

LTD Light Troffer

Description

ASLI Light Troffer Diffusers (LTD) are designed to fit virtually any available light fixture with air diffuser capabilities. The coordination of air distribution and lighting into a single, efficient ceiling unit, giving a pleasing appearance. The LTD deflectors direct the supply air away from the light fitting as to prevent condensation. LTD are excellent for VAV system as they have high induction ratio and strong horizontal air pattern. Standard features include volume damper and locking tabs to hold the diffuser to the light fixture.

Materials

Part	Standard	Optional
Casing	0.5mm Galvanized Steel	0.7mm Galvanized Steel
Blade	0.5mm Galvanized Steel	Extruded Aluminum
Insulation	PE foam	Fiberglass

Surface Finish

- Mill galvanized on body.
- Matt black on the slot diffuser face.

Features

- Custom manufactured to fit all air handling light fixtures.
- Volume control damper at the inlet to control air volume.
- Air pattern adjustable from horizontal to vertical through deflectors.
- Oval and round inlet available.
- Supply or return air application.
- Internal insulation.

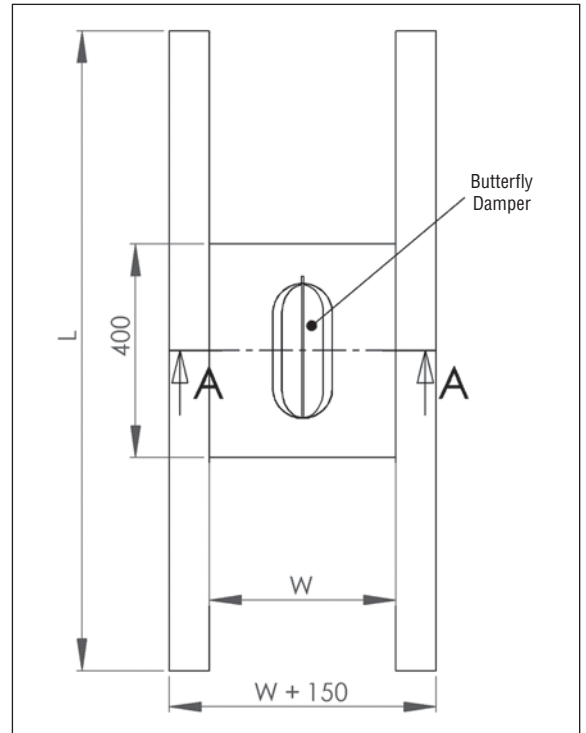
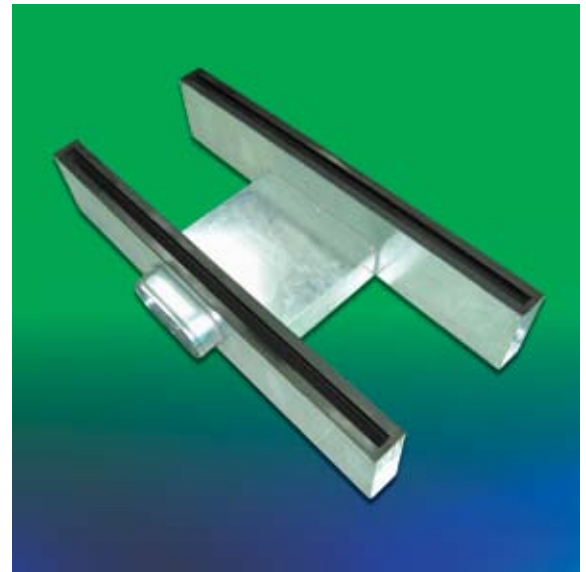
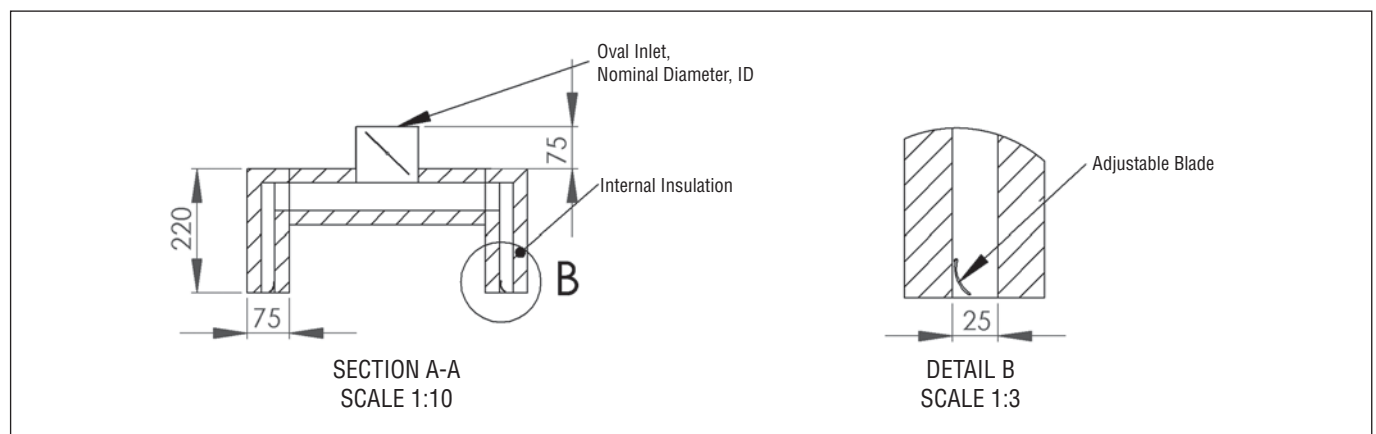
Standard Models

- Single sided/side inlet (LTD-S-S)
- Double sided/side inlet (LTD-D-S)
- Double sided/top inlet (LTD-D-T)

Standard Nominal Inlet Diameter

- Top round/oval inlet nominal diameter: 100, 125, 150, 200 (mm)
- Side oval inlet nominal diameter: 100, 125, 150, 200 (mm)

LTD Construction Illustrations



LTD Light Troffer Diffuser

■ Performance Data for LTD

LTD-S-S (600mm)

Inlet Size (mm)	Throw (m)	CMH	50	60	65	75	85	100	120	135
		H	2.4-3.0	2.7-3.3	2.7-3.9	3.0-4.2	3.3-4.5	3.6-4.8	3.9-5.4	3.9-5.7
	V	1.2-1.8	1.5-2.1	1.5-2.1	1.5-2.4	1.8-2.4	1.8-2.7	2.1-2.7	2.1-3.0	
100	Tot. Press. (mmAq)	H	1.8	2.5	3.2	4.1	5.1	7.3	9.9	12.9
		V	1.5	2.0	2.7	3.4	4.3	6.0	8.2	10.7
	NC	H	-	-	20	23	27	32	35	39
		V	-	-	-	22	26	31	34	38
125	Tot. Press. (mmAq)	H	1.2	1.7	2.3	2.9	3.6	5.1	7.0	9.0
		V	1.1	1.4	1.9	2.4	3.0	4.2	5.8	7.5
	NC	H	-	-	-	-	22	26	31	34
		V	-	-	-	-	22	26	30	34
150	Tot. Press. (mmAq)	H	0.9	1.2	1.6	2.0	2.5	3.6	4.9	6.3
		V	0.7	1.0	1.3	1.7	2.1	3.0	4.0	5.2
	NC	H	-	-	-	-	-	22	26	30
		V	-	-	-	-	-	22	26	30

LTD-S-S (1200mm)

Inlet Size (mm)	Throw (m)	CMH	85	100	120	135	150	170	205	235
		H	1.2-2.0	1.5-2.4	1.8-2.4	1.8-2.7	2.1-2.8	2.1-3.0	2.4-3.3	2.4-3.6
	V	1.2-1.5	1.2-1.8	1.2-1.8	1.5-2.0	1.5-2.4	1.5-2.4	1.8-2.4	2.1-2.6	
100	Tot. Press. (mmAq)	H	1.5	2.1	2.9	3.8	4.8	6.0	8.7	11.2
		V	1.3	1.8	2.6	3.3	4.3	5.1	7.3	10.2
	NC	H	-	22	25	29	32	35	39	45
		V	-	21	24	28	31	34	38	43
125	Tot. Press. (mmAq)	H	1.1	1.5	2.1	3.1	3.4	4.3	6.1	8.3
		V	0.9	1.4	1.8	2.4	3.0	3.7	5.4	7.3
	NC	H	-	-	21	24	28	31	36	41
		V	-	-	20	24	27	30	36	40
150	Tot. Press. (mmAq)	H	0.9	1.3	1.8	2.3	3.0	3.7	5.4	7.3
		V	0.9	1.1	1.5	2.0	2.6	3.2	4.6	6.3
	NC	H	-	-	-	22	26	29	34	39
		V	-	-	-	22	25	28	33	38
200	Tot. Press. (mmAq)	H	0.8	1.0	1.5	1.8	2.6	3.1	4.6	6.4
		V	0.7	0.9	1.3	1.7	2.0	2.7	3.6	5.3
	NC	H	-	-	-	-	24	27	32	38
		V	-	-	-	-	23	26	31	37

- Throw is based on terminal velocities of 0.5m/s and 0.25m/s respectively.
- NC value is based on room absorption of 10dB, re 10^{-12} watts.
- Dash (-) indicates NC less than 20.
- H indicates horizontal throw, V indicates vertical throw.

LTD Light Troffer Diffuser

■ Performance Data for LTD

LTD-D-S (600mm)

Inlet Size (mm)	Throw (m)	CMH	85	100	120	135	150	170	190	205
		H	1.2-2.1	1.5-2.4	1.8-2.7	2.1-3.0	2.1-3.3	2.4-3.6	2.7-3.9	2.7-3.9
		V	1.2-1.5	1.2-1.8	1.5-2.1	1.5-2.1	1.5-2.4	1.8-2.4	1.8-2.7	2.1-2.7
100	Tot. Press. (mmAq)	H	1.6	2.4	3.5	4.8	7.9	9.7	11.9	14.0
		V	1.4	2.2	3.4	4.6	6.0	9.3	11.1	13.7
	NC	H	-	21	26	30	34	40	43	45
		V	-	20	25	29	33	39	42	44
125	Tot. Press. (mmAq)	H	1.1	1.8	2.5	3.5	4.5	7.0	8.4	10.1
		V	0.9	1.5	2.2	2.9	3.8	6.0	7.2	8.5
	NC	H	-	-	21	25	29	35	38	41
		V	-	-	20	24	28	34	37	39
150	Tot. Press. (mmAq)	H	0.8	1.2	1.8	2.4	3.1	4.9	5.9	7.1
		V	0.7	1.0	1.5	2.0	2.7	4.2	5.0	6.0
	NC	H	-	-	21	25	29	35	38	41
		V	-	-	20	24	28	34	37	39

LTD-D-S (1200mm)

Inlet Size (mm)	Throw (m)	CMH	135	170	205	235	270	305	340	370
		H	0.6-1.2	0.9-1.5	0.9-1.5	1.2-1.8	1.2-1.8	1.5-2.1	1.5-2.1	1.5-2.1
		V	0.6-0.9	0.6-0.9	0.9-1.2	0.9-1.2	0.9-1.2	0.9-1.5	0.9-1.5	1.2-1.5
100	Tot. Press. (mmAq)	H	4.1	6.5	9.4	12.6	16.5	21.4	25.9	30.4
		V	2.2	3.4	5.0	6.7	8.8	11.4	13.6	16.1
	NC	H	27	33	38	42	46	49	53	55
		V	21	27	32	37	40	44	47	49
125	Tot. Press. (mmAq)	H	2.2	3.5	5.0	8.8	9.0	11.4	14.1	17.1
		V	1.3	2.1	3.0	4.1	5.4	6.9	8.5	10.5
	NC	H	-	23	29	33	37	40	43	46
		V	-	-	24	29	32	36	39	42
150	Tot. Press. (mmAq)	H	1.8	2.7	3.9	5.3	6.9	9.0	11.0	13.7
		V	1.0	1.7	2.4	3.3	4.3	5.4	6.7	8.3
	NC	H	-	-	24	29	32	36	39	42
		V	-	-	22	26	29	33	36	39
200	Tot. Press. (mmAq)	H	1.1	1.7	3.1	3.4	4.3	5.6	6.9	8.6
		V	0.7	0.9	1.8	1.9	2.4	3.2	3.9	5.0
	NC	H	-	-	-	23	29	32	35	38
		V	-	-	-	-	24	28	31	33

- Throw is based on terminal velocities of 0.5m/s and 0.25m/s respectively.
- NC value is based on room absorption of 10dB, re 10⁻¹² watts.
- Dash (-) indicates NC less than 20.
- H indicates horizontal throw, V indicates vertical throw.

LTD Light Troffer Diffuser

■ Performance Data for LTD

LTD-D-T (600mm)

Inlet Size (mm)	Throw (m)	CMH	85	100	120	135	150	170	190	205
		H	1.2-2.1	1.5-2.4	1.8-2.7	2.1-3.0	2.1-3.3	2.4-3.6	2.7-3.9	2.7-3.9
	V	1.2-1.5	1.2-1.8	1.5-2.1	1.5-2.1	1.5-2.4	1.8-2.4	1.8-2.7	2.1-2.7	
100	Tot. Press. (mmAq)	H	1.4	2.2	3.1	4.3	7.1	8.8	10.8	12.8
		V	1.3	2.0	3.1	4.2	5.4	8.4	10.1	12.4
	NC	H	-	23	28	32	36	42	45	47
		V	-	22	27	31	35	41	44	46
125	Tot. Press. (mmAq)	H	1.0	1.6	2.3	3.1	4.1	6.4	7.7	9.2
		V	0.9	1.4	2.0	2.6	3.5	5.4	6.5	7.7
	NC	H	-	-	23	27	31	37	40	43
		V	-	-	22	26	30	36	39	41
150	Tot. Press. (mmAq)	H	0.7	1.1	1.6	2.2	2.9	4.5	5.4	6.4
		V	0.6	1.0	1.4	1.8	2.4	3.8	4.6	5.4
	NC	H	-	-	23	27	31	37	40	43
		V	-	-	22	26	30	36	39	41

LTD-D-T (1200mm)

Inlet Size (mm)	Throw (m)	CMH	135	170	205	235	270	305	340	370
		H	0.6-1.2	0.9-1.5	0.9-1.5	1.2-1.8	1.2-1.8	1.5-2.1	1.5-2.1	1.5-2.1
	V	0.6-0.9	0.6-0.9	0.9-1.2	0.9-1.2	0.9-1.2	0.9-1.5	0.9-1.5	1.2-1.5	
100	Tot. Press. (mmAq)	H	3.7	5.9	8.5	11.5	15.0	19.5	23.5	27.6
		V	2.0	3.1	4.5	6.1	8.0	10.4	12.4	14.6
	NC	H	28	34	39	43	47	50	54	56
		V	22	28	33	38	41	45	48	50
125	Tot. Press. (mmAq)	H	2.0	3.1	4.6	8.0	8.2	10.4	12.8	15.6
		V	1.2	1.9	2.7	3.7	4.9	6.3	7.7	9.5
	NC	H	-	24	30	34	38	41	44	47
		V	-	-	25	30	33	37	40	43
150	Tot. Press. (mmAq)	H	1.6	2.5	3.6	4.8	6.3	8.2	10.0	12.5
		V	0.9	1.5	2.2	3.0	3.9	4.9	6.1	7.6
	NC	H	-	-	25	30	33	37	40	43
		V	-	-	23	27	30	34	37	40
200	Tot. Press. (mmAq)	H	1.0	1.5	2.8	3.1	3.9	5.1	6.3	7.8
		V	0.6	0.9	1.6	1.7	2.2	2.9	3.6	4.5
	NC	H	-	-	-	24	30	33	36	39
		V	-	-	-	-	25	29	32	34

- Throw is based on terminal velocities of 0.5m/s and 0.25m/s respectively.
- NC value is based on room absorption of 10dB, re 10⁻¹² watts.
- Dash (-) indicates NC less than 20.
- H indicates horizontal throw, V indicates vertical throw.

■ LTD Order Code Unit:mm

Model	No. Sided	Inlet Location	Nominal Inlet Diameter	Round/Oval Inlet	Width W	Length L
LTD	S-Single D-Double	S-Side T-Top	100mm, 125mm, 150mm, 200mm	O-Oval R-Round	Varies	Varies

Example: LTD-D-S-200mm-O-600mmX1200mm