

# EXP

Perforated extract air diffuser designed for square suspended ceiling systems



## QUICK FACTS

- Used in square ceiling system
- Standard white RAL 9003/NCS S 0500-N
- Can be placed directly in the T15//T24 Lay in suspended ceiling system

AIR FLOW - SOUND PRESSURE ROOM (Lp10A) *)						
EXP Size (mm)	25 dB (A)		30 dB (A)		35 dB (A)	
	l/s	m³/h	l/s	m³/h	l/s	m³/h
600-C	283	1019	323	1163	422	1519
600-R2	568	2045	668	2405	784	2822
600-R1	666	2398	793	2855	944	3400

\*)  $L_{p10A}$  = Sound pressure incl. A-filter with 4 dB room attenuation and 10 m² room absorption area.

# Technical description

## Design

Square extract air diffuser for installation in suspended ceiling systems of the type visible T-bars, lay in.

## Materials and surface treatment

- The extract air diffuser is made of galvanized sheet steel.
- 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.

## Adaptation

Special versions of the diffuser are adapted to different types of ceilings. For further details contact your nearest sales office.

## Commissioning

Adjust the air flow on the measuring damper placed in the duct system.

## Maintenance

When necessary clean the extract air diffuser with luke-warm water and detergent. Alternatively, use a vacuum cleaner with a brush nozzle when cleaning. The ducting system/suspended ceiling is accessed by simply lifting the extract air diffuser from the suspended ceiling system.

## Environment

The Building Materials Declaration is available from [www.swegon.com](http://www.swegon.com).

## Installation

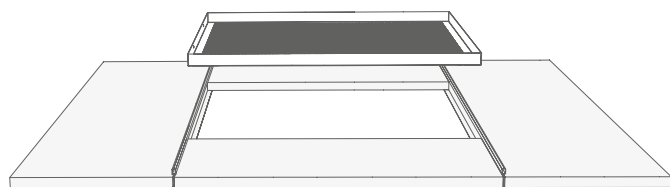


Figure 1. Installation.

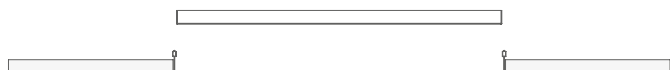
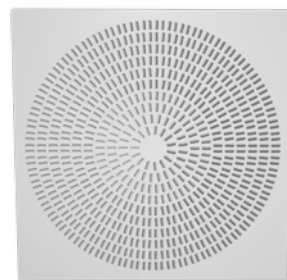
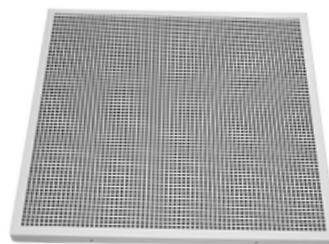


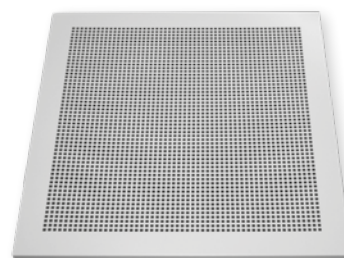
Figure 2. Installation.



C = Circular pattern, free area = 25%



R1 = Rectangular pattern, free area = 54%



R2 = Rectangular pattern, free area = 35%

## Dimensions and weights

Description	Size	Weight (kg)	Free area (m <sup>2</sup> )
EXP 600-C	593x593	1.98	25%
EXP 600-R1	593x593	1.19	54%
EXP 600-R2	593x593	1.44	35%

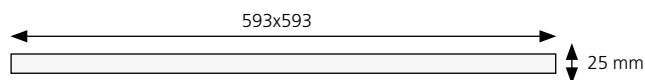


Figure 3. Dimensions.

# 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.

## Acoustic data

### EXP – Extract air

#### Sound power level $L_w$ (dB)

Table  $K_{OK}$

EXP Size	Mid-frequency (octave band) Hz							
	63	125	250	500	1000	2000	4000	8000
600-C	-3	-4	6	3	-2	-7	-16	-25
600-R1	3	-1	5	3	-2	-9	-20	-29
600-R2	0	-3	2	1	0	-3	-12	-22
Tol. $\pm$	2	2	2	2	2	2	2	2

$L_w$  = Sound power level

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

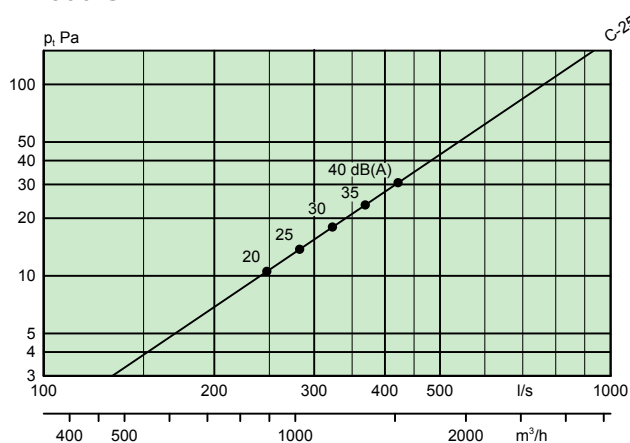
$K_{ok}$  = Correction for producing the  $L_w$  value in the octave band

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

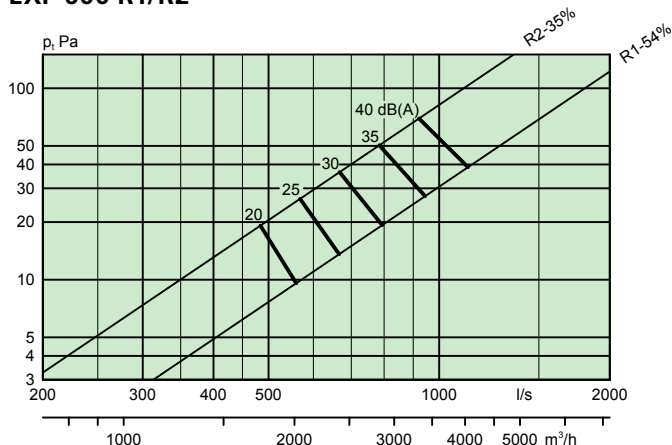
## Sizing diagram

- The diagrams should not be used for commissioning.
- The dB(A) values apply to rooms with normal acoustic absorption, 4 dB room attenuation/10 m<sup>2</sup> equivalent room absorption area.
- The dB(C) value is normally 6-9 dB higher than the dB(A) value.

### EXP 600 C



### EXP 600 R1/R2



# Specification

Product

Perforated extract air diffuser for suspended ceiling systems	EXP	a	600-	bb
Version:				
Size				
Model: C, R1, R2				

# Specification text

Swegon's square extract air diffuser EXP for installation in suspended ceiling systems.

- Powder-painted and baked white finish, RAL 9003/NCS S 0500-N.
- Diffuser without adjustment option.
- For installation in suspended ceiling systems with visible T-bars of the type lay in.