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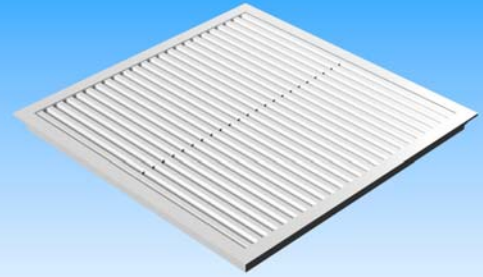
CONSTANT VOLUME RETURN AIR GRILLES

FEATURES

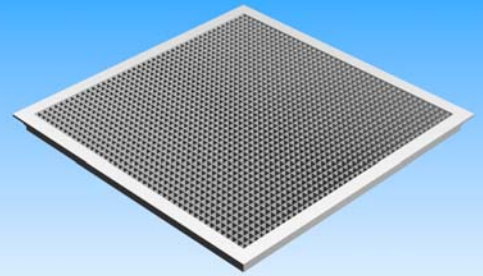
- ◆ LARGE FREE AIR OPENING
 - ◆ LIGHT WEIGHT
 - ◆ MINIMAL PRESSURE LOSSES
 - ◆ ARCHITECTURALLY PLEASING DESIGN
 - ◆ ALUMINIUM & PLASTIC EGG CRATE
- TYPES AVAILABLE
- ◆ FIXED VANE TYPES AVAILABLE
 - ◆ AVAILABLE WITH & WITHOUT FILTERS
 - ◆ EX STOCK AVAILABILITY FOR 600 x 600
& 1200 x 600 CEILING MODULES
 - ◆ COATED & ANODIZED FINISHES
AVAILABLE
 - ◆ COST EFFECTIVE
 - ◆ EASE OF INSTALLATION



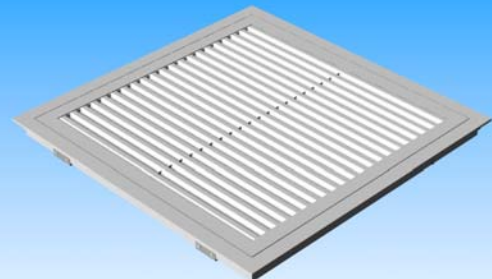
INTELLIGENT COMFORT CONTROL



FIXED VANE TYPE RSV



**EGG CRATE TYPES
RAE or RPE**



**HINGED CORE WITH
FILTERS**

INTRODUCTION

The RICKARD Return Air Grilles have a 27mm wide x 36mm deep extruded aluminium frame with aluminium or plastic egg crate or aluminium fixed vane cores & are available with or without washable filters. The RICKARD Type R return air grille frames & aluminium egg crate cores are epoxy powder coated in our standard textured white finish, while the fixed vane type may be anodized or epoxy powder coated in our standard textured white finish. If filters are required, a double frame is provided, the outer to match the ceiling grid size and the inner hinged & clipped to the outer for easy access to the filter for cleaning or replacement. For the convenience of our clients, we carry in stock epoxy powder coated return air grilles, both with & without filters to suit the most prevalent ceiling grid sizes, namely 600mm x 600mm & 600mm x 1200mm. Other grid & non standard sizes are available but are manufactured for specific needs, please contact your nearest RICKARD sales office for your special needs. The various types available are:

Type RSV—Fixed Vane core without filter.



INTELLIGENT COMFORT CONTROL

Type RSV-HF—Fixed Vane with hinged core & filter.

Type RAE—Aluminium Egg Crate core without filter.

Type RAE-HF—Aluminium Egg Crate with hinged core & filter.

Type RPE—Plastic Egg Crate core without filter.

RPE-HF—Plastic Egg Crate with hinged core & filter.

ACCESSORIES

The following accessories are available for use in conjunction with Return Air Grille types RSV, RAE and RPE:

1. Opposed Blade Balancing Dampers Type OBD.
2. Standard washable filters-Type HF.
3. Plastered Ceiling Installation Tee Frames-Type TF

PERFORMANCE DATA

NOMINAL SIZE	READING	RESISTANCE (Pa) DROP-IN				RESISTANCE (Pa) DUCT MOUNTED			
		5	10	15	20	5	10	15	20
500 x 500	FLOW l/s NC LEVEL	174	246	302	348	194	275	337	389
500 x 1000	FLOW l/s NC LEVEL	372	526	644	743	403	570	698	806
600 x 600	FLOW l/s NC LEVEL	262	371	454	524	287	406	497	574
600 x 1200	FLOW l/s NC LEVEL	553	782	957	1105	583	825	1010	1166

To calculate the Volume Flow rate in l/s at a specific desired pressure drop for sizes not listed multiply $0.0004 \times \sqrt{PD} \times (\text{nominal width} - 54) \times (\text{nominal height} - 54\text{mm})$ for drop-in RA grilles or $(\text{nominal width} - 29\text{mm}) \times (\text{nominal height} - 29\text{mm})$ for ducted RA grilles. For example - a 400mm x 400mm at a PD of 12Pa = $0.0004 \times \sqrt{12} \times (400-54) \times (400-54) = 186\text{l/s}$.

DIMENSIONAL DATA

NOMINAL SIZE	A DROP-IN / DUCTED	B DROP-IN / DUCTED	C DROP-IN / DUCTED	D DROP-IN / DUCTED	E / F DROP-IN & DUCTED
1200 x 600	1195 / 1220	595 / 620	1164 / 1195	564 / 595	35 / 30
600 x 600	595 / 620	595 / 620	564 / 595	564 / 595	35 / 30
600 x 300	595 / 620	295 / 320	564 / 595	264 / 295	35 / 30
1000 x 500	995 / 1020	495 / 520	964 / 995	464 / 495	35 / 30
500 x 500	495 / 520	495 / 520	464 / 495	464 / 495	35 / 30
500 X 250	495 / 520	245 / 270	464 / 495	214 / 245	35 / 30

