



TROFFER DIFFUSERS



Description

SAFID troffer diffusers SST Series are designed to provide single side concealed air distribution when installed behind the air handling luminaires (light fixtures). The troffer diffusers are equipped with concealed adjustable air deflectors to provide horizontal or vertical discharge air pattern.

SAFID troffer diffusers are coordinated with luminaire (light fixture) manufacturers to ensure optimum air distribution performance and ease of installation. Various sizes of SAFID troffer diffusers are available to fit with any model or style of light fixture manufacturers.

SAFID troffer diffusers should be located uniformly in the ceiling together with the luminaires in order to have a proper air distribution in the occupied area.

Standard Construction

Casing:

Built of galvanized steel sheet gauge 22, conform to ASTM A653, Lock Forming Quality, G90 zinc coating.

Insulation:

12.5 mm thick acoustic lining with black glass tissue facing, 48kg/m³ density. Acoustic lining is fixed inside the troffer diffuser with non-flammable adhesive and mechanical fastener (cupped head pins).

Spigot:

Spigot inlet without damper as standard.

Additional Options

1. Spigot inlet with damper.
2. Troffer diffuser without insulation can be used for return or exhaust system. Type: SST - 100X, SST - 110X.

SST - 110

General construction as Type SST - 100 troffer diffuser but with flat oval spigot side inlet.

SST SERIES [SST 100, SST 110]

Use for Luminaire (Light Fixture) with Length = 600mm

Vertical Discharge	Air Flow (L/S)	7	10	12	15	17	19	21	23
	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure, Pa	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw, Meter	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

Use for Luminaire (Light Fixture) with Length = 900mm

Vertical Discharge	Air Flow (L/S)	12	17	18	23	27	30	34	37
	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

Use for Luminaire (Light Fixture) with Length = 1200mm

Vertical Discharge	Air Flow (L/S)	16	23	26	33	38	43	47	52
	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

- All above performance data is based on troffer diffuser with 13mm wide slot. Performance may vary with other makes and designs of air troffer.
- All above data is based on inlet size 150mm (6") although the effect on inlet size is negligible in the range of inlets offered
- Throws vertical and horizontal distances in meters to reach terminal velocities of 0.5 m/s and 0.25 m/s.

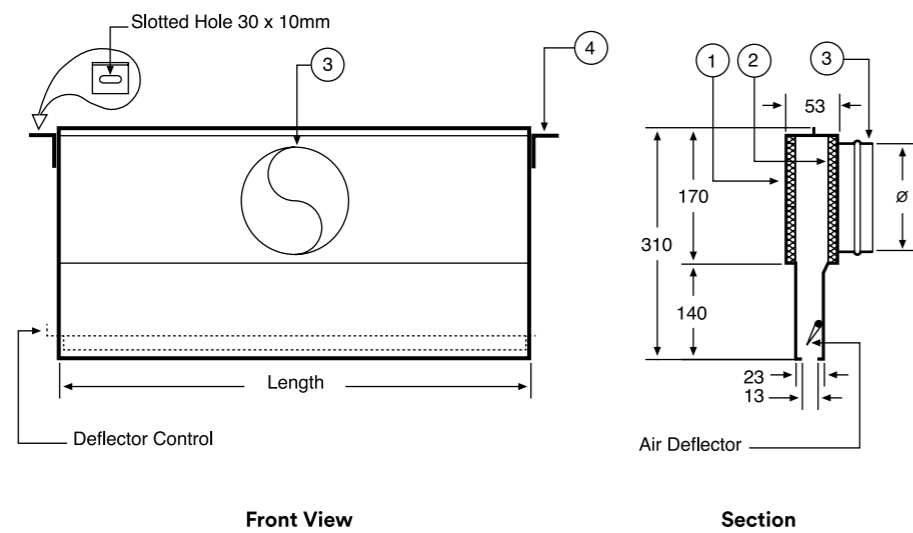
SST SERIES [SST 100, SST 110]

Legend:

- 1 - Casing 2 - Acoustic Lining 3 - Spigot Inlet 4 - Hanging Bracket

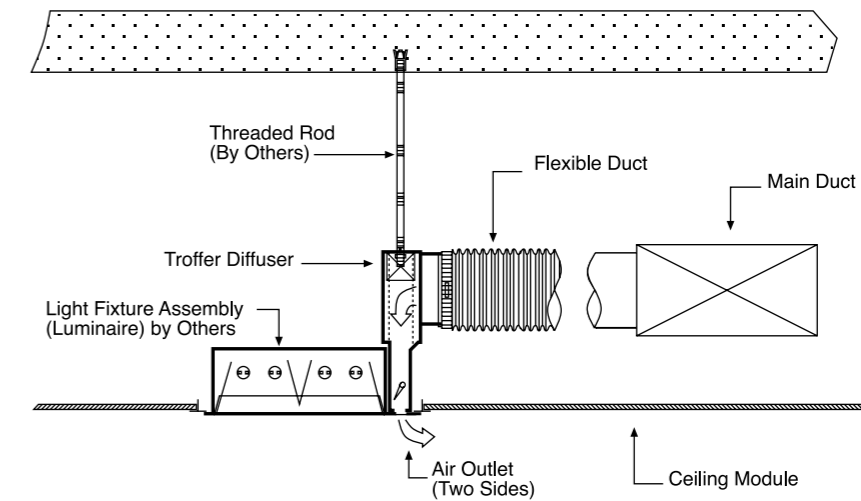
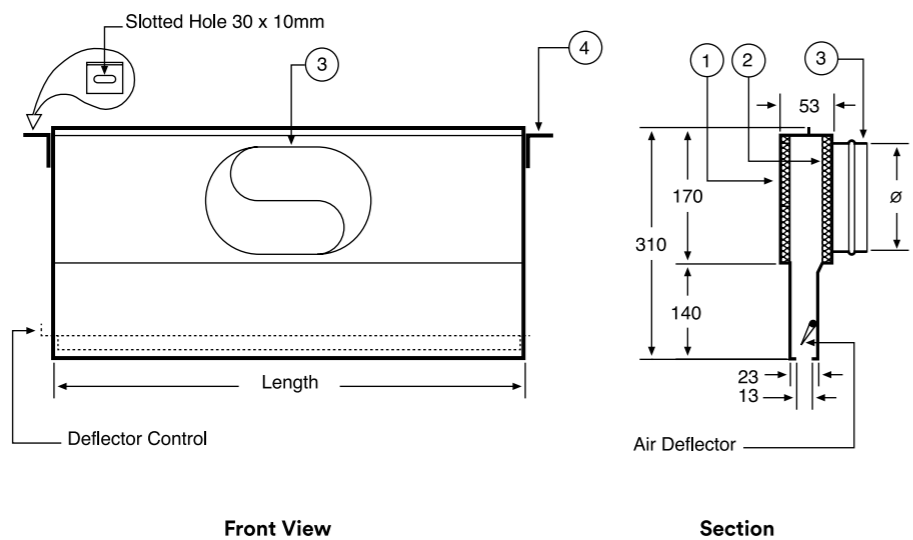
SST - 100

Round spigot top inlet without damper and with 12.5mm thick acoustic lining, density 48kg/m³ with BGT facing.



SST - 110

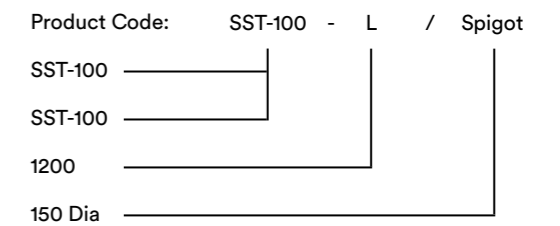
Flat Oval spigot side inlet without damper and with 12.5mm thick acoustic lining, density 48kg/m³ with BGT facing.



Sizes of Troffer Diffuser

Item No.	Luminaire Size L x W (mm)	Troffer Size (variable) L x W (mm)	Spigot Inlet dia (mm)
1	600 x 600	600	150
2	600 x 300	600	150
3	900 x 900	900	150
4	900 x 600	900	150
5	900 x 300	900	150
6	1200 x 1200	1200	150
7	1200 x 600	1200	150
8	1200 x 300	1200	150

Order Example



Make : SAFID
Type : SST-100-1200L / 150 Dia
Qty. : 1

NOTE

Troffer Diffuser size varies as per Luminaire actual size.