

INTRODUCTION

EGC545 egg crate return grilles are designed to fit common commercial applications where the architect requires a return grille without bars on the face and with significantly deterred sight through the grille. The EGC545 offers 1/2"x1/2"x1/2" 45° angle aluminum cube core and 1 1/4" flange. The EGC545 angled cube core design allows for deterred sight through the grille when mounted angled towards least likely occupied area, like the ceiling or closest adjacent wall.

MODELS

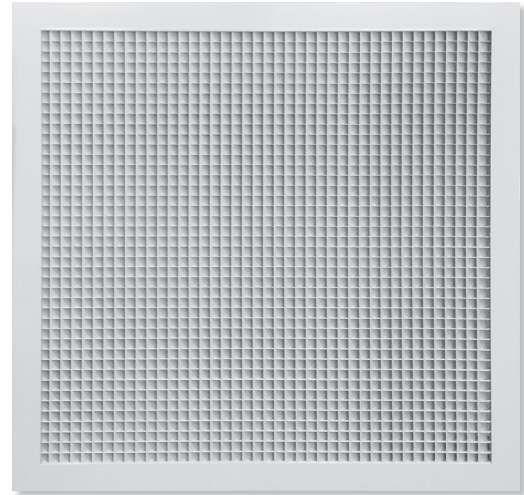
EGC545 - Limited-sight egg-crate return grille

FEATURES

- 1/2"x1/2"x1/2" 45° angle aluminum cube core
- 1 1/4" flange
- Standard finish is #44 British White
- Optional finishes available

ACCESSORIES

- Steel opposed blade damper (model OBD)
- Steel painted opposed blade damper (model POBD)
- Aluminum opposed blade damper (model 5OBD)
- Aluminum plaster frame (model 58PF)
- Insect or debris screens
- Square to round adapter (model SRAC325, ordered separately)



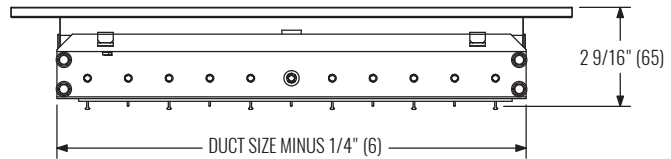
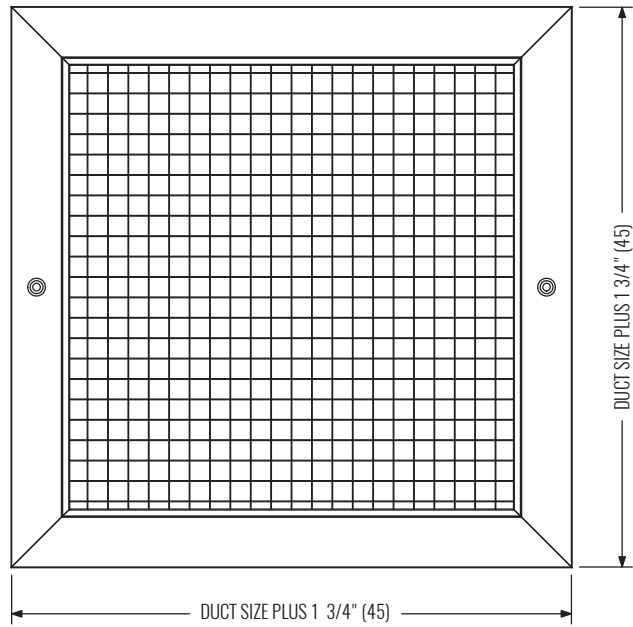
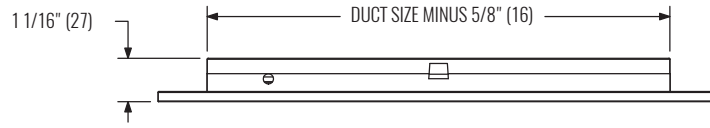
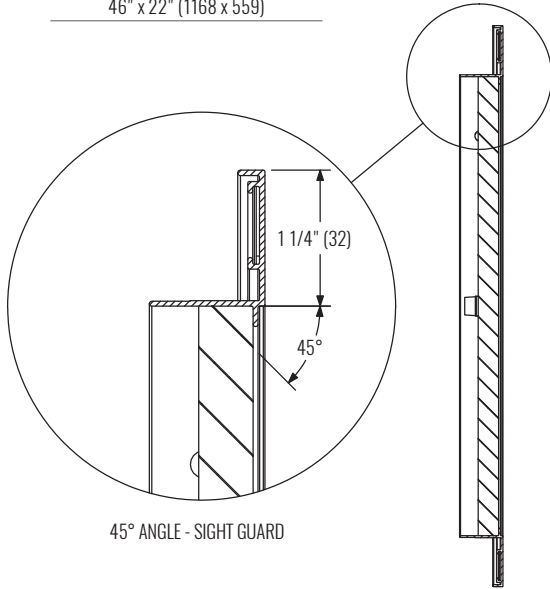
EGC545

Return Grille | Egg-Crate, Limited Sight



DIMENSIONAL DATA

AVAILABLE SIZES
10" x 10" (254 x 254)
22" x 10" (559 x 254)
22" x 22" (559 x 559)
46" x 22" (1168 x 559)



FACE, SIDE, AND CROSS SECTION VIEWS

NOTE: Dimensions in parentheses are mm.

PERFORMANCE DATA (NO DAMPER)

IP DATA					NC	METRIC DATA					OCTAVE BAND, dB						
NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps		NOM DUCT	DUCT AREA	NECK VEL	AIRFLOW	Ps	OCTAVE BAND, dB						
in	ft ²	FPM	CFM	"WG		mm	m ²	m/s	L/s	Pa	2	3	4	5	6	7	
10" x 10"	0.69	250	149	.036	10	254 x 254	0.06	1.27	70	9.0	40	37	36	31	24	15	
		475	282	.129	25			2.41	133	32.1	46	46	46	45	43	38	
		700	416	.280	34			3.56	196	69.7	50	51	51	54	55	51	
		1200	713	.489	41			6.10	337	121.8	55	59	59	66	71	70	
		1400	832	.572	42			7.11	393	142.4	56	61	62	69	75	75	
22" x 10"	1.53	250	341	.036	15	559 x 254	0.14	1.27	161	9.0	40	37	36	31	24	15	
		400	546	.091	26			2.03	258	22.7	45	43	43	41	38	32	
		550	751	.173	33			2.79	354	43.1	47	48	48	48	47	43	
		700	956	.280	39			3.56	451	69.7	50	51	51	54	55	51	
		1200	1638	.489	45			6.10	773	121.8	55	59	59	66	71	70	
22" x 22"	3.36	175	549	.018	11	559 x 559	0.31	0.89	259	4.5	37	32	31	23	13	3	
		325	1019	.060	25			1.65	481	14.9	43	41	40	37	32	25	
		475	1490	.129	34			2.41	703	32.1	46	46	46	45	43	38	
		625	1960	.223	41			3.18	925	55.5	49	50	50	51	51	47	
		775	2430	.343	46			3.94	1147	85.4	51	53	53	56	58	55	
46" x 22"	7.03	175	1169	.018	15	1168 x 559	0.65	0.89	552	4.5	37	32	31	23	13	3	
		325	2170	.060	30			1.65	1024	14.9	43	41	40	37	32	25	
		475	3172	.129	38			2.41	1497	32.1	46	46	46	45	43	38	
		625	4173	.223	45			3.18	1970	55.5	49	50	50	51	51	47	
		700	4674	.280	47			3.56	2206	69.7	50	51	51	54	55	51	

NOTES: NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741.

ENGINEERING SPECIFICATION & CONFIGURATION

EGC545

The return grille shall be a Krueger model EGC545. This grille must have a core with a 45° deflection in one direction. The frame of the grille must be constructed of extruded aluminum with a thickness of 0.04" – 0.05" and countersunk screw holes. This frame must also produce a border of 1 1/4" around all sides of the grille with mitered corners that are mechanically staked for rigidity.

PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 - 7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

FINISH

The paint finish shall be #44 British White applied by an anodic electrocoating process. This process shall include washing, rinsing, applying iron phosphate, sealing and rinsing again. While hanging from an anodic hook, the product will then be dipped into a high performance electrocoating dip. Then the product shall be forced air dried and baked to a peak temperature of 350°F until cured. The overall process shall result to the following film properties: a film thickness of 0.8 – 1.0 mils, gloss at 60° per ASTM D523-89 of 50 – 85%, pencil hardness per ASTM D3363-92A of HB – H, crosshatch adhesion per ASTM D3359-83 of 4B – 5B, impact per ASTM D2794-93 of direct impact >100 in/lb and reverse impact >80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of >500 hours and water soak per ASTM D870-92 of 250 hours.

1. SERIES: (XXXX)

EGC545 - 1/2"x1/2"x1/2" 45° angle aluminum cube core return grille with 1 1/4" flange

2. WIDTH: (XX) *

10", 22", or 46" only

3. HEIGHT: (XX) *

10" or 22" only

4. FRAME STYLE: (XXX)

F22 - Surface mount

5. PANEL: (XXX)

00 - No panel

6. FASTENING: (XXX)

00 - No screw holes

01 - Standard screw holes

7. DAMPER: (XX) **

00 - No damper

01 - Steel opposed blade damper (OBD)

13 - Steel, painted opposed blade damper (POBD)

15 - Aluminum opposed blade damper (5OBD)

8. ACCESSORIES: (XX) (XX) (XX)

00 - No accessories

01 - Aluminum plaster frame (58PF)

DS - Debris screen (1/4" mesh)

IS - Insect screen (1/16" mesh)

9. FINISH: (XX)

01 - Mill

10 - Alumican

35 - Black

44 - British White

* Only available in 10"x10", 22"x10", 22"x22", or 46"x22" sizes.

** Dampers (01, 13, or 15) are not available fastening method (02) or insect/debris screen accessories.

SAMPLE CONFIGURATIONS: EGC545 - 22x22 - F22 - 00 - 01 - 00 - 00 - 10