

DLQ – Architectural ceiling diffuser



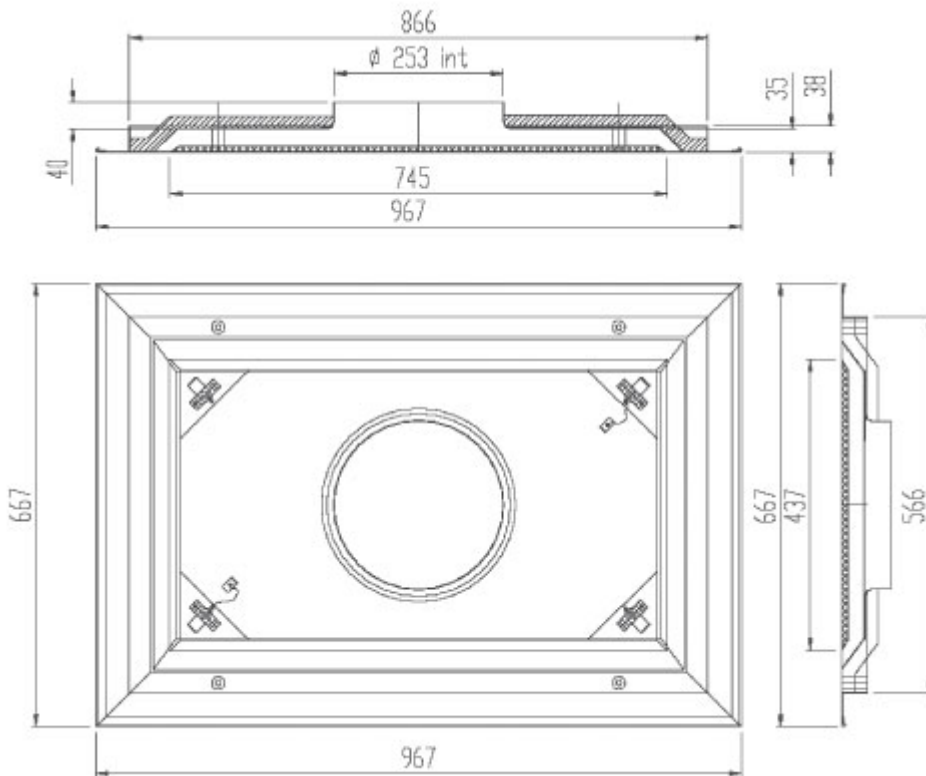
Overview

- Horizontal radial air supply
- Installation either to balancing plenum or cabin unit
- Detachable front plate enables cleaning of the diffuser
- Circular duct connection
- Compatible with Halton cabin units

Specification

Halton DLQ is a rectangular architectural diffuser for circular duct connections D250 mm. The diffuser is manufactured of steel and finished with epoxy paint in RAL/NCS colour. The DLQ diffuser is specially designed to meet the highest criteria of good indoor climate in cruise ship applications. The short-throw levels guarantee low air residual velocities in cabins, which also reduces draft. DLQ diffuser is to be installed in a false ceiling (B-0, B-15), and with it form an integral impression. The low noise level of less than 40 dB(A) is achieved through the operating level of the diffuser which is between 250 – 300 m³/h. Air is supplied into space through the diffuser slots on the front plate. The detachable front plate is fixed to the sleeve with clips. The DLQ diffuser is fully compatible with Halton cabin units.

Dimensions and Weight



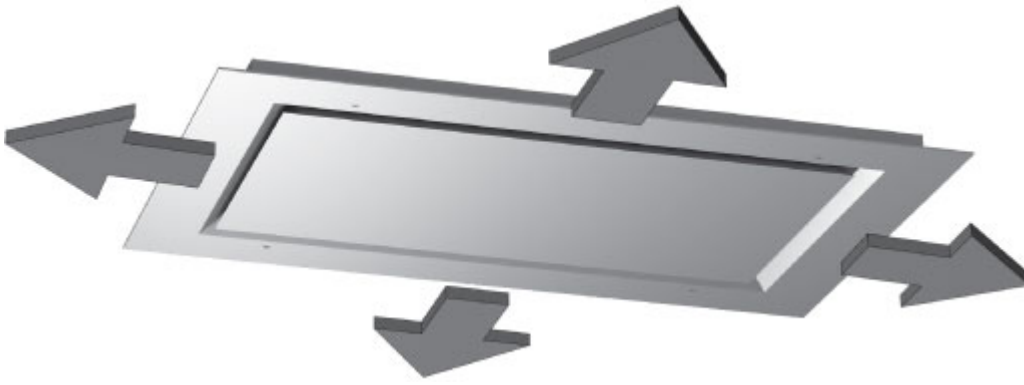
The standard weight of the DLQ diffuser is 10,8 kg.

Material

PART	MATERIAL	NOTE
Upper plate	Steel	–
Front plate	Steel	–
Front plate insulation	Mineral wool	–
Upper plate insulation	Mineral wool	–
Coupling sleeve	Steel	–
Finishing	Epoxy-painted	RAL and NCS colours available

Function

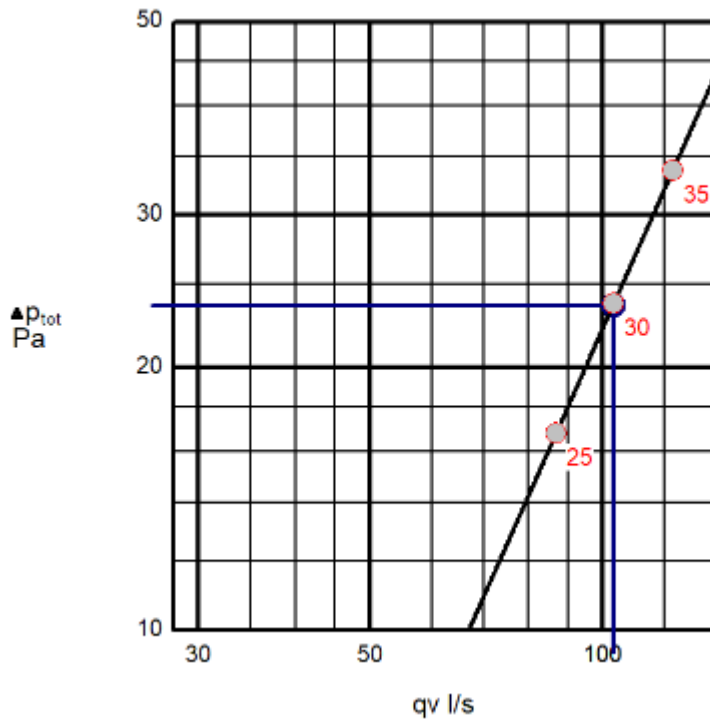
Air is supplied horizontally into the space through the side slots of the diffuser and induces the room air outside the diffuser.



Supply					DLQ-250								2020.03
qv l/s	Δp_{st} Pa	Δp_{tot} Pa	$L_p A$ dB(A)	NR/ NC	L_w dB								
					f Hz								
					63	125	250	500	1000	2000	4000	8000	
87	15	17	25	21/19	33	32	30	29	23	9	3	9	
104	21	24	30	26/24	37	36	35	34	28	16	6	10	
123	30	24	35	31/30	42	41	40	39	33	23	14	11	
146	42	47	40	36/35	46	45	45	44	39	30	21	12	

Supply / Attenuation								DLQ-250		2020.03
ΔL dB										
f Hz										
63	125	250	500	1000	2000	4000	8000			
15	10	7	4	7	16	21	22			

Supply				DLQ-250				2020.03
qv = 103 l/s				$\Delta p_{tot} = 24$ Pa				
L_p Are 10m ² sab = 30 dB(A) $L_w = 34$ dB(A) NR/NC = 26/24								
L_w dB								
63	125	250	500	1000	2000	4000	8000	
15	10	7	4	7	16	21	22	



Installation

The DLQ diffuser can be connected to a balancing plenum or cabin unit.

Servicing

Open the front panel of the diffuser and clean the parts by wiping with a damp cloth. After servicing, fasten the safety wires back into the front panel. Place the front panel back into place and lock the latches.