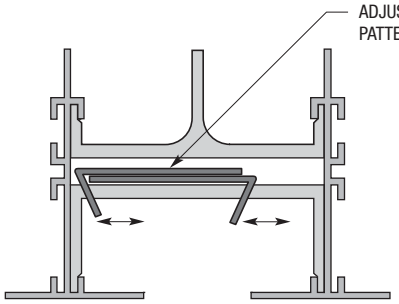
KEY FEATURES:

- High capacity single slot linear diffuser available in five slot widths, offers an attractive alternative to traditional multi-slot designs. Available slot widths are 1" (25), 1 1/2" (38), 2" (51), 2 1/2" (64) and 3" (76). A two slot option is also available.
- Comprehensive selection of frame/border styles and mounting hardware to suit any installation.
- Choice of FLH Series Horizontal or FLV Series Vertical Pattern Controllers. May be combined within a single system.
- Custom curving availability to meet specific design requirements, provides architectural appeal.
- Heavy wall extruded aluminum construction permits support and full integration with ceiling system.
- Mitered end borders are available which maximize aesthetic appeal.
- Available in single sections up to 12 ft. (3658) in length. Longer lengths are supplied in multiple sections with alignment strips for field assembly.
- High performance design is ideally suited to VAV systems, both heating and cooling.
- Custom colors and anodized finishes are available.

FLH SERIES:

Designed primarily for continuous linear slot ceiling applications requiring horizontal air patterns. Tight, high induction air pattern maximizes coanda effect under a wide range of airflow volumes for maximum occupant comfort. Typical applications would include open office perimeter zones, entrance foyers and lobbies, mall and office entrance atriums and conference meeting rooms.

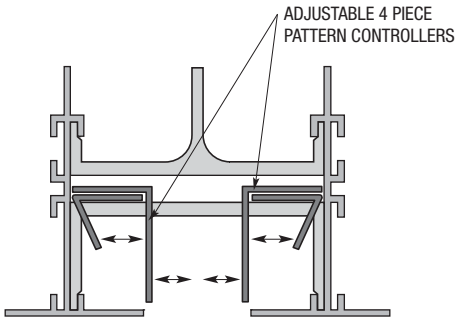


Horizontal High Throw Series:
Pattern controllers provide 180° directional control; left or right horizontal throw, angular discharge, volume control and shut-off capability.

FLV SERIES:

Designed primarily for continuous linear slot ceiling applications requiring an adjustable extended throw vertical air pattern. Typical applications would include perimeter glass curtain walls and high bays for heated and/or cooled air, which may be directed downwards, terminating at the floor at a comfortable velocity. Also suitable for interior zones with high ceilings, such as entrance foyers and lobbies, mall and office entrance atriums, convention center and theaters.

This model may also be used in high sidewall applications with long throw requirements.



Vertical Jet Throw Series:
Versatile pattern controllers provide for an adjustable perpendicular discharge.

FLP(I) SERIES:

Nailor offers factory built supply air plenum boots in various lengths to suit the application in both uninsulated and insulated versions. Nailor engineered plenums save on costly field labor and ensure a sure-fit trouble free installation.

FT SERIES:

The FlowLine™ Series is available in modular lengths for lay-in T-Bar applications, utilizing either the horizontal high throw or vertical jet throw pattern controllers. Units are supplied with factory installed engineered plenums in uninsulated or insulated versions.

FM SERIES:

The FM Series is an architecturally pleasing modular square ceiling diffuser primarily for lay-in T-Bar applications. Designed to complement the FlowLine™ Linear Diffuser System, the FM Series features a single slot at the perimeter of a 2 ft. x 2 ft. (600 x 600) ceiling module and accommodates a center acoustic ceiling tile.

FLH SERIES

- HORIZONTAL HIGH THROW PATTERN CONTROLLERS
- CONTINUOUS CUSTOM LINEAR DIFFUSER

Models:

FLH10	1" (25) Slot
FLH15	1 1/2" (38) Slot
FLH20	2" (51) Slot
FLH25	2 1/2" (64) Slot
FLH30	3" (76) Slot

The FlowLine™ FLH Series continuous slot diffuser is designed primarily for ceiling applications. The adjustable pattern controllers, which are easily adjusted from the face, allow the discharge air to be directed to the left or right as well as downward. When positioned for horizontal discharge, a tight horizontal air pattern is produced that makes full use of the ceiling (coanda) effect, even at reduced air volumes. High induction characteristics maximize room air movement and mixing, making FlowLine™ FLH Series eminently suitable for variable air volume systems.

STANDARD FEATURES:

- Heavy wall extruded aluminum construction with galvanized steel pattern controllers.
- Sliding pattern controller design provides easy adjustment for horizontal or vertical directional control as well as a volume control or shut-off capability.
- Dual blade pattern controllers are constructed on 24" (610) centers as standard for maximum flexibility.
- Five slot widths in a one or two slot configuration provide a high air volume capability.
- Single section lengths up to 12 ft. (3658) reduce the number of joints in continuous runs.
- Multiple section assemblies are divided into equal length single sections and are provided with alignment strips.
- Mitered end borders on standard frame Type AA provide a superior architectural finish.
- FlowLine™ can be custom curved in any plane - concave, convex or flat radius.

FRAME/BORDER STYLES:

- FlowLine™ FLH Series is designed for continuous length installation in both hard drywall or acoustical suspension (T-Bar) ceiling systems. Optional mounting hardware is available to suit the installation method.
- Available in two standard and various special frame/border designs to suit any installation requirement.
- Various end border options are available to suit installation.
- Mitered corner and transition sections are available.

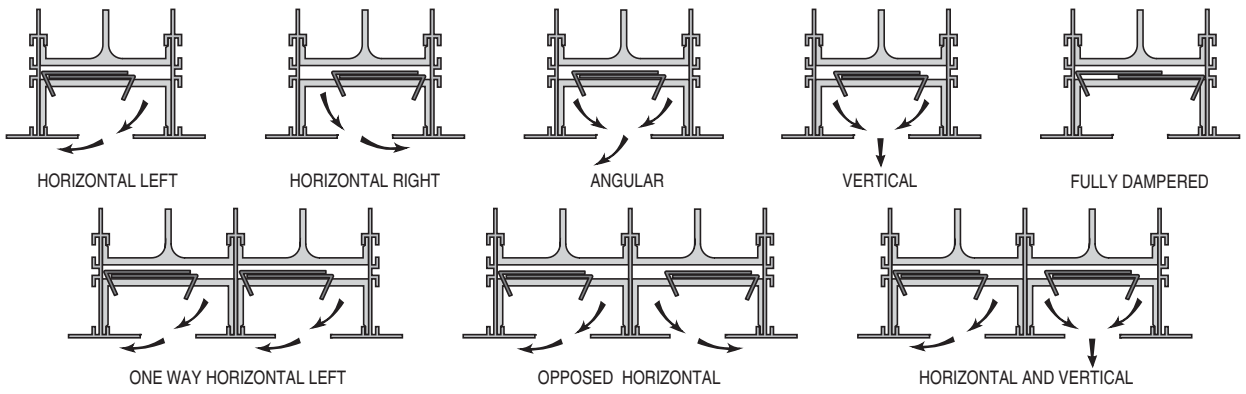
SUPPLY AIR PLENUMS:

- Model Series FLP(I) factory engineered plenum boots are available, which ensure both a trouble free installation and that catalog performance is met.

FINISH:

- Standard finish is AW Appliance White on exposed frame surfaces. Pattern controllers and interior surfaces are black.
- Custom color and anodized finishes are available to suit architectural requirements.

FLH Series Pattern Controller Adjustment



FLV SERIES

- VERTICAL JET THROW PATTERN CONTROLLERS
- CONTINUOUS CUSTOM LINEAR DIFFUSER

Models:

FLV10	1" (25) Slot
FLV15	1 1/2" (38) Slot
FLV20	2" (51) Slot
FLV25	2 1/2" (64) Slot
FLV30	3" (76) Slot

The FlowLine™ FLV Series continuous slot diffuser is designed for both ceiling and high sidewall applications and provides total air pattern control flexibility. Similar in appearance to the FLH Series, the FLV Series features adjustable pattern controllers that direct the airstream perpendicular to the face, providing a strong vertical projection when installed in a ceiling and horizontally when installed in a sidewall application. The pattern controllers permit angular discharge, allowing the airstream to be directed left or right in a ceiling application and up or down in a sidewall application. The pattern controllers also provide a variable aperture capability to adjust performance to specific applications.

STANDARD FEATURES:

- Heavy wall extruded aluminum construction with galvanized steel pattern controllers.
- Sliding pattern controller design provides easy adjustment for vertical directional control as well as a volume control capability.
- Dual blade pattern controllers are constructed on 24" (610) centers as standard for maximum flexibility.
- Five slot widths in a one or two slot configuration provide a high air volume capability.
- Single section lengths up to 12 ft. (3658) reduce the number of joints in continuous runs.
- Multiple section assemblies are divided into equal length single sections and are provided with alignment strips.
- Mitered end borders on standard frame Type AA provide a superior architectural finish.
- FlowLine™ can be custom curved in any plane - concave, convex or flat radius.

FRAME/BORDER STYLES:

- FlowLine™ FLV Series is designed for continuous length installation in both hard drywall or acoustical suspension (T-Bar) ceiling systems. Optional mounting hardware is available to suit the installation method.
- Available in two standard and various special frame/border designs to suit any installation requirement.
- Various end border options are available to suit installation.
- Mitered corner and transition sections are available.

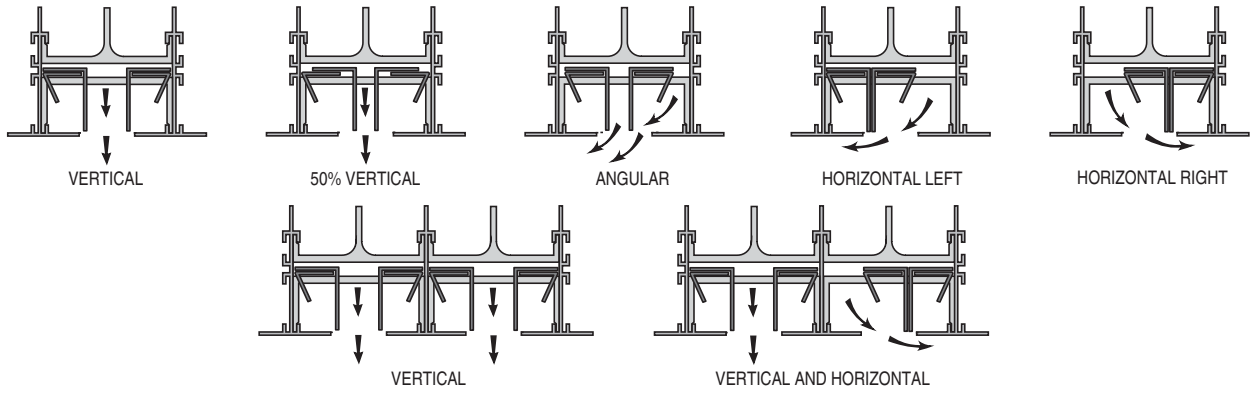
SUPPLY AIR PLENUMS:

- Model Series FLP(I) factory engineered plenum boots are available, which ensure both a trouble free installation and that catalog performance is met.

FINISH:

- Standard finish is AW Appliance White on exposed frame surfaces. Pattern controllers and interior surfaces are black.
- Custom color and anodized finishes are available to suit architectural requirements.

FLV Series Pattern Controller Adjustment



STANDARD FRAME/BORDER STYLES

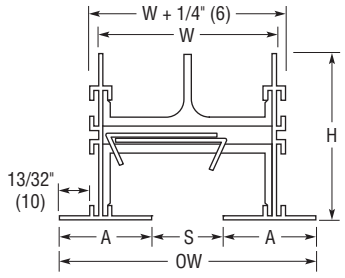
(TYPE H HORIZONTAL PATTERN CONTROLLERS ILLUSTRATED. ALSO AVAILABLE WITH TYPE V VERTICAL).

These frame/border styles require installation of the FlowLine™ diffuser prior to installation of the drywall. The ceiling opening should be framed and the diffuser attached with optional mounting clips or suspended from the building structure with hanger wire using the integral hanger brackets supplied with the diffuser.

One Slot

Type AA Exposed Flange Frame

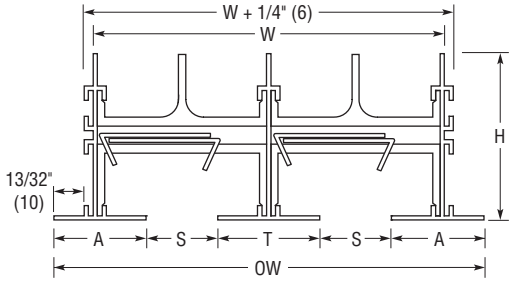
- Drywall (ceiling, wall), T-Bar



Two Slot

Type AA Exposed Flange Frame

- Drywall (ceiling, wall), T-Bar



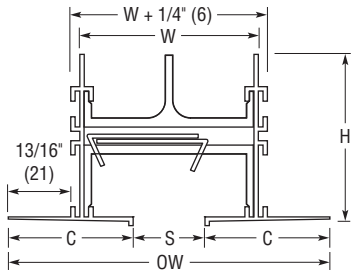
Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	1 Slot		2 Slot		A Border Width	H Height	T 2 Slot
		W	OW	W	OW			
FL(H or V)10	1 (25)	2 1/2 (64)	3 9/16 (90)	4 15/16 (125)	6 (152)	1 9/32 (33)	2 3/8 (60)	1 7/16 (37)
FL(H or V)15	1 1/2 (38)	3 1/2 (89)	4 9/16 (116)	6 15/16 (176)	8 (203)	1 17/32 (39)	2 5/8 (67)	1 15/16 (49)
FL(H or V)20	2 (51)	4 1/2 (114)	5 9/16 (141)	8 15/16 (227)	10 (254)	1 25/32 (45)	2 7/8 (73)	2 7/16 (62)
FL(H or V)25	2 1/2 (64)	5 1/2 (140)	6 9/16 (167)	10 15/16 (278)	12 (305)	2 1/32 (52)	3 1/8 (79)	2 15/16 (75)
FL(H or V)30	3 (76)	6 1/2 (165)	7 9/16 (192)	12 15/16 (329)	14 (356)	2 9/32 (58)	3 3/8 (86)	3 7/16 (87)

One Slot

Type CC Concealed Tapered Frame

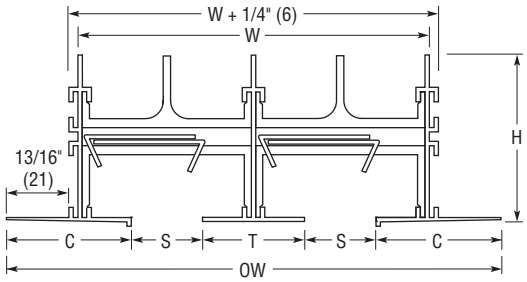
- Drywall (ceiling, wall)
- Tape and Spackle



Two Slot

Type CC Concealed Tapered Side Frame

- Drywall (ceiling, wall)
- Tape and Spackle



Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	1 Slot		2 Slot		C Border Width	H Height	T 2 Slot
		W	OW	W	OW			
FLH10	1 (25)	2 1/2 (64)	4 3/8 (111)	4 15/16 (125)	6 13/16 (173)	1 11/16 (43)	2 3/8 (60)	1 7/16 (37)
FLH15	1 1/2 (38)	3 1/2 (89)	5 3/8 (137)	6 15/16 (176)	8 13/16 (224)	1 15/16 (49)	2 5/8 (67)	1 15/16 (49)
FLH20	2 (51)	4 1/2 (114)	6 3/8 (162)	8 15/16 (227)	10 13/16 (275)	2 3/16 (56)	2 7/8 (73)	2 7/16 (62)
FLH25	2 1/2 (64)	5 1/2 (140)	7 3/8 (187)	10 15/16 (278)	12 13/16 (325)	2 7/16 (62)	3 1/8 (79)	2 15/16 (75)
FLH30	3 (76)	6 1/2 (165)	8 3/8 (213)	12 15/16 (329)	14 13/16 (376)	2 11/16 (68)	3 3/8 (86)	3 7/16 (87)

STANDARD FRAME/BORDER STYLES WITH CONCEALED MOUNTING BRACKET

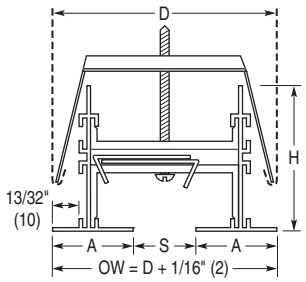
(TYPE H HORIZONTAL PATTERN CONTROLLERS ILLUSTRATED. ALSO AVAILABLE WITH TYPE V VERTICAL).

The concealed mounting bracket option permits surface mounting of the FlowLine™ diffuser after the ceiling installation. Diffuser simply pushes up into the ceiling opening until the legs of the factory supplied mounting brackets locate into a hemmed duct plenum or onto the topside of the drywall. Factory supplied levelling screws then draw the diffuser up until it is tight and snug with the ceiling.

One Slot

Type AAC Exposed Flange Frame

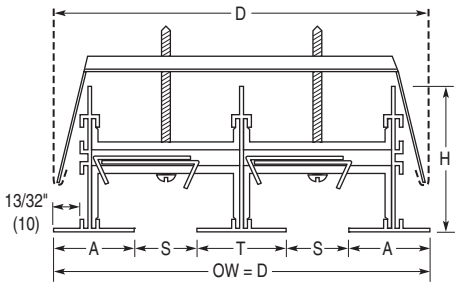
• Drywall (ceiling)



Two Slot

Type AAC Exposed Flange Frame

• Drywall (ceiling)

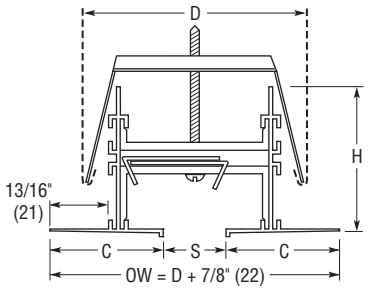


Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	D Duct Width		Ceiling Opening Width		A Border Width	H Height	T 2 Slot
		1 Slot	2 Slot	1 Slot	2 Slot			
FLH10	1 (25)	3 1/2 (89)	6 (152)	3 (76)	5 1/2 (140)	1 9/32 (33)	2 3/8 (60)	1 7/16 (37)
FLH15	1 1/2 (38)	4 1/2 (114)	8 (203)	4 (102)	7 1/2 (191)	1 17/32 (39)	2 5/8 (67)	1 15/16 (49)
FLH20	2 (51)	5 1/2 (140)	10 (254)	5 (127)	9 1/2 (241)	1 25/32 (45)	2 7/8 (73)	2 7/16 (62)
FLH25	2 1/2 (64)	6 1/2 (165)	12 (305)	6 (152)	11 1/2 (292)	2 1/32 (52)	3 1/8 (79)	2 15/16 (75)
FLH30	3 (76)	7 1/2 (191)	14 (356)	7 (178)	13 1/2 (343)	2 9/32 (58)	3 3/8 (86)	3 7/16 (87)

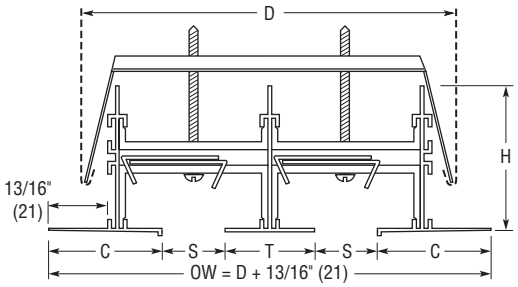
One Slot

Type CCC Concealed Tapered Frame with Concealed Mounting Brackets



Two Slot

Type CCC Concealed Tapered Side Frame with Concealed Mounting Brackets



Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	D Duct Width		C Border Width	H Height	T 2 Slot	Ceiling Opening Width	
		1 Slot	2 Slot				1 Slot	2 Slot
FLH10	1 (25)	3 1/2 (89)	6 (152)	1 11/16 (43)	2 3/8 (60)	1 7/16 (37)	3 (76)	5 1/2 (140)
FLH15	1 1/2 (38)	4 1/2 (114)	8 (203)	1 15/16 (49)	2 5/8 (67)	1 15/16 (49)	4 (102)	7 1/2 (191)
FLH20	2 (51)	5 1/2 (140)	10 (254)	2 3/16 (56)	2 7/8 (73)	2 7/16 (62)	5 (127)	9 1/2 (241)
FLH25	2 1/2 (64)	6 1/2 (165)	12 (305)	2 7/16 (62)	3 1/8 (79)	2 15/16 (75)	6 (152)	11 1/2 (292)
FLH30	3 (76)	7 1/2 (191)	14 (356)	2 11/16 (68)	3 3/8 (86)	3 7/16 (87)	7 (178)	13 1/2 (343)

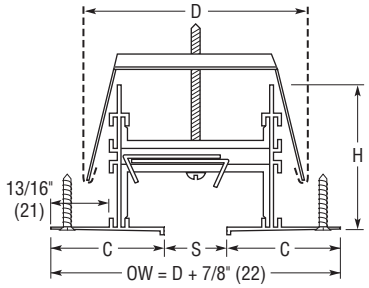
STANDARD FRAME/BORDER STYLES

(TYPE H HORIZONTAL PATTERN CONTROLLERS ILLUSTRATED. ALSO AVAILABLE WITH TYPE V VERTICAL).

These frame/border styles require installation of the FlowLine™ diffuser prior to installation of the drywall. The ceiling opening should be framed and the diffuser attached with optional mounting clips or suspended from the building structure with hanger wire using the integral hanger brackets supplied with the diffuser.

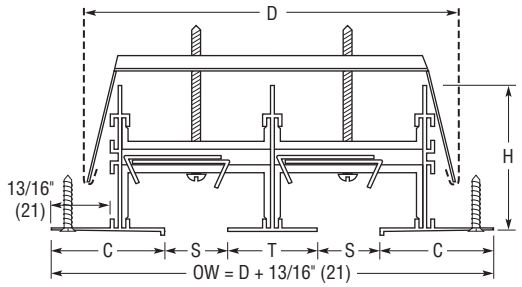
One Slot

Type CCCA Concealed Tapered Frame with Concealed Mounting Brackets & Countersunk Screw Holes



Two Slot

Type CCCA Concealed Tapered Side Frame with Concealed Mounting Brackets & Countersunk Screw Holes

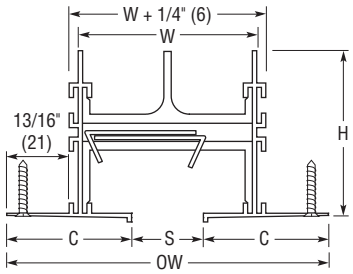


Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	D Duct Width		C Border Width	H Height	T 2 Slot	Ceiling Opening Width	
		1 Slot	2 Slot				1 Slot	2 Slot
FLH10	1 (25)	3 1/2 (89)	6 (152)	1 11/16 (43)	2 3/8 (60)	1 7/16 (37)	3 (76)	5 1/2 (140)
FLH15	1 1/2 (38)	4 1/2 (114)	8 (203)	1 15/16 (49)	2 5/8 (67)	1 15/16 (49)	4 (102)	7 1/2 (191)
FLH20	2 (51)	5 1/2 (140)	10 (254)	2 3/16 (56)	2 7/8 (73)	2 7/16 (62)	5 (127)	9 1/2 (241)
FLH25	2 1/2 (64)	6 1/2 (165)	12 (305)	2 7/16 (62)	3 1/8 (79)	2 15/16 (75)	6 (152)	11 1/2 (292)
FLH30	3 (76)	7 1/2 (191)	14 (356)	2 11/16 (68)	3 3/8 (86)	3 7/16 (87)	7 (178)	13 1/2 (343)

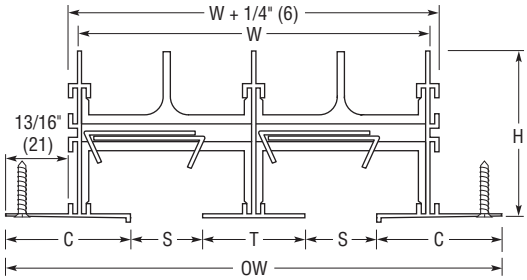
One Slot

Type CCA Concealed Tapered Frame with Countersunk Screw Holes



Two Slot

Type CCA Concealed Tapered Side Frame with Countersunk Screw Holes



Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	1 Slot		2 Slot		C Border Width	H Height	T 2 Slot
		W	OW	W	OW			
FLH10	1 (25)	2 1/2 (64)	4 3/8 (111)	4 15/16 (125)	6 13/16 (173)	1 11/16 (43)	2 3/8 (60)	1 7/16 (37)
FLH15	1 1/2 (38)	3 1/2 (89)	5 3/8 (137)	6 15/16 (176)	8 13/16 (224)	1 15/16 (49)	2 5/8 (67)	1 15/16 (49)
FLH20	2 (51)	4 1/2 (114)	6 3/8 (162)	8 15/16 (227)	10 13/16 (275)	2 3/16 (56)	2 7/8 (73)	2 7/16 (62)
FLH25	2 1/2 (64)	5 1/2 (140)	7 3/8 (187)	10 15/16 (278)	12 13/16 (325)	2 7/16 (62)	3 1/8 (79)	2 15/16 (75)
FLH30	3 (76)	6 1/2 (165)	8 3/8 (213)	12 15/16 (329)	14 13/16 (376)	2 11/16 (68)	3 3/8 (86)	3 7/16 (87)

SPECIAL FRAME/BORDER STYLES

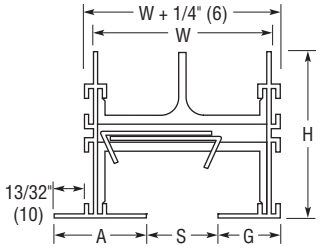
(TYPE H HORIZONTAL PATTERN CONTROLLERS ILLUSTRATED. ALSO AVAILABLE WITH TYPE V VERTICAL).

These frame/border styles require installation of the FlowLine™ diffuser prior to installation of the drywall. The ceiling opening should be framed and the diffuser attached with optional mounting clips or suspended from the building structure with hanger wire using the integral hanger brackets supplied with the diffuser.

One Slot

Type AG Flangeless Frame

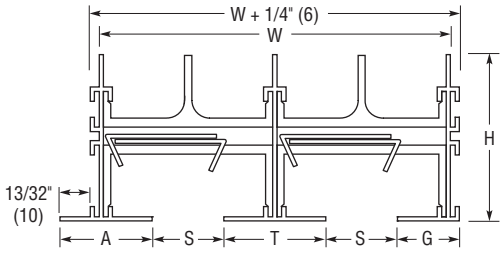
• Drywall (ceiling, wall)



Two Slot

Type AG Flange/Flangeless Frame

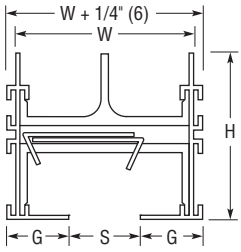
• Drywall (ceiling, wall)



One Slot

Type GG Flangeless Frame

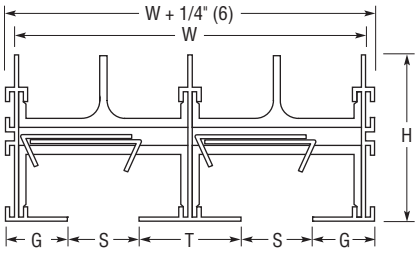
• Drywall (ceiling, wall)



Two Slot

Type GG Flange/Flangeless Frame

• Drywall (ceiling, wall)



Dimensional Data - Imperial (Metric) Units

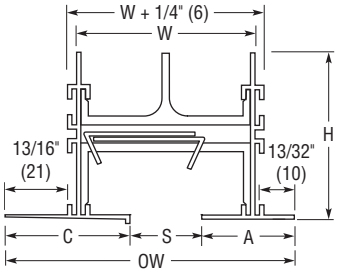
Model	S Slot Width	1 Slot W	2 Slot W	A Border Width	G Border Width	H Height	T 2 Slot
FL(H or V)10	1 (25)	2 1/2 (64)	4 15/16 (125)	1 9/32 (33)	7/8 (22)	2 3/8 (60)	1 7/16 (37)
FL(H or V)15	1 1/2 (38)	3 1/2 (89)	6 15/16 (176)	1 17/32 (39)	1 1/8 (29)	2 5/8 (67)	1 15/16 (49)
FL(H or V)20	2 (51)	4 1/2 (114)	8 15/16 (227)	1 25/32 (45)	1 3/8 (35)	2 7/8 (73)	2 7/16 (62)
FL(H or V)25	2 1/2 (64)	5 1/2 (140)	10 15/16 (278)	2 1/32 (52)	1 5/8 (41)	3 1/8 (79)	2 15/16 (75)
FL(H or V)30	3 (76)	6 1/2 (165)	12 15/16 (329)	2 9/32 (58)	1 7/8 (48)	3 3/8 (86)	3 7/16 (87)

SPECIAL FRAME/BORDER STYLES

These frame/border styles require installation of the FlowLine™ diffuser prior to installation of the drywall. The ceiling opening should be framed and the diffuser attached with optional mounting clips or suspended from the building structure with hanger wire using the integral hanger brackets supplied with the diffuser.

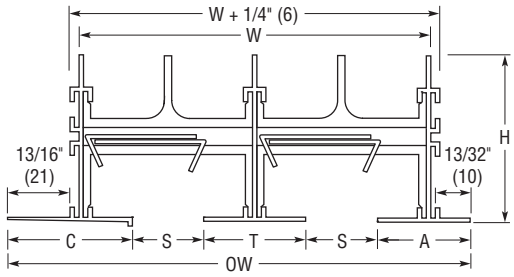
One Slot

Type CA Concealed Tapered/Exposed Flange Frame
- Tape and Spackle (one side)
- Drywall (ceiling)



Two Slot

Type CA Concealed Tapered/Exposed Flange Frame
- Tape and Spackle (one side)
- Drywall (ceiling)

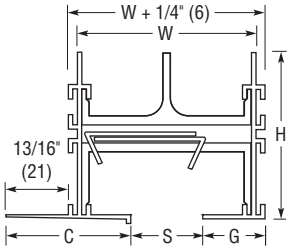


Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	1 Slot W	1 Slot OW	2 Slot W	2 Slot OW	C Border Width	A Border Width	H Height	T 2 Slot
FLH10, FLV10	1 (25)	2 1/2 (64)	3 31/32 (101)	4 15/16 (125)	6 13/32 (163)	1 11/16 (43)	1 9/32 (33)	2 3/8 (60)	1 7/16 (37)
FLH15, FLV15	1 1/2 (38)	3 1/2 (89)	4 31/32 (126)	6 15/16 (176)	8 13/32 (214)	1 15/16 (49)	1 17/32 (39)	2 5/8 (67)	1 15/16 (49)
FLH20, FLV20	2 (51)	4 1/2 (114)	5 31/32 (152)	8 15/16 (227)	10 13/32 (264)	2 3/16 (56)	1 25/32 (45)	2 7/8 (73)	2 7/16 (62)
FLH25, FLV25	2 1/2 (64)	5 1/2 (140)	6 31/32 (177)	10 15/16 (278)	12 13/32 (315)	2 7/16 (62)	2 1/32 (52)	3 1/8 (79)	2 15/16 (75)
FLH30, FLV30	3 (76)	6 1/2 (165)	7 31/32 (202)	12 15/16 (329)	14 13/32 (366)	2 11/16 (68)	2 9/32 (58)	3 3/8 (86)	3 7/16 (87)

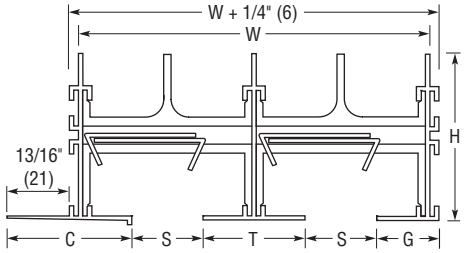
One Slot

Type CG Concealed Tapered/Flangeless Frame
- Tape and Spackle (one side)
- Drywall (ceiling)



Two Slot

Type CG Concealed Tapered/Flangeless Frame
- Tape and Spackle (one side)
- Drywall (ceiling)



Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	1 Slot W	2 Slot W	C Border Width	G Border Width	H Height	T 2 Slot
FLH10, FLV10	1 (25)	2 1/2 (64)	4 15/16 (125)	1 11/16 (43)	7/8 (22)	2 3/8 (60)	1 7/16 (37)
FLH15, FLV15	1 1/2 (38)	3 1/2 (89)	6 15/16 (176)	1 15/16 (49)	1 1/8 (29)	2 5/8 (67)	1 15/16 (49)
FLH20, FLV20	2 (51)	4 1/2 (114)	8 15/16 (227)	2 3/16 (56)	1 3/8 (35)	2 7/8 (73)	2 7/16 (62)
FLH25, FLV25	2 1/2 (64)	5 1/2 (140)	10 15/16 (278)	2 7/16 (62)	1 5/8 (41)	3 1/8 (79)	2 15/16 (75)
FLH30, FLV30	3 (76)	6 1/2 (165)	12 15/16 (329)	2 11/16 (68)	1 7/8 (48)	3 3/8 (86)	3 7/16 (87)

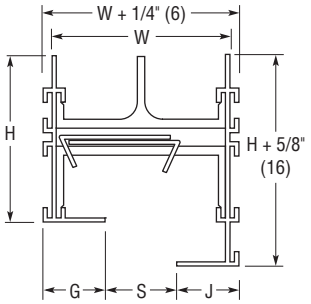
SPECIAL FRAME/BORDER STYLES

These frame/border styles require installation of the FlowLine™ diffuser prior to installation of the drywall. The ceiling opening should be framed and the diffuser attached with optional mounting clips or suspended from the building structure with hanger wire using the integral hanger brackets supplied with the diffuser.

One Slot

Type GJ Concealed Offset Frame

• Drywall (ceiling, wall)



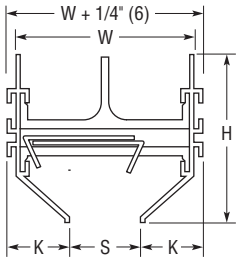
Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	1 Slot	G Border Width	J Border Width	H Height
FLH10	1 (25)	2 1/2 (64)	7/8 (22)	7/8 (22)	2 3/8 (60)
FLH15	1 1/2 (38)	3 1/2 (89)	1 1/8 (29)	1 1/8 (29)	2 5/8 (67)
FLH20	2 (51)	4 1/2 (114)	1 3/8 (35)	1 3/8 (35)	2 7/8 (73)
FLH25	2 1/2 (64)	5 1/2 (140)	1 5/8 (41)	1 5/8 (41)	3 1/8 (79)
FLH30	3 (76)	6 1/2 (165)	1 7/8 (48)	1 7/8 (48)	3 3/8 (86)

One Slot

Type KK Concealed Angular Frame

• Drywall (ceiling, wall)



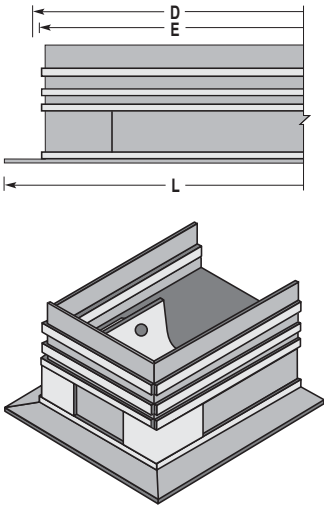
Dimensional Data - Imperial (Metric) Units

Model	S Slot Width	W	K Border Width	H Height
FLH10, FLV10	1 (25)	2 1/2 (64)	7/8 (22)	2 3/8 (60)
FLH15, FLV15	1 1/2 (38)	3 1/2 (89)	1 1/8 (29)	2 5/8 (67)
FLH20, FLV20	2 (51)	4 1/2 (114)	1 3/8 (35)	2 7/8 (73)

END BORDER CONFIGURATIONS FOR VARIOUS MOUNTINGS

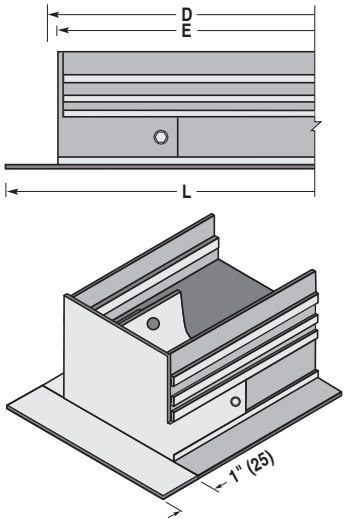
M Mitered End Border

- Architecturally superior look for Type A Frame/ Border with Exposed Flange.
- Factory mounted.

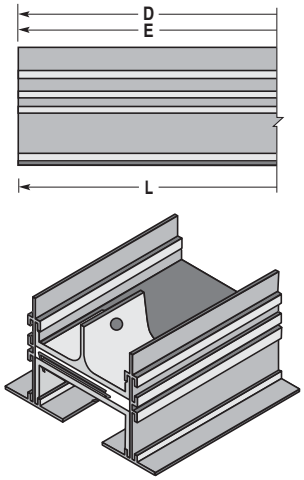


F Flanged End Cap

- Removable for field end trim or stocking.

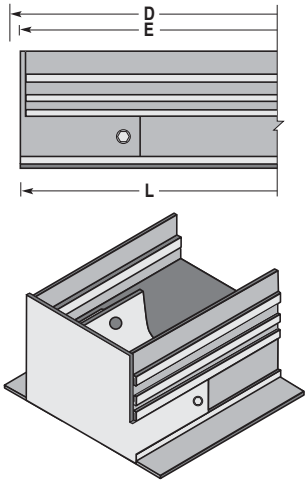


O Open End



C Flat End Cap

- Removable for field end trim or stocking.



Overall Length Dimensions and End Cap Position

D = Duct Length **E = End Cap Position** **L = Overall Length**

Frame Type	M	M	M	O	M	C	O	O	O	C
	E	L	E	L	E	L	E	L	E	L
AA, AAC	D - 1/4 (6)	D + 9/16 (14)	D - 1/8 (3)	D + 9/32 (7)	D - 1/16 (2)	D + 11/32 (9)	D	D	D - 1/16 (2)	D - 1/16 (2)
CC, CCA, CCC, CCCA	D - 1/4 (6)	D + 1 3/8 (35)	D - 1/8 (3)	D + 11/16 (17)	D - 1/16 (2)	D + 3/4 (19)	D	D	D - 1/16 (2)	D - 1/16 (2)
GG, AG	N/A	N/A	N/A	N/A	N/A	N/A	D	D	D - 1/16 (2)	D - 1/16 (2)
CA, CG, GJ, KK	N/A	N/A	N/A	N/A	N/A	N/A	D	D	D - 1/16 (2)	D - 1/16 (2)

Frame Type	C	C	F	F	F	O	F	C
	E	L	E	L	E	L	E	L
AA, AAC	D - 1/8 (3)	D - 1/8 (3)	D - 1/4 (6)	D +1 5/8 (41)	D - 1/8 (3)	D + 13/16 (21)	D - 1/16 (2)	D + 7/8 (22)
CC, CCA, CCC, CCCA	D - 1/8 (3)	D - 1/8 (3)	N/A	N/A	N/A	N/A	N/A	N/A
GG, AG	D - 1/8 (3)	D - 1/8 (3)	D - 1/4 (6)	D +1 5/8 (41)	D - 1/8 (3)	D + 13/16 (21)	D - 1/16 (2)	D + 7/8 (22)
CA, CG, GJ, KK	D - 1/8 (3)	D - 1/8 (3)	N/A	N/A	N/A	N/A	N/A	N/A

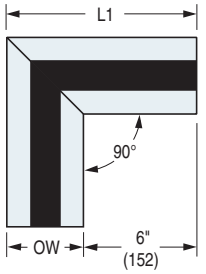
OPTIONS AND ACCESSORIES

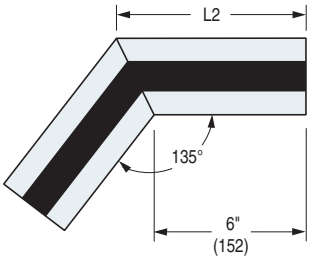
Mitered Corners

FLMC10 • 1" (25) Slot
FLMC15 • 1 1/2" (38) Slot
FLMC20 • 2" (51) Slot
FLMC25 • 2 1/2" (64) Slot
FLMC30 • 3" (76) Slot

The standard mitered corners are 90° and 135°. Units are factory welded with precision to match and align with the associated straight leg.

Units are supplied with factory installed blank-offs in the slot (painted black) and are inactive. Other angles are available.





No. of Slots	Slot Width	Border AA, CC		Border GG	
		L1	L2	L1	L2
1	1 (25)	9 9/16 (243)	7 15/32 (190)	8 11/16 (221)	7 1/8 (181)
	1 1/2 (38)	10 9/16 (268)	7 7/8 (200)	9 11/16 (246)	7 17/32 (191)
	2 (51)	11 9/16 (294)	8 5/16 (211)	10 11/16 (271)	7 15/16 (202)
	2 1/2 (64)	12 9/16 (319)	8 23/32 (221)	11 11/16 (297)	8 11/32 (212)
	3 (76)	13 9/16 (344)	9 1/8 (232)	12 11/16 (322)	8 3/4 (222)
2	1 (25)	11 31/32 (304)	8 15/32 (215)	11 3/32 (282)	8 3/32 (206)
	1 1/2 (38)	13 31/32 (355)	9 5/16 (237)	13 3/32 (333)	8 29/32 (226)
	2 (51)	15 31/32 (406)	10 1/8 (257)	15 3/32 (383)	9 3/4 (248)
	2 1/2 (64)	17 31/32 (456)	10 31/32 (279)	17 3/32 (434)	10 9/16 (268)
	3 (76)	19 31/32 (507)	11 25/32 (299)	19 3/32 (485)	11 13/32 (290)

Special Mitered Corners

*Available from 45 – 179° as SPL. (A detailed sketch is required for co-ordination with installing contractors).

Transitions

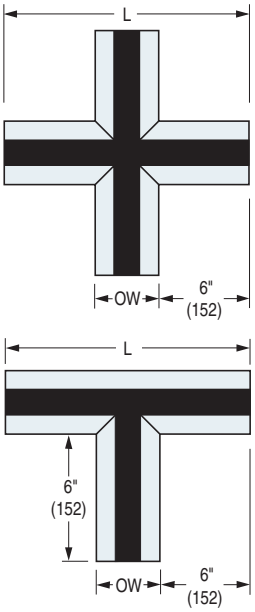
Type C Cross

FLC10 • 1" (25) Slot
FLC15 • 1 1/2" (38) Slot
FLC20 • 2" (51) Slot
FLC25 • 2 1/2" (64) Slot
FLC30 • 3" (76) Slot

Type T Tee

FLT10 • 1" (25) Slot
FLT15 • 1 1/2" (38) Slot
FLT20 • 2" (51) Slot
FLT25 • 2 1/2" (64) Slot
FLT30 • 3" (76) Slot

Transitions are inactive. Blank-offs installed at factory. Not available in 2 slot version.

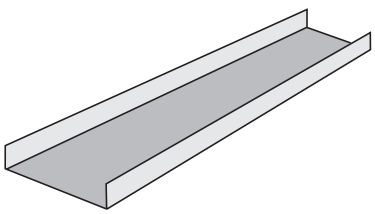


No. of Slots	Slot Width	Border AA, CC		Border GG	
		OW	L	OW	L
1	1 (25)	3 9/16 (90)	15 9/16 (395)	2 3/4 (70)	14 11/16 (373)
	1 1/2 (38)	4 9/16 (116)	16 9/16 (421)	3 3/4 (95)	15 11/16 (398)
	2 (51)	5 9/16 (141)	17 9/16 (446)	4 3/4 (121)	16 11/16 (424)
	2 1/2 (64)	6 9/16 (167)	18 9/16 (471)	5 3/4 (146)	17 11/16 (449)
	3 (76)	7 9/16 (192)	19 9/16 (497)	6 3/4 (171)	18 11/16 (475)

Blank-Offs

FLBO10 • 1" (25) Slot
FLBO15 • 1 1/2" (38) Slot
FLBO20 • 2" (51) Slot
FLBO25 • 2 1/2" (64) Slot
FLBO30 • 3" (76) Slot

Corrosion resistant steel, painted flat black. Fit in neck of diffuser. Provided in 48" (1219) lengths. Field cut to length.



OPTIONS AND ACCESSORIES

Return Hood/Sight Shield

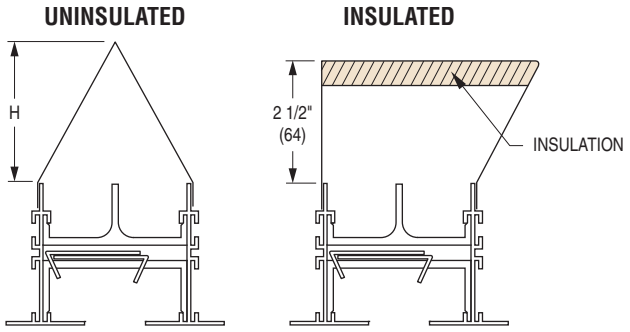
Uninsulated:

FLR10 • 1" (25) Slot
FLR15 • 1 1/2" (38) Slot
FLR20 • 2" (51) Slot
FLR25 • 2 1/2" (64) Slot
FLR30 • 3" (76) Slot

51% free area perforated corrosion resistant steel, painted flat black. Provided in 4 ft. (1219) lengths. Field cut to length.

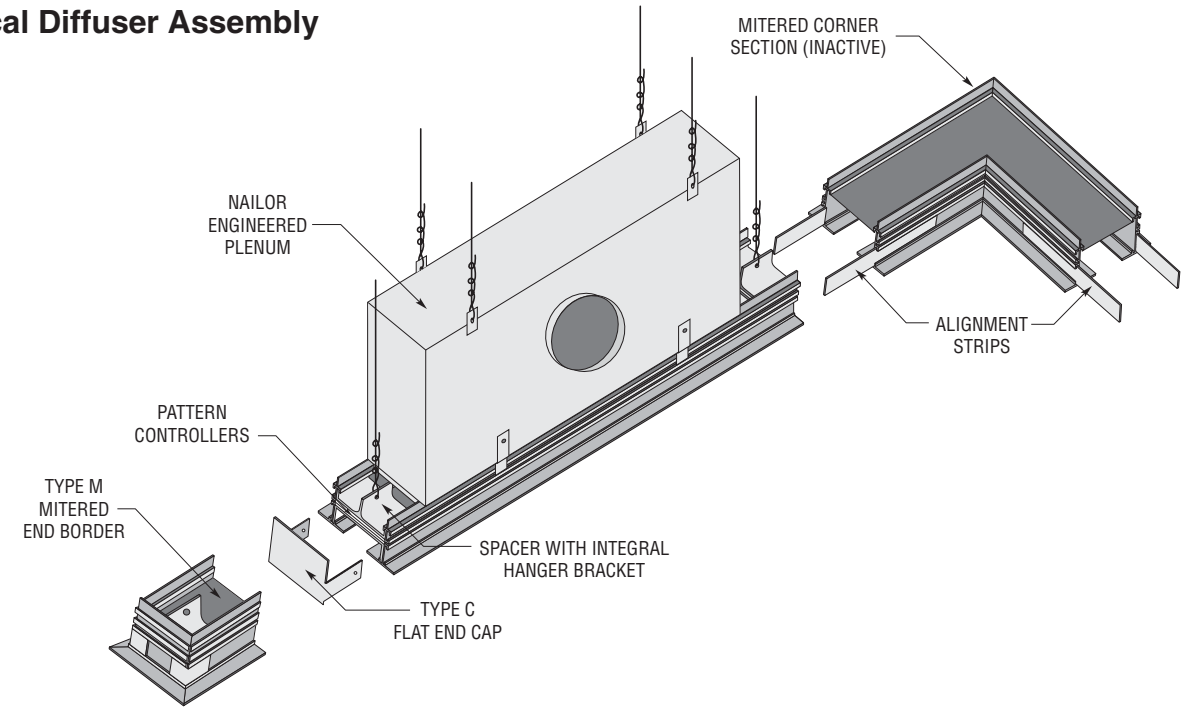
Insulated:

FLRI10 • 1" (25) Slot
FLRI15 • 1 1/2" (38) Slot
FLRI20 • 2" (51) Slot
FLRI25 • 2 1/2" (64) Slot
FLRI30 • 3" (76) Slot



No. of Slots	Slot Width	H Height
1	1 (25)	3 3/8 (86)
	1 1/2 (38)	3 3/8 (86)
	2 (51)	3 3/8 (86)
	2 1/2 (64)	3 3/8 (86)
	3 (76)	3 3/8 (86)
2	1 (25)	2 1/8 (54)
	1 1/2 (38)	3 1/8 (79)
	2 (51)	4 1/8 (105)
	2 1/2 (64)	5 1/8 (130)
	3 (76)	6 1/8 (156)

Typical Diffuser Assembly



- Diffuser sections can be joined end to end for long continuous runs.
- Type M Mitered End Borders provide a superior architectural finish. Type C End Caps close off the ends of the diffuser when terminating at a wall or other stop. Type C may be field installed.
- Alignment strips are factory supplied as standard on all multiple section assemblies to ensure close and positive alignment between sections.
- Nailor's optional engineered plenums ensure catalog performance and a trouble free sure fit installation.
- Unique integral hanger brackets provide independent hanging points and eliminate the need for field add-on hanger clips.

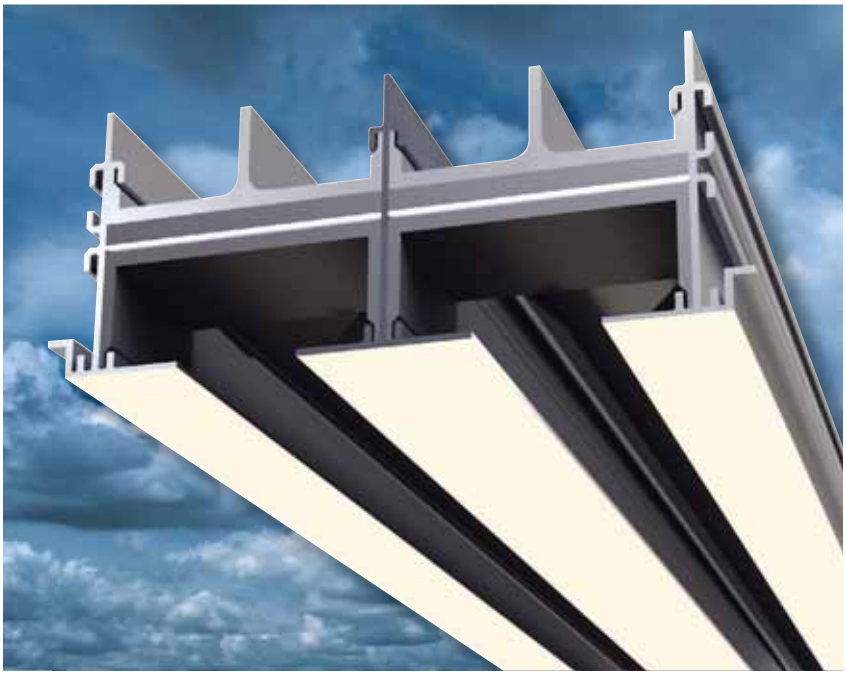
FLH OR FLV SERIES FOR TECHZONE™ TYPE CEILINGS

- HORIZONTAL HIGH THROW AND VERTICAL JET THROW PATTERN CONTROLLERS
- CONTINUOUS CUSTOM LINEAR DIFFUSER
- STANDARD T-BAR & NARROW T-BAR FRAMES
- ALUMINUM

Models:

FLH10TZ 1" (25) Slot

FLV10TZ 1" (25) Slot



The FlowLine™ FL (H or V) 10TZ Series Continuous Slot Diffusers provide outstanding performance flexibility. Compatible with the Armstrong® TechZone™ and USG Logix™ Ceiling Systems, the crisp, clean lines of this linear slot diffuser are not only architecturally appealing but they integrate smoothly into the ceiling system, delivering a high performance VAV solution with 180° air pattern for true design flexibility. The adjustable pattern controllers, which are easily adjusted from the face, allow the discharge air to be directed to the left or right as well as downward. Ideally suited for applications such as open plan offices, computer rooms, corridors (walls-to-desk), auditoriums.

STANDARD FEATURES:

- Heavy duty extruded aluminum frame and spacers.
- Adjustable pattern controllers are corrosion resistant steel, constructed on 24" (610) centers as standard for maximum flexibility.
- Standard module lengths range from 24" (610) to 72" (1829).
- Available in 1" (25) slot width, choice of 1 slot with 4" (102) TechZone™ module or 2 slot with 6" (152) TechZone™ module.
- Single section lengths up to 12 ft. (3658) reduce the number of joints in continuous runs.
- Multiple section assemblies are provided with alignment strips for continuous run applications.
- Linear over 144" (3658) long are supplied in equal section lengths.
- Ends are finished with Type CC Flat End Caps.
- Integral hanger brackets on 24" (610) centers are standard.

FRAME/BORDER STYLES:

- The FlowLine™ TechZone™ models are compatible with standard 15/16" (24) flat T-Bars (Flowline™ diffuser lays flush on the T-Bars) as well as 9/16" (14) flat tees that provide a tegular appearance and 9/16" (14) Bolt-Slot Fineline® Type regressed tees for a flush appearance with a tegular ceiling tile.

FINISH:

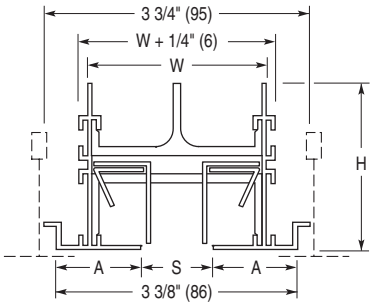
- Standard finish is AW Appliance White on exterior frame surfaces (optional finishes are available). Pattern controllers and interior surfaces are black on all models.
- Custom color and anodized finishes are available to suit architectural requirements.

STANDARD FRAME/BORDER STYLES

(TYPE H HORIZONTAL PATTERN CONTROLLERS ILLUSTRATED. ALSO AVAILABLE WITH TYPE V VERTICAL). TYPE LT 15/16" (24) STANDARD T-BAR.

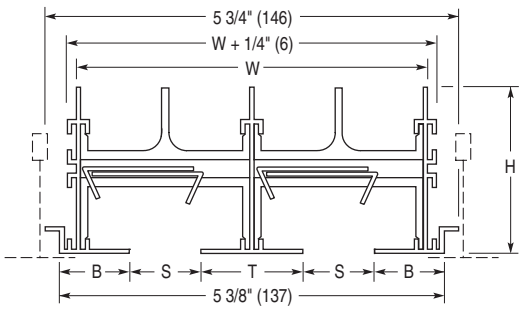
One Slot

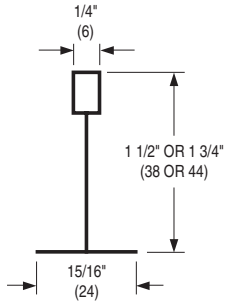
4" (102) Ceiling Module



Two Slot

6" (152) Ceiling Module



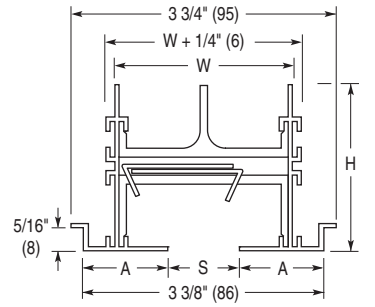


15/16" (24) Flat T-Bar Detail

(TYPE H HORIZONTAL PATTERN CONTROLLERS ILLUSTRATED. ALSO AVAILABLE WITH TYPE V VERTICAL). TYPE NT 9/16" (14) NARROW T-BAR.

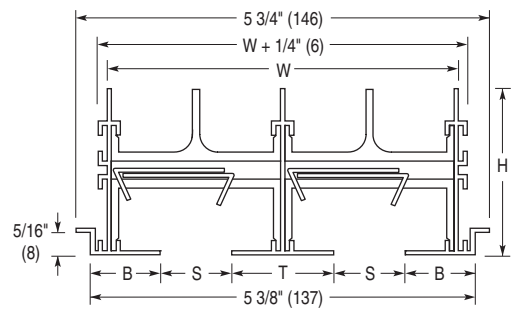
One Slot

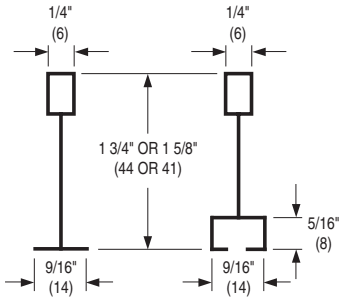
4" (102) Ceiling Module



Two Slot

6" (152) Ceiling Module





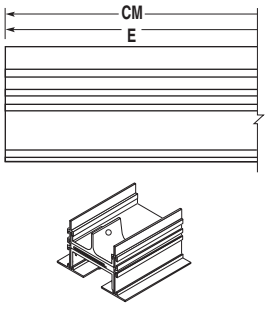
Flat Tee Detail Bolt-Slot Detail

Dimensional Data - Imperial (Metric) Units

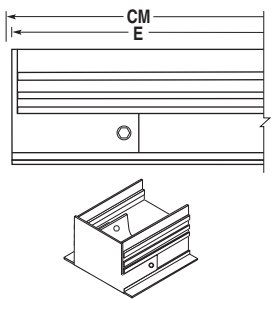
Model	S Slot Width	1 Slot W	2 Slot OW	Border Width A	Border Width B	H Height	T 2 Slot
FL(H or V)10TZ	1 (25)	2 1/2 (64)	4 15/16 (125)	1 3/16 (30)	31/32 (25)	2 3/8 (60)	1 7/16 (37)

End Condition

O Open End



C Flat End Cap



Type LT End Condition	Face Length E
CC	Ceiling Module – 1/4" (6)
OC	Ceiling Module – 1/8" (3)
OO	Ceiling Module

Type NT End Condition	Face Length E
CC	Ceiling Module – 5/8" (16)
OC	Ceiling Module – 5/16" (8)
OO	Ceiling Module

CM = Ceiling Module E = Overall Length

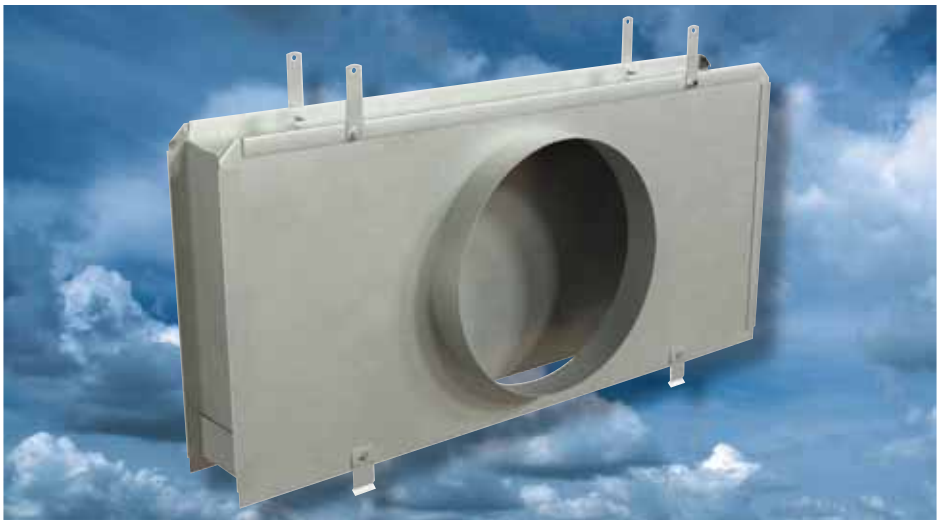
FLP SERIES

- SUPPLY AIR ENGINEERED PLENUMS FOR FLOWLINE™ LINEAR DIFFUSERS

Models:

FLP(I)10	**1" (25) Slot**
FLP(I)15	**1 1/2" (38) Slot**
FLP(I)20	**2" (51) Slot**
FLP(I)25	**2 1/2" (64) Slot**
FLP(I)30	**3" (76) Slot**

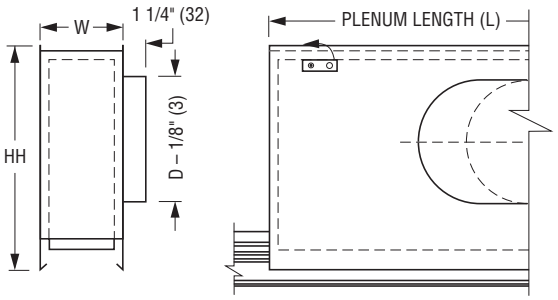
(I) Adds internal insulation.



The Nailor FLP Series engineered plenum boots are designed specifically for the FLH and FLV Series FlowLine™ Linear diffuser. These plenums are factory fabricated and tested to provide the engineer with proven catalog performance and the installing contractor with a labor saving, cost effective unit that provides for a fast, correct fit and easy field installation. FLP Series plenums are shipped loose from the factory. Uninsulated and insulated versions are available.

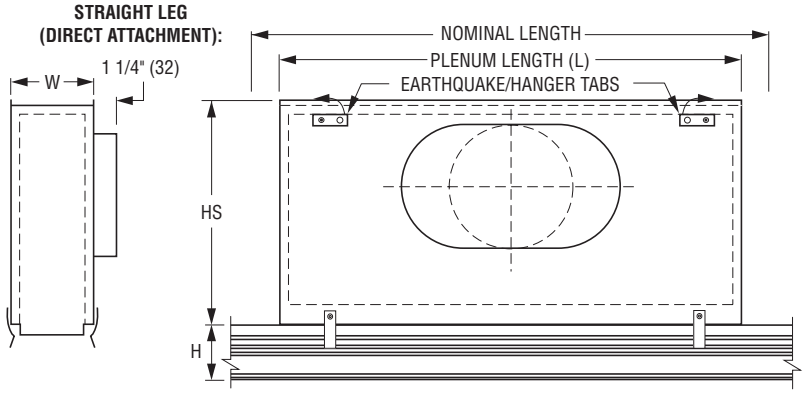
FLP Series plenums are available in two basic styles to suit the installation method. A straight leg version with spring clips is provided for direct attachment to the FlowLine™ diffuser neck. The diffuser and plenum are installed and attached directly to the ceiling structure prior to installation of the drywall or acoustic suspension ceiling and tiles. Plenums are provided as standard with hanger tabs. A hemmed leg version is available when it is desired to install the FlowLine™ diffuser after the hard gypsum board/drywall ceiling. The diffuser requires a frame/border style which includes a factory supplied concealed mounting bracket. The diffuser simply slides up through the ceiling opening until the mounting straps locate in the hem and is then secured through the slot face using the fastening screws provided.

HEMMED LEG (FOR CONCEALED MOUNTING BRACKET):



FOR USE WITH FRAME/BORDER TYPES AAC, CCC, CCCA
PLENUM HEIGHT (HH): ONE SLOT 12" (305), TWO SLOTS 18" (457)

STRAIGHT LEG (DIRECT ATTACHMENT):



FOR USE WITH FRAME/BORDER TYPES AA, CA, CC, CCA, CG, GG, KK, LT, NT
TECHZONE™ FRAME/BORDER TYPES LT & NT ARE AVAILABLE IN FLP10 & FLPI10 1" (25) SLOT ONLY
PLENUM HEIGHT (HS): ONE SLOT 10" (254), TWO SLOTS 16" (406)

Dimensional Data

Nominal Length	Actual Plenum Length (L) for Frame/Border Type		Available Inlet Sizes	
	AA, CA, CC, CCA, CG, GG, KK, LT, NT	AAC, CCC, CCCA	1 Slot	2 Slot
24 (610)	20 3/4 (527)	24 (610)	6 (152), 8 (203) Round 10 (254), 12 (305), 14 (356) Flat Oval*	6 (152), 8 (203), 10 (254), 12 (305), 14 (356) Round
30 (762)	26 3/4 (679)	30 (762)		
36 (914)	32 3/4 (832)	36 (914)		
48 (1219)	44 3/4 (1137)	48 (1219)		
60 (1524)	56 3/4 (1441)	60 (1524)		
72 (1829)	68 3/4 (1746)	72 (1829)		

Plenum Model	Width (W) for Frame/Border Type Noted			
	AA, CA, CC, CCA, CG, GG, KK, LT, NT		AAC, CCC, CCCA	
	1 Slot	2 Slot	1 Slot	2 Slot
FLP(I)10	2 3/4 (70)	5 3/16 (132)	3 1/2 (89)	5 15/16 (151)
FLP(I)15	3 3/4 (95)	7 3/16 (183)	4 1/2 (114)	7 15/16 (202)
FLP(I)20	4 3/4 (121)	9 3/16 (233)	5 1/2 (140)	9 15/16 (252)
FLP(I)25	5 3/4 (146)	11 3/16 (284)	6 1/2 (165)	11 15/16 (303)
FLP(I)30	6 3/4 (171)	13 3/16 (335)	7 1/2 (191)	13 15/16 (354)

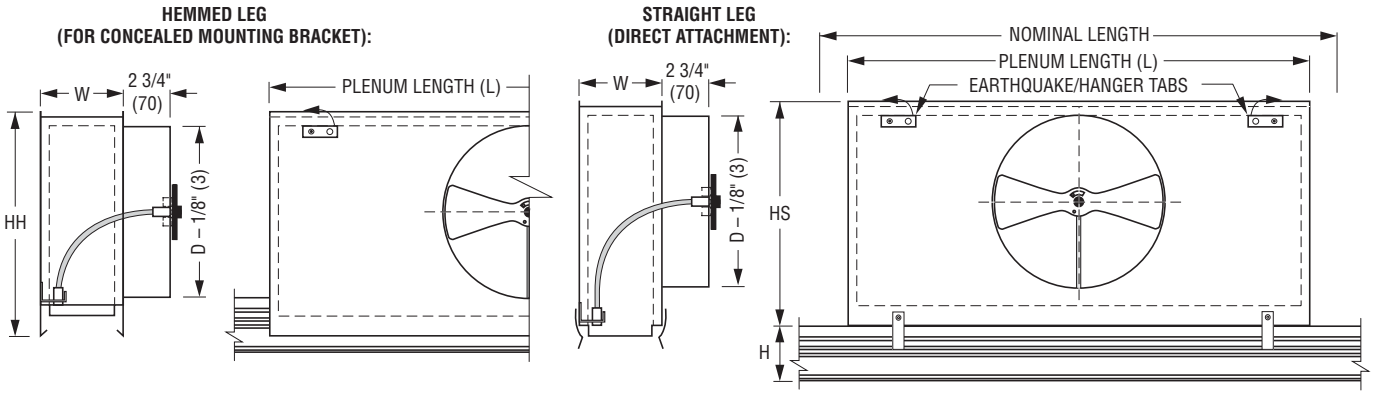
*** Equivalent Oval:** 10" (254) = 11" x 7 7/8" (279 x 200); 12" (305) = 14 1/8" x 7 7/8" (359 x 200); 14" (356) = 17 5/16" x 7 7/8" (440 x 200).

FLP PLENUMS WITH IDCO OPTION (CABLE OPERATED INLET DAMPER)

The Nailor FLP Series engineered plenum boots with IDCO option (Cable Operated inlet damper) are designed specifically for the FLH and FLV Series FlowLine™ Linear diffuser. These plenums are factory fabricated and tested to provide the engineer with proven catalog performance and the installing contractor with a labor saving, cost effective unit that provides for a fast, correct fit and easy field installation. FLP Series plenums are shipped loose from the factory. Uninsulated and insulated versions are available.

The round inlet damper is Nailor's 4250 radial sliding blade design factory mounted on the inlet. A flexible rotary cable connects the damper to a Phillips head screw operator mounted inside the plenum that permits air balancing at the diffuser face.

FLP Series plenums are available in two basic styles to suit the installation method. A straight leg version with spring clips is provided for direct attachment to the FlowLine™ diffuser neck. The diffuser and plenum are installed and attached directly to the ceiling structure prior to installation of the drywall or acoustic suspension ceiling and tiles. Plenums are provided as standard with hanger tabs. A hemmed leg version is available when it is desired to install the FlowLine™ diffuser after the hard gypsum board/drywall ceiling. The diffuser requires a frame/border style which includes a factory supplied concealed mounting bracket. The diffuser simply slides up through the ceiling opening until the mounting straps locate in the hem and is then secured through the slot face using the fastening screws provided.



FOR USE WITH FRAME/BORDER TYPES AAC, CCC, CCCA

FOR USE WITH FRAME/BORDER TYPES AA, CA, CC, CCA, CG, GG, KK, LT, NT
TECHZONE™ FRAME/BORDER TYPES LT & NT ARE AVAILABLE IN FLP10 & FLPI10 1" (25) SLOT ONLY

Hemmed Leg (For concealed mounting bracket)
For use w/Frame/Border Types AAC, CCC, CCCA

Inlet Size D (Round)	Plenum Height HH	
	1 Slot	2 Slot
6 (152), 8 (203)	12 (305)	18 (457)
10 (254)	13 (330)	18 (457)
12 (305)	15 (381)	18 (457)
14 (356)	17 (432)	18 (457)

Straight Leg (Direct Attachment)
For use w/Frame/Border Types AA, CA, CC, CCA, CG, GG, KK, LT, NT

Inlet Size D (Round)	Plenum Height HS	
	1 Slot	2 Slot
6 (152), 8 (203)	10 (254)	16 (406)
10 (254)	13 (330)	16 (406)
12 (305)	15 (381)	16 (406)
14 (356)	17 (432)	17 (432)

Dimensional Data

Nominal Length	Actual Plenum Length (L) for Frame/Border Type	
	AA, CA, CC, CCA, CG, GG, KK, LT, NT	AAC, CCC, CCCA
24 (610)	20 3/4 (527)	24 (610)
30 (762)	26 3/4 (679)	30 (762)
36 (914)	32 3/4 (832)	36 (914)
48 (1219)	44 3/4 (1137)	48 (1219)
60 (1524)	56 3/4 (1441)	60 (1524)
72 (1829)	68 3/4 (1746)	72 (1829)

Plenum Model	Width (W) for Frame/Border Type Noted			
	AA, CA, CC, CCA, CG, GG, KK, LT, NT		AAC, CCC, CCCA	
	1 Slot	2 Slot	1 Slot	2 Slot
FLP(I)10	2 3/4 (70)	5 3/16 (132)	3 1/2 (89)	5 15/16 (151)
FLP(I)15	3 3/4 (95)	7 3/16 (183)	4 1/2 (114)	7 15/16 (202)
FLP(I)20	4 3/4 (121)	9 3/16 (233)	5 1/2 (140)	9 15/16 (252)
FLP(I)25	5 3/4 (146)	11 3/16 (284)	6 1/2 (165)	11 15/16 (303)
FLP(I)30	6 3/4 (171)	13 3/16 (335)	7 1/2 (191)	13 15/16 (354)

CURVED FLOWLINE™

- FLH OR FLV SERIES
- CUSTOM CURVING FOR WALL / CEILING APPLICATIONS
- CONCAVE, CONVEX AND FLAT FACE CURVING OPTIONS
- 1 AND 2 SLOTS
- 1" (25) TO 3" (76) SLOT WIDTHS

Our expansive selection of FlowLine™ custom curving options will fufill the architect's most intricate designs. Curving is available for both the FLH Horizontal High Throw Pattern and FLV Jet Throw Pattern Model Series. Applications include Concave and Convex for both wall/ceiling and Flat Curve for ceiling applications. Nailor's most discreet and exposed frames options are available for curving. With our curving techniques and custom ordering support tools, the simplest of arches to the most complex design styles are achievable. Custom Curved Plenum Model Series FLP are also available. For further details and sizing information for custom curving; contact your local Nailor representative or go to www.nailor.com for a detailed submittal drawing.

STANDARD FEATURES:

- Heavy duty extruded aluminum rame and spacers.
- Pattern controllers are corrosion-resistant steel.*
- Standard Frame Styles A, C and G are available.
- End border include Flanged, Flat and Open styles.

SUPPLY AIR PLENUMS:

- Model Series FLP(I) custom curved plenum boots are available.

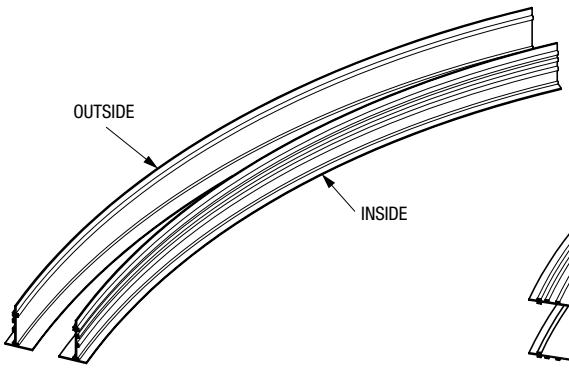
FINISH:

- Standard finish is AW Appliance White on exposed frame surfaces. Pattern controllers and interior surfaces are black.
- Custom color and anodized finishes are available.

CURVE TYPE:

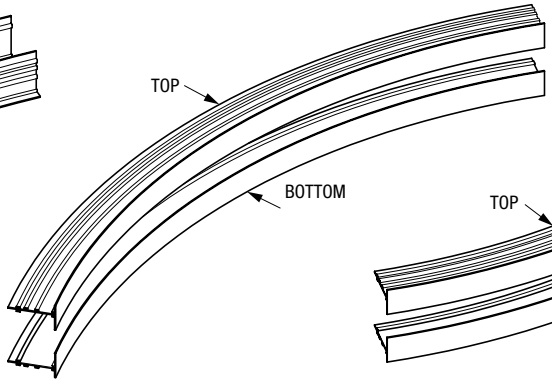
FLT – Flat Face Curve

- Ceiling Applications



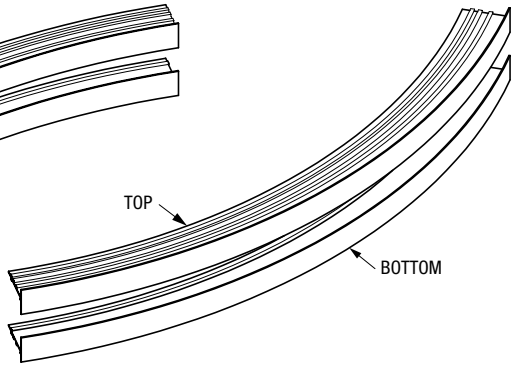
CAV – Concave Face Curve

- Wall / Ceiling Applications



VEX – Convex Face Curve

- Wall / Ceiling Applications

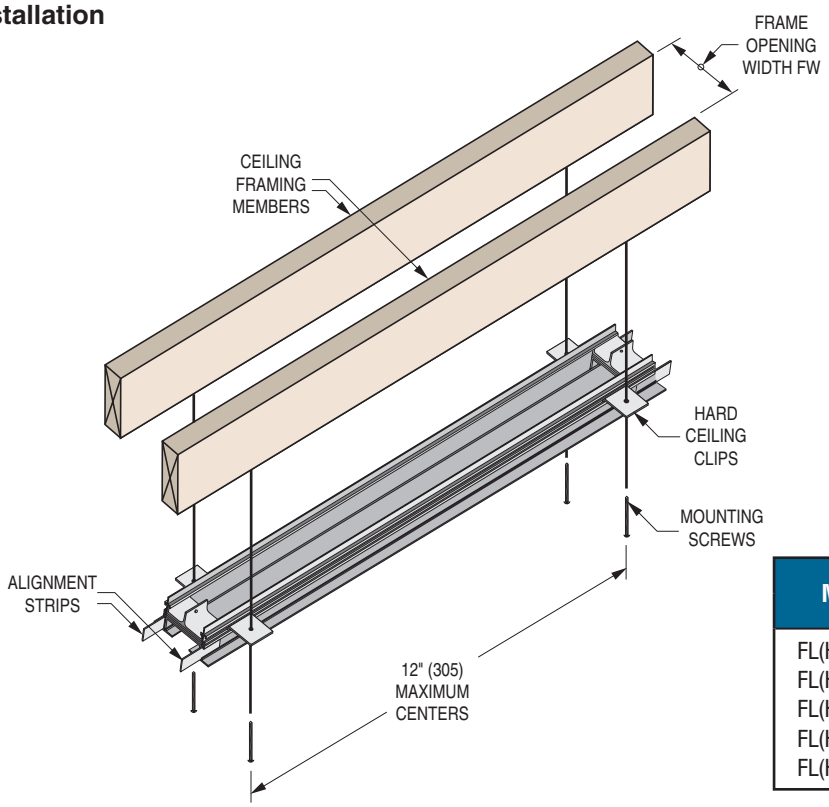


Minimum Radius:

Models	Slot Width	Flat Face				Concave & Convex	
		Frame Types AA & GG		Frame Type CC		Frame Types AA, CC & GG	
		1 Slot	2 Slot	1 Slot	2 Slot	1 Slot	2 Slot
FLH10, FLV10	1 (25)	30 (762)	30 (762)	40 (1016)	40 (1016)	60 (1524)	60 (1524)
FLH15, FLV15	1 1/2 (38)	30 (762)	30 (762)	40 (1016)	40 (1016)	60 (1524)	60 (1524)
FLH20, FLV20	2 (51)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)
FLH25, FLV25	2 1/2 (64)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)
FLH30, FLV30	3 (76)	60 (1524)	60 (1524)	60 (1524))	60 (1524)	60 (1524))	60 (1524)

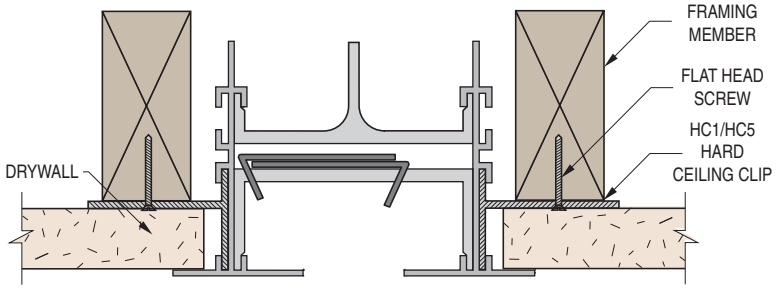
HARD CEILING APPLICATION AND INSTALLATION METHODS

Typical Installation

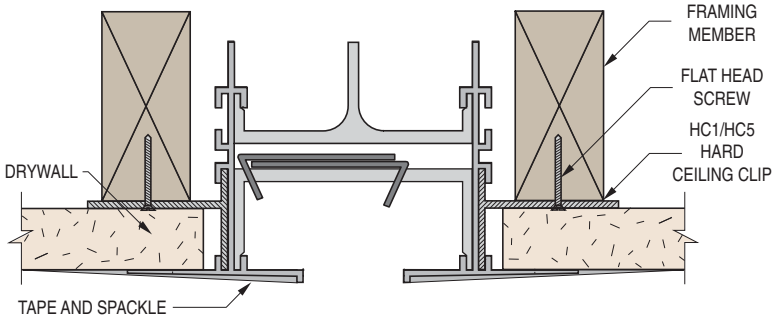


Model	Frame Opening Width FW	
	1 Slot	2 Slot
FL(H or V)10	3 1/4 (83)	5 3/4 (146)
FL(H or V)15	4 1/4 (108)	7 3/4 (197)
FL(H or V)20	5 1/4 (133)	9 3/4 (248)
FL(H or V)25	6 1/4 (159)	11 3/4 (298)
FL(H or V)30	7 1/4 (184)	13 3/4 (349)

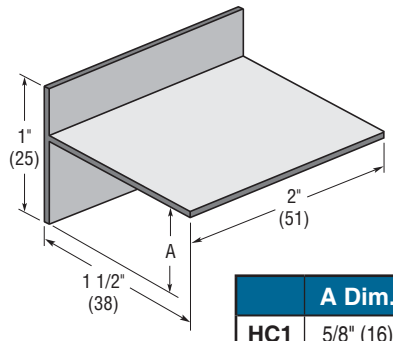
Exposed Flange Frame Type AA



Concealed Tapered Frame Type CC



HC1 Hard Ceiling Clip 5/8" (16) HC5 Hard Ceiling Clip 1/2" (13)

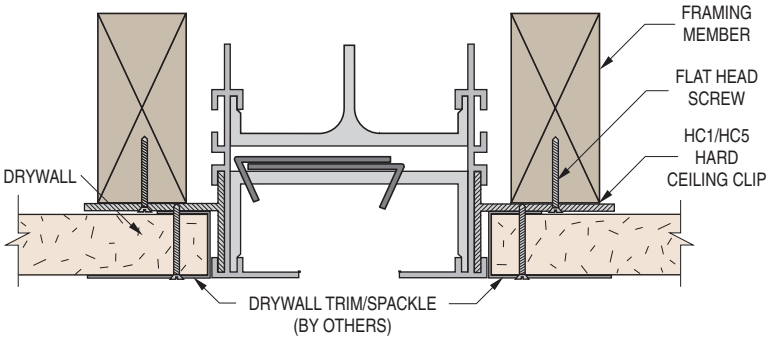


	A Dim.
HC1	5/8" (16)
HC5	1/2" (13)

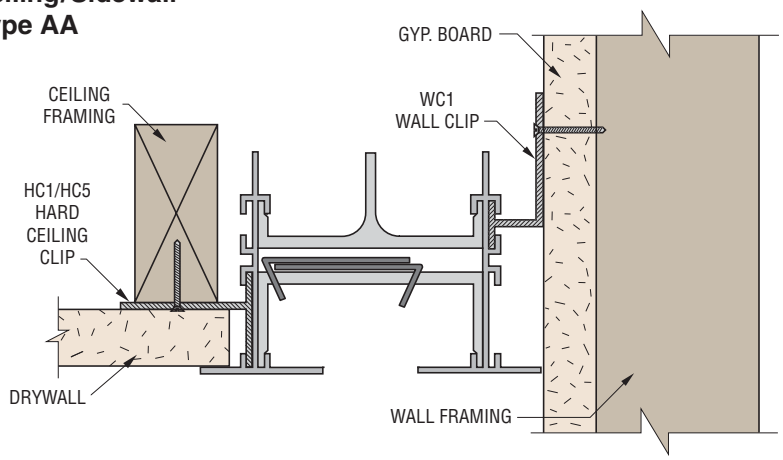
The HC1 and HC5 Hard Ceiling Clips can be used to mount the FlowLine™ assembly with Frame/Border Types AA, CC or GG, where 5/8" (16) or 1/2" (13) gypsum wallboard (drywall) is used.

HARD CEILING APPLICATION AND INSTALLATION METHODS

Flangeless Flush Frame Type GG



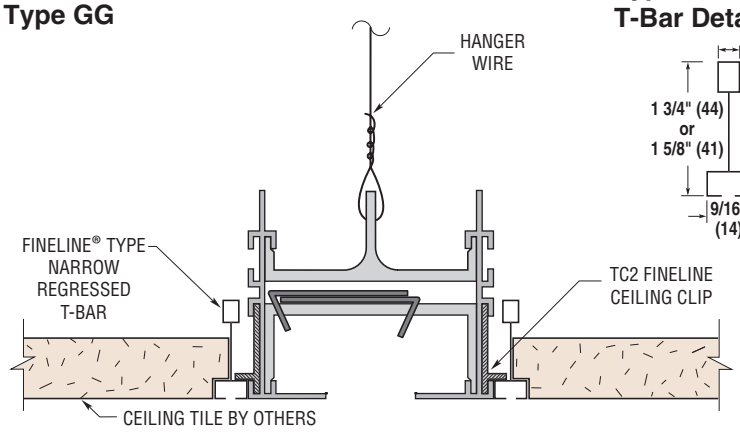
Ceiling/Sidewall Type AA



NARROW REGRESSED T-BAR CEILING SUSPENSION SYSTEM

(COMMONLY REFERRED TO AS BOLT-SLOT OR FINELINE® T-BAR)

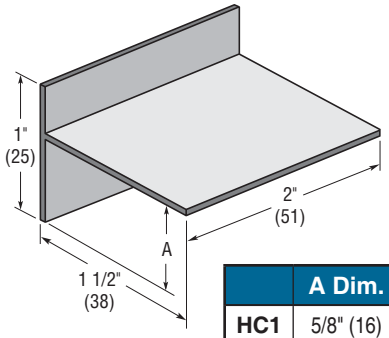
Flangeless Frame Type GG



Typical Regressed T-Bar Detail

USG 'Donn® Fineline®', Rockfon® 'Ultraline™' and Armstrong 'Silhouette' are three common examples of compatibility.

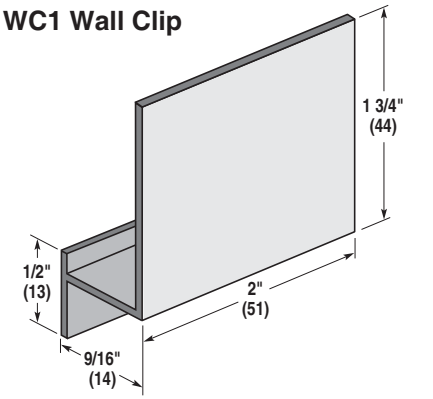
HC1 Hard Ceiling Clip 5/8" (16)
HC5 Hard Ceiling Clip 1/2" (13)



	A Dim.
HC1	5/8" (16)
HC5	1/2" (13)

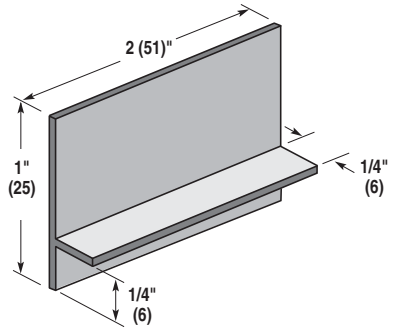
The HC1 and HC5 Hard Ceiling Clips can be used to mount the FlowLine™ assembly with Frame/Border Type GG, where standard 5/8" (16) or 1/2" (13) gypsum wallboard (drywall) is used.

WC1 Wall Clip



The WC1 Wall Clip is used to mount the FlowLine™ assembly with Frame/Border Type AA flush to a wall.

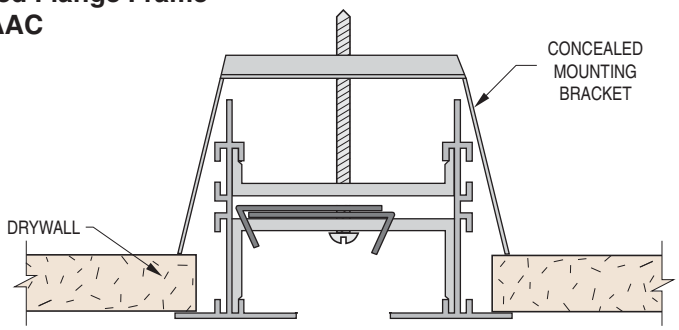
TC2 Fineline® T-Bar Clip



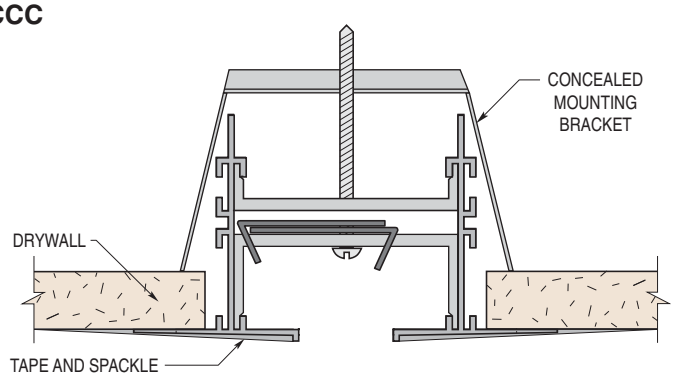
The TC2 Fineline® T-Bar Clips are used to support and level the FlowLine™ assembly in Bolt-Slot (Fineline® Type) suspension systems.

HARD CEILING APPLICATION AND INSTALLATION METHODS

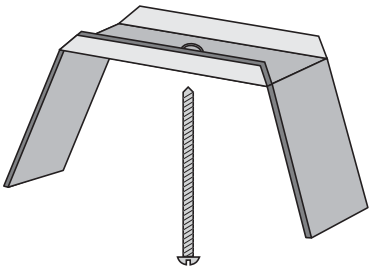
Exposed Flange Frame
Type AAC



Concealed Tapered Frame with Concealed Mounting Brackets
Type CCC



FLCMB Concealed Mounting Bracket

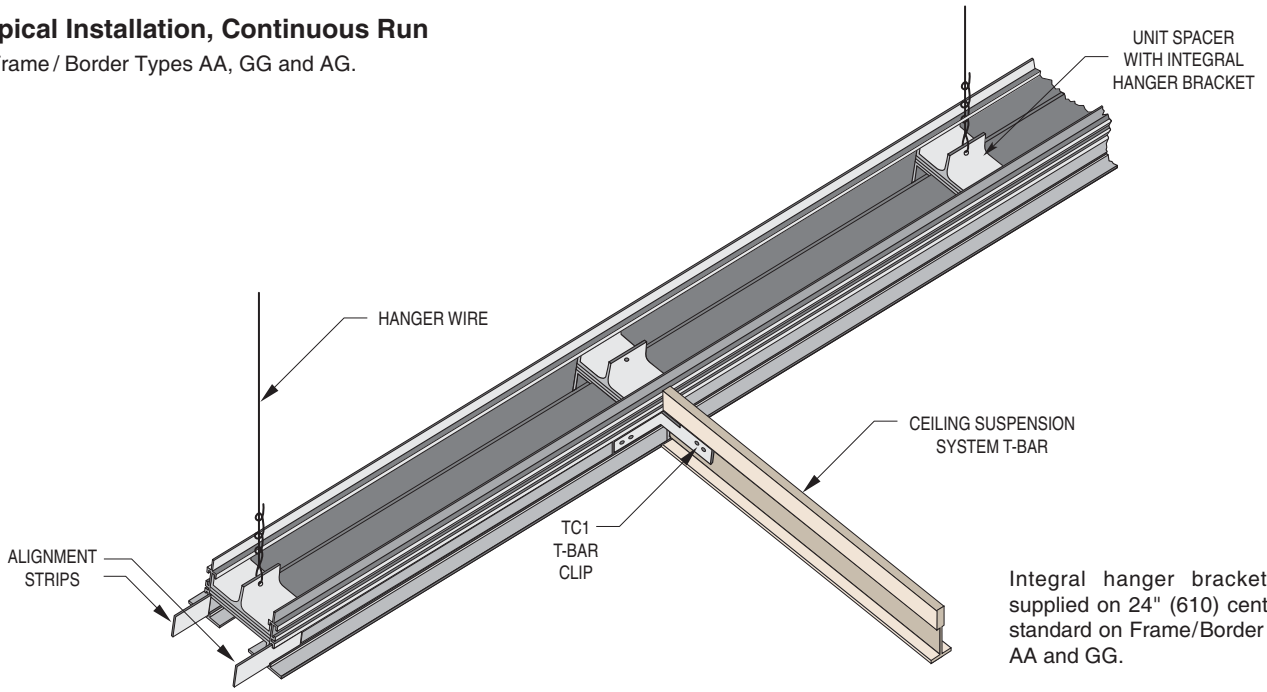


Supplied as standard with Frame/Border Types AAC, CCC and CCCA.

T-BAR CEILING SUSPENSION SYSTEM APPLICATION AND INSTALLATION METHODS

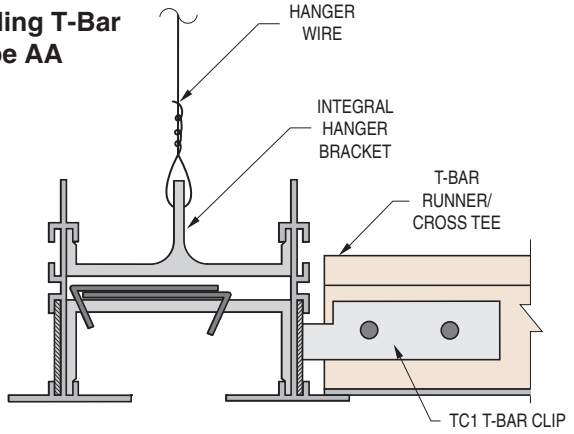
Typical Installation, Continuous Run

- Frame / Border Types AA, GG and AG.

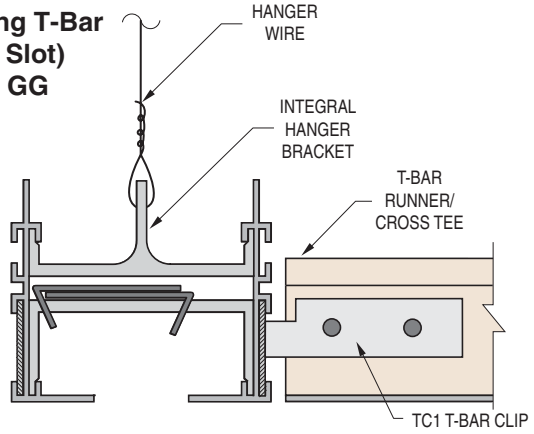


Integral hanger brackets are supplied on 24" (610) centers as standard on Frame/Border Types AA and GG.

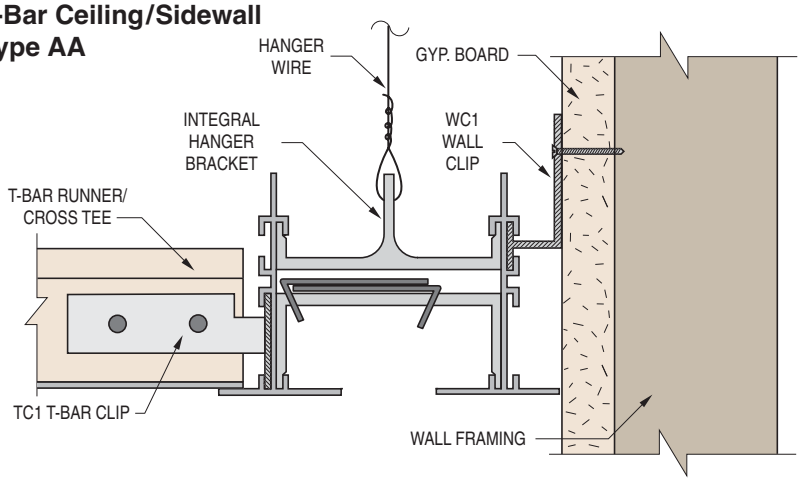
Ceiling T-Bar Type AA



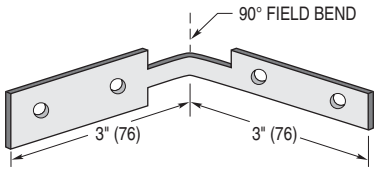
Ceiling T-Bar (Bolt Slot) Type GG



T-Bar Ceiling/Sidewall Type AA



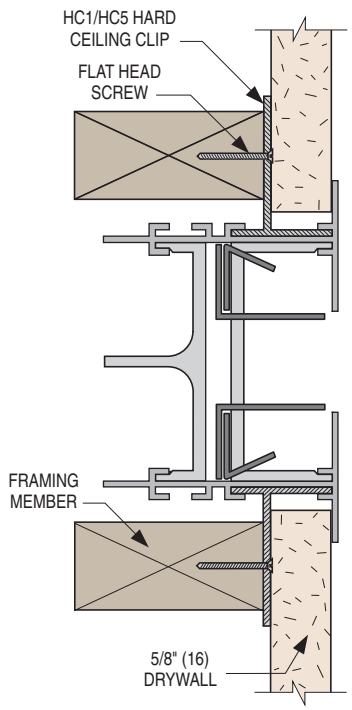
TC1 T-Bar Clip (field formed)



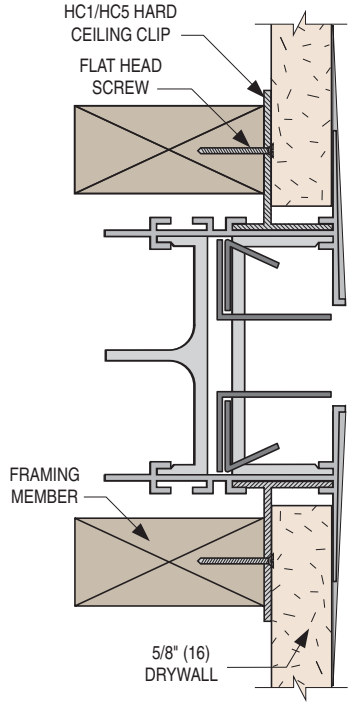
The TC1 T-Bar Clip is used to attach drop tees to the FlowLine™ assembly.

SIDEWALL APPLICATION AND INSTALLATION METHODS

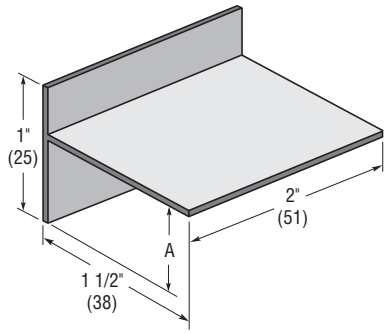
Exposed Flange Frame Type AA



Concealed Tapered Frame Type CC



HC1 Hard Ceiling Clip 5/8" (16) HC5 Hard Ceiling Clip 1/2" (13)

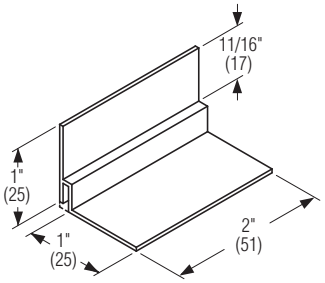


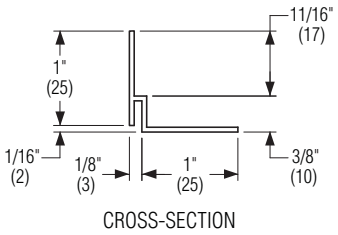
	A Dim.
HC1	5/8" (16)
HC5	1/2" (13)

The HC1 and HC5 Hard Ceiling Clips can be used to mount the FlowLine™ assembly with Frame/Border Types AA or CC, where 5/8" (16) or 1/2" (13) gypsum wallboard (drywall) is used.

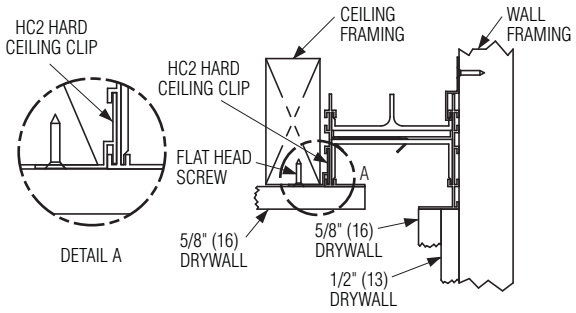
SIDEWALL APPLICATION AND INSTALLATION METHODS

Mounting Clips
HC2 Hard Ceiling Clip



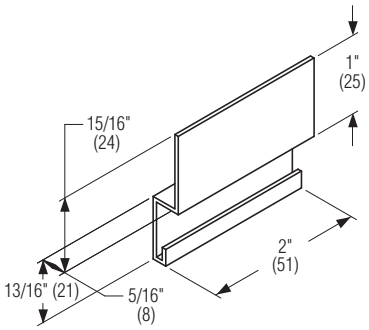


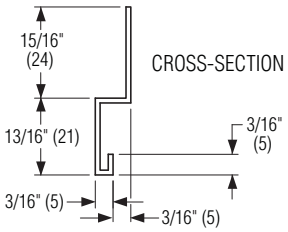
The HC2 Hard Ceiling Clip can be used to mount the FlowLine™ assembly with frame/border type **G**, where standard 5/8" (16) gypsum wallboard (drywall) is installed below the frame face.



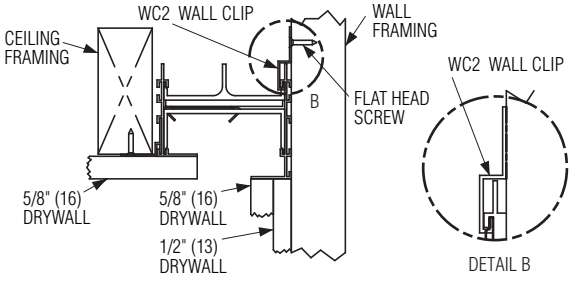
Flangeless Concealed Frame Type GJ

Mounting Clips
WC2 Wall Clip



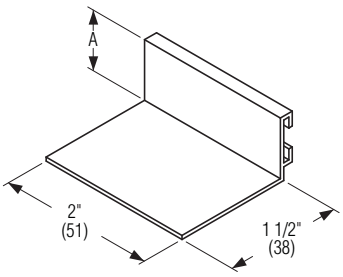


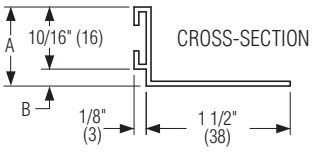
The WC2 Wall Clip can be used to mount the FlowLine™ assembly with frame/border types **G** or **J**, flush to a wall.



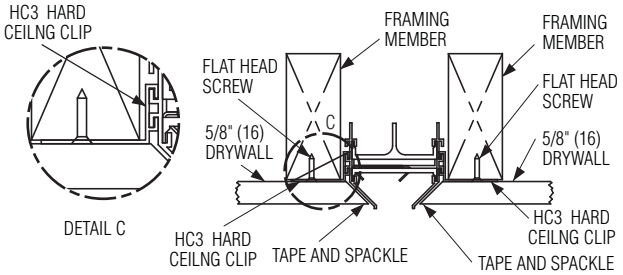
Flangeless Concealed Frame Type GJ

Mounting Clips
HC3 Hard Ceiling Clip for Type K Border





The HC3 Hard Ceiling Clip can be used to mount the FlowLine™ assembly with frame/border type **K**, where standard 5/8" (16) gypsum wallboard (drywall) is used.

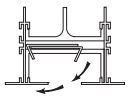


Flangeless Concealed Frame Type KK

Flowline	Part No.	A Dim.	B Dim.
FLH10	HC3-10	13/16 (21)	3/16 (5)
FLH15	HC3-15	1 1/16 (27)	7/16 (11)
FLH20	HC3-20	1 5/16 (33)	11/16 (17)

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH (10, 15, 20, 25 & 30) • CONTINUOUS PRESSURIZED PLENUM



1" Slot Width	1 Slot	Airflow, CFM/FT.	20	35	50	65	80	95	110
		Static Pressure	.013	.039	.080	.135	.205	.289	.387
		Noise Criteria	<15	<15	23	30	36	42	45
		Throw	4-6-12	7-11-16	10-14-20	13-16-22	15-18-25	16-20-27	17-21-30
	2 Slot	Airflow, CFM/FT.	40	70	100	130	160	190	220
		Static Pressure	.013	.039	.080	.135	.205	.289	.387
		Noise Criteria	<15	<15	25	33	39	45	48
		Throw	5-8-17	10-15-24	15-20-29	17-22-32	19-25-35	20-28-38	22-30-40
1.5" Slot Width	1 Slot	Airflow, CFM/FT.	25	40	55	70	85	100	115
		Static Pressure	.011	.029	.054	.089	.130	.180	.237
		Noise Criteria	<15	<15	17	25	31	36	40
		Throw	5-8-12	9-12-17	12-15-20	14-17-22	15-18-25	16-20-28	17-21-30
	2 Slot	Airflow, CFM/FT.	55	80	105	130	155	180	205
		Static Pressure	.014	.029	.049	.076	.108	.145	.189
		Noise Criteria	<15	<15	16	26	31	35	39
		Throw	8-12-19	12-17-25	15-20-29	17-22-31	20-26-35	21-27-39	23-30-40
2" Slot Width	1 Slot	Airflow, CFM/FT.	25	45	65	85	105	125	145
		Static Pressure	.007	.021	.044	.075	.115	.163	.219
		Noise Criteria	<15	<15	19	24	32	38	43
		Throw	4-8-13	8-12-18	11-16-22	14-19-26	16-21-30	17-22-31	20-24-34
	2 Slot	Airflow, CFM/FT.	45	85	125	165	205	245	285
		Static Pressure	.005	.019	.042	.073	.113	.161	.218
		Noise Criteria	<15	<15	19	26	34	40	45
		Throw	4-9-15	11-16-25	16-21-29	21-26-37	23-28-40	26-31-42	27-32-44
2.5" Slot Width	1 Slot	Airflow, CFM/FT.	30	55	80	105	130	155	180
		Static Pressure	.009	.031	.065	.113	.173	.245	.331
		Noise Criteria	<15	<15	18	25	30	34	39
		Throw	3-7-16	9-14-21	13-18-26	15-20-29	18-22-33	20-25-36	21-27-39
	2 Slot	Airflow, CFM/FT.	60	105	150	195	240	285	330
		Static Pressure	.009	.028	.057	.097	.147	.207	.278
		Noise Criteria	<15	<15	21	27	32	37	41
		Throw	7-12-22	13-19-28	19-24-35	22-27-39	25-31-44	27-33-48	29-36-51
3" Slot Width	1 Slot	Airflow, CFM/FT.	30	60	90	120	150	180	210
		Static Pressure	.008	.033	.074	.131	.205	.296	.403
		Noise Criteria	<15	<15	15	24	30	35	40
		Throw	3-6-15	10-14-22	14-19-27	17-23-32	19-25-35	22-27-39	24-29-42
	2 Slot	Airflow, CFM/FT.	60	120	180	240	300	360	420
		Static Pressure	.008	.033	.074	.131	.205	.296	.403
		Noise Criteria	<15	<15	18	27	33	38	43
		Throw	4-9-20	12-20-31	19-26-38	24-31-44	27-34-48	30-37-53	32-40-57

NC Correction Factors for Various Lengths

Length (ft.)	2	4	6	8	9	10	15
Supply	- 3	0	+ 2	+ 3	+ 4	+ 5	+ 8
Return	0	+ 3	+ 5	+ 6	+ 7	+ 8	+ 11

Throw Correction Factors for Various Lengths

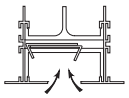
Length (ft.)	2	4	6	8	10	12
Multiplier	0.70	1.00	1.25	1.40	1.55	1.70

Performance Notes:

1. Data is based upon pressurized plenum application (non ducted) with no plenum effect for pressure or sound. Plenums should be sized to achieve equal velocity along the slot length. Keep duct inlet velocities below 700 fpm in order to maintain cataloged performance.
2. All pressures are in inches w.g..
3. Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
4. Throw data is based on active sections 4 ft. (1219) long. For other lengths, use the correction factor table above.
5. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts, for a 4 ft. section. For other lengths, use the correction factor table above.
6. Throw values are based on a 1-way air pattern. For 2-way pattern, throw is determined from the 1 slot data at half the specified air volume.
7. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

PERFORMANCE DATA • RETURN AIR APPLICATIONS

MODELS: FLH (10, 15, 20, 25 & 30)



1" Slot Width	1 Slot	Airflow, CFM/FT.	20	35	50	65	80	95	110
		Static Pressure	.014	.043	.088	.149	.226	.318	.426
		Noise Criteria	<15	<18	26	33	39	45	48
	2 Slot	Airflow, CFM/FT.	40	70	100	130	160	190	220
		Static Pressure	.014	.043	.088	.149	.226	.318	.426
		Noise Criteria	<15	<19	28	36	42	48	51
1.5" Slot Width	1 Slot	Airflow, CFM/FT.	25	40	55	70	85	100	115
		Static Pressure	.012	.032	.059	.098	.143	.198	.261
		Noise Criteria	<15	<15	20	28	34	39	43
	2 Slot	Airflow, CFM/FT.	55	80	105	130	155	180	205
		Static Pressure	.015	.032	.054	.084	.119	.160	.208
		Noise Criteria	<15	<15	19	29	34	38	42
2" Slot Width	1 Slot	Airflow, CFM/FT.	25	45	65	85	105	125	145
		Static Pressure	.008	.023	.048	.083	.127	.179	.241
		Noise Criteria	<15	<15	22	27	35	41	46
	2 Slot	Airflow, CFM/FT.	45	85	125	165	205	245	285
		Static Pressure	.006	.021	.046	.080	.124	.177	.240
		Noise Criteria	<15	<15	22	29	37	43	48
2.5" Slot Width	1 Slot	Airflow, CFM/FT.	30	55	80	105	130	155	180
		Static Pressure	.010	.034	.074	.124	.190	.270	.364
		Noise Criteria	<15	<15	21	28	33	37	42
	2 Slot	Airflow, CFM/FT.	60	105	150	195	240	285	330
		Static Pressure	.010	.031	.063	.107	.162	.228	.306
		Noise Criteria	<15	<15	24	30	35	40	44
3" Slot Width	1 Slot	Airflow, CFM/FT.	30	60	90	120	150	180	210
		Static Pressure	.009	.036	.081	.144	.226	.326	.443
		Noise Criteria	<15	<15	18	27	33	38	43
	2 Slot	Airflow, CFM/FT.	60	120	180	240	300	360	420
		Static Pressure	.009	.036	.081	.144	.226	.326	.443
		Noise Criteria	<15	<15	22	30	36	41	46

NC Correction Factors for Various Lengths

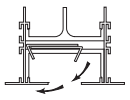
Length (ft.)	2	4	6	8	9	10	15
Return	- 3	0	+ 1	+ 2	+ 3	+ 5	+ 7

Performance Notes:

1. Data is based upon a ductless return application.
2. All pressures are in inches w.g..
3. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts, for a 4 ft. (1219) section. For other lengths, use the correction factor table above.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH / FTH (10 &15) • 1 SLOT WITH NAILOR PLENUM

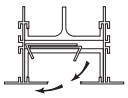


1" Slot Width	1 Slot 6" Dia. Inlet	2 Ft.	Airflow, CFM	25	50	75	100	125	150	175
			Total Pressure	.008	.034	.075	.132	.206	.297	.040
			Static Pressure	.007	.030	.065	.115	.180	.260	.350
			Noise Criteria	<15	<15	<15	20	29	36	40
			Throw	1-2-5	3-6-9	5-9-12	7-10-13	8-10-14	9-11-16	10-12-18
		4 Ft.	Airflow, CFM	40	80	120	160	200	240	280
			Total Pressure	.009	.031	.066	.117	.180	.264	.352
			Static Pressure	.006	.020	.042	.075	.115	.170	.225
			Noise Criteria	<15	<15	<15	17	25	32	38
			Throw	1-2-5	3-6-12	5-9-15	8-12-17	10-12-18	12-15-20	13-16-22
		5 Ft.	Airflow, CFM	50	100	150	200	250	300	350
			Total Pressure	.009	.036	.079	.140	.217	.316	.424
			Static Pressure	.005	.020	.042	.075	.115	.170	.225
			Noise Criteria	<15	<15	<15	18	26	33	38
			Throw	1-2-7	3-7-13	8-10-17	10-13-19	12-15-20	14-16-22	15-17-24
1" Slot Width	1 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	50	75	100	125	150	175	200
			Total Pressure	.029	.068	.119	.188	.272	.358	.471
			Static Pressure	.028	.065	.114	.180	.260	.342	.450
			Noise Criteria	<15	<15	20	28	35	41	44
			Throw	2-5-9	5-9-11	7-10-14	8-11-15	9-12-18	10-12-19	11-13-20
		4 Ft.	Airflow, CFM	70	110	150	190	230	270	310
			Total Pressure	.016	.040	.075	.120	.176	.242	.319
			Static Pressure	.014	.034	.063	.101	.149	.205	.270
			Noise Criteria	<15	<15	<15	23	30	36	41
			Throw	2-4-10	6-8-14	7-11-17	9-13-19	10-15-22	13-16-24	15-18-26
		5 Ft.	Airflow, CFM	80	130	180	230	280	330	380
			Total Pressure	.007	.025	.056	.093	.142	.206	.283
			Static Pressure	.006	.020	.044	.072	.110	.160	.220
			Noise Criteria	<15	<15	<15	23	29	35	40
			Throw	2-5-11	6-9-15	8-12-18	9-14-20	11-15-22	13-17-24	14-18-26
1.5" Slot Width	1 Slot 6" Dia. Inlet	2 Ft.	Airflow, CFM	30	60	90	120	150	180	210
			Total Pressure	.002	.038	.088	.148	.246	.367	.471
			Static Pressure	.001	.032	.075	.125	.210	.315	.400
			Noise Criteria	<15	<15	<15	22	31	39	44
			Throw	1-4-7	4-7-11	6-9-13	8-10-15	10-13-17	11-14-19	12-15-20
		4 Ft.	Airflow, CFM	70	110	150	190	230	270	310
			Total Pressure	.021	.045	.089	.148	.206	.288	.376
			Static Pressure	.013	.025	.052	.089	.120	.170	.220
			Noise Criteria	<15	<15	<15	20	24	30	36
			Throw	2-5-11	5-8-15	8-12-17	10-13-19	12-15-20	13-16-21	14-17-23
		5 Ft.	Airflow, CFM	85	135	185	235	285	335	385
			Total Pressure	.013	.055	.101	.165	.247	.342	.440
			Static Pressure	.001	.025	.045	.075	.115	.160	.200
			Noise Criteria	<15	<15	<15	20	26	31	37
			Throw	2-5-11	5-19-15	8-13-18	11-15-21	12-17-23	14-18-25	15-20-27
1.5" Slot Width	1 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	30	60	90	120	150	180	210
			Total Pressure	.002	.032	.076	.128	.222	.317	.428
			Static Pressure	.001	.030	.072	.120	.210	.300	.405
			Noise Criteria	<15	<15	<15	23	31	40	44
			Throw	1-4-7	4-7-11	7-9-13	8-12-15	10-13-17	11-14-18	12-15-19
		4 Ft.	Airflow, CFM	70	120	170	220	270	320	370
			Total Pressure	.015	.035	.075	.125	.207	.272	.380
			Static Pressure	.012	.027	.060	.100	.170	.220	.310
			Noise Criteria	<15	<15	<15	22	30	36	44
			Throw	2-5-11	6-9-15	9-13-18	12-15-21	14-17-23	15-19-25	16-20-26
		5 Ft.	Airflow, CFM	85	145	205	265	325	385	445
			Total Pressure	.016	.041	.084	.131	.204	.276	.401
			Static Pressure	.012	.03	.062	.095	.150	.200	.300
			Noise Criteria	<15	<15	<15	23	30	36	43
			Throw	2-5-11	6-10-16	9-13-20	12-17-23	15-19-25	16-20-27	17-21-29
1.5" Slot Width	1 Slot 10" Dia. Inlet	2 Ft.	Airflow, CFM	30	60	90	120	150	180	210
			Total Pressure	.002	.027	.065	.109	.189	.269	.364
			Static Pressure	.002	.026	.063	.106	.184	.263	.355
			Noise Criteria	<15	<15	<15	20	28	37	41
			Throw	1-4-7	4-7-11	7-9-13	8-12-15	10-13-17	11-14-18	12-15-19
		4 Ft.	Airflow, CFM	70	120	170	220	270	320	370
			Total Pressure	.013	.030	.064	.106	.176	.231	.323
			Static Pressure	.012	.027	.058	.096	.161	.210	.294
			Noise Criteria	<15	<15	<15	19	27	33	41
			Throw	2-5-11	6-9-15	9-13-18	12-15-21	14-17-23	15-19-25	16-20-26
		5 Ft.	Airflow, CFM	85	145	205	265	325	385	445
			Total Pressure	.014	.035	.071	.111	.173	.235	.341
			Static Pressure	.012	.030	.063	.097	.151	.204	.299
			Noise Criteria	<15	<15	<15	20	27	33	40
			Throw	2-5-11	6-10-16	9-13-20	12-17-23	15-19-25	16-20-27	17-21-29

For performance table notes, see page A37.

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH / FTH (20 & 25) • 1 SLOT WITH NAILOR PLENUM

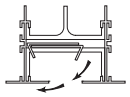


2" Slot Width	1 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	40	80	120	160	200	240	280
			Total Pressure	.007	.028	.065	.115	.180	.259	.352
			Static Pressure	.006	.025	.057	.102	.159	.229	.312
			Noise Criteria	<15	<15	<15	17	26	31	38
			Throw	1-3-8	5-8-13	7-10-15	10-13-17	11-14-19	12-15-22	13-16-23
		4 Ft.	Airflow, CFM	100	150	200	250	300	350	400
			Total Pressure	.015	.034	.040	.094	.136	.185	.241
			Static Pressure	.010	.022	.040	.062	.089	.122	.159
			Noise Criteria	<15	<15	<15	15	22	30	37
			Throw	3-4-11	6-9-14	8-12-17	9-13-19	12-14-23	14-25-27	15-17-28
		5 Ft.	Airflow, CFM	125	180	235	290	345	400	455
			Total Pressure	.180	.037	.064	.097	.137	.184	.238
			Static Pressure	.010	.021	.035	.535	.076	.102	.132
			Noise Criteria	<15	<15	<15	22	29	34	39
			Throw	3-6-12	8-12-17	9-13-19	12-14-23	14-13-26	16-18-28	17-21-30
2" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	Airflow, CFM	50	100	150	200	250	300	350
			Total Pressure	.007	.028	.064	.113	.177	.254	.346
			Static Pressure	.007	.027	.060	.108	.168	.242	.329
			Noise Criteria	<15	<15	<15	17	24	29	37
			Throw	2-5-10	5-8-12	6-10-14	8-12-17	9-13-19	10-14-22	13-16-25
		4 Ft.	Airflow, CFM	100	170	240	310	380	450	520
			Total Pressure	.008	.023	.045	.076	.114	.169	.213
			Static Pressure	.065	.019	.038	.063	.094	.132	.176
			Noise Criteria	<15	<15	<15	20	27	33	39
			Throw	3-6-12	7-11-15	9-13-19	11-15-23	14-17-27	15-19-30	16-21-34
		5 Ft.	Airflow, CFM	125	205	285	365	445	525	605
			Total Pressure	.009	.023	.045	.074	.109	.152	.202
			Static Pressure	.007	.018	.034	.056	.083	.115	.153
			Noise Criteria	<15	<15	<15	23	31	36	41
			Throw	3-7-15	7-11-19	10-14-24	13-16-25	15-19-30	16-21-32	21-25-34
2.5" Slot Width	1 Slot 10" Oval Inlet	2 Ft.	Airflow, CFM	100	145	190	235	280	325	370
			Total Pressure	.024	.05	.085	.131	.186	.25	.324
			Static Pressure	.045	.045	.077	.117	.167	.224	.291
			Noise Criteria	<15	<15	<15	22	29	35	40
			Throw	4-9-11	6-19-13	8-12-17	10-14-18	12-16-22	13-17-24	14-18-26
		4 Ft.	Airflow, CFM	140	220	300	380	460	540	620
			Total Pressure	.015	.037	.069	.111	.163	.225	.296
			Static Pressure	.010	.026	.048	.077	.112	.155	.204
			Noise Criteria	<15	<15	<15	25	33	40	45
			Throw	5-8-17	10-14-22	12-16-25	14-17-28	16-19-31	19-22-33	21-24-35
		5 Ft.	Airflow, CFM	150	240	330	420	510	600	690
			Total Pressure	.013	.034	.063	.103	.151	.209	.277
			Static Pressure	.002	.020	.037	.060	.088	.122	.162
			Noise Criteria	<15	<15	<15	23	31	38	43
			Throw	3-8-16	8-12-21	12-15-25	15-18-29	17-21-32	19-23-35	21-27-38
2.5" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	Airflow, CFM	100	145	190	235	280	325	370
			Total Pressure	.021	.043	.074	.114	.161	.217	.282
			Static Pressure	.019	.041	.070	.106	.151	.204	.264
			Noise Criteria	<15	<15	<15	20	27	33	38
			Throw	4-9-11	6-19-13	8-12-17	10-14-18	12-16-22	13-17-24	14-18-26
		4 Ft.	Airflow, CFM	140	225	310	395	480	565	650
			Total Pressure	.012	.031	.059	.096	.142	.197	.261
			Static Pressure	.009	.024	.046	.075	.111	.154	.204
			Noise Criteria	<15	<15	15	23	31	38	43
			Throw	5-8-17	10-14-22	12-16-25	14-17-29	17-20-32	20-23-34	22-26-37
		5 Ft.	Airflow, CFM	150	250	350	450	550	650	750
			Total Pressure	.010	.028	.054	.090	.134	.188	.250
			Static Pressure	.007	.019	.038	.063	.094	.131	.174
			Noise Criteria	<15	<15	16	26	34	40	46
			Throw	3-8-16	8-12-21	13-16-26	16-19-31	18-22-33	20-25-37	22-28-39

For performance table notes, see page A37.

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH30 AND FTH30 • 1 SLOT WITH NAILOR PLENUM



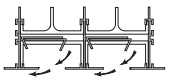
3" Slot Width	1 Slot 10" Oval Inlet	2 Ft.	**Airflow, CFM**	**125**	**170**	**215**	**260**	**305**	**350**	**395**
			Total Pressure	.030	.056	.894	.131	.180	.237	.302
			Static Pressure	.027	.049	.078	.115	.158	.208	.265
			Noise Criteria	<15	<15	<15	24	29	35	40
			Throw	7-11-16	9-13-19	11-15-21	13-17-23	15-18-25	16-19-28	17-20-31
		4 Ft.	**Airflow, CFM**	**200**	**275**	**350**	**425**	**500**	**575**	**650**
			Total Pressure	.027	.050	.081	.120	.166	.220	.281
			Static Pressure	.017	.032	.052	.076	.106	.140	.179
			Noise Criteria	<15	<15	18	22	28	34	40
			Throw	8-13-20	10-15-24	15-19-27	17-21-30	18-23-32	20-24-35	21-26-37
		5 Ft.	**Airflow, CFM**	**220**	**310**	**400**	**490**	**580**	**670**	**760**
			Total Pressure	.025	.040	.082	.123	.172	.230	.296
			Static Pressure	.013	.026	.043	.065	.091	.122	.157
			Noise Criteria	<15	<15	16	24	32	39	45
			Throw	8-12-21	12-17-25	15-20-29	18-23-32	20-24-35	21-26-37	23-28-40
3" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	**Airflow, CFM**	**125**	**170**	**215**	**260**	**305**	**350**	**395**
			Total Pressure	.029	.053	.085	.124	.170	.224	.286
			Static Pressure	.026	.049	.078	.115	.158	.208	.265
			Noise Criteria	<15	<15	<15	18	25	31	36
			Throw	7-11-16	9-13-19	11-15-21	13-17-23	15-18-25	16-19-28	17-20-31
		4 Ft.	**Airflow, CFM**	**200**	**290**	**380**	**470**	**560**	**650**	**740**
			Total Pressure	.022	.047	.081	.123	.175	.236	.306
			Static Pressure	.017	.036	.061	.094	.133	.179	.232
			Noise Criteria	<15	<15	<15	22	29	36	41
			Throw	8-13-20	11-16-24	15-20-28	17-22-31	20-24-34	21-26-37	23-28-40
		5 Ft.	**Airflow, CFM**	**220**	**330**	**440**	**550**	**660**	**770**	**880**
			Total Pressure	.020	.044	.079	.123	.177	.241	.315
			Static Pressure	.013	.030	.053	.082	.118	.161	.210
			Noise Criteria	<15	<15	19	26	32	39	43
			Throw	8-12-21	11-14-26	14-16-30	17-20-34	20-25-37	22-27-39	24-29-42

Performance Notes:

1. Data is based upon FlowLine™ with Nailor engineered plenum (uninsulated) as a complete assembly.
2. All pressures are in inches w.g..
3. Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
4. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts.
5. Throw values are based on a 1-way air pattern. For 2-way pattern, throw is determined from the 1 slot data at half the specified air volume.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH / FTH (10 & 15) • 2 SLOT WITH NAILOR PLENUM

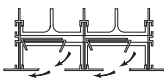


1" Slot Width	2 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	80	120	160	200	240	280	320
			Total Pressure	.016	.036	.064	.101	.145	.198	.258
			Static Pressure	.018	.041	.072	.080	.115	.157	.205
			Noise Criteria	<15	<15	<15	23	29	35	40
			Throw	3-6-12	6-10-16	9-13-18	11-14-20	13-16-22	14-17-23	15-18-25
		4 Ft.	Airflow, CFM	160	230	300	370	440	510	580
			Total Pressure	.025	.053	.091	.138	.196	.263	.340
			Static Pressure	.013	.026	.045	.068	.097	.130	.168
			Noise Criteria	<15	<15	17	24	31	36	41
			Throw	5-8-17	8-12-21	10-16-24	13-18-26	16-20-30	17-22-32	18-24-34
		5 Ft.	Airflow, CFM	200	280	360	440	520	600	680
			Total Pressure	.033	.065	.108	.161	.225	.300	.385
			Static Pressure	.013	.025	.041	.062	.087	.115	.148
			Noise Criteria	<15	<15	19	26	32	37	42
			Throw	5-10-20	9-14-24	12-17-26	15-20-30	17-22-33	19-24-35	22-26-38
1" Slot Width	2 Slot 10" Dia. Inlet	2 Ft.	Airflow, CFM	80	130	180	230	280	330	380
			Total Pressure	.014	.038	.073	.119	.176	.244	.324
			Static Pressure	.013	.034	.065	.106	.157	.218	.289
			Noise Criteria	<15	<15	19	28	35	41	47
			Throw	3-6-13	7-11-16	10-14-19	12-15-22	13-17-24	14-18-26	15-19-28
		4 Ft.	Airflow, CFM	160	240	320	400	480	560	640
			Total Pressure	.019	.043	.076	.118	.170	.232	.303
			Static Pressure	.013	.029	.051	.080	.115	.157	.205
			Noise Criteria	<15	<15	18	26	33	39	44
			Throw	4-9-18	9-14-22	12-28-26	15-20-29	17-22-32	20-24-34	19-25-35
		5 Ft.	Airflow, CFM	200	295	390	485	580	675	770
			Total Pressure	.022	.048	.085	.132	.189	.256	.333
			Static Pressure	.013	.028	.049	.075	.108	.146	.190
			Noise Criteria	<15	<15	20	28	34	40	45
			Throw	5-19-19	10-14-24	13-19-27	17-22-32	20-24-35	21-25-38	22-27-39
1.5" Slot Width	2 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	120	160	200	240	280	320	360
			Total Pressure	.036	.064	.101	.145	.198	.258	.327
			Static Pressure	.029	.051	.080	.115	.157	.205	.259
			Noise Criteria	<15	<15	19	26	32	37	41
			Throw	5-19-16	8-12-18	11-12-18	13-16-21	14-17-24	15-18-26	15-19-27
		4 Ft.	Airflow, CFM	240	310	380	450	520	590	660
			Total Pressure	.058	.097	.146	.205	.274	.352	.441
			Static Pressure	.029	.048	.072	.101	.135	.174	.218
			Noise Criteria	<15	<15	21	27	33	37	42
			Throw	9-14-22	12-17-25	14-20-28	16-22-31	17-23-33	19-25-35	21-26-37
		5 Ft.	Airflow, CFM	300	370	440	510	580	650	720
			Total Pressure	.075	.114	.161	.217	.281	.352	.432
			Static Pressure	.029	.044	.062	.083	.108	.135	.166
			Noise Criteria	<15	<15	22	27	32	36	40
			Throw	10-15-25	13-19-28	15-21-30	16-22-32	18-23-33	19-24-34	21-27-38
1.5" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	Airflow, CFM	120	170	220	270	320	370	420
			Total Pressure	.031	.062	.103	.156	.219	.293	.377
			Static Pressure	.029	.058	.097	.146	.205	.274	.353
			Noise Criteria	<15	<15	21	29	35	40	45
			Throw	5-9-16	9-13-19	12-14-21	14-16-24	15-18-26	15-19-28	17-21-29
		4 Ft.	Airflow, CFM	240	320	400	480	560	640	720
			Total Pressure	.037	.065	.102	.146	.199	.260	.329
			Static Pressure	.029	.051	.080	.115	.157	.205	.259
			Noise Criteria	<15	<15	22	26	32	37	41
			Throw	9-14-22	12-18-26	15-20-29	17-22-32	18-24-33	20-26-36	22-27-39
		5 Ft.	Airflow, CFM	300	400	500	600	700	800	900
			Total Pressure	.041	.073	.114	.163	.222	.291	.368
			Static Pressure	.029	.051	.080	.115	.157	.205	.259
			Noise Criteria	<15	<15	23	30	35	40	45
			Throw	10-15-25	14-20-29	16-22-32	19-24-35	22-27-38	23-28-41	24-30-43

For performance table notes, see page A40.

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH / FTH (20 & 25) • 2 SLOT WITH NAILOR PLENUM

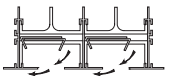


2" Slot Width	2 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	120	165	210	255	300	345	390
			Total Pressure	.023	.043	.069	.101	.141	.186	.238
			Static Pressure	.015	.029	.047	.068	.095	.125	.160
			Noise Criteria	<15	<15	16	24	29	34	38
			Throw	5-8-14	7-11-16	9-14-19	11-14-21	13-16-23	14-17-24	14-18-25
		4 Ft.	Airflow, CFM	240	300	360	420	480	540	600
			Total Pressure	.051	.079	.114	.156	.204	.258	.318
			Static Pressure	.021	.034	.048	.066	.086	.108	.134
			Noise Criteria	<15	17	23	29	34	39	43
			Throw	6-11-20	9-14-23	11-16-24	13-19-26	14-20-29	16-22-30	18-23-32
		5 Ft.	Airflow, CFM	260	325	390	455	520	585	650
			Total Pressure	.053	.082	.118	.161	.211	.267	.329
			Static Pressure	.018	.028	.040	.055	.072	.092	.113
			Noise Criteria	<15	16	22	29	34	38	42
			Throw	5-11-21	8-14-23	11-16-25	13-18-28	14-21-30	16-23-32	17-23-33
2" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	Airflow, CFM	120	195	270	345	420	495	570
			Total Pressure	.009	.024	.046	.075	.111	.155	.205
			Static Pressure	.007	.020	.039	.063	.094	.130	.172
			Noise Criteria	<15	<15	<15	22	28	35	41
			Throw	5-8-14	8-13-18	12-15-22	14-17-24	15-19-26	16-21-29	18-20-31
		4 Ft.	Airflow, CFM	240	330	420	510	600	690	780
			Total Pressure	.019	.037	.060	.088	.122	.161	.206
			Static Pressure	.013	.026	.042	.062	.086	.113	.145
			Noise Criteria	<15	<15	17	24	30	35	41
			Throw	6-11-20	10-15-23	13-19-26	15-21-29	18-23-32	20-24-34	21-25-36
		5 Ft.	Airflow, CFM	280	380	480	580	680	780	880
			Total Pressure	.022	.040	.065	.094	.130	.172	.218
			Static Pressure	.014	.026	.041	.060	.083	.110	.140
			Noise Criteria	<15	<15	18	25	31	36	41
			Throw	5-12-22	10-15-25	13-20-29	15-22-32	18-24-34	21-25-36	23-27-39
2.5" Slot Width	2 Slot 10" Dia. Inlet	2 Ft.	Airflow, CFM	80	160	240	320	400	480	560
			Total Pressure	.005	.019	.043	.078	.122	.175	.238
			Static Pressure	.003	.014	.032	.057	.088	.127	.173
			Noise Criteria	<15	<15	<15	18	27	35	41
			Throw	2-4-10	6-10-16	10-14-20	13-16-23	15-18-26	16-20-29	18-22-31
		4 Ft.	Airflow, CFM	160	280	400	520	640	760	880
			Total Pressure	.011	.034	.070	.118	.178	.251	.336
			Static Pressure	.005	.018	.036	.061	.092	.130	.174
			Noise Criteria	<15	<15	<15	22	31	38	44
			Throw	3-15-14	7-12-22	12-17-26	15-21-30	18-23-32	21-25-36	23-27-39
		5 Ft.	Airflow, CFM	200	335	470	605	740	875	1010
			Total Pressure	.014	.040	.079	.130	.194	.271	.361
			Static Pressure	.005	.016	.032	.054	.079	.110	.147
			Noise Criteria	<15	<15	<15	23	31	38	44
			Throw	3-5-15	7-13-23	12-18-28	15-23-32	19-25-35	23-27-29	23-29-41
2.5" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	Airflow, CFM	80	170	260	350	440	530	620
			Total Pressure	.003	.015	.034	.061	.097	.140	.192
			Static Pressure	.002	.012	.027	.049	.077	.112	.153
			Noise Criteria	<15	<15	<15	17	27	34	41
			Throw	2-4-10	7-10-17	11-14-21	14-17-24	15-19-27	17-21-31	19-23-32
		4 Ft.	Airflow, CFM	160	295	430	595	700	835	970
			Total Pressure	.007	.024	.051	.088	.136	.193	.260
			Static Pressure	.004	.016	.033	.056	.086	.122	.165
			Noise Criteria	<15	<15	<15	21	29	37	43
			Throw	3-5-14	8-13-23	13-19-27	16-22-31	20-24-34	22-26-38	23-29-41
		5 Ft.	Airflow, CFM	200	350	500	650	800	950	1100
			Total Pressure	.010	.029	.059	.100	.151	.212	.284
			Static Pressure	.005	.017	.033	.057	.086	.121	.162
			Noise Criteria	<15	<15	<15	21	29	37	43
			Throw	3-5-15	8-14-24	13-19-29	17-23-33	21-26-37	23-28-40	25-31-43

For performance table notes, see page A40.

PERFORMANCE DATA • HORIZONTAL HIGH THROW SERIES

MODELS: FLH30 AND FTH30 • 2 SLOT WITH NAILOR PLENUM



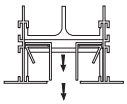
3" Slot Width	2 Slot 10" Dia. Inlet	2 Ft.	**Airflow, CFM**	**80**	**180**	**280**	**380**	**480**	**580**	**680**
			Total Pressure	.004	.022	.053	.097	.155	.226	.311
			Static Pressure	.003	.015	.036	.067	.106	.156	.214
			Noise Criteria	<15	<15	<15	17	28	36	43
			Throw	1-3-9	6-10-17	11-15-22	14-18-25	16-20-29	18-22-32	20-24-34
		4 Ft.	**Airflow, CFM**	**150**	**300**	**450**	**600**	**750**	**900**	**1050**
			Total Pressure	.009	.035	.080	.143	.222	.321	.436
			Static Pressure	.004	.016	.038	.067	.104	.151	.205
			Noise Criteria	<15	<15	<15	19	29	38	45
			Throw	2-4-12	6-12-23	12-18-28	16-23-32	20-25-35	23-28-39	24-30-42
		5 Ft.	**Airflow, CFM**	**180**	**350**	**520**	**690**	**860**	**1030**	**1200**
			Total Pressure	.011	.042	.092	.162	.251	.360	.489
			Static Pressure	.004	.016	.035	.062	.096	.138	.186
			Noise Criteria	<15	<15	<15	19	29	38	45
			Throw	2-4-13	6-13-24	13-19-30	16-24-34	21-27-38	24-30-41	26-32-45
3" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	**Airflow, CFM**	**80**	**180**	**280**	**380**	**480**	**580**	**680**
			Total Pressure	.004	.017	.042	.077	.124	.180	.248
			Static Pressure	.003	.014	.034	.063	.100	.146	.201
			Noise Criteria	<15	<15	<15	<15	23	32	39
			Throw	1-3-9	6-10-17	11-15-22	14-18-25	16-20-29	18-22-32	20-24-34
		4 Ft.	**Airflow, CFM**	**150**	**310**	**470**	**630**	**790**	**950**	**1110**
			Total Pressure	.006	.024	.056	.100	.156	.226	.309
			Static Pressure	.003	.014	.033	.059	.093	.135	.184
			Noise Criteria	<15	<15	<15	23	29	35	42
			Throw	2-4-12	7-13-23	13-19-28	17-23-32	21-26-36	23-28-40	25-31-43
		5 Ft.	**Airflow, CFM**	**180**	**360**	**540**	**720**	**900**	**1080**	**1260**
			Total Pressure	.007	.027	.060	.108	.169	.244	.331
			Static Pressure	.003	.014	.031	.056	.087	.126	.170
			Noise Criteria	<15	<15	16	24	30	35	42
			Throw	2-4-13	6-13-24	13-19-30	17-24-35	22-28-39	24-30-42	26-32-46

Performance Notes:

1. Data is based upon FlowLine™ with Nailor engineered plenum (uninsulated) as a complete assembly.
2. All pressures are in inches w.g..
3. Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
4. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts.
5. Throw values are based on a 1-way air pattern. For 2-way pattern, throw is determined from the 1 slot data at half the specified air volume.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV (10, 15, 20, 25 & 30) • CONTINUOUS PRESSURIZED PLENUM



1" Slot Width	1 Slot	Airflow, CFM/FT.	20	40	60	80	100	120	140
		Static Pressure	.005	.018	.041	.074	.114	.164	.223
		Noise Criteria	—	—	<15	20	24	30	35
		Throw	1-3-10	4-10-21	10-15-29	14-21-33	18-26-37	21-19-41	24-31-44
	2 Slot	Airflow, CFM/FT.	40	85	130	175	220	265	310
		Static Pressure	.005	.024	.056	.102	.161	.234	.320
		Noise Criteria	—	<15	20	27	32	37	42
		Throw	2-4-17	9-18-32	19-28-40	25-32-45	30-36-51	32-40-56	35-43-61
1.5" Slot Width	1 Slot	Airflow, CFM/FT.	30	60	90	120	150	180	210
		Static Pressure	.005	.020	.045	.080	.125	.180	.245
		Noise Criteria	—	—	<15	20	26	32	37
		Throw	1-3-12	6-12-24	12-19-34	17-24-40	21-31-44	24-34-48	29-36-52
	2 Slot	Airflow, CFM/FT.	60	120	180	240	300	360	420
		Static Pressure	.006	.023	.052	.093	.145	.209	.285
		Noise Criteria	—	<15	16	24	31	37	43
		Throw	2-6-20	9-20-36	20-31-44	28-36-51	33-41-57	36-44-63	39-47-67
2" Slot Width	1 Slot	Airflow, CFM/FT.	35	75	115	155	195	235	275
		Static Pressure	.004	.019	.044	.080	.126	.183	.251
		Noise Criteria	<15	15	21	25	29	34	39
		Throw	1-2-8	4-9-20	9-15-29	14-21-33	18-26-37	21-29-41	25-31-44
	2 Slot	Airflow, CFM/FT.	70	150	230	310	390	470	550
		Static Pressure	.005	.022	.051	.092	.146	.212	.291
		Noise Criteria	<15	19	25	29	34	39	44
		Throw	2-3-13	.7-14-30	15-26-37	23-31-43	28-34-18	31-37-54	33-41-58
2.5" Slot Width	1 Slot	Airflow, CFM/FT.	40	95	150	205	260	315	370
		Static Pressure	.004	.020	.050	.094	.151	.222	.306
		Noise Criteria	<15	<15	16	24	29	35	48
		Throw	1-2-7	4-10-22	11-18-31	16-25-37	20-30-42	25-32-42	29-36-50
	2 Slot	Airflow, CFM/FT.	80	190	300	410	520	630	740
		Static Pressure	.004	.023	.058	.108	.174	.256	.353
		Noise Criteria	<15	<15	20	26	35	41	46
		Throw	1-3-11	7-16-33	18-29-42	26-34-48	31-38-54	35-43-60	37-46-65
3" Slot Width	1 Slot	Airflow, CFM/FT.	50	115	180	245	310	375	440
		Static Pressure	.004	.021	.052	.097	.155	.226	.312
		Noise Criteria	<15	<15	16	26	32	37	42
		Throw	1-2-8	5-11-25	12-20-34	17-26-40	22-31-45	26-35-49	31-37-54
	2 Slot	Airflow, CFM/FT.	100	230	360	490	620	750	880
		Static Pressure	.005	.025	.060	.112	.179	.261	.360
		Noise Criteria	<15	<15	21	29	36	41	45
		Throw	2-3-13	8-17-36	19-31-44	29-37-52	33-41-58	37-45-64	40-49-70

NC Correction Factors for Various Lengths

Length (ft.)	2	4	6	8	9	10	15
Supply	- 3	0	+ 2	+ 3	+ 4	+ 5	+ 8
Return	0	+ 3	+ 5	+ 6	+ 7	+ 8	+ 11

Throw Correction Factors for Various Lengths

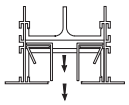
Length (ft.)	2	4	6	8	10	12
Multiplier	0.80	1.00	1.20	1.30	1.40	1.50

Performance Notes:

1. Data is based upon pressurized plenum application (non ducted) with no plenum effect for pressure or sound. Plenums should be sized to achieve equal velocity along the slot length. Keep duct inlet velocities below 700 fpm in order to maintain cataloged performance.
2. All pressures are in inches w.g..
3. Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
4. Throw data is based on active sections 4 ft. (1219) long. For other lengths, use the correction factor table above.
5. Throw values are based on pattern controller set 100% open.
6. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts, for a 4 ft. section. For other lengths, use the correction factor table above.
7. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV / FTV (10 & 15) • 1 SLOT WITH NAILOR PLENUM

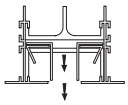


1" Slot Width	1 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	50	95	140	185	230	275	320
			Total Pressure	.010	.033	.073	.127	.197	.281	.381
			Static Pressure	.007	.029	.062	.109	.168	.241	.325
			Noise Criteria	<15	<15	17	26	33	39	44
			Throw	2-3-10	7-9-19	9-14-24	12-19-28	15-22-31	18-24-34	21-26-36
		4 Ft.	Airflow, CFM	100	175	250	325	400	475	550
			Total Pressure	.018	.056	.113	.190	.289	.408	.547
			Static Pressure	.013	.039	.079	.133	.201	.285	.381
			Noise Criteria	<15	<15	20	29	35	41	46
			Throw	2-4-13	6-11-23	11-17-30	14-21-34	18-26-37	21-29-41	24-31-44
		5 Ft.	Airflow, CFM	110	195	280	365	450	535	620
			Total Pressure	.019	.060	.124	.212	.322	.455	.611
			Static Pressure	.013	.040	.081	.139	.211	.297	.400
			Noise Criteria	<15	<15	21	30	36	42	47
			Throw	1-3-12	6-11-22	10-17-31	14-21-35	18-25-39	21-30-42	23-32-45
1" Slot Width	1 Slot 10" Oval Inlet	2 Ft.	Airflow, CFM	50	95	140	185	230	275	320
			Total Pressure	.006	.022	.049	.087	.134	.192	.259
			Static Pressure	.005	.020	.045	.079	.122	.174	.236
			Noise Criteria	<15	<15	15	23	30	35	40
			Throw	2-3-10	7-9-19	9-14-24	12-19-28	15-22-31	18-24-34	21-26-36
		4 Ft.	Airflow, CFM	100	180	260	340	420	500	580
			Total Pressure	.011	.036	.075	.128	.196	.278	.373
			Static Pressure	.009	.029	.060	.103	.156	.221	.299
			Noise Criteria	<15	<15	17	24	31	37	42
			Throw	2-4-13	7-12-23	11-17-30	14-22-34	18-28-39	22-30-42	25-32-45
		5 Ft.	Airflow, CFM	110	210	310	410	510	610	710
			Total Pressure	.011	.040	.087	.152	.235	.337	.456
			Static Pressure	.009	.030	.065	.114	.177	.256	.342
			Noise Criteria	<15	<15	17	26	33	39	44
			Throw	1-3-12	6-12-24	12-18-32	15-23-37	20-29-41	23-32-45	28-34-48
1" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	Airflow, CFM	50	95	140	185	230	275	320
			Total Pressure	.004	.017	.037	.064	.100	.142	.194
			Static Pressure	.004	.016	.035	.061	.094	.135	.182
			Noise Criteria	<15	<15	<15	20	27	32	37
			Throw	2-3-10	7-9-19	9-14-24	12-19-28	15-22-31	18-24-34	21-26-36
		4 Ft.	Airflow, CFM	100	190	280	370	460	550	640
			Total Pressure	.009	.032	.068	.120	.185	.264	.358
			Static Pressure	.007	.028	.060	.105	.163	.232	.315
			Noise Criteria	<15	<15	18	26	33	38	43
			Throw	2-4-13	7-12-24	12-18-31	17-24-36	20-29-41	24-31-44	28-33-47
		5 Ft.	Airflow, CFM	110	220	330	440	550	660	770
			Total Pressure	.007	.016	.035	.061	.094	.135	.182
			Static Pressure	.006	.026	.057	.101	.157	.227	.308
			Noise Criteria	<15	<15	17	24	31	37	42
			Throw	1-3-12	7-12-25	12-19-33	17-25-39	21-31-43	25-33-47	30-36-51
1.5" Slot Width	1 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	60	110	160	210	260	310	360
			Total Pressure	.009	.029	.060	.104	.159	.226	.305
			Static Pressure	.006	.021	.046	.079	.122	.173	.234
			Noise Criteria	<15	<15	<15	20	27	33	38
			Throw	1-2-9	4-9-18	9-12-24	11-17-29	13-20-32	17-24-34	19-26-37
		4 Ft.	Airflow, CFM	120	200	280	360	440	520	600
			Total Pressure	.020	.057	.111	.184	.276	.385	.513
			Static Pressure	.013	.035	.068	.113	.170	.236	.316
			Noise Criteria	<15	<15	19	27	33	39	43
			Throw	1-3-12	3-9-21	8-14-29	12-19-34	15-23-37	18-26-41	21-31-44
		5 Ft.	Airflow, CFM	140	220	300	380	460	540	620
			Total Pressure	.026	.062	.116	.186	.272	.376	.494
			Static Pressure	.015	.035	.066	.107	.156	.215	.285
			Noise Criteria	<15	<15	19	26	32	38	42
			Throw	1-3-12	3-8-20	6-13-28	10-18-34	14-21-37	17-24-11	19-29-43

For performance table notes, see page A44.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV / FTV (15 & 20) • 1 SLOT WITH NAILOR PLENUM

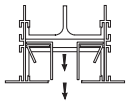


1.5" Slot Width	1 Slot 10" Oval Inlet	2 Ft.	Airflow, CFM	60	125	190	255	320	385	450
			Total Pressure	.005	.025	.057	.103	.163	.235	.321
			Static Pressure	.005	.021	.049	.089	.139	.201	.275
			Noise Criteria	<15	<15	<15	23	30	36	41
			Throw	1-2-9	6-10-20	10-14-26	13-20-31	17-24-35	20-28-39	23-30-39
		4 Ft.	Airflow, CFM	120	240	360	480	600	720	840
			Total Pressure	.012	.045	.102	.181	.281	.406	.552
			Static Pressure	.009	.032	.073	.128	.201	.290	.394
			Noise Criteria	<15	<15	19	28	35	41	46
			Throw	1-3-12	6-12-24	12-19-34	17-24-40	21-31-44	24-34-48	29-36-52
		5 Ft.	Airflow, CFM	140	280	420	560	700	840	980
			Total Pressure	.014	.054	.121	.215	.336	.484	.659
			Static Pressure	.009	.036	.081	.144	.226	.325	.443
			Noise Criteria	<15	<15	21	30	37	43	48
			Throw	1-3-12	6-12-25	12-19-35	17-25-41	21-32-46	25-35-51	30-39-54
1.5" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	Airflow, CFM	60	125	190	255	320	385	450
			Total Pressure	.004	.019	.044	.078	.123	.179	.244
			Static Pressure	.004	.017	.040	.072	.112	.163	.221
			Noise Criteria	<15	<15	<15	20	28	34	39
			Throw	1-2-9	6-10-20	10-14-26	13-20-31	17-24-35	20-28-39	23-30-42
		4 Ft.	Airflow, CFM	120	240	360	480	600	720	840
			Total Pressure	.007	.031	.070	.123	.192	.276	.376
			Static Pressure	.006	.025	.055	.097	.153	.220	.300
			Noise Criteria	<15	<15	16	24	31	37	42
			Throw	1-3-12	6-12-24	12-19-34	17-24-40	21-31-44	24-34-48	29-36-52
		5 Ft.	Airflow, CFM	140	280	420	560	700	840	980
			Total Pressure	.009	.035	.079	.141	.220	.318	.432
			Static Pressure	.006	.027	.060	.107	.168	.242	.328
			Noise Criteria	<15	<15	16	25	32	38	43
			Throw	1-3-12	6-12-15	12-19-35	17-25-41	21-32-46	25-35-51	30-39-54
2" Slot Width	1 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	70	140	210	280	350	420	490
			Total Pressure	.010	.036	.082	.146	.228	.328	.447
			Static Pressure	.006	.026	.058	.103	.161	.232	.316
			Noise Criteria	<15	<15	16	24	32	38	42
			Throw	1-2-7	3-7-14	7-11-21	9-14-25	12-18-27	14-21-30	17-23-32
		4 Ft.	Airflow, CFM	140	220	300	380	460	540	620
			Total Pressure	.025	.060	.111	.178	.261	.36	.474
			Static Pressure	.014	.033	.062	.098	.144	.200	.263
			Noise Criteria	<15	<15	18	25	31	37	41
			Throw	1-2-8	3-5-14	4-9-20	7-13-26	9-15-29	12-18-31	14-21-33
		5 Ft.	Airflow, CFM	150	250	350	450	550	650	750
			Total Pressure	.026	.071	.138	.227	.339	.474	.631
			Static Pressure	.013	.036	.071	.117	.174	.243	.323
			Noise Criteria	<15	<15	21	29	35	41	45
			Throw	1-2-6	2-4-14	3-9-20	6-14-26	9-16-31	13-20-33	14-22-36
2" Slot Width	1 Slot 10" Oval Inlet	2 Ft.	Airflow, CFM	70	150	230	310	390	470	550
			Total Pressure	.005	.027	.062	.112	.179	.259	.354
			Static Pressure	.004	.021	.050	.091	.144	.210	.287
			Noise Criteria	<15	<15	<15	23	30	36	41
			Throw	1-2-7	3-8-15	8-12-22	10-16-26	14-20-29	16-22-31	19-24-34
		4 Ft.	Airflow, CFM	140	265	390	515	640	765	890
			Total Pressure	.013	.047	.103	.179	.276	.394	.534
			Static Pressure	.009	.031	.068	.119	.184	.263	.356
			Noise Criteria	<15	<15	18	27	34	40	45
			Throw	1-2-8	3-7-18	7-13-26	12-17-31	14-21-34	17-26-37	20-28-40
		5 Ft.	Airflow, CFM	150	300	450	600	750	900	1050
			Total Pressure	.013	.054	.122	.212	.331	.477	.649
			Static Pressure	.009	.033	.074	.132	.205	.295	.401
			Noise Criteria	<15	<15	20	29	36	42	47
			Throw	1-2-6	3-6-18	6-14-26	11-18-31	14-22-36	18-26-39	20-30-42

For performance table notes, see page A44.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV / FTV (20, 25 & 30) • 1 SLOT WITH NAILOR PLENUM



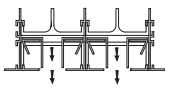
2" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	Airflow, CFM	70	160	250	340	430	520	610
			Total Pressure	.004	.022	.055	.102	.162	.236	.325
			Static Pressure	.004	.019	.048	.089	.141	.208	.286
			Noise Criteria	<15	<15	<15	23	30	37	42
			Throw	1-2-7	4-9-16	9-13-23	12-17-27	14-21-30	18-24-33	20-26-36
		4 Ft.	Airflow, CFM	140	290	440	590	740	890	1040
			Total Pressure	.009	.035	.082	.148	.232	.335	.458
			Static Pressure	.006	.027	.061	.109	.172	.249	.340
			Noise Criteria	<15	<15	16	26	33	39	44
			Throw	1-2-8	3-9-20	9-14-28	14-20-32	16-25-37	20-28-40	23-31-43
		5 Ft.	Airflow, CFM	150	330	510	690	870	1050	1230
			Total Pressure	.009	.040	.096	.175	.279	.406	.557
			Static Pressure	.005	.028	.067	.124	.197	.289	.394
			Noise Criteria	<15	<15	18	28	35	41	46
			Throw	1-2-6	3-8-20	8-15-29	14-20-34	17-26-38	20-30-42	25-32-46
2.5" Slot Width	1 Slot 12" Oval Inlet	2 Ft.	Airflow, CFM	80	190	300	410	520	630	740
			Total Pressure	.004	.025	.061	.114	.185	.271	.375
			Static Pressure	.003	.020	.051	.096	.155	.228	.315
			Noise Criteria	<15	<15	<15	24	31	38	43
			Throw	1-2-6	4-9-17	9-14-25	12-19-29	15-23-32	19-26-36	22-27-38
		4 Ft.	Airflow, CFM	150	335	520	705	890	1075	1260
			Total Pressure	.009	.042	.100	.183	.292	.426	.584
			Static Pressure	.005	.029	.071	.129	.207	.301	.413
			Noise Criteria	<15	<15	19	28	36	42	47
			Throw	1-2-6	3-8-20	9-15-30	14-21-35	18-26-39	21-30-43	25-32-46
		5 Ft.	Airflow, CFM	160	370	580	790	1000	1210	1420
			Total Pressure	.009	.044	.108	.200	.320	.469	.646
			Static Pressure	.005	.029	.072	.133	.212	.310	.428
			Noise Criteria	<15	<15	19	29	37	43	48
			Throw	1-1-5	3-7-20	7-15-31	14-20-36	17-26-40	21-31-44	25-34-48
3" Slot Width	1 Slot 14" Oval Inlet	2 Ft.	Airflow, CFM	100	225	350	475	600	725	850
			Total Pressure	.004	.022	.055	.102	.162	.236	.325
			Static Pressure	.004	.020	.048	.088	.141	.205	.282
			Noise Criteria	<15	<15	<15	22	30	36	41
			Throw	1-2-7	4-9-18	9-14-26	13-20-31	16-24-34	20-26-37	23-29-40
		4 Ft.	Airflow, CFM	200	400	600	800	1000	1200	1400
			Total Pressure	.010	.036	.082	.146	.228	.328	.446
			Static Pressure	.006	.027	.061	.108	.169	.244	.333
			Noise Criteria	<15	<15	<15	26	33	39	44
			Throw	1-2-8	3-8-21	8-16-31	14-21-36	18-26-40	21-31-44	25-33-48
		5 Ft.	Airflow, CFM	240	460	680	900	1120	1340	1560
			Total Pressure	.012	.042	.091	.159	.247	.354	.480
			Static Pressure	.007	.030	.064	.112	.174	.249	.338
			Noise Criteria	<15	<15	18	27	34	49	44
			Throw	1-2-8	3-8-21	7-16-32	13-21-37	18-26-42	21-31-45	25-35-48

Performance Notes:

1. Data is based upon FlowLine™ with Nailor engineered plenum (uninsulated) as a complete assembly.
2. All pressures are in inches w.g..
3. Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
4. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts.
5. Throw values are based on pattern controller set 100% open.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV / FTV (10 & 15) • 2 SLOT WITH NAILOR PLENUM

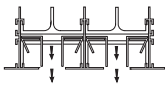


1" Slot Width	2 Slot 8" Dia. Inlet	2 Ft.	Airflow, CFM	80	155	230	305	380	455	530
			Total Pressure	.012	.045	.098	.173	.269	.385	.523
			Static Pressure	.009	.032	.070	.122	.189	.272	.369
			Noise Criteria	<15	<15	18	27	34	40	45
			Throw	2-4-13	7-12-23	12-19-29	12-23-33	21-26-36	23-29-40	25-31-43
		4 Ft.	Airflow, CFM	160	260	360	460	560	660	760
			Total Pressure	.031	.083	.159	.261	.386	.537	.712
			Static Pressure	.017	.046	.089	.144	.215	.299	.396
			Noise Criteria	<15	<15	24	31	38	43	48
			Throw	2-4-17	6-12-28	10-29-33	17-24-37	20-29-41	23-31-44	26-34-47
		5 Ft.	Airflow, CFM	200	300	400	500	600	700	800
			Total Pressure	.045	.101	.180	.280	.404	.550	.718
			Static Pressure	.022	.051	.092	.143	.207	.281	.368
			Noise Criteria	<15	<15	25	32	38	43	47
			Throw	2-4-19	4-11-19	9-19-34	13-23-37	19-29-41	22-32-44	25-34-47
1" Slot Width	2 Slot 10" Dia. Inlet	2 Ft.	Airflow, CFM	80	165	250	335	420	505	590
			Total Pressure	.006	.029	.067	.121	.190	.275	.376
			Static Pressure	.005	.024	.054	.096	.151	.217	.297
			Noise Criteria	<15	<15	<15	23	31	37	42
			Throw	2-4-13	8-13-24	13-20-30	18-24-34	22-28-39	24-30-42	26-32-46
		4 Ft.	Airflow, CFM	160	300	440	580	720	860	1000
			Total Pressure	.016	.057	.122	.212	.326	.464	.628
			Static Pressure	.011	.036	.078	.136	.210	.299	.404
			Noise Criteria	<15	<15	20	29	36	42	47
			Throw	2-4-17	7-15-30	15-23-36	21-30-42	25-33-46	30-35-51	32-39-55
		5 Ft.	Airflow, CFM	200	350	500	650	800	950	1100
			Total Pressure	.022	.068	.140	.238	.360	.506	.679
			Static Pressure	.014	.042	.085	.142	.215	.304	.408
			Noise Criteria	<15	<15	22	31	37	43	47
			Throw	2-4-19	7-14-32	13-23-37	20-31-43	25-43-47	30-36-52	32-40-56
1" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	Airflow, CFM	80	170	260	350	440	530	620
			Total Pressure	.004	.021	.049	.090	.142	.207	.282
			Static Pressure	.004	.018	.043	.077	.122	.177	.242
			Noise Criteria	<15	<15	<15	21	28	34	39
			Throw	2-4-13	8-13-24	14-21-31	19-25-35	23-28-40	25-31-43	28-33-47
		4 Ft.	Airflow, CFM	160	320	480	640	800	960	1120
			Total Pressure	.010	.036	.082	.147	.229	.330	.448
			Static Pressure	.006	.026	.058	.102	.159	.229	.312
			Noise Criteria	<15	<15	<15	24	32	37	42
			Throw	2-4-17	8-17-31	17-25-37	23-31-44	29-34-48	31-37-54	33-41-57
		5 Ft.	Airflow, CFM	200	375	550	725	900	1075	1250
			Total Pressure	.013	.044	.095	.165	.255	.363	.490
			Static Pressure	.009	.029	.062	.108	.167	.238	.321
			Noise Criteria	<15	<15	17	26	33	38	43
			Throw	2-4-19	8-17-33	17-25-40	23-32-45	29-35-51	32-39-55	34-42-59
1.5" Slot Width	2 Slot 10" Dia. Inlet	2 Ft.	Airflow, CFM	120	210	300	390	480	570	660
			Total Pressure	.011	.033	.068	.116	.175	.248	.333
			Static Pressure	.007	.024	.048	.082	.124	.175	.234
			Noise Criteria	<15	<15	<15	21	27	33	38
			Throw	2-4-15	6-13-26	12-19-31	17-25-35	21-28-40	24-31-43	26-33-46
		4 Ft.	Airflow, CFM	240	340	440	540	640	740	840
			Total Pressure	.029	.059	.097	.148	.207	.276	.356
			Static Pressure	.016	.032	.055	.082	.114	.154	.198
			Noise Criteria	<15	<15	<15	22	28	32	37
			Throw	2-6-20	4-10-29	8-17-34	11-23-39	15-26-42	21-31-45	23-34-47
		5 Ft.	Airflow, CFM	260	365	470	575	680	785	890
			Total Pressure	.031	.061	.102	.152	.213	.284	.365
			Static Pressure	.016	.031	.052	.078	.109	.146	.187
			Noise Criteria	<15	<15	<15	22	28	32	36
			Throw	2-4-17	3-8-28	6-13-35	9-20-39	12-25-42	17-30-45	21-33-47

For performance table notes, see page A47.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV / FTV (15 & 20) • 2 SLOT WITH NAILOR PLENUM

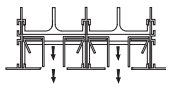


1.5" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	Airflow, CFM	120	230	340	450	560	670	780
			Total Pressure	.006	.025	.054	.094	.146	.209	.284
			Static Pressure	.005	.019	.042	.073	.112	.161	.217
			Noise Criteria	<15	<15	<15	19	26	32	36
			Throw	2-4-15	8-14-28	14-22-33	19-26-39	24-30-43	26-33-46	29-35-40
		4 Ft.	Airflow, CFM	240	390	540	690	840	990	1140
			Total Pressure	.016	.043	.082	.134	.199	.276	.366
			Static Pressure	.010	.027	.050	.082	.122	.170	.225
			Noise Criteria	<15	<15	<15	22	28	33	38
			Throw	2-6-20	6-13-32	17-25-37	23-31-44	29-34-48	31-37-54	33-41-57
		5 Ft.	Airflow, CFM	260	425	590	755	920	1085	1250
			Total Pressure	.017	.046	.089	.144	.215	.300	.397
			Static Pressure	.010	.027	.051	.083	.124	.172	.228
			Noise Criteria	<15	<15	<15	22	29	34	39
			Throw	2-4-17	4-11-32	9-21-39	15-29-44	22-34-48	26-37-53	31-40-56
1.5" Slot Width	2 Slot 14" Dia. Inlet	2 Ft.	Airflow, CFM	120	240	360	480	600	720	840
			Total Pressure	.005	.018	.042	.074	.116	.167	.227
			Static Pressure	.004	.015	.034	.061	.094	.136	.185
			Noise Criteria	<15	<15	<15	<15	23	29	34
			Throw	2-4-15	8-15-28	15-23-34	21-28-40	25-31-44	28-34-48	30-36-52
		4 Ft.	Airflow, CFM	240	415	590	765	940	1115	1290
			Total Pressure	.010	.030	.060	.101	.152	.214	.287
			Static Pressure	.006	.019	.040	.066	.101	.141	.189
			Noise Criteria	<15	<15	<15	18	24	30	35
			Throw	2-6-20	7-15-33	13-25-40	22-32-45	26-35-51	31-39-55	34-42-55
		5 Ft.	Airflow, CFM	260	440	620	800	980	1160	1340
			Total Pressure	.011	.032	.063	.105	.157	.220	.293
			Static Pressure	.007	.020	.041	.067	.101	.141	.188
			Noise Criteria	<15	<15	<15	18	25	30	35
			Throw	2-4-17	6-12-33	10-23-40	17-30-45	24-35-51	29-39-55	33-42-58
2" Slot Width	2 Slot 10" Dia. Inlet	2 Ft.	Airflow, CFM	70	140	210	280	350	420	490
			Total Pressure	.003	.013	.028	.050	.078	.112	.154
			Static Pressure	.002	.009	.018	.032	.051	.073	.100
			Noise Criteria	<15	<15	<15	<15	<15	19	24
			Throw	0-1-3	1-3-11	3-6-18	5-11-22	8-14-25	11-18-27	14-20-30
		4 Ft.	Airflow, CFM	250	355	460	565	670	775	880
			Total Pressure	.028	.057	.095	.143	.201	.270	.348
			Static Pressure	.014	.028	.047	.072	.101	.135	.174
			Noise Criteria	<15	<15	<15	21	27	31	35
			Throw	1-3-10	3-5-20	4-9-26	6-13-29	9-19-31	11-21-34	14-25-37
		5 Ft.	Airflow, CFM	280	390	500	610	720	830	940
			Total Pressure	.032	.061	.101	.150	.210	.278	.357
			Static Pressure	.014	.027	.045	.067	.093	.128	.158
			Noise Criteria	<15	<15	<15	21	27	31	35
			Throw	1-3-9	2-4-17	3-7-25	4-10-30	7-14-32	9-20-34	11-23-37
2" Slot Width	2 Slot 12" Dia. Inlet	2 Ft.	Airflow, CFM	140	275	410	545	680	815	950
			Total Pressure	.007	.028	.062	.109	.170	.244	.332
			Static Pressure	.005	.019	.044	.077	.120	.172	.234
			Noise Criteria	<15	<15	<15	20	27	33	38
			Throw	1-3-11	5-11-22	11-17-27	15-22-31	19-25-35	22-27-38	24-27-38
		4 Ft.	Airflow, CFM	250	425	600	775	950	1125	1300
			Total Pressure	.015	.044	.088	.147	.219	.308	.412
			Static Pressure	.008	.024	.049	.081	.122	.171	.229
			Noise Criteria	<15	<15	<15	22	29	34	39
			Throw	1-3-10	3-8-24	7-14-30	11-21-34	16-26-37	20-29-41	24-31-44
		5 Ft.	Airflow, CFM	280	460	640	820	1000	1180	1360
			Total Pressure	.017	.047	.091	.149	.221	.309	.410
			Static Pressure	.008	.024	.047	.076	.113	.158	.210
			Noise Criteria	<15	<15	<15	22	28	34	38
			Throw	1-3-9	3-6-22	5-12-31	9-19-34	13-25-37	18-29-41	22-31-44

For performance table notes, see page A47.

PERFORMANCE DATA • VERTICAL JET THROW SERIES

MODELS: FLV / FTV (20, 25 & 30) • 2 SLOT WITH NAILOR PLENUM



2" Slot Width	2 Slot 14" Dia. Inlet	2 Ft.	Airflow, CFM	140	280	420	560	700	840	980
			Total Pressure	.004	.018	.041	.073	.114	.165	.225
			Static Pressure	.003	.014	.031	.055	.086	.123	.168
			Noise Criteria	<15	<15	<15	<15	21	27	32
			Throw	1-3-11	5-11-22	11-18-27	15-22-31	20-25-36	22-27-39	24-30-42
		4 Ft.	Airflow, CFM	250	450	650	850	1050	1250	1450
			Total Pressure	.010	.030	.062	.106	.161	.228	.307
			Static Pressure	.005	.018	.037	.063	.096	.137	.184
			Noise Criteria	<15	<15	<15	18	24	30	35
			Throw	1-3-10	3-9-25	8-17-31	13-24-36	20-28-40	23-31-43	26-33-47
		5 Ft.	Airflow, CFM	280	480	680	880	1080	1280	1480
			Total Pressure	.011	.030	.061	.102	.153	.215	.288
			Static Pressure	.005	.017	.034	.057	.086	.120	.159
			Noise Criteria	<15	<15	<15	16	23	28	33
			Throw	1-3-10	3-8-28	7-15-37	11-25-42	17-31-46	24-26-50	28-38-54
2.5" Slot Width	2 Slot 14" Dia. Inlet	2 Ft.	Airflow, CFM	150	335	520	705	890	1075	1260
			Total Pressure	.004	.022	.054	.098	.157	.229	.315
			Static Pressure	.003	.016	.037	.070	.111	.162	.223
			Noise Criteria	<15	<15	<15	18	26	32	37
			Throw	1-3-9	5-11-24	12-20-30	17-25-35	22-27-39	25-31-43	26-32-46
		4 Ft.	Airflow, CFM	300	540	780	1020	1260	1500	1740
			Total Pressure	.012	.039	.080	.137	.209	.295	.398
			Static Pressure	.006	.021	.044	.076	.116	.164	.220
			Noise Criteria	<15	<15	<15	21	28	33	38
			Throw	1-3-10	3-9-26	8-17-33	13-25-38	20-30-43	25-32-46	28-35-50
		5 Ft.	Airflow, CFM	350	600	850	1100	1350	1600	1850
			Total Pressure	.015	.043	.087	.144	.218	.306	.410
			Static Pressure	.007	.022	.044	.074	.111	.157	.210
			Noise Criteria	<15	<15	<15	22	28	34	38
			Throw	1-3-9	3-7-26	6-14-34	10-23-38	15-29-43	22-33-47	26-36-50
3" Slot Width	2 Slot 14" Dia. Inlet	2 Ft.	Airflow, CFM	175	385	595	805	1015	1225	1435
			Total Pressure	.005	.026	.062	.113	.181	.263	.361
			Static Pressure	.003	.017	.042	.076	.120	.175	.241
			Noise Criteria	<15	<15	<15	20	27	33	38
			Throw	1-3-9	5-10-25	11-20-31	18-26-37	22-29-41	26-31-44	28-34-18
		4 Ft.	Airflow, CFM	320	580	840	1100	1360	1620	1880
			Total Pressure	.013	.042	.087	.149	.227	.322	.433
			Static Pressure	.006	.021	.045	.078	.119	.168	.227
			Noise Criteria	<15	<15	<15	22	27	34	39
			Throw	1-2-9	3-7-26	7-14-34	11-24-39	17-30-43	24-33-47	27-36-51
		5 Ft.	Airflow, CFM	380	645	910	1175	1440	1705	1970
			Total Pressure	.016	.045	.090	.149	.224	.314	.419
			Static Pressure	.007	.020	.041	.068	.103	.144	.193
			Noise Criteria	<15	<15	<15	21	28	33	38
			Throw	1-2-9	3-6-23	5-12-34	9-20-39	13-28-43	18-33-47	24-36-50

Performance Notes:

1. Data is based upon FlowLine™ with Nailor engineered plenum (uninsulated) as a complete assembly.
2. All pressures are in inches w.g..
3. Throw values are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
4. Noise criteria values are based on 10 dB room absorption, re 10^{-12} watts.
5. Throw values are based on pattern controller set 100% open.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

HOW TO ORDER

MODEL SERIES: FLH & FLV
STRAIGHT FLOWLINE™ LINEAR DIFFUSERS

EXAMPLE: FLH20 - 144" x 1 SLOT - STR - AA - AW - MM - HC1 - HC1 - —

1. **Models**

Horizontal High Throw

FLH10	1" (25) Slot
FLH15	1 1/2" (38) Slot
FLH20	2" (51) Slot
FLH25	2 1/2" (64) Slot
FLH30	3" (76) Slot

Vertical Jet Throw

FLV10	1" (25) Slot
FLV15	1 1/2" (38) Slot
FLV20	2" (51) Slot
FLV25	2 1/2" (64) Slot
FLV30	3" (76) Slot

2. **Nominal Length**

inches (mm's)

3. **Number of Slots**

1	One
2	Two

4. **Type**

STR	Straight Section (default)

5. **Frame/Border Type**

AA	Exposed Flange Frame
AAC	Exposed Flange Frame with Concealed Mounting Brackets
AG	Flange / Flangeless Frame
CA	Concealed Tapered/Exposed Flange Frame
CC	Concealed Tapered Frame
CCA	Concealed Tapered Frame with Countersunk Screw Holes
CCC	Concealed Tapered Frame with Concealed Mounting Brackets
CCCA	Concealed Tapered Frame with Concealed Mounting Brackets and Countersunk Screw Holes
CG	Concealed Tapered/Exposed Flangeless Frame
GG	Flangeless Frame
GJ	Exposed/Concealed Offset Frame (one slot FLH only)
KK	Concealed Angular Frame (One Slot FLH or FLV 10, 15, 20 only)

6. **Finish**

AW	Appliance White (default) (on Frames AA, AG, GG and GJ)
AL	Aluminum
BK	Black
BW	British White
MI	Mill (default on frames CC and KK)
MIAW	Mill/Appliance White (default on frames CA and CG)
PC	Prime Coat Paint
SA	Satin (clear) anodized (Frame/Border AA and AAC only)
SP	Special custom color
LBP	Light Bronze Paint
MBP	Medium Bronze Paint
DBP	Dark Bronze Paint

7. **End Cap Configuration**

Frame/Border Types AA, AAC, CC, CCA, CCC and CCCA only

MM	Mitered Mitered (default)
MO	Mitered Open
MC	Mitered Flat Cap

Frame/Border Types AA, AAC, GG and AG only

FF	Flanged Flanged
FO	Flanged Open
FC	Flanged Flat Cap

All Frame/Border Types including CA, CG, GJ and KK

OO	Open Open
OC	Open Flat Cap
CC	Flat Cap Flat Cap

Mounting Clip Availability

Accessory	Compatibility Frame/Border Type	Accessory	Compatibility Frame/Border Type
HC1	A, C, G	WC1	A
HC2	G	WC2	G, J
HC3-10	K (FLH10 or FLV10)		
HC3-15	K (FLH15 or FLV15)	TC1	A, G
HC3-20	K (FLH20 or FLV20)	TC2	G
HC5	A, C, G		

Options and Accessories

8. **Left Hand Mounting Hardware**

–	None (default)
HC1	Hard Ceiling Clip – 5/8" (16) drywall
HC2	Hard Ceiling Clip – 5/8" (16) drywall
HC3	Hard Ceiling Clip – 5/8" (16) drywall
HC5	Hard Ceiling Clip – 1/2" (13) drywall
WC1	Wall Clip
WC2	Wall Clip
TC1	T-Bar Clip
TC2	Fineline® T-Bar Clip

9. **Right Hand Mounting Hardware**

–	None (default)
HC1	Hard Ceiling Clip – 5/8" (16) drywall
HC2	Hard Ceiling Clip – 5/8" (16) drywall
HC3	Hard Ceiling Clip – 5/8" (16) drywall
HC5	Hard Ceiling Clip – 1/2" (13) drywall
WC1	Wall Clip
WC2	Wall Clip
TC1	T-Bar Clip
TC2	Fineline® T-Bar Clip

10. **Angle Cut ***

–	None (default)
AC1	One End
AC2	Both Ends

Note:

1. Maximum single section length is 144" (3658).

2. Border Types CC, CCA, CCC, CCCA and KK (concealed frame) are supplied as standard with mill finish (MI). No options. Two slot model Frame/Border CC (A, C and CA), CA and CG have AW Appliance White center tee.

3. All models except Frame/Border Type AAC, CCC and CCCA (supplied with concealed mounting brackets) include integral hanger brackets on 24" (610) centers as standard.

4. Hard ceiling clips and wall clips are shipped in quantities based on 12" (305) spacing and T-Bar clips on 24" (610) spacing. Left and right hand clips are identical.

5. *Specify AC Angle cut(s) and attach drawing. Angle cuts require an open end border.

HOW TO ORDER

MODEL SERIES: FLH AND FLV
CURVED FLOWLINE™ LINEAR DIFFUSERS

EXAMPLE: FLH20 - 120" x 1 SLOT - FLT - ARC - LRIO - 240" - AA - AW - FF - HC1 - HC1

1. **Models**

Horizontal High Throw

FLH10	1" (25) Slot
FLH15	1 1/2" (38) Slot
FLH20	2" (51) Slot
FLH25	2 1/2" (64) Slot
FLH30	3" (76) Slot

Vertical Jet Throw

FLV10	1" (25) Slot
FLV15	1 1/2" (38) Slot
FLV20	2" (51) Slot
FLV25	2 1/2" (64) Slot
FLV30	3" (76) Slot

2. **Nominal Length**

inches (mm's)

3. **Number of Slots**

1	One
2	Two

4. **Type**

STR	Straight Section (default)
FLT	Flat Face Curve
CAV	Concave Face Curve <)
VEX	Convex Face Curve) >

5. **Curve Length**

ARC	Arc (default)
CHRD	Chord
CIRC	Circle

6. **Location of Radius**

Type FLT:

LRIO	Inside Edge of Opening
LRCL	Centerline of Opening

Type CAV / VEX:

LRFO	Face of Opening

7. **Radius Dim.**

Specify in inches (mm's)

(See table for restrictions)

8. **Frame/Border Type**

AA	Exposed Flange Frame
AAC	Exposed Flange Frame with Concealed Mounting Brackets
CC	Concealed Tapered Frame
CCA	Concealed Tapered Frame with Countersunk Screw Holes
CCC	Concealed Tapered Frame with Concealed Mounting Brackets
CCCA	Concealed Tapered Frame with Concealed Mounting Brackets and Countersunk Screw Holes
GG	Flangeless Frame

9. **Finish**

AW	Appliance White (default) (on Frame AA)
AL	Aluminum
BK	Black
BW	British White
MI	Mill (default on frames CC)
PC	Prime Coat Paint
SP	Special custom color
LBP	Light Bronze Paint
MBP	Medium Bronze Paint
DBP	Dark Bronze Paint

10. **End Cap Configuration**

Frame/Border Types AA, AAC and GG only

FF	Flanged Flanged
FO	Flanged Open
FC	Flanged Flat Cap

All Frame/Border Types

OO	Open Open
OC	Open Flat Cap
CC	Flat Cap Flat Cap

(None for circle length)

Options and Accessories

11. **Left Hand Mounting Hardware**

–	None (default)
HC1	Hard Ceiling Clip – 5/8" (16) drywall
HC5	Hard Ceiling Clip – 1/2" (13) drywall

12. **Right Hand Mounting Hardware**

–	None (default)
HC1	Hard Ceiling Clip – 5/8" (16) drywall
HC5	Hard Ceiling Clip – 1/2" (13) drywall

Notes:

1. Maximum single section curved length is 120" (3048). Longer lengths are supplied in multiple sections.

2. Curve Length: Must be ordered by ARC or CIRCLE.

Chord: There is no standard pricing for the configuration selected. Contact Application Engineering, Houston or calculate ARC length. Circle: Length - 2 r. Radius = Length/2 Arc Length = Angle (degrees) 2 r/360

3. Radius: Refer to submittal FLCC. For multiple radius, contact Application Engineering, Houston and provide a sketch.

4. Border Types CC, CCA, CCC and CCCA are supplied as standard with mill finish (MI). No options. Two slot model has AW Appliance White center tee.

5. All models except Frame/Border Type AAC, CCC and CCCA (supplied with concealed mounting brackets) include integral hanger brackets on 24" (610) centers as standard.

6. Hard ceiling clips and wall clips are shipped in quantities based on 12" (305) spacing. Left and right hand clips are identical.

Minimum Radius:

Models	Slot Width	Flat Face				Concave & Convex	
		Frame Types AA & GG		Frame Type CC		Frame Types AA, CC & GG	
		1 Slot	2 Slot	1 Slot	2 Slot	1 Slot	2 Slot
FLH10, FLV10	1" (25)	30" (762)	30" (762)	40" (1016)	40" (1016)	60" (1524)	60" (1524)
FLH15, FLV15	1 1/2" (38)	30" (762)	30" (762)	40" (1016)	40" (1016)	60" (1524)	60" (1524)
FLH20, FLV20	2" (51)	60" (1524)	60" (1524)	60" (1524)	60" (1524)	60" (1524)	60" (1524)
FLH25, FLV25	2 1/2" (64)	60" (1524)	60" (1524)	60" (1524)	60" (1524)	60" (1524)	60" (1524)
FLH30, FLV30	3" (76)	60" (1524)	60" (1524)	60" (1524)	60" (1524)	60" (1524)	60" (1524)

HOW TO ORDER

MODEL SERIES: FLH-TZ & FLV-TZ
TECHZONE™ FLOWLINE™ LINEAR DIFFUSERS

EXAMPLE: FLH10TZ - 48" x 2 SLOT - 06 - NT - AW - CC - —

1. **Models**

   Horizontal High Throw

   FLH10TZ 1" (25) Slot

   Vertical Jet Throw

   FLV10TZ 1" (25) Slot

2. **Nominal Length**

   inches (mm's)

3. **Number of Slots**

   1 One

   2 Two

4. **Ceiling Module Width**

   04 4" (102) Wide

   06 6" (152) Wide

5. **Frame/Border Type**

   LT Lay-in T-Bar

   NT Narrow T-Bar

6. **Finish**

   AW Appliance White (default)

   AL Aluminum

   BK Black

   BW British White

   MI Mill

   PC Prime Coat Paint

   SP Special custom color

7. **End Cap Configuration**

   OO Open Open

   OC Open Flat Cap

   CC Flat Cap Flat Cap

Options and Accessories

8. **Angle Cut ***

   – None (default)

   AC1 One End

   AC2 Both Ends

Note:

1. Maximum single section length is 144" (3658).

2. All models include integral hanger brackets on 24" (610) centers as standard.

3. *Specify AC Angle cut(s) and attach drawing. Angle cut AC1 is available with OO and OC end cap. Angle cut AC2 is available with OO end cap.

HOW TO ORDER

MODEL SERIES: FLMC

FLOWLINE™ ACCESSORIES — MITERED CORNER SECTIONS

EXAMPLE: FLMC20 - 1 - AA - AW - 90 - HC1 - HC1

1. **Models**
   - FLMC10 1" (25) Slot
   - FLMC15 1 1/2" (38) Slot
   - FLMC20 2" (51) Slot
   - FLMC25 2 1/2" (64) Slot
   - FLMC30 3" (76) Slot
2. **Number of Slots**
   - 1 One
   - 2 Two
3. **Frame/Border Type**
   - AA Exposed Flange Frame
   - AC* Exposed Flange/Concealed Tapered Frame
   - AG* Flange/Flangeless Frame
   - CA* Concealed Tapered/Exposed Flange Frame
   - CC Concealed Tapered Frame
   - CG* Concealed Tapered/Exposed Flangeless Frame
   - GG Flangeless Frame
   - GA* Flangeless/Flange Frame
   - GC* Exposed Flangeless/Concealed Tapered Frame
   - GJ* Exposed/Concealed Offset Frame (One Slot FLH only)
   - KK Concealed Angular Frame (One Slot FLH or FLV 10, 15, 20 only)
4. **Finish**
   - AW Appliance White (default) (on Frames AA, GG, AG, GA & GJ)
   - AL Aluminum
   - BK Black
   - BW British White
   - MI Mill (default on frames CC and KK)
   - MIAW Mill/Appliance White (default on frames AC, CA, CG and GC)
   - PC Prime Coat Paint
   - SA Satin (clear) anodized (Frame/border AA only)
   - SP Special custom color
   - LBP Light Bronze Paint
   - MBP Medium Bronze Paint
   - DBP Dark Bronze Paint
5. **Mitered Angle**
   - 90 90 degree (default)
   - 135 135 degree
   - AN Degree of angle (Specify angle = ____)

Options and Accessories

6. **Inside Mounting Hardware**
   - – None (default)
   - HC1 Hard Ceiling Clip – 5/8" (16) drywall
   - HC5 Hard Ceiling Clip – 1/2" (13) drywall
   - TC2 Fineline® T-Bar Mounting Clip
7. **Outside Mounting Hardware**
   - – None (default)
   - HC1 Hard Ceiling Clip – 5/8" (16) drywall
   - HC5 Hard Ceiling Clip – 1/2" (13) drywall
   - TC2 Fineline® T-Bar Mounting Clip

Notes:

1. Border Types CC and KK are supplied with Mill finish (MI). No options (2 slot model CC has AW Appliance White center tee). Border Types AC, CA, CG and GC are supplied with MIAW Mill/Appliance White finish. No options except SP.

2. Mitered corner section is supplied inactive with integral blank-offs. Unit is supported by adjacent Flowline™.

3. *First specified Frame/Border is inside edge of miter, second is outside.

MODEL SERIES: FLEF

FLOWLINE™ ACCESSORIES — FLANGED END CAPS (TYPE F)

EXAMPLE: FLEF20 - 1 - AA - AW

1. **Models**
   - FLEF10 1" (25) Slot
   - FLEF15 1 1/2" (38) Slot
   - FLEF20 2" (51) Slot
   - FLEF25 2 1/2" (64) Slot
   - FLEF30 3" (76) Slot
2. **Number of Slots**
   - 1 One
   - 2 Two
3. **Frame/Border Type**
   - AA Exposed Flange Frame
   - AG Flange / Flangeless Frame
   - GG Flangeless Frame
4. **Finish**
   - AW Appliance White (default)
   - AL Aluminum
   - BK Black
   - BW British White
   - MI Mill
   - PC Prime Coat Paint

HOW TO ORDER

MODEL SERIES: FLC & FLT

FLOWLINE™ ACCESSORIES — TRANSITIONS

EXAMPLE: FLC20 - 1 - AA - AW - HC1

1. **Models**

Type C Cross

FLC10	1" (25) Slot
FLC15	1 1/2" (38) Slot
FLC20	2" (51) Slot
FLC25	2 1/2" (64) Slot
FLC30	3" (76) Slot

Type T Tee

FLT10	1" (25) Slot
FLT15	1 1/2" (38) Slot
FLT20	2" (51) Slot
FLT25	2 1/2" (64) Slot
FLT30	3" (76) Slot

2. **Number of Slots**

1	One

3. **Frame/Border Type**

AA	Exposed Flange Frame
CC	Concealed Tapered Frame
GG	Flangeless Frame

4. **Finish**

AW	Appliance White (default) (on Frames AA and GG)
AL	Aluminum
BK	Black
BW	British White
MI	Mill (default on frame CC)
PC	Prime Coat Paint
SP	Special custom color
LBP	Light Bronze Paint
MBP	Medium Bronze Paint
DBP	Dark Bronze Paint

Options and Accessories

5. **Mounting Hardware**

–	None (default)
HC1	Hard Ceiling Clip – 5/8" (16) drywall
HC5	Hard Ceiling Clip – 1/2" (13) drywall
TC2	Fineline® T-Bar Mounting Clip

Note:

1. Border Type CC is supplied with Mill finish (MI) only.

2. Units are supplied inactive with integral blank-offs. Unit is supported by adjacent flowline.

MODEL SERIES: FLR

FLOWLINE™ ACCESSORIES — RETURN HOOD/SIGHT SHIELD

EXAMPLE: FLR20 - 48 - 1

1. **Models**

FLR(I)10	1" (25) Slot
FLR(I)15	1 1/2" (38) Slot
FLR(I)20	2" (51) Slot
FLR(I)25	2 1/2" (64) Slot
FLR(I)30	3" (76) Slot

(I) Adds Internal Insulation

2. **Length**

Imperial Sizes

inches (mm's)

48	(1219) (default)

3. **Number of Slots**

1	One
2	Two

HOW TO ORDER

MODEL SERIES: FLP

FLOWLINE™ LINEAR DIFFUSER PLENUMS

EXAMPLE: FLP10 - 48" x 1 SLOT - STR - HSTD - 08 - AA - —

1. **Models**

Uninsulated Plenum

FLP10	1" (25) Slot
FLP15	1 1/2" (38) Slot
FLP20	2" (51) Slot
FLP25	2 1/2" (64) Slot
FLP30	3" (76) Slot

Insulated Plenum (internal)

FLPI10	1" (25) Slot
FLPI15	1 1/2" (38) Slot
FLPI20	2" (51) Slot
FLPI25	2 1/2" (64) Slot
FLPI30	3" (76) Slot

2. **Nominal Length**

Imperial Sizes

inches (mm's)

24, 30, 36, 48, 60, 72

(610, 762, 914, 1219, 1524, 1829)

Metric Sizes

(mm's)

(600, 750, 900, 1200, 1500, 1800)

3. **Number of Slots**

1	One
2	Two

4. **Type**

STR Straight Section (default)

5. **Plenum Height**

HSTD Standard (default)

One Slot Option (for round inlets)

H13	13" (330)
H15	15" (381)
H17	17" (432)

6. **Inlet Size**

One Slot

06	6" (152)	Round
08	8" (203)	Round
10	10" (254)	Flat Oval
10R	10" (254)	Round
12	12" (305)	Flat Oval
12R	12" (305)	Round
14	14" (356)	Flat Oval
14R	14" (356)	Round

Two Slot

06	6" (152)	Round
08	8" (203)	Round
10R	10" (254)	Round
12R	12" (305)	Round
14R	14" (356)	Round

7. **Frame/Border Type**

(Diffuser)

AA	Exposed Flange Frame
AAC	Exposed Flange Frame with Concealed Mounting Brackets
AG	Flange/Flangeless Frame
CA	Concealed Tapered/Exposed Flange Frame
CC	Concealed Tapered Frame
CCA	Concealed Tapered Frame with Countersunk Screw Holes
CCC	Concealed Tapered Frame with Concealed Mounting Brackets
CCCA	Concealed Tapered Frame with Concealed Mounting Brackets and Countersunk Screw Holes
CG	Concealed Tapered/Exposed Flangeless Frame
GG	Flangeless Frame
GJ	Exposed/Concealed Offset Frame (One Slot FLH only)
KK	Concealed Angular Frame (One Slot FLH or FLV 10, 15, 20 only)
LT	Lay-in T-Bar (TechZone™)
NT	Narrow T-Bar (TechZone™)

Options and Accessories:

8. **Inlet Damper**

–	None (default)
ID	Inlet Damper with HLQ
IDCO	Cable Operated Damper

9a. **External Insulation**

(FLP models only)

–	None (default)
EX	Foil Back (installed)

9b. **Internal Insulation**

(FLPI models only)

FGI	1/4" (6.35) Coated fiberglass (default)
FFI	3/8" (9.53) Fiber-free foam

Notes:

1. Plenums are shipped loose as standard for field installation.

2. Plenums for Frame/Border Types AA, CC, CA, CG, CCA, GG, AG, GJ, KK, LT and NT are for direct attachment to diffuser neck. TechZone™ Frame Border Type LT and NT are available in FLP10 and FLPI10 1" (25) slot only.

3. Plenums for Frame Types AAC, CCC and CCCA are hemmed for field attachment by use of concealed mounting brackets.

4. Standard internal insulation ("I" suffix models) is 1/4" (6.35) coated fiberglass.

Available Inlet Sizes – One Slot Plenum

Plenum		Inlet Type/Size	
Code	Height	Round	Oval
HSTD	Standard *	06, 08	10 – 14
H13	13" (330)	06, 08, 10R	12 – 14
H15	15" (381)	06, 08, 10R, 12R	14
H17	17" (432)	06, 08, 10R – 14R	—

* 10" (254) for Type AA, CC, CA, CG, CCA, GG, AG, GJ, KK, LT and NT (straight leg).
12" (305) for Type AAC, CCC and CCCA (hemmed leg).

HOW TO ORDER

MODEL SERIES: FLP

CURVED FLOWLINE™ LINEAR DIFFUSER PLENUMS

EXAMPLE: FLP10 - 48" x 1 SLOT - FLT - LRIO - HSTD - 08 - IC - AA - —

1. **Models**

Uninsulated Plenum

FLP10	1" (25) Slot
FLP15	1 1/2" (38) Slot
FLP20	2" (51) Slot
FLP25	2 1/2" (64) Slot
FLP30	3" (76) Slot

Insulated Plenum (internal)

FLPI10	1" (25) Slot
FLPI15	1 1/2" (38) Slot
FLPI20	2" (51) Slot
FLPI25	2 1/2" (64) Slot
FLPI30	3" (76) Slot

2. **Nominal Length**

Imperial Sizes

inches (mm's)

24, 30, 36, 48, 60, 72

(610, 762, 914, 1219, 1524, 1829)

Metric Sizes

(mm's)

(600, 750, 900, 1200, 1500, 1800)

3. **Number of Slots**

1	One
2	Two

4. **Type**

STR	Straight Section (default)
FLT	Flat Face Curve
CAV	Concave Face Curve <)
VEX	Convex Face Curve) >

5. **Location of Radius**

Type FLT:

LRIO	Inside Edge of Opening
LRCL	Centerline of Opening

Type CAV / VEX:

LRFO	Face of Opening

6. **Radius Dim.**

Specify in inches (mm's)

(See table for restrictions)

7. **Plenum Height**

HSTD Standard (default)

One Slot Option (for round inlets)

H13	13" (330)
H15	15" (381)
H17	17" (432)

8. **Inlet Size**

One Slot

06	6" (152)	Round
08	8" (203)	Round
10	10" (254)	Flat Oval
10R	10" (254)	Round
12	12" (305)	Flat Oval
12R	12" (305)	Round
14	14" (356)	Flat Oval
14R	14" (356)	Round

Two Slot

06	6" (152)	Round
08	8" (203)	Round
10R	10" (254)	Round
12R	12" (305)	Round
14R	14" (356)	Round

9. **Inlet Location**

(FLT only)

IC	Inside Curve
OC	Outside Curve

10. **Frame/Border Type**

(Diffuser)

AA	Exposed Flange Frame
AAC	Exposed Flange Frame with Concealed Mounting Brackets
CC	Concealed Tapered Frame
CCA	Concealed Tapered Frame with Countersunk Screw Holes
CCC	Concealed Tapered Frame with Concealed Mounting Brackets
CCCA	Concealed Tapered Frame with Concealed Mounting Brackets and Countersunk Screw Holes
GG	Flangeless Frame

Options and Accessories

11. **Inlet Damper**

–	None (default)
ID	Inlet Damper with HLQ
IDCO	Cable Operated Damper

12a. **External Insulation**

(FLP models only)

–	None (default)
EX	Foil Back (installed)

12b. **Internal Insulation**

(FLPI models only)

FGI	1/4" (6.35) Coated fiberglass (default)
FFI	3/8" (9.53) Fiber-free foam

Notes:

1. Plenums are shipped loose as standard for field installation.

2. Plenums for Frame/Border Types AA, CC, CA, CCA and GG are for direct attachment to diffuser neck.

3. Plenums for Frame Types AAC, CCC and CCCA are hemmed for field attachment by use of concealed mounting brackets.

4. Standard internal insulation ("I" suffix models) is 1/4" (6.35) coated fiberglass.

Available Inlet Sizes – One Slot Plenum

Plenum		Inlet Type/Size	
Code	Height	Round	Oval
HSTD	Standard *	06, 08	10 – 14
H13	13" (330)	06, 08, 10R	12 – 14
H15	15" (381)	06, 08, 10R, 12R	14
H17	17" (432)	06, 08, 10R – 14R	—

* 10" (254) for Type AA, CC, CA, CCA and GG (straight leg).
12" (305) for Type AAC, CCC and CCCA (hemmed leg).

Curved Plenum Minimum Radius:

Models	Flat Face		Concave & Convex	
	1 Slot	2 Slot	1 Slot	2 Slot
FLP10, FLPI10	30" (762)	30" (762)	60" (1524)	60" (1524)
FLP15, FLPI15	30" (762)	30" (762)	60" (1524)	60" (1524)
FLP20, FLPI20	60" (1524)	60" (1524)	60" (1524)	60" (1524)
FLP25, FLPI25	60" (1524)	60" (1524)	60" (1524)	60" (1524)
FLP30, FLPI30	60" (1524)	60" (1524)	60" (1524)	60" (1524)

SUGGESTED SPECIFICATIONS

FLH and FLV Series

Furnish and install Nailor FlowLine™ linear slot diffusers and accessories of the size and type shown on the architectural and mechanical plans and/or air distribution schedules. Mechanical contractor shall coordinate installation with General Contractor and other sub-contractors as required.

The linear slot diffuser shall utilize heavy wall extruded aluminum frames and be capable of supporting the ceiling system. Material shall be minimum wall thickness 0.06" (1.52). Diffuser frames shall be supplied with integral spacer bars and hanger brackets, spaced approximately on 24" (610) centers. The integral hanger brackets shall allow the linear slot diffusers to be supported from the ceiling structure with hanger wire in lay-in suspension ceiling installations. In hard ceiling installations, provide support clips by the manufacturer that allow the diffusers to be secured to the ceiling diffuser opening framing channels.

The linear slot diffuser shall be complete with factory end border configurations as shown or indicated. Where exposed end caps are required, they shall be factory installed architectural mitered picture frame type. Flanges/butt type end caps are not acceptable.

Provide alignment strips and spline clips by the manufacturer to secure joints and ceiling tees to the linear diffuser as required. Mitered corner sections shall be supplied by the manufacturer in one-piece construction.

The air pattern controller shall be dual type on 24" (610) centers and fully adjustable to permit various air pattern configurations, as well as allow throttling, as required for air volume reduction or complete shut-off without adding any blank-off devices. Pattern controllers shall be minimum 20 ga. (1.01) corrosion-resistant steel. One-piece pattern controllers are not acceptable.

Linear slot diffusers shall incorporate either horizontal high throw or vertical jet throw pattern controllers as shown on mechanical plans and drawings.

All diffusers shall have a single slot, unless shown otherwise, and shall be capable of being used for supply, return or exhaust air. Horizontal high throw diffusers shall maintain a tight ceiling pattern from maximum to minimum cataloged airflows and be suitable for VAV systems.

Where curved linear slot diffusers are indicated, they shall be one slot design and stretch formed by the manufacturer to the exact radii required. Segmented linear slot diffusers are not acceptable. Pattern controller shall be factory installed and fixed in the airflow direction specified on the drawings.

Supply air engineered plenum boots shall be minimum 22 ga. (0.85) coated steel and of the same manufacturer as the linear slot diffuser. Lengths and inlet sizes shall be as indicated on the plans and schedules. Where required, plenums shall be insulated with either internal matt faced fiberglass insulation or external foil back insulation, as specified on drawings or schedules. Return hood/sight baffles shall be provided as shown.

Exposed flange/border frames shall be factory painted standard white or custom painted to match specified architectural requirements. Provide paint samples if required. Pattern controllers and integral spacers shall be painted flat black.

Performance of the linear slot diffuser shall be based upon cataloged data obtained from tests conducted in accordance with ASHRAE Standard 70-2006. Pattern controllers shall be field adjusted after diffuser installation and set in their normal operating condition. Air test and balancing of linear slot diffusers shall be in accordance with the testing and balancing portion section of the specifications.

Provide manufacturers submittal drawings and published performance data.

FM Series

Furnish and install Nailor FlowLine™ modular square ceiling diffusers of the size and type shown on the architectural and mechanical plans and/or air distribution schedules. Diffusers shall be designed as a nominal 24" x 24" (600 x 600mm) module size. Mechanical contractor shall coordinate installation with General Contractor and other sub-contractors as required.

These diffusers shall utilize heavy wall extruded aluminum frames with inside and outside mitered corners. The diffusers shall feature a 1" (25) continuous slot around all four sides with dual pattern controllers that are fully adjustable to permit throttling, as required for air volume reduction or complete shut-off without adding any blank-off devices. Diffusers shall be capable of being adjustable for a 4, 3, 2 or 1-way blow pattern as required after installation. Pattern controllers shall be minimum 20 ga. (1.01) corrosion- resistant steel. One-piece pattern controllers are not acceptable. The pattern controllers shall be horizontal high throw type and shall maintain a tight ceiling air pattern from maximum to minimum cataloged airflows and be suitable for VAV systems.

Supply units shall be complete with a compatible steel back pan that is removable and secured by steel 's' clips. The back pan shall incorporate an integral drawn round neck to permit hard or flexible duct connection. Return units shall be similar in appearance but feature a light shield back pan for ductless return installations. The center acoustical ceiling tile shall be supplied, cut and field installed by the acoustical tile sub-contractor.

Exposed flange/border frames shall be factory painted standard white or custom painted to match specified architectural requirements. Provide paint samples if required. Pattern controllers and integral spacers shall be painted flat black.

Performance of the ceiling diffuser shall be based upon cataloged data obtained from tests conducted in accordance with ASHRAE Standard 70-2006. Pattern controllers shall be field adjusted after diffuser installation and set in their normal operating condition. Air test and balancing of ceiling diffusers shall be in accordance with the testing and balancing portion section of the specifications.

Provide manufacturers submittal drawings and published performance data.