online
Free Flow Area:	45% free area.

SELF-ATTACHING FRAME



OPTIONAL FEATURES AT AN ADDITIONAL COST:

Finishes & Materials:	___ (S) 18 gauge stainless steel—#4 finish. ___ (E) Electro Galvanized for corrosion resistance & exterior use. ___ Special order colors. Please provide color chip.
Fasteners:	___ Torx ___ Other: _____
Screen:	___ Insect or Bird Screen.
Door:	___ 1-3/8" Door
Custom:	Custom sizes, other door thickness. Contact Customer Service.
Order Format:	1900A _____
Example: 1900A 1212SA	Option S,E W H Color

LISTINGS & RATINGS:



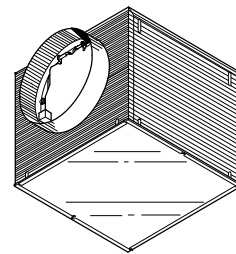
Fire Ratings with UL & WHI Classification Marks
Tested & Listed for UL10B & C, and classified in accordance with UBC7-2, ASTM E152, CAN/ULC S104, NFPA 252, NFPA80.

Model 1900A is Rated for use in fire doors up to 1-1/2 hour rating. Louver size shall not exceed maximum of 576 sq. inches, 24"W and 24" H. The minimum width and height shall not be less than 10" and 6", respectively. Louvers may be provided for classified hollow metal type and composite type fire doors. Consult with the Local Authority Having Jurisdiction (AHJ) to determine appropriate standards. Louver frame will be labeled with Listing mark.

STOCK ITEM— SEVERAL SIZES OF 1900A IN STOCK FOR NEXT DAY SHIPMENT FROM MANY OF OUR WAREHOUSES

	Distributor:	Width: <u>18</u> x Height: <u>12</u>
	Architect:	Quantity: <u>1</u>
	Contractor:	Model: TAG - FD-DG
	Project:	Date: _____ Version: ALPDS0313
800-554-6077 QUOTES@ACTIVARCPG.COM ORDERS@ACTIVARCPG.COM SALES@AIRLOUVERS.COM FAX: 952-835-2218 VISIT WWW.ACTIVARCPG.COM FOR THE MOST UPDATED PRODUCT INFORMATION • AN ACTIVAR CONSTRUCTION PRODUCTS COMPANY MFG: COMMERCE CA, BLOOMINGTON, MN • WAREHOUSES: LANCASTER PA, ATLANTA GA, CHICAGO IL, SEATTLE WA, FORT MYERS FL, DALLAS TX		

LIGHT COMMERCIAL ENERGY STAR® CERTIFIED IN-LINE VENTILATORS MODELS L100EL, L150EL, L200EL, L250EL & L300EL



Incredibly reliable. Unbelievably quiet. Offering the CFM choices you need at the lowest sound levels in the industry.

FEATURES

BLOWER:

- Low RPM for quiet operation
- Resilient anti-vibration mounts
- Dynamically-balanced, centrifugal blower wheel for quiet, efficient performance
- Permanently lubricated, thermally protected motor
- Plug-in motor rated at 120 VAC
- Designed for continuous operation

HOUSING:

- Not intended for use in cooking area, see instruction sheet for details
- Rugged, 20 gauge galvanized steel
- 8" round duct connector
- 1/2" acoustic insulation inside
- May be installed in ceiling or wall (size permitting)
- 8-position mounting brackets for easy installation and greater adaptability to various mounting requirements
- Automatic backdraft damper located within duct connector

ACCESSORY (Available separately):

- Model 80L Electronic Speed Control (Internal)

TYPICAL SPECIFICATION

Ventilator shall be Broan Model L100EL, (L150EL), (L200EL), (L250EL), (L300EL).

Ventilator shall have galvanized steel housing insulated with at least 1/2" of acoustic insulation. Housing to have adjustable mounting brackets and removable panel to allow motor access without disturbing ductwork.

Automatic backdraft damper to be located within duct connector.

Blower unit shall be removable from housing and shall have a dynamically balanced centrifugal-type blower wheel. Motor to be permanently lubricated and mounted with resilient anti-vibration mounts.

Air delivery shall be no less and sound levels no greater than listed for each model. All air and sound ratings shall be certified by AMCA and HVI. Units to be cULus Listed.



Broan-NuTone LLC, 926 West State Street, Hartford, Wisconsin, USA 53027 Broan-NuTone.com 800-558-1711
Venmar Ventilation ULC, 550 Lemire Blvd., Drummondville, Québec, Canada J2C 7W9 Broan-NuTone.ca 800-567-3855

REFERENCE	QTY.	REMARKS	Project
TF-1	1	L200EL FAN	Location
TF-2	1	L100EL FAN	Architect
		C/W 2 -R/A THERMOSTATS	Engineer
		RUBBER GROMMETS	Contractor
			Submitted by Date

PERFORMANCE RATINGS - LIGHT COMMERCIAL ENERGY STAR® CERTIFIED IN-LINE VENTILATORS L100EL, L150EL, L200EL, L250EL & L300EL

AMCA LICENSED PERFORMANCE

MODEL NO.		STATIC PRESSURE (Inches water gage)								NOMINAL RPM	MAX. AMPS @ 60 Hz	AC VOLTS
		0.0	0.1	0.125	0.25	0.375	0.5	0.625	0.75			
L100EL	CFM	148	127	122	95	64	27			853	0.3	120
L150EL	CFM	210	191	186	164	135	99	57		1023	0.4	120
L200EL	CFM	229	211	206	183	160	125	78	35	1089	0.5	120
L250EL	CFM	257	241	237	216	192	163	125	70	1158	0.6	120
L300EL	CFM	296	280	275.5	255	230	204	173	119	1256	0.7	120

Performance ratings including the effects of a backdraft damper. Speed (RPM) shown is nominal. Performance is based on actual speed test. CFM Performance shown is for Installation Type D: Ducted inlet, Ducted outlet.

HVI PERFORMANCE

MODEL NO.	Ducting	0.2" Ps	
		CFM	CFM/Watt
L100EL	Horizontal	100	4.0
L150EL	Horizontal	170	4.1
L200EL	Horizontal	200	4.0
L250EL	Horizontal	233	3.9
L300EL	Horizontal	270	3.8



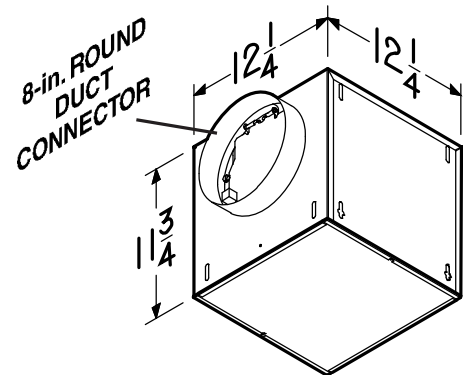
HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.2 in. static pressure, based on tests conducted in a state-of-the-art test laboratory.



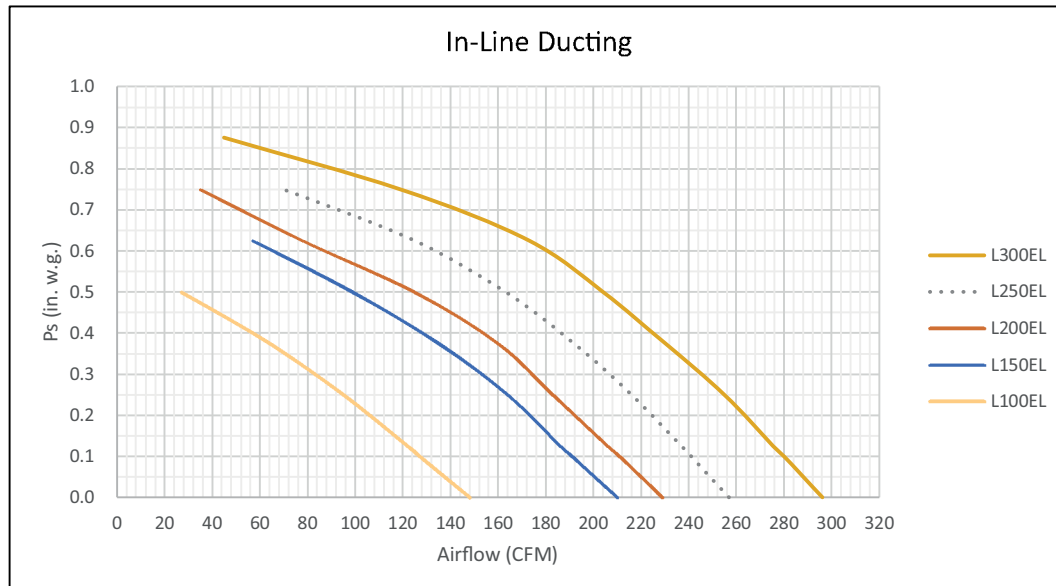
Broan-NuTone LLC certifies that the models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 (and AMCA Publication 311 if sound is also certified) and comply with the requirements of the AMCA Certified Ratings Program.

WEIGHT

MODEL NO.	SHIPPING WT.
L100EL	19.1 lb.
L150EL	19.7 lb.
L200EL	19.5 lb.
L250EL	21.4 lb.
L300EL	21.4 lb.



NOTE: Dimensions shown are in inches.



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CFD(R)2, CFD(R)3 and CFD(R) 3.5 CEILING FIRE DAMPERS

UL Classified Radiation Dampers

APPLICATION

UL Fire Rated Floor/Ceiling Assemblies and Roof/Ceiling Assemblies require specially tested and classified Ceiling Dampers (also called Ceiling Fire Dampers or Radiation Dampers) to provide fire and heat protection where HVAC components penetrate the ceiling membrane. **Standard, 1½ and 3 hr. primary fire dampers DO NOT provide the necessary protection.**

Ruskin CFD(R)2 and CFD(R)3 are UL Classified to provide protection to HVAC penetrations of up to 324 sq. in. (2090) maximum opening size through UL fire rated assemblies with fire resistance ratings of 3 hours or less. Penetrations larger than 324 sq. in. (2090) and up to 576 sq. in. (3716) require model CFD4. The quantity and frequency of permissible HVAC ceiling penetrations are described in the UL Fire Resistance Directory.

STANDARD CONSTRUCTION

FRAME

24 gage (.7) galvanized steel. Frame depths are as shown in following chart.

DAMPER MODEL	FRAME STYLE	B DIMENSION OR D DIAMETER	FRAME DEPTH
CFD2 CFD3 CFD3.5	Standard	All sizes	3" (76)
	Extended	4" to 10" (102 to 254)	6 ³ / ₈ " (162)
		11" to 14" (279 to 356)	8 ⁷ / ₁₆ " (208)
		15" to 24" (381 to 607)	11 ³ / ₁₆ " (284)
CFDR2 CFDR3 CFD(R)3.5	Standard	All sizes	3 ⁵ / ₈ " (92)
	Extended	5" to 10" (127 to 254)	6 ³ / ₄ " (171)
		11" to 14" (279 to 356)	6 ³ / ₄ " (171)
		15" to 20" (381 to 508)	11 ³ / ₄ " (298)

BLADE

24 gage (.7) galvanized steel, with UL Classified insulation as required.

FUSIBLE LINK

165°F (74°C) is standard. 212°F (100°C) is available at no additional cost.

MINIMUM SIZE (Damper Sizes)

CFD2/CFD3 – 5"w x 4"h (127 x 102).
CFDR2 – 12" (305) diameter.
CFDR3/3.5 – 5" (127) diameter.

MAXIMUM SIZE (Damper Sizes)

CFD3 – 70 sq. in. (452) maximum.
CFD2 – 324 sq. in. (2090) with height or width dimensions not greater than 24" (607).
CFDR2 – 20" (508) diameter.
CFDR3/3.5 – 10" (254) diameter.

OPTIONS

- VA Volume Adjust to balance airflow.

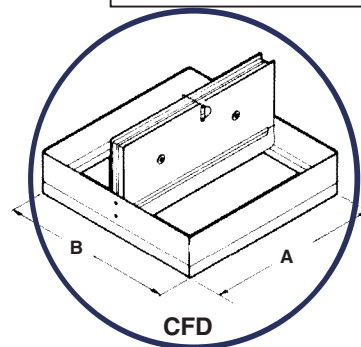
Dimensions shown in parentheses () indicate millimeters.

WOOD TRUSS CEILING APPLICATION

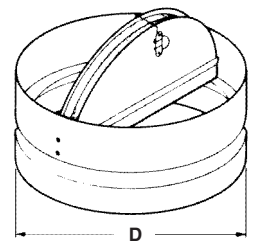
The Ruskin CFD7T ceiling fire damper is the ceiling fire damper to use if the application is a wood truss ceiling. The CFD7T is UL approved for use in wood truss ceiling design L586 which is similar to wood truss ceiling designs like L528, L521, L534, L546, L550, etc.

UL CLASSIFIED ULC LISTED

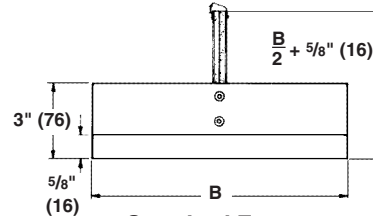
UL555C Listing R8039



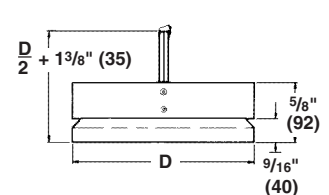
CFD



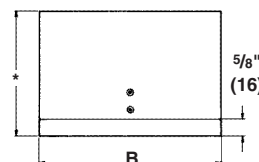
CFDR



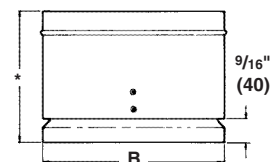
Standard Frame



Standard Frame



Extended Frame

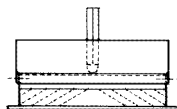


Extended Frame

1PC 10" X 6" SIZE

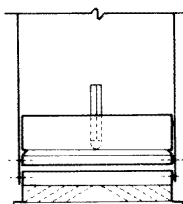
CFD(R)2, CFD(R)3 and CFD(R)3.5 CEILING FIRE DAMPERS

HOW TO ORDER



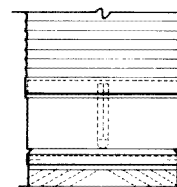
Ductless Installation

Order "actual size" with **standard** frame. Damper installs over diffuser neck.



Steel Duct Installation

Order "deduct 1/4" (6)" with **standard** frame. Damper installs inside duct.



Flex Duct Installation

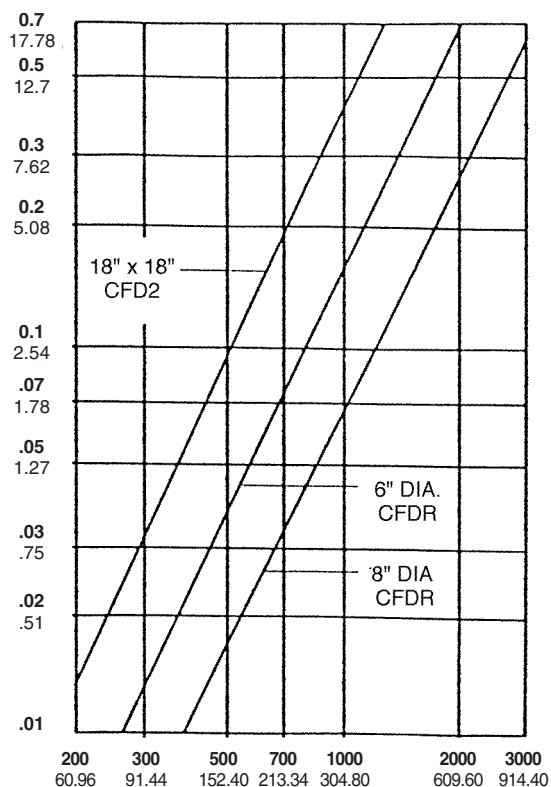
Order "actual size" with **extended** frame. Damper installs over diffuser neck; flex duct installs over damper.

UL Listed Fusible Volume Adjustment Option

The standard, fusible link can be replaced with a simple mechanism that permits adjustment of damper blades to balance airflow. A standard 3/16" (5) hex (Allen) wrench is used for adjustment. In fire conditions, the damper closes regardless of volume setting. This feature must be added to the damper at fabrication. 165°F or 212°F (74°C or 100°C) (specify temperature) fusible volume adjustment options are available. **Caution: Volume Adjust hangs below a rectangular damper 1 1/8" (29). Volume Adjust hangs below a round damper 3/8" (10).**

CFD(R)2, 3, 3.5 with Fusible Volume Adjustment

Pressure Drop – Damper Open (Size as noted)



Air Velocity in FEET and METERS per minute through FACE AREA.
Tested per AMCA Std. 500, Fig. 5.2, ductwork upstream.

RUSKIN®

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