Perforated Face Diffusers
KRCP KRCPE

Waterloo

Introduction
The Waterloo KRCP range of diffusers have been designed to suit 600mm square ceiling modules of 'Burgess type', lay-in T and concealed T arrangements. The diffuser incorporates an easily removable perforated face plate and adjustable inner multicone pattern control cores which produce an efficient 4, 3, 2 or 1 way air diffusion pattern. Matching exhaust units are available.

The control cores are available as separate items to facilitate simple on site changes.

This diffuser may be applied to most commercial projects, but as the frame detail incorporates an anti-smudge ring it is ideal for kitchen and restaurant applications. The range is suitable for systems involving air change rates up to 20 per hour and cooling differentials up to 14°C.

Product Description
KRCP Perforated face supply diffuser
KRCPE Perforated face exhaust diffuser
OBSS Opposed blade damper for square connections
LD Louvre damper for circular connections

Features
- Easy maintenance
- Anti-smudge frame
- Pivoted front plate
- Adjustable pattern control cores
- Versatile ceiling integration

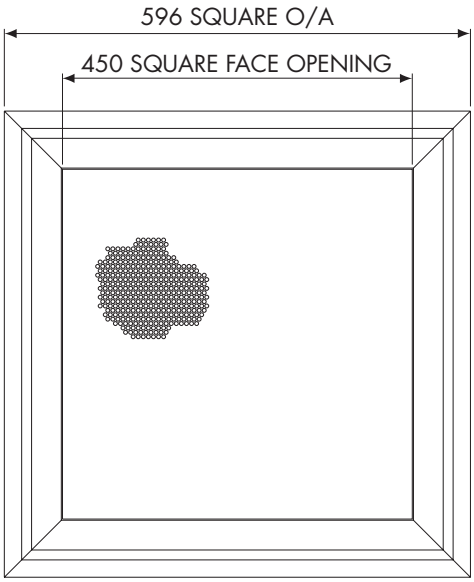
Finishes
PPM9006 (RAL 9006 Matt Silver)
PPM9010 (RAL 9010 20% Gloss White)
PPG9010 (RAL 9010 Gloss White)
Other colours available on request

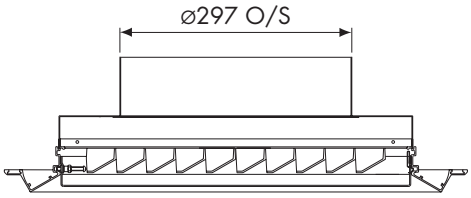
Sizes
All diffusers are 596 x 596mm overall. Available spigot sizes are as follows:-

KRCP	ø300
KRCPE	450 x 450, 300 x 300 or ø300

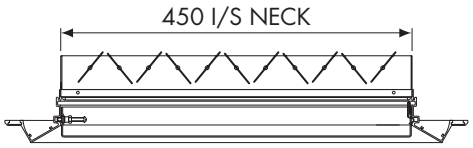
Weights

KRCP	5.7 kg
KRCPE	3.7 kg
OBSS	4.0 kg

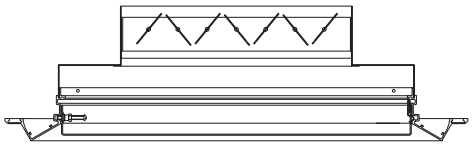




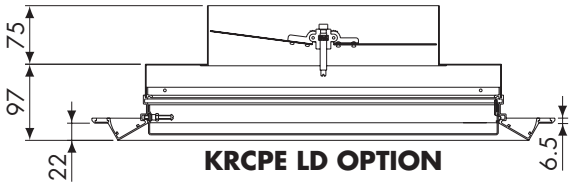
KRCP



KRCPE 450 SQ OBSS OPTION



KRCPE 300 SQ OBSS OPTION



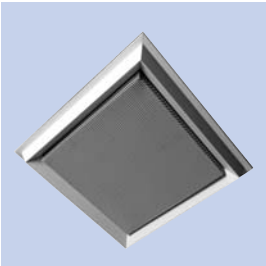
KRCPE LD OPTION

Order Example

KRCP/600x600/300 DIA/PPG9010/LD

Type
Nominal Width
Nominal Height
Spigot Size
Finish
Damper

Perforated Face Diffusers
KRCP KRCPE



Selection Criteria

Ceiling Height 3.0 m
Radius of diffusion is based on terminal velocities of 0.75 m/s (minimum) and 0.10 m/s (maximum) respectively.
NR level is based on diffuser sound power level less 8dB room absorption.
Data is based on testing in accordance with BS 4773 Part 1 and 2 for isothermal air conditions. Data is directly applicable to cooling and heating applications.

Selection Example

KRCP/600x600/300
4 way throw

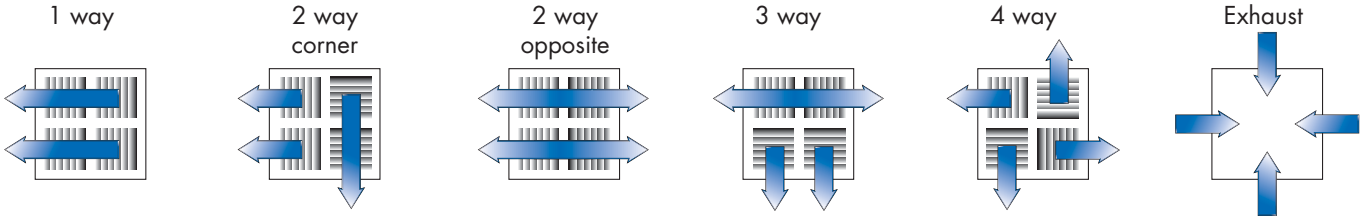
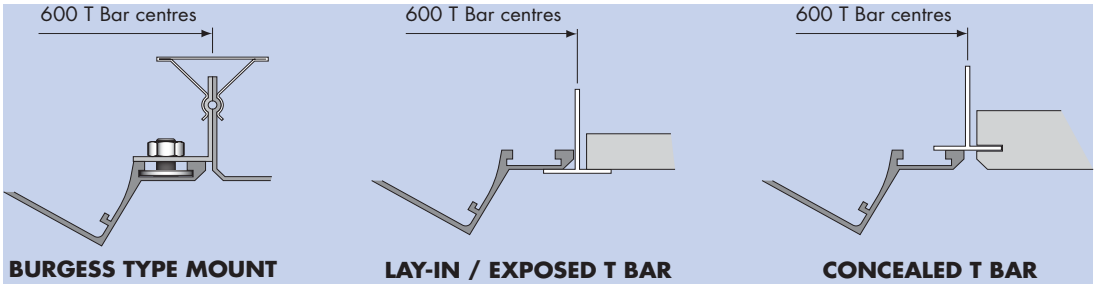
Air Flow Rate 210 l/s
Throw 0.7 - 2.0m
Static Pressure Loss 7 Pa
Noise level NR 28

Performance Tables

KRCP			Supply				
			4 way throw	3 way throw long side	3 way throw short side	2 way throw	1 way throw
m^3/h	l/s						
504	140	T	0.3-1.1	0.3-1.3	0.3-0.8	0.3-1.8	0.4-2.5
		Pa	4	4	4	4	4
		Lw	17	17	17	17	17
756	210	T	0.7-2.0	1.0-3.0	0.5-1.6	0.6-2.5	1.8-3.5
		Pa	7	7	7	7	7
		Lw	28	28	28	28	28
1008	280	T	1.2-2.5	1.6-3.5	0.7-2.0	1.2-3.5	3.2-5.5
		Pa	17	17	17	17	17
		Lw	37	37	37	37	37
1260	350	T	1.7-3.5	2.1-4.0	1.2-2.5	1.7-4.5	4.5-8.0
		Pa	26	26	26	26	26
		Lw	44	44	44	44	44

KRCPE			Exhaust	
			Spigot 450x450	Spigot Ø300
m^3/h	l/s			
504	140	Pa	1	6
		Lw	-	-
1008	280	Pa	4	22
		Lw	-	-
1512	420	Pa	9	50
		Lw	18	23
2016	560	Pa	15	88
		Lw	30	33
2520	700	Pa	23	125
		Lw	40	41

Core Patterns



Installation Options