

OHCL - 125

CLOSABLE WEATHER LOUVER

MODEL OHCL-125

FEATURES

- High Performance Louver
- Water Penetration Performance
- Motorised or Manual Operation
- Bold Straight Blade Profile
- Obstructed Line of Sight
- Dual Weather Stop Blade

OPTIONS

- The OHCL-125 is available in two surrounds:
 - 40mm flange cover as standard
 - Flangeless channel surround (on request)
- Motorised operation via 24V or 230V:
 - Linear actuators as standard
 - Spring return rotary actuators available for fail-safe applications (on request)
- Finish:
 - Natural anodised 25um finish as standard
 - Duralloy Powder Coat finish (on request)
 - Warranty powder coatings available (on request)
- The OHCL-125 can be ordered with no closable blades (on request) - this option improves the performance but eliminates the operability of the louver (ordering code: OHL-125)
- Insect screens (on request)
- Blank-off panels (on request)
- Head and/or sill flashing (on request)
- Security bars (on request)
- Filter racks (on request)



The OHCL-125 is a closable louver designed from proven Holyoake louver technology, featuring improved weather performance alongside a high free area.

The OHCL-125 is an operable, closable louver that offers functionality through black anodised damper blades. These blades are pivoted on the underside of each fixed blade and operated by either manual or motorised means. While open the closing blades offer minimal additional air flow resistance.

TYPICAL APPLICATIONS

The OHCL-125 louver can be installed as part of the Mechanical Services System for either intake or exhaust applications and is suited for applications where high airflow is required.

Typical uses are to provide controlled air movement in conjunction with powered and natural ventilation systems in stadiums, data centres, factories, plant rooms, power stations, and projects that require similar large air volumes.

CONSTRUCTION

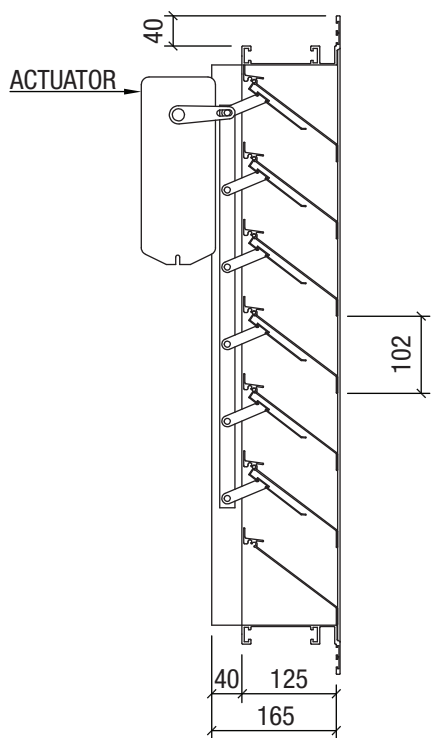
The OHCL-125 louver is constructed with 6063 T6 extruded aluminium, mechanically locked together ensuring a reliable and resilient louver. The integral extruded closing blades, hinged off the fixed blades, are finished black anodised. Various mesh options are available for fitting to the rear of the louver.

Surround:	125mm deep
Blades:	37° x 2mm thick
Closing Blade:	1.5mm thick, black anodised
Mesh:	- Stainless steel 10 x 10 x 0.9mm as standard - Stainless steel 6 x 6 x 0.5mm (on request)
Mullion:	Fitted to rear at either edge and at intervals no greater than 1000mm spacing
Hardware:	All stainless steel
Free Area:	1200mm x 1200mm unit - (0.63m ²) 44%
Minimum Nominal Size:	300mm (wide) x 280mm (high)
Maximum Nominal Size:	OHCL-125: 1128mm (wide) x 5788mm (high) or 5800mm (wide) x 1198mm (high)
(single section)	OHL-125: 1128mm (wide) x 5788mm (high) or 5800mm (wide) x 1504mm (high)

5 YEAR WARRANTY

ALL DIMENSIONS IN MM
INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTICE OR OBLIGATION
PRICE HOLYOAKE OHCL-125 FEBRUARY 2024

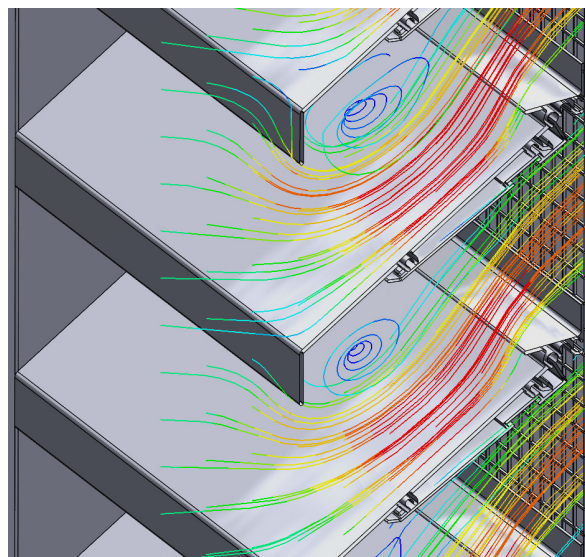
PRODUCT INFORMATION - DIMENSIONS



PRODUCT INFORMATION - WEIGHTS

OHCL-125 PRODUCT GUIDE WEIGHTS (KG)			
600 x 600	13	1500 x 1500	56
900 x 900	24	2000 x 3500	160
1200 x 1200	41	4000 x 1500	135

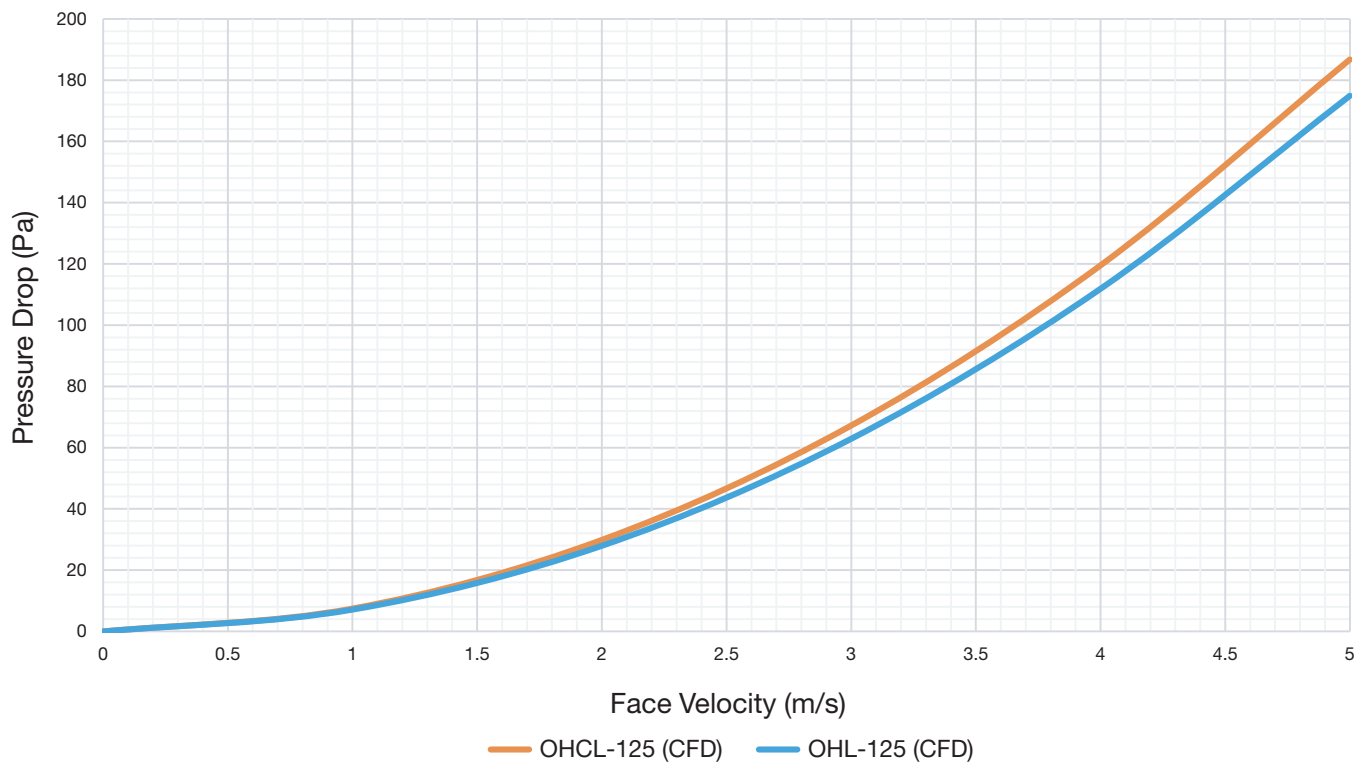
PRESSURE DROP - CFD ANALYSIS



PERFORMANCE DATA - FACE VELOCITY

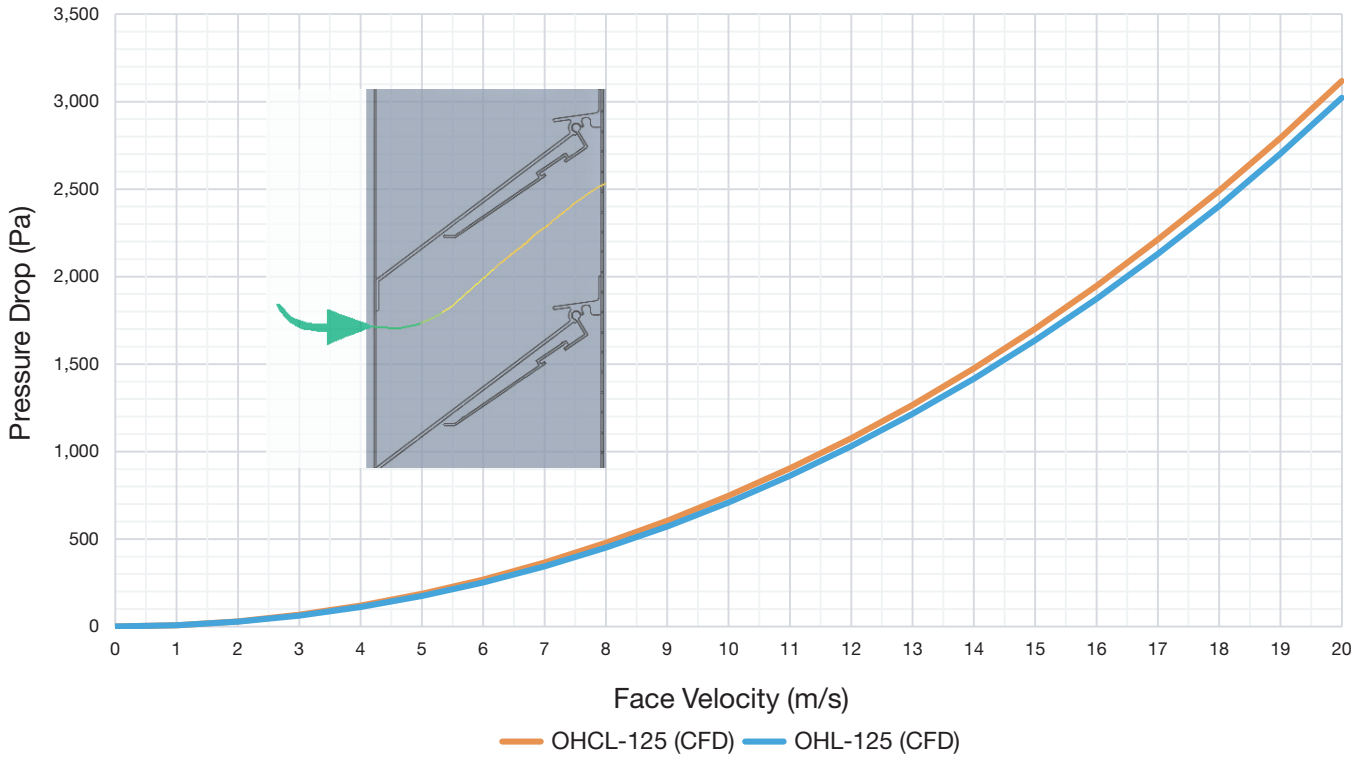
(0m/s - 5m/s for increased resolution)

Pressure Drop Performance Analysis



PERFORMANCE DATA - FACE VELOCITY

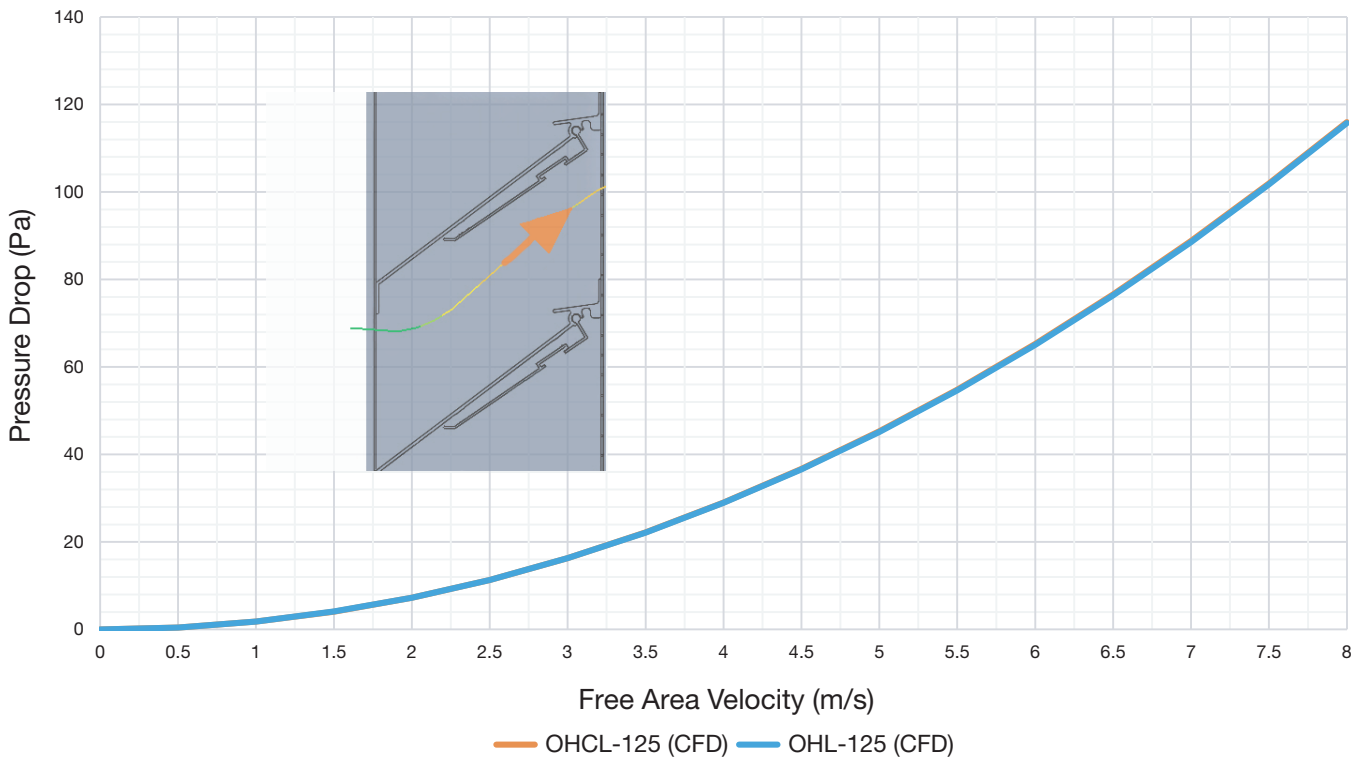
Pressure Drop Performance Analysis



The face area of a louver is the total area within the frame of the louver. (face area velocity is illustrated by the green arrow)

PERFORMANCE DATA - FREE AREA VELOCITY

Pressure Drop Performance Analysis



The free area of a louver is the total minimum area between the louver blades that air can pass through. (free area velocity is illustrated by the orange arrow)

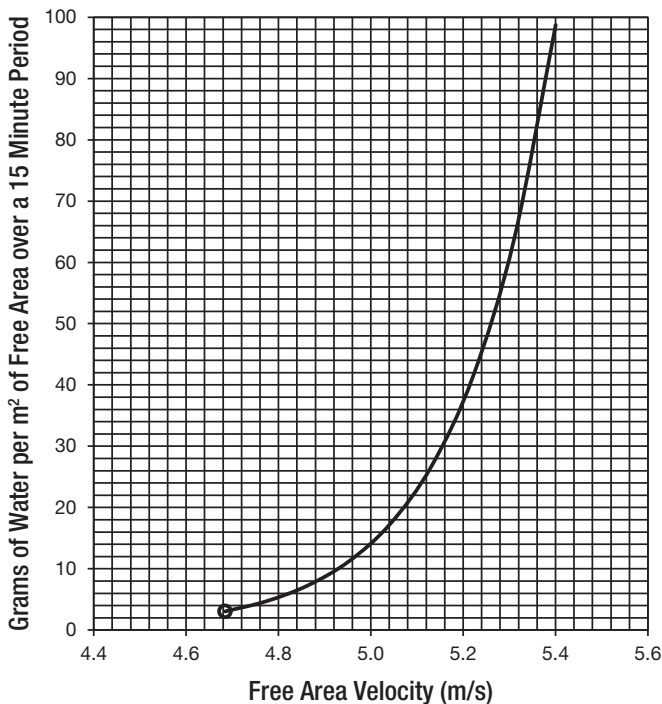
PERFORMANCE DATA - FREE AREA (m²)

Height (mm)	Width (mm)																	
	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
280	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.11	0.12
382	0.03	0.04	0.05	0.07	0.08	0.09	0.10	0.12	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.23	0.24
484	0.05	0.06	0.08	0.10	0.12	0.14	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.28	0.30	0.32	0.34	0.36
586	0.06	0.09	0.11	0.13	0.16	0.18	0.21	0.23	0.26	0.28	0.31	0.33	0.35	0.38	0.40	0.43	0.45	0.48
688	0.08	0.11	0.14	0.17	0.20	0.23	0.26	0.29	0.32	0.35	0.38	0.41	0.44	0.47	0.50	0.53	0.56	0.59
790	0.09	0.13	0.16	0.20	0.24	0.27	0.31	0.35	0.38	0.42	0.46	0.49	0.53	0.57	0.60	0.64	0.68	0.71
892	0.11	0.15	0.19	0.23	0.28	0.32	0.36	0.41	0.45	0.49	0.53	0.58	0.62	0.66	0.70	0.75	0.79	0.83
994	0.12	0.17	0.22	0.27	0.32	0.37	0.41	0.46	0.51	0.56	0.61	0.66	0.71	0.76	0.81	0.85	0.90	0.95
1096	0.14	0.19	0.25	0.30	0.36	0.41	0.47	0.52	0.58	0.63	0.69	0.74	0.80	0.85	0.91	0.96	1.02	1.07
1198	0.15	0.21	0.27	0.34	0.40	0.46	0.52	0.58	0.64	0.70	0.76	0.82	0.88	0.95	1.01	1.07	1.13	1.19
1300	0.17	0.23	0.30	0.37	0.44	0.50	0.57	0.64	0.70	0.77	0.84	0.91	0.97	1.04	1.11	1.17	1.24	1.31
1402	0.18	0.26	0.33	0.40	0.48	0.55	0.62	0.70	0.77	0.84	0.92	0.99	1.06	1.13	1.21	1.28	1.35	1.43
1504	0.20	0.28	0.36	0.44	0.52	0.59	0.67	0.75	0.83	0.91	0.99	1.07	1.15	1.23	1.31	1.39	1.47	1.55
1606	0.21	0.30	0.38	0.47	0.56	0.64	0.73	0.81	0.90	0.98	1.07	1.15	1.24	1.32	1.41	1.49	1.58	1.67
1708	0.23	0.32	0.41	0.50	0.59	0.69	0.78	0.87	0.96	1.05	1.14	1.24	1.33	1.42	1.51	1.60	1.69	1.78
1810	0.24	0.34	0.44	0.54	0.63	0.73	0.83	0.93	1.02	1.12	1.22	1.32	1.42	1.51	1.61	1.71	1.81	1.90
1912	0.26	0.36	0.47	0.57	0.67	0.78	0.88	0.99	1.09	1.19	1.30	1.40	1.50	1.61	1.71	1.81	1.92	2.02
2014	0.27	0.38	0.49	0.60	0.71	0.82	0.93	1.04	1.15	1.26	1.37	1.48	1.59	1.70	1.81	1.92	2.03	2.14

PERFORMANCE DATA - WATER PENETRATION

AMCA defines the beginning point of water penetration as the free area velocity at the intersection of a simple linear regression of test data and the line of 3 grams of water per square metre of free area measured through a 1219 mm x 1219 mm louver during a 15 minute period. The AMCA water penetration test provides a method for comparing louver models and designs as to their efficiency in resisting the penetration of rainfall under specific lab conditions. We recommend that intake louvers are selected with a reasonable margin of safety below the beginning point of water penetration in order to avoid unwanted penetration during severe storm conditions.

Beginning Point of Water Penetration = 4.7 m/s



PERFORMANCE DATA - PRESSURE LOSS

Pressure loss testing has been completed on a 1219 mm x 1219 mm louver in accordance with Figure 5.5 of AMCA Standard 500-L.

