

MODEL

- DFL - Aluminum, architectural linear slot diffuser

FEATURES

- Slot widths of 1" (DFL10), 1 1/2" (DFL15), 2" (DFL20), 2 1/2" (DFL25), and 3" (DFL30)
- Maximum single section length of 12 ft; able to be joined to create long, continuous runs
- Integral pattern controllers constructed on 24" centers
- Pattern controllers adjustable through face of diffuser

SLOTS

- Slot Quantity: 1 or 2 ¹
- Slot Width: 1" to 3" ¹
- Slot Length: 12" - 999" (1/8" increments)

FRAME STYLES

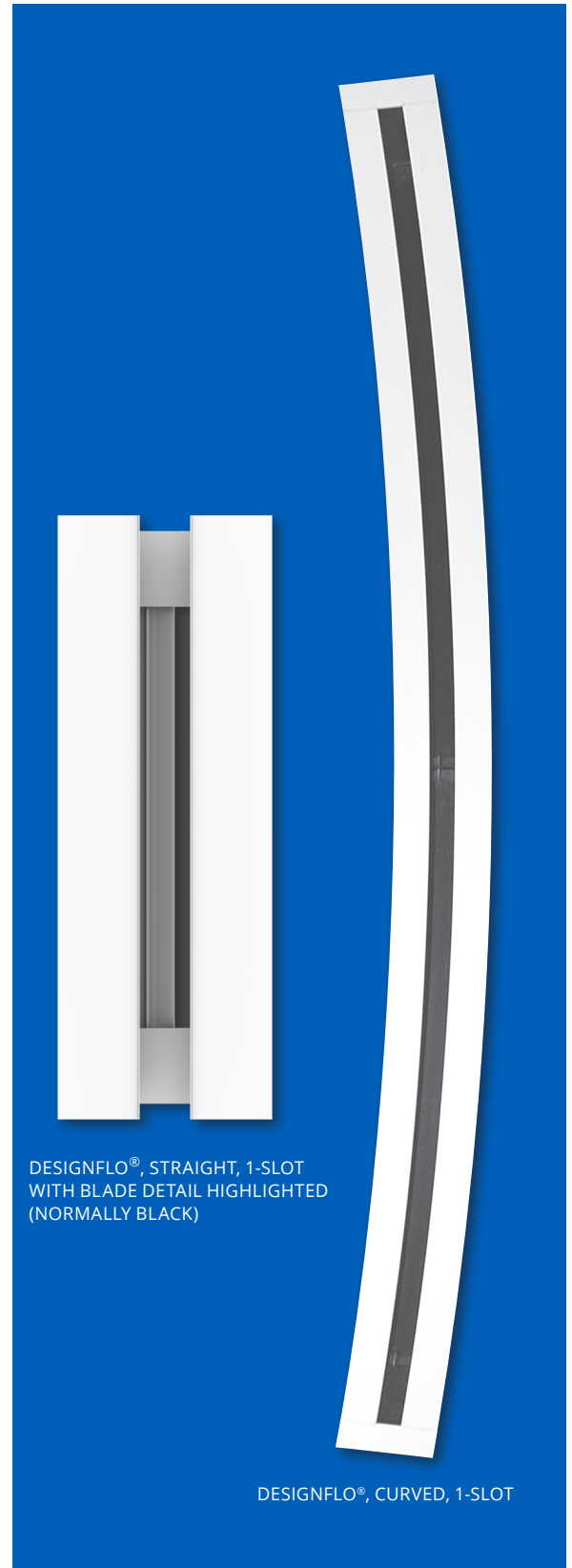
- AA - No flange, both sides
- CC - 3/16" flange, both sides
- AC - No flange left, 3/16" flange right
- CA - 3/16" flange left, no flange right
- AD - No flange left, 5/8" step-down flange right
- DA - 5/8" step-down flange left, no flange right
- BB - Flanges that accept a finishing compound on both sides
- EE - Beveled frame for mud-in
- FF - 1/2" flange, both sides

COMPATIBLE OPTIONS AND ACCESSORIES

- Custom curving, available on request
- Mounting brackets
- Spline support
- Upper support hanger
- DFMC - Mitered corner for DFL
- DFC - 4-leg junction
- DFT - 3-leg junction
- DFBO - Blankoff strip
- DFRH - Steel return hood
- OBDDM - Steel, square or rectangular damper (duct mount)
- EX8 - Steel duct extractor with 1" blade spacing (duct mount)
- EX88 - Steel duct extractor with 2" blade spacing (duct mount)

NOTES:

- ¹ See website for availability.

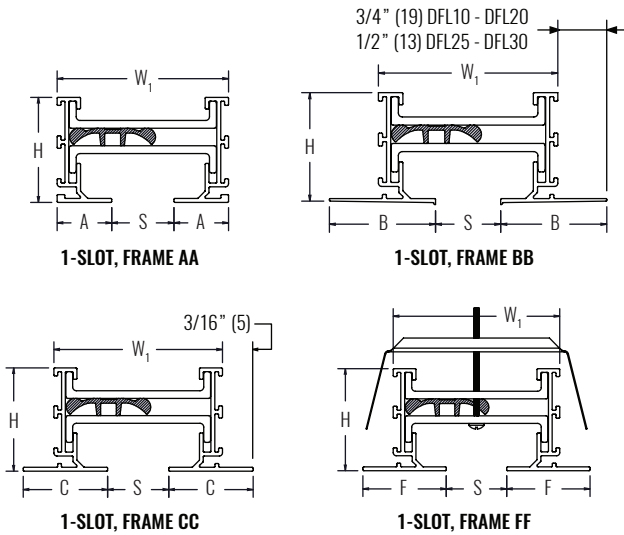


DESIGNFLO®, STRAIGHT, 1-SLOT
WITH BLADE DETAIL HIGHLIGHTED
(NORMALLY BLACK)

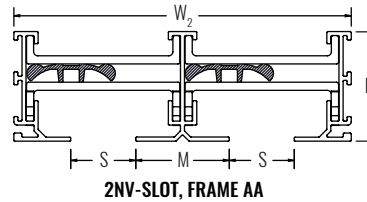
DESIGNFLO®, CURVED, 1-SLOT

DIMENSIONAL DATA - FRAME STYLES

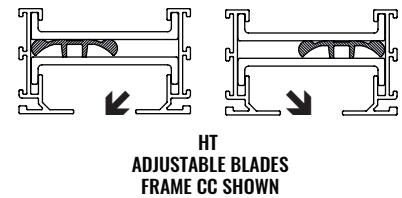
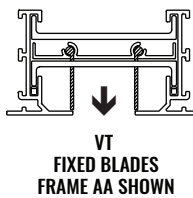
1-SLOT CROSS FRAME STYLES



2-SLOT CROSS FRAME STYLES



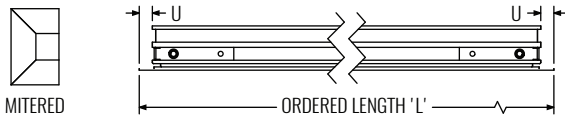
PATTERN CONTROLLERS



DIMENSIONS

SLOT WIDTH	LEG DIMENSIONS					HEIGHT	1-SLOT			2-SLOT	
	S	A	B	C	F		H	STACK W ₁	M	STACK W ₂	
1"	7/8" (22)	1 5/8" (41)	1 1/16" (27)	1 3/8" (35)	1 11/16" (43)	2 3/4" (70)	1 7/16" (37)	5 3/16" (132)			
1.5"	1 1/8" (29)	1 7/8" (48)	1 5/16" (33)	1 5/8" (41)	1 11/16" (43)	3 3/4" (95)	1 15/16" (49)	7 3/16" (183)			
2"	1 3/8" (35)	2 1/8" (54)	1 9/16" (40)	1 7/8" (48)	1 11/16" (43)	4 3/4" (121)	2 7/16" (62)	9 3/16" (233)			
2.5"	1 5/8" (41)	2 1/8" (54)	1 13/16" (46)	2 1/8" (54)	2 5/16" (59)	5 3/4" (146)	2 15/16" (75)	11 3/16" (284)			
3"	1 7/8" (48)	2 3/8" (60)	2 1/16" (52)	2 3/8" (60)	2 5/16" (59)	6 3/4" (171)	3 7/16" (87)	13 3/16" (335)			

END BORDERS

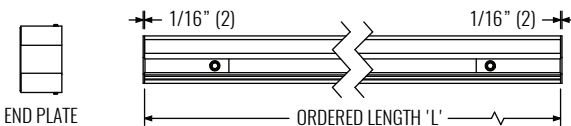


**END BORDER 01
MITERED / MITERED**
UNIT LENGTH = ORDERED LENGTH (L)
USED WITH FRAMES AA, BB, CC, AND FF
1-SLOT ONLY

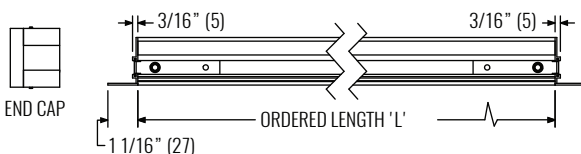
FRAME (U)	STACK SIZE	
AA	L	
BB	(WIDTH 1", 1.5", 2") L - 1 1/2"	(WIDTH 2.5", 3") L - 1"
CC	L - 3/8" (10)	
FF	L - 1" (25)	



**END BORDER 03
BUTT CUT / BUTT CUT**
UNIT LENGTH = ORDERED LENGTH (L)
USED WITH ALL FRAMES AND SLOTS



**END BORDER 04
END PLATE / END PLATE**
UNIT LENGTH = ORDERED LENGTH (L) + 1/8" (3)
USED WITH ALL FRAMES AND SLOTS



**END BORDER 06
END CAP / END CAP**
UNIT LENGTH = ORDERED LENGTH (L) + 2 1/8" (54)
USED WITH ALL FRAMES AND SLOTS, EXCEPT AD, DA, BB AND EE
NOTE: VERTICAL LEG OF END CAP ADDS 3/16" (5) TO EACH END OF THE STACK HEAD IN THE "L" DIMENSION.

NOTES: Dimensions in parentheses are millimeters (mm).

MOUNTING OPTIONS

BRACKETS AND SUPPORTS

HARD SURFACE CLIPS (H1 - H4) ARE DESIGNED FOR DIFFERENT TYPES OF INSTALLATION IN 5/8" GYP BOARD.

- H1:** USED WITH FRAME TYPE C, F, OR B.
- H2:** USED WITH FRAME TYPE A OR C.
- H3:** USED WITH FRAME BB, EE, OR THE A SIDE OF FRAME AD. YOU MAY HAVE AN H3 CLIP WITH FRAME AA IF THE PATTERN IS 'VT'.
- H4:** USED WITH FRAME TYPE D ONLY.

WALL CLIPS (W2 - W4) ARE DESIGNED FOR INSTALLATION PERPENDICULAR TO A WALL, WHERE FLANGE EDGE IS NEXT TO THE WALL.

- W2:** USED WITH FRAME TYPE A, C, D, OR F.
- W3:** USED WITH FRAME TYPE A OR D AND CANNOT BE USED WITH THE OPTIONAL PLENUM.
- W4:** USED WITH FRAME TYPE F. USED FOR INSTALLATION OF DFL PERPENDICULAR TO A WALL, WHERE FLANGE EDGE IS FLUSH AGAINST THE WALL.

CONCEALED FASTENING (CF) IS DESIGNED FOR POST-DRYWALL INSTALL INTO A DFP PLENUM.

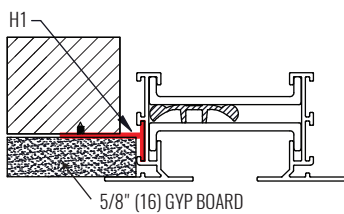
- CF:** USED WITH FRAME TYPE F OR B ONLY AND MUST BE USED WITH CONCEALED MOUNT DFP (TYPE F DFP).

SUSPENSION CLIP (US & UC) ARE DESIGNED TO HANG THE DFL FROM CEILING STRUCTURE IN EXPOSED OR WOOD SLAT CEILING APPLICATIONS.

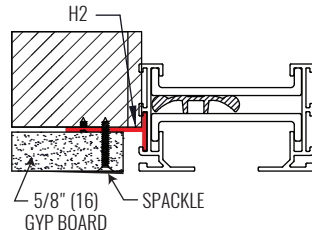
- US/UC:** USED WITH ALL FRAME TYPES, EXCEPT BB, FOR INSTALLATION IN EXPOSED CEILING TYPE INSTALLATION, SUCH AS METAL OR WOOD SLAT CEILINGS.

T-BAR ATTACHMENT CLIPS (SS & SC) THAT ARE DESIGNED TO INSTALL THE DFL ONTO A T-BAR CEILING. SS IS SPECIFICALLY USED FOR 15/16" GRIDS, WHILE SC IS USED FOR 9/16" DROP FACE GRIDS.

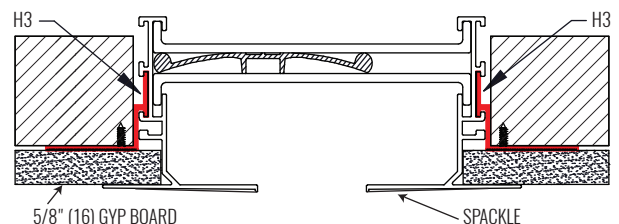
- SS:** USED WITH ALL FRAME TYPES TO CONNECT MULTIPLE SECTIONS OF LINEAR AND OCCASIONALLY FOR INSTALLATION IN 15/16" T-BAR GRID.
- SC:** USED WITH FRAME TYPE A FOR 9/16" BOLT SLOT OR DROP FACE APPLICATION.



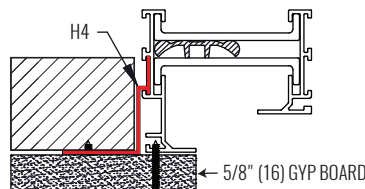
H1 - HARD CEILING BRACKET



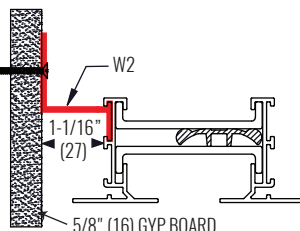
H2 - HARD CEILING BRACKET



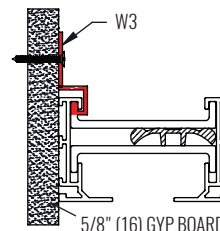
H3 - HARD CEILING BRACKET



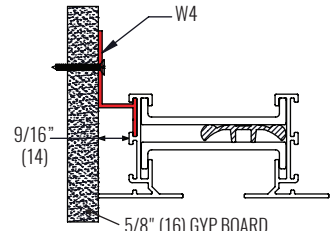
H4 - HARD CEILING BRACKET



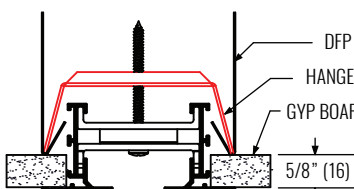
W2 - WALL MOUNT



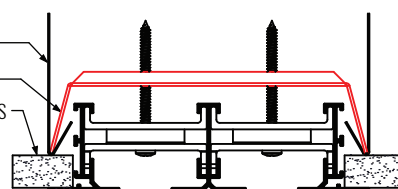
W3 - WALL BRACKET



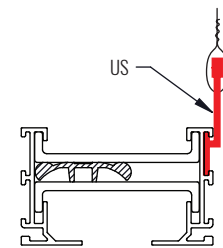
W4 - WALL BRACKET



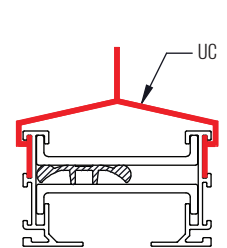
**CF - 1-SLOT, CONCEALED MOUNT
FRAME FF SHOWN**



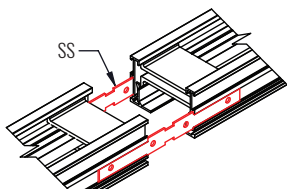
**CF - 2-NV-SLOT, CONCEALED MOUNT
FRAME FF SHOWN**



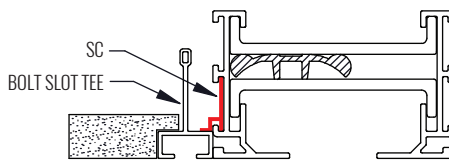
US - UPPER SUPPORT HANGER



UC - UPPER HANGER CLIP



SS - SPLINE SUPPORT BRACKET

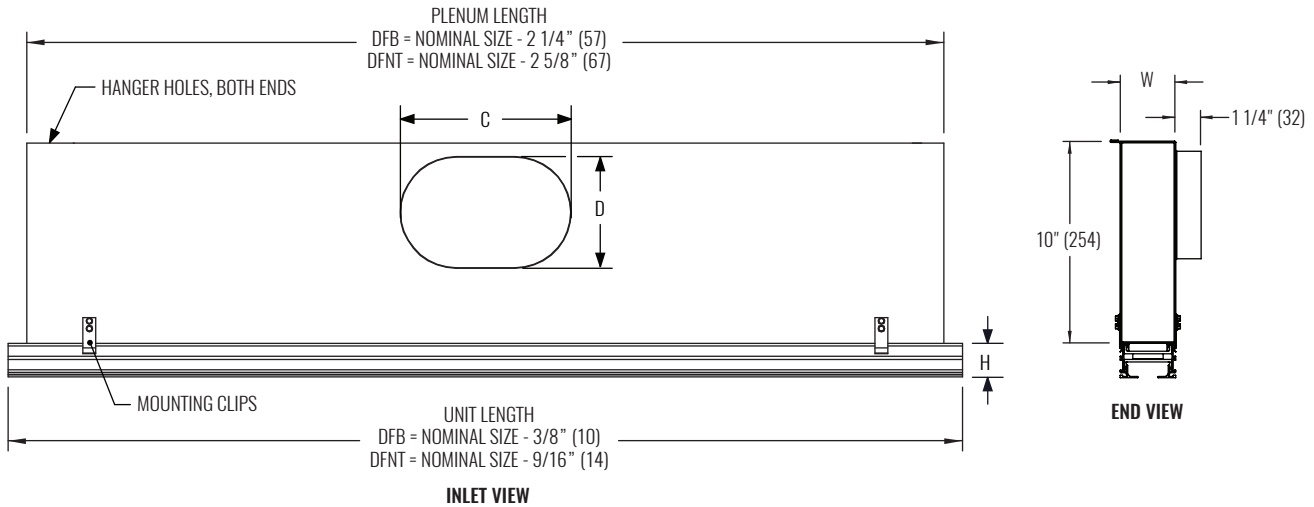


SC - SPLINE CLIP

NOTES: Dimensions in parentheses are millimeters (mm).

DIMENSIONAL DATA - DFNT / DFB

COMBINATION DFL AND PLENUM



DIMENSIONS		
INLET	C	D
6" OVAL	6 1/4" (159)	5 1/4" (133)
8" OVAL	9 3/8" (238)	5 1/4" (133)
10" OVAL	12 1/2" (318)	5 1/4" (133)
12" OVAL	14 1/8" (359)	7 7/8" (200)

DFB DETAIL, FRAME CC *

DFNT DETAIL, FRAME AA

NOTES: Dimensions in parentheses are millimeters (mm). DFB length sized to lay into standard 15/16" tee bar ceiling grid. DFNT length sized to suspend between narrow 9/16" tee bar ceiling grid. Frame AC is also available with DFB. DFB and DFNT come standard with endplates.

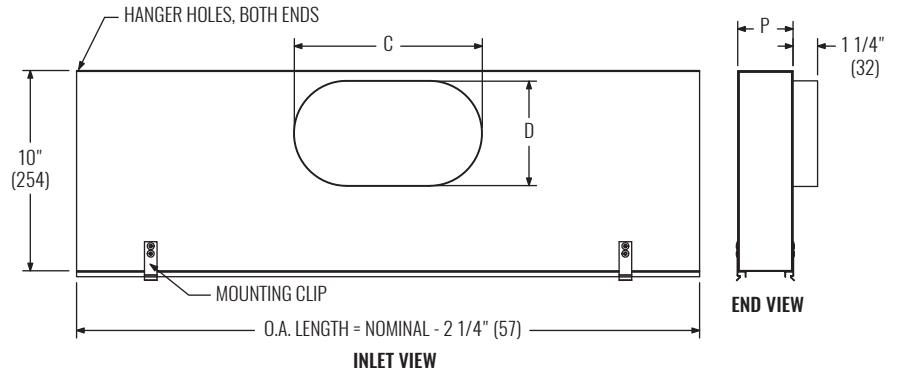
DIMENSIONS											
MODEL	SLOT WIDTH	H	WIDTH			LENGTH					
			1-SLOT	2-SLOTS		DFB			DFNT		
				1 W	2NV W (DFB ONLY)	2AB W	NOMINAL SIZE	UNIT LENGTH	PLENUM LENGTH	NOMINAL SIZE	UNIT LENGTH
DFB	1" (25)	1 11/16" (43)	2 3/4" (70)	5 3/16" (132)	6 1/16" (154)	24" (610)	23 5/8" (600)	21 3/4" (552)	24" (610)	23 7/16" (595)	21 3/8" (543)
	1 1/2" (38)	1 11/16" (43)	3 3/4" (95)	7 3/16" (183)	8 1/16" (205)						
- OR -	2" (51)	1 11/16" (43)	4 3/4" (121)	9 3/16" (233)	10 1/16" (256)	48" (1219)	47 5/8" (1210)	45 3/4" (1162)	48" (1219)	47 7/16" (1205)	45 3/8" (1153)
DFNT	2 1/2" (64)	2 5/16" (59)	5 3/4" (146)	11 3/16" (284)	12 1/16" (306)	60" (1524)	59 5/8" (1514)	57 3/4" (1467)	60" (1524)	59 5/8" (1514)	57 3/4" (1467)
	3" (76)	2 5/16" (59)	6 3/4" (171)	13 3/16" (335)	14 1/16" (357)						

NOTES: Dimensions in parentheses are millimeters (mm). End caps are not insulated. Quadrant damper adds 6" to inlet depth. Plenum is galvanized steel, mill finish. Insulation options include 1/4" Fiberglass or 1/4" Fiber Free.

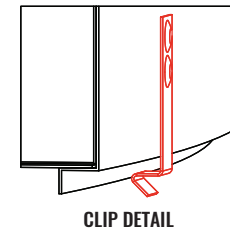
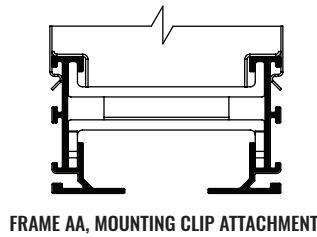
DIMENSIONAL DATA - DFP

MOUNTING TYPE S - CLIPS

DIMENSIONS		
INLET	C	D
6" OVAL	6 1/4" (159)	5 1/4" (133)
8" OVAL	9 3/8" (238)	5 1/4" (133)
10" OVAL	12 1/2" (318)	5 1/4" (133)
12" OVAL	14 1/8" (359)	7 7/8" (200)



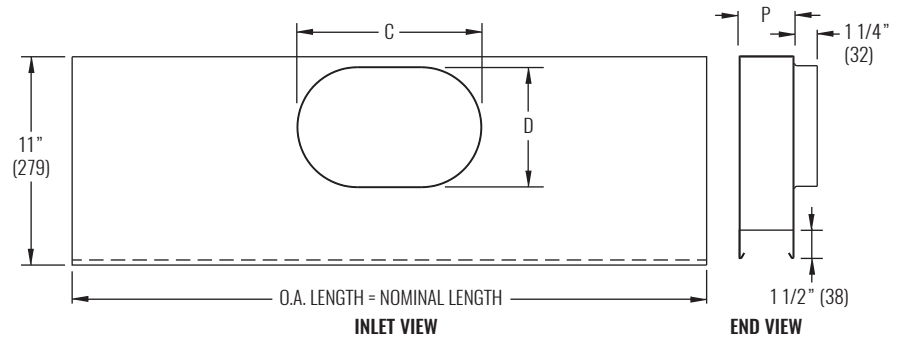
DIMENSIONS		
MODEL	DFP TYPE S	
	ONE SLOT PLENUM WIDTH P	2 NV PLENUM WIDTH P
DFP 10	2 3/4" (70)	5 1/4" (133)
DFP 15	3 3/4" (95)	7 1/4" (184)
DFP 20	4 3/4" (121)	9 1/4" (235)



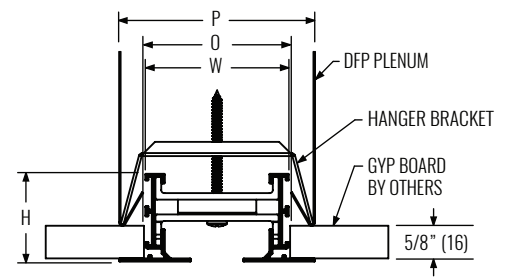
NOTES: Dimensions in parentheses are millimeters (mm). Type S plenum compatible with DFL with H clips, W clips, US, or SS fastening; not compatible with DFL with concealed fastening. 2 1/2" and 3" slot widths also available.

MOUNTING TYPE F - CONCEALED

DIMENSIONS		
INLET	C	D
6" OVAL	6 1/4" (159)	5 1/4" (133)
8" OVAL	9 3/8" (238)	5 1/4" (133)
10" OVAL	12 1/2" (318)	5 1/4" (133)
12" OVAL	14 1/8" (359)	7 7/8" (200)



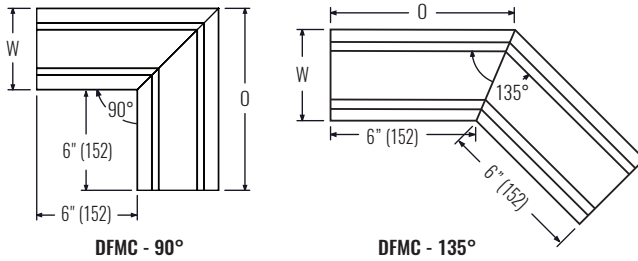
DIMENSIONS							
MODEL	HEIGHT H	DFP TYPE F					
		1-SLOT			2 NV-SLOT		
	PLENUM WIDTH P	STACK WIDTH W	CEILING OPENING O	PLENUM WIDTH P	STACK WIDTH W	CEILING OPENING O	
DFP 10	1 11/16" (43)	3 3/4" (95)	2 3/4" (70)	3" (76)	6 3/16" (157)	5 3/16" (132)	5 1/2" (140)
DFP 15	1 11/16" (43)	4 3/4" (121)	3 3/4" (95)	4" (102)	8 3/16" (208)	7 3/16" (183)	7 1/2" (191)
DFP 20	1 11/16" (43)	5 3/4" (146)	4 3/4" (121)	5" (127)	10 3/16" (258)	9 3/16" (233)	9 1/2" (241)



NOTES: Dimensions in parentheses are millimeters (mm). Type F plenum compatible with DFL with concealed fastening; not compatible with DFL with H clips, W clips, US, UC, SC, or SS fastening.

DIMENSIONAL DATA - DFMC

MITERED CORNERS



NOTES: Miters are inactive and come standard with butt cut ends, no blades, and with blank offs installed at factory. 2 slot miter available in "NV" only. Custom angles are available upon request. Dimensions in parentheses are millimeters (mm).

DFMC DIMENSIONS

SLOT QTY	SLOT WIDTH	FRAME BB			FRAME CC			FRAME FF		
		W	O (135°)	O (90°)	W	O (135°)	O (90°)	W	O (135°)	O (90°)
1 SLOT	1" (25)	4 1/4" (108)	7 1/2" (191)	9 1/2" (241)	3 1/8" (79)	7 1/4" (184)	8 15/16" (227)	3 3/4" (95)	7 3/8" (187)	9 1/4" (235)
	1 1/2" (38)	5 1/4" (133)	7 7/8" (200)	10 1/2" (267)	4 1/8" (105)	7 5/8" (194)	9 15/16" (252)	4 3/4" (121)	7 3/4" (197)	10 1/4" (260)
	2" (51)	6 1/4" (159)	8 3/16" (208)	11 1/2" (292)	5 1/8" (130)	8" (203)	10 15/16" (278)	5 3/4" (146)	8 3/16" (208)	11 1/4" (286)
2 SLOTS	1" (25)	6 11/16" (170)	8 1/2" (216)	11 15/16" (303)	5 9/16" (141)	8 1/4" (210)	11 3/8" (289)	6 3/16" (157)	8 3/8" (212)	11 11/16" (297)
	1 1/2" (38)	8 11/16" (221)	9 1/4" (235)	13 15/16" (354)	7 9/16" (116)	9 1/16" (230)	13 3/8" (340)	8 3/16" (208)	9 3/16" (233)	13 11/16" (348)
	2" (51)	10 11/16" (271)	10 1/8" (257)	15 15/16" (405)	9 9/16" (243)	9 7/8" (251)	15 3/8" (391)	10 3/16" (259)	10" (254)	15 11/16" (399)

PERFORMANCE DATA

SIZE			PERFORMANCE - HORIZONTAL THROW, 48" UNIT LENGTH						DESIGN		
SLOT WIDTH	SLOT QTY	INLET SIZE	NC (< 25)			NC (25 - 40)			CFM @ NC=30	SPACING @ 0.6 CFM/sf (ft)	MINIMUM CFM/sf
			CFM	1-WAY THROW (ft)	2-WAY THROW (ft)	CFM	1-WAY THROW (ft)	2-WAY THROW (ft)			
1"	1	6"	60 - 145	12 - 23	-	150 - 285	23 - 32	-	180	25	0.30
1"	1	8"	70 - 150	14 - 23	-	160 - 280	24 - 32	-	190	26	0.30
1"	1	10"	85 - 170	17 - 25	-	180 - 290	26 - 33	-	200	28	0.30
1"	2	8"	120 - 250	17 - 30	12 - 21	260 - 485	31 - 42	22 - 30	320	44	0.22
1"	2	10"	130 - 260	19 - 31	13 - 22	270 - 505	31 - 43	22 - 30	330	46	0.24
1"	2	12"	140 - 270	20 - 31	14 - 22	280 - 510	32 - 43	23 - 31	340	47	0.26
1.5"	1	8"	110 - 230	18 - 28	-	240 - 410	29 - 38	-	270	38	0.38
1.5"	1	10"	140 - 240	22 - 29	-	250 - 450	30 - 40	-	300	42	0.39
2"	1	8"	120 - 240	18 - 26	-	250 - 445	27 - 35	-	315	44	0.35
2"	1	10"	150 - 270	21 - 28	-	280 - 465	28 - 36	-	325	45	0.37
2"	1	12"	175 - 290	22 - 29	-	300 - 500	29 - 38	-	340	47	0.39
3"	1	10"	170 - 210	18 - 20	-	220 - 375	21 - 27	-	335	47	0.38

NOTES: Information shown is abbreviated. See website for complete information. Dimensions in parentheses are millimeters (mm). Throw value ranges are given for isothermal conditions, unless otherwise noted, and a terminal velocity of 50 FPM (0.25 m/s). NC ranges are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. Design spacing is recommended distance between diffusers in an open plan office based on ADPI > 80%, 9ft ceiling, and 55°F discharge at 30 NC and 0.6 CFM/sf. Minimum CFM/sf is based on recommended spacing at 80% ADPI. Design recommendations not applicable to vertical throw. "N/A" in design table denotes situations which do not result in ADPI>80% and are therefore not recommended.