

## GENERAL PRODUCT OVERVIEW

### Security Products

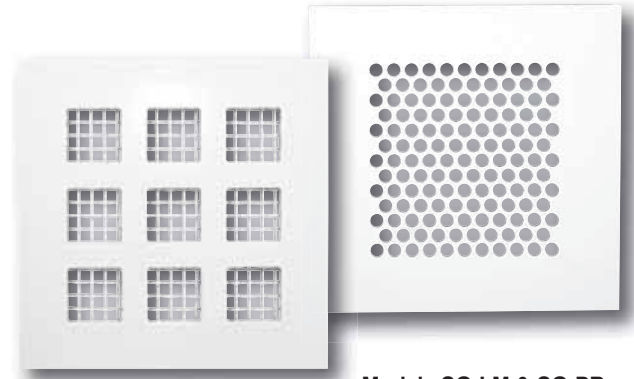
Nailor offers a complete line of Security Grilles, Registers and Diffusers. The product line includes grilles and registers for maximum, medium and minimum security and a diffuser for minimum security applications. The grilles and registers that are for use in the highest security areas are constructed 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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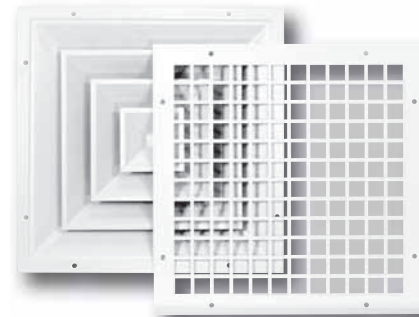
#### MINIMUM SECURITY DIFFUSERS

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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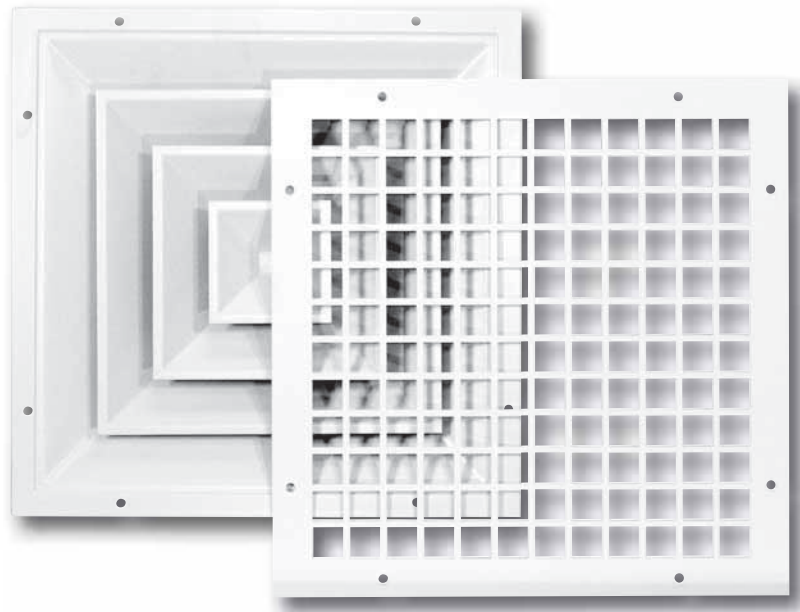
## MINIMUM SECURITY DIFFUSERS

- LOUVERED CORE
- LATTICE FACE
- 1, 2, 3 OR 4-WAY BLOW PATTERN

### Models:

- SG-6500 Steel
- SG-6200 Aluminum

- Suffix '-O' adds an opposed blade damper



Model SG-6500

Model SG-6500 is most often used in minimum security areas such as lobbies and foyers where constant supervision is required. This ceiling diffuser assembly combines the high performance Model Series 6500 Pattern Diffuser with a heavy gauge steel lattice grille mounted on the diffuser face. Also available in aluminum construction as Model SG-6200.

### STANDARD FEATURES:

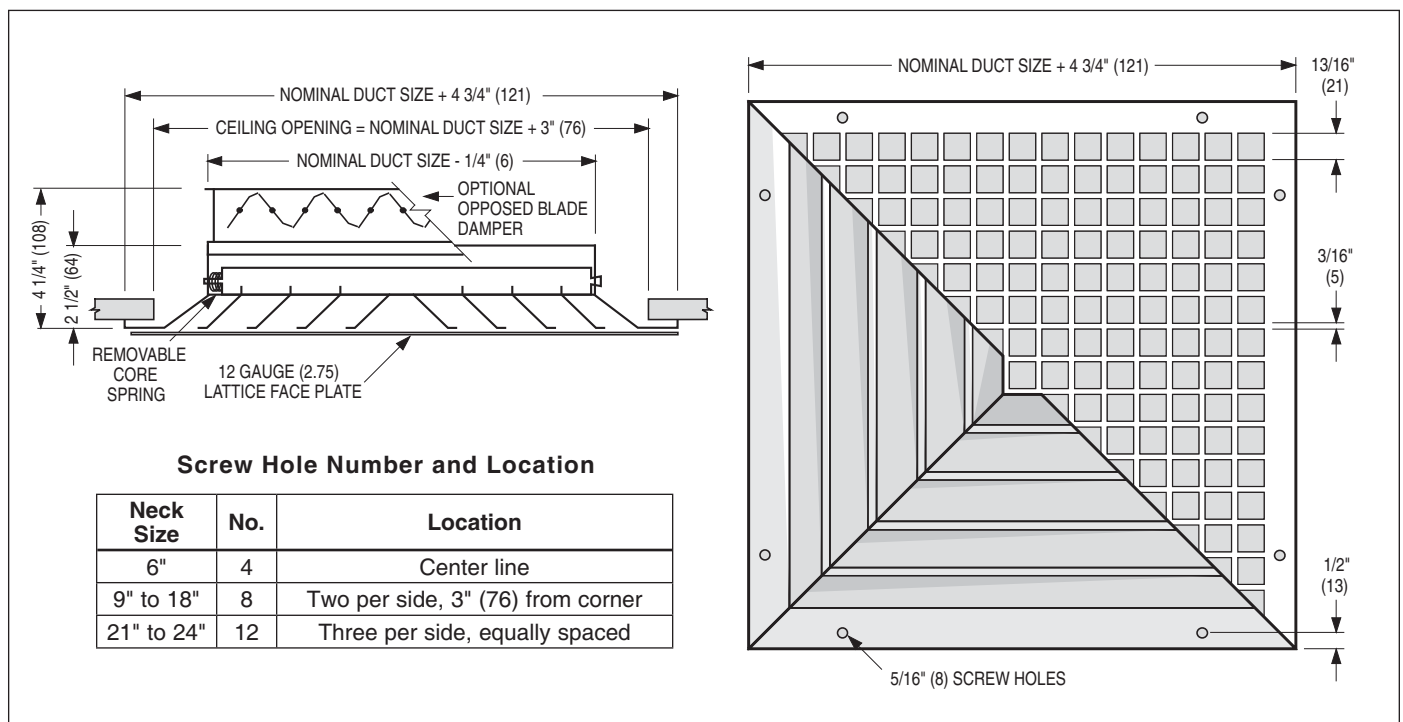
- Model Series 6500 or 6200 diffusers with Frame Type S and 1, 2, 3 or 4-way blow pattern.
- Face plate is constructed of 12 gauge steel with 13/16" (21) square holes on 1" (25) centers. 3/16" (5) fret bars.
- Screw holes provided in face plate. Tamper proof/security screws by others to suit local requirements.
- Available in square neck sizes 6" x 6" (152 x 152) through 24" x 24" (610 x 610) in 3" (76) increments.

### FINISH OPTIONS:

- Standard finish is AW Appliance White. Other finishes are available.

### OPTIONS & ACCESSORIES:

- Opposed blade damper. Adjustable from the face with lattice and core removed.



## PERFORMANCE DATA:

### MODELS SG-6500 AND SG-6200

Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Total Pressure	.006	.022	.049	.087	.134	.193	.270
6 x 6 .25 Sq. ft.	CFM	25	50	75	100	125	150	175
	Noise Criteria	–	–	–	–	23	30	34
	Throw	1-1-2	1-2-3	1-3-5	3-5-7	3-6-8	4-7-10	5-7-11
9 x 9 .56 Sq. ft.	CFM	55	110	170	225	280	335	390
	Noise Criteria	–	–	–	22	29	36	40
	Throw	1-1-2	1-3-5	3-5-7	5-7-10	6-8-12	7-10-15	8-10-17
12 x 12 1.0 Sq. ft.	CFM	100	200	300	400	500	600	700
	Noise Criteria	–	–	–	26	34	40	45
	Throw	1-1-2	2-4-5	4-6-9	6-9-12	7-10-15	9-13-20	10-13-21
15 x 15 1.56 Sq. ft.	CFM	155	310	470	625	780	935	1090
	Noise Criteria	–	–	21	29	37	43	48
	Throw	1-2-4	2-5-8	4-8-12	8-11-13	10-13-21	11-16-26	13-18-29
18 x 18 2.25 Sq. ft.	CFM	225	450	675	900	1125	1350	1575
	Noise Criteria	–	–	24	34	41	45	51
	Throw	1-2-4	3-7-11	5-9-15	8-12-20	11-16-27	13-19-31	14-21-35
21 x 21 3.06 Sq. ft.	CFM	305	610	920	1225	1530	1835	2140
	Noise Criteria	–	–	26	35	43	48	53
	Throw	1-3-5	3-8-12	7-11-18	10-15-24	13-20-29	15-22-36	17-24-40
24 x 24 4.0 Sq. ft.	CFM	400	800	1200	1600	2000	2400	2800
	Noise Criteria	–	–	28	37	44	50	54
	Throw	1-3-5	4-6-13	8-12-21	12-15-28	16-22-35	18-26-42	20-29-45

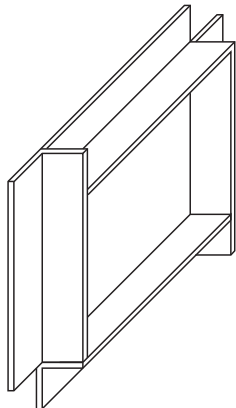
#### Performance Notes:

- All pressure are in inches w.g..
- Throws are given at 150, 100 and 50 fpm terminal velocities.
- Noise Criteria (NC) values are based upon 10dB room absorption, re 10<sup>-12</sup> 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.

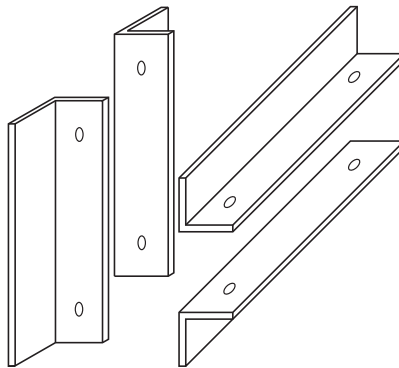
## Options and Accessories

### MOUNTING ANGLES:

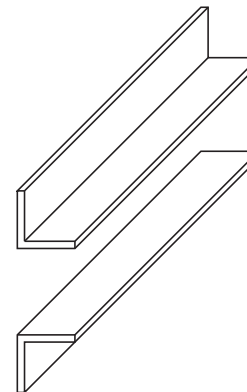
**Option A** 1" x 1" x 1/8" (25 x 25 x 3) welded rear angle frame. Shipped loose for field attachment (weld or bolt).



**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.

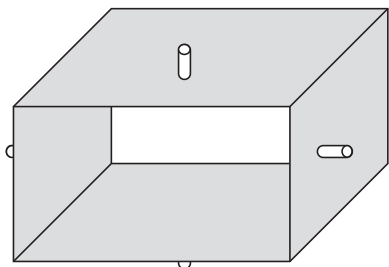


**Option C** 2 pcs. 1" x 1" x 1/8" (25 x 25 x 3) mounting angles (long dim.). Shipped loose for field attachment (weld or bolt).

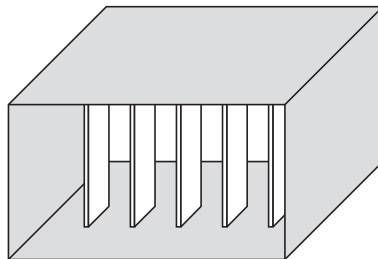


### MASONRY ANCHOR TABS AND SECURITY BARS:

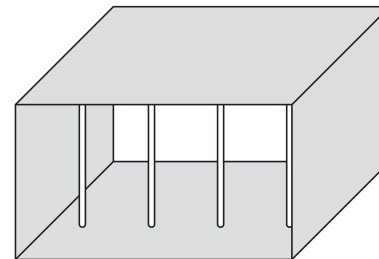
**Option D** 1/2" (13) dia. steel anchor tabs. 3" (76) long for concrete or brick walls. Minimum one per side.



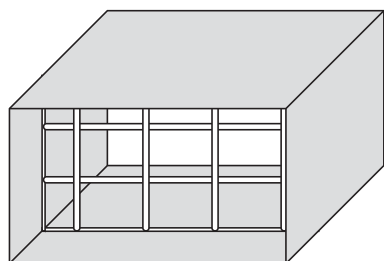
**Option E** 2 1/2" x 3/8" (64 x 10) flat security bars welded in sleeve, 4" (102) max. on center.



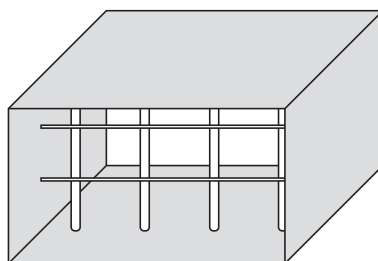
**Option F** 1/2" (13) dia. round security bars welded in sleeve, 6" (152) max. on center.



**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.

