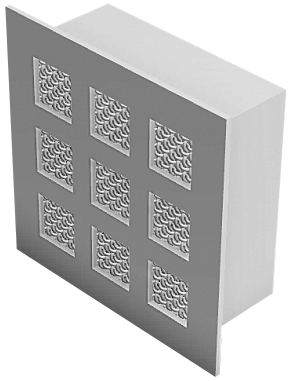
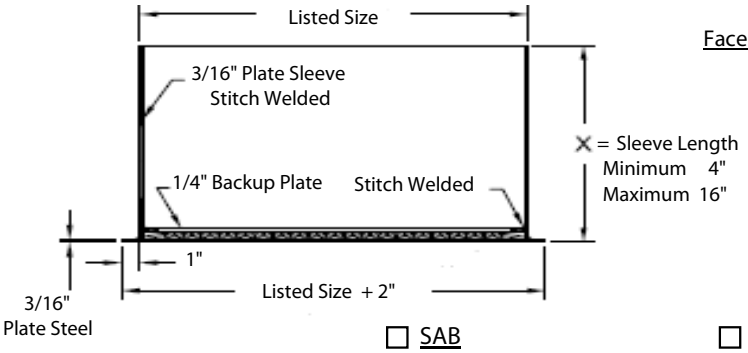
MODEL SGSP



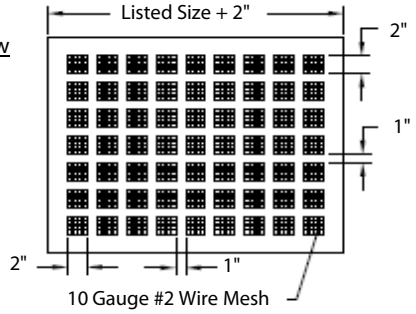
The SGSP maximum security sidewall/ceiling supply grille is designed with a perforated face plate of 2" square holes separated by 1" wide fret bars. A woven steel mesh screen is inserted directly behind the face plate and is sandwiched by a steel backup plate for additional security.

- 3/16" steel face plate
- 10-gauge woven steel mesh screen
- 1/4" steel back up plate
- Optional stainless steel construction
- Optional continuously welded seams

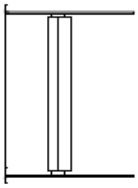
Model SGSP Steel Maximum Security Grille Square Holes - Mesh Screen Back



Face View



☐ OBD
Steel
Opposed Blade Damper
Rear Operated



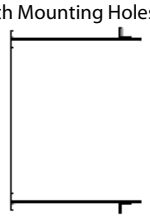
☐ SAB
Steel Anchor Bars
1/2" Diameter
3" Long For
Concrete , Block or Brick Walls



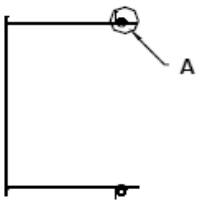
☐ SBR
Steel Security Bars
1/2" Diameter Bars
Welded In Sleeve
6" On Center Max
Horizontal & Vertical



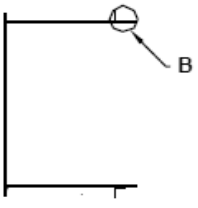
☐ LSA
Loose Steel Angle
LSA-2S 2 Angles Short Dimension
LSA-2L 2 Angles Long Dimension
LSA-4 4 Angles
1" X 1" X 3/16" Angle
With Mounting Holes



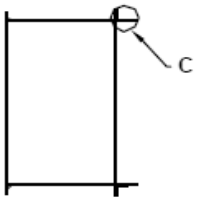
☐ BSA
Bolted Steel Angles
BSA-2S 2 Angles Short Dimension
BSA-2L 2 Angles Long Dimension
BSA-4 4 Angles
1" X 1" X 3/16" Angles
Shipped Bolted To Sleeve

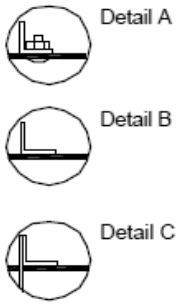


☐ WSA
Welded Steel Angles
WSA-2S 2 Angles Short Dimension
WSA-2L 2 Angles Long Dimension
WSA-4 4 Angles
1" X 1" X 3/16" Angle
Shipped Welded To Sleeve



☐ WAF
Welded Steel Angle Frame
1" X 1" X 3/16" Angle
Shipped Loose
Field Installed

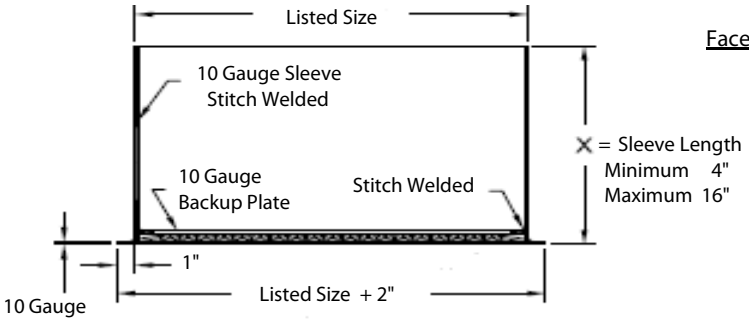




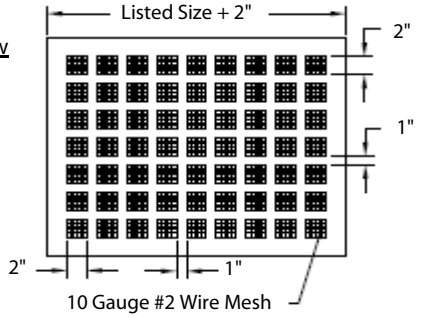
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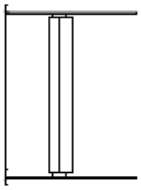
Model SGSP-SS Stainless Steel Maximum Security Grille Square Holes - Mesh Screen Back



Face View



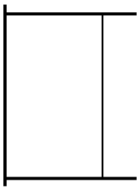
☐ OBDSS
Stainless Steel
Opposed Blade Damper
Rear Operated



☐ SSAB
Stainless Steel Anchor Bars
1/2" Diameter
3" Long For
Concrete , Block or Brick Walls



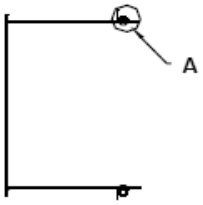
☐ SBR-SS
Stainless Steel Security Bars
1/2" Diameter Bars
Welded In Sleeve
6" On Center Max
Horizontal & Vertical



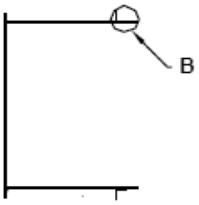
☐ LSSA
Loose Stainless Steel Angle
LSSA-2S 2 Angles Short dimension LSSA-2L 2 Angles Long Dimension LSSA-4 4 Angles
1" X 1" X 3/16" Angle



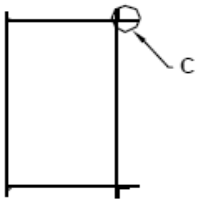
☐ BSSA
Bolted Stainless Steel Angles
BSSA-2S 2 Angles Short Dimension
BSSA-2L 2 Angles Long Dimension
BSSA-4 4 Angles
1" X 1" X 3/16" Angles
Shipped Bolted To Sleeve

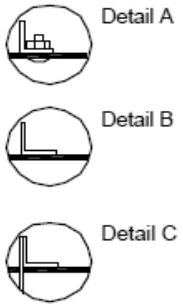


☐ WSSA
Welded Stainless Steel Angles
WSSA-2S 2 Angles Short Dimension
WSSA-2L 2 Angles Long Dimension
WSSA-4 4 Angles
1" X 1" X 3/16" Angle
Shipped Welded To Sleeve



☐ WAF-SS
Welded Stainless Steel Angle Frame
1" X 1" X 3/16" Angle
Shipped Loose
Field Installed





SERIES SGSP SPECIFICATIONS

MAXIMUM SECURITY SQUARE HOLES — STEEL — MODEL SGSP

- Air outlets shall be model SGSP manufactured by METALAIRE. Units shall be maximum security supply grilles of steel construction. Units shall have a face plate constructed of 3/16" steel with 2" square holes and 1” fret bars. A 10 gauge woven steel mesh screen shall be inserted directly behind the face panel sandwiched by a 1/4" steel backup plate. This assembly shall be backed by a stitch welded 3/16" thick steel sleeve. Both face and back-up plate shall be stitch welded to the sleeve. Units shall include a 1" border.
- The units shall be the size and quantity as outlined in the plans and specifications.
- Optional opposed blade damper shall be constructed of steel (Model OBD).
- Rear operation of the damper is recommended.

Performance Specification

The manufacturer shall provide published performance data. Data shall be tested in accordance to ANSI/ ASHRAE Standard 70-2006.

Paint Specification

Process shall be anodic electro-deposition using an anodic acrylic paint. Units shall undergo pre-treatment including a pressurized spray stage using an alkaline cleaner and a de-ionized water rinse.

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SGSP MODEL NUMBER SPECIFICATIONS

MAXIMUM SECURITY — 3/16" STEEL PERFORATED FACE WITH 2" SQUARE HOLES, 10 GAUGE WOVEN STEEL MESH SCREEN AND 1/4" STEEL BACKUP PLATE

Model	Neck										Sleeve
SGSP		6	9	12	15	18	21	24	27	30	
SGSP - SS	6	X	X	X	X	X	X	X	X	X	
	9		X	X	X	X	X	X	X	X	
	12			X	X	X	X	X	X	X	
	15				X	X	X	X	X	X	
	18					X	X	X	X	X	4 - 16
	21						X	X	X	X	
	24							X	X	X	
	27								X	X	
	30									X	

Available Finishes	
Steel - Standard	
01	White
Steel - Optional	
02	Satin Silver
03	Black
28	Custom Color
Stainless Steel - Standard	
23	Satin Polish
Stainless Steel - Optional	
01	White Painted
02	Satin Silver Painted
03	Black Painted
28	Custom Color

Available Accessories - Steel		Available Accessories - Stainless Steel	
OBD	Steel Opposed Blade Damper	OBD-SS	Stainless Steel Opposed Blade Damper
SAB	Steel Anchor Bars	SAB-SS	Stainless Steel Anchor Bars
SBR	Steel Security Bars	SBR-SS	Stainless Steel Security Bars
LSA	Loose Steel Angle	LSA-SS	Loose Stainless Steel Angle
BSA	Bolted Steel Angle	BSA-SS	Bolted Stainless Steel Angle
WSA	Welded Steel Angle	WSA-SS	Welded Stainless Steel Angle
WAF	Welded Steel Angle Frame	WAF-SS	Welded Stainless Steel Angle Frame
		316-SS	316 Stainless Steel

SERIES SGSP PERFORMANCE DATA

MODEL SGSP

Size (in)	NK Vel	100	150	200	250	300	350	400	450	500	550	600
Neck Area ft²	Ps	.005	.010	.018	.029	.042	.058	.075	.094	.117	.140	.166
06x06	CFM	25	38	50	63	75	88	100	113	125	138	150
.250	Throws	2-7	3-10	5-12	6-13	7-15	9-16	10-17	10-18	11-19	12-20	12-21
	NC	-	-	-	14	20	24	28	32	35	38	40
08x08	CFM	44	67	89	111	133	155	178	200	222	244	266
.444	Throws	2-10	5-14	7-16	8-18	10-20	12-21	13-23	14-24	15-25	15-27	16-28
	NC	-	-	-	17	22	27	31	34	37	40	43
09x09	CFM	56	84	113	141	169	197	225	253	282	310	338
.563	Throws	2-11	5-16	7-18	9-20	11-22	13-24	15-25	16-27	16-28	17-30	18-31
	NC	-	-	11	18	23	28	32	35	38	41	44
12x06	CFM	50	75	100	125	150	175	200	225	250	275	300
.500	Throws	2-11	5-15	7-17	9-19	11-21	12-22	14-24	15-25	15-27	16-28	17-29
	NC	-	-	-	17	23	27	31	35	38	41	43
12x12	CFM	100	150	200	250	300	350	400	450	500	550	600
1.000	Throws	3-15	7-21	10-24	12-27	15-29	17-32	10-24	21-36	22-38	23-40	24-42
	NC	-	-	13	20	26	30	34	38	41	44	46
15x12	CFM	125	188	250	313	375	438	500	563	625	688	750
1.250	Throws	3-17	8-23	11-27	14-30	17-33	20-35	22-38	23-42	24-42	26-45	27-46
	NC	-	-	14	21	27	31	35	39	42	45	47
15x15	CFM	156	234	313	391	469	547	625	703	782	860	938
1.563	Throws	4-19	9-26	12-30	16-34	19-37	22-40	25-42	26-45	27-47	29-50	30-52
	NC	-	-	15	22	28	32	36	40	43	46	48
18x12	CFM	150	225	300	375	450	525	600	675	750	825	900
1.500	Throws	4-18	8-25	12-29	15-33	18-36	21-39	24-42	25-44	27-46	28-49	29-51
	NC	-	-	15	22	27	32	36	39	43	45	48
18x18	CFM	225	338	450	563	675	788	900	1013	1125	1238	1350
2.250	Throws	5-22	10-31	15-36	19-40	22-44	26-48	29-51	31-54	33-57	34-60	36-62
	NC	-	11	17	24	29	34	38	41	44	47	50
21x21	CFM	306	459	613	766	919	1072	1225	1378	1532	1685	1838
3.063	Throws	5-26	12-36	17-42	22-47	26-51	31-56	34-59	36-63	38-66	40-70	42-73
	NC	-	12	18	25	30	35	39	43	46	49	51
24x12	CFM	200	300	400	500	600	700	800	900	1000	1100	1200
2.000	Throws	4-21	10-29	14-34	18-36	21-42	25-45	28-48	29-51	31-54	32-56	34-59
	NC	-	-	16	23	29	33	37	41	44	47	49

CONTINUED

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SERIES SGSP PERFORMANCE DATA

MODEL SGSP

Size (in)	NK Vel	100	150	200	250	300	350	400	450	500	550	600
Neck Area ft²	Ps	.005	.010	.018	.029	.042	.058	.075	.094	.117	.140	.166
24x24	CFM	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
4.000	Throws	6-30	14-42	20-48	25-54	30-59	35-63	39-68	42-72	44-76	46-80	48-83
	NC	-	11	20	26	32	36	40	44	47	50	52
27x27	CFM	506	759	1013	1266	1519	1772	2025	2278	2532	2785	3038
5.063	Throws	7-34	15-47	22-54	28-60	34-66	39-71	44-76	47-81	49-85	52-90	54-94
	NC	-	12	21	27	33	37	41	45	48	51	53
30x24	CFM	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000
5.000	Throws	7-33	15-46	22-54	28-60	33-66	39-71	44-76	46-80	49-85	51-89	54-93
	NC	-	12	20	27	33	37	41	45	48	51	53
30x30	CFM	625	938	1250	1563	1875	2188	2500	2813	3125	3438	3750
6.250	Throws	4-31	10-47	18-60	26-67	31-73	36-79	42-85	47-90	52-95	57-100	60-104
	NC	-	-	12	19	24	29	33	36	40	42	45

PERFORMANCE NOTES FOR SERIES SGSP

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)
Nk Vel Neck Velocity is the airstream velocity in the duct just before it reaches the supply outlet; measured in feet per minute
Ps Static pressure = Pt–Pv (inches of water column)
Throw Throw distance in feet are for terminal velocities of 150 and 50 fpm respectively
NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10^{-12} watts minus a 10dB room attenuation in all octave bands