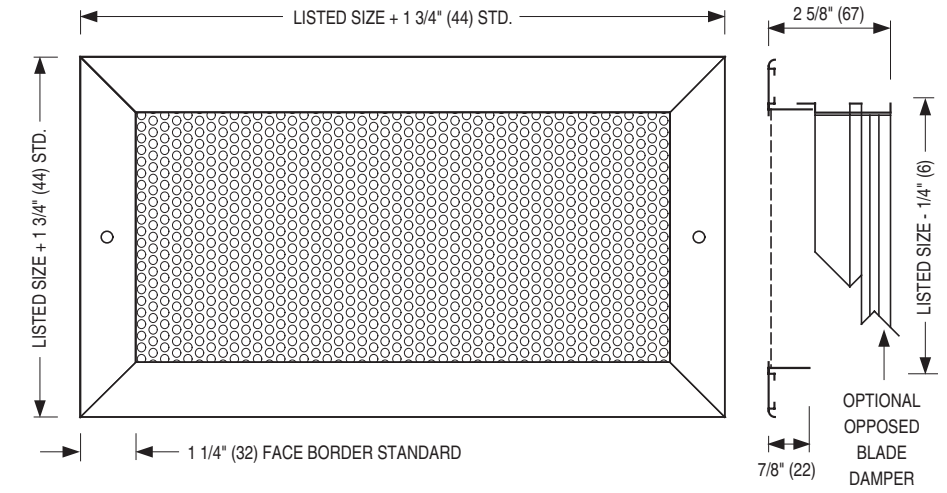
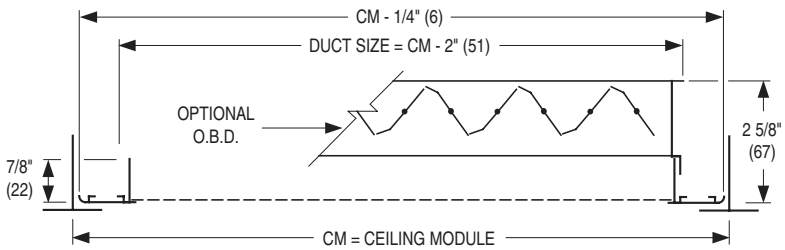
ALUMINUM PERFORATED FACE RETURN GRILLES & REGISTERS
MODELS: 51PR(-O) TYPE S OR L



TYPE S SURFACE MOUNT

❑ **MODEL 51PR**
Perforated Grille
Surface Mount

❑ **MODEL 51PR-O**
Perforated Register
(Includes O. B. Damper)
Surface Mount



TYPE L LAY-IN T-BAR

❑ **MODEL 51PR**
Perforated Grille
Lay-in T-Bar

❑ **MODEL 51PR-O**
Perforated Register
(Includes O. B. Damper)
Lay-in T-Bar

DESCRIPTION:

1. Construction: Aluminum perforated core and extruded aluminum frame mechanically interlocked with reinforced mitered corners for strength. Perforated 3/16" (5) staggered holes on 1/4" (6) centers. 51% free area.
2. These perforated core grilles and registers are capable of transferring or returning high air volumes at minimum pressure requirements.

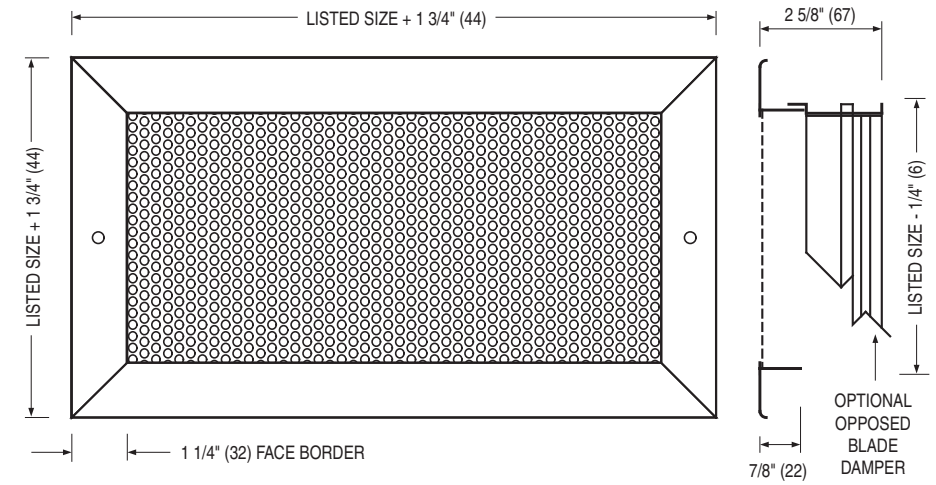
   They overlap openings in solid ceilings and walls and fit lay-in T-Bar openings in suspended grid ceilings. For T-Bar applications select frame/border Type L to indicate the unit will be 2" (51) undersized to suit the ceiling module size, e.g. 24" x 24" (610 x 610) lay-in equals 22" x 22" (559 x 559) neck size.
3. Optional roll-formed steel opposed blade damper has a removable key operator or screwdriver adjustment through the face of the register with a special access hole.
4. Frame/border Type S is available in sizes 6" x 4" (152 x 102) through 48" x 48" (1219 x 1219) in one piece construction. Available in multiple sections with mullions - see submittal OG-1-A. Frame/border Type L is available in ceiling module sizes: 12" x 12", 24" x 12", 36" x 12", 48" x 12", 20" x 20", 24" x 24", 36" x 24" and 48" x 48" (305 x 305, 610 x 305, 914 x 305, 1219 x 305, 508 x 508, 610 x 610, 914 x 610 and 1219 x 1219).
5. Type S Surface mount standard frame has a 1 1/4" (32) face border and a 1" (25) overlap margin.
6. Standard fastening is Type A countersunk screw holes for surface mount (Type N for lay-in).
7. Standard finish is AW Appliance White.

OPTIONS:

1. Finish:
   - ❑ AL Aluminum
   - ❑ SP Special _____ .
2. Fastening (surface mount only):
   - ❑ Type N None.
3. ❑ OA Aluminum opposed blade damper (model suffix).
4. ❑ Type NF Narrow frame with 1" (25) face border and a 3/4" (19) overlap margin. O.A. flange to flange dim. = listed size + 1 1/4" (32). (surface mount only)
5. ❑ PF Plaster frame (surface mount only)
6. ❑ IS Insect screen
7. ❑ Other _____ .

SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**9 - 1 - 20**	**5100**	**2 - 1 - 11**	**51PR-1**

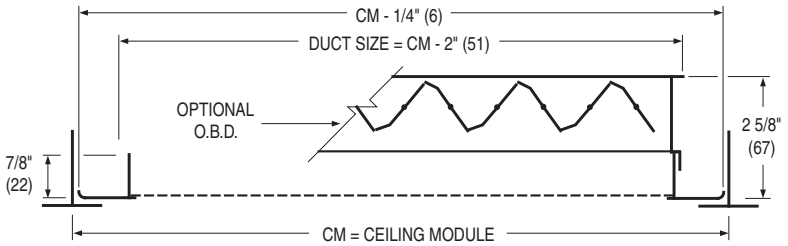
STEEL PERFORATED FACE RETURN GRILLES & REGISTERS
MODELS: 61PR(-O) TYPE S OR L



TYPE S SURFACE MOUNT

❑ **MODEL 61PR**
Perforated Grille
Surface Mount

❑ **MODEL 61PR-O**
Perforated Register
(Includes O. B. Damper)
Surface Mount



TYPE L LAY-IN T-BAR

❑ **MODEL 61PR**
Perforated Grille
Lay-in T-Bar

❑ **MODEL 61PR-O**
Perforated Register
(Includes O. B. Damper)
Lay-in T-Bar

DESCRIPTION:

1. Construction: Corrosion-resistant steel core and frame mechanically interlocked with reinforced mitered corners for strength . Perforated 3/16" (5) staggered holes on 1/4" (6) centers. 51% free area.
2. These perforated core grilles and registers are capable of transferring or returning high air volumes at minimum pressure requirements.

   They overlap openings in solid ceilings and walls and fit lay-in T-bar openings in suspended grid ceilings. For T-bar applications select frame/border Type L to indicate the unit will be 2" (51) undersized to suit the ceiling module size, e.g. 24" x 24" (610 x 610) lay-in equals 22" x 22" (559 x 559) neck size.
3. Optional roll-formed steel opposed blade damper has a removable key operator or screwdriver adjustment through the face of the register with a special access hole.
4. Minimum size is 6" x 4" (152 x 102).

   Maximum size is 48" x 48" (1219 x 1219).
5. Type S Surface mount frame has a 1 1/4" (32) face border and a 1" (25) overlap margin.
6. Standard fastening is Type A countersunk screw holes for surface mount (Type N for lay-in).
7. Standard finish is AW Appliance White.

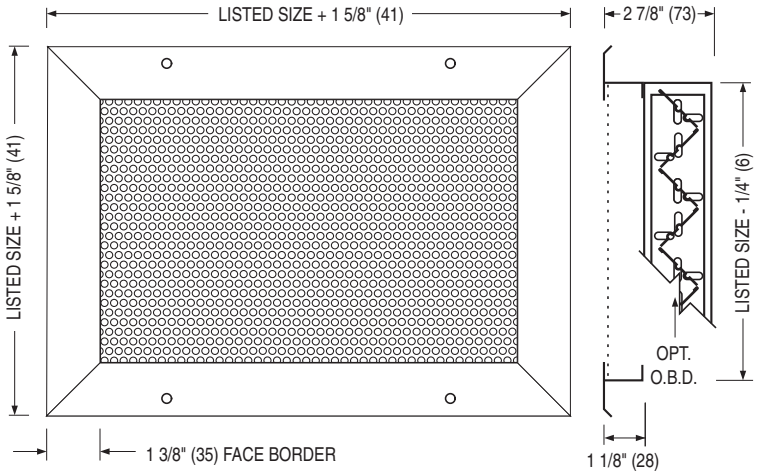
OPTIONS:

1. Finish:
   - ❑ AL Aluminum
   - ❑ SP Special _____ .
2. Fastening (surface mount only):
   - ❑ Type N None.
3. ❑ PF Plaster frame (surface mount only)
4. ❑ IS Insect screen
5. ❑ Other _____ .

SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**2 - 1 - 11**	**6100**	**6100-5/8-29-05**	**61PR-1**

STAINLESS STEEL PERFORATED FACE RETURN GRILLES & REGISTERS MODELS: 67PR(-O) TYPE S

Nailor® Industries Inc.



❑ **MODEL 67PR**
Perforated Face Grille
Surface Mount

❑ **MODEL 67PR-O**
Perforated Face Register
Surface Mount
(Includes O. B. Damper)

DESCRIPTION:

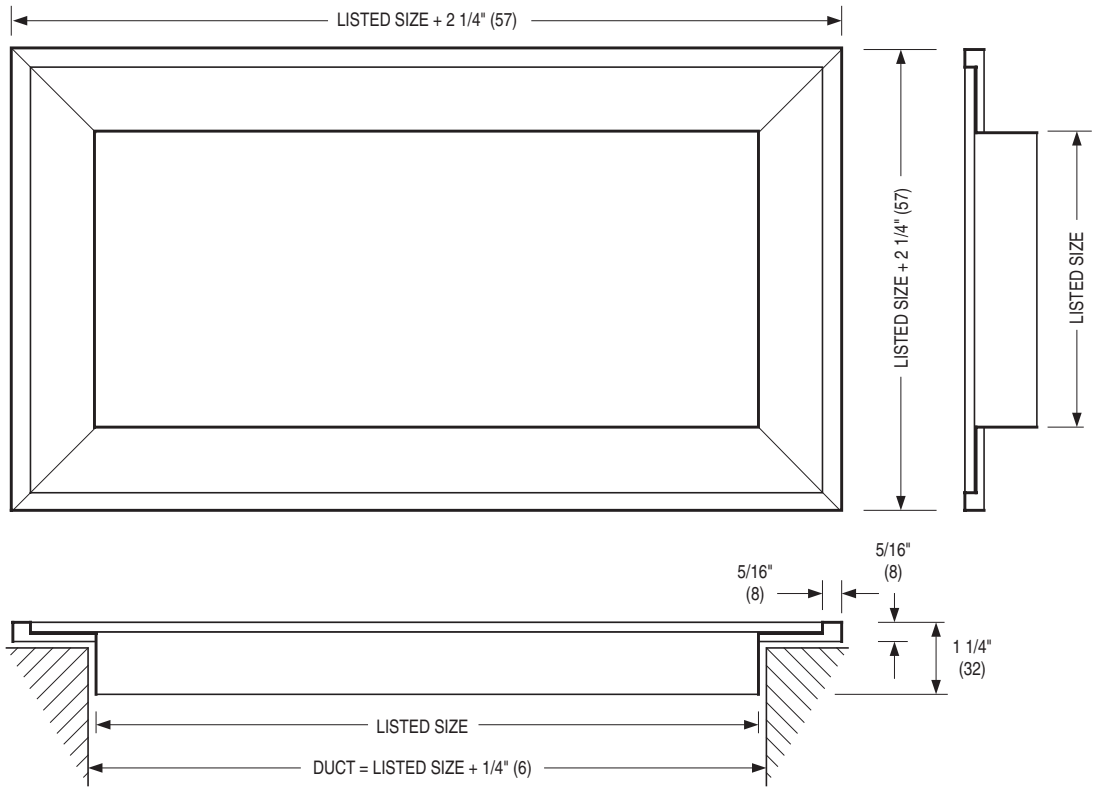
1. Construction: Type 304 stainless steel welded and reinforced frame features hairline mitered corners. Perforated 304 stainless steel face has 3/16" (5) staggered holes on 1/4" (6) centers. 51% free area.
2. Optional roll-formed Type 304 stainless steel opposed blade damper.
3. Minimum size is 4" x 4" (102 x 102).
   Maximum size is 60" x 48" (1524 x 1219).
4. Type S Surface mount standard frame has a 1 3/8" (35) face border.
5. Standard fastening is Type A countersunk screw holes. Supplied with #6 x 1 1/4" (32) stainless steel sheet metal screws.
6. Standard finish is #4 Brushed Satin Polished.

OPTIONS:

1. Construction:
   ❑ 316 Type 316 stainless steel.
2. Finish:
   ❑ AW Appliance White baked enamel.
   ❑ SP Special _____ .
3. ❑ PFS Stainless Steel Plaster frame
4. ❑ Other _____ .

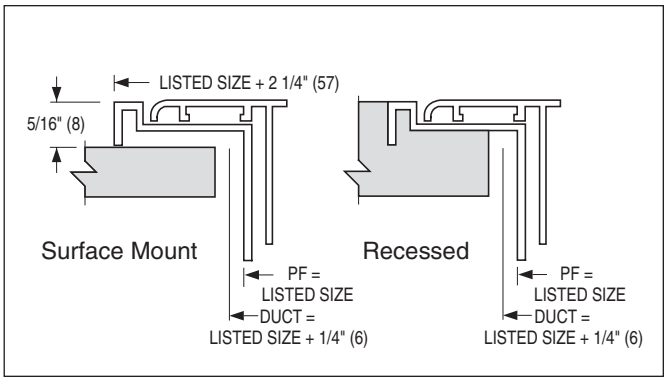
SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**5 - 11 - 15**	**6700**	**9 - 22 - 11**	**67PR-1**

GRILLES AND REGISTERS ACCESSORY
PLASTER/MOUNTING FRAME
(FOR USE WITH MODEL SERIES 5100, 6100, AND 7100)
MODEL: PF



DESCRIPTION:

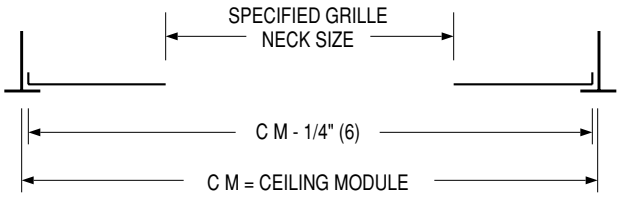
1. Construction: Extruded aluminum frame with staked and mitered mitered corners for strength.
2. Model PF Plaster frame provides a convenient and professional method for finishing off a grille or register opening. It provides a stable anchor for attachment, while enabling the grille or register to be readily removed and replaced without disturbing the finished surface of the wall or ceiling.
3. Frames can be installed before plastering and installed in a recessed fashion or surface mounted afterwards on plaster or other material.
4. Duct openings should be 1/4" (6) larger than nominal listed size to accommodate frame.
5. Finish: Baked enamel finish to match grille or register.

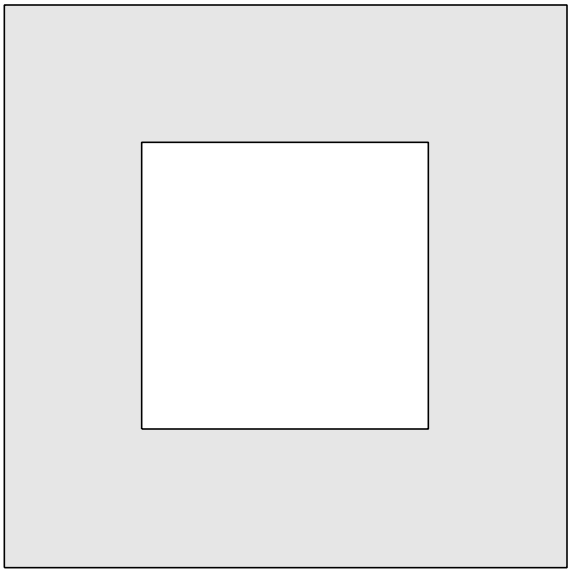


SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**10 - 24 - 01**	**ACC-GR**	**5100-11**	**ACC-PF**

Nailor Industries Inc.

ALUMINUM T-BAR MOUNTING PANEL
(FOR USE WITH ALUMINUM RETURN GRILLES AND REGISTERS)
TYPE PLA





AVAILABLE CEILING MODULE SIZES		
Imperial Modules		**Metric Modules**
Imperial Units (in.)	**Metric Units (mm)**	**S.I. Units (mm)**
12 x 12	305 x 305	300 x 300
24 x 12	610 x 305	600 x 300
36 x 12	914 x 305	900 x 300
48 x 12	1219 x 305	1200 x 300
20 x 20	508 x 508	500 x 500
24 x 24	610 x 610	600 x 600
36 x 24	914 x 610	900 x 600
48 x 24	1219 x 610	1200 x 600

DESCRIPTION:

1. Material: Aluminum.
2. Type PLA mounting panels are for use with aluminum return grilles and registers, Model Series 51C, 5100, 51EC, 51PR and 7100 to fit standard exposed grid T-bar ceiling systems.
3. Grilles or registers are factory mounted in the auxiliary panel.
4. Maximum grille neck size = Ceiling Module - 3" (76).
5. Standard finish is AW Appliance White to match supply or return grille and register.

OPTIONS:

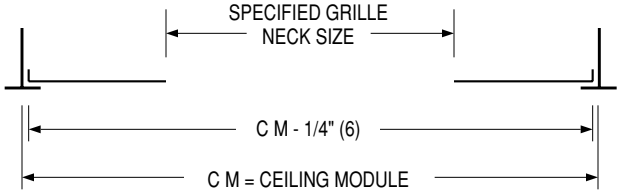
Finish:

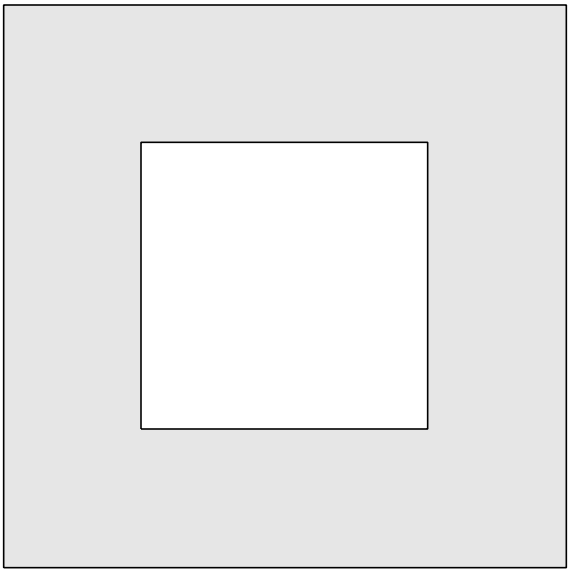
❑ SP Special _____ .

SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**13 - 10 - 00R**	**ACC-GR**	**4-93/5100-PL**	**ACC-PLA**

Nailor Industries Inc.

STEEL T-BAR MOUNTING PANEL
(FOR USE WITH STEEL OR ALUMINUM RETURN GRILLES AND REGISTERS)
TYPE PLS





AVAILABLE CEILING MODULE SIZES		
Imperial Modules		**Metric Modules**
Imperial Units (in.)	**Metric Units (mm)**	**S.I. Units (mm)**
12 x 12	305 x 305	300 x 300
24 x 12	610 x 305	600 x 300
36 x 12	914 x 305	900 x 300
48 x 12	1219 x 305	1200 x 300
20 x 20	508 x 508	500 x 500
24 x 24	610 x 610	600 x 600
36 x 24	914 x 610	900 x 600
48 x 24	1219 x 610	1200 x 600

DESCRIPTION:

1. Material: Heavy gauge corrosion-resistant steel.
2. Type PLS mounting panels are for use with steel or aluminum return grilles and registers, Model Series 51C, 5100, 51EC, 51PR, 61C, 6100, 61EC, 61PR and 7100 to fit standard exposed grid T-bar ceiling systems.
3. Grilles or registers are factory mounted in the auxiliary panel.
4. Maximum grille neck size = Ceiling Module - 3" (76).
5. Standard finish is AW Appliance White to match supply or return grille and register.

OPTIONS:

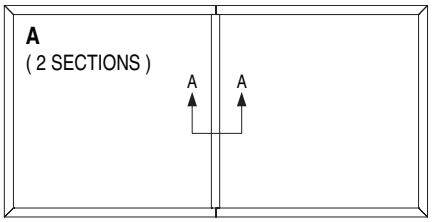
Finish:

❑ SP Special _____ .

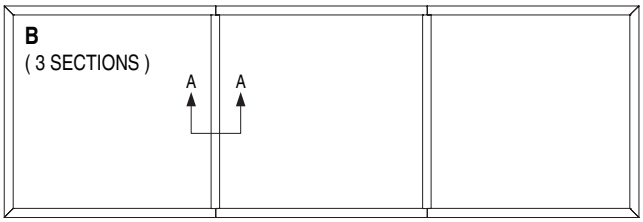
SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**13 - 10 - 00R**	**ACC-GR**	**4-93/6100-PL**	**ACC-PLS**

Nailor® Industries Inc.

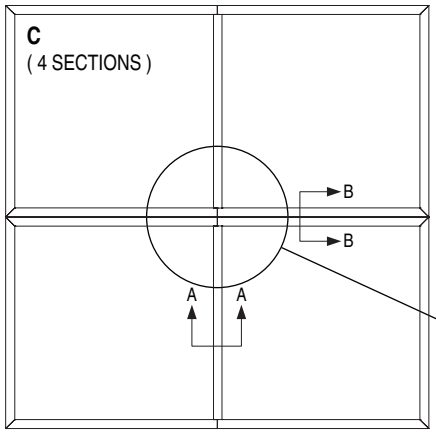
OVERSIZED GRILLE CONSTRUCTION
ALUMINUM SUPPLY AND RETURN GRILLES
FOR DUCTS OR OPENINGS LARGER THAN 48" (1219)
MODEL SERIES: 5100 AND 7100



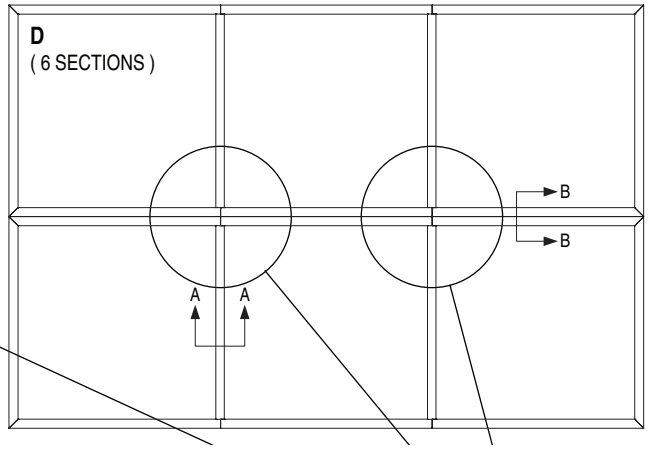
OVER 48" (1219) IN WIDTH UP TO 96" x 48" (2438 x 1219)



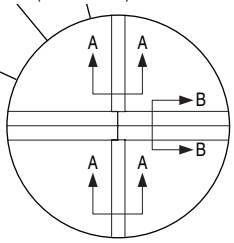
OVER 96" (2438) IN WIDTH UP TO 144" x 48" (3658 x 1219)

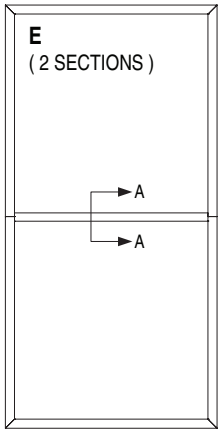


OVER 48" (1219) IN WIDTH AND HEIGHT UP TO 96" x 96" (2438 x 2438)

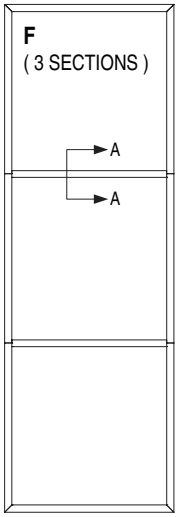


OVER 96" x 48" (2438 x 1219) UP TO 144" x 96" (3658 x 2438)

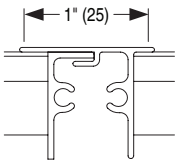




UP TO 48" (1219) IN WIDTH AND
UP TO 96" (2438) IN HEIGHT

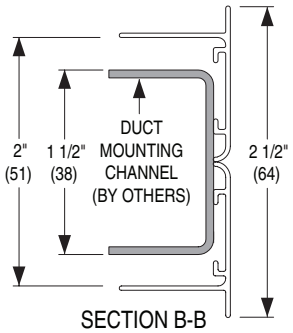


UP TO 48" (1219) IN WIDTH AND
UP TO 144" (3658) IN HEIGHT



SECTION A-A

FACE MULLION WITH
ALIGNMENT TAB
OVERLAP DETAIL



SECTION B-B

DOUBLE FRAME / BORDER DETAIL

NOTES:

1. Maximum single section size is 48" x 48" (1219 x 1219).
2. Detail A-A frame joints are sheared and butted together. Alignment tabs interlock and keep the face surfaces parallel.
3. Detail B-B shows two separate grille frames butted together.
4. Mounting countersunk screw holes are located per the standard screw hole chart on grille frames, but not on face mullion.
5. Sections ship loose for field installation.
6. Additional structural support (Duct mounting support channels by others) is required for diagrams C and D.
7. This detail applies to Type S Surface Mount Frame/Border only.

SCHEDULE TYPE:	Dimensions are in inches (mm)			
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**4 - 27 - 20**	**GR**	**NEW**	**OG-1-A**

Nailor Industries Inc.

Standard and Optional Finishes For Grilles and Diffusers

Nailor offers a selection of standard colors and finishes available on our grilles, registers and diffusers. For painted finishes, our state-of-the-art paint systems provide environmentally friendly finishing solutions with uniform coverage and coating thickness. The result is an exceptionally durable finish that resists scratching, corrosion and general wear. Additional facilities for special requirements, as well as a selection of anodized or brushed finishes, complete our ability to provide unmatched beauty and durability for any application.

NAILOR POWDER COAT PROPERTIES

FILM THICKNESS	2.0 to 3.0 mils
HARDNESS	2 H
IMPACT RESISTANCE	Direct: 160 inch - lbs. Reverse 160 inch - lbs.
SALT SPRAY	1000 hours

ELECTROCOATING PROPERTIES

FILM THICKNESS	.8 to 1.2 mils
HARDNESS	HB TO H
IMPACT RESISTANCE	80 inch - lbs
SALT SPRAY	100 hours

POWDER COAT

Nailor's powder coat is a high-tech thermosetting polyester powder coating with superior physical properties that provide excellent color and gloss retention. The finish offers extreme durability and hardness that resists scratching, chipping and general wear. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse before a final powder coat finish is applied and baked. The environmentally friendly Nailor powder coat system assures uniform coverage and color consistency resulting in a long lasting superior finish. Colors, including simulated anodizing, which is far more economical than color anodizing, can be selected from Nailor's standard color chart or non-standard colors and can be matched from sample chips provided to Nailor.

ELECTROCOATING

E-Coat is an environmentally friendly coating that provides complete coverage and a wide range of performance properties, formulated to meet corrosion, durability and other performance specifications. Electrocoating is a highly automated process in which paint is electrically deposited onto a metal foundation. Film build thickness is uniform and overall application efficiencies are in excess of 90%. Paint is consistent on all part-to-part surfaces, preventing sags, runs or drips. E-Coat offers flexibility, better first yield pass and quicker production times compared to other forms of paint applications. Electrocoating is an excellent solution that offers superior properties and uniform finish.

CLEAR ANODIZING (Aluminum products only)

Clear anodizing is a clear oxide coating that exemplifies an aluminum surface's natural oxide coating producing a hard, scratch resistant surface that is resistant to general wear and mild chemicals. The process provides a natural looking, virtually maintenance free finish that will endure for many years.

COLOR ANODIZING (Aluminum products only)

Color anodizing is an electrolytic process where, after standard anodizing procedures, colored metallic pigments penetrate the oxide surface pores producing a corrosion resistant, colorfast finish. The process results in a natural metallic appearance that requires little maintenance.

BRUSHED AND CLEAR COAT

Available on specific aluminum products (consult applicable product page for availability). Surface is brushed to achieve a scratch finish texture before being degreased and chemically cleaned. A clear lacquer coating is then applied to provide a durable protective finish.

#4 BRUSHED SATIN POLISHED (Stainless Steel products only)

Surface is polished to ASTM A480 #4 standard to achieve a bright durable finish that is resistant to mild chemicals and corrosion. A final coating is not required due to the inherent anti-corrosion properties of the stainless steel.

PRIME COAT

Prime coat provides a stable base for painting in the field. Surface pretreatment includes degreasing and a chemical cleaning before an alkyd prime coat is applied. After a thorough cleaning for dust, etc. that can contaminate the final finish and cause premature flaking or peeling, finish coat should be field applied as soon as possible.

PAINT PREPARED ALUMINUM (Aluminum products only)

Allows for field applied paint. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse. Finish coat should be field applied as soon as possible.

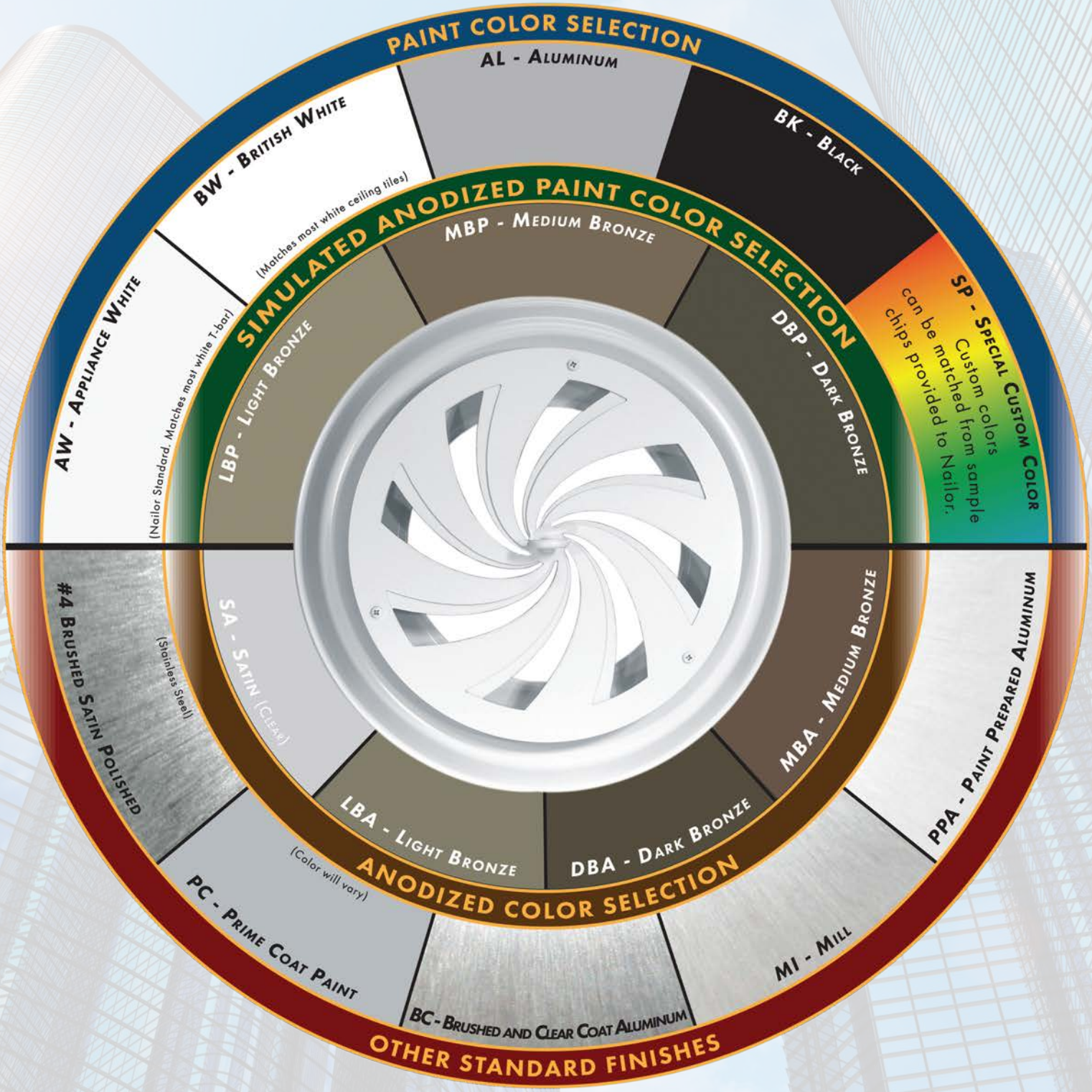
MILL FINISH

Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.

Nailor® Industries Inc.

Standard and Optional Finishes For Grilles and Diffusers

The following standard colors and finishes are available on applicable Nailor air distribution products. Consult individual product pages for availability



The pictured finishes have been represented as best as possible within printing limitations. However, actual finish may vary. Contact your Nailor representative for a color chip sample on the material specified for a more accurate representation.

DBK - Black (for registers ordered with factory mounted dampers) - ***BA*** - Perforated Diffusers (4300 series only) Appliance White (AW) face with black back pan and pattern controllers.

PERFORMANCE DATA:

PERFORATED RETURN GRILLES AND REGISTERS • 5100, 6100 AND 6700 SERIES

MODELS: 51PR, 51FP, 61PR, 61FP, 67PR, 51PRC, 61PRC

Listed Duct Size (inches)	Alternate Sizes (inches)	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	300 .006 .024	400 .010 .042	500 .016 .067	600 .022 .095	700 .031 .130	800 .040 .170	900 .051 .215	1000 .062 .265	1200 .090 .382
6 x 6	8 x 4 10 x 4	0.20	0.20	**CFM** Noise Criteria	**60** –	**80** –	**100** –	**120** 15	**140** 21	**160** 26	**180** 32	**200** 37	**240** 44
8 x 6	10 x 5 12 x 4	0.27	0.27	**CFM** Noise Criteria	**81** –	**108** –	**135** –	**162** 16	**189** 22	**216** 28	**243** 33	**270** 38	**324** 45
10 x 6	12 x 5 16 x 4	0.35	0.33	**CFM** Noise Criteria	**105** –	**140** –	**175** –	**210** 17	**245** 24	**280** 29	**315** 34	**350** 39	**420** 46
8 x 8	14 x 5	0.38	0.36	**CFM** Noise Criteria	**114** –	**152** –	**190** –	**228** 18	**266** 25	**304** 29	**342** 35	**380** 40	**456** 47
12 x 6	18 x 4	0.42	0.40	**CFM** Noise Criteria	**126** –	**168** –	**210** –	**252** 18	**294** 25	**336** 30	**378** 35	**420** 40	**504** 47
12 x 8	16 x 6 24 x 4	0.58	0.53	**CFM** Noise Criteria	**174** –	**232** –	**290** –	**348** 20	**406** 27	**464** 31	**522** 36	**580** 41	**696** 48
10 x 10	14 x 7	0.61	0.56	**CFM** Noise Criteria	**183** –	**244** –	**305** –	**366** 20	**427** 27	**488** 31	**549** 37	**610** 42	**732** 49
18 x 6	14 x 8 30 x 4 28 x 4	0.65	0.60	**CFM** Noise Criteria	**195** –	**260** –	**325** –	**390** 20	**455** 27	**520** 32	**585** 37	**650** 42	**780** 49
12 x 10	16 x 8 20 x 6 24 x 5	0.74	0.67	**CFM** Noise Criteria	**222** –	**296** –	**370** –	**444** 21	**518** 28	**592** 32	**666** 37	**740** 43	**888** 50
12 x 12	14 x 10 24 x 6 18 x 8 38 x 4	0.90	0.80	**CFM** Noise Criteria	**270** –	**360** –	**450** 15	**540** 22	**630** 28	**720** 33	**810** 38	**900** 44	**1080** 51
14 x 14	16 x 12 24 x 8 20 x 10 34 x 6	1.24	1.09	**CFM** Noise Criteria	**372** –	**496** –	**620** 16	**744** 23	**868** 29	**992** 34	**1116** 39	**1240** 45	**1488** 52
18 x 12	16 x 14 28 x 8 22 x 10 38 x 6	1.37	1.20	**CFM** Noise Criteria	**411** –	**548** –	**685** 17	**822** 23	**959** 30	**1096** 35	**1233** 39	**1370** 45	**1644** 52
24 x 10	20 x 12 30 x 8	1.52	1.33	**CFM** Noise Criteria	**456** –	**608** –	**760** 17	**912** 24	**1064** 30	**1216** 35	**1368** 40	**1520** 46	**1824** 53
16 x 16	18 x 14 30 x 8 22 x 12	1.64	1.42	**CFM** Noise Criteria	**492** –	**656** –	**820** 17	**984** 24	**1148** 30	**1312** 35	**1476** 40	**1640** 46	**1968** 53
24 x 12	18 x 16 30 x 10 20 x 14 36 x 8	1.85	1.60	**CFM** Noise Criteria	**555** –	**740** –	**925** 17	**1110** 24	**1295** 30	**1480** 35	**1665** 40	**1850** 46	**2220** 53
18 x 18	20 x 16 28 x 12 24 x 14 32 x 10	2.10	1.80	**CFM** Noise Criteria	**630** –	**840** –	**1050** 17	**1260** 24	**1470** 30	**1680** 36	**1890** 40	**2100** 46	**2520** 53
30 x 12	20 x 18 26 x 14 22 x 16 36 x 10	2.32	2.00	**CFM** Noise Criteria	**696** –	**928** –	**1160** 17	**1392** 25	**1624** 30	**1856** 37	**2088** 41	**2320** 47	**2784** 54
20 x 20	24 x 18 30 x 14 26 x 16 36 x 12	2.61	2.22	**CFM** Noise Criteria	**783** –	**1044** –	**1305** 18	**1566** 25	**1827** 30	**2088** 37	**2349** 41	**2610** 47	**3132** 54
22 x 22	24 x 20 30 x 16 26 x 18 36 x 14	3.17	2.69	**CFM** Noise Criteria	**951** –	**1268** –	**1585** 18	**1902** 26	**2219** 31	**2536** 37	**2853** 42	**3170** 48	**3804** 55
30 x 18	24 x 22 40 x 14 34 x 16	3.54	3.00	**CFM** Noise Criteria	**1062** –	**1416** –	**1770** 19	**2124** 26	**2478** 32	**2832** 37	**3186** 42	**3540** 48	**4248** 55
24 x 24	26 x 22 32 x 18 28 x 20 36 x 16	3.79	3.20	**CFM** Noise Criteria	**1137** –	**1516** –	**1895** 19	**2274** 27	**2653** 33	**3032** 38	**3411** 43	**3790** 49	**4548** 56
36 x 18	32 x 20 46 x 14 40 x 16	4.29	3.60	**CFM** Noise Criteria	**1287** –	**1716** –	**2145** 19	**2574** 27	**3003** 33	**3432** 38	**3861** 43	**4290** 49	**5148** 56
26 x 26	28 x 24 48 x 14	4.47	3.76	**CFM** Noise Criteria	**1341** –	**1788** –	**2235** 20	**2682** 28	**3129** 34	**3576** 39	**4025** 44	**4470** 50	**5364** 57
30 x 24	28 x 26 36 x 20 32 x 22 40 x 18	4.77	4.00	**CFM** Noise Criteria	**1431** –	**1908** –	**2385** 21	**2862** 28	**3339** 34	**3816** 39	**4293** 44	**4770** 50	**5724** 57
28 x 28	30 x 26 40 x 20 36 x 22	5.20	4.36	**CFM** Noise Criteria	**1560** –	**2080** –	**2600** 21	**3120** 28	**3640** 34	**4160** 40	**4680** 44	**5200** 50	**6240** 57
36 x 24	30 x 28 44 x 20 40 x 22	5.74	4.80	**CFM** Noise Criteria	**1722** –	**2296** –	**2870** 22	**3444** 29	**4018** 35	**4592** 40	**5166** 45	**5740** 50	**6888** 58
30 x 30	34 x 26 48 x 20 38 x 24	5.99	5.00	**CFM** Noise Criteria	**1797** –	**2396** –	**2995** 22	**3594** 29	**4193** 35	**4792** 40	**5391** 45	**5990** 51	**7188** 58

For performance data notes, see F118.

PERFORMANCE DATA:

PERFORATED RETURN GRILLES AND REGISTERS • 5100, 6100 AND 6700 SERIES

MODELS: 51PR, 51FP, 61PR, 61FP, 67PR, 51PRC, 61PRC

Listed Duct Size (inches)	Alternate Sizes (inches)	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	300 .006 .024	400 .010 .042	500 .016 .067	600 .022 .095	700 .031 .130	800 .040 .170	900 .051 .215	1000 .062 .265	1200 .090 .382
32 x 32	36 x 30 46 x 22 38 x 28	6.84	5.69	**CFM** Noise Criteria	**2052** –	**2736** 15	**3420** 23	**4104** 29	**4788** 36	**5472** 41	**6156** 46	**6840** 51	**8208** 58
48 x 24	34 x 34 38 x 30 36 x 32 48 x 28	7.69	6.40	**CFM** Noise Criteria	**2307** –	**3076** 16	**3845** 24	**4614** 30	**5383** 36	**6152** 41	**6921** 47	**7690** 52	**9228** 59
36 x 36	38 x 34 26 x 28 42 x 30 48 x 26	8.69	7.20	**CFM** Noise Criteria	**2607** –	**3476** 16	**4345** 24	**5214** 31	**6083** 37	**6952** 42	**7821** 47	**8690** 52	**10428** 59
38 x 38	42 x 34 48 x 30 44 x 34	9.70	8.02	**CFM** Noise Criteria	**2910** –	**3880** 17	**4850** 24	**5820** 31	**6790** 37	**7760** 42	**8730** 48	**9700** 53	**11640** 60
40 x 40	42 x 36 48 x 32 46 x 34	10.77	8.89	**CFM** Noise Criteria	**3231** –	**4308** 17	**5385** 24	**6462** 31	**7539** 38	**8616** 43	**9693** 49	**10770** 54	**12924** 61
42 x 42	44 x 40 48 x 36 46 x 38	11.89	9.80	**CFM** Noise Criteria	**3567** –	**4756** 18	**5945** 25	**7134** 32	**8323** 38	**9512** 43	**10701** 49	**11890** 54	**14268** 61
44 x 44	46 x 42	13.07	10.76	**CFM** Noise Criteria	**3921** –	**5228** 18	**6535** 25	**7842** 32	**9149** 38	**10456** 44	**11763** 49	**13070** 54	**15684** 61
46 x 46		14.30	11.76	**CFM** Noise Criteria	**4290** –	**5720** 19	**7150** 26	**8580** 33	**10010** 39	**11440** 44	**12870** 49	**14300** 54	**17160** 61
48 x 48		15.59	12.80	**CFM** Noise Criteria	**4677** –	**6236** 19	**7795** 26	**9354** 33	**10913** 39	**12472** 44	**14031** 49	**15590** 54	**18708** 61

Performance Notes:

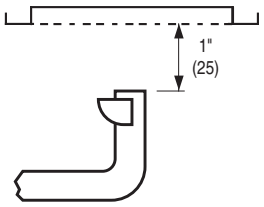
1. All pressures are in inches w.g..
2. Core Velocity is in feet per minute.
3. Performance data is for grille tested without damper. Apply the following correction factors for addition of opposed blade damper to grille.

Neg. Static Pressure Listed Value x 1.10.

Noise Criteria Add 5 dB to listed value.

4. Noise Criteria (NC) values are based on a room absorption of 10 dB, re 10^{-12} watts. Dash (–) in space denotes a Noise Criteria level of less than 15.
5. Data derived from tests conducted in accordance with ANSI/ ASHRAE Standard 70 – 2006.

Air Measurement



Alnor Velometer with 2220A or 6070P Jet Probe

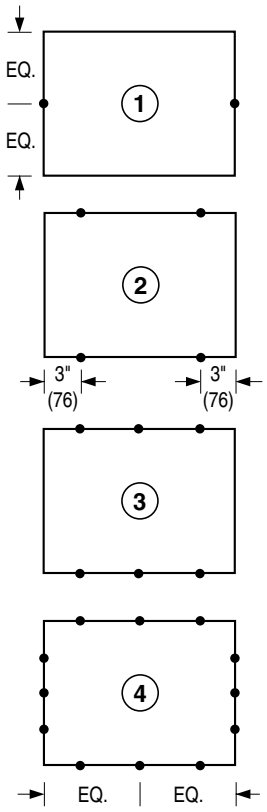
Airflow Measurements

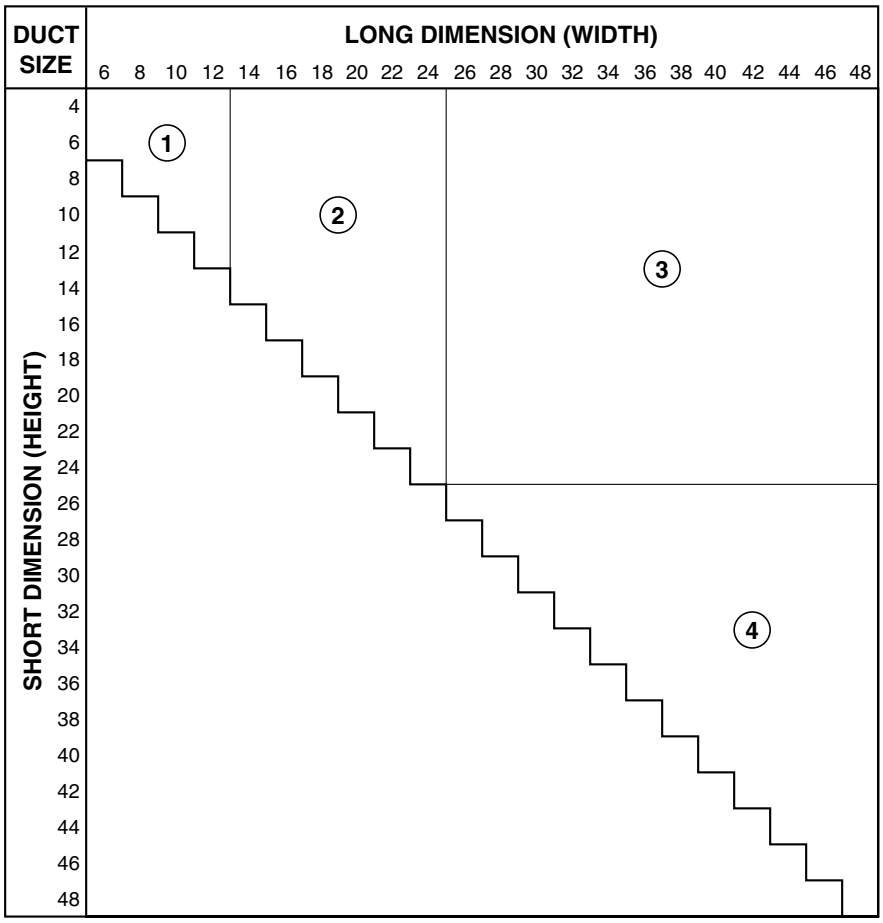
1. Balancing factors are applicable with or without dampers, providing uniform airflow exists into grille or register.
2. Take velocity readings at a number of locations on the inlet face (a minimum of 4), while positioning probe as shown above, one inch out from the face.
3. Total the various velocity readings and divide by the number of readings taken to arrive at an average inlet velocity (Vk in FPM).
4. Calculate the airflow (CFM) by multiplying the average velocity by the appropriate Ak factor.

Airflow (CFM) = Average velocity (Vk) x Ak.

Nailor Industries Inc.

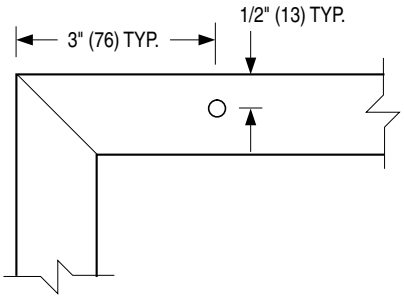
SCREW HOLE LOCATION CHART
FOR MODELS: 51C, 61C, 5100, 6100, 7100, 51EC TYPE S, 61EC TYPE S, 51PR, 61PR AND 51RC

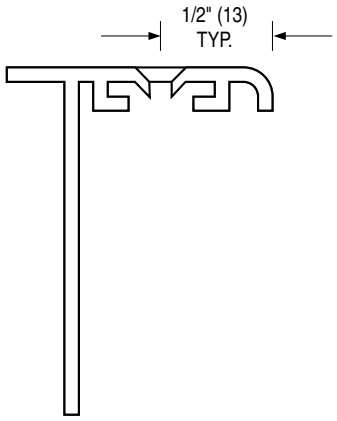




DESCRIPTION:

1. All screw holes are located 1/2" (13) in from the outside edge of the frame.
2. Use the chart above to determine which screw hole location diagram applies based on the duct size of the grille or register.
3. This information is provided for general information only. Pre-drilling of mounting holes is not recommended. The actual grille or register, as supplied, should be used as a template to enhance the installation quality.





SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	**DATE**	**B SERIES**	**SUPERSEDES**	**DRAWING NO.**
CONTRACTOR:	**30 - 4 - 01**	**SUPP./G&R**	**NEW**	**SHLC-1**

Dimensions are in inches (mm).