

Introduction

The performance objective of a ceiling air Diffuser is to deliver conditioned air into an occupied space in a quiet draft free manner.

The performance efficiency of a particular diffuser design is usually judged by the diffuser's ability to rapidly dissipate the air velocities and temperature differential of the supply air before it enters the occupied space.

Application

- Versatile Supply Air Diffuser for constant or variable air volume cooling, heating, or ventilating.
- Designed for high capacity, Model Series "KD" can supply large volumes of air at low sound levels and pressure drops.
- Directed air diffusion for space coverage with great flexibility in space layout, geometry, and diffuser location.
- Return Air use to maintain matched appearance

Product Features

- 5 "application specific" air distribution patterns
- Available in wide variety of neck sizes ranging from 150mm up to 600mm in 75mm increments
- 1-way, 2-way opposite, 2-way corner, 3-way, and 4-way
- Core is removable to facilitate access to duct / damper
- Powder coated to RAL9010

Construction

- Frame & inner cores are made of Extruded Aluminium.
- The core is held in place & fixed to the frame by spring latches or lock sets for easy removal of cores without any special tools.
- Foam gasket seals at the rear of the frame.

Diffuser Options

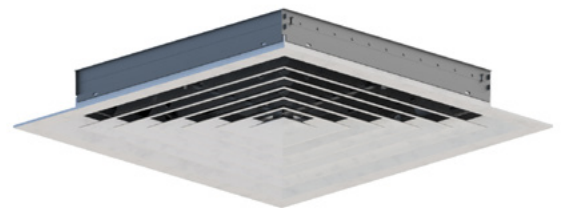
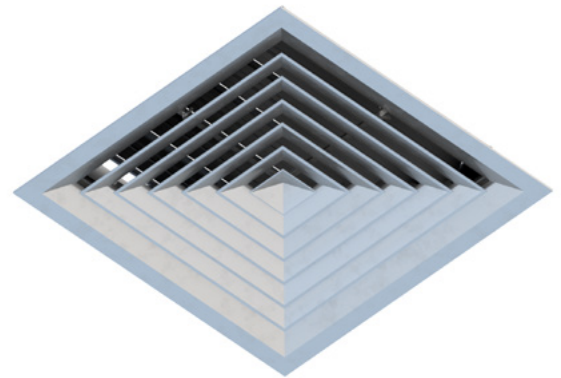
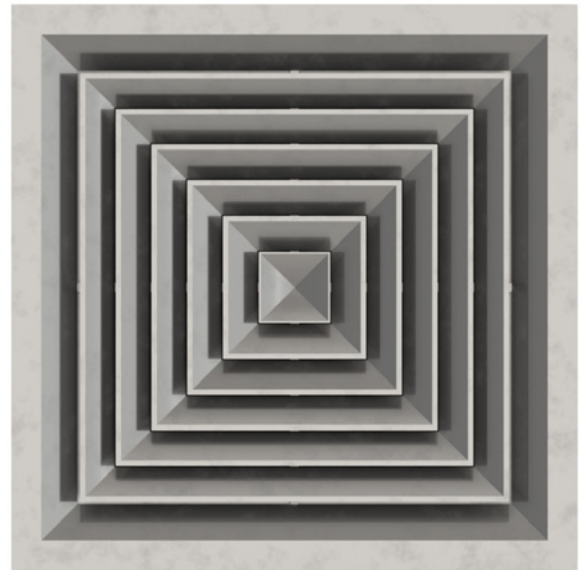
- SS304 or SS316 construction (Contact Factory)
- Lay in T-Bar – Model KDP
- Custom or optional RAL colours (RAL codes to be provided)

Accessories

- Opposed Blade Damper – Model OBD
- Square to round transition
- Plenum box






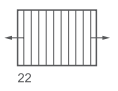
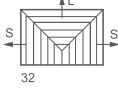
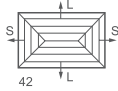


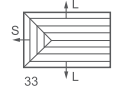
Selection Procedure

- Determine air diffusion pattern required and air volume flow rate per outlet.
- Establish the required throw (Refer Notes for Throw Pattern)
- Opposing Diffusers: Maximum Throw for each diffuser should be no more than 75% of half of the distance between them.
- Select the diffuser based on required Air flow rate against the limiting pressure drop and sound level requirements.

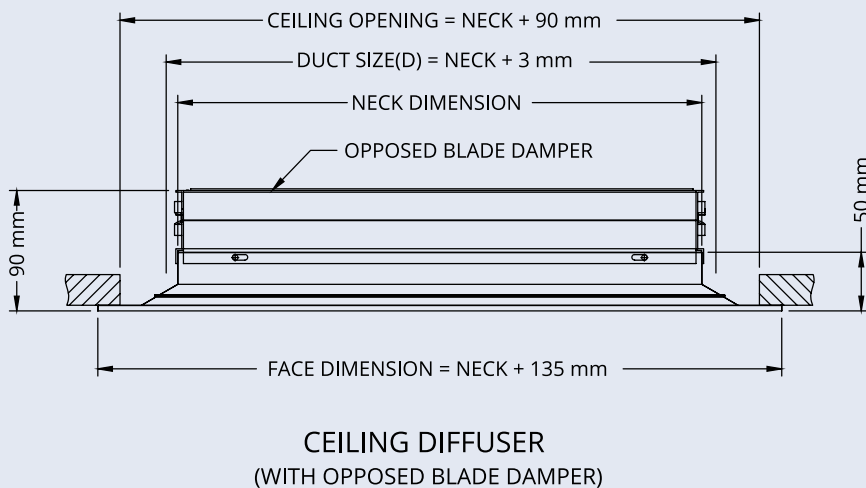


Product Selection Check List

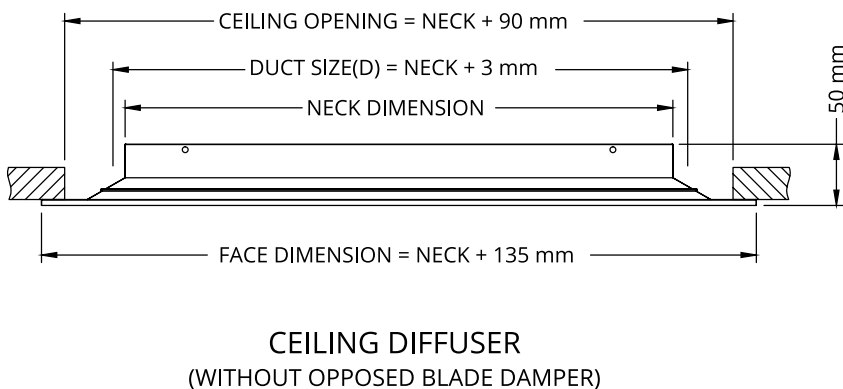
- Select Inlet (W X H) Size based on desired performance requirements.
- Select face size based on ceiling module (Lay-in Application Only)
- Select core style based on application.
- Select volume control accessories, if desired (OBD)
- Select RAL Colour

CORE PATTERNS (PLAN VIEW)			
1 Way - Pattern	2 Way - Pattern	3 Way - Pattern	4 Way - Pattern
KDF-11 	KDF-21 	KDF-31 	KDF-41 
KDF-12 	KDF-22 	KDF-32 	KDF-42 
KDF-13 	KDF-23 	KDF-33 	

Dimensions



Square Ceiling Diffuser (with Opposed Blade Damper)							
Order Size (inches)		Order Size (mm)		Neck Size (mm)		Face Size (mm)	
W	H	W	H	W	H	W	H
6	6	150	150	155	155	285	285
9	9	225	225	230	230	360	360
12	12	300	300	305	305	435	435
15	15	375	375	380	380	510	510
18	18	460	460	465	465	595	595
21	21	525	525	530	530	660	660
24	24	600	600	605	605	735	735



Square Ceiling Diffuser (without Opposed Blade Damper)							
Order Size (inches)		Order Size (mm)		Neck Size (mm)		Face Size (mm)	
W	H	W	H	W	H	W	H
6	6	150	150	150	150	285	285
9	9	225	225	225	225	360	360
12	12	300	300	300	300	435	435
15	15	375	375	375	375	510	510
18	18	460	460	460	460	595	595
21	21	525	525	525	525	660	660
24	24	600	600	600	600	735	735