### **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	Page G17
Steel - Models SG-61DV, SG-61DH	Page G18
Aluminum - Models SG-51DV, SG-51DH	Page G18
Suffix '-O' adds an opposed blade damper.	

## Single Deflection Supply

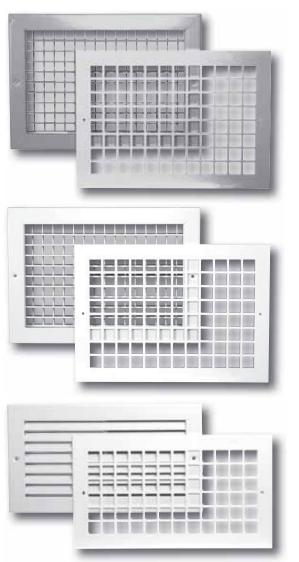
Steel - Models SG-61SV, SG-61SH	Page G19
Aluminum - Models SG-51SV, SG-51SH	Page G19
Suffix '-O' adds an opposed blade damper.	

## Fixed, 45° Deflection

Steel - Models SG-6145H, SG-6145V	Page G20
Aluminum - Models SG-5145H, SG-5145V	Page G20
Suffix '-O' adds an opposed blade damper.	

#### Fixed. 0° Deflection

i ixed, o Deficetion	
Steel - Models SG-61FH, SG-61FV	Page G21
Aluminum - Models SG-51FH, SG-51FV	Page G21
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.

SteelModel SG-LGSPage G22AluminumModel SG-LGAPage G22

## **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	Page G24
Masonry Anchor Tabs	Page G24
Security Bars	Page G24
Opposed Blade Dampers	Page G25
Directional Blades	Page G25



Options A and J shown

## MINIMUM SECURITY DOUBLE DEFLECTION SUPPLY GRILLES AND REGISTERS

- LATTICE FACE
- LOUVERED BLADES

### Models:

### SG-67DV and DH Stainless Steel

• Suffix '-O' adds an opposed blade damper



Model SG-67DV

These models are suitable for minimum security applications where the location is either hard to reach, such as high walls or ceilings in day rooms, or where there is constant supervision. The actual size of the unit may have a bearing on its application if the grille size selected is small enough that physical removal and/or bodily entry would not be contemplated. These models are essentially the same as the corresponding Nailor 6700 Series grilles with the addition of a lattice face for additional security.

## **STANDARD FEATURES:**

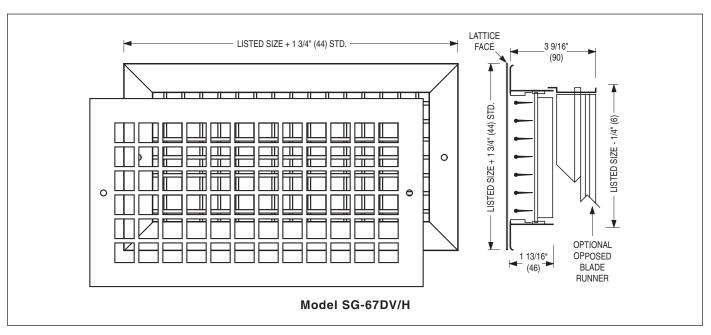
- Lattice Face: 12 gauge Type 304 stainless steel with 13/16" (21) square holes on 1" (25) centers. 3/16" (5) fret bars. Other lattice configurations are available.
- Grille or register is same as corresponding 6700 Series.
- Blades on 3/4" (19) centers are individually adjustable.
- Front blades are vertical (V) or horizontal (H) with the rear blades having the opposite orientation.
- Screw holes provided in face plate. Tamper proof/security screws by others to suit local requirements.
- Performance Data: See the appropriate base model and add the pressure drop of lattice face from table on page G23.
- Available in sizes 6" x 4" (152 x 102) through 48" x 24" (1219 x 610) in one piece construction.

### **FINISH OPTIONS:**

• Standard finish is #4 Brushed Satin Polished. AW Appliance White is optional. Other finishes are available.

## **OPTIONS & ACCESSORIES:**

 Opposed blade damper (stainless steel) has a screwdriver slot operator accessible through face of register.



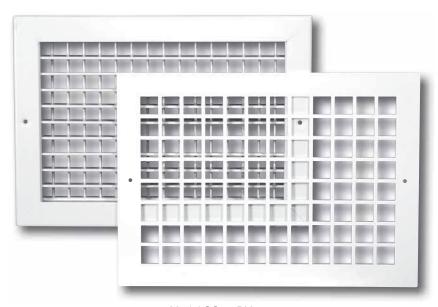
## MINIMUM SECURITY DOUBLE DEFLECTION SUPPLY GRILLES AND REGISTERS

- LATTICE FACE
- LOUVERED BLADES

### Models:

SG-61DV and DH Steel
SG-51DV and DH Aluminum

 Suffix '-O' adds an opposed blade damper



Model SG-61DV

These models are suitable for minimum security applications where the location is either hard to reach, such as high walls or ceilings in day rooms, or where there is constant supervision. The actual size of the unit may have a bearing on its application if the grille size selected is small enough that physical removal and/or bodily entry would not be contemplated. These models are essentially the same as the corresponding Nailor 6100 and 5100 Series range of grilles with the addition of a lattice face for additional security.

## STANDARD FEATURES:

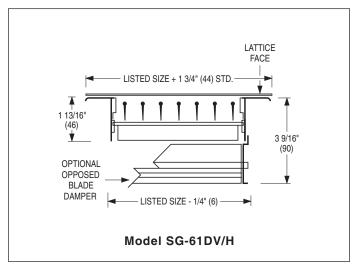
- Lattice Face: 12 gauge steel or aluminum with 13/16" (21) square holes on 1" (25) centers. 3/16" (5) fret bars. Other lattice configurations are available.
- Grille or register is same as corresponding 6100 or 5100 Series.
- Blades on 3/4" (19) centers are individually adjustable.
- Front blades are vertical (V) or horizontal (H) with the rear blades having the opposite orientation.
- Screw holes provided in face plate.
   Tamper proof/security screws by others to suit local requirements.

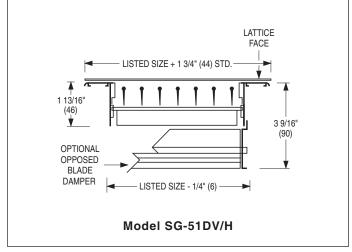
- Performance Data: See the appropriate base model and add the pressure drop of lattice face from table on page G23.
- Available in sizes 6" x 4" (152 x 102) through 48" x 24" (1219 x 610) in one piece construction.

#### **FINISH OPTIONS:**

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

## **OPTIONS & ACCESSORIES:**





# MINIMUM SECURITY SINGLE DEFLECTION SUPPLY GRILLES AND REGISTERS

- LATTICE FACE
- LOUVERED BLADES

## Models:

SG-61SV and SH Steel
SG-51SV and SH Aluminum

• Suffix '-O' adds an opposed blade damper



Model SG-61SH

These models are suitable for minimum security applications where the location is either hard to reach, such as high walls or ceilings in day rooms, or where there is constant supervision. The actual size of the unit may have a bearing on its application if the grille size selected is small enough that physical removal and/or bodily entry would not be contemplated. These models are essentially the same as the corresponding Nailor 6100 and 5100 Series range of grilles with the addition of a lattice face for additional security.

### STANDARD FEATURES:

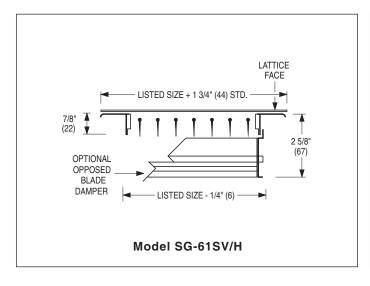
- Lattice Face: 12 gauge steel or aluminum with 13/16" (21) square holes on 1" (25) centers. 3/16" (5) fret bars. Other lattice configurations are available.
- Grille or register is same as corresponding 6100 or 5100 Series.
- Blades on 3/4" (19) centers are individually adjustable.
- Available with vertical (V) or horizontal (H) blades.
- Screw holes provided in face plate.
   Tamper proof/security screws by others to suit local requirements.

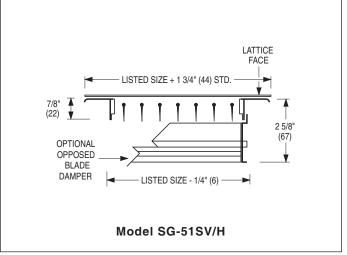
- Performance Data: See the appropriate base model and add the pressure drop of lattice face from table on page G23.
- Available in sizes 6" x 4" (152 x 102) through 48" x 24" (1219 x 610) in one piece construction.

#### **FINISH OPTIONS:**

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

## **OPTIONS & ACCESSORIES:**





## MINIMUM SECURITY FIXED BLADE RETURN GRILLES AND REGISTERS

- LATTICE FACE
- 45° DEFLECTION BLADES

## Models:

SG-6145H and 45V Steel SG-5145H and 45V Aluminum

• Suffix '-O' adds an opposed blade damper



Model SG-6145H

These models are suitable for minimum security applications where the location is either hard to reach, such as high walls or ceilings in day rooms, or where there is constant supervision. The actual size of the unit may have a bearing on its application if the grille size selected is small enough that physical removal and/or bodily entry would not be contemplated. These models are essentially the same as the corresponding Nailor 6100 and 5100 Series range of return grilles with the addition of a lattice face for additional security.

## STANDARD FEATURES:

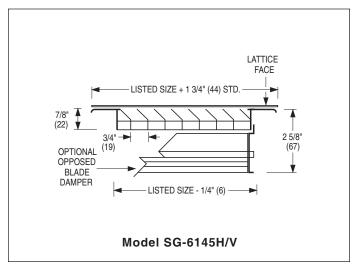
- Lattice Face: 12 gauge steel or aluminum with 13/16" (21) square holes on 1" (25) centers. 3/16" (5) fret bars. Other lattice configurations are available.
- Grille or register is same as corresponding 6100 or 5100 Series.
- Blades on 3/4" (19) centers are individually adjustable.
- Available with vertical (V) or horizontal (H) blades.
- Screw holes provided in face plate.
   Tamper proof/security screws by others to suit local requirements.

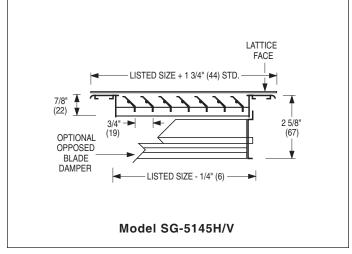
- Performance Data: See the appropriate base model and add the pressure drop of lattice face from table on page G23.
- Available in sizes 6" x 4" (152 x 102) through 48" x 24" (1219 x 610) in one piece construction.

### **FINISH OPTIONS:**

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

## **OPTIONS & ACCESSORIES:**





## MINIMUM SECURITY FIXED BLADE RETURN GRILLES AND REGISTERS

- LATTICE FACE
- 0° DEFLECTION BLADES

## Models:

SG-61FH and FV Steel
SG-51FH and FV Aluminum

• Suffix '-O' adds an opposed blade damper



Model SG-61FH

These models are suitable for minimum security applications where the location is either hard to reach, such as high walls or ceilings in day rooms, or where there is constant supervision. The actual size of the unit may have a bearing on its application if the grille size selected is small enough that physical removal and/or bodily entry would not be contemplated. These models are essentially the same as the corresponding Nailor 6100 and 5100 Series range of return grilles with the addition of a lattice face for additional security.

## STANDARD FEATURES:

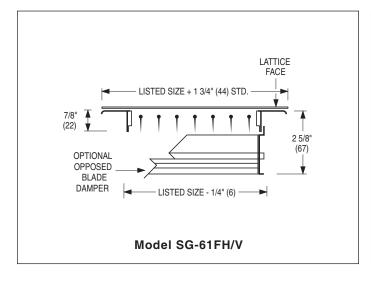
- Lattice Face: 12 gauge steel or aluminum with 13/16" (21) square holes on 1" (25) centers. 3/16" (5) fret bars. Other lattice configurations are available.
- Grille or register is same as corresponding 6100 or 5100 Series.
- Blades on 3/4" (19) centers are individually adjustable.
- Available with vertical (V) or horizontal (H) blades.
- Screw holes provided in face plate.
   Tamper proof/security screws by others to suit local requirements.

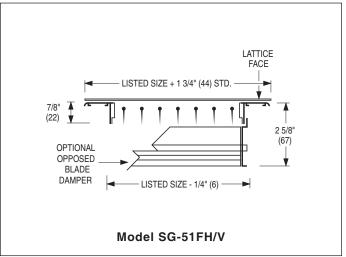
- Performance Data: See the appropriate base model and add the pressure drop of lattice face from table on page G23.
- Available in sizes 6" x 4" (152 x 102) through 48" x 24" (1219 x 610) in one piece construction.

### **FINISH OPTIONS:**

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

#### **OPTIONS & ACCESSORIES:**





## SIZING SCHEDULE AND PERFORMANCE DATA:

## **MODEL SERIES SG-LGS & SG-LGA • LATTICE FACE GRILLES**

DAYLIGHT OPENING DIMENSION													
NO. OF HOLES	CODE A1, B1, C1		CODE A3, B3, C3 13/16" SQ.		CODE A4, B4, C4 1" SQ.		NO. OF HOLES	CODE A5, B5, C		C5 2 1/2" x 1/2" Height			
	in.	mm	in.	mm	in.	mm	in.	mm		in.	mm	in.	mm
6	5 3/4	146	4 1/4	108	5 13/16	148	7 1/4	184	3	6 1/2	165	2	51
8	7 3/4	197	5 3/4	146	7 13/16	198	9 3/4	248	4	8 3/4	222	2 3/4	70
10	9 3/4	248	7 1/4	184	8 13/16	224	12 1/4	311	5	11	279	3 1/2	89
12	11 3/4	298	8 3/4	222	11 13/16	300	14 3/4	375	6	13 1/4	337	4 1/4	108
14	13 3/4	349	10 1/4	260	13 13/16	351	17 1/4	438	7	15 1/2	394	5	127
16	15 3/4	400	11 3/4	298	15 13/16	402	19 3/4	502	8	17 3/4	451	5 3/4	146
18	17 3/4	451	13 1/4	337	17 13/16	452	22 1/4	565	9	20	508	6 1/2	165
20	19 3/4	502	14 3/4	375	19 13/16	503	24 3/4	629	10	22 1/4	565	7 1/4	184
22	21 3/4	552	16 1/4	413	21 13/16	554	27 1/4	692	11	24 1/2	622	8	203
24	23 3/4	603	17 3/4	451	23 13/16	605	29 3/4	756	12	26 3/4	679	8 3/4	222
26	25 3/4	654	19 1/4	489	25 13/16	656	32 1/4	819	13	29	737	9 1/2	241
28	27 3/4	705	20 3/4	527	27 13/16	706	34 3/4	883	14	31 1/4	794	10 1/4	260
30	29 3/4	756	22 1/4	565	29 13/16	757	37 1/4	946	15	33 1/2	851	11	279
32	31 3/4	806	23 3/4	603	31 13/16	808	39 3/4	1010	16	35 3/4	908	11 3/4	298
34	33 3/4	857	25 1/4	641	33 13/16	859	42 1/4	1073	17	38	965	12 1/2	318
36	35 3/4	908	26 3/4	679	35 13/16	910	44 3/4	1137	18	40 1/4	1022	13 1/4	337
38	37 3/4	959	28 1/4	718	37 13/16	960	47 1/4	1200	19	42 1/2	1080	14	356
40	39 3/4	1010	29 3/4	756	39 13/16	1011			20	44 3/4	1137	14 3/4	375
42	41 3/4	1060	31 1/4	794	41 13/16	1062	]		21	47	1194	15 1/2	394
44	43 3/4	1111	32 3/4	832	43 13/16	1113							
46	45 3/4	1162	34 1/4	870	45 13/16	1164	]						
48	47 3/4	1213	35 3/4	908	47 13/16	1214	1						
50			37 1/4	946			-						

## **Pressure Loss Through Lattice Grille**

38 3/4

40 1/4

41 3/4

43 1/4

44 3/4

46 1/4

47 3/4

984

1022

1060

1099

1137

1175

1213

Option Code	Core Velocity	300	400	500	600	700	800	900	1000	1200	1400
Option Gode	Velocity Pressure	.006	.010	.016	.022	.031	.040	.051	.062	.090	.122
A1, B1, C1 (60%)	Negative Static Pressure	.019	.034	.053	.077	.105	.137	.173	.213	.307	.418
A2, B2, C2 (50%)		.032	.057	.089	.128	.174	.228	.288	.356	.512	.697
A3, B3, C3 (70%)		.011	.020	.031	.044	.060	.078	.099	.122	.176	.240
A4, B4, C4 (68%)		.012	.022	.034	.050	.068	.089	.112	.138	.198	.270
A5, B5, C5 (65%)	1	.015	.027	.042	.061	.083	.108	.137	.167	.243	.331

## **Performance Notes:**

52

54

56

58

60

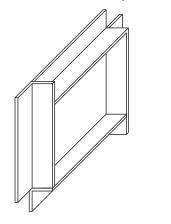
62

- 1. All pressure are in inches w.g..
- 2. Core Velocity is in feet per minute.
- 3. Core represents daylight opening dimensions.

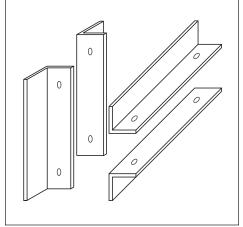
## **Options and Accessories**

## **MOUNTING ANGLES:**

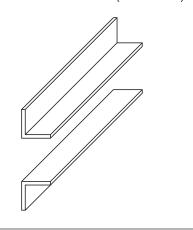
**Option A** 1" x 1" x 1/8" (25 x 25 x 3) welded rear angle frame. Shipped loose for field attachment (weld or bolt).



**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.

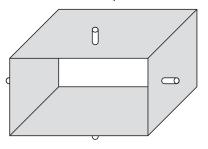


**Option C** 2 pcs. 1" x 1" x 1/8" (25 x 25 x 3) mounting angles (long dim.). Shipped loose for field attachment (weld or bolt).

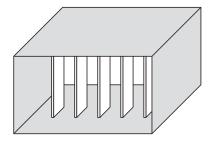


## **MASONRY ANCHOR TABS AND SECURITY BARS:**

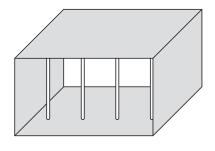
**Option D** 1/2" (13) dia. steel anchor tabs. 3" (76) long for concrete or brick walls. Minimum one per side.



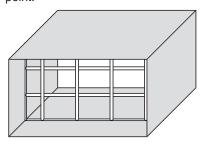
**Option E** 2 1/2" x 3/8" (64 x 10) flat security bars welded in sleeve, 4" (102) max. on center.



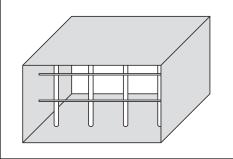
**Option F** 1/2" (13) dia. round security bars welded in sleeve, 6" (152) max. on center.



**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 crosspoint.



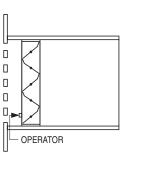
**Option H** Barrier Grille. 3/4" (19) dia. vertical bars with 2" x 1/4" (51 x 6) horizontal flat bars welded to sleeve and at each cross-point.



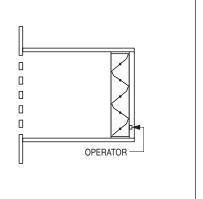
## **Options and Accessories**

## **OPPOSED BLADE DAMPERS:**

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

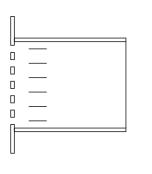


**Option K** Opposed Blade Damper. Rear operator (screwdriver slot).

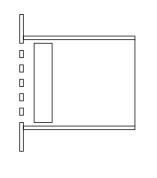


## **DIRECTIONAL BLADES:**

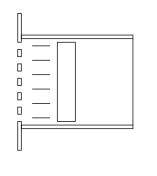
**Option L** Adjustable single deflection horizontal blades on 3/4" (19) centers.



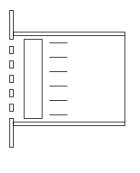
**Option M** Adjustable single deflection vertical blades on 3/4" (19) centers.



**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.