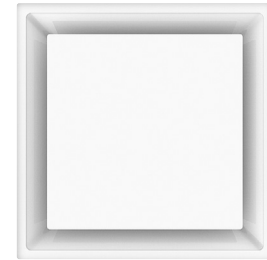


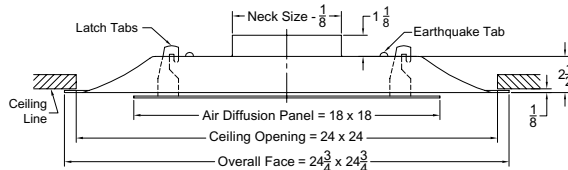
MODEL 5750

Model 5750 offers the architect the often preferred appearance of a single air diffusion panel. The diffuser is designed to efficiently handle cooling temperature differentials of 18-20°F at ceiling heights of 8' to 10'.

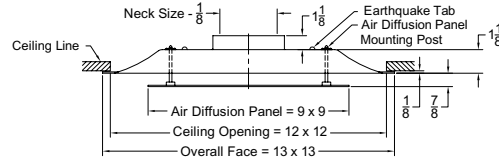
- Available in aluminum, aluminized steel and steel construction
- Face panel has rounded off corners with a smooth edge
- One piece die-formed back pan provides a smooth, aerodynamically designed surface with no corner joints
- Design helps prevent ceiling smudging
- Face panel is easily removed and installed without special tools



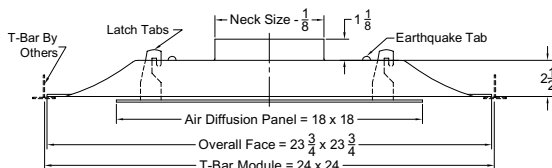
Models: 5750-1 (Steel - Surface Mount - 24 x 24)
5750-1 AS (Aluminized Steel - Surface Mount - 24 x 24)
5750-1 AL (Aluminum - Surface Mount - 24 x 24)



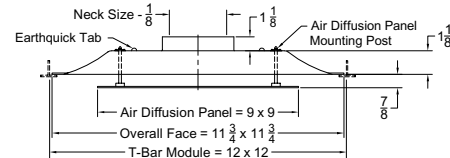
Models: 5750-1 (Steel - Surface Mount - 12 x 12)
5750-1 AS (Aluminized Steel - Surface Mount - 12 x 12)
5750-1 AL (Aluminum - Surface Mount - 12 x 12)



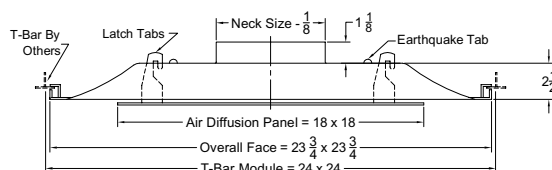
Models: 5750-6 (Steel - Lay In T Bar - 24 x 24)
5750-1 AS (Aluminized Steel - Lay In T Bar - 24 x 24)
5750-1 AL (Aluminum - Lay In T Bar - 24 x 24)



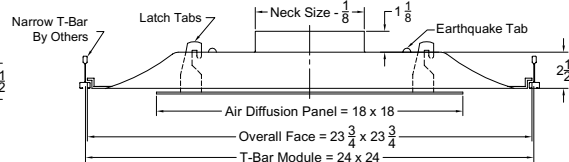
Models: 5750-6 (Steel - Lay In T Bar - 12 x 12)
5750-1 AS (Aluminized Steel - Lay In T Bar - 12 x 12)
5750-1 AL (Aluminum - Lay In T Bar - 12 x 12)



Models: 5750-7 (Steel - Concealed T-Bar - 24 x 24)
5750-7 AS (Aluminized Steel - Concealed T Bar - 24 x 24)
5750-7 AL (Aluminum - Concealed T Bar - 24 x 24)



Models: 5750-9 (Steel - Donn Ceiling Grid - 24 x 24)
5750-9 AS (Aluminized Steel - Donn Ceiling Grid - 24 x 24)
5750-9 AL (Aluminum - Donn Ceiling Grid - 24 x 24)



SERIES 5750 SPECIFICATIONS

Air Diffusers shall be model:

5750-1 Surface Mount

5750-6 T-bar Lay-in

5750-7 Concealed Spline

5750-9 Donn Fineline Lay-in

- 5750 manufactured by METALAIRE. Units shall be constructed of steel.
- 5750 AS manufactured by METALAIRE. Units shall be constructed of aluminized steel.
- 5750 AL manufactured by METALAIRE. Units shall be constructed of aluminum.
- Units shall be square with a formed backpan and a flat face panel. Face panel shall project no more than 1/4" below the ceiling grid or surface. Diffuser shall have the same appearance from the face regardless of inlet size. The units shall be the size and quantity as outlined in the plans and specifications.
- Inlets shall be drawn into the backpan of the diffuser. Welded inlets are not acceptable. Diffusers shall include seismic tabs drawn into the backpan. Face panel shall be removable without the aid of tools for installation and to access optional damper. Units requiring tools to remove the inner cones are not acceptable.
- Units shall be designed to integrate into the specified ceiling system.

Optional Dampers and Accessories

BUTTERFLY DAMPER

- METALAIRE model BDS aluminum round butterfly type dampers shall be provided. Damper shall consist of two butterfly style blades that can be adjusted from full open to full closed. Damper shall be adjusted with a screwdriver slot.

RADIAL SHUTTER DAMPER

- METALAIRE model RSD steel round radial shutter damper shall be provided. Damper shall consist of gang-operated radial blades that slide perpendicular to air flow direction. The damper shall be adjusted from full open to full closed. Damper shall be adjusted with a screwdriver slot.

OPPOSED BLADE DAMPER

- METALAIRE model D3 aluminum or SD3 Steel round opposed blade type dampers shall be provided. Damper shall consist of gang operated blades that can be adjusted from full open to full closed. Damper shall be adjusted with a screwdriver slot.

EQUALIZING GRID

- METALAIRE model G3 aluminum round equalizing grid shall be provided. Equalizing grid shall consist of 1/2" x 1/2" x 1/2" aluminum cubed core mounting in an aluminum frame.

Performance Specification

The manufacturer shall provide published performance data. Data shall be tested in accordance to ANSI/ASHRAE Standard 70-2006.

Paint Specification

Process shall be anodic electro-deposition using an anodic acrylic paint. Units shall undergo pre-treatment including a pressurized spray stage using an alkaline cleaner and a de-ionized water rinse.

5750 MODEL NUMBER SPECIFICATION SQUARE FACE DIFFUSER — PLAQUE FACE

Model		Neck Size	Module	Available Finishes	
5750-1	Surface Mount - Steel	6	12 x 12	Standard Finish	
5750-1 AS	Surface Mount - Aluminized Steel	8		01	White
5750-1 AL	Surface Mount - Aluminum	6	24 x 24	Optional Finishes	
		8		02	Satin Silver
		10		03	Black
		12		28	Custom Color
		14			
		15			

Available Accessories	
G3	Equalizing Grid
BDS	Butterfly Damper
RSD	Radial Damper
BO-1	3-Way Blank Off
BO-2	2-Way Blank Off
BO-3	1-Way Blank Off
LIPF	Lay-in Plaster Frame

5750 MODEL NUMBER SPECIFICATION SQUARE FACE DIFFUSER — PLAQUE FACE

Model		Neck Size	Module	Available Finishes	
5750-6	T-bar Lay-in - Steel	6	12 x 12	Standard Finish	
5750-6 AS	T-bar Lay-in - Aluminized Steel	8		01	White
5750-6	T-bar Lay-in - Steel	6	24 x 24	Optional Finishes	
5750-6 AS	T-bar Lay-in - Aluminized Steel	8		02	Satin Silver
5750-6 AL	T-bar Lay-in - Aluminum	10		03	Black
5750-7	Concealed Spline - Steel	12		28	Custom Color
5750-7 AS	Concealed Spline - Aluminized Steel	14			
5750-9	Donn Finline / Bolt Slot - Steel	15			
5750-9 AS	Donn Finline / Bolt Slot - Aluminized Steel				

Available Accessories	
G3	Equalizing Grid
BDS	Butterfly Damper
RSD	Radial Damper
BO-1	3-Way Blank Off
BO-2	2-Way Blank Off
BO-3	1-Way Blank Off
FGPB	Factory Installed R6 Insulation
TBPF	T-Bar Plaster Frame (-6 Only)

Model		Neck Size	Module	Available Finishes	
M5750-6	Metric T-bar Lay-in - Steel	6	600mm x 600mm	Standard Finish	
M5750-6 AS	Metric T-bar Lay-in - Aluminized Steel	8		01	White
		10		Optional Finishes	
		12		02	Satin Silver
		14		03	Black
		15		28	Custom Color

Available Accessories	
G3	Equalizing Grid
BDS	Butterfly Damper
RSD	Radial Damper
BO-1	3-Way Blank Off
BO-2	2-Way Blank Off
BO-3	1-Way Blank Off
TBPF	T-Bar Plaster Frame

SERIES 5750 PERFORMANCE DATA MODEL 5750

Listed Size	Neck Size	fpm Vn	400	500	600	700	800	900	1000	1200	1400	1600
		Pv	0.01	0.016	0.022	0.031	0.04	0.05	0.062	0.09	0.122	0.249
12 x 12	6	CFM	80	100	120	135	155	175	195	235	275	315
		Ps	.009	.014	.021	.024	.032	.041	.051	.075	.104	.137
		Pt	.019	.030	.043	.054	.072	.092	.114	.165	.226	.297
		Throw*	3-4-7	3-5-7	4-6-8	4-6-9	5-6-9	6-7-10	6-7-10	6-8-11	7-9-12	8-9-13
		Throw	3-4-7	4-5-7	4-6-8	5-6-9	5-7-9	6-7-10	6-7-10	7-8-11	7-9-12	8-9-13
		NC	<15	<15	<15	16	18	21	23	27	31	34
	8	CFM	140	175	210	245	280	315	350	420	490	560
		Ps	.017	.027	.039	.053	.069	.087	.108	.155	.212	.276
		Pt	.027	.043	.061	.083	.109	.138	.170	.245	.334	.436
		Throw*	3-5-9	4-7-10	5-8-11	6-8-11	7-9-12	8-9-13	8-10-14	9-11-15	9-11-16	10-12-17
		Throw	4-6-9	5-7-10	6-8-11	7-8-12	7-9-13	8-9-13	8-10-14	9-11-15	10-12-17	10-13-18
		NC	<15	<15	17	20	22	25	27	31	34	37
24 x 24	6	CFM	80	100	120	135	155	175	195	235	275	315
		Ps	.003	.004	.006	.006	.008	.011	.014	.021	.029	.039
		Pt	.013	.020	.029	.036	.048	.061	.076	.110	.151	.198
		Throw*	0-1-4	1-2-6	1-2-7	1-3-8	2-4-8	2-5-9	3-5-9	4-7-10	5-8-11	6-9-12
		Throw	1-2-5	1-3-6	2-4-7	2-4-8	3-5-9	4-5-9	4-6-10	5-7-11	6-8-12	6-9-13
		NC	<15	<15	<15	<15	15	18	21	26	31	35
	8	CFM	140	175	210	245	280	315	350	420	490	560
		Ps	.007	.012	.017	.023	.030	.038	.047	.067	.091	.119
		Pt	.017	.027	.039	.053	.070	.088	.109	.157	.213	.279
		Throw*	1-1-6	1-2-7	1-3-9	2-4-10	3-6-11	3-7-12	4-7-13	6-9-14	7-10-15	8-11-16
		Throw	1-2-6	2-4-8	2-5-10	3-6-11	4-6-12	5-7-13	5-8-13	6-10-14	7-11-16	9-12-17
		NC	<15	<15	<15	17	21	25	28	34	39	42
	10	CFM	220	275	325	380	435	490	545	655	765	875
		Ps	.016	.025	.034	.047	.061	.078	.096	.139	.190	.249
		Pt	.026	.040	.056	.077	.101	.128	.159	.229	.313	.409
		Throw*	1-2-7	1-3-9	2-4-11	2-5-13	3-7-14	4-8-15	5-9-16	7-11-17	9-13-19	10-14-20
		Throw	1-3-8	2-5-10	3-6-12	4-7-14	5-8-15	6-9-16	7-10-17	8-12-18	9-14-20	11-15-21
		NC	<15	15	15	21	26	30	33	37	41	43

SERIES 5750 PERFORMANCE DATA MODEL 5750

CEILING
DIFFUSERS

SQUARE CEILING DIFFUSERS

5750

Listed Size	Neck Size	fpm Vn	400	500	600	700	800	900	1000	1200	1400	1600
		Pv	0.01	0.016	0.022	0.031	0.04	0.05	0.062	0.09	0.122	0.249
24 x 24	12	CFM	315	395	470	550	630	705	785	940	1100	1255
		Ps	.027	.042	.059	.081	.107	.133	.165	.236	.324	.422
		Pt	.037	.058	.082	.112	.146	.183	.227	.326	.446	.581
		Throw*	1-2-9	1-3-11	2-5-13	3-7-15	4-9-17	5-10-18	6-11-19	8-13-21	10-15-23	12-17-24
		Throw	2-4-10	2-6-12	4-7-14	5-8-17	6-10-18	7-11-19	8-12-20	10-14-22	11-17-23	13-18-25
		NC	<15	<15	17	22	27	30	33	38	42	45
	14	CFM	430	535	640	750	855	960	1070	1285	1495	1710
		Ps	.031	.049	.069	.095	.124	.156	.194	.280	.378	.495
		Pt	.041	.064	.092	.126	.164	.206	.256	.370	.501	.655
		Throw*	1-3-10	2-4-13	2-6-15	3-8-18	4-10-20	6-12-21	7-13-22	10-15-24	12-18-26	14-20-28
		Throw	2-4-11	3-6-14	4-8-17	6-10-19	7-11-21	8-13-22	9-14-23	11-17-25	13-19-27	15-21-29
		NC	<15	<15	20	25	30	33	36	40	43	46
	15	CFM	490	615	735	860	980	1105	1225	1475	1720	1965
		Ps	.038	.060	.086	.117	.152	.194	.238	.345	.469	.613
		Pt	.048	.076	.108	.148	.192	.244	.300	.435	.592	.772
		Throw*	1-3-11	2-4-14	3-6-16	4-8-19	5-11-21	6-12-23	7-14-24	11-17-26	13-19-28	15-21-30
		Throw	2-4-12	3-7-15	4-9-18	6-10-21	8-12-22	9-13-24	10-15-25	12-18-27	14-21-29	16-22-31
		NC	<15	<15	20	27	32	35	37	41	44	47

PERFORMANCE NOTES FOR SERIES 5750

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

fpm Velocity of air stream in Feet per Minute

Pv Velocity pressure (inches of water column)

Pt Total pressure (inches of water column)

Ps Static pressure = Pt-Pv (inches of water column)

Throw* Non-isothermal horizontal throw (supply air temperature 15°F colder than average room temperature); values are for 150, 100 and 50fpm velocities

Throw Isothermal throw (supply air temperature the same as average room temperature); values are for 150, 100 and 50fpm velocities

NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10⁻¹² watts minus a 10dB room attenuation in all octave bands

Vn Neck Velocity