E _ - Eyelash (Curved Blade) Diffusers

Model: EL

Holyoake EL diffusers present a clean, functional, strong appearance, along with economy and high performance.

They are so versatile that this one series can often be used throughout an entire installation. They are an excellent choice for high sidewall and low sidewall, as well as ceiling applications. There is a wide selection of sizes and deflection patterns and the adjustable louvers and optional dampers add flexibility in operation. Special sizes and designs can also be furnished.

Features

- Extruded aluminium louvers are individually adjustable from the face of the diffuser.
- Three different fixing arrangements are available.
 Surface mounting in wall or ceiling openings,
 plain, or panel fixing in suspended ceiling 'T-Rails'.
- Optional Volume Control Damper is adjustable from the face of the diffuser.
 - Opposed blade design meters air precisely, from the fully open to the fully closed position, with minimum disturbance of the air pattern.
- One piece construction is used in sizes up to 900 x 900.

Construction

Extruded aluminium louvers and frame.*

* = Model EL-P Panel is 0.75 mm Steel.

Air Deflection Combinations

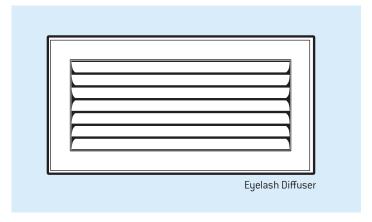
The various air deflection patterns in the plane of the diffuser face are shown in the diagrams. In addition, these patterns can be varied by the louver positions for different spreads and throws.

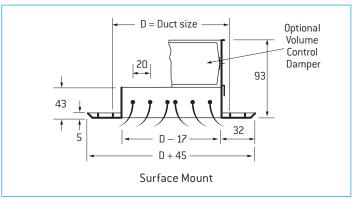
The capacity tables, pages 106D through to 109D, show the performances of the various air deflection patterns.

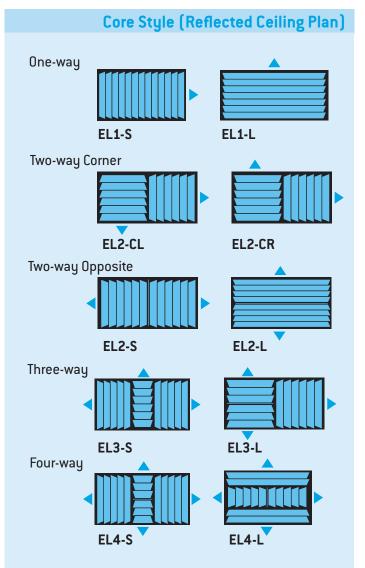
Note: Square diffusers can be rotated in their mountings.

Guide Weights For Core Styles Shown											
Model	Size	Approximate Weight in Kg.									
EL1-L	1000 x 150	1.75									
EL2-L	1000 x 300	2.94									
EL3-L	1000 x 300	2.97									
EL4-L	1000 x 450	4.15									









Eyelash Panel & Curved Frame –

Model: EL-P for Suspended Ceilings

Panel Diffusers

For installation in all suspended acoustic, or metal tile ceilings. Sized to fit standard ceiling module dimensions.

Module Sizes:

300 x 300 600 x 600 1200 x 600

300 x 600 600 x 900

Exposed 'T'

Actual panel dimension is 5 mm less than module nominated.

Concealed 'T'

Consult factory with details of ceiling system being used. Normally, panels are same size as ceiling tile, but depth and fixing systems vary. For approximate weights, please contact your local Holyoake branch.

Model: TLC-EL

Model TLC-EL is designed specifically for direct mounting on to Holyoake Spiroloc rigid round duct. Only a restricted range of sizes are available as shown.

When selecting from the EL selection data, allowance must be made for the neck area reduction caused by the angle between the two sides. This can be approximated by using selection data for a grille **50mm less in height** than nominal, as shown in the table. *Where mounting duct diameter is greater than double the minimum listed, this correction can be ignored.

Allowance must also be made to the throw data that is based on a ceiling effect, which is not present for diffusers mounted on exposed round ducts.

Specify duct construction at time of ordering. Volume control damper can be added at rear of diffuser but requires and additional 30mm gap from the diffuser.

Example:

Select TLC-EL, 2 way for 0.083 m³/s and

Vt 0.25 m/s, 6.4 m.

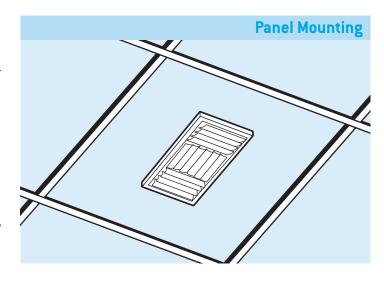
*Data shows 400 x 100 TLC-EL2L (See Page 107D).

Select a nominal size 400 x 150 TLC-EL2L

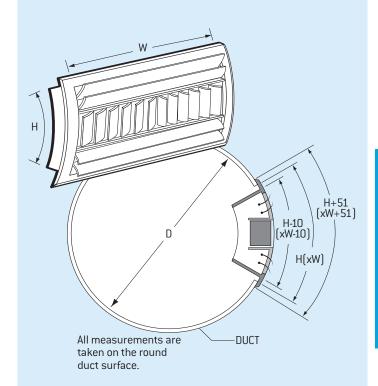
Nominal Width, W	Nominal Height, H	Minimum Duct Diameter, D	*Selection Height
300	150	300	100
400	200	400	150
500	250	500	200
600	300	600	250

Maximum nominal diffuser width: 600mm.

Guide Weights For Core Styles Shown											
Model	Size	Approximate Weight in Kg.									
EL2-L	300 x 150	0.45									
EL2-L	400 x 200	0.90									
EL2-L	500 x 250	1.13									
EL2-L	600 x 300	1.58									



Round Duct Mounting



E _ – Performance Data

		Core. Vel. m/s	0.51	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59	5.10
Size mm	Pattern	Vel. Press.	0	1	1	3	4	6	8	10	13	16
111111		Tot. Press.	1	4	8	14	23	33	44	57	73	89
	All	m³/s	0.005	0.012	0.017	0.024	0.028	0.033	0.040	0.045	0.052	0.057
	AII	NC				14	20	24	28	32	35	38
*150 x 100	2	Throw, m	-	-	-	1.5-4.0	2.1-4.9	2.4-5.8	2.7-6.7	3.1-7.6	3.7-8.5	4.0-9.5
$Ac = 0.011 \ m^2$	1		-	-	-	2.1-4.9	2.4-5.8	3.1-7.0	3.4-8.2	3.7-9.2	4.3-10.4	4.6-11.4
	All	m³/s	0.007	0.014	0.024	0.031	0.038	0.045	0.052	0.061	0.068	0.076
	All	NC				18	21	26	30	33	36	39
*200x100	2	Throw, m	-	-	1.5-3.4	1.8-4.3	2.1-5.2	2.7-6.4	3.1-7.3	3.4-8.2	3.7-9.2	4.3-10.1
$Ac = 0.0149 \ m^2$	1		-	-	1.5-4.0	2.1-5.2	2.7-6.4	3.1-7.6	3.7-8.8	4.6-9.8	4.6-11.0	5.2-12.2
	All	m³/s	0.009	0.019	0.028	0.038	0.047	0.056	0.066	0.076	0.085	0.094
*250 x 100		NC				16	22	27	31	34	37	40
*150 x 150	2	Throw, m	-	-	1.5-3.4	1.8-4.6	2.4-5.5	2.7-6.7	3.1-7.6	3.7-8.8	4.0-9.8	4.6-10.7
$Ac = 0.018 \ m^2$	1		-	-	1.8-4.3	2.4-5.5	2.7-6.7	3.4-7.9	3.7-9.2	4.3-10.4	4.9-11.6	8.8-12.8
	All	m³/s	0.012	0.024	0.038	0.050	0.061	0.073	0.085	0.099	0.111	0.123
*300 x 100	All	NC			10	17	23	28	32	35	38	41
*200 x 150	2	Throw, m	-	0.9-2.4	1.5-3.7	2.1-4.9	2.4-6.1	3.1-7.3	3.4-8.2	4.0-9.5	4.3-10.4	4.9-11.6
$Ac = 0.024 \ m^2$	1		-	1.2-3.1	1.8-4.6	2.4-5.8	3.1-7.3	3.7-8.5	4.0-9.8	4.6-11.3	5.2-12.5	5.8-13.7
	AII	m³/s	0.014	0.028	0.043	0.057	0.071	0.085	0.099	0.113	0.127	0.142
	All	NC			10	18	23	28	32	36	39	42
**350 x 100	4	Throw, m	-	0.9-2.1	1.2-3.1	1.8-4.3	2.1-5.2	2.7-6.4	3.1-7.3	3.4-8.2	3.7-9.2	4.3-10.1
	3		-	0.9-2.4	1.5-3.4	1.8-4.6	2.4-5.8	2.7-6.7	3.1-7.6	3.7-8.8	4.0-9.8	4.6-10.7
$Ac = 0.027 \text{ m}^2$	2		-	0.9-2.4	1.5-4.0	2.1-5.2	2.7-6.4	3.1-7.3	3.7-8.5	4.0-9.8	4.9-11.6	4.9-11.9
	1		-	1.2-3.1	1.8-4.6	2.4-6.1	3.1-7.6	3.7-8.8	4.3-10.4	4.9-11.6	5.5-13.1	6.1-14.3

^{*} Not available as 3 or 4 way.

Notes on Performance Data

- 1. All pressures are $Pa-(N/m^2)$.
- 2. Minimum throw values refer to a terminal velocity of 0.75 m/s and maximum to 0.25 m/s, with a cooling temperature differential of 12°C. The throw may be increased, or decreased 20%, by changing the vane setting.
- 3. The NC values are based on a room absorption of 8dB, re $10^{\text{-}12}$ watts.
- 4. Data is based on an opening of about 3 mm between the frame and the first vane and progressively wider spacings between vanes away from the frame. This setting will cause the air to be discharged parallel to the face of the diffuser (horizontal discharge if installed in ceiling).
- 5. If the vanes are adjusted to the full open position, the listed NC values will be reduced by 7 and the total pressure will be 0.30 times that shown in the tables.

^{** 3} or 4 way only available in 'S' format.

		Core. Vel. m/s	0.51	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59	5.10
Size	Pattern	Vel. Press.	0	1	1	3	4	6	8	10	13	16
mm		Tot. Press.	1	4	8	14	23	33	44	57	73	89
**400 x 100	AH	m³/s	0.017	0.033	0.050	0.066	0.083	0.099	0.116	0.132	0.149	0.165
*250 x 150	All	NC			11	18	24	29	33	37	39	42
*200 x 200	4			0.9-2.1	1.5-3.4	1.8-4.6	2.4-5.5	2.7-6.4	3.1-7.6	3.7-8.5	4.0-9.5	4.3-10.4
	3	Throw, m		0.9-2.4	1.5-3.7	1.8-4.6	2.4-5.8	3.1-7.0	3.4-7.9	4.3-9.2	4.3-10.1	4.6-11.6
$Ac = 0.032 \text{ m}^2$	2			1.2-2.7	1.5-4.0	2.1-5.2	2.7-6.4	3.1-7.6	3.7-8.8	4.3-10.1	4.6-11.3	5.2-12.5
**450 x 100 *250 x 150 *200 x 200 Ac = 0.032 m² **450 x 100 **300 x 150 Ac = 0.037 m² **500 x 100 *350 x 150 *250 x 200 Ac = 0.041 m² **600 x 100 **400 x 150 *300 x 200 Ac = 0.051 m² **450 x 150 *250 x 250 Ac = 0.057 m² **750 x 100 **500 x 150 *350 x 200 Ac = 0.065 m² **600 x 150 *350 x 200 Ac = 0.065 m² **600 x 150 *350 x 200 Ac = 0.075 m² **450 x 200 **350 x 250 Ac = 0.075 m²	1			1.2-3.1	2.1-4.9	2.7-6.4	3.1-7.6	3.7-9.2	4.6-10.7	5.2-12.2	5.5-13.4	6.1-14.9
	A 11	m³/s	0.019	0.038	0.057	0.076	0.094	0.113	0.132	0.151	0.170	0.189
**450 x 100	All	NC			12	19	25	30	34	37	40	43
**300 x 150	4			0.9-2.4	1.5-3.4	1.8-4.6	2.4-5.8	2.7-6.7	3.4-7.9	3.7-8.8	4.0-9.8	4.6-10.7
	3	Throw, m		0.9-2.4	1.5-3.7	2.1-4.9	2.4-6.1	3.1-7.3	3.4-8.2	4.0-9.5	4.6-10.7	4.9-11.6
$Ac = 0.037 \text{ m}^2$	2			1.2-2.7	1.8-4.3	2.4-5.5	2.7-6.7	3.4-7.9	3.7-9.2	4.3-10.4	4.9-11.6	5.5-12.8
	1			1.5-3.4	2.1-4.9	2.7-6.7	3.4-7.9	4.0-9.5	4.6-11.0	5.2-12.5	5.8-14.0	6.4-15.6
**500 x 100	A 11	m³/s	0.021	0.043	0.064	0.085	0.106	0.127	0.149	0.167	0.191	0.212
*350 x 150	All	NC			12	19	26	30	34	38	41	44
*250 x 200	4			0.9-2.4	1.5-3.7	1.8-4.6	2.4-5.8	3.1-7.0	3.4-7.9	3.7-9.2	4.3-10.1	4.6-11.3
	3	Throw, m		0.9-2.4	1.5-4.0	2.1-5.2	2.4-6.4	3.1-7.3	3.7-8.5	4.0-9.8	4.6-11.0	4.9-11.9
$Ac = 0.041 \text{ m}^2$	2			1.2-2.7	1.8-4.3	2.4-5.8	3.1-7.0	3.4-8.2	4.0-9.5	4.6-10.7	4.9-11.9	5.5-13.4
	1			1.5-3.4	2.1-5.2	2.7-6.7	3.4-8.2	4.0-9.8	4.6-11.3	5.5-12.8	6.1-14.3	6.7-16.2
**600 x 100	A 11	m³/s	0.026	0.052	0.078	0.104	0.130	0.156	0.182	0.208	0.234	0.260
**400 x 150	All	NC			13	20	26	31	35	39	41	44
*300 x 200	4		0.6-1.2	0.9-2.4	1.5-3.7	2.1-4.9	2.4-6.1	3.1-7.3	3.7-8.5	4.0-9.5	4.6-10.7	4.9-11.9
	3	Throw, m	0.6-1.5	1.2-2.7	1.5-4.0	2.4-5.5	2.7-6.7	3.4-7.9	3.7-9.2	4.3-10.1	4.9-11.6	5.2-12.5
$Ac = 0.051 \text{ m}^2$	2		0.6-1.5	1.2-3.1	1.8-4.6	2.4-6.1	3.1-7.3	3.7-8.8	4.3-10.1	4.6-11.3	5.2-12.5	5.8-14.0
	1		0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.0	3.7-8.8	4.3-10.4	4.9-11.9	5.5-13.4	6.4-15.3	7.0-17.1
	A 11	m³/s	0.028	0.059	0.087	0.118	0.146	0.175	0.205	0.234	0.264	0.293
**450 x 150	All	NC			13	21	27	32	36	39	42	45
*250 x 250	4		0.6-1.2	1.2-2.7	1.5-4.0	2.1-5.2	2.7-6.4	3.1-7.6	3.7-8.5	4.0-9.8	4.6-11.0	5.2-12.2
	3	Throw, m	0.6-1.5	1.2-2.7	1.8-4.3	2.4-5.5	2.7-6.7	3.4-8.2	4.0-9.5	5.3-10.4	4.9-11.9	5.5-13.1
$Ac = 0.057 \text{ m}^2$	2		0.6-1.5	1.2-3.1	1.8-4.6	2.4-6.1	3.1-7.6	3.7-8.8	4.3-10.4	4.9-11.6	5.5-13.1	6.1-14.3
	1		0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.3	3.7-9.2	4.6-10.7	5.2-12.5	5.8-14.0	6.4-15.6	7.3-17.4
**750 x 100	AH	m³/s	0.033	0.066	0.099	0.132	0.165	0.198	0.231	0.264	0.297	0.332
**500 x 150	All	NC			14	21	27	32	36	40	42	45
*350 x 200	4		0.6-1.5	1.2-2.7	1.5-4.0	2.1-5.2	2.7-6.4	3.1-7.6	3.7-8.8	4.3-10.1	4.6-11.3	5.2-12.5
	3	Throw, m	0.6-1.5	1.2-2.7	1.8-4.3	2.4-5.8	3.1-7.0	3.4-8.2	4.0-9.8	4.6-11.0	5.2-12.2	5.5-13.4
$Ac = 0.065 m^2$	2		0.6-1.8	1.5-3.4	2.1-4.9	2.7-6.4	3.1-7.6	3.7-9.2	4.6-10.7	5.2-12.2	5.5-13.4	6.1-14.9
	1		0.9-2.1	1.5-4.0	2.4-5.8	3.1-7.6	3.7-9.2	4.6-11.0	5.5-12.8	6.1-14.3	6.7-16.2	7.6-18.0
**600 x 150	AII	m³/s	0.038	0.076	0.116	0.153	0.191	0.229	0.267	0.307	0.345	0.382
**400 x 200	All	NC			15	22	28	33	37	40	43	46
**350 x 250	4		0.6-1.5	1.2-2.7	1.8-4.3	2.4-5.5	2.7-6.7	3.4-7.9	3.7-9.2	4.3-10.4	4.9-11.6	5.5-13.1
	3	Throw, m	0.6-1.5	1.2-2.7	1.8-4.3	2.4-5.5	2.7-7.6	3.4-7.9	3.7-9.2	4.3-10.4	4.9-11.6	5.5-13.1
$Ac = 0.075 \text{ m}^2$	2		0.6-1.8	1.5-3.4	2.1-4.9	2.7-6.7	3.4-7.9	4.0-9.5	4.6-11.0	5.2-12.5	5.8-14.0	6.4-15.6
	1		0.9-2.1	1.5-4.0	2.4-6.1	3.4-7.9	4.0-9.8	4.9-11.6	5.5-13.4	6.1-14.9	7.0-16.8	7.9-18.9
	A.II	m³/s	0.040	0.083	0.123	0.165	0.205	0.245	0.288	0.328	0.371	0.411
**450 x 200	All	NC			15	22	28	33	37	40	43	46
*300 x 300	4		0.6-1.5	1.2-3.1	1.8-4.3	2.4-5.8	3.1-7.0	3.4-8.2	4.0-9.5	4.6-10.7	4.9-11.9	5.5-13.1
	3	Throw, m	0.6-1.5	1.2-3.1	1.8-4.6	2.4-6.1	3.1-7.6	3.7-8.8	4.3-10.1	4.9-11.6	5.5-12.8	6.1-14.3
$Ac = 0.080 \text{ m}^2$	2		0.6-1.8	1.5-3.4	2.1-5.2	2.7-6.7	3.4-8.2	4.0-9.8	4.6-11.3	5.5-12.8	6.1-14.3	6.7-15.9
	1		0.9-2.1	1.8-4.3	2.4-6.1	3.4-7.9	4.0-9.8	4.9-11.9	5.8-13.7	6.4-15.3	7.0-17.1	7.9-19.2
								•	•	*		

^{*} Not available as 3 or 4 way.

^{** 3} or 4 way only available in 'S' format.

E _ - Performance Data

<u></u>		Core. Vel. m/s	0.51	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59	5.10
Size mm	Pattern	Vel. Press.	0	1	1	3	4	6	8	10	13	16
		Tot. Press.	1	4	8	14	23	33	44	57	73	89
**750 x 150	All	m³/s	0.047	0.097	0.144	0.194	0.241	0.288	0.338	0.395	0.434	0.481
**500 x 200	AII	NC			16	23	29	34	38	41	44	47
**400 x 250	4		0.6-1.5	1.2-3.1	1.8-4.6	2.4-5.8	3.1-7.3	3.7-8.5	4.0-9.8	4.6-11.0	5.2-12.5	5.8-13.7
**350 x 300	3	Throw, m	0.6-1.8	1.2-3.1	2.1-4.9	2.7-6.4	3.1-7.6	3.7-9.2	4.6-10.7	4.9-11.9	5.5-13.4	6.1-14.6
	2		0.6-1.8	1.5-3.7	2.1-5.2	3.1-7.0	3.7-8.5	4.3-10.1	4.9-11.9	5.5-13.1	6.1-14.9	7.0-16.8
$Ac = 0.094 \text{ m}^2$	1		0.9-2.1	1.8-4.3	2.7-6.4	3.4-8.2	4.3-10.4	5.2-12.2	5.8-14.0	6.7-15.9	7.6-18.0	8.2-19.8
**600 x 200	All	m³/s	0.054	0.109	0.163	0.217	0.271	0.326	0.380	0.434	0.491	0.543
**450 x 250	All	NC			16	24	30	34	38	42	45	48
**400 x 300	4		0.6-1.5	1.2-3.1	1.8-4.6	2.4-6.1	3.1-7.6	3.7-8.8	4.3-10.1	4.9-11.6	5.5-12.8	5.8-14.0
	3	Throw, m	0.6-1.8	1.5-3.4	2.1-4.9	2.7-6.4	3.4-7.9	4.0-9.5	4.6-11.0	5.2-12.5	5.8-13.7	6.4-15.3
$Ac = 0.107 \text{ m}^2$	2		0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.0	3.7-8.8	4.3-10.4	5.2-12.2	5.8-13.7	6.4-15.3	7.0-17.1
	1		0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.5	4.6-10.7	5.2-12.5	6.1-14.3	6.7-16.5	7.6-18.3	8.5-20.7
**900 x 150	A 11	m³/s	0.059	0.118	0.177	0.236	0.295	0.354	0.413	0.472	0.529	0.592
**500 x 250	All	NC			16	24	30	35	39	42	45	48
350 x 350	4		0.6-1.5	1.2-3.1	1.8-4.6	2.4-6.1	3.1-7.6	3.7-8.8	4.3-10.4	4.9-11.6	5.5-13.1	6.1-14.3
	3	Throw, m	0.6-1.8	1.5-3.4	2.1-4.9	2.7-6.7	3.4-8.2	4.0-9.8	4.6-11.3	5.2-12.5	5.8-14.0	6.4-15.6
$Ac = 0.116m^2$	2		0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.3	3.7-9.2	4.6-10.7	5.2-12.5	5.8-14.0	6.4-15.6	7.3-17.4
	1		0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.8	4.6-10.7	5.5-12.8	6.1-14.6	7.0-16.8	7.9-18.9	8.8-21.0
	A.II	m³/s	0.064	0.127	0.191	0.255	0.319	0.382	0.446	0.510	0.576	0.637
400 x 300	All	NC			17	24	30	35	39	42	45	48
450 x 300	4		0.6-1.8	1.2-3.1	2.1-4.9	2.7-6.4	3.1-7.6	3.7-9.2	4.6-10.7	4.9-11.9	5.5-13.4	6.1-14.6
	3	Throw, m	0.6-1.8	1.5-3.4	2.1-5.2	2.7-6.7	3.4-8.2	4.0-9.8	4.6-11.3	5.5-12.8	6.1-14.3	6.7-15.9
$Ac = 0.125m^2$	2		0.9-2.1	1.5-4.0	2.4-5.8	3.1-7.6	3.7-9.2	4.6-11.0	5.5-12.8	6.1-14.3	6.7-16.2	7.6-18.0
	1		0.9-2.4	1.8-4.6	3.1-7.0	3.7-8.8	4.6-11.0	5.5-13.1	6.4-15.3	7.0-17.1	7.9-19.2	8.8-21.4
**750 x 200	A 11	m³/s	0.073	0.144	0.217	0.288	0.361	0.434	0.505	0.576	0.651	0.722
**600 x 250	All	NC			17	25	31	36	40	43	46	49
500 x 300	4		0.6-1.8	1.5-3.4	2.1-4.9	2.7-6.4	3.4-7.9	4.0-9.5	4.6-11.0	5.2-12.2	5.8-13.7	6.4-15.3
450 x 350	3	Throw, m	0.6-1.8	1.5-3.7	2.1-5.2	3.1-7.0	3.7-8.5	4.3-10.1	4.9-11.9	5.5-13.4	6.1-14.9	6.7-16.5
400 x 400	2		0.9-2.1	1.5-4.0	2.4-5.8	3.1-7.6	4.0-9.8	4.6-11.3	5.5-13.0	6.1-14.6	7.0-16.8	7.6-18.3
$Ac = 0.142m^2$	1		0.9-2.4	2.1-4.9	3.1-7.0	3.7-9.2	4.6-11.3	5.5-13.4	6.4-15.6	7.3-17.7	8.2-19.8	9.2-22.3
**900 x 200	A 11	m³/s	0.086	0.172	0.257	0.345	0.430	0.515	0.599	0.689	0.774	0.859
**750 x 250	All	NC			18	26	32	36	40	44	47	50
600 x 300	4		0.6-1.8	1.5-3.4	2.1-5.2	2.7-6.7	3.4-8.2	4.0-9.8	4.6-11.3	5.5-12.8	6.1-14.3	6.7-16.2
500 x 350	3	Throw, m	0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.3	3.7-8.8	4.6-10.7	5.2-12.2	5.8-13.7	6.4-15.6	7.3-17.4
450 x 400	2		0.9-2.1	1.8-4.3	2.4-6.1	3.4-8.2	4.3-10.1	4.9-11.9	5.8-13.7	6.4-15.3	7.3-17.4	7.9-19.2
$Ac = 0.169 \text{ m}^2$	1		0.9-2.4	2.1-4.9	3.1-7.3	4.0-9.8	4.9-11.9	5.8-14.0	6.7-16.5	7.6-18.3	8.5-20.7	9.8-23.2
600 x 350	All	m³/s	0.099	0.198	0.297	0.397	0.496	0.595	0.694	0.793	0.892	0.991
500 x 400	AII	NC			19	26	32	37	41	44	47	50
450 x 450	4		0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.0	3.7-8.5	4.3-10.4	4.9-11.9	5.5-13.4	6.1-14.9	7.0-16.8
	3	Throw, m	0.9-2.1	1.5-4.0	2.4-5.8	3.1-7.6	3.7-9.2	4.6-11.0	5.5-12.8	6.1-14.3	6.7-16.2	7.6-18.0
$Ac=0.195m^2$	2		0.9-2.1	1.8-4.3	2.7-6.4	3.7-8.5	4.3-10.4	5.2-12.2	5.8-14.0	6.7-15.9	7.6-18.0	8.5-20.1
	1		1.2-2.7	2.1-5.2	3.1-7.6	4.3-10.1	5.2-12.2	6.1-14.6	7.0-16.8	7.9-18.9	8.8-21.4	10.1-24.4
**900 x 250	All	m³/s	0.111	0.222	0.333	0.444	0.557	0.666	0.774	0.887	1.000	1.112
750 x 300	All	NC			19	27	33	37	41	45	48	51
600 x 400	4		0.6-1.8	1.5-3.7	2.4-5.5	3.1-7.3	3.7-8.8	4.6-10.7	5.2-12.2	5.8-13.7	6.4-15.3	7.3-17.4
500 x 450	3	Throw, m	0.9-2.1	1.5-4.0	2.4-6.1	3.1-7.6	4.0-9.5	4.6-11.3	5.5-13.1	6.1-14.9	7.0-16.8	7.6-18.3
	2		0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.5	4.6-10.7	5.5-12.8	6.1-14.6	6.7-16.5	7.6-18.6	8.5-20.7
$Ac = 0.218 m^2$	1		1.2-2.7	2.1-5.2	3.4-7.9	4.3-10.4	5.5-12.8	6.1-14.9	7.3-17.4	8.2-19.5	9.2-22.0	10.4-25.0

 $[\]ensuremath{^{**}}$ 3 or 4 way only available in 'S' format.

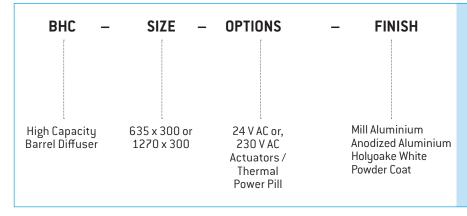
108D — © Holyoake by Price – 2022

Performance Data — **E**

		Core. Vel. m/s	0.51	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59	5.10
Size mm	Pattern	Vel. Press.	0	1	1	3	4	6	8	10	13	16
111111		Tot. Press.	1	4	8	14	23	33	44	57	73	89
900 x 300	A 11	m³/s	0.127	0.253	0.381	0.505	0.633	0.762	0.887	1.016	1.143	1.270
750 x 350	All	NC			20	27	33	38	42	45	48	51
600 x 450	4		0.9-2.1	1.5-4.0	2.4-5.8	3.1-7.6	3.7-9.2	4.6-11.0	5.5-12.8	6.1-14.3	6.7-15.9	7.6-18.0
500 x 500	3	Throw, m	0.9-2.1	1.8-4.3	2.4-6.1	3.4-7.9	4.3-10.1	4.9-11.9	5.8-13.7	6.4-15.3	7.3-17.4	7.9-19.2
	2		0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.8	4.6-11.0	6.1-14.6	6.1-14.9	7.0-17.1	7.9-18.9	8.8-21.4
$Ac = 0.249 \text{ m}^2$	1		1.2-2.7	2.4-5.5	3.4-8.2	4.6-10.7	5.5-13.1	6.4-15.6	7.6-18.0	8.5-20.1	9.5-22.9	10.7-25.9
900 x 350		m³/s	0.149	0.297	0.446	0.595	0.746	0.892	1.046	1.195	1.345	1.494
750 x 400	All	NC		10	20	28	34	39	43	46		52
600 x 500	4		0.9-2.1	1.5-4.0	2.4-5.8	3.4-7.9	4.0-9.5	4.6-11.3	5.5-13.1	6.1-14.9	7.0-16.8	7.9-18.9
	3	Throw, m	0.9-2.1	1.8-4.3	2.7-6.4	3.4-8.2	4.3-10.4	5.2-12.2	5.8-14.0	6.7-15.9	7.6-18.0	8.5-20.1
$Ac = 0.293 \text{ m}^2$	2		0.9-2.4	2.1-4.9	3.1-7.3	3.7-9.2	4.9-11.6	5.8-13.7	6.4-15.6	7.3-17.7	8.2-19.8	9.2-22.3
	1		1.2-3.1	2.4-5.8	3.7-8.5	4.6-11.0	5.8-13.7	6.7-16.2	7.9-18.9	8.8-21.0	10.1-24.1	11.3-27.2
900 x 400		m³/s	0.172	0.345	0.519	0.689	0.859	1.037	1.210	1.383	1.556	1.729
750 x 450	All	NC		11	21	29	35	39	43	47	50	53
600 x 600	4		0.9-2.1	1.8-4.3	2.4-6.1	3.4-8.2	4.3-10.1	4.9-11.9	5.8-13.7	6.4-15.3	7.3-17.4	8.2-19.5
	3	Throw, m	0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.5	4.6-10.7	5.5-12.8	6.1-14.6	7.0-16.8	7.6-18.6	8.5-20.7
$Ac = 0.339 \text{ m}^2$	2		0.9-2.4	2.1-4.9	3.1-7.3	4.0-9.8	4.9-11.9	5.8-14.0	6.7-16.5	7.6-18.3	8.5-20.7	9.8-23.2
	1		1.2-3.1	2.4-6.1	3.7-8.8	4.6-11.3	5.8-14.0	7.0-16.8	8.2-19.5	9.2-22.0	10.4-25.0	11.6-28.1
		m³/s	0.191	0.382	0.576	0.765	0.953	1.151	1.342	1.534	1.726	1.918
900 x 450	All	NC		11	22	29	35	40	44	47	50	53
750 x 500	4		0.9-2.1	1.8-4.3	2.7-6.4	3.4-8.2	4.3-10.4	5.2-12.2	5.8-14.0	6.7-15.9	7.6-18.0	8.5-20.1
	3	Throw, m	0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.8	4.6-11.0	5.5-13.1	6.1-14.9	7.0-17.1	7.9-19.2	8.8-21.4
$Ac = 0.376 \text{ m}^2$	2		1.2-2.7	2.1-5.2	3.1-7.6	4.0-9.8	5.2-12.2	6.1-14.3	7.0-16.8	7.9-18.9	8.8-21.4	10.1-24.1
	1		1.2-3.1	2.4-6.1	3.7-9.2	4.9-11.9	6.1-14.3	7.3-17.4	8.5-20.1	9.5-22.6	10.7-25.6	11.9-28.7
		m³/s	0.222	0.446	0.670	0.892	1.117	1.340	1.564	1.787	2.010	2.234
900 x 500	All	NC		12	22	30	36	40	44	48	46	54
750 x 600	4		0.9-2.4	1.8-4.6	2.7-6.7	3.7-8.5	4.6-10.7	5.5-12.8	6.1-14.6	6.7-16.5	7.6-18.6	8.5-20.7
	3	Throw, m	0.9-2.4	2.1-4.9	3.1-7.0	3.7-9.2	4.9-11.6	5.8-13.7	6.7-15.9	7.3-17.7	8.5-20.1	9.5-22.6
$Ac = 0.438 \text{ m}^2$	2		1.6-2.7	2.4-5.2	3.4-7.9	4.3-10.4	5.5-12.8	6.1-14.9	7.3-17.4	8.2-19.5	9.2-22.3	10.4-25.0
	1		1.5-3.4	2.7-6.4	4.0-9.5	5.2-12.2	6.1-14.9	7.6-18.0	8.5-20.7	9.8-23.8	11.3-26.8	12.5-29.9
		m³/s	0.274	0.548	0.826	1.104	1.379	1.655	1.931	2.207	2.483	2.759
900 x 600	All	NC		13	23	31	37	41	45	49	52	55
750 x 750	4		0.9-2.4	1.8-4.6	3.1-7.0	3.7-9.2	4.6-11.3	5.5-13.4	6.4-15.6	7.3-17.4	8.2-19.5	9.2-22.0
	3	Throw, m	1.2-2.7	2.1-4.9	3.1-7.6	4.0-9.8	5.2-12.2	6.1-14.3	7.0-16.8	7.6-18.6	8.8-21.4	9.8-23.8
$Ac = 0.541 \text{ m}^2$	2		1.2-2.7	2.4-5.5	3.4-8.2	4.6-10.7	5.5-13.4	6.7-15.9	7.6-18.3	8.5-20.7	9.8-23.5	11.0-26.5
	1		1.5-3.4	2.7-6.7	4.0-9.8	5.5-12.8	6.7-15.9	7.9-18.9	9.2-22.0	10.4-25.0	11.9-28.4	13.4-32.0
	A 11	m³/s	0.338	0.675	1.020	1.360	1.698	2.038	2.378	2.717	3.057	3.396
	All	NC		14	24	31	37	42	46	50	53	56
900 x 750	4		0.9-2.4	2.1-4.9	3.1-7.3	4.0-9.8	4.9-11.9	5.8-14.0	6.7-16.5	7.6-18.3	8.5-20.7	9.8-23.2
	3	Throw, m	1.6-2.7	2.1-5.2	3.4-7.9	4.3-10.4	5.5-12.8	6.4-15.3	7.3-17.4	8.2-19.8	9.2-22.3	10.4-25.0
Ac = 0.666 m ²	2		1.6-3.1	2.4-6.1	3.7-8.8	4.6-11.3	5.8-14.0	7.0-16.8	8.2-19.5	9.2-22.0	10.4-25.0	11.6-28.1
	1		1.5-3.7	3.1-7.0	4.3-10.4	5.5-13.4	7.0-16.8	8.5-20.1	9.8-23.5	11.0-26.5	12.5-29.9	14.0-33.6
	A 11	m³/s	0.408	0.817	1.227	1.636	2.045	2.454	2.863	3.272	3.681	4.090
	All	NC		14	25	32	38	43	47	51	53	56
900 x 900	4		1.2-2.7	2.1-5.2	3.1-7.6	4.3-10.1	5.2-12.5	6.1-14.9	7.0-17.1	8.2-19.5	9.2-21.7	10.1-24.4
	3	Throw, m	1.2-3.1	2.4-5.5	3.4-8.2	4.6-10.7	5.5-13.4	6.7-15.9	7.6-18.3	8.5-20.7	9.8-23.5	11.0-26.5
$Ac = 0.802 \text{ m}^2$	2		1.2-3.1	2.4-6.1	3.7-9.2	4.9-11.9	6.1-14.6	7.3-17.7	8.5-20.4	9.8-23.2	11.0-26.2	12.2-29.3
	1		1.5-4.0	3.1-7.3	4.6-11.0	5.8-14.0	7.3-17.7	8.8-21.4	10. 1-24.4	11.6-27.8	13.1-31.4	14.6-35.4

BHC, DFR, DS & JD

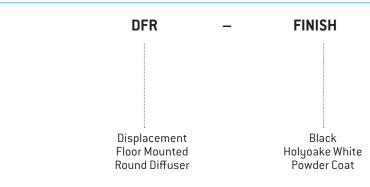
Product Ordering Key and Suggested Specifications



High Capacity Barrel Diffusers shall be Holyoake Series BHC. They shall be designed to be mounted into a supply plenum that may contain a number of BHC units, which will provide high capacity and long throw diffusion. Adjustment is available to change the vertical and horizontal throw and spread.

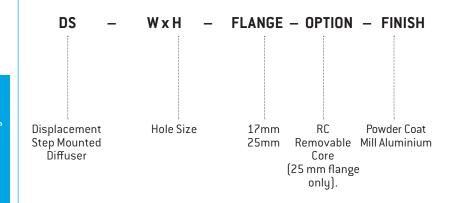
Series BHC shall be finished in Mill Aluminium and fitted with accessories where indicated.

All shall be as manufactured by Holyoake.



Displacement Floor Mounted Round Diffusers shall be Holyoake Series DFR. They shall be designed to mount into a supply plenum at floor level and to provide an even distribution of air flow at low velocity, thereby creating a draft-less environment. Pressure drop through the displacement diffusers will be such to provide balance within the supply plenum, while being low enough to generate very low noise levels

Series DFR Displacement Diffusers shall be circular.
All shall be as manufactured by Holyoake.



Displacement Step Mounted Diffusers shall be Holyoake Series DS. They shall be designed to mount into a supply plenum at floor level and to provide an even distribution of air flow at low velocity, thereby creating a draft-less environment. Pressure drop through the displacement diffusers will be such to provide balance within the supply plenum, while being low enough to generate very low noise levels.

Series DS Displacement Step Mounted Diffusers are designed to be face fixed, or supplied with the Holyoake Removable Core System (25 mm flange only).

All shall be as manufactured by Holyoake.



Circular Jet Diffusers shall be Holyoake Model JD constructed from spun aluminium cones. JD Jet Diffusers shall be capable of operating in either diffused, or jet air pattern configurations. The air patterns shall be achieved by rotating the cone assembly through 180 degrees. JD Jet Diffusers shall be complete with a mounting system suitable for wall, or ceiling applications.

Series JD shall be finished in powder coat and fitted with accessories where indicated.

All shall be as manufactured by Holyoake.

Note

For ceiling applications of JD Diffusers, Seismic Restraints would be required, but not supplied.

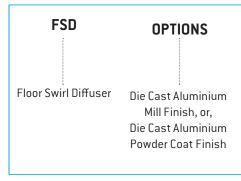
JND, EL, EL-P, FSD & TLC-EL

Product Ordering Key and Suggested Specifications



Holyoake Jet nozzle diffusers shall be of spun aluminium construction with a steel concealed mounting system. They shall be designed to supply large air quantities over large throws.

Series JND shall be finished in powder coat and all shall be as manufactured by Holyoake.

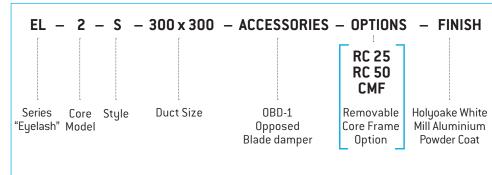


Circular floor diffusers shall be Holyoake FSD Series manufactured in glass filled polycarbonate, in self-coloured grey, or black, as standard. Nominal FSD diffuser size shall be 220mm in diameter. The FSD diffuser shall contain a flow regulation damper and the fascia is complete with 'Min/Max' indication.

Series FSD mounting clamp and trim ring shall also be manufactured in glass filled polycarbonate. FSD diffusers shall contain a dust/dirt collection basket.

All Series FSD materials used are fire retardant and the diffusers shall resist permanent deformation when subject to point loads up to 500 Kg.

All shall be as manufactured by Holyoake.



Surface Mounted Eyelash Type

EL surface mounted diffusers shall be of the "Eyelash", or curved blade type. They shall be of extruded aluminium construction, with each blade individually adjustable from the face. Optional opposed blade damper can be adjusted through the face of the diffuser.

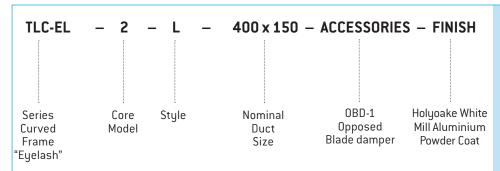
All shall be as manufactured by Holyoake



Panel Lay-in Eyelash Type

EL-P Panel Lay-in diffusers shall be of the "Eyelash", or curved blade type. They shall be of extruded aluminium construction, with each blade individually adjustable from the face. Optional opposed blade damper can be adjusted through the face of the diffuser.

All shall be as manufactured by Holyoake.



Curved Frame Eyelash Type

TLC-EL diffusers shall be of the "Curved Frame Eyelash" type, with curved blades. They shall be of extruded aluminium construction, with each blade adjustable from the face. Optional opposed blade damper can be adjusted through the face of the diffuser.

All shall be as manufactured by Holyoake.

Note

For ceiling applications of EL Diffusers, Seismic Restraints would be required, but not supplied.