

GENERAL PRODUCT OVERVIEW

Linear Diffusers and Bar Grilles

Linear type diffusers and grilles have been developed to satisfy architectural and engineering applications that require a continuous length appearance, aesthetically pleasing design and high engineering performance with premium quality aluminum products. Installations can be equally effective where lengths are literally continuous around the periphery of a wall, floor or ceiling space and certain sections of the unit are active with regard to airflow, satisfying mechanical and architectural requirements. Individual discreet lengths may be separately installed at reduced cost and offer the same engineering performance. The proposed application and installed location will usually dictate whether a slot, bar or louvered type product is the most suitable choice. When the ideal product type has been chosen, the airflow and performance requirements will dictate the style and sizing selections from a comprehensive range of available sizes and capacities.

LINEAR SLOT DIFFUSERS

Model Series 5000 provides architectural excellence and outstanding performance flexibility. Available in four different slot opening widths, a range of 1 to 10 slots and a wide choice of border/frame styles that co-ordinate with ceiling and installation details. They feature 'ice tong' style individual pattern controllers in each slot that not only offer a 180° air pattern adjustment, but can also be used to dampen airflow.

Designed primarily for ceiling and high sidewall installation, they are eminently suited to, and recommended for, VAV applications. They maintain a tight and stable horizontal air pattern over a wide range of air volumes by utilizing the maximum ceiling coanda effect.

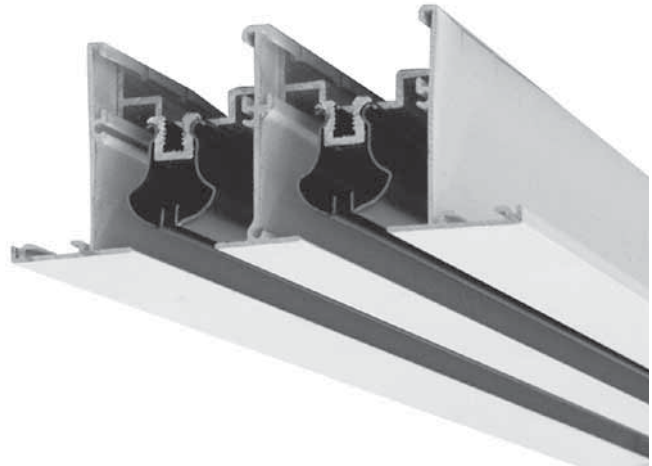
Also commonly used in overhead heating applications, the versatile pattern controllers allow vertical projection of heated air to meet almost any perimeter condition.

Supply Air – Models 5050, 5075, 5010, 5015

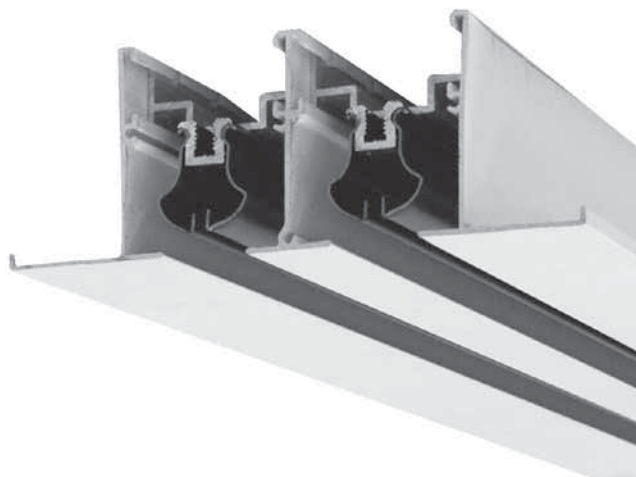
Return Air – Models 5050R, 5075R, 5010R, 5015R

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Model 5075



Model 5075TZ

LINEAR SLOT DIFFUSERS FOR TECHZONE™ TYPE CEILINGS

Model Series 5000TZ provides architectural excellence and outstanding performance flexibility. Available to suit two ceiling modules. 4" (102) wide with 1 to 2 slots and 6" (152) wide with 1 to 4 slots to suit capacity requirements with three frame styles for Armstrong® TechZone™ and USG Logix™ ceiling systems. They feature 'ice tong' style individual pattern controllers in each slot that not only offer a 180° air pattern adjustment, but can also be used to dampen airflow.

Designed primarily for ceiling and high sidewall installation, they are eminently suited to, and recommended for, VAV applications. They maintain a tight and stable horizontal air pattern over a wide range of air volumes by utilizing the maximum ceiling coanda effect.

Also commonly used in overhead heating applications, the versatile pattern controllers allow vertical projection of heated air to meet almost any perimeter condition.

Supply Air – Model 5075TZ

Return Air – Model 5075TZR

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PLENUMS FOR LINEAR SLOT DIFFUSERS

Model Series 5300 Plenums are designed to fit the 5000 Series Slot Diffusers. The plenums are constructed from corrosion-resistant steel and are available in two different styles for an extensive performance range. The standard constructed plenum is suited for applications that require longer throws and shorter spreads, whereas the modified plenum increases the spread and reduces the throw. Specially designed end caps can be turned up for continuous runs. All styles are offered with internal or external insulation.

Standard Performance (non-insulated) –

Models 5350, 5375, 5310, 5315

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Standard Performance (internally insulated) –

Models 5350I, 5375I, 5310I, 5315I

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Modified Performance (non-insulated) –

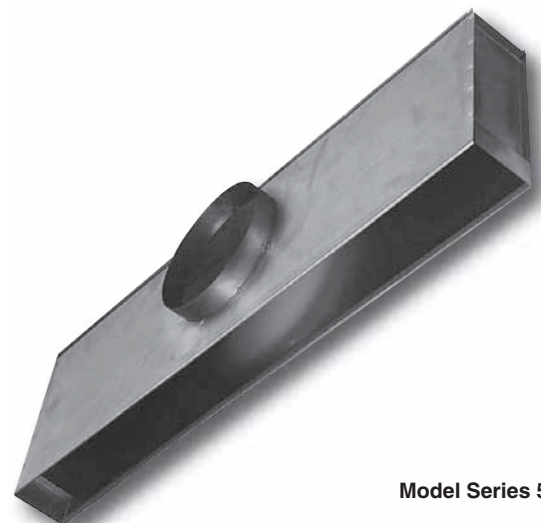
Models 5350MP, 5375MP, 5310MP, 5315MP

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Modified Performance (internally insulated) –

Models 5350IMP, 5375IMP, 5310IMP, 5315IMP

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Model Series 5300

LINEAR SLOT DIFFUSER PLENUMS FOR TECHZONE™ TYPE CEILING

Model Series 5300TZ Plenums are designed to fit the 5000TZ Series Slot Diffusers. The plenums are constructed from corrosion-resistant steel and are available in two different styles for an extensive performance range.

Available choice of 1 to 4 slots are available to suit capacity requirements and three frame styles for Armstrong® TechZone™ and USG Logix™ ceiling systems. The standard constructed plenum is suited for applications that require longer throws and shorter spreads, whereas the modified plenum increases the spread and reduces the throw. Specially designed end caps can be turned up for continuous runs. All styles are offered with internal or external insulation.

Standard Performance (non-insulated) –

Model 5375TZ

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Standard Performance (internally insulated) –

Model 5375TZI

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Modified Performance (non-insulated) –

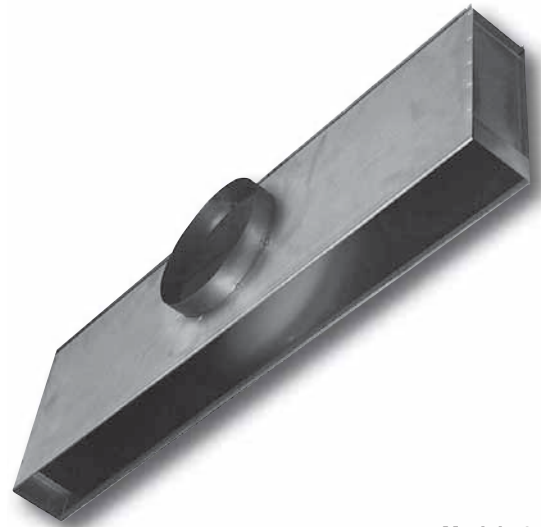
Models 5375TZMP

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Modified Performance (internally insulated) –

Models 5375TZIMP, 5310TZIMP, 5315TZIMP

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Model 5375TZ

B
LINEAR DIFFUSERS AND BAR GRILLES



Models 49-240, 49-280 and 49-480

LINEAR BAR GRILLES

4900 Series provides an extruded aluminum bar grille that offers beautiful styling and efficient performance.

Linear bar grilles offer a choice of fixed air patterns with 0°, 15° or 30° air deflection, a choice of bar widths and spacing and a wide choice of border/frame style combinations to suit most types of installation. They are available with an optional opposed blade damper for volume control. Linear bar grilles are recommended for supply air applications in floors, window sills, and high sidewall locations. They are not generally suited to ceiling mounted supply applications (other than for directional spot heating or cooling as an air curtain) as they are not designed for horizontal projection from the face.

Models 49-240, 49-241, 49-243, 49-280, 49-281, 49-480, 49-481

Suffix '-O' adds a steel OBD.

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LINEAR LOUVER DIFFUSERS

48LL Series Linear Louver (Vane) Diffusers are designed to provide a high capacity, architecturally pleasing linear diffuser that can supply large volumes of air at relatively low sound levels and pressure drops.

High quality, extruded aluminum angular discharge louvers are designed to create a stable horizontal air pattern that is tight to the ceiling. Ideal for applications in VAV systems, these diffusers create a strong ceiling coanda effect at typical maximum and minimum flow rates and ensure optimal comfort conditions.

Models 48LL, 48LL2

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Suffix '-O' adds a steel OBD.

Suffix '-OA' adds an aluminum OBD.



Models 48LL2 and 48LL1

LINEAR SLOT DIFFUSERS

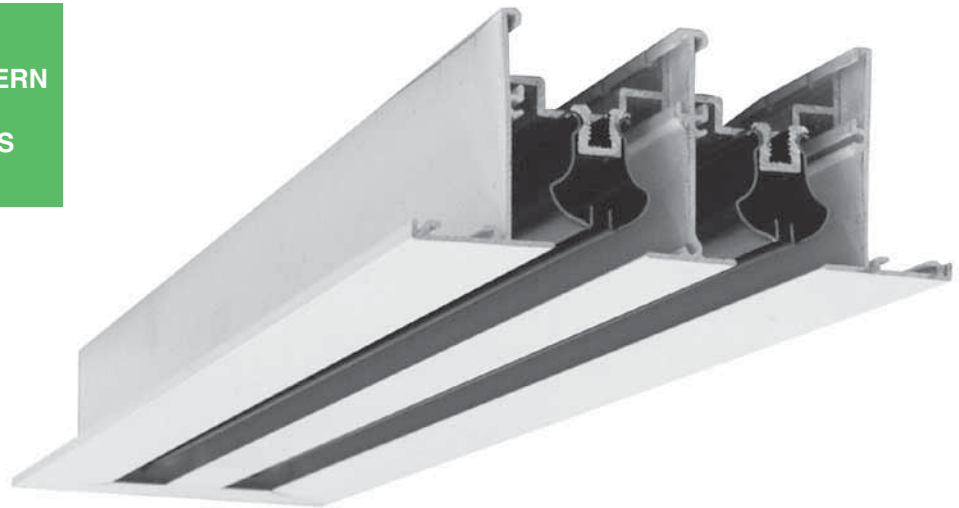
- ADJUSTABLE 'ICE TONG' PATTERN CONTROLLERS
- AVAILABLE WITH 1 TO 10 SLOTS
- CHOICE OF 4 SLOT WIDTHS

Supply Models:

- 5050 1/2" (13) Slot
- 5075 3/4" (19) Slot
- 5010 1" (25) Slot
- 5015 1 1/2" (38) Slot

Return Models:

- 5050R 1/2" (13) Slot
- 5075R 3/4" (19) Slot
- 5010R 1" (25) Slot
- 5015R 1 1/2" (38) Slot



Model 5075

Model Series 5000 Linear Slot Ceiling Diffuser have been specially designed to provide both the unobtrusive appearance required for architectural excellence, and the full 180° pattern controller adjustment at minimum NC levels required for high engineering performance. Model Series 5000 Diffusers provide stable diffusion under large amounts of air with both constant and changing load conditions. This is particularly suitable for variable air volume systems. With several choices of mounting frames, the diffusers are suited to accommodate multiple applications. The diffusers are available with mitered corner end caps and feature die-formed components to provide consistent quality and performance.

STANDARD FEATURES:

- The volume and direction of the discharge air can be adjusted by moving the pattern controllers.
- Available with 1 to 10 slots.
- Choice of four slot widths to suit capacity requirements.
- Selection of frames & mounting sub-frames for various types of installations.
- The maximum length of the pattern controller is 36" (914). Diffusers longer than 36" (914) are provided with multiple pattern controller sections.
- Diffusers are supplied in lengths of up to 6 feet (1829) in a single section.
- Ideal for continuous length applications.

- Multiple sections are provided with alignment strips on the frames and sub-frames to provide superior, positive field alignment.

- Model Series 5000R returns and Series 5000 supply diffusers are identical except for the omission of pattern controllers.

- Mounting sub-frames are cut to length and assembled in the field.

CONSTRUCTION MATERIAL:

Extruded aluminum frame with corrosion-resistant steel pattern controllers.

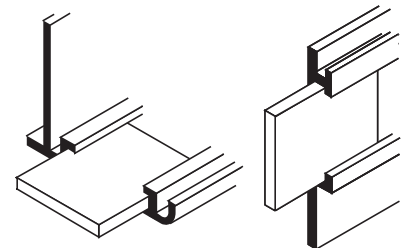
FINISH OPTIONS:

- All visible frames are AW Appliance White and the pattern controllers have a

black finish as standard. Optional finishes are available.

Alignment Strips

Alignment strips on the frames and sub-frames provide superior, positive alignment on multi-section assemblies.



Frame

Sub-frame

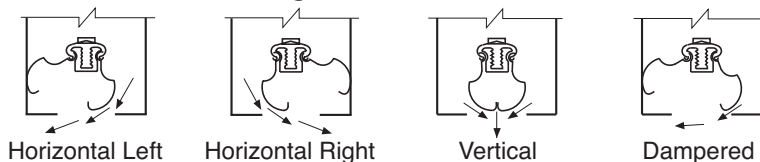
Supply Model

- 5050 S = 1/2" (13) slot
- 5075 S = 3/4" (19) slot
- 5010 S = 1" (25) slot
- 5015 S = 1 1/2" (38) slot

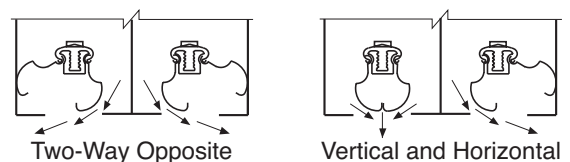
Return Model

- 5050R S = 1/2" (13) slot
- 5075R S = 3/4" (19) slot
- 5010R S = 1" (25) slot
- 5015R S = 1 1/2" (38) slot

Single Slot Air Patterns



Multi-Slot Air Patterns



FRAME AND MOUNTING SUB-FRAME COMBINATIONS FOR HARD CEILINGS:

D = Duct Size
 S = Slot Width
 W = Overall Face Width

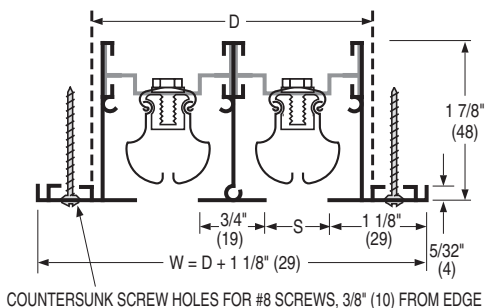
Standard Frames are the most commonly recommended, specified and easiest to install.

B

LINEAR DIFFUSERS AND BAR GRILLES

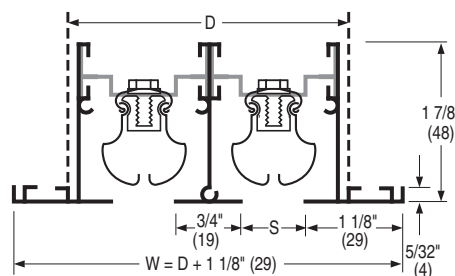
TYPE A STANDARD FRAME

Flange Frame/Screw Mounting



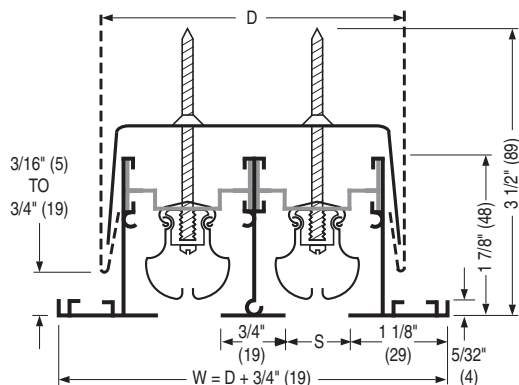
TYPE B STANDARD FRAME

Flange Frame/Duct Mounting, less screw holes



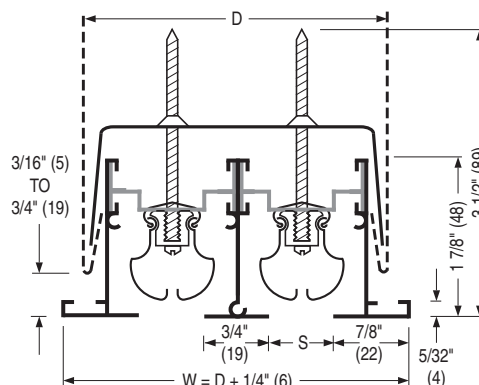
TYPE C STANDARD FRAME

Flange Frame/Concealed Mounting



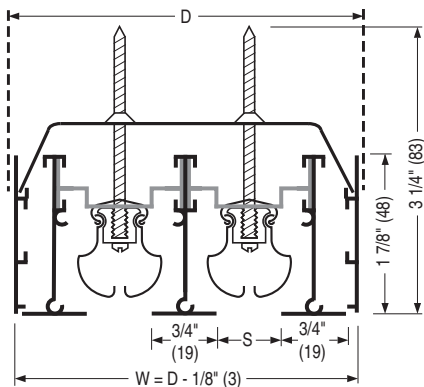
TYPE D STANDARD FRAME

Flange Frame, Narrow Margin/Concealed Mounting



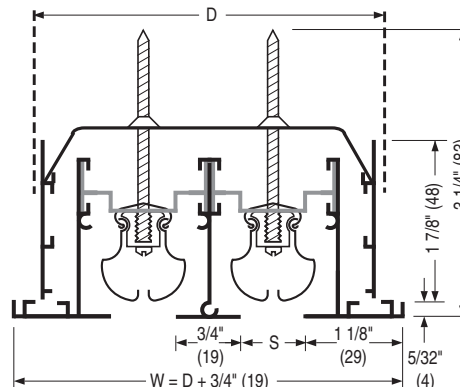
TYPE E

Flush Frame & Sub-Frame/Concealed Mounting



TYPE F

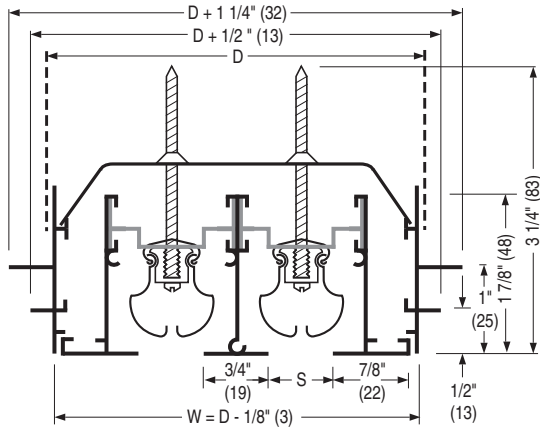
Flange Frame & Sub-Frame/Concealed Mounting



FRAME AND MOUNTING SUB-FRAME COMBINATIONS FOR HARD CEILINGS:

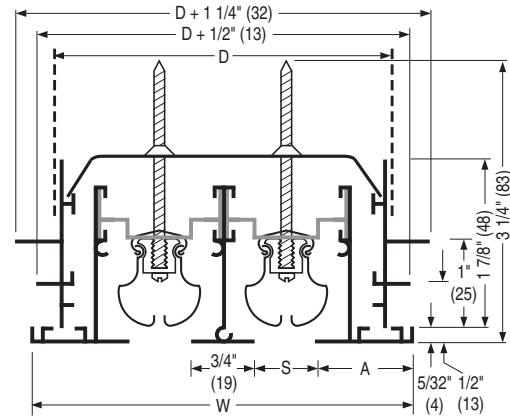
TYPE G

Flush Frame w/Plaster & Tile Sub-Frame/Concealed Mounting



TYPE H, H2

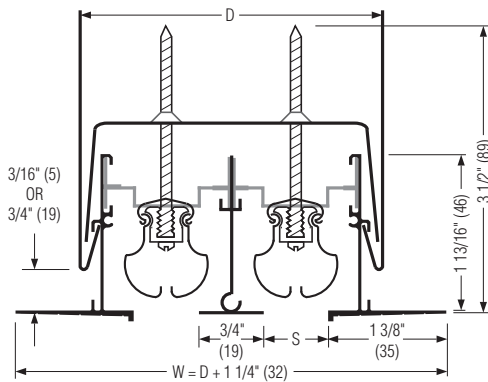
Flange Frame w/Plaster & Tile Sub-Frame/Concealed Mounting



Type	A	W
H	1 1/8" (29)	D + 3/4" (19)
H2	7/8" (22)	D + 1/4" (6)

TYPE J

Tape & Spackle Frame/Concealed Mounting

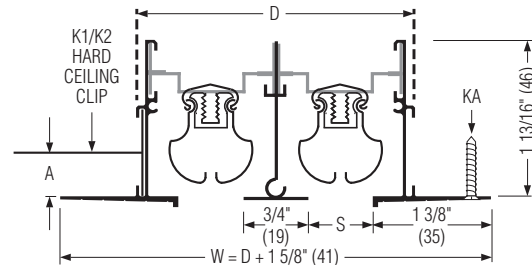


TYPE KA

Tape & Spackle Frame/Countersunk Screw Holes (both sides)

TYPES K1, K2

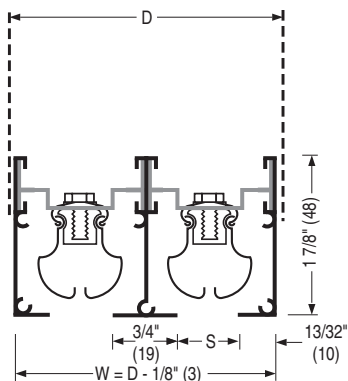
Tape & Spackle Frame/Hard Ceiling Clip for 1/2" (13) or 5/8" (16) drywall (both sides)



Type	A	Hard Clip
K1	1/2" (13)	HC5
K2	5/8" (16)	HC1

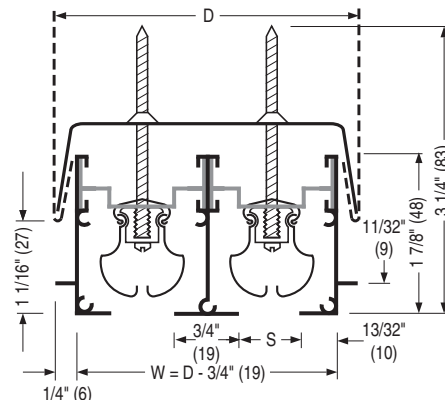
TYPE M

Flush Frame / Duct Mounting / Flangeless Frame



TYPE N

Spline Frame Ceiling / Concealed Mounting



DUCT WIDTH D DIMENSION:

S = SLOT WIDTH (IMPERIAL UNITS – INCHES)

B

LINEAR DIFFUSERS AND BAR GRILLES

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
A B	1	1 5/8"	1 7/8"	2 1/8"	2 5/8"
	2	2 7/8"	3 3/8"	3 7/8"	4 7/8"
	3	4 1/8"	4 7/8"	5 5/8"	7 1/8"
	4	5 3/8"	6 3/8"	7 3/8"	9 3/8"
	5	6 5/8"	7 7/8"	9 1/8"	11 5/8"
	6	7 7/8"	9 3/8"	10 7/8"	13 7/8"
	7	9 1/8"	10 7/8"	12 5/8"	16 1/8"
	8	10 3/8"	12 3/8"	14 3/8"	18 3/8"
	9	11 5/8"	13 7/8"	16 1/8"	20 5/8"
	10	12 7/8"	15 3/8"	17 7/8"	22 7/8"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
C D	1	2"	2 1/4"	2 1/2"	3"
	2	3 1/4"	3 3/4"	4 1/4"	5 1/4"
	3	4 1/2"	5 1/4"	6"	7 1/2"
	4	5 3/4"	6 3/4"	7 3/4"	9 3/4"
	5	7"	8 1/4"	9 1/2"	12"
	6	8 1/4"	9 3/4"	11 1/4"	14 1/4"
	7	9 1/2"	11 1/4"	13"	16 1/2"
	8	10 3/4"	12 3/4"	14 3/4"	18 3/4"
	9	12"	14 1/4"	16 1/2"	21"
	10	13 1/4"	15 3/4"	18 1/4"	23 1/4"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
E	1	2 1/4"	2 1/2"	2 3/4"	3 1/4"
	2	3 1/2"	4"	4 1/2"	5 1/2"
	3	4 3/4"	5 1/2"	6 1/4"	7 3/4"
	4	6"	7"	8"	10"
	5	7 1/4"	8 1/2"	9 3/4"	12 1/4"
	6	8 1/2"	10"	11 1/2"	14 1/2"
	7	9 3/4"	11 1/2"	13 1/4"	16 3/4"
	8	11"	13"	15"	19"
	9	12 1/4"	14 1/2"	16 3/4"	21 1/4"
	10	13 1/2"	16"	18 1/2"	23 1/2"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
F, H, H2	1	2"	2 1/4"	2 1/2"	3"
	2	3 1/4"	3 3/4"	4 1/4"	5 1/4"
	3	4 1/2"	5 1/4"	6"	7 1/2"
	4	5 3/4"	6 3/4"	7 3/4"	9 3/4"
	5	7"	8 1/4"	9 1/2"	12"
	6	8 1/4"	9 3/4"	11 1/4"	14 1/4"
	7	9 1/2"	11 1/4"	13"	16 1/2"
	8	10 3/4"	12 3/4"	14 3/4"	18 3/4"
	9	12"	14 1/4"	16 1/2"	21"
	10	13 1/4"	15 3/4"	18 1/4"	23 1/4"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
G	1	2 1/2"	2 3/4"	3"	3 1/2"
	2	3 3/4"	4 1/4"	4 3/4"	5 3/4"
	3	5"	5 3/4"	6 1/2"	8"
	4	6 1/4"	7 1/4"	8 1/4"	10 1/4"
	5	7 1/2"	8 3/4"	10"	12 1/2"
	6	8 3/4"	10 1/4"	11 3/4"	14 3/4"
	7	10"	11 3/4"	13 1/2"	17"
	8	11 1/4"	13 1/4"	15 1/4"	19 1/4"
	9	12 1/2"	14 3/4"	17"	21 1/2"
	10	13 3/4"	16 1/4"	18 3/4"	23 3/4"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
J, N	1	2"	2 1/4"	2 1/2"	3"
	2	3 1/4"	3 3/4"	4 1/4"	5 1/4"
	3	4 1/2"	5 1/4"	6"	7 1/2"
	4	5 3/4"	6 3/4"	7 3/4"	9 3/4"
	5	7"	8 1/4"	9 1/2"	12"
	6	8 1/4"	9 3/4"	11 1/4"	14 1/4"
	7	9 1/2"	11 1/4"	13"	16 1/2"
	8	10 3/4"	12 3/4"	14 3/4"	18 3/4"
	9	12"	14 1/4"	16 1/2"	21"
	10	13 1/4"	15 3/4"	18 1/4"	23 1/4"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
KA, K1, K2	1	1 5/8"	1 7/8"	2 1/8"	2 5/8"
	2	2 7/8"	3 3/8"	3 7/8"	4 7/8"
	3	4 1/8"	4 7/8"	5 5/8"	7 1/8"
	4	5 3/8"	6 3/8"	7 3/8"	9 3/8"
	5	6 5/8"	7 7/8"	9 1/8"	11 5/8"
	6	7 7/8"	9 3/8"	10 7/8"	13 7/8"
	7	9 1/8"	10 7/8"	12 5/8"	16 1/8"
	8	10 3/8"	12 3/8"	14 3/8"	18 3/8"
	9	11 5/8"	13 7/8"	16 1/8"	20 5/8"
	10	12 7/8"	15 3/8"	17 7/8"	22 7/8"

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"
M	1	1 3/8"	1 5/8"	1 7/8"	2 3/8"
	2	2 5/8"	3 1/8"	3 5/8"	4 5/8"
	3	3 7/8"	4 5/8"	5 3/8"	6 7/8"
	4	5 1/8"	6 1/8"	7 1/8"	9 1/8"
	5	6 3/8"	7 5/8"	8 7/8"	11 3/8"
	6	7 5/8"	9 1/8"	10 5/8"	13 5/8"
	7	8 7/8"	10 5/8"	12 3/8"	15 7/8"
	8	10 1/8"	12 1/8"	14 1/8"	18 1/8"
	9	11 3/8"	13 5/8"	15 7/8"	20 3/8"
	10	12 5/8"	15 1/8"	17 5/8"	22 5/8"

DUCT WIDTH D DIMENSION:

S = SLOT WIDTH (METRIC UNITS – MILLIMETERS)

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
A B	1	41	48	54	67
	2	73	86	98	124
	3	105	124	143	181
	4	137	162	187	238
	5	168	200	232	295
	6	200	238	276	352
	7	232	276	321	410
	8	264	314	365	467
	9	295	352	410	524
	10	327	391	454	581

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
E	1	57	64	70	83
	2	89	102	114	140
	3	121	140	159	197
	4	152	178	203	254
	5	184	216	248	311
	6	216	254	292	368
	7	248	292	337	425
	8	279	330	381	483
	9	311	368	425	540
	10	343	406	470	597

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
G	1	64	70	76	89
	2	95	108	121	146
	3	127	146	165	203
	4	159	184	210	260
	5	191	222	254	318
	6	222	260	298	375
	7	254	298	343	432
	8	286	337	387	489
	9	318	375	432	546
	10	349	413	476	603

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
KA, K1, K2	1	41	48	54	67
	2	73	86	98	124
	3	105	124	143	181
	4	137	162	187	238
	5	168	200	232	295
	6	200	238	276	352
	7	232	276	321	410
	8	264	314	365	467
	9	295	352	410	524
	10	327	391	454	581

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
C D	1	51	57	64	76
	2	83	95	108	133
	3	114	133	152	191
	4	146	171	197	248
	5	178	210	241	305
	6	210	248	286	362
	7	241	286	330	419
	8	273	324	375	476
	9	305	362	419	533
	10	337	400	464	591

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
F, H, H2	1	51	57	64	76
	2	83	95	108	133
	3	114	133	152	191
	4	146	171	197	248
	5	178	210	241	305
	6	210	248	286	362
	7	241	286	330	419
	8	273	324	375	476
	9	305	362	419	533
	10	337	400	464	591

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
J, N	1	51	57	64	76
	2	83	95	108	133
	3	114	133	152	191
	4	146	171	197	248
	5	178	210	241	305
	6	210	248	286	362
	7	241	286	330	419
	8	273	324	375	476
	9	305	362	419	533
	10	337	400	464	591

Frame Type	No. of Slots	5050	5075	5010	5015
		5050R	5075R	5010R	5015R
		S = 13	S = 19	S = 25	S = 38
M	1	35	41	48	60
	2	67	79	92	117
	3	98	117	137	175
	4	130	156	181	232
	5	162	194	225	289
	6	194	232	270	346
	7	225	270	314	403
	8	257	308	359	460
	9	289	346	403	518
	10	321	384	448	575

END CAP CONFIGURATIONS FOR VARIOUS MOUNTINGS:

SPECIFY MM, FF, MO, FO, MC, FC, OO, OC OR CC

M - MITERED END CAP

(Standard)

O - OPEN END

C - FLAT END CAP

F - FLANGED END CAP

Frame Type	X Dim.
A, B, C, F, H	1" (25)
D, G, H2	3/4" (19)

Field attachable. Suitable for stocking reps.

D = Duct length E = End cap position L = Overall length

OVERALL LENGTH DIMENSIONS AND END CAP POSITION:

Frame Type	M		F		M		M		O		O		C		C	
	E	L	E	L	E	L†	E	L†	E	L	E	L	E	L	E	L
A, B	D - 1/2" (13)	D+1" (25)	D - 1/2" (13)	D+1 1/2" (38)	D - 1/4" (6)	D+1/2" (13)	D - 3/16" (5)	D+9/16" (14)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		
C	D - 1/2" (13)	D+1" (25)	D - 1/2" (13)	D+1 1/2" (38)	D - 1/4" (6)	D+1/2" (13)	D - 3/16" (5)	D+9/16" (14)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		
D	D - 1/2" (13)	D+1/2" (13)	D - 1/2" (13)	D+1" (25)	D - 1/4" (6)	D+1/4" (6)	D - 3/16" (5)	D+7/16" (11)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		
E	D - 7/8" (22)	D	N/A	N/A	D - 7/16" (11)	D	D - 3/8" (10)	D+1/16" (2)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		
F, H	D - 3/4" (19)	D+3/4" (19)	D - 3/4" (19)	D+1 1/4" (32)	D - 3/8" (10)	D+3/8" (10)	D - 5/16" (8)	D+7/16" (11)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		
H2	D - 3/4" (19)	D+1/4" (6)	D - 3/4" (19)	D+7/8" (22)	D - 3/8" (10)	D+1/8" (3)	D - 5/16" (8)	D+5/16" (8)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		
G	D - 1 1/8" (29)	D	D - 1 3/8" (35)	D	D - 9/16" (14)	D	D - 1/2" (13)	D+1/16" (2)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)		

† Configurations FO and FC: Add 1/4" (6) for frame types A, B, C, D, F, G, H and H2.

Frame Type	M		M		M		O		O		O		C		C	
	E	L	E	L	E	L	E	L	E	L	E	L	E	L	E	L
J	D - 3/4" (19)	D+3/4" (19)	D - 3/8" (10)	D+3/8" (10)	D - 1/16" (2)	D - 1/16" (2)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)				
KA, K1, K2	D - 1/2" (13)	D+1" (25)	D - 1/4" (6)	D+1/2" (13)	D - 1/16" (2)	D - 1/16" (2)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)				
M*, N*	D - 1/16" (2)	D - 1/16" (2)	D - 1/32" (1)	D - 1/32" (1)	D - 1/16" (2)	D - 1/16" (2)	D	D	D - 1/16" (2)	D - 1/16" (2)	D - 1/8" (3)	D - 1/8" (3)				

* These types have a flangeless mitered end cap which is the same extrusion profile as the frame.

B LINEAR DIFFUSERS AND BAR GRILLES

STANDARD LAY-IN T-BAR APPLICATION:

Designed and fabricated specifically to integrate with standard exposed grid T-Bar Ceiling Systems.

Available in nominal lengths to suit both imperial and metric ceiling grid modules.

Imperial module lengths: 20", 24", 48" and 60".

Metric module lengths: 500, 600, 1200 and 1500 mm.

Also available in custom lengths for special applications and in multiple section assemblies for continuous paired T-Bar ceilings.

* Type CC Flat Endcaps are not recommended for use with 9/16" (14) flat face T-bar.

DUCT WIDTH D DIMENSION:

S = SLOT WIDTH (IMPERIAL UNITS – INCHES)

Frame Type	No. of Slots	Imperial Units (inches)				Metric Units (mm)			
		5050	5075	5010	5015	5050	5075	5010	5015
		5050R	5075R	5010R	5015R	5050R	5075R	5010R	5015R
T, FL		S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"	S = 13	S = 19	S = 25	S = 38
	1	1 1/2"	1 3/4"	2"	2 1/2"	38	44	51	64
	2	2 3/4"	3 1/4"	3 3/4"	4 3/4"	70	83	95	121
	3	4"	4 3/4"	5 1/2"	7"	102	121	140	178
	4	5 1/4"	6 1/4"	7 1/4"	9 1/4"	133	159	184	235
	5	6 1/2"	7 3/4"	9"	11 1/2"	165	197	229	292
	6	7 3/4"	9 1/4"	10 3/4"	13 3/4"	197	235	273	349
	7	9"	10 3/4"	12 1/2"	16"	229	273	318	406
	8	10 1/4"	12 1/4"	14 1/4"	18 1/4"	260	311	362	464
	9	11 1/2"	13 3/4"	16"	20 1/2"	292	349	406	521
10	12 3/4"	15 1/4"	17 3/4"	22 3/4"	324	387	451	578	

FINELINE® TYPE CEILING SYSTEMS:

Nailor can fabricate the **5000 Series** to integrate with most available Fineline® or Regressed T-Bar type ceiling systems.

Available in nominal lengths to suit both imperial and metric ceiling grid modules.

Imperial module lengths: 24" and 48".

Metric module lengths: 600 and 1200 mm.

Note: Nominal 48" (1200) does not include a cross notch.

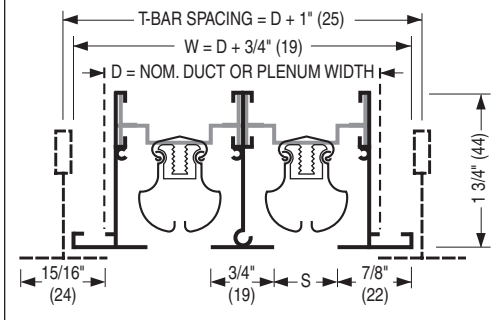
The Type FL frame is compatible with both the USG Interiors Inc. 'Donn® Fineline® and Rockfon® 'Ultraline™' 3500/3600 systems. For other ceiling systems, contact your Nailor representative.

'Fineline®' is a registered trademark of USG Interiors Inc.

'Ultraline™' is a registered trademark of Rockfon®.

TYPE T FRAME

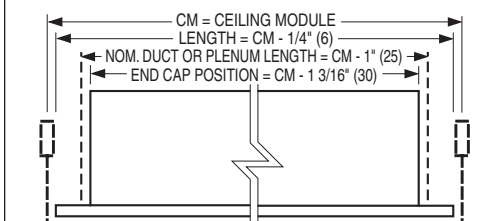
- For standard 15/16" (24) or *9/16" (14) face lay-in T-Bar



END CAP CONFIGURATIONS • TYPE T FRAME

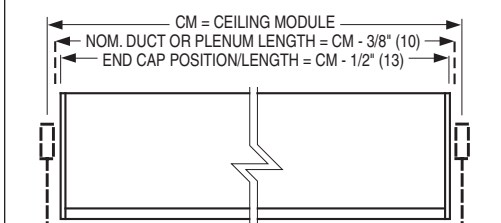
TYPE MM

- Mitered End Caps (standard)



*TYPE CC

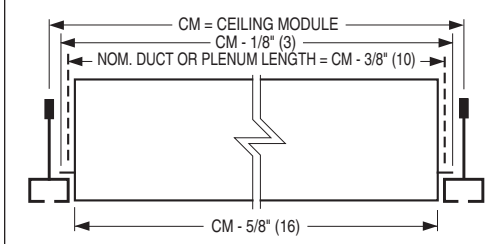
- Flat End Caps



END CAP CONFIGURATION • TYPE FL FRAME

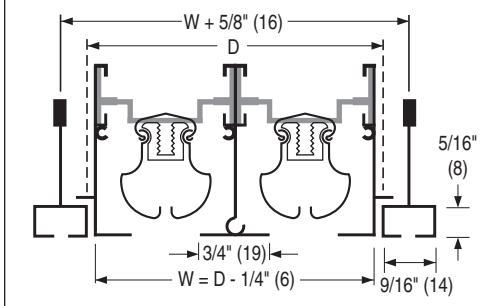
TYPE MM

- Mitered End Caps (standard)



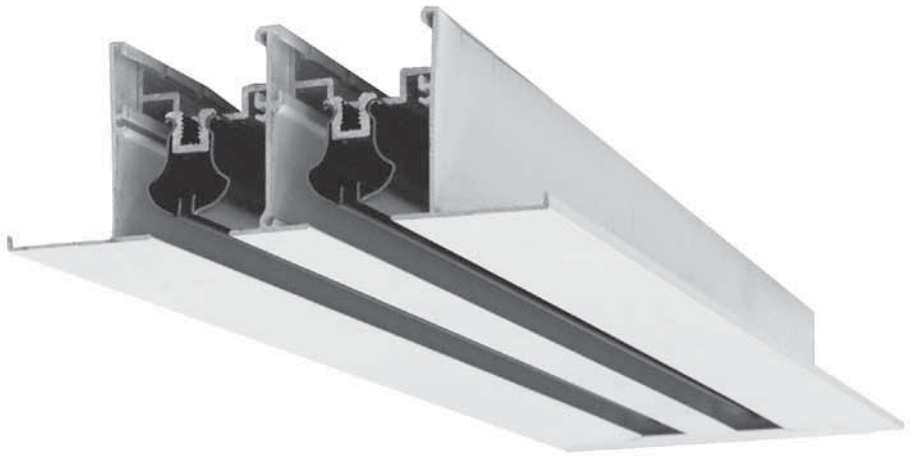
TYPE FL FRAME

- For Fineline® type ceilings



LINEAR SLOT DIFFUSERS FOR TECHZONE™ TYPE CEILINGS

- COMPATIBLE WITH ARMSTRONG® AND USG LOGIX™ CEILING SYSTEMS



Model 5075TZ

Supply Models:

5075TZ 3/4" (19) Slot

Return Models:

5075TZR 3/4" (19) Slot

Model Series 5075TZ Linear Slot Ceiling Diffusers have been specially designed to provide both the unobtrusive appearance required for architectural excellence, and the full 180° pattern controller adjustment at minimum NC levels required for high engineering performance. Particularly suitable for variable air volume systems, they provide stable diffusion under large amounts of air with both constant and changing load conditions. The 5075TZ diffusers are compatible with Armstrong® TechZone™ and USG Logix™ ceiling systems. The diffusers are available with open or flat end caps and feature die-formed components to provide consistent quality and performance. Ideal for continuous length applications.

STANDARD FEATURES:

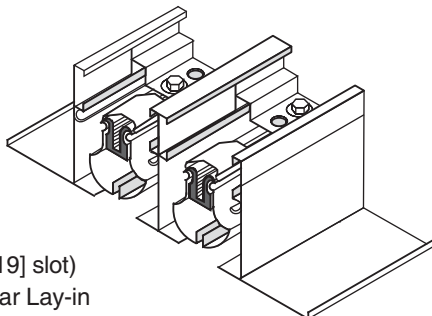
- Compatible with Armstrong TechZone™ and USG Logix™ ceiling systems. Available for Standard, Tegral, and Narrow T-Bar Lay-in ceilings.
- The volume and direction of the discharge air can be adjusted by moving the pattern controllers.
- The diffuser slot width is 3/4" (19).
- Available in either a 4" (102) module size up to 2 slots or a 6" (152) module size up to 4 slots.
- Available for Standard Ceiling Module lengths from sizes 24" (610) to 72" (1829).
- Sizes larger than 72" (1829) will be supplied in equal multiple sections. Alignment strips will be provided for superior field alignment.
- Model 5075TZR returns and Model 5075TZ supply diffusers are identical except for the omission of pattern controllers.

CONSTRUCTION MATERIAL:

Extruded aluminum frame with corrosion-resistant steel pattern controllers.

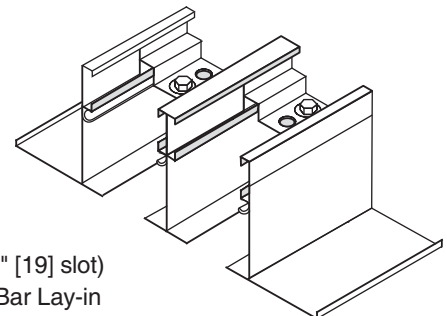
FINISH OPTIONS:

- AW Appliance White frame with black pattern controllers is standard. Other finishes are available.



Supply Model

5075TZ (S = 3/4" [19] slot)
Frame Type L T-Bar Lay-in



Return Model

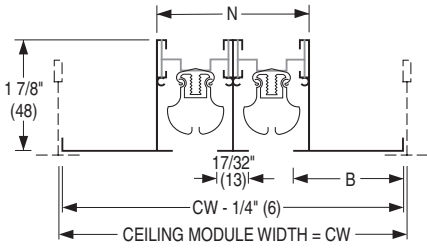
5075TZR (S = 3/4" [19] slot)
Frame Type L T-Bar Lay-in

FRAME TYPES FOR TECHZONE™ TYPE CEILINGS 4" (102) AND 6" (152) WIDE:

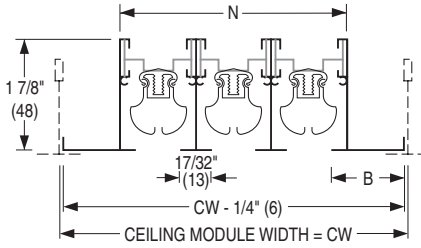
B
LINEAR DIFFUSERS AND BAR GRILLES

TYPE L 15/16" (24) & 9/16" (14) T-BAR LAY-IN

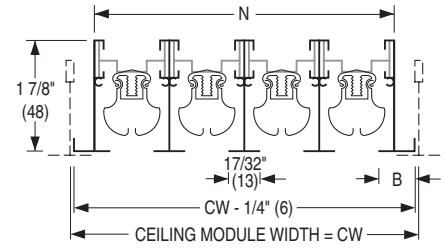
2 Slot:



3 Slot:

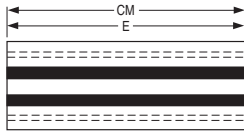


4 Slot:

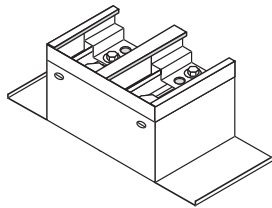
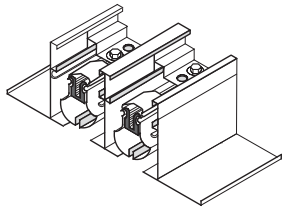
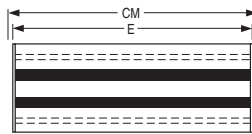


END CAP CONFIGURATION

O – Open End



C – Flat End Cap



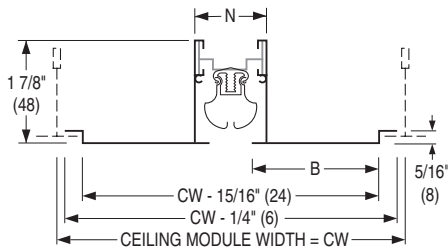
CM = Ceiling Module E = Overall Length

Ceiling Module Width CW	No. of Slots	Border B	Neck N
4"	1	1 1/2" (38)	1 3/8" (35)
	2	7/8" (22)	2 5/8" (67)
6"	1	2 1/2" (64)	1 3/8" (35)
	2	1 7/8" (48)	2 5/8" (67)
	3	1 1/4" (32)	3 7/8" (98)
	4	5/8" (16)	5 1/8" (130)

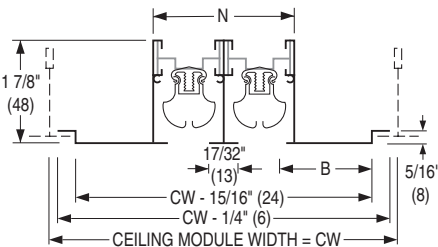
End Condition	Face Length E
CC	Ceiling Module – 1/4" (6)
OC	Ceiling Module – 1/8" (3)
OO	Ceiling Module

TYPE TL 15/16" (24) T-BAR TEGULAR LAY-IN

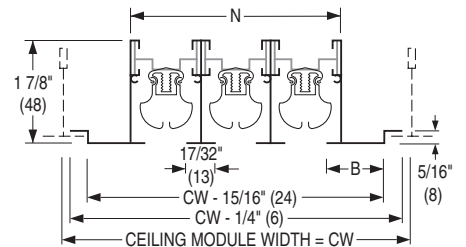
1 Slot:



2 Slot:

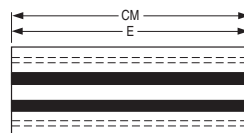


3 Slot:

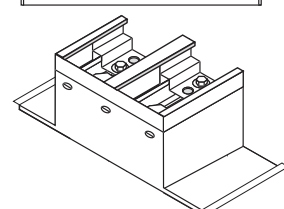
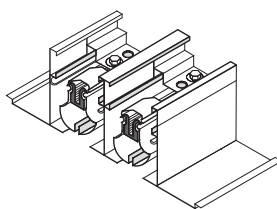
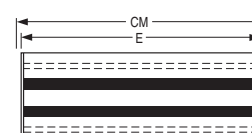


END CAP CONFIGURATION

O – Open End



C – Flat End Cap



CM = Ceiling Module E = Overall Length

Ceiling Module Width CW	No. of Slots	Border B	Neck N
4"	1	1 1/8" (29)	1 3/8" (35)
	2	1/2" (13)	2 5/8" (67)
6"	1	2 1/8" (54)	1 3/8" (35)
	2	1 1/2" (38)	2 5/8" (67)
	3	7/8" (22)	3 7/8" (98)

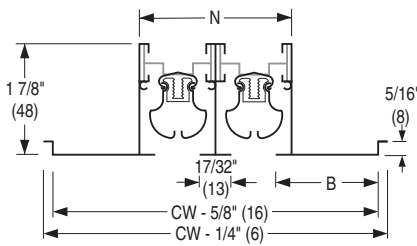
End Condition	Face Length E
CC	Ceiling Module – 1" (25)
OC	Ceiling Module – 1/2" (13)
OO	Ceiling Module

FRAME TYPES FOR TECHZONE™ TYPE CEILINGS 4" (102) AND 6" (152) WIDE:

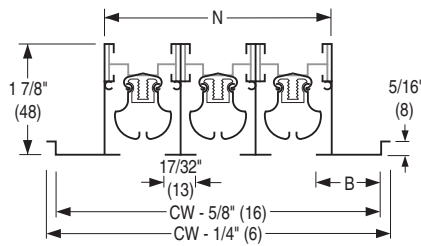
B LINEAR DIFFUSERS AND BAR GRILLES

TYPE NT 9/16" (14) NARROW T-BAR LAY-IN

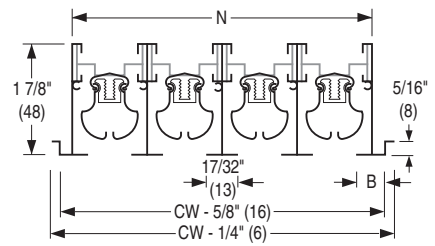
2 Slot:



3 Slot:

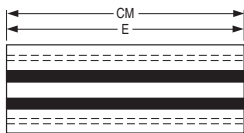


4 Slot:

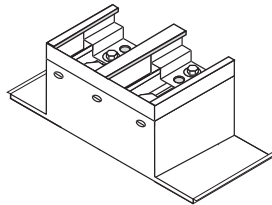
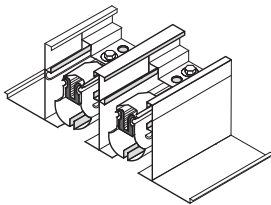


END CAP CONFIGURATION

O – Open End



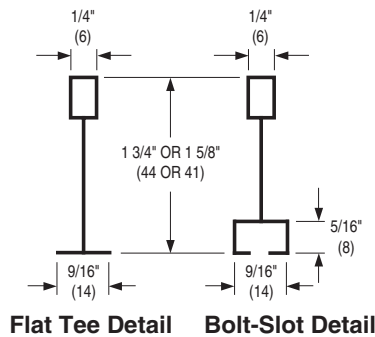
C – Flat End Cap



CM = Ceiling Module E = Overall Length

Ceiling Module Width CW	No. of Slots	Border B	Neck N
4"	1	1 5/16" (33)	1 3/8" (35)
	2	11/16" (17)	2 5/8" (67)
6"	1	2 5/16" (59)	1 3/8" (35)
	2	1 11/16" (43)	2 5/8" (67)
	3	1 1/16" (27)	3 7/8" (98)
	4	7/16" (11)	5 1/8" (130)

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



Options and Accessories

90° MITERED CORNERS:

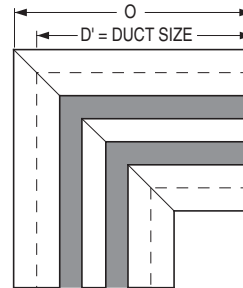
- 5050MC** • 1/2" (13) SLOT
- 5075MC** • 3/4" (19) SLOT
- 5010MC** • 1" (25) SLOT
- 5015MC** • 1 1/2" (38) SLOT

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.

SPECIAL MITERED CORNERS • OTHER ANGLE

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



D' = Duct Size		
Models	No. of Slots	D'
5050MC 5075MC	1 to 4	12 (305)
	5 to 10	24 (610)
5010MC 5015MC	1 to 4	16 (406)
	5 to 8	24 (610)
	9 to 10	36 (914)

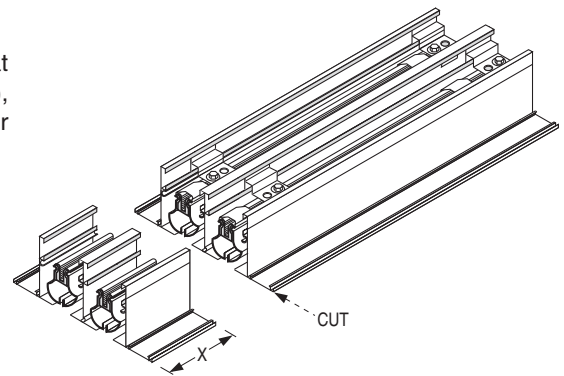
90° Mitered Corner Dimension 'O'

Frame Type					
A, B	C, F, H, H2, J, T	D	E, G	KA, K1, K2	M, N, FL
D' + 9/16 (14)	D' + 3/8 (10)	D' + 1/8 (3)	D' - 1/8 (3)	D' + 5/8 (16)	D'

FIELD TRIMMING OF DIFFUSERS:

If "X" is less than 3" (76) at either end (6" (152) total), standard **Model 5000** or **5000R** can be field-cut.

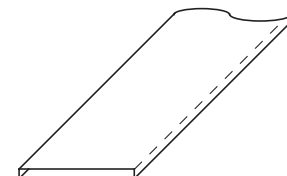
- Factory-Cut Diffusers **Model 5000** or **5000R** are ordered for a specific length from the factory, but can be trimmed as much as 6" (152) in length, (3" [76] from each end) with a fine tooth, high speed carbon steel metal cutting blade.



BLANK-OFFS:

- 5050BO** for 1/2" (13) SLOT
- 5075BO** for 3/4" (19) SLOT
- 5010BO** for 1" (25) SLOT
- 5015BO** for 1 1/2" (38) SLOT

- Cold-rolled steel.
- Fits over neck.
- Black Finish
- Shipped in 6' (1829) lengths to be field-cut.

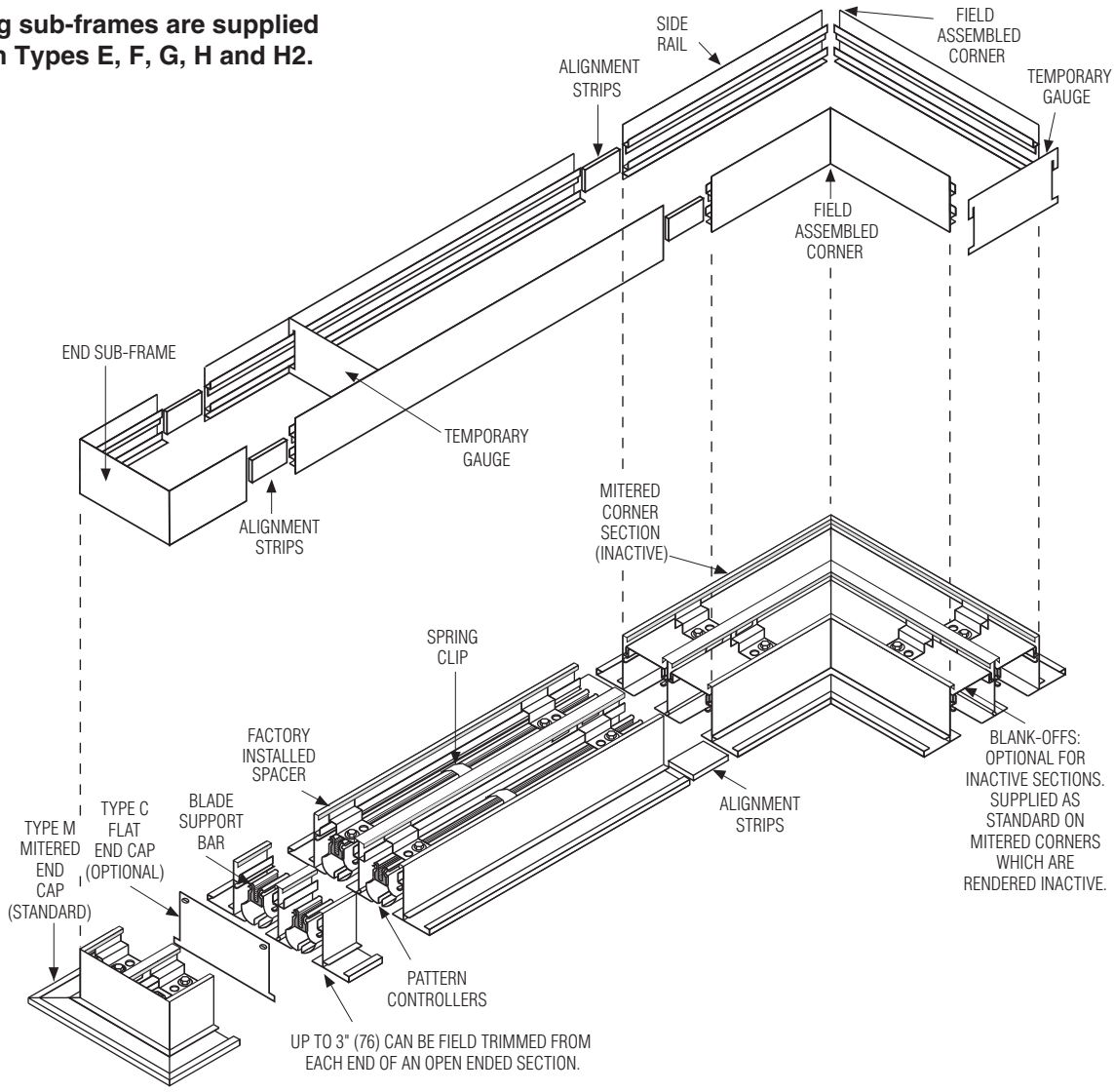


TYPICAL DIFFUSER AND SUB-FRAME ASSEMBLY:

B

LINEAR DIFFUSERS AND BAR GRILLES

Mounting sub-frames are supplied only with Types E, F, G, H and H2.



Diffuser Assembly Features:

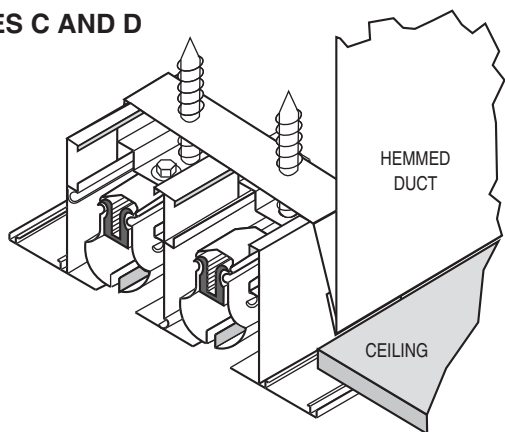
- Diffusers can be joined together end to end to form long continuous slots.
- The standard Type M end cap is mitered and offers a superior architectural finish on the visible surface.
- The optional Type F end cap can be field installed.
- The optional Type C flat end cap may be used where the diffuser ends at a wall or other stopping point.
- The standard 90° mitered corner section is factory welded and fully assembled to ensure a smooth professional finish. They are inactive.
- Alignment strips are factory supplied as standard on all multiple section frame and sub-frame assemblies and ensure close and positive alignment between sections.

Sub-Frame Features:

- Supplied with Frame Types E, F, G, H and H2.
- Assures a clean, accurately dimensioned opening to receive the diffuser.
- Allows the diffuser to be installed at the end of the job, minimizing risk of damage or contamination from paint or plaster.
- Diffuser can be simply removed and replaced without damage to architectural ceiling finishes.
- Types E, F, G, H and H2 are ideal as a wet plaster ground. In this case they should be installed sufficiently proud to allow for the finished ceiling thickness.
- Types E and G are designed to leave a diffuser totally flush with the finished ceiling.
- Types F, H and H2 are designed to leave a surface mount diffuser appearance.
- Type E may also be used where a diffuser runs flush along a wall.

HEMMED DUCT PREPARATION:

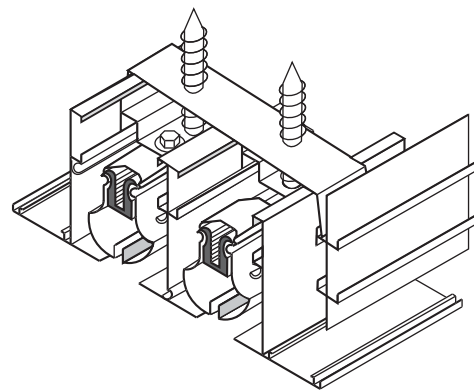
TYPES C AND D



- Far and away the most popular type of installation. Simple and quick.
- Diffuser simply pushes up into duct until the legs of the factory supplied mounting straps locate into the hems of the duct.
- Factory supplied levelling screws then draw the diffuser up until it is tight and snug with the ceiling.
- Duct should be fabricated with a 1/2" (13) hem on both long sides and opened approximately 1/8" (3).

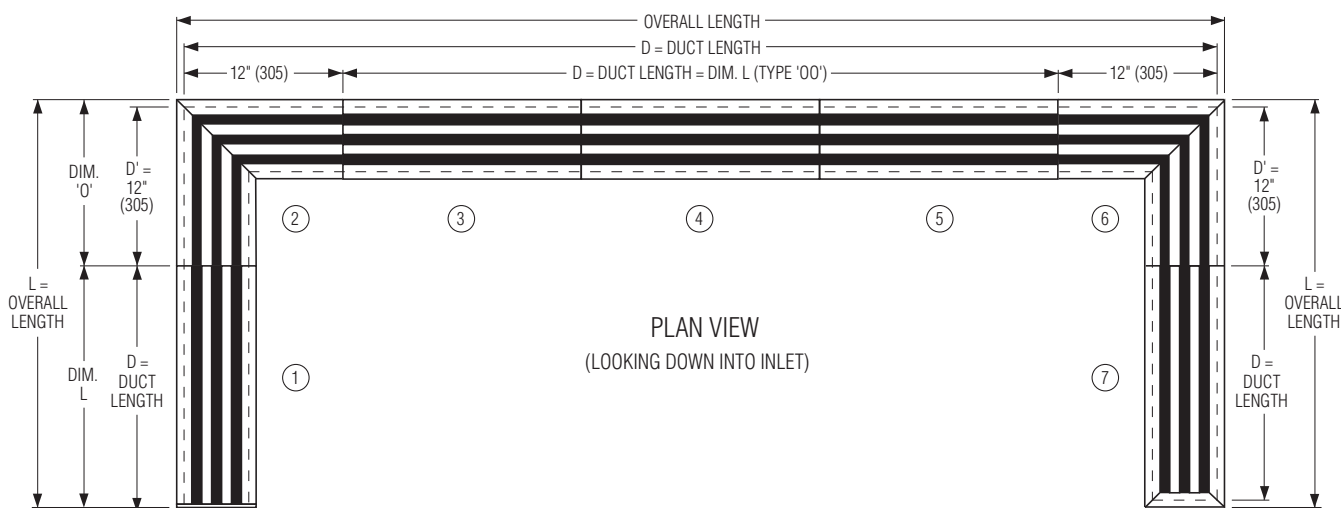
AUXILIARY SUB-FRAME PREPARATION:

TYPES E, F, G, H AND H2



- Sub-frame should be attached to inside of duct and/or a framed ceiling opening as deemed necessary.
- Factory supplied mounting straps locate into an extrusion slot in the sub-frame. Installation of diffuser is similar to the hemmed duct method shown to the left.

CONTINUOUS RUN DIMENSIONS:



The above example illustrates a typical 3 slot installation with two 90° mitered corner sections.

- ① Type 'CO' End Cap configuration.
- ② and ⑥ 'MC' Mitered Corner Section.
- ③, ④ and ⑤ Type 'OO' End Cap configuration.
- ⑦ Type 'MO' End Cap configuration.

Each straight section, regardless of total duct length may be ordered as a single section.

Example:

- ① and ⑦ Each section may be ordered as a single item, regardless of total length.
- ③, ④ and ⑤ One section may be ordered, regardless of total length.

Multiple sections are sub-divided by the factory into equal length sections at the factories' discretion.

Note: It is extremely difficult to achieve a perfect installation where compound miters are involved, such as above, when all sections are ordered from the factory fabricated to suit finished duct dimensions. This is due to field tolerance variations which may prevent proper alignment and butting together of individual sections due to insufficient material.

It is recommended that section ③, ④ or ⑤ are ordered oversized by 3" (76) and field cut to suit field conditions. 'OO' configuration lengths can be trimmed by up to 6" (152). 3" (76) from each end.

PERFORMANCE DATA:

SUPPLY • CONTINUOUS PRESSURIZED PLENUM

Model 5050 • 1/2" (13) Slot

B LINEAR DIFFUSERS AND BAR GRILLES

No. of Slots	Total Pressure, Horizontal	.005	.020	.041	.074	.120	.173	.230	.310
	Total Pressure, Vertical	.003	.014	.027	.051	.083	.116	.158	.215
1	Airflow, CFM/FT.	5	10	15	20	25	30	35	40
	Throw, Horizontal	1-1-6	3-6-12	6-10-14	8-12-18	10-14-18	12-14-20	12-14-20	14-16-24
	Throw, Vertical	2	6	9	11	12	13	14	15
	Noise Criteria	–	–	17	21	26	31	35	38
2	Airflow, CFM/FT.	10	20	30	40	50	60	70	80
	Throw, Horizontal	1-3-9	4-9-16	6-12-20	10-16-22	14-18-24	16-20-28	18-20-30	18-22-32
	Throw, Vertical	3	7	12	14	15	17	18	20
	Noise Criteria	–	15	20	24	28	34	38	41
3	Airflow, CFM/FT.	15	30	45	60	75	90	105	120
	Throw, Horizontal	2-4-10	6-12-20	10-16-24	14-20-28	18-20-30	20-24-38	20-24-40	22-28-44
	Throw, Vertical	4	10	15	18	21	22	25	23
	Noise Criteria	–	16	21	26	31	36	40	43
4	Airflow, CFM/FT.	20	40	60	80	100	120	140	160
	Throw, Horizontal	3-5-12	8-12-22	12-18-28	16-22-32	20-24-40	22-28-44	24-30-48	26-32-52
	Throw, Vertical	6	11	16	20	22	24	26	29
	Noise Criteria	–	17	22	27	32	37	41	44
5	Airflow, CFM/FT.	25	50	75	100	125	150	175	200
	Throw, Horizontal	3-6-14	8-14-24	14-20-30	18-24-40	22-28-46	26-32-50	28-40-52	30-40-58
	Throw, Vertical	6	12	20	26	27	30	30	33
	Noise Criteria	–	18	23	28	33	38	42	45
6	Airflow, CFM/FT.	30	60	90	120	150	180	210	240
	Throw, Horizontal	4-7-16	10-16-28	14-20-38	20-28-44	24-32-50	28-40-54	30-42-58	32-46-64
	Throw, Vertical	6	14	20	25	27	30	33	34
	Noise Criteria	–	19	24	29	34	39	43	46
7	Airflow, CFM/FT.	35	70	105	140	175	210	245	280
	Throw, Horizontal	5-8-18	12-18-30	16-24-42	22-30-48	26-36-54	30-42-58	38-46-64	40-48-68
	Throw, Vertical	6	14	22	27	30	32	36	38
	Noise Criteria	–	19	24	29	34	39	43	46
8	Airflow, CFM/FT.	40	80	120	160	200	240	280	320
	Throw, Horizontal	6-10-20	14-20-32	18-30-44	24-36-52	28-40-58	32-46-64	40-48-68	42-52-72
	Throw, Vertical	7	15	24	29	33	36	39	40
	Noise Criteria	–	20	25	30	35	40	44	47

Noise Criteria 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	+4	+6	+7	+8	+10

Throw Correction Factors for Various Lengths

Length (ft.)	2	4	6	8	10	12
Multiplier	0.70	1.0	1.25	1.40	1.55	1.70

Performance Notes:

- 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.
- All pressures are in inches w.g..
- Horizontal throws are given at 150, 100 and 50 fpm terminal velocities. Vertical throws are given at 50 fpm terminal velocity. Both under isothermal conditions.
- Throw data are based on active sections 4 ft. long. For other lengths, use the correction factor table above.

- Noise criteria [NC] 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. For vertical throw, deduct 10 NC.
- Throw values are for a 1-way air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- Dash (–) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.018	.033
2	.035	.066
3	.053	.099
4	.070	.132
5	.088	.165
6	.105	.198
7	.123	.231
8	.140	.264

PERFORMANCE DATA:

SUPPLY • CONTINUOUS PRESSURIZED PLENUM

Models 5075 and 5075TZ • 3/4" (19) Slot

No. of Slots	Total Pressure, Horizontal	.004	.017	.030	.055	.089	.123	.176	.256
	Total Pressure, Vertical	.003	.012	.026	.042	.065	.092	.125	.174
1	Airflow, CFM/FT.	5	10	20	25	30	35	40	50
	Throw, Horizontal	1-1-5	2-5-14	5-9-16	7-14-21	12-16-23	14-16-23	16-18-25	16-21-28
	Throw, Vertical	2	6	10	12	13	14	15	16
	Noise Criteria	–	–	16	21	26	30	33	38
2	Airflow, CFM/FT.	10	20	40	50	60	70	80	100
	Throw, Horizontal	1-2-10	4-9-21	7-16-23	14-21-28	16-23-32	21-23-35	21-25-44	23-28-46
	Throw, Vertical	3	8	11	15	18	20	21	22
	Noise Criteria	–	–	19	24	29	33	36	41
3	Airflow, CFM/FT.	15	30	60	75	90	105	120	150
	Throw, Horizontal	2-4-12	6-12-23	12-18-30	16-23-35	21-28-46	23-30-48	28-32-53	28-35-55
	Throw, Vertical	6	10	15	19	20	24	25	27
	Noise Criteria	–	–	21	26	31	35	38	43
4	Airflow, CFM/FT.	20	40	80	100	120	140	160	200
	Throw, Horizontal	2-5-14	8-14-28	16-23-35	21-28-46	23-32-53	28-35-55	32-44-60	32-46-64
	Throw, Vertical	5	11	18	21	25	27	30	31
	Noise Criteria	–	–	22	27	32	36	39	44
5	Airflow, CFM/FT.	25	50	100	125	150	175	200	250
	Throw, Horizontal	3-7-16	9-16-32	16-23-46	23-32-53	28-37-58	32-46-62	35-48-67	44-53-74
	Throw, Vertical	6	12	18	25	28	30	34	35
	Noise Criteria	–	–	23	28	33	37	40	45
6	Airflow, CFM/FT.	30	60	120	150	180	210	240	300
	Throw, Horizontal	4-8-17	10-18-35	18-28-48	23-35-55	30-46-62	35-48-69	44-53-74	46-58-78
	Throw, Vertical	7	13	21	25	30	32	36	39
	Noise Criteria	–	–	24	29	34	38	41	46
7	Airflow, CFM/FT.	35	70	140	175	210	245	280	350
	Throw, Horizontal	5-9-18	11-21-38	21-30-53	28-44-60	32-48-67	44-53-74	46-58-81	51-60-85
	Throw, Vertical	8	16	22	29	33	35	40	42
	Noise Criteria	–	–	24	29	34	38	41	46
8	Airflow, CFM/FT.	40	80	160	200	240	280	320	400
	Throw, Horizontal	6-10-21	12-21-41	21-32-55	28-46-64	37-53-74	46-58-78	51-60-85	53-64-90
	Throw, Vertical	8	17	21	30	35	40	42	43
	Noise Criteria	–	15	25	30	35	39	42	47

Noise Criteria 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	+4	+6	+7	+8	+10

Throw Correction Factors for Various Lengths

Length (ft.)	2	4	6	8	10	12
Multiplier	0.70	1.0	1.25	1.40	1.55	1.70

Performance Notes:

- 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.
- All pressures are in inches w.g..
- Horizontal throws are given at 150, 100 and 50 fpm terminal velocities. Vertical throws are given at 50 fpm terminal velocity. Both under isothermal conditions.
- Throw data are based on active sections 4 ft. long. For other lengths, use the correction factor table above.

- Noise criteria [NC] 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. For vertical throw, deduct 10 NC.
- Throw values are for a 1-way air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- Dash (–) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.024	.039
2	.049	.078
3	.073	.117
4	.098	.156
5	.122	.195
6	.146	.234
7	.171	.273
8	.195	.312

PERFORMANCE DATA:

SUPPLY • CONTINUOUS PRESSURIZED PLENUM

Model 5010 • 1" (25) Slot

B
LINEAR DIFFUSERS AND BAR GRILLES

No. of Slots	Total Pressure, Horizontal	.004	.016	.036	.065	.098	.138	.192	.245
	Total Pressure, Vertical	.002	.009	.024	.038	.057	.082	.113	.148
1	Airflow, CFM/FT.	10	15	25	30	40	50	55	65
	Throw, Horizontal	1-4-10	3-6-13	8-13-18	10-16-21	13-16-23	16-18-26	18-18-26	18-21-29
	Throw, Vertical	2	8	12	13	15	16	17	18
	Noise Criteria	-	-	18	22	29	34	37	41
2	Airflow, CFM/FT.	20	30	50	60	80	100	110	130
	Throw, Horizontal	3-7-18	5-10-21	13-18-26	16-21-31	18-23-39	21-26-42	23-34-44	26-39-47
	Throw, Vertical	4	10	16	19	20	21	23	25
	Noise Criteria	-	-	21	25	32	37	40	44
3	Airflow, CFM/FT.	30	45	75	90	120	150	165	195
	Throw, Horizontal	5-9-21	8-14-26	16-21-31	18-26-42	23-29-47	26-31-49	29-34-55	31-36-57
	Throw, Vertical	6	11	18	22	25	27	30	31
	Noise Criteria	-	-	23	27	34	39	42	46
4	Airflow, CFM/FT.	40	60	100	120	160	200	220	260
	Throw, Horizontal	8-10-26	12-19-31	18-26-42	21-29-47	26-39-55	29-42-57	31-44-62	34-47-68
	Throw, Vertical	7	13	21	26	29	30	34	36
	Noise Criteria	-	-	24	28	35	40	43	47
5	Airflow, CFM/FT.	50	75	125	150	200	250	275	325
	Throw, Horizontal	10-12-29	16-21-36	20-29-47	23-34-52	31-44-60	39-47-68	42-49-73	44-52-78
	Throw, Vertical	8	15	22	27	30	36	37	40
	Noise Criteria	-	-	25	29	36	41	44	48
6	Airflow, CFM/FT.	60	90	150	180	240	300	330	390
	Throw, Horizontal	11-14-31	18-23-39	21-31-42	26-42-57	39-47-68	42-52-70	44-57-75	47-60-81
	Throw, Vertical	8	17	26	30	34	36	41	44
	Noise Criteria	-	15	26	30	37	42	45	49
7	Airflow, CFM/FT.	70	105	175	210	280	350	385	455
	Throw, Horizontal	12-16-39	20-26-44	26-39-55	29-44-60	42-52-73	47-55-78	49-60-83	52-62-88
	Throw, Vertical	9	18	28	32	37	41	43	48
	Noise Criteria	-	15	26	30	37	42	45	49
8	Airflow, CFM/FT.	80	120	200	240	320	400	440	520
	Throw, Horizontal	13-18-42	21-29-47	26-42-57	34-47-68	47-55-78	49-57-81	55-62-86	57-68-94
	Throw, Vertical	11	20	30	35	40	45	50	51
	Noise Criteria	-	16	27	31	38	43	46	50

Noise Criteria 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	+4	+6	+7	+8	+10

Throw Correction Factors for Various Lengths

Length (ft.)	2	4	6	8	10	12
Multiplier	0.70	1.0	1.25	1.40	1.55	1.70

Performance Notes:

- 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.
- All pressures are in inches w.g..
- Horizontal throws are given at 150, 100 and 50 fpm terminal velocities. Vertical throws are given at 50 fpm terminal velocity. Both under isothermal conditions.
- Throw data are based on active sections 4 ft. long. For other lengths, use the correction factor table above.

- Noise criteria [NC] 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. For vertical throw, deduct 10 NC.
- Throw values are for a 1-way air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- Dash (-) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.030	.044
2	.060	.088
3	.090	.132
4	.121	.176
5	.151	.220
6	.181	.264
7	.211	.308
8	.241	.352

PERFORMANCE DATA:

SUPPLY • CONTINUOUS PRESSURIZED PLENUM

Model 5015 • 1 1/2" (38) Slot

No. of Slots	Total Pressure, Horizontal	.017	.032	.056	.082	.118	.154	.203	.250
	Total Pressure, Vertical	.010	.019	.033	.049	.071	.093	.122	.150
1	Airflow, CFM/FT.	18	25	33	40	48	55	63	70
	Throw, Horizontal	3-5-9	5-8-12	7-10-14	8-11-15	10-12-17	11-13-18	12-14-19	13-15-20
	Throw, Vertical	9	12	13	15	16	17	18	19
	Noise Criteria	–	–	21	26	31	35	38	41
2	Airflow, CFM/FT.	35	50	65	80	95	110	125	140
	Throw, Horizontal	5-8-14	8-12-17	10-13-20	12-16-25	13-17-27	15-18-29	16-19-30	17-20-32
	Throw, Vertical	11	16	19	20	21	23	25	27
	Noise Criteria	–	17	24	29	34	38	41	44
3	Airflow, CFM/FT.	53	75	98	120	143	165	188	210
	Throw, Horizontal	7-10-17	10-14-20	13-17-28	15-19-31	16-20-33	19-22-35	20-27-36	22-28-38
	Throw, Vertical	12	18	23	25	27	30	31	35
	Noise Criteria	–	19	26	31	36	40	43	46
4	Airflow, CFM/FT.	70	100	130	160	190	220	250	280
	Throw, Horizontal	9-14-22	12-17-27	14-20-32	17-25-36	18-27-38	20-29-40	22-31-44	24-33-47
	Throw, Vertical	15	21	26	29	31	34	36	40
	Noise Criteria	–	20	27	32	37	41	44	47
5	Airflow, CFM/FT.	88	125	163	200	238	275	313	350
	Throw, Horizontal	11-15-25	13-19-31	16-23-35	20-28-39	24-30-43	27-32-47	28-33-50	30-35-53
	Throw, Vertical	17	22	27	30	34	37	39	43
	Noise Criteria	–	21	28	33	38	42	45	48
6	Airflow, CFM/FT.	105	150	195	240	285	330	375	420
	Throw, Horizontal	12-17-27	14-20-32	18-27-40	25-31-44	27-33-46	29-37-49	30-38-52	31-39-55
	Throw, Vertical	18	26	31	34	37	41	43	45
	Noise Criteria	15	22	29	34	39	43	46	49

Noise Criteria 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	+ 4	+ 6	+ 7	+ 8	+ 10

Throw Correction Factors for Various Lengths

Length (ft.)	2	4	6	8	10	12
Multiplier	0.70	1.0	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. Horizontal throws are given at 150, 100 and 50 fpm terminal velocities. Vertical throws are given at 50 fpm terminal velocity. Both under isothermal conditions.

4. Throw data are based on active sections 4 ft. long. For other lengths, use the correction factor table above.

5. Noise criteria [NC] 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. For vertical throw, deduct 10 NC.

6. Throw values are for a 1-way air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

7. Dash (–) in space indicates an Noise Criteria level of less than 15.

8. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

HOW TO ORDER

LINEAR SLOT DIFFUSER – MODEL SERIES 5000

MODELS 5050, 5075, 5010, 5015, 5050R, 5075R, 5010R, 5015R, 5050BO, 5075BO, 5010BO, 5015BO

EXAMPLE: 5075 - 48" x 2 SLOT - C - AW - MM - —

1. Models

Supply

5050	1/2" (13) Slot
5075	3/4" (19) Slot
5010	1" (25) Slot
5015	1 1/2" (38) Slot

Return

5050R	1/2" (13) Slot
5075R	3/4" (19) Slot
5010R	1" (25) Slot
5015R	1 1/2" (38) Slot

Blank-Off

5050BO	1/2" (13) Slot – 6 ft. long
5075BO	3/4" (19) Slot – 6 ft. long
5010BO	1" (25) Slot – 6 ft. long
5015BO	1 1/2" (38) Slot – 6 ft. long

2. Nominal Length

inches or mm's

3. No. of Slots

1 through 10

4. Frame or Frame/Sub-Frame Combination

A	1 1/8" (29) Flange Frame, screwholes
B	1 1/8" (29) Flange Frame, no screwholes
C	1 1/8" (29) Flange Frame, concealed mounting
D	7/8" (22) Flange Frame, concealed mounting
E	3/4" (19) Flush Frame/sub-frame, concealed mounting
F	1 1/8" (29) Flange Frame/sub-frame, concealed mounting
FL	Fineline® Frame
G	7/8" (22) Flush Frame/plaster sub-frame, concealed mounting
H	1 1/8" (29) Flange Frame/plaster sub-frame, concealed mounting
H2	7/8" (22) Flange Frame/plaster sub-frame, concealed mounting
*J	Tape & Spackle Frame, concealed mounting

*KA Tape & Spackle Frame, Countersunk screw holes (both sides)

*K1 Tape & Spackle Frame, HC5 Hard Ceiling Clip, 1/2" (13) drywall (both sides)

*K2 Tape & Spackle Frame, HC1 Hard Ceiling Clip, 5/8" (16) drywall (both sides)

M Flangeless Frame/Duct mounting

N Spline Frame, concealed mounting

T 7/8" (22) Flange Frame – T-Bar

5. Finish

AW	Appliance White (default)
AL	Aluminum
BW	British White
BK	Black
DBP	Dark Bronze Paint
LBP	Light Bronze Paint
MBP	Medium Bronze Paint
MI	Mill
PC	Prime Coat
PPA	Paint Prepared Aluminum
SP	Special Custom Color
SA	Satin (clear) anodized
BC	Brushed and clear coat lacquer

6. End Cap Configuration

MM	Mitered Mitered (default)
MO	Mitered Open
MC	Mitered Flat
OO	Open Open
OC	Open Flat
CC	Flat Flat
FF	Flanged Flanged
FO	Flanged Open
FC	Flanged Flat

OPTIONS & ACCESSORIES

7. Angle Cut

—	None (default)
AC1	One End, Specify Angle
AC2	Both Ends, Specify Angle

End Cap Availability

Frame or Frame/Subframe Combination	End Cap
A, B, C, D, E, F, G, H, H2	M, C, F, O
FL	M, O
J, KA, K1, K2, T	M, C, O
M, N	C, O

Notes:

1. Flanged end caps (FF) may be shipped loose upon request for field attachment and are intended for use with Field Cut sections or for use by stocking representatives.
2. It is helpful to include a sketch for multiple units with mitered corners and angle cuts. Specify exact outside length of diffuser run and angles.
3. For lay-in T-Bar installations, specify nominal T-Bar opening length.
4. Frame type T with Type CC end caps is not recommended for use with 9/16" (14) lay-in T-Bar.
5. Blank-offs are supplied in 6 ft. sections for field trimming. Specify No. of slots only.
6. *Frame Types J, KA, K1 and K2 are supplied with "MI" Mill finish on the outer frame and AW Appliance White on the center tees.

HOW TO ORDER

MITERED CORNER SECTION – LINEAR SLOT DIFFUSER – MODEL SERIES 5000 MODELS 5050MC, 5075MC, 5010MC, 5015MC

EXAMPLE: 5075MC - 2 SLOT - 12 - C - AW - 90

1. Models

- 5050MC 1/2" (13) Slot
- 5075MC 3/4" (19) Slot
- 5010MC 1" (25) Slot
- 5015MC 1 1/2" (38) Slot

2. No. of Slots

1 through 10

3. Duct Length O. D.

- 12 12" Outside Length
- 16 16" Outside Length
- 24 24" Outside Length
- 36 36" Outside Length

(see page B16)

4. Frame or Frame/Sub-Frame Combination

- A 1 1/8" (29) Flange Frame, screwholes
- B 1 1/8" (29) Flange Frame, no screwholes
- C 1 1/8" (29) Flange Frame, concealed mounting
- D 7/8" (22) Flange Frame, concealed mounting
- E 3/4" (19) Flush Frame & sub-frame, concealed mtg.
- F 1 1/8" (29) Flange Frame & sub-frame, concealed mtg.
- FL Finline® Frame
- G 7/8" (22) Flush Frame w/plaster & tile sub-frame, concealed mounting
- H 1 1/8" (29) Flange Frame w/plaster & tile sub-frame, concealed mounting
- H2 7/8" (22) Flange Frame w/plaster & tile sub-frame, concealed mounting
- *J Tape & Spackle Frame, concealed mounting
- *KA Tape & Spackle Frame, Countersunk screw holes (both sides)
- *K1 Tape & Spackle Frame, HC5 Hard Ceiling Clip, 1/2" (13) drywall (both sides)
- *K2 Tape & Spackle Frame, HC1 Hard Ceiling Clip, 5/8" (16) drywall (both sides)
- M Flangeless Frame/Duct mounting
- N Spline Frame, concealed mounting
- T 7/8" (22) Flange Frame – T-Bar

5. Finish

- AW Appliance White (default)
- AL Aluminum
- BW British White
- BK Black
- DBP Dark Bronze Paint
- LBP Light Bronze Paint
- MBP Medium Bronze Paint
- MI Mill
- PC Prime Coat
- PPA Paint Prepared Aluminum
- SP Special Custom Color
- SA Satin (clear) anodized
- BC Brushed and clear coat lacquer

6. Mitered Angle

- 90 90° (default)
- 135 135°
- AN Degree of Angle (Specify angle = ____)

Notes:

1. It is helpful to include a sketch for multiple units with mitered corners and angle cuts. Specify exact outside length of diffuser run and angles.
2. Mitered corner selection is supplied inactive with integral blank-offs.
3. *Frame Types J, KA, K1 and K2 are supplied with "MI" Mill finish on the outer frame and AW Appliance White on the center tees.

HOW TO ORDER

TECHZONE™ LINEAR SLOT DIFFUSERS

MODEL SERIES 5075TZ • 3/4" (19) SLOT • 4" (102) AND 6" (152) CEILING MODULE

EXAMPLE: 5075TZ - 48" x 2 SLOT - 4" - L - AW - CC

1. **Models**

Slot Width / Fabrication

Supply

5075TZ 3/4" (19) Slot

Return

5075TZR 3/4" (19) Slot

2. **Nominal Length**

inches or mm's

3. **No. of Slots**

1, 2, 3, 4

4" (102) Ceiling Module, 1 and 2 slot only.

6" (152) Ceiling Module.

4. **Ceiling Module Width**

04 4" (102) Wide

06 6" (152) Wide

5. **Frame Type**

L Lay-in T-Bar

NT Narrow T-Bar Lay-in

TL Tegular Lay-in

6. **Finish**

AW Appliance White (default)

AL Aluminum

BW British White

MI Mill

PC Prime coat paint

7. **End Cap Configuration**

CC Flat Flat (default)

OO Open Open

OC Open Flat

Notes:

1. Nailor 5075TZ Series Linear Diffusers are compatible with both Armstrong® TechZone™ and USG Interiors, Inc.® Logix™ Ceiling Systems.

2. Ensure Diffuser Frame Type selection correctly matches architectural suspension ceiling system T-Bar and ceiling panel type selection.

Frame Type L is for standard 15/16" (24) flat T-Bars usually with flush ceiling tiles.

Frame Type NT is for both 9/16" (14) flat T-Bars usually with tegular (drop-face) ceiling tiles and 9/16" (14) Bolt-Slot (regressed) T-Bars with tegular ceiling tiles which provides a flush finish.

Frame Type TL is for standard 15/16" (24) flat T-Bars with tegular (drop-face) ceiling tiles.

3. Frame Type TL is not available in 4 slots.

HOW TO SPECIFY

LINEAR SLOT DIFFUSERS – MODEL SERIES 5000

MODELS 5015, 5010, 5075, 5050, 5015R, 5010R, 5075R, 5050R

SUGGESTED SPECIFICATION:

Models 5015, 5010, 5075, 5050

Furnish and install **Nailor Model** (select one) **5015** (1 1/2" [38] slot), **5010** (1" [25] slot), **5075** (3/4" [19] slot), or **5050** (1/2" [13] slot) **Linear Slot Supply Diffusers** of the sizes and capacities shown on the plans and air distribution schedules. The maximum length of a single section shall be 72" (1829) long. All sizes larger than 72" (1829) will be provided in continuous multiple sections. Alignment strips are to be provided for joining continuous diffuser sections together. The frame borders and end caps shall be extruded aluminum with extruded aluminum spacers. The linear shall be supplied in 1 – 10 slots wide as specified. Pattern deflectors shall have an aerodynamic 'ice tong' shape that can be adjusted to regulate the volume and direction of the airflow. The maximum length of the deflectors shall be 36" (914), longer sizes shall be provided in multiple sections. The pattern deflector finish shall be black. The frame/border finish is to be AW Appliance White (optional finishes are available).

The manufacturer shall provide published performance data for the linear slot diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

Models 5015R, 5010R, 5075R, 5050R

Furnish and install **Nailor Model** (select one) **5015R** (1 1/2" [38] slot), **5010R** (1" [25] slot), **5075R** (3/4" [19] slot), or **5050R** (1/2" [13] slot) **Linear Slot Return Diffusers** of the sizes and capacities shown on the plans and air distribution schedules. The maximum length of a single section shall be 72" (1829) long. All sizes larger than 72" (1829) will be provided in continuous multiple sections. Alignment strips are to be provided for joining continuous diffuser sections together. The frame border and end caps shall be extruded aluminum with extruded aluminum spacers. The linear shall be supplied in 1 – 10 slots wide as specified. The finish is to be AW Appliance White (optional finishes are available).

The manufacturer shall provide published performance data for the linear slot diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

TECHZONE™ LINEAR SLOT DIFFUSERS – MODEL SERIES 5000TZ

MODELS 5075TZ, 5075TZR

SUGGESTED SPECIFICATION:

Model 5075TZ

Furnish and install **Nailor Model 5075TZ** (3/4" [19] slot) **Linear Slot Supply Diffusers for TechZone™ Ceilings** of the sizes and capacities as shown on the plans and air distribution schedules. The linear diffuser must fit a lay-in style T-Bar as specified in either a 4" (102) or 6" (152) ceiling module width, as determined by the TechZone™ ceiling system selected. The linear shall be supplied with 1 – 4 slots as specified. The maximum length of a single section shall be 72" (1829) long. All sizes larger than 72" (1829) will be provided in continuous multiple sections. Alignment strips are to be provided for joining continuous diffuser sections together. The frame borders and end caps shall be extruded aluminum with extruded aluminum spacers. Corrosion-resistant steel pattern deflectors shall have an aerodynamic "ice tong" shape that can be adjusted to regulate the volume and direction of the airflow. Pattern deflector finish shall be black. The maximum length of the deflectors shall be 36" (914), longer sizes shall be provided in multiple sections. The frame/border finish shall be AW Appliance White (optional finishes are available).

The manufacturer shall provide published performance data for the linear slot diffusers, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

Model 5075TZR

Furnish and install **Nailor Model 5075TZR** (3/4" [19] slot) **Linear Slot Return Diffusers for TechZone™ Ceilings** of the sizes and capacities as shown on the plans and air distribution schedules. The linear diffuser will have 1 – 4 slots, must fit a lay-in style T-Bar, as specified, and fit either a 4" (102) or 6" (152) ceiling module width, as determined by the TechZone™ ceiling system selected. The maximum length of a single section shall be 72" (1829) long. All sizes larger than 72" (1829) will be provided in continuous multiple sections. Alignment strips are to be provided for joining continuous diffuser sections together. The frame borders and end caps shall be extruded aluminum with extruded aluminum spacers. Model 5075TZR is a matching return diffuser and supplied without pattern controllers. The finish shall be AW Appliance White (optional finishes are available).

The manufacturer shall provide published performance data for the linear slot diffusers, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

LINEAR SLOT DIFFUSER PLENUMS

- ADAPTORS FOR MODEL SERIES 5000 LINEAR SLOT 'ICE TONG' DIFFUSERS
- HEMMED OR STRAIGHT LEG
- STANDARD OR MODIFIED MODELS
- 1 THROUGH 8 SLOTS

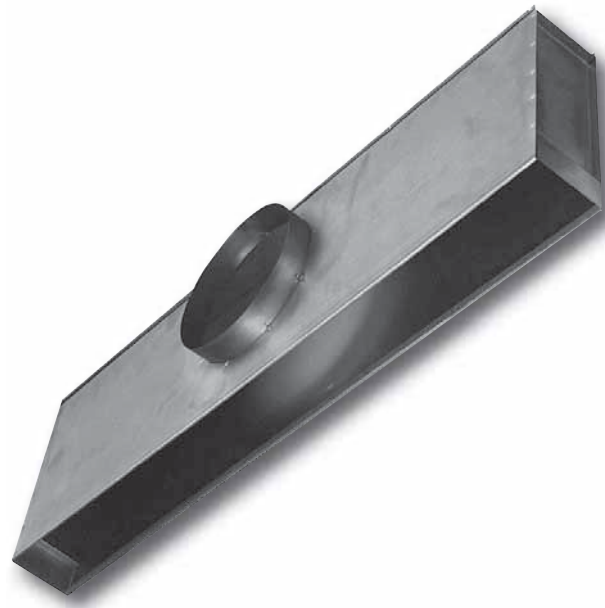
Standard Models:

- 5350(I) 1/2" (13) Slot
- 5375(I) 3/4" (19) Slot
- 5310(I) 1" (25) Slot
- 5315(I) 1 1/2" (38) Slot

Modified Performance Models:

- 5350(I)MP 1/2" (13) Slot
- 5375(I)MP 3/4" (19) Slot
- 5310(I)MP 1" (25) Slot
- 5315(I)MP 1 1/2" (38) Slot

- Suffix 'I' adds internal insulation



Model 5375

Model Series 5300 Diffuser Plenums are designed specifically to fit the 5000 Series 'Ice Tong' Linear Slot Diffusers. They have been designed for flexible duct connection with a model to suit each of the various frame/sub-frame 5000 Series combinations available. For drywall ceiling mounted applications, the plenums are installed separately. Unless there is access to the ceiling space, the plenum is intended to be installed during the drywall installation. Most applications of this type utilize concealed mounting straps on the 5000 Series. The plenums may be supplied with a hemmed leg into which the mounting straps snap or they locate in extrusion slots on sub-frames as the linear is drawn up to the plenum from below the ceiling. Model Series 5300 Plenums save on-site fabrication and field labor as well as maximizing performance of Model Series 5000. When room lay-out changes occur, the plenums can be simply relocated to satisfy the re-arrangement of air distribution requirements. The airflow discharge maintains a horizontal pattern that is close and tight to the ceiling throughout the full range of cataloged air volumes. Excellent for variable air volume applications. Model Series 5300MP Modified Performance Plenums are fabricated in a similar manner to the 5300 Series with the addition of internal sloping baffles for reduced throw and increased spread of the air pattern.

STANDARD FEATURES:

- Standard nominal lengths are 20", 24", 30", 36", 48", 60" and 72" (500, 600, 750, 900, 1200, 1500 and 1800 mm).
- Widths available to fit Model Series 5000 and 5000R with option of 1 to 8 slots.
- Easily installed with flexible duct.
- Ends caps can be turned up to allow plenums to be installed on continuous runs.

CONSTRUCTION MATERIAL:

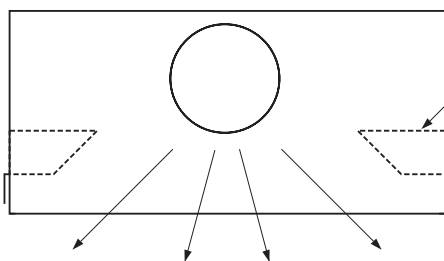
Corrosion-resistant steel.

OPTIONS & ACCESSORIES:

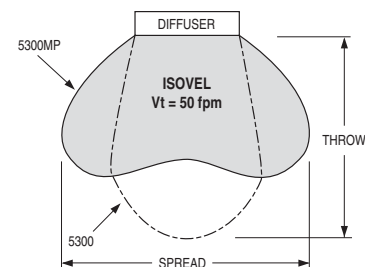
- Internal insulation for Models 5350I(MP), Models 5375I(MP), 5310I(MP) & 5315IMP or 1/4" (6) coated fiberglass or 3/8" (10) fiber-free foam.
- EX External Foil Back insulation.
- ID Inlet dampers with hand locking quadrant are available.

- IDCO Cable Operated Damper with a radial sliding blade design factory mounted on the inlet.

MP Modified Performance



INTEGRAL BAFFLES
REDUCE THROW
AND INCREASE
SPREAD FOR
IMPROVED COMFORT
IN SHORT-THROW
APPLICATIONS.



DIMENSIONAL DATA:

ACCESSORIES FOR MODEL SERIES 5000 LINEAR SLOT ICE TONG DIFFUSER • 1 TO 8 SLOT MODELS 5350, 5375, 5310 AND 5315(I)(MP)

B LINEAR DIFFUSERS AND BAR GRILLES

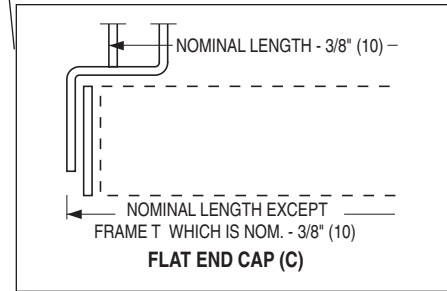
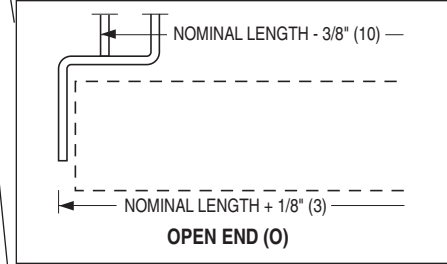
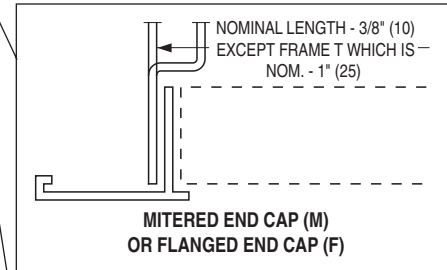
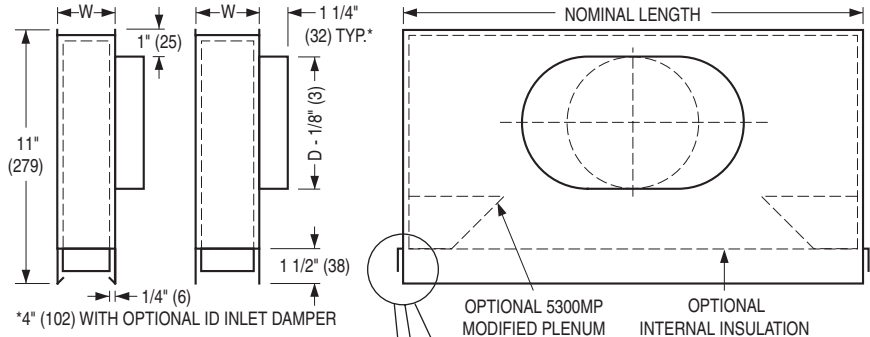
Nominal Length		Standard Nominal Inlets (D)	
inches	mm	inches	mm
24	610	4, 5, 6, 8, 10	102, 127, 152, 203, 254
30	762		
36	914		
48	1219	6, 8, 10, 12, 14	152, 203, 254, 305, 356
60	1524		
72	1829		

Plenum		Inlet Type / Size	
Code	Height	D (Round)	D (Oval)
H11	11" (279)	04 - 08	10 - 14
H13	13" (330)	04 - 08, 10 - 14	12 - 14
H15	15" (381)	04 - 08, 10R, 12R	14
H17	17" (432)	04 - 08, 10R - 14R	—

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).

HEMMED LEG FRAME TYPES:
C, D, J, N

STRAIGHT LEG FRAME TYPES:
A, B, E, F, FL, G, H, H2, KA, K1, K2, M, T



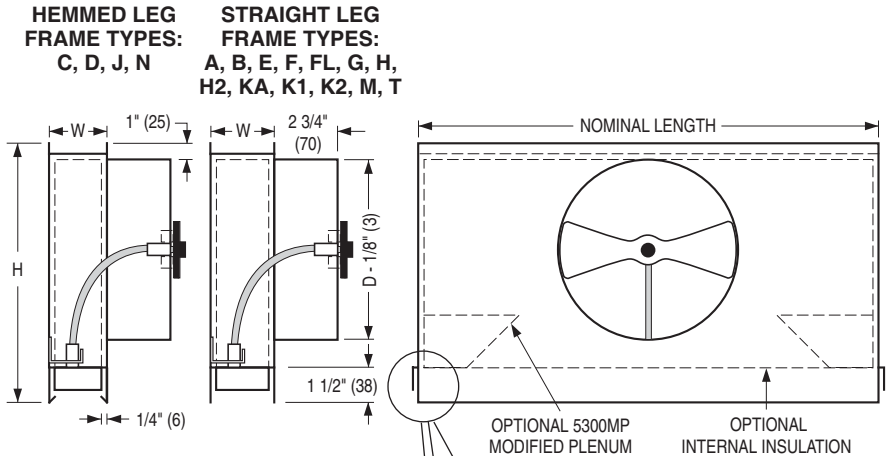
Model	No. of Slots	Plenum Width (W) For Various Frame Types									
		Imperial Units (inches)					Metric Units (mm)				
		A, B, FL, KA, K1, K2, M, T	C, D, F, J, H, H2, N	E	G	A, B, FL, KA, K1, K2, M, T	C, D, F, J, H, H2, N	E	G		
5350	1	1 1/2	2	2 1/4	2 1/2	38	51	57	64		
5375		1 3/4	2 1/4	2 1/2	2 3/4	44	57	64	70		
5310		2	2 1/2	2 3/4	3	51	64	70	76		
5315		2 1/2	3	3 1/4	3 1/2	64	76	83	89		
5350	2	2 3/4	3 1/4	3 1/2	3 3/4	70	83	89	95		
5375		3 1/4	3 3/4	4	4 1/4	83	95	102	108		
5310		3 3/4	4 1/4	4 1/2	4 3/4	95	108	114	121		
5315		4 3/4	5 1/4	5 1/2	5 3/4	121	133	140	146		
5350	3	4	4 1/2	4 3/4	5	102	114	121	127		
5375		4 3/4	5 1/4	5 1/2	5 3/4	121	133	140	146		
5310		5 1/2	6	6 1/4	6 1/2	140	152	159	165		
5315		7	7 1/2	7 3/4	8	178	191	197	203		
5350	4	5 1/4	5 3/4	6	6 1/4	133	146	152	159		
5375		6 1/4	6 3/4	7	7 1/4	159	171	178	184		
5310		7 1/4	7 3/4	8	8 1/4	184	197	203	210		
5315		9 1/4	9 3/4	10	10 1/4	235	248	254	260		
5350	5	6 1/2	7	7 1/4	7 1/2	165	178	184	191		
5375		7 3/4	8 1/4	8 1/2	8 3/4	197	210	216	222		
5310		9	9 1/2	9 3/4	10	229	241	248	254		
5315		11 1/2	12	12 1/4	12 1/2	292	305	311	318		
5350	6	7 3/4	8 1/4	8 1/2	8 3/4	197	210	216	222		
5375		9 1/4	9 3/4	10	10 1/4	235	248	254	260		
5310		10 3/4	11 1/4	11 1/2	11 3/4	273	286	292	298		
5315		13 3/4	14 1/4	14 1/2	14 3/4	349	362	368	375		
5350	7	9	9 1/2	9 3/4	10	229	241	248	254		
5375		10 3/4	11 1/4	11 1/2	11 3/4	273	286	292	298		
5310		12 1/2	13	13 1/4	13 1/2	318	330	337	343		
5315		16	16 1/2	16 3/4	17	406	419	425	432		
5350	8	10 1/4	10 3/4	11	11 1/4	260	273	279	286		
5375		12 1/4	12 3/4	13	13 1/4	311	324	330	337		
5310		14 1/4	14 3/4	15	15 1/4	362	375	381	387		
5315		18 1/4	18 3/4	19	19 1/4	464	476	483	489		

DIMENSIONAL DATA:

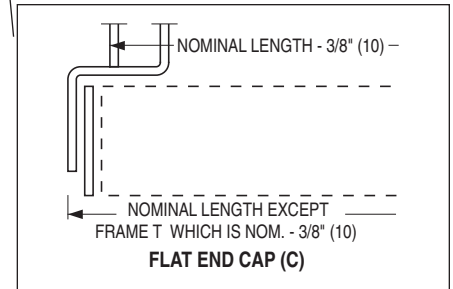
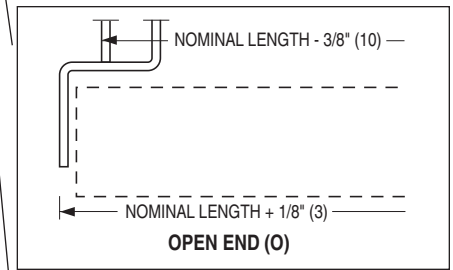
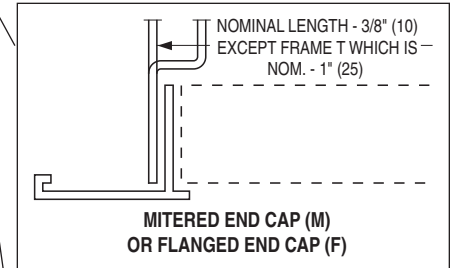
ACCESSORIES FOR MODEL SERIES 5000 LINEAR SLOT ICE TONG DIFFUSER • 1 TO 8 SLOT MODELS 5375(I), 5310(I), 5315(I), 5375(I)MP, 5310(I)MP, 5315(I)MP WITH IDCO OPTION

Nominal Length		Standard Nominal Inlets (D)	
inches	mm	inches	mm
20	508	6, 8, 10	152, 203, 254
24	610		
30	762		
36	914		
48	1219	6, 8, 10, 12, 14	152, 203, 254, 305, 356
60	1524		
72	1829		

Plenum		Inlet Type / Size
Code	Height	D (Round)
H11	11" (279)	06 - 08
H13	13" (330)	10R
H15	15" (381)	12R
H17	17" (432)	14R



Model	No. of Slots	Plenum Width (W) For Various Frame Types									
		Imperial Units (inches)					Metric Units (mm)				
		A, B, FL, KA, K1, K2, M, T	C, D, F, J, H, H2, N	E	G	A, B, FL, KA, K1, K2, M, T	C, D, F, J, H, H2, N	E	G		
5375	1	1 3/4	2 1/4	2 1/2	2 3/4	44	57	64	70		
5310		2	2 1/2	2 3/4	3	51	64	70	76		
5315		2 1/2	3	3 1/4	3 1/2	64	76	83	89		
5375	2	3 1/4	3 3/4	4	4 1/4	83	95	102	108		
5310		3 3/4	4 1/4	4 1/2	4 3/4	95	108	114	121		
5315		4 3/4	5 1/4	5 1/2	5 3/4	121	133	140	146		
5375	3	4 3/4	5 1/4	5 1/2	5 3/4	121	133	140	146		
5310		5 1/2	6	6 1/4	6 1/2	140	152	159	165		
5315		7	7 1/2	7 3/4	8	178	191	197	203		
5375	4	6 1/4	6 3/4	7	7 1/4	159	171	178	184		
5310		7 1/4	7 3/4	8	8 1/4	184	197	203	210		
5315		9 1/4	9 3/4	10	10 1/4	235	248	254	260		
5375	5	7 3/4	8 1/4	8 1/2	8 3/4	197	210	216	222		
5310		9	9 1/2	9 3/4	10	229	241	248	254		
5315		11 1/2	12	12 1/4	12 1/2	292	305	311	318		
5375	6	9 1/4	9 3/4	10	10 1/4	235	248	254	260		
5310		10 3/4	11 1/4	11 1/2	11 3/4	273	286	292	298		
5315		13 3/4	14 1/4	14 1/2	14 3/4	349	362	368	375		
5375	7	10 3/4	11 1/4	11 1/2	11 3/4	273	286	292	298		
5310		12 1/2	13	13 1/4	13 1/2	318	330	337	343		
5315		16	16 1/2	16 3/4	17	406	419	425	432		
5375	8	12 1/4	12 3/4	13	13 1/4	311	324	330	337		
5310		14 1/4	14 3/4	15	15 1/4	362	375	381	387		
5315		18 1/4	18 3/4	19	19 1/4	464	476	483	489		



LINEAR SLOT DIFFUSER PLENUMS FOR TECHZONE™ TYPE CEILINGS

- PLENUMS FOR 5075TZ SERIES TECHZONE™
- STRAIGHT LEG
- STANDARD OR MODIFIED PLENUM
- 1 THROUGH 4 SLOTS

B LINEAR DIFFUSERS AND BAR GRILLES

Standard Model:

5375TZ(I) 3/4" (19) Slot

Modified Performance Model:

5375TZ(I)MP 3/4" (19) Slot

- Suffix 'I' adds internal insulation



Model 5375TZ (MP)

Model Series 5375TZ(I)MP Diffuser Plenums are designed specifically to fit the Model Series 5000TZ(I) 'Ice Tong' Linear Slot Diffusers. They have been designed for flexible duct connection with a model to suit each of the various frame/sub-frame 5000TZ Series combinations available. For drywall ceiling mounted applications, the plenums are installed separately. Unless there is access to the ceiling space, the plenum is intended to be installed during the drywall installation. Most applications of this type utilize concealed mounting straps on the 5000TZ Series. The plenums may be supplied with a hemmed leg into which the mounting straps snap or they locate in extrusion slots on sub-frames as the linear is drawn up to the plenum from below the ceiling. Model Series 5300 Plenums save on-site fabrication and field labor. When room lay-out changes occur, the plenums can be simply relocated to satisfy the re-arrangement of air distribution requirements. Model Series 5300 Plenums maximize the 5000TZ Series performance. The airflow discharge maintains a horizontal pattern that is close and tight to the ceiling throughout the full range of cataloged air volumes. Excellent for variable air volume applications. Model Series 5375TZ(I)MP Modified Performance Plenums are fabricated in a similar manner to the 5300 Series with the addition of internal sloping baffles for reduced throw and increased spread of the air pattern.

STANDARD FEATURES:

- Straight Leg Frame Types are L, TL and NT.
- Nailor 5375TZ Series Plenums are designed specifically for field attachment to the 5075TZ Series Linear Slot Diffuser. They ensure optimum use of the 5075TZ Series VAV performance, providing a tight horizontal air pattern even at low volumes. Optional MP models incorporate integral baffles, which provide a reduction in throw and increased spread of the air pattern.
- Standard nominal lengths are 24", 30", 36", 48", 60" and 72" (600, 750, 900, 1200, 1500 and 1800 mm).

- Widths available to fit Model Series 5000TZ and 5000TZR with 1, 2, 3 or 4 slots.
- Easily installed with flexible duct.
- Ends caps can be turned up and field trimmed as necessary to allow plenums to fit diffuser length and provide a blank-off to reduce air leakage at end of diffuser.

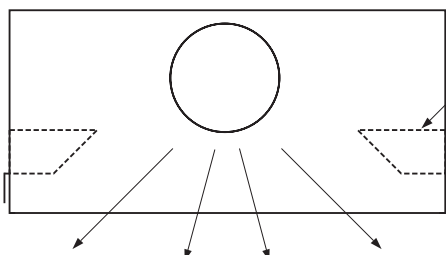
CONSTRUCTION MATERIAL:

Corrosion-resistant steel.

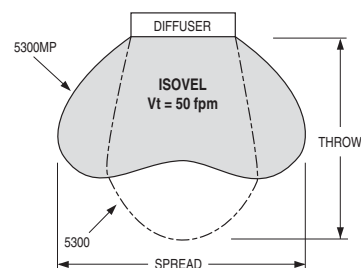
OPTIONS & ACCESSORIES:

- Optional internal insulation for Models 5375TZ(I)(MP) 1/4" (6) coated fiberglass or 3/8" (10) fiber-free foam.
- ID Inlet are available.
- EX External Foil Back insulation.
- IDCO Cable Operated Damper with a radial sliding blade design factory mounted on the inlet and is only available with 06, 08, 10R, 12R and 14R round inlets.

MP Modified Performance



INTEGRAL BAFFLES REDUCE THROW AND INCREASE SPREAD FOR IMPROVED COMFORT IN SHORT-THROW APPLICATIONS.



DIMENSIONAL DATA:

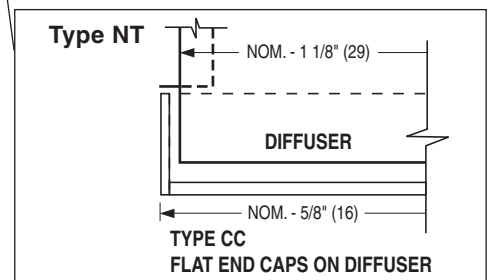
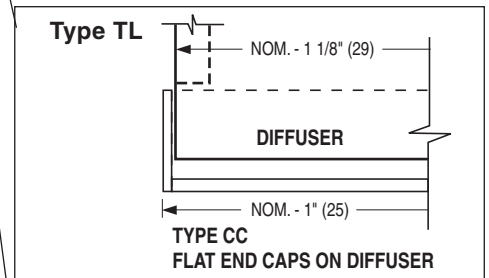
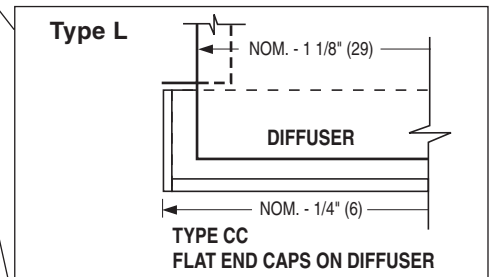
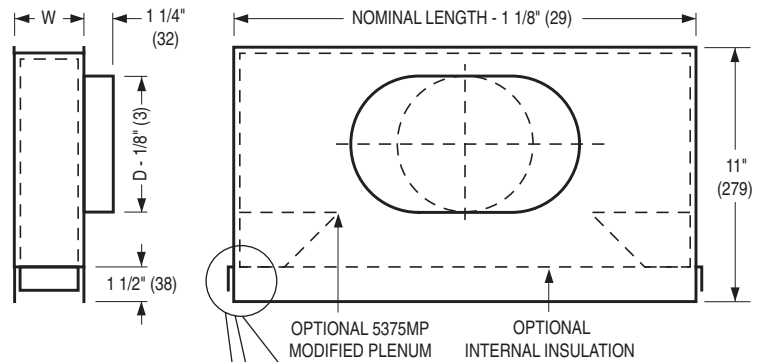
ADAPTORS FOR MODEL SERIES 5000TZ LINEAR SLOT DIFFUSER • 1 THROUGH 4 SLOT MODELS 5375TZ(I)(MP)

Nominal Length		Standard Nominal Inlets (D)	
inches	mm	inches	mm
24	610	4, 5, 6, 8, 10	102, 127, 152, 203, 254
30	762		
36	914		
48	1219	6, 8, 10, 12, 14	152, 203, 254, 305, 356
60	1524		
72	1829		

Inlet sizes 4" – 8" (102 – 203) are round and 10" – 14" (254 – 356) are flat oval.

No. of Slots	Plenum Width (W) For Various Frame Types			
	Imperial Units (inches)		Metric Units (mm)	
	L, NT	TL	L, NT	TL
1	1 1/2	1 1/2	38	38
2	2 3/4	2 3/4	70	70
3	4	4	102	102
4	5 1/4	N/A	133	N/A

**STRAIGHT LEG FRAME TYPES:
L, NT, TL**



DIMENSIONAL DATA:

ADAPTORS FOR MODEL SERIES 5075TZ LINEAR SLOT DIFFUSER • 1 THROUGH 4 SLOT MODELS 5375TZ(MP) WITH IDCO OPTION

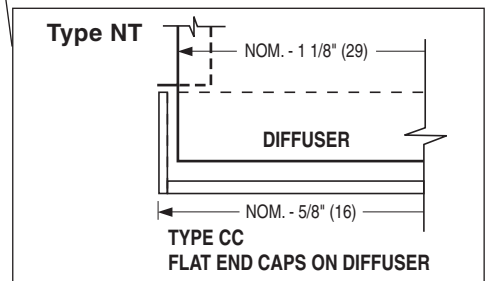
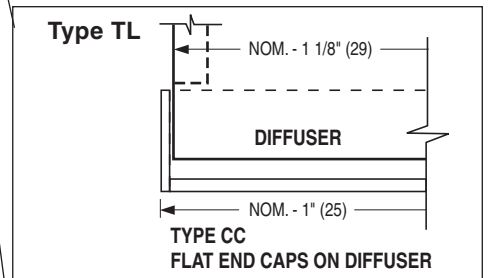
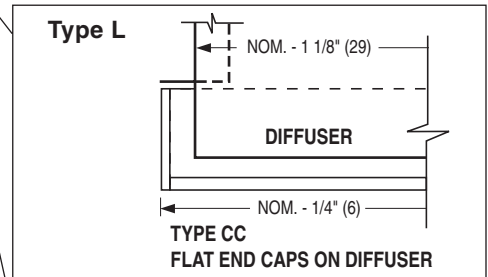
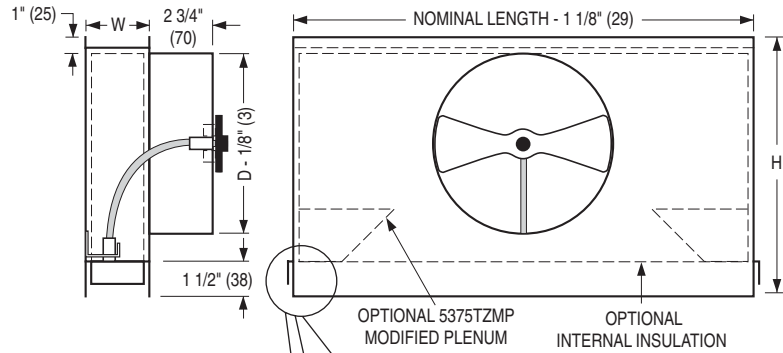
B LINEAR DIFFUSERS AND BAR GRILLES

Nominal Length		Standard Nominal Inlets (D)	
inches	mm	inches	mm
24	610	6, 8, 10	152, 203, 254
30	762		
36	914		
48	1219	6, 8, 10, 12, 14	152, 203, 254, 305, 356
60	1524		
72	1829		

Plenum		Inlet Type / Size	
Code	Height	D (Round)	
H11	11" (279)	6" (152), 8" (203)	
H13	13" (330)	10" (254)	
H15	15" (381)	12" (305)	
H15	17" (432)	14" (356)	

No. of Slots	Plenum Width (W) For Various Frame Types			
	Imperial Units (inches)		Metric Units (mm)	
	L, NT	TL	L, NT	TL
1	1 1/2	1 1/2	38	38
2	2 3/4	2 3/4	70	70
3	4	4	102	102
4	5 1/4	N/A	133	N/A

**STRAIGHT LEG FRAME TYPES:
L, NT, TL**



PERFORMANCE DATA:

MODEL 5350(I) • 1/2" (13) SLOT WIDTH

1 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	20	30	40	50	60	70	80	90
	Total Pressure	.017	.038	.068	.107	.154	.209	.273	.346
	Noise Criteria	–	17	23	29	33	37	41	43
	Throw	3-4-8	5-6-10	6-8-12	7-9-13	8-10-14	9-11-15	9-11-16	10-12-16

1 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	35	50	65	80	95	110	125	140
	Total Pressure	.023	.047	.080	.121	.171	.229	.295	.371
	Noise Criteria	–	19	25	30	34	37	40	43
	Throw	3-5-10	6-8-13	7-10-15	9-11-17	10-13-18	11-14-19	12-14-20	12-15-21
8" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	Total Pressure	.030	.051	.077	.109	.146	.188	.236	.29
	Noise Criteria	15	21	26	30	33	36	39	42
	Throw	6-8-13	7-10-15	9-11-17	10-13-18	11-14-19	12-14-20	12-15-21	13-16-22

1 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	Total Pressure	.025	.043	.064	.091	.122	.157	.198	.242
	Noise Criteria	–	20	26	30	34	37	40	42
	Throw	5-7-13	7-9-15	8-11-17	9-12-19	10-13-20	11-14-21	12-15-22	13-16-23
8" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	Total Pressure	.021	.036	.055	.077	.103	.133	.167	.205
	Noise Criteria	–	17	22	26	30	34	37	39
	Throw	5-7-13	7-9-15	8-11-17	9-12-19	10-13-20	11-14-21	12-15-22	13-16-23

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
- Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
- Dash (–) in space indicates an Noise Criteria level of less than 15.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.018	.033
2	.035	.066
3	.053	.099
4	.070	.132

PERFORMANCE DATA:

MODEL 5350(I) • 1/2" (13) SLOT WIDTH

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	35	50	65	80	95	110	125	140
	Total Pressure	.021	.042	.072	.108	.153	.205	.265	.332
	Noise Criteria	–	20	26	31	36	39	42	45
	Throw	3-6-10	5-8-13	7-10-15	8-11-16	9-12-18	10-13-19	11-14-20	12-15-21

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.042	.074	.116	.168	.228	.298	.377	.465
	Noise Criteria	–	19	24	28	32	36	38	41
	Throw	2-6-13	5-9-16	7-11-18	9-13-20	10-14-22	11-16-23	13-17-25	13-18-26
8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	Total Pressure	.039	.060	.087	.118	.154	.195	.241	.291
	Noise Criteria	16	20	24	28	31	34	37	39
	Throw	5-9-16	7-11-18	9-13-20	10-14-22	11-16-23	13-17-25	13-18-26	14-19-27
10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	Total Pressure	.041	.058	.079	.104	.131	.162	.196	.233
	Noise Criteria	18	22	26	29	32	35	37	39
	Throw	7-11-18	9-13-20	10-14-22	11-16-23	13-17-25	13-18-26	14-19-27	15-19-28

2 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	120	140	160	180	200	220	240	260
	Total Pressure	.071	.097	.126	.160	.198	.239	.284	.334
	Noise Criteria	21	25	28	31	34	36	38	40
	Throw	8-12-20	9-14-22	11-15-23	12-16-25	13-17-26	14-18-27	15-19-28	15-20-29
10" Oval Inlet	Airflow, CFM	140	160	180	200	220	240	260	280
	Total Pressure	.065	.085	.107	.133	.161	.191	.224	.260
	Noise Criteria	22	25	28	31	33	35	37	39
	Throw	9-14-22	11-15-23	12-16-25	13-17-26	14-18-27	15-19-28	15-20-29	16-21-30

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
- Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- Performance data is based upon the standard **5300 Series** Model.
The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%.
Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
- Dash (–) in space indicates an Noise Criteria level of less than 15.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.018	.033
2	.035	.066
3	.053	.099
4	.070	.132

B

LINEAR DIFFUSERS AND BAR GRILLES

PERFORMANCE DATA:

MODEL 5375(I) • 3/4" (19) SLOT WIDTH

1 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	20	30	40	50	60	70	80	90
	Total Pressure	.014	.031	.055	.085	.123	.168	.219	.277
Noise Criteria	–	–	20	26	30	34	37	40	
Throw	2-4-08	4-6-11	6-8-13	7-10-14	8-11-16	9-12-17	9-12-18	10-13-18	
8" Round Inlet	Airflow, CFM	30	40	50	60	70	80	90	100
	Total Pressure	.026	.046	.073	.104	.142	.186	.235	.290
Noise Criteria	–	17	22	26	30	32	35	38	
Throw	4-6-11	6-8-13	7-10-14	8-11-16	9-12-17	9-12-18	10-13-18	11-14-19	
10" Oval Inlet	Airflow, CFM	40	50	60	70	80	90	100	110
	Total Pressure	.037	.058	.084	.114	.149	.188	.232	.281
Noise Criteria	–	18	22	26	29	32	35	37	
Throw	6-8-13	7-10-14	8-11-16	9-12-17	9-12-18	10-13-18	11-14-19	11-14-20	

1 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	35	50	65	80	95	110	125	140
	Total Pressure	.012	.024	.040	.061	.086	.115	.149	.187
Noise Criteria	–	17	22	27	30	33	36	39	
Throw	2-5-11	5-8-14	7-10-17	8-12-19	10-13-20	11-14-22	12-16-23	13-17-24	
8" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	Total Pressure	.020	.034	.052	.073	.098	.127	.159	.195
Noise Criteria	–	17	22	26	29	31	34	37	
Throw	5-8-14	7-10-17	8-12-19	10-13-20	11-14-22	12-16-23	13-17-24	13-17-25	
10" Oval Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	Total Pressure	.027	.042	.059	.079	.101	.127	.156	.188
Noise Criteria	–	19	23	27	30	32	34	37	
Throw	7-10-17	8-12-19	10-13-20	11-14-22	12-16-23	13-17-24	13-17-25	14-18-26	
12" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	Total Pressure	.037	.052	.070	.090	.113	.138	.166	.197
Noise Criteria	16	20	23	26	29	31	34	36	
Throw	8-12-19	10-13-20	11-14-22	12-16-23	13-17-24	13-17-25	14-18-26	15-19-26	

1 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	Total Pressure	.039	.055	.074	.095	.119	.146	.176	.209
Noise Criteria	18	22	26	29	32	35	36	39	
Throw	8-11-18	9-13-20	10-14-22	11-15-23	12-16-24	13-17-25	14-18-26	15-19-27	
10" Oval Inlet	Airflow, CFM	95	110	125	140	155	170	185	200
	Total Pressure	.050	.068	.087	.110	.134	.162	.191	.224
Noise Criteria	20	23	26	29	31	33	35	37	
Throw	9-13-20	10-14-22	11-15-23	12-16-24	13-17-25	14-18-26	15-19-27	15-20-28	
12" Oval Inlet	Airflow, CFM	110	125	140	155	170	185	200	215
	Total Pressure	.048	.062	.078	.095	.115	.136	.159	.184
Noise Criteria	21	24	26	29	31	33	36	37	
Throw	10-14-22	11-15-23	12-16-24	13-17-25	14-18-26	15-19-27	15-20-28	16-21-29	

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total Pressure is in inches w.g..
3. Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

5. Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.

6. Dash (–) in space indicates an Noise Criteria level of less than 15.

7. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.024	.039
2	.049	.078
3	.073	.117
4	.098	.156

PERFORMANCE DATA:

MODEL 5375(I) • 3/4" (19) SLOT WIDTH

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	Total Pressure	.027	.045	.068	.096	.129	.167	.209	.257
	Noise Criteria	16	21	26	30	34	37	40	43
	Throw	5-8-15	7-10-18	9-12-20	10-14-22	11-15-23	12-16-25	13-17-26	13-17-27
8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	Total Pressure	.036	.055	.077	.103	.134	.168	.205	.247
	Noise Criteria	17	22	26	29	32	35	38	41
	Throw	7-10-18	9-12-20	10-14-22	11-15-23	12-16-25	13-17-26	13-17-27	14-18-28
10" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	Total Pressure	.044	.062	.083	.107	.134	.164	.197	.234
	Noise Criteria	16	22	26	30	33	36	39	41
	Throw	9-12-20	10-14-22	11-15-23	12-16-25	13-17-26	13-17-27	14-18-28	15-19-29

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.022	.039	.061	.088	.119	.156	.198	.244
	Noise Criteria	–	16	21	25	29	32	35	38
	Throw	2-6-14	5-9-18	8-12-22	9-14-24	11-16-27	12-17-29	14-19-30	15-20-32
8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	Total Pressure	.022	.034	.049	.067	.088	.111	.137	.166
	Noise Criteria	–	15	19	23	27	30	33	36
	Throw	5-9-18	8-12-22	9-14-24	11-16-27	12-17-29	14-19-30	15-20-32	16-21-33
10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	Total Pressure	.025	.036	.049	.064	.082	.101	.122	.145
	Noise Criteria	–	17	21	24	27	30	33	35
	Throw	8-12-22	9-14-24	11-16-27	12-17-29	14-19-30	15-20-32	16-21-33	17-22-35
12" Oval Inlet	Airflow, CFM	120	140	160	180	200	220	240	260
	Total Pressure	.031	.042	.055	.070	.086	.104	.124	.145
	Noise Criteria	–	15	18	23	26	29	32	34
	Throw	9-14-24	11-16-27	12-17-29	14-19-30	15-20-32	16-21-33	17-22-35	17-23-36

2 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	140	160	180	200	220	240	260	280
	Total Pressure	.054	.070	.089	.110	.133	.158	.186	.216
	Noise Criteria	20	23	26	28	31	33	35	37
	Throw	10-15-26	11-17-28	13-18-30	14-19-32	15-21-34	16-22-35	17-23-36	18-24-38
10" Oval Inlet	Airflow, CFM	160	180	200	220	240	260	280	300
	Total Pressure	.049	.063	.077	.093	.111	.130	.151	.174
	Noise Criteria	20	23	25	28	30	32	34	36
	Throw	11-17-28	13-18-30	14-19-32	15-21-34	16-22-35	17-23-36	18-24-38	19-25-39
12" Oval Inlet	Airflow, CFM	180	200	220	240	260	280	300	320
	Total Pressure	.044	.055	.066	.079	.092	.107	.123	.140
	Noise Criteria	20	23	25	27	29	31	33	35
	Throw	13-18-30	14-19-32	15-21-34	16-22-35	17-23-36	18-24-38	19-25-39	19-25-40

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
- Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

- Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
- Dash (–) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.024	.039
2	.049	.078
3	.073	.117
4	.098	.156

PERFORMANCE DATA:

MODEL 5375(I) • 3/4" (19) SLOT WIDTH

3 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.026	.047	.073	.106	.144	.188	.238	.294
	Noise Criteria	–	20	26	30	34	37	40	43
	Throw	5-8-16	8-11-20	10-13-23	11-15-25	12-17-27	14-18-29	15-19-31	15-20-32
8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	Total Pressure	.030	.047	.068	.093	.122	.154	.190	.230
	Noise Criteria	15	20	25	29	32	35	37	39
	Throw	8-11-20	10-13-23	11-15-25	12-17-27	14-18-29	15-19-31	15-20-32	16-21-33
10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	Total Pressure	.040	.058	.078	.102	.130	.160	.194	.230
	Noise Criteria	19	23	27	30	33	35	37	39
	Throw	10-13-23	11-15-25	12-17-27	14-18-29	15-19-31	15-20-32	16-21-33	17-22-35

3 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	Total Pressure	.074	.107	.145	.190	.240	.297	.359	.427
	Noise Criteria	20	24	28	32	35	37	39	41
	Throw	8-13-23	10-15-27	12-17-30	14-19-32	15-21-35	16-22-37	18-23-39	19-25-40
8" Round Inlet	Airflow, CFM	150	175	200	225	250	275	300	325
	Total Pressure	.057	.077	.101	.128	.157	.191	.227	.266
	Noise Criteria	20	24	27	30	33	35	37	39
	Throw	10-15-27	12-17-30	14-19-32	15-21-35	16-22-37	18-23-39	19-25-40	20-26-42
10" Oval Inlet	Airflow, CFM	175	200	225	250	275	300	325	350
	Total Pressure	.051	.067	.085	.104	.126	.150	.176	.204
	Noise Criteria	22	25	27	30	32	34	36	38
	Throw	12-17-30	14-19-32	15-21-35	16-22-37	18-23-39	19-25-40	20-26-42	20-27-43
12" Oval Inlet	Airflow, CFM	200	225	250	275	300	325	350	375
	Total Pressure	.041	.052	.064	.077	.092	.108	.125	.143
	Noise Criteria	20	23	26	28	30	32	34	38
	Throw	14-19-32	15-21-35	16-22-37	18-23-39	19-25-40	20-26-42	20-27-43	21-28-45

3 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	180	210	240	270	300	330	360	390
	Total Pressure	.069	.094	.123	.156	.192	.233	.277	.325
	Noise Criteria	21	25	28	31	34	36	38	40
	Throw	11-16-29	13-19-33	15-21-36	16-22-38	18-24-40	19-26-42	20-27-44	21-28-46
10" Oval Inlet	Airflow, CFM	210	240	270	300	330	360	390	420
	Total Pressure	.064	.084	.106	.131	.159	.189	.222	.257
	Noise Criteria	23	26	28	31	33	35	37	39
	Throw	13-19-33	15-21-36	16-22-38	18-24-40	19-26-42	20-27-44	21-28-46	22-29-48
12" Oval Inlet	Airflow, CFM	240	270	300	330	360	390	420	450
	Total Pressure	.049	.063	.077	.093	.111	.130	.151	.174
	Noise Criteria	22	24	27	29	31	33	35	37
	Throw	15-21-36	16-22-38	18-24-40	19-26-42	20-27-44	21-28-46	22-29-48	23-30-49

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
- Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

- Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
- Dash (–) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.024	.039
2	.049	.078
3	.073	.117
4	.098	.156

PERFORMANCE DATA:

MODEL 5375(I) • 3/4" (19) SLOT WIDTH

4 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	75	100	125	150	175	200	225	250
	Total Pressure	.033	.058	.091	.131	.179	.233	.295	.365
	Noise Criteria	16	21	27	31	35	38	41	44
	Throw	6-9-18	9-13-22	11-16-26	13-18-29	14-20-31	15-22-33	17-23-35	18-24-37
8" Round Inlet	Airflow, CFM	100	125	150	175	200	225	250	275
	Total Pressure	.031	.049	.070	.095	.124	.157	.194	.235
	Noise Criteria	17	22	26	31	34	37	39	41
	Throw	9-13-22	11-16-26	13-18-29	14-20-31	15-22-33	17-23-35	18-24-37	19-25-38
10" Oval Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	Total Pressure	.042	.060	.082	.107	.135	.167	.202	.240
	Noise Criteria	21	24	27	31	34	36	38	40
	Throw	11-16-26	13-18-29	14-20-31	15-22-33	17-23-35	18-24-37	19-25-38	19-27-39

4 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	160	190	220	250	280	310	340	370
	Total Pressure	.074	.159	.213	.275	.345	.422	.508	.602
	Noise Criteria	23	27	30	33	35	38	40	42
	Throw	9-14-27	12-18-31	14-20-34	16-22-37	17-24-39	19-26-42	20-28-44	21-29-46
8" Round Inlet	Airflow, CFM	190	220	250	280	310	340	370	400
	Total Pressure	.071	.096	.124	.155	.190	.229	.271	.317
	Noise Criteria	22	25	28	31	33	36	38	40
	Throw	12-18-31	14-20-34	16-22-37	17-24-39	19-26-42	20-28-44	21-29-46	22-31-47
10" Oval Inlet	Airflow, CFM	220	250	280	310	340	370	400	430
	Total Pressure	.064	.082	.103	.126	.152	.180	.210	.243
	Noise Criteria	22	25	28	31	33	35	37	39
	Throw	14-20-34	16-22-37	17-24-39	19-26-42	20-28-44	21-29-46	22-31-47	23-32-49
12" Oval Inlet	Airflow, CFM	250	280	310	340	370	400	430	460
	Total Pressure	.046	.057	.070	.084	.100	.117	.135	.155
	Noise Criteria	21	24	27	29	31	33	35	37
	Throw	16-22-37	17-24-39	19-26-42	20-28-44	21-29-46	22-31-47	23-32-49	24-33-50

4 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	220	260	300	340	380	420	460	500
	Total Pressure	.089	.124	.165	.212	.265	.324	.389	.459
	Noise Criteria	22	26	29	32	35	37	39	41
	Throw	12-18-33	15-21-37	17-24-40	19-27-43	20-29-46	22-31-49	23-33-51	25-34-53
10" Oval Inlet	Airflow, CFM	260	300	340	380	420	460	500	540
	Total Pressure	.077	.103	.132	.165	.201	.242	.285	.333
	Noise Criteria	23	26	29	32	35	37	39	41
	Throw	15-21-37	17-24-40	19-27-43	20-29-46	22-31-49	23-33-51	25-34-53	26-36-55
12" Oval Inlet	Airflow, CFM	300	340	380	420	460	500	540	580
	Total Pressure	.053	.068	.085	.104	.124	.147	.171	.198
	Noise Criteria	22	25	28	30	33	35	37	39
	Throw	17-24-40	19-27-43	20-29-46	22-31-49	23-33-51	25-34-53	26-36-55	27-37-57

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
- Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

- Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
- Dash (–) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.024	.039
2	.049	.078
3	.073	.117
4	.098	.156

PERFORMANCE DATA:

MODEL 5310(I) • 1" (25) SLOT WIDTH

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	50	65	80	95	110	125	140	155
	Total Pressure	.020	.034	.052	.073	.098	.127	.159	.195
	Noise Criteria	–	17	23	27	31	34	37	40
	Throw	3-6-13	5-8-16	7-11-18	9-13-20	10-14-22	11-16-24	12-17-25	13-18-26
8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155	170
	Total Pressure	.026	.039	.055	.074	.095	.119	.146	.176
	Noise Criteria	15	19	22	26	29	32	35	38
	Throw	5-8-16	7-11-18	9-13-20	10-14-22	11-16-24	12-17-25	13-18-26	14-19-27
10" Oval Inlet	Airflow, CFM	80	95	110	125	140	155	170	185
	Total Pressure	.043	.060	.081	.104	.131	.160	.193	.229
	Noise Criteria	16	20	24	27	30	33	36	38
	Throw	7-11-18	9-13-20	10-14-22	11-16-24	12-17-25	13-18-26	14-19-27	14-20-28

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	Total Pressure	.054	.077	.105	.137	.174	.214	.259	.309
	Noise Criteria	18	22	26	29	33	35	37	39
	Throw	4-8-19	7-11-22	9-13-24	10-15-26	12-17-28	13-19-30	14-20-32	15-22-33
8" Round Inlet	Airflow, CFM	120	140	160	180	200	220	240	260
	Total Pressure	.041	.056	.073	.092	.113	.137	.163	.192
	Noise Criteria	17	21	24	27	30	32	34	36
	Throw	7-11-22	9-13-24	10-15-26	12-17-28	13-19-30	14-20-32	15-22-33	16-23-34
10" Oval Inlet	Airflow, CFM	140	160	180	200	220	240	260	280
	Total Pressure	.038	.049	.063	.077	.093	.111	.130	.151
	Noise Criteria	18	21	24	27	29	31	33	35
	Throw	9-13-24	10-15-26	12-17-28	13-19-30	14-20-32	15-22-33	16-23-34	17-24-36
12" Oval Inlet	Airflow, CFM	160	180	200	220	240	260	280	300
	Total Pressure	.032	.040	.049	.060	.071	.083	.097	.111
	Noise Criteria	17	21	23	25	27	29	31	33
	Throw	10-15-26	12-17-28	13-19-30	14-20-32	15-22-33	16-23-34	17-24-36	18-25-37

2 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	160	180	200	220	240	260	280	300
	Total Pressure	.059	.075	.093	.112	.133	.157	.182	.209
	Noise Criteria	20	23	25	27	29	31	33	35
	Throw	8-13-25	10-15-28	11-17-30	13-19-31	14-20-33	15-22-34	16-23-36	17-24-37
10" Oval Inlet	Airflow, CFM	180	200	220	240	260	280	300	320
	Total Pressure	.052	.064	.077	.092	.108	.125	.143	.163
	Noise Criteria	19	21	23	26	28	30	32	34
	Throw	10-15-28	11-17-30	13-19-31	14-20-33	15-22-34	16-23-36	17-24-37	18-26-38
12" Oval Inlet	Airflow, CFM	200	220	240	260	280	300	320	340
	Total Pressure	.045	.054	.064	.076	.088	.101	.115	.129
	Noise Criteria	19	22	24	26	28	30	32	34
	Throw	11-17-30	13-19-31	14-20-33	15-22-34	16-23-36	17-24-37	18-26-38	19-27-39

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total Pressure is in inches w.g..
3. Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

5. Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
6. Dash (–) in space indicates an Noise Criteria level of less than 15.

7. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.030	.051
2	.060	.104
3	.090	.155
4	.120	.206

PERFORMANCE DATA:

MODEL 5310(I) • 1" (25) SLOT WIDTH

3 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.024	.043	.067	.096	.131	.171	.216	.267
	Noise Criteria	–	18	23	27	31	34	37	40
	Throw	2-6-13	5-9-17	7-11-20	9-13-23	11-15-25	12-16-27	13-17-28	14-18-30
8" Round Inlet	Airflow, CFM	80	100	120	140	160	180	200	220
	Total Pressure	.034	.053	.077	.104	.136	.173	.213	.258
	Noise Criteria	–	18	23	26	29	32	35	37
	Throw	5-9-17	7-11-20	9-13-23	11-15-25	12-16-27	13-17-28	14-18-30	15-19-31
10" Oval Inlet	Airflow, CFM	100	120	140	160	180	200	220	240
	Total Pressure	.029	.042	.057	.075	.095	.117	.141	.168
	Noise Criteria	16	20	23	26	29	32	34	36
	Throw	7-11-20	9-13-23	11-15-25	12-16-27	13-17-28	14-18-30	15-19-31	16-20-32

3 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	Total Pressure	.071	.103	.140	.183	.231	.285	.345	.411
	Noise Criteria	17	21	25	28	31	34	36	38
	Throw	4-9-19	7-12-23	9-14-26	11-16-29	12-18-31	14-19-33	15-21-35	17-22-37
8" Round Inlet	Airflow, CFM	150	175	200	225	250	275	300	325
	Total Pressure	.048	.065	.085	.108	.134	.162	.192	.226
	Noise Criteria	18	21	24	27	30	32	34	36
	Throw	7-12-38	9-14-38	11-16-38	12-18-38	14-19-38	15-21-38	17-22-38	18-23-38
10" Oval Inlet	Airflow, CFM	175	200	225	250	275	300	325	350
	Total Pressure	.045	.058	.074	.091	.110	.131	.154	.179
	Noise Criteria	19	22	25	27	29	31	33	35
	Throw	9-14-26	11-16-29	12-18-31	14-19-33	15-21-35	17-22-37	18-23-38	19-24-40
12" Oval Inlet	Airflow, CFM	200	225	250	275	300	325	350	375
	Total Pressure	.032	.040	.049	.060	.071	.083	.097	.111
	Noise Criteria	17	20	23	25	27	29	31	33
	Throw	11-16-29	12-18-31	14-19-33	15-21-35	17-22-37	18-23-38	19-24-40	20-25-41

3 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	180	210	240	270	300	330	360	390
	Total Pressure	.063	.085	.111	.141	.174	.210	.250	.293
	Noise Criteria	18	21	25	29	31	33	35	37
	Throw	7-13-25	9-15-28	11-17-31	13-19-34	15-21-36	16-23-38	18-24-40	19-25-42
10" Oval Inlet	Airflow, CFM	210	240	270	300	330	360	390	420
	Total Pressure	.054	.071	.090	.111	.134	.160	.188	.218
	Noise Criteria	20	22	25	27	30	32	34	36
	Throw	9-15-28	11-17-31	13-19-34	15-21-36	16-23-38	18-24-40	19-25-42	20-26-44
12" Oval Inlet	Airflow, CFM	240	270	300	330	360	390	420	450
	Total Pressure	.036	.046	.057	.069	.082	.096	.111	.128
	Noise Criteria	19	21	23	26	28	30	32	34
	Throw	11-17-31	13-19-34	15-21-36	16-23-38	18-24-40	19-25-42	20-26-44	21-28-45

Performance Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
- Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

- Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.
- Dash (–) in space indicates an Noise Criteria level of less than 15.

- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.030	.051
2	.060	.104
3	.090	.155
4	.120	.206

PERFORMANCE DATA:

MODEL 5310(I) • 1" (25) SLOT WIDTH

4 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	75	100	125	150	175	200	225	250
	Total Pressure	.030	.054	.084	.121	.164	.214	.271	.335
	Noise Criteria	15	19	24	28	32	35	38	40
	Throw	4-6-15	7-10-20	9-13-23	11-15-26	12-18-29	14-20-31	15-21-33	16-23-34
8" Round Inlet	Airflow, CFM	100	125	150	175	200	225	250	275
	Total Pressure	.035	.054	.078	.106	.138	.175	.216	.261
	Noise Criteria	15	19	23	27	31	33	35	38
	Throw	7-10-20	9-13-23	11-15-26	12-18-29	14-20-31	15-21-33	16-23-34	17-24-36
10" Oval Inlet	Airflow, CFM	125	150	175	200	225	250	275	300
	Total Pressure	.029	.041	.056	.073	.093	.115	.139	.165
	Noise Criteria	17	21	24	28	30	33	35	37
	Throw	9-13-23	11-15-26	12-18-29	14-20-31	15-21-33	16-23-34	17-24-36	18-25-37

4 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	160	190	220	250	280	310	340	370
	Total Pressure	.104	.147	.198	.255	.320	.392	.472	.559
	Noise Criteria	19	23	27	30	33	35	37	39
	Throw	7-10-23	9-13-27	11-16-31	13-18-33	14-21-36	16-23-38	17-25-40	18-26-42
8" Round Inlet	Airflow, CFM	190	220	250	280	310	340	370	400
	Total Pressure	.065	.087	.112	.140	.172	.207	.245	.287
	Noise Criteria	19	22	25	28	30	32	34	36
	Throw	9-13-27	11-16-31	13-18-33	14-21-36	16-23-38	17-25-40	18-26-42	19-28-44
10" Oval Inlet	Airflow, CFM	220	250	280	310	340	370	400	430
	Total Pressure	.054	.070	.088	.108	.129	.153	.179	.207
	Noise Criteria	19	23	25	27	29	31	33	35
	Throw	11-16-1931	13-18-33	14-21-36	16-23-38	17-25-40	18-26-42	19-28-44	20-29-45
12" Oval Inlet	Airflow, CFM	250	280	310	340	370	400	430	460
	Total Pressure	.039	.049	.061	.073	.086	.101	.116	.133
	Noise Criteria	17	20	23	25	27	29	31	33
	Throw	13-18-33	14-21-36	16-23-38	17-25-40	18-26-42	19-28-44	20-29-45	21-31-47

4 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	220	260	300	340	380	420	460	500
	Total Pressure	.085	.118	.157	.202	.253	.309	.370	.437
	Noise Criteria	19	22	27	29	31	33	36	38
	Throw	9-13-29	12-17-33	14-20-36	16-23-39	17-25-42	19-27-45	20-29-47	22-31-49
10" Oval Inlet	Airflow, CFM	260	300	340	380	420	460	500	540
	Total Pressure	.072	.095	.122	.153	.187	.224	.265	.309
	Noise Criteria	21	24	27	30	32	34	36	38
	Throw	12-17-33	14-20-36	16-23-39	17-25-42	19-27-45	20-29-47	22-31-49	23-33-51
12" Oval Inlet	Airflow, CFM	300	340	380	420	460	500	540	580
	Total Pressure	.043	.056	.070	.085	.102	.121	.141	.162
	Noise Criteria	20	23	26	28	30	32	34	36
	Throw	14-20-36	16-23-39	17-25-42	19-27-45	20-29-47	22-31-49	23-33-51	24-35-53

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total Pressure is in inches w.g..
3. Noise Criteria [NC] values based on 10 dB room absorption, re 10⁻¹² watts.
4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned

between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

5. Performance data is based upon the standard **5300 Series** Model. The **5300MP** Modified Performance Series reduces the tabulated throw values by approximately 25%. Horizontal spread values are approximately 150% of the horizontal throw (T) projection values.

6. Dash (-) in space indicates an Noise Criteria level of less than 15.

7. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

Number of Slots	Ak Factor per foot	
	Supply	Return
1	.030	.051
2	.060	.104
3	.090	.155
4	.120	.206

B

LINEAR DIFFUSERS AND BAR GRILLES

HOW TO ORDER

LINEAR SLOT DIFFUSER PLENUMS – MODEL SERIES 5300

MODELS 5315(I), 5310(I), 5375(I), 5350(I), 5315(I)MP, 5310(I)MP, 5375(I)MP, 5350(I)MP

EXAMPLE: 5375 - 48" x 2 SLOT - H11 - C - MM - 08 - ID

1. **Models**
 - Standard Plenum**
 - 5350(I) 1/2" (13) Slot
 - 5375(I) 3/4" (19) Slot
 - 5310(I) 1" (25) Slot
 - 5315(I) 1 1/2" (38) Slot
 - Modified Plenum**
 - 5350(I)MP 1/2" (13) Slot
 - 5375(I)MP 3/4" (19) Slot
 - 5310(I)MP 1" (25) Slot
 - 5315(I)MP 1 1/2" (38) Slot
 - (Add Suffix "I" for optional internal insulation)
2. **Nominal Length**
 - Imperial Sizes**
 - inches / mm's
 - 20, 24, 30, 36, 48, 60, 72
 - (508, 610, 762, 914, 1219, 1524, 1829)
 - Metric Sizes**
 - mm's
 - 500, 600, 750, 900, 1200, 1500, 1800
3. **No. of Slots**
- 1 through 8
4. **Plenum Height**
 - H11 11" (279) standard (default)
 - H13 13" (330)
 - H15 15" (381)
 - H17 17" (432)
5. **Linear Slot Diffuser 5000 Series Frame or Frame/Sub-Frame Combination**
 - A, B, C, D, E, F, FL, G, H, H2, J, KA, K1, K2, M, N or T
6. **Linear Slot Diffuser 5000 Series End Caps**
 - MM, MO, MC, OO, OC, CC, FF, FO or FC

7. **Plenum Inlet Size**
 - 04 4" (102) round
 - 05 5" (127) round
 - 06 6" (152) round
 - 07 7" (178) 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

OPTIONS & ACCESSORIES

8. **Inlet Damper**
 - None (default)
 - ID Inlet Damper with HLQ
 - IDCO Cable Operated Damper
- 9a. **External Insulation**
 - (Non-insulated models only)
 - None (default)
 - EX Foil-Back Insulation, installed – R-4.2
- 9b. **Internal Insulation**
 - ("I" models only)
 - FGI 1/4" (6) Coated Fiberglass (default)
 - FFI 3/8" (10) Fiber-free Foam

Notes:

1. Plenums are shipped loose as standard for field installation.
2. Standard plenum height is 11" (279). Inlet sizes 4" – 8" (102 – 203) are round, 10" – 14" (254 – 356) are flat oval. 10R, 12R and 14R round inlets require a minimum plenum height of inlet size + 3".
3. Plenums for frame/sub-frame types A, B, E, F, G, H, H2, KA, K1, K2 and M are for direct attachment to diffuser neck or sub-frame.
Plenums for frame types C, D, J and N are hemmed for field attachment by use of concealed mounting straps.
4. End caps of plenums can be turned up for use on continuous runs.
5. For lay-in T-Bar installations, specify nominal T-Bar opening length. Plenums can be factory mounted when nominal length is same as finished length of linear. Please specify.
6. Standard internal insulation ("I" suffix models) is 1/4" (6) coated fiberglass.
7. IDCO Cable Operated Damper is only available on 5375(I)(MP) 3/4" (19), 5310 (I)(MP) 1" (25), and 5315(I)(MP) 1 1/2" (38) slot widths and only with 06, 08, 10R, 12R and 14R round inlets.

Available Inlet Sizes

Plenum		Inlet Type/Size	
Code	Height	Round	Oval
H11	11" (279)	04 – 08	10 – 14
H13	13" (330)	04 – 08, 10R	12 – 14
H15	15" (381)	04 – 08, 10R, 12R	14
H17	17" (432)	04 – 08, 10R – 14R	–

HOW TO SPECIFY

LINEAR SLOT DIFFUSER PLENUMS – MODEL SERIES 5300

MODELS 5315(I), 5310(I), 5375(I), 5350(I), 5315(I)MP, 5310(I)MP, 5375(I)MP, 5350(I)MP

SUGGESTED SPECIFICATION:

Models 5315(I), 5310(I), 5375(I), 5350(I)

Furnish and install **Nailor Model** (select one) **5315(I)** (1 1/2" [38] slot), **5310(I)** (1" [25] slot), **5375(I)** (3/4" [19] slot), or **5350(I)** (1/2" [13] slot) **Plenums for Linear Slot Diffusers** of the sizes and capacities shown on the plans and air distribution schedules. The plenums shall be manufactured from corrosion-resistant steel and shall include a side inlet for connection to the duct. The width shall fit a 1, 2, 3, 4, 5, 6, 7 or 8 slot linear as specified and the length shall be in standard nominal lengths of 20", 24", 30", 36", 48", 60" and 72" (508, 610, 762, 914, 1219, 1524 and 1829 mm). When continuous sections are required, the end caps shall be folded up for uninterrupted airflow. Models 5315I, 5310I, 5375I and 5350I shall have internal insulation.

The manufacturer shall provide published performance data for the linear slot diffuser plenums, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

Models 5315(I)MP, 5310(I)MP, 5375(I)MP, 5350(I)MP

Furnish and install **Nailor Model** (select one) **5315(I)MP** (1 1/2" [38] slot), **5310(I)MP** (1" [25] slot), **5375(I)MP** (3/4" [19] slot), or **5350(I)MP** (1/2" [13] slot) **Modified Performance Plenums for Linear Slot Diffusers** of the sizes and capacities shown on the plans and air distribution schedules. The plenums shall be manufactured from corrosion-resistant steel and shall include a side inlet for connection to the duct. The modified performance plenums shall incorporate integral baffles, providing a reduction in throw and increased spread of the air pattern. The width shall fit a 1, 2, 3, 4, 5, 6, 7 or 8 slot linear as specified and the length shall be in standard nominal lengths of 20", 24", 30", 36", 48", 60" and 72" (508, 610, 762, 914, 1219, 1524 and 1829 mm). When continuous sections are required, the end caps shall be folded up for uninterrupted airflow. Models 5315IMP, 5310IMP, 5375IMP and 5350IMP shall have internal insulation.

(IDCO) An optional cable operated round inlet damper with a radial sliding blade design shall be factory mounted on the inlet. Models 5315 and 5310 shall include a flexible rotary cable, connecting the damper to a Phillips head screw operator mounted inside the plenum, permitting air balancing at the diffuser face. Model 5375 shall include a flexible rotary cable with male square rotary end and nylon cable clamp which can be adjusted with 1/4" (6) hex nut driver. Cable shall be threaded through the diffuser face during installation for balancing and pushed back in afterwards.

The manufacturer shall provide published performance data for the linear slot diffuser plenums, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

B

LINEAR DIFFUSERS AND BAR GRILLES

HOW TO ORDER

**TECHZONE™ LINEAR SLOT DIFFUSER PLENUMS
MODEL SERIES 5375TZ • 3/4" (19) SLOT
MODELS 5375TZ, 5375TZI, 5375TZMP, 5375TZIMP**

EXAMPLE: 5375TZ - 48" x 2 SLOT - H11 - L - CC - 08 - ID - —

- 1. **Models**
 - 5375TZ Standard Plenum
 - 5375TZI Insulated Plenum (internal)
 - 5375TZMP Modified Performance Plenum
 - 5375TZIMP Insulated Modified Performance Plenum (internal)
- 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. **No. of Slots**
1 through 4
- 4. **Plenum Height**
H11 11" (279) standard (default)
H13 13" (330)
H15 15" (381)
H17 17" (432)
- 5. **Linear Slot Diffuser 5075TZ Series**
Frame Type
L Lay-in T-Bar
NT Narrow T-Bar Lay-in
TL Tegular T-Bar Lay-in
- 6. **End Cap Configuration 5075TZ Series**
CC Flat Flat (default)
OO Open Open
OC Open Flat

- 7. **Plenum Inlet Size**
 - 04 4" (102) round
 - 05 5" (127) round
 - 06 6" (152) round
 - 07 7" (178) 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
- OPTIONS & ACCESSORIES**
- 8. **Inlet Damper**
 - None (default)
 - ID Inlet Damper with HLQ
 - IDCO Cable Operated Damper
- 9a. **External Insulation**
 - None (default)
 - EX Foil Back R-4.2 (installed)
- 9b. **Internal Insulation**
("I" models only)
FGI 1/4" (6) Coated Fiberglass (default)
FFI 3/8" (10) Fiber-free Foam

Notes:

- 1. Plenums are shipped loose as standard for field installation.
- 2. Standard plenum height is 11" (279). Inlet sizes 4" – 8" (102 – 203) are round, 10" – 14" (254 – 356) are flat oval. 10R, 12R and 14R round inlets require a minimum plenum height of inlet size + 3".
- 3. End caps of plenums can be turned up for use on continuous runs.
- 4. Standard internal insulation ("I" suffix models) is 1/4" (6) coated fiberglass.
- 5. IDCO Cable Operated Damper is only available on 06, 08, 10R, 12R and 14R round inlets.
- 6. Frame Type TL is available in one through three slots only.

Available Inlet Sizes

Plenum		Inlet Type/Size	
Code	Height	Round	Oval
H11	11" (279)	04 – 08	10 – 14
H13	13" (330)	04 – 08, 10R	12 – 14
H15	15" (381)	04 – 08, 10R, 12R	14
H17	17" (432)	04 – 08, 10R – 14R	–

HOW TO SPECIFY

TECHZONE™ LINEAR SLOT DIFFUSER PLENUMS
 MODELS 5375TZ(I), 5375TZ(I)MP

B

LINEAR DIFFUSERS AND BAR GRILLES

SUGGESTED SPECIFICATION:

Model 5375TZ(I)

Furnish and install **Nailor Model** (select one) **5375TZ(I)** (3/4" [19] slot) **Plenums for Linear Slot Diffusers for TechZone™ Type Ceilings** of the sizes and capacities shown on the plans and air distribution schedules. The plenums shall be manufactured from corrosion-resistant steel and shall include a side inlet for connection to the duct. The width shall fit a 1, 2, 3 or 4 slot linear as specified and the length shall be in standard nominal lengths of 24", 30", 36", 48", 60" and 72" (610, 762, 914, 1219, 1524 and 1829 mm). When continuous sections are required, the end caps shall be folded up for uninterrupted airflow. Model 5375TZI shall have internal insulation.

(IDCO) An optional cable operated round inlet damper with a radial sliding blade design shall be factory mounted on the inlet. Model 5375 shall include a flexible rotary cable with male square rotary end and nylon cable clamp which can be adjusted with 1/4" (6) hex nut driver. Cable shall be threaded through the diffuser face during installation for balancing and pushed back in afterwards.

The manufacturer shall provide published performance data for the linear slot diffuser plenums, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.

Model 5375TZ(I)MP

Furnish and install **Nailor Model** (select one) **5375TZ(I)MP** (3/4" [19] slot) **Modified Performance Plenums for Linear Slot Diffusers for TechZone™ Type Ceilings** of the sizes and capacities shown on the plans and air distribution schedules. The plenums shall be manufactured from corrosion-resistant steel and shall include a side inlet for connection to the duct. The width shall fit a 1, 2, 3 or 4 slot linear as specified and the length shall be in standard nominal lengths of 24", 30", 36", 48", 60" and 72" (610, 762, 914, 1219, 1524 and 1829 mm). When continuous sections are required, the end caps shall be folded up for uninterrupted airflow. Model 5375TZIMP shall have internal insulation.

(IDCO) An optional cable operated round inlet damper with a radial sliding blade design shall be factory mounted on the inlet. Model 5375 shall include a flexible rotary cable with male square rotary end and nylon cable clamp which can be adjusted with 1/4" (6) hex nut driver. Cable shall be threaded through the diffuser face during installation for balancing and pushed back in afterwards.

The manufacturer shall provide published performance data for the linear slot diffuser plenums, which shall be tested in accordance with ANSI/ASHRAE Standard 70–2006.