

# IBIS Wall

Duct diffuser with nozzles for supply air



## QUICK FACTS

- Flexible distribution pattern
- Simple to install where the wall meets the ceiling
- Modular length: 1500 mm
- Available in alternative lengths
- Standard colour White RAL 9003
  - 5 alternative standard colours
  - Other colours upon request

# Technical description

## Design

The IBIS wall duct diffuser with nozzles is designed for installation where the wall meets the ceiling. The diffuser face is equipped with aerodynamically shaped nozzles that are rotatable. The air diffuser has size 200 mm dia. connections in its short sides and a completely perforated rear panel.

## Material and finish

The duct diffuser with nozzles is made of galvanised sheet steel. The interior and exterior surfaces of the air diffuser are painted.

- Standard colour:
  - White semi-gloss, lustre 40, RAL 9003/NCS S 0500-N
- Alternative standard colours:
  - Silver gloss, lustre 80, RAL 9006
  - Grey aluminium gloss, lustre 80, RAL 9007
  - White semi-gloss, lustre 40, RAL 9010
  - Black semi-gloss, lustre 35, RAL 9005
  - Grey semi-gloss, lustre 30, RAL 7037
- Non-painted finish and other colours available on request.

## Project planning

The air diffuser can be connected from the side, size 200 mm dia. connection, or via the perforated rear panel. If old grilles are to be replaced, for instance, you need only take the flow and air velocity at the connection into consideration and install the duct diffuser in front of the opening. The rear panel has a sealing strip for preventing air leakage.

## Installation

The duct diffuser is to be mounted where the wall meets the ceiling and be secured to the wall or ceiling with screws.

For side connection, first remove the appropriate side cover, and then fit the insertion joint, included, for connection to the ductwork. See figure 2.

For rear connection, do not use the duct insertion joint supplied. See figure 3.

## Commissioning

A flow measuring damper installed in the duct system upstream of the duct diffuser is recommended for commissioning and airflow measurements.

## Maintenance

The air diffuser can be cleaned, if necessary, using luke-warm water with dishwashing detergent added.

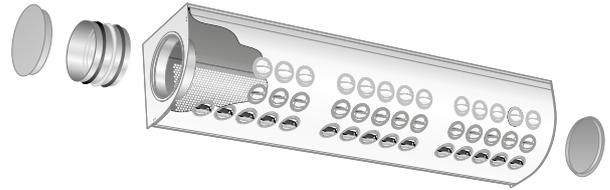


Figure 1. IBIS W.

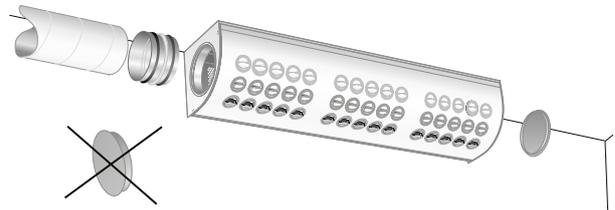


Figure 2. IBIS W, side connection.

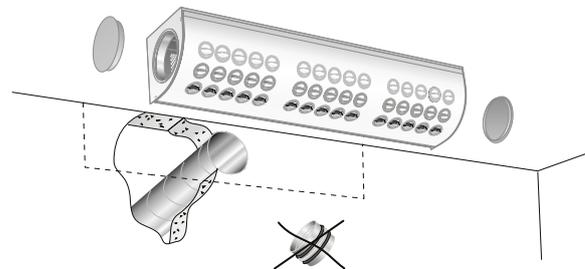


Figure 3. IBIS W, rear connection.

# Sizing

- Sound pressure level dB(A) applies to rooms with 10 m<sup>2</sup> equivalent sound absorption area.
- Sound attenuation ( $\Delta L$ ) below is shown in the octave band. Orifice attenuation is included in the values.

$L_w$  = Sound power level

$L_{p10A}$  = Sound pressure level dB (A)

$K_{ok}$  = Correction for producing the  $L_w$  value in the octave band

$L_w = L_{p10A} + K_{OK}$  gives the frequency divided octave band

## Sound data

### Sound power level

Table  $K_{OK}$

Size	Mid-frequency (Octave band) Hz							
	63	125	250	500	1000	2000	4000	8000
200-1500 B	4	10	9	2	-4	-15	-24	-23
200-1500 K	1	11	9	2	-5	-15	-23	-22
200-3000 K	1	11	10	1	-6	-18	-24	-26
200-4500 K	1	1	10	1	-6	-18	-24	-26

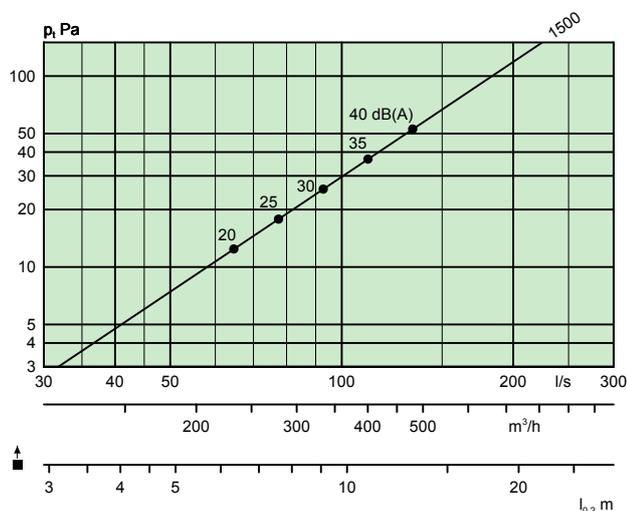
### Sound attenuation $\Delta L$ (dB)

Table  $\Delta L$

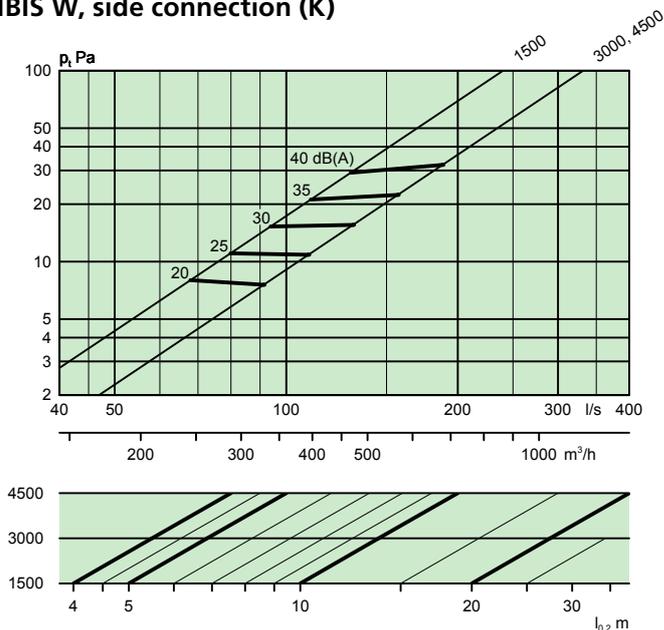
Size	Mid-frequency (Octave band) Hz							
	63	125	250	500	1000	2000	4000	8000
200-1500 B	12	9	5	1	0	0	0	0
200-1500 K	12	9	5	1	0	0	0	0
200-3000 K	12	9	5	1	0	0	0	0
200-4500 K	12	9	5	1	0	0	0	0

## Engineering graphs

### IBIS W, rear connection (B)



### IBIS W, side connection (K)



# Dimensions and weights Ordering key

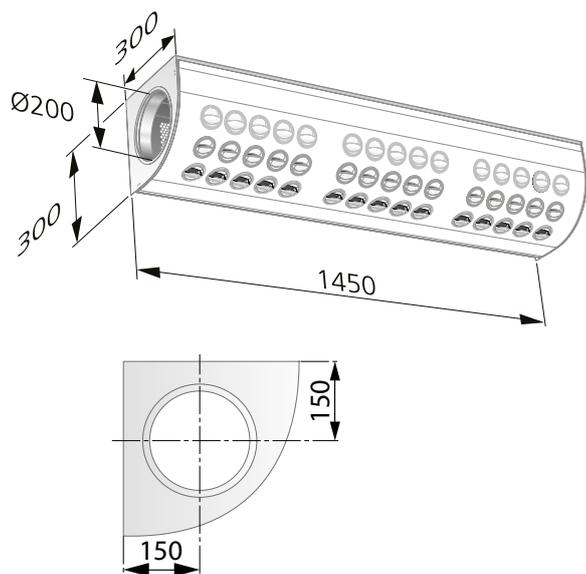


Figure 4. IBIS W.

**Table – IBIS Wall**

IBIS Wa	Weight
200	12,1 kg

## Product

Duct diffuser with nozzles	IBIS W	a	-200
Version			
Nominal connection size in mm:			

## Specification text

Swegon's duct diffuser with nozzles for installation where the wall meets the ceiling with the following functions.

- 100 % flexible distribution pattern
- Individually adjustable nozzles
- 1500 mm long modules
- Powder coated, RAL 9003/NCS S 0500-N

Size: IBIS Wa-200 xx items