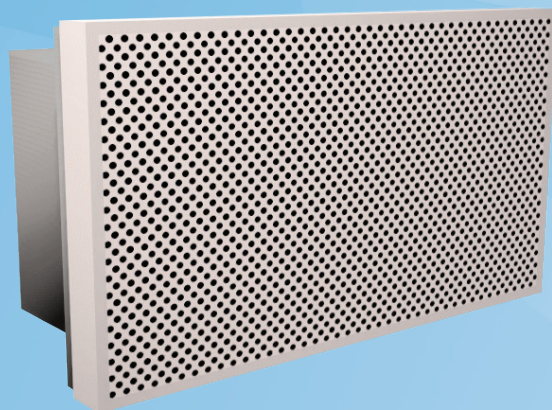


# Halton EVA

Exhaust Unit



Halton reserves the right to alter products without notice

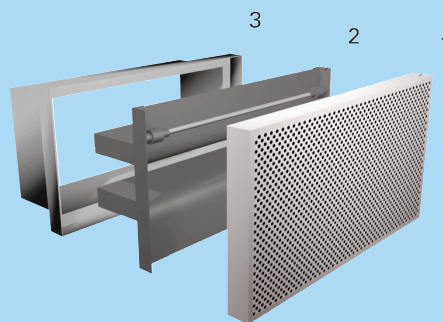
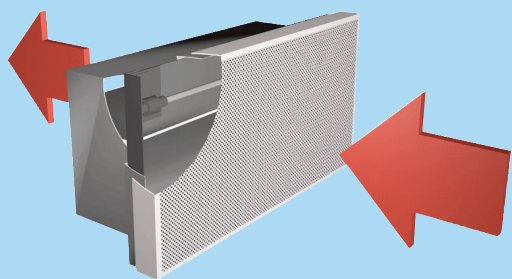
- Exhaust air unit with airflow measurement and adjustment arrangement
- Wide pressure drop range with low noise level
- Installation with balancing plenum or directly to rectangular ductwork
- Detachable front panel enables cleaning of the unit and ductwork

## Accessories

- Balancing plenum with circular duct connection

## MATERIAL AND FINISHING

PART	MATERIAL	NOTE
Front panel	Perforated steel	
Adjustment module	Aluminium	Black as standard colour
Casing	Galvanised steel	
Finishing	Painted White RAL 9010	Special colours available



## Function

Air is exhausted through the front panel. The valve throttles the exhaust airflow and attenuates duct noise. The pressure drop and airflow rate are dependant on the distance of the cone elements of the adjustment module. The desired exhaust airflow rate is adjusted during the balancing of the airflows in a ductwork system.

## DIMENSION OF WALL OR CEILING OPENINGS

LxH	L2	H
300x150	298	148
500x150	498	148
800x150	798	148

## Installation

### CODE DESCRIPTION

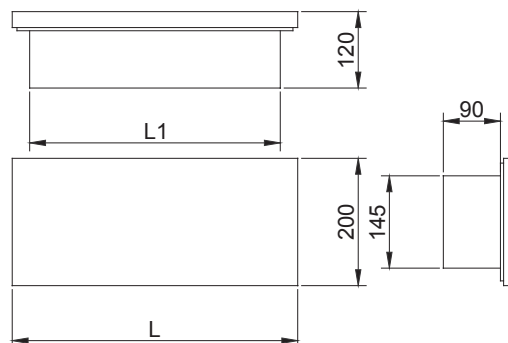
1	Front panel
2	Adjustment module
3	Casing

The exhaust unit is connected either directly to the duct by screwing or by riveting or alternatively to the PRI balancing plenum (PRI/G, PRI/H or PRI/I, ES=Y, AC=IN: PRI models without flow control damper, but with sound attenuation material).

When the EVA unit is installed to a PRI balancing plenum, the EVA casing (3) replaces the telescopic collar of the PRI thus making the PRI collar unnecessary.

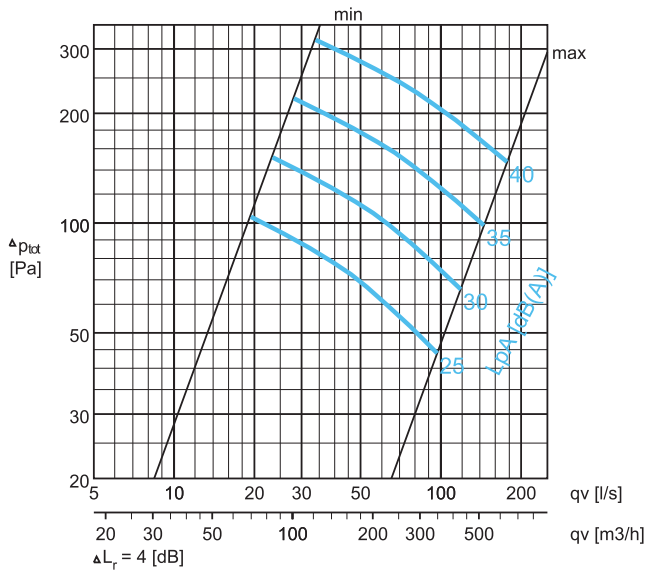
## DIMENSIONS

LxH	L	L1
300x150	350	295
500x150	550	495
800x150	850	795

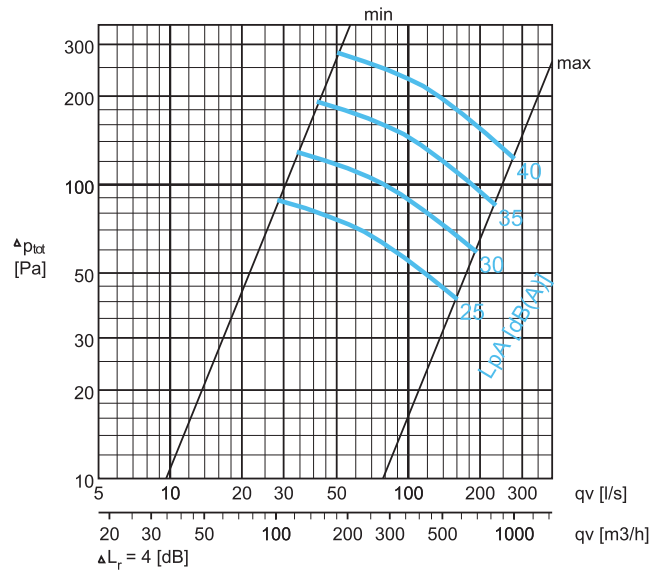


Pressure drop and sound data

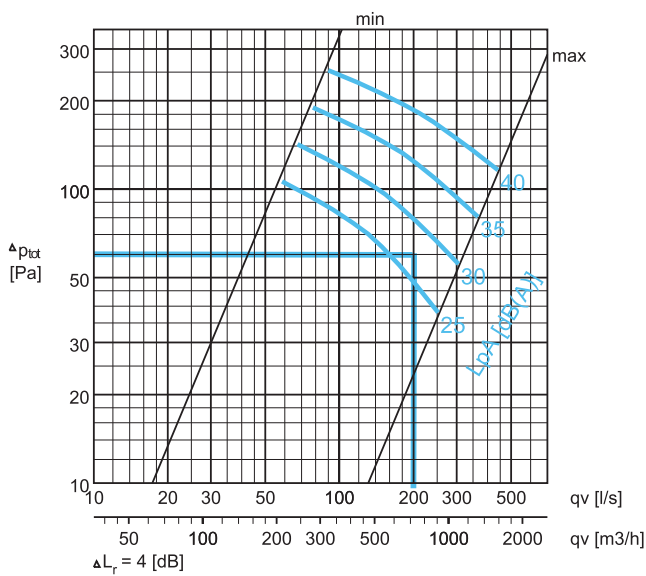
EVA-300x150



EVA-500x150



EVA-800x150



Selection example :

Requirements :  $q_v = 200$  l/s  
 $L_{pA} \leq 30$  dB(A)  
 $\Delta p_{tot} = 60$  Pa

Selection : EVA-800x150  
 $L_{pA} = 27$  dB(A)

## SOUND LEVEL DATA

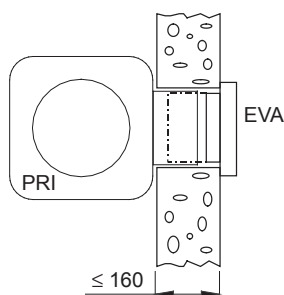
		qv		$\Delta P_{st}$	$\Delta P_{tot}$	F (Hz)						LpA	NR	NC
		(l/s)	(m <sup>3</sup> /h)	(Pa)	(Pa)	125	250	500	1000	2000	4000	[dB(A)]		
EVA-300x150	max	19	68	104	104	29	24	23	25	24	18	25	23	20
		23	83	152	151	34	29	28	30	29	23	30	28	25
		28	101	220	220	39	34	33	35	34	28	35	33	30
		34	122	318	318	44	39	38	40	39	33	40	38	35
	min	97	349	47	44	28	23	22	24	23	17	25	23	20
		118	425	70	66	34	29	28	30	29	23	30	28	25
		145	522	105	98	39	34	33	35	34	28	35	33	30
		177	637	156	147	44	39	38	40	39	33	40	38	35
EVA-500x150	max	28	101	89	89	30	23	23	25	23	16	25	22	19
		34	122	129	129	35	28	28	30	28	21	30	27	24
		41	148	191	191	40	33	33	35	33	26	35	32	29
		50	180	282	282	45	38	38	40	38	31	40	37	35
	min	161	580	43	41	30	23	23	25	23	16	25	23	20
		193	695	63	59	35	28	28	30	28	21	30	28	25
		232	835	91	85	40	33	33	35	33	26	35	33	30
		279	1004	131	122	45	38	38	40	38	31	40	37	35
EVA-800x150	max	58	209	106	106	30	26	24	24	23	15	25	22	20
		67	241	142	142	35	31	29	29	28	20	30	27	25
		78	281	190	190	40	36	34	34	33	25	35	32	30
		90	324	254	254	45	41	39	39	38	30	40	37	35
	min	252	907	41	38	30	26	24	24	23	15	25	22	20
		305	1098	60	56	35	31	29	29	28	20	30	27	25
		367	1321	86	81	40	36	34	34	33	25	35	32	30
		444	1598	126	118	45	41	39	39	38	30	40	37	35

LpA values presented with room attenuation 4 dB (red 10m<sup>2</sup> - sab). When using room attenuation 8 dB (red 25m<sup>2</sup> - sab): LpA - 4dB.  
NR/NC noise criteria

## SOUND ATTENUATION

		$\Delta L$ [(dB)]					
		A	125	250	500	1000	2000
EVA-300x150	0	13	11	14	14	10	
	1	10	7	7	7	5	
EVA-500x150	0	12	10	13	14	9	
	1	8	6	7	7	4	
EVA-800x150	0	10	9	13	14	9	
	1	6	5	6	5	4	

## Adjustment



Measure the differential pressure using a manometer.  
The flow rate is calculated using the formula below.

$$q_v = k * \sqrt{\Delta p_m}$$

Adjust the airflow rate by turning the adjustment spindle until the desired setting is achieved.

Note: Airflow rate adjustment is carried out using the adjustment arrangement of the EVA exhaust unit even when connected to PRI balancing plenum.

K -factor for different adjustment module openings (A):

SIZE	300x150	500x150	800x150
A	k	k	k
0	1.90	3.54	6.00
1	2.68	5.66	10.95
2	4.02	8.49	14.61
3	5.77	11.18	18.26
4	7.07	14.14	23.57
5	9.00	16.43	28.00
6	10.61	18.97	32.27
7	12.50	21.00	35.00

## Servicing

Detach the perforated front panel by gently pulling.  
Remove the adjustment module by opening the clips.  
Wipe the parts with a damp cloth instead of immersing in water.  
Reassemble the adjustment module so that the clips lock.  
Push the front panel into place so that the clips lock.

## Suggested Specifications

The exhaust unit shall have a telescopic casing made of galvanised steel.  
The unit comprises internal removable adjustment module and detachable perforated front panel.  
The front panel shall be attached to the casing with clips.  
The unit shall have a fixed measurement tap for airflow measurement.  
The airflow shall be adjustable by rotating the adjustment spindle.

## Product Code

EVA-W-H

W = Width  
300, 500, 800

H = Height  
150

Specifics and accessories

CO = Colour  
W White  
X Special colour

Code example

EVA-300-150, CO=W

Sub products

PRI Plenum