

GENERAL PRODUCT OVERVIEW

Security Products

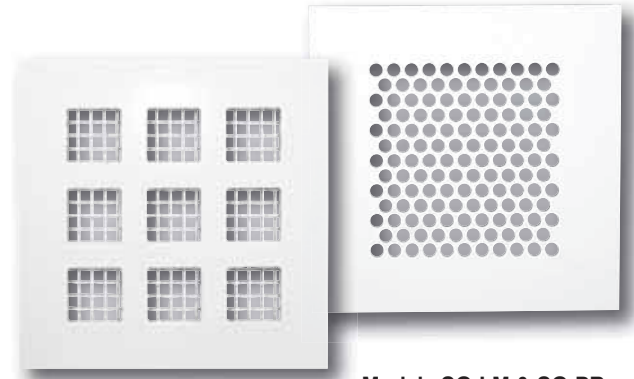
Nailor offers a complete line of Security Grilles, Registers and Diffusers. The product line includes grilles and registers for maximum, medium and minimum security and a diffuser for minimum security applications. The grilles and registers that are for use in the highest security areas are constructed from very heavy gauge welded steel that provides exceptional strength and durability. A wide range of options and accessories are available that can enhance the strength and performance of the grilles and registers.

MAXIMUM SECURITY GRILLES & REGISTERS

Nailor's maximum security grilles and registers are constructed from heavy gauge welded steel and are for use in areas where maximum security is vital. These grilles can be used for both supply and return air applications.

Lattice Face w/Mesh Model SG-LM
Perforated Face Plate Model SG-PR

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Models SG-LM & SG-PR



Model SG-BM4

MEDIUM/MINIMUM SECURITY GRILLES & REGISTERS

This sidewall bar grille is constructed from 14 gauge steel and has blades that are fixed at 40° or 0° deflection. The louvered blade and steel mesh screen are reinforced with heavy gauge steel mullions and a welded sleeve. These grilles can be used for both supply and return air applications.

40° Deflection Model SG-BM4
0° Deflection Model SG-BMZ

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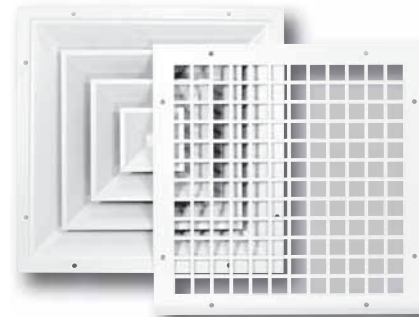
MINIMUM SECURITY DIFFUSERS

These diffusers are a combination of a louvered pattern diffuser with a lattice face plate for minimum security protection. The diffusers are available with a choice of 1, 2, 3 or 4-way throw patterns. Use these diffusers in applications where constant supervision occurs.

Steel Model SG-6500
Aluminum Model SG-6200

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Suffix '-O' adds an opposed blade damper.



Model SG-6500



Model SG-480

MINIMUM SECURITY BAR GRILLES & REGISTERS

These minimum security bar grilles are all aluminum rust-proof construction, which makes them ideal for use in showers and wet areas. The frame and blades are welded for extra strength. These grilles have 0° deflection blades that are spaced on either 1/2" (13) or 1/4" (6) centers.

1/2" (13) Spacing Model SG-280
1/4" (6) Spacing Model SG-480

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MINIMUM SECURITY GRILLES & REGISTERS

These louvered blade grilles and registers are paired up with a lattice face plate to meet minimum security requirements. They are available for both supply and return air applications with a choice of steel or aluminum construction.

Double Deflection Supply

Stainless Steel - Models SG-67DV, 67DH

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Steel - Models SG-61DV, SG-61DH

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Aluminum - Models SG-51DV, SG-51DH

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Suffix '-O' adds an opposed blade damper.

Single Deflection Supply

Steel - Models SG-61SV, SG-61SH

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Aluminum - Models SG-51SV, SG-51SH

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Suffix '-O' adds an opposed blade damper.

Fixed, 45° Deflection

Steel - Models SG-6145H, SG-6145V

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Aluminum - Models SG-5145H, SG-5145V

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Suffix '-O' adds an opposed blade damper.

Fixed, 0° Deflection

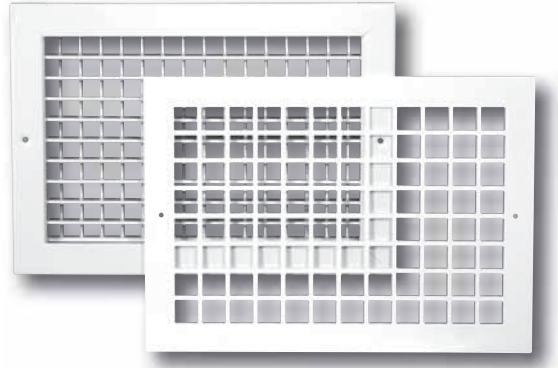
Steel - Models SG-61FH, SG-61FV

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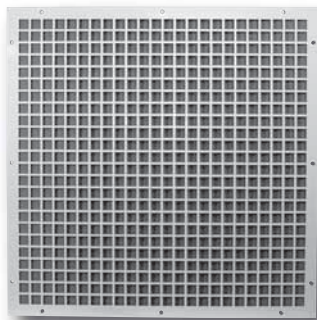
Aluminum - Models SG-51FH, SG-51FV

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Suffix '-O' adds an opposed blade damper.



Models SG-67DH, SG-61DH, SG-6145H



Model SG-LGS-B3

MINIMUM SECURITY LATTICE FACE GRILLES

These lattice face grilles are offered as an economical return air grille for minimum security applications. They are available in heavy gauge steel or heavy gauge aluminum with a selection of hole pattern designs.

Steel Model SG-LGS

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Aluminum Model SG-LGA

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OPTIONS & ACCESSORIES

A selection of mounting angles, security bars, opposed blade dampers and directional blades are the enhancements that are offered on the maximum and medium security grilles.

Mounting Angles

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Masonry Anchor Tabs

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Security Bars

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Opposed Blade Dampers

Page G25

Directional Blades

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Options A and J shown

MEDIUM / MINIMUM SECURITY GRILLES AND REGISTERS

- SUPPLY OR RETURN
- STEEL CONSTRUCTION
- FIXED BARS

Models:

- SG-BM4** 40° deflection
- SG-BMZ** 0° deflection



Model SG-BM4

Model Series SG-BM may be used for sidewall applications in medium or minimum security areas. Model Series SG-BM construction includes a stamped, heavy gauge steel, one piece frame welded to the sleeve. The louvered bars and steel mesh screen are reinforced with heavy gauge steel support mullions on 3" (76) maximum centers and welded to a steel sleeve passing through the wall. This design makes the Model Series SG-BM the highest quality standard security grille of its kind, providing exceptional strength and impact resistance.

STANDARD FEATURES:

- Face Plate (frame) constructed from 14 gauge steel.
- 1/2" (13) x 14 gauge blades on 1/2" (13) centers passing through 14 gauge vertical support bars on 3" (76) centers. Blades are fixed at 40° or 0° deflection.
- Sleeve: 14 gauge steel, of length required, with welded seams and welded to face plate.

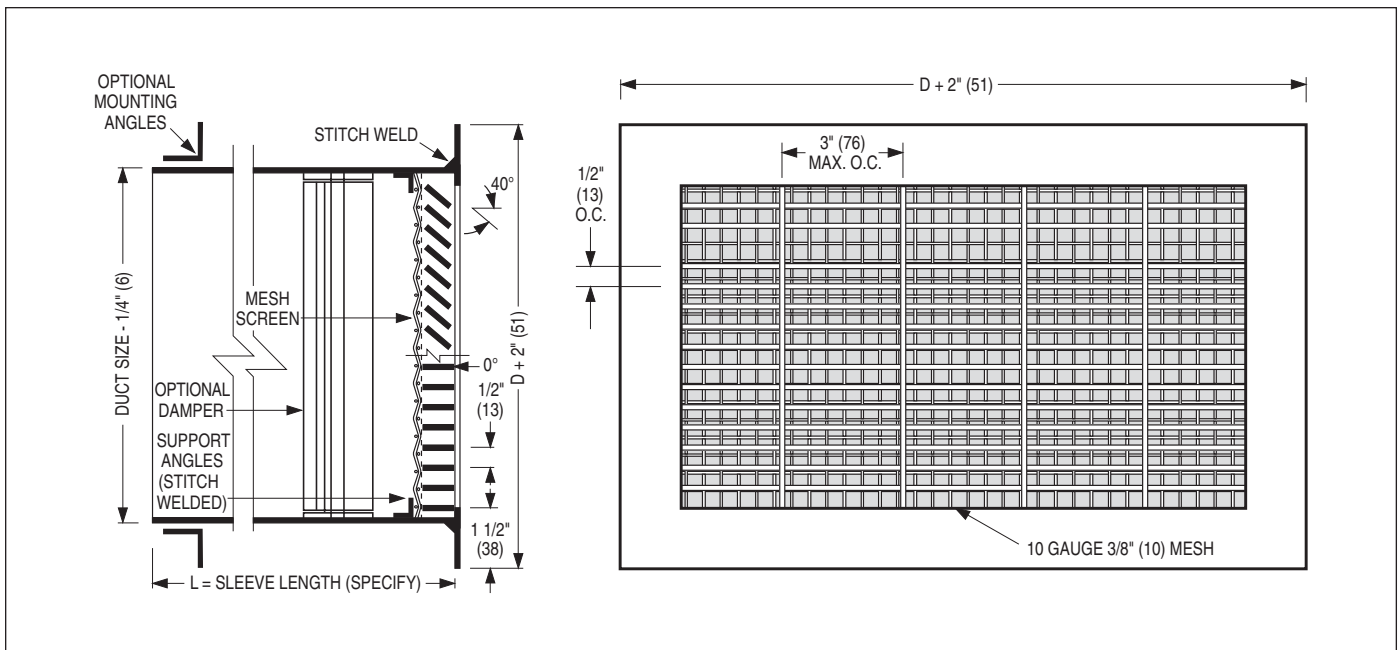
- Protective screen behind face bars of 10 gauge x 3/8" (10) clear opening (No. 2 mesh) woven steel wire, secured in place by stitch welded support angles.

FINISH OPTIONS:

- Standard finish is prime coat for field painting.

OPTIONS & ACCESSORIES:

- Mounting Angles: Option A, B or C. See page G24.
- Masonry Anchor Tabs: Option D. See page G24.
- Additional Security Barrier: Option E or F. See page G24.
- Opposed Blade Damper: Face operator (lever): Option J, Rear operator (screwdriver slot): Option K, See page G25.



PERFORMANCE DATA:

MODEL SG-BM4 • SUPPLY

Core Area Sq. Feet	Nominal Duct Size, Inches		Core Velocity	300	400	500	600	800	1000	1200
			Total Pressure	.041	.067	.108	.149	.27	.420	.615
.18	8 x 4	6 x 6	CFM	55	70	90	110	145	180	215
			Noise Criteria	-	-	21	27	36	42	48
			Throw	5-8-12	7-9-13	9-11-15	10-12-16	11-13-19	13-15-21	14-16-23
.39	18 x 4	12 x 6	CFM	115	155	195	235	310	390	470
			Noise Criteria	-	-	25	30	39	45	52
			Throw	8-12-16	11-13-20	12-15-22	14-17-24	16-19-28	17-21-31	19-24-33
.52	24 x 4	16 x 6	CFM	155	210	260	310	415	520	625
			Noise Criteria	-	-	26	31	40	46	53
			Throw	9-13-19	12-16-23	13-17-24	16-19-28	18-21-31	21-26-36	24-29-4
1.18	14 x 12	16 x 12	CFM	355	470	590	710	945	1180	1420
			Noise Criteria	-	23	29	34	43	50	55
			Throw	13-20-30	17-24-33	22-27-38	25-30-42	29-33-48	32-38-54	34-41-58
1.60	30 x 8	24 x 10	CFM	480	640	800	960	1280	1600	1920
			Noise Criteria	-	27	33	38	47	53	59
			Throw	14-22-33	20-29-40	24-31-45	29-35-50	32-40-55	37-45-64	38-48-68
2.78	30 x 14	24 x 18	CFM	835	1110	1320	1676	2220	2780	3340
			Noise Criteria	-	27	33	38	47	53	60
			Throw	20-30-46	26-35-55	31-40-58	37-47-69	45-55-78	48-60-85	54-66-91
4.29	30 x 22	28 x 24	CFM	1290	1720	2140	2570	3430	4290	5150
			Noise Criteria	20	28	35	40	49	55	61
			Throw	24-36-55	32-42-61	41-51-72	46-56-80	51-62-87	58-71-97	67-82-111

MODEL SG-BM4 • RETURN

Core Area Sq. Feet	Nominal Duct Size, Inches		Core Velocity	200	300	400	500	600	800	1000
			Neg. Static Pressu	.018	.055	.091	.146	.200	.364	.565
.18	8 x 4	6 x 6	CFM	35	55	70	90	110	145	180
			Noise Criteria	-	-	-	25	29	36	42
			CFM	80	115	155	195	235	310	390
.39	18 x 4	12 x 6	Noise Criteria	-	-	25	31	35	42	48
			CFM	105	155	210	260	310	415	520
			Noise Criteria	-	-	26	32	37	44	49
1.18	14 x 14	16 x 12	CFM	235	355	470	590	710	945	1180
			Noise Criteria	-	26	32	37	43	50	55
			CFM	320	480	640	800	960	1280	1600
1.60	30 x 8	24 x 10	Noise Criteria	-	28	34	40	45	52	58
			CFM	555	835	1110	1390	1670	2220	2780
			Noise Criteria	20	32	38	44	49	56	61
2.78	30 x 14	24 x 18	CFM	860	1290	1720	2140	2570	3430	4290
			Noise Criteria	24	35	41	47	52	60	64

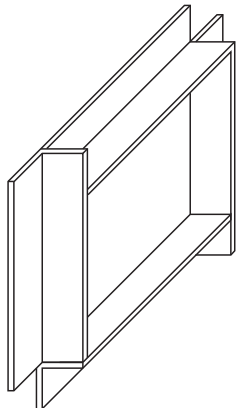
Performance Notes:

- All pressure are in inches w.g..
- Core Velocity is in feet per minute
- Throws are given at 150, 100 and 50 fpm terminal velocities.
- Noise Criteria (NC) values are based upon 10dB room absorption, re 10⁻¹² watts. Dash (-) in space indicates an Noise Criteria of less than 15.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

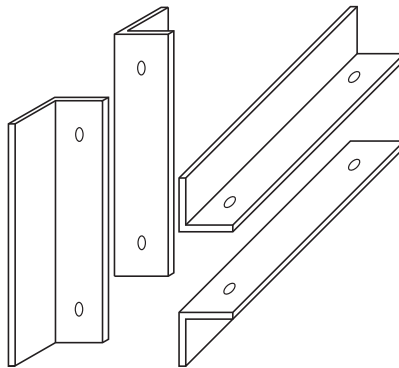
Options and Accessories

MOUNTING ANGLES:

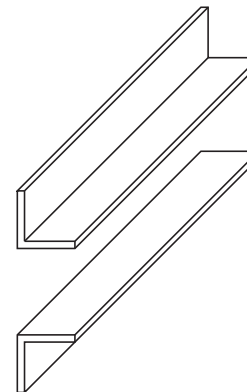
Option A 1" x 1" x 1/8" (25 x 25 x 3) welded rear angle frame. Shipped loose for field attachment (weld or bolt).



Option B 4 pcs. 1" x 1" x 1/8" (25 x 25 x 3) mounting angles, with holes and bolts. Shipped loose for field attachment.

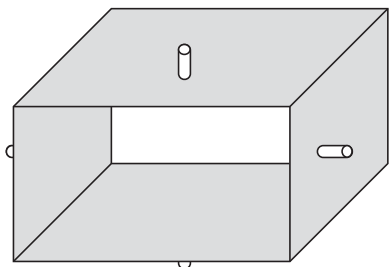


Option C 2 pcs. 1" x 1" x 1/8" (25 x 25 x 3) mounting angles (long dim.). Shipped loose for field attachment (weld or bolt).

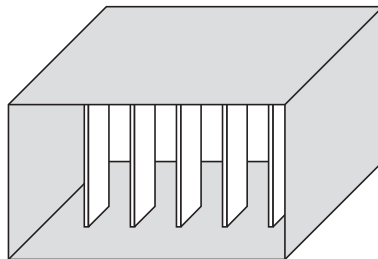


MASONRY ANCHOR TABS AND SECURITY BARS:

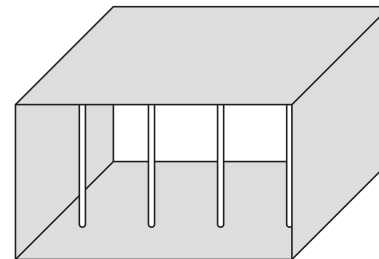
Option D 1/2" (13) dia. steel anchor tabs. 3" (76) long for concrete or brick walls. Minimum one per side.



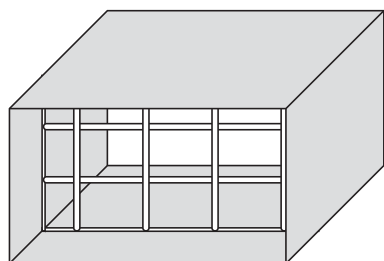
Option E 2 1/2" x 3/8" (64 x 10) flat security bars welded in sleeve, 4" (102) max. on center.



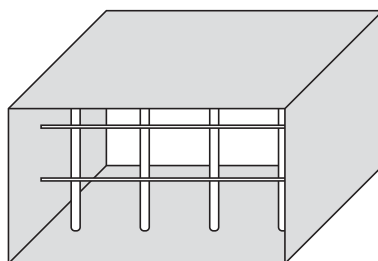
Option F 1/2" (13) dia. round security bars welded in sleeve, 6" (152) max. on center.



Option G Barrier Grille. 1/2" (13) dia. round security bars, vertical and horizontal, 6" (152) max. on center welded to sleeve and at each cross-point.



Option H Barrier Grille. 3/4" (19) dia. vertical bars with 2" x 1/4" (51 x 6) horizontal flat bars welded to sleeve and at each cross-point.



Options and Accessories

OPPOSED BLADE DAMPERS:

Option J Opposed Blade Damper. Face operator (screwdriver slot or lever).

Option K Opposed Blade Damper. Rear operator (screwdriver slot).

DIRECTIONAL BLADES:

Option L Adjustable single deflection horizontal blades on 3/4" (19) centers.

Option M Adjustable single deflection vertical blades on 3/4" (19) centers.

Option N Adjustable double deflection blades on 3/4" (19) centers. Horizontal front blades.

Option P Adjustable double deflection blades on 3/4" (19) centers. Vertical front blades.

Important note for all options and accessories:
 Not all options shown, or certain combinations, are necessarily available on individual security products. Consult the individual model description to determine which options apply.

