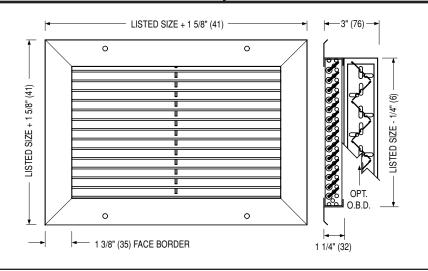


HEAVY DUTY STAINLESS STEEL RETURN GRILLES & REGISTERS • FIXED BLADE MODELS: 6755H-HD(-O) AND 6755V-HD(-O) TYPE S

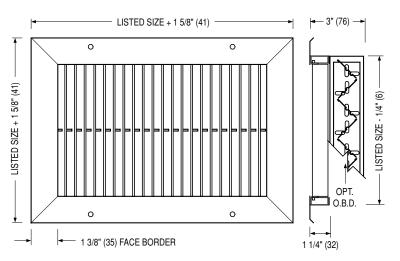


☐ MODEL 6755H-HD

Single Deflection Grille Fixed 45° Horizontal Blades

☐ MODEL 6755H-HD-O

Single Deflection Register Fixed 45° Horizontal Blades (Includes O. B. Damper)



☐ MODEL 6755V-HD

Single Deflection Grille Fixed 45° Vertical Blades

☐ MODEL 6755V-HD-O

Single Deflection Register Fixed 45° Vertical Blades (Includes O. B. Damper)

DESCRIPTION:

- Construction: Type 304 stainless steel welded and reinforced frame features hairline mitered corners. Streamlined shaped grille blades on 1/2" (13) centers are fixed at 45 degrees to match and compliment the supply grilles and registers. Blades are reinforced by an additional support mullion on maximum 8" (203) centers.
- 2. Optional roll-formed Type 304 stainless steel opposed blade damper.
- 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.
- 6. Standard finish is #4 Brushed Satin Polished.

OPTIONS:	0	PT	10	N:	S:
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4. Other

1.	Constructio	n:
	3 16	Type 316 stainless steel.
2.	Finish:	
	□ AW	Appliance White.
	☐ SP	Special
3	□ PES	Stainless Steel Plaster fram

 SCHEDULE TYPE:
 Dimensions are in inches (mm).

 PROJECT:
 DATE
 B SERIES
 SUPERSEDES
 DRAWING NO.

 CONTRACTOR:
 5 - 11 - 15
 6700
 9 - 22 - 11
 6700-HD-1



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	НВ ТО Н
IMPACT RESISTANCE	80 inch - Ibs
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.

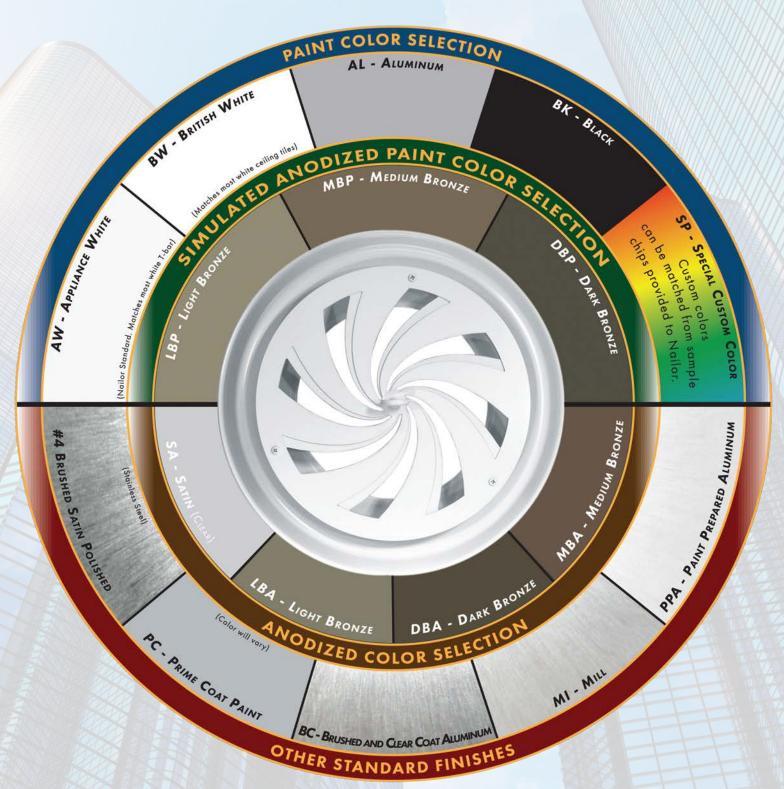
MILL FINISH

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



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:

STAINLESS STEEL HEAVY DUTY RETURN GRILLES AND REGISTERS • 45° DEFLECTION MODELS: 6755H-HD, 6755V-HD

Listed Duct Size (inches)	Alternate Sizes (inches)	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	100 .001 .005	200 .002 .021	300 .006 .046	400 .010 .082	500 .016 .129	600 .022 .185	700 .031 .252	800 .040 .330	900 .050 .417	1000 .062 .515
6 x 6	8 x 4 10 x 4	0.20	0.23	CFM Noise Criteria	20 -	40 _	60 -	80 -	100 17	120 22	140 27	160 31	180 35	200 39
8 x 6	10 x 5 12 x 4	0.28	0.30	CFM Noise Criteria	28	56 _	84	112 _	140 18	168 23	196 28	224 32	252 36	280 40
10 x 6	12 x 5 16 x 4	0.35	0.37	CFM Noise Criteria	35	70 _	105	140	175 19	210 24	245 29	280 33	315 37	350 41
8 x 8	14 x 5	0.38	0.40	CFM Noise Criteria	38	76 _	114	152 15	190 20	228 25	266 30	304 34	342 38	380 42
12 x 6	18 x 4	0.42	0.45	CFM Noise Criteria	42	84	126	168	210 21	252 26	294 30	336 35	378 39	420 43
12 x 8	16 x 6 24 x 4	0.58	0.59	CFM Noise Criteria	58	116	174	232 17	290 22	348 27	406 31	464 36	522 40	580
10 x 10	14 x 7	0.61	0.62	CFM	- 61	122	183	244	305	366	427	488	549	610
18 x 6	26 x 4 14 x 8 30 x 4	1 0.65	0.67	Noise Criteria CFM	65	130	195	17 260	22 325	27 390	32 455	37 520	40 585	650
12 x 10	28 x 4 16 x 8 20 x 6		0.74	Noise Criteria CFM	74	148	222	18 296	23 370	28 444	33 518	37 592	41 666	740
12 x 12	24 x 5 14 x 10 24 x 6	6 0.00	0.89	Noise Criteria CFM	90	180	270	18 360	23 450	28 540	33 630	38 720	42 810	900
14 x 14	18 x 8 38 x 4	3 1.24	1.22	Noise Criteria CFM	124	248	372	19 496	24 620	29 744	34 868	39 992	42 1116	45 1240
18 x 12	20 x 10 34 x 6 16 x 14 28 x 8	3 1 27	1.34	Noise Criteria CFM	137	274	411	19 548	24 685	29 822	34 959	39 1096	43 1233	46 1370
24 x 10	22 x 10 38 x 6	1.52	1.49	Noise Criteria CFM	- 152	304	16 456	21 608	26 760	31 912	36 1064	41 1216	44 1368	47 1520
16 x 16	30 x 8 18 x 14 30 x 8		1.58	Noise Criteria CFM	- 164	328	16 492	21 656	26 820	31 984	36 1148	42 1312	45 1476	48 1640
	22 x 12 18 x 16 30 x 1	0		Noise Criteria	- 185	- 370	17 555	22 740	27 925	32 1110	37 1295	42 1480	45 1665	48 1850
24 x 12	20 x 14 36 x 8	3 1.00	1.78	Noise Criteria	210	420	17 630	22 840	27 1050	32 1260	37 1470	42 1680	45 1890	49 2100
18 x 18	24 x 14 32 x 1	0 2.10	2.01	Noise Criteria	-	_	17	22	27	33	38	43	46	49
30 x 12	20 x 18 26 x 1 22 x 16 36 x 1	0 2.32	2.23	CFM Noise Criteria	232	464 -	696 17	928 23	1160 28	1392 33	1624 38	1856 43	2088 46	2320 50
20 x 20	24 x 18 30 x 1 26 x 16 36 x 1		2.48	CFM Noise Criteria	261 -	522 -	783 17	1044 23	1305 28	1566 34	1827 39	2088 44	2349 47	2610 50
22 x 22	24 x 20 30 x 1 26 x 18 36 x 1	3 17	3.00	CFM Noise Criteria	317 -	634 -	951 18	1268 24	1585 29	1902 35	2219 39	2536 44	2853 47	3170 51
30 x 18	24 x 22 40 x 1 34 x 16	3.54	3.34	CFM Noise Criteria	354 -	708 -	1062 18	1416 24	1770 29	2124 35	2478 40	2832 45	3186 48	3540 52
24 x 24	26 x 22 32 x 1 28 x 20 36 x 1		3.56	CFM Noise Criteria	379 -	758 -	1137 18	1516 24	1895 29	2274 35	2653 40	3032 45	3411 48	3790 52
36 x 18	32 x 20 46 x 1 40 x 16	4 4.27	4.01	CFM Noise Criteria	427 –	854 -	1281 19	1708 26	2135 30	2562 37	2989 42	3416 47	3843 50	4270 54
26 x 26	28 x 24 48 x 14	4.47	4.19	CFM Noise Criteria	447 –	894	1341 19	1788 26	2235 31	2682 37	3129 42	3576 47	4023 50	4470 54
30 x 24	28 x 26 36 x 2 32 x 22 40 x 1		4.46	CFM Noise Criteria	477 –	954	1431 20	1908 27	2385 32	2862 38	3339 43	3816 47	4293 51	4770 55
28 x 28	30 x 26 40 x 2 36 x 22		4.85	CFM Noise Criteria	520	1040	1560 20	2080 27	2600 32	3120 38	3640 43	4160 48	4680 51	5200
36 x 24	30 x 28 44 x 2 40 x 22	0 5.74	5.35	CFM Noise Criteria	574 _	1148	1722 20	2296 27	2870 33	3444 39	4018 43	4592 48	5166 52	5740 56
30 x 30	34 x 26 48 x 2 38 x 24	0 5.99	5.57	CFM Noise Criteria	599	1198	1797 20	2396 27	2995	3594 39	4193	4792 48	5391 52	5990 56

For performance data notes, see F165.

PERFORMANCE DATA:

STAINLESS STEEL HEAVY DUTY RETURN GRILLES AND REGISTERS • 45° DEFLECTION MODELS: 6755H-HD, 6755V-HD

Listed Duct Size (inches)	Alteri Sizo (inch	es	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	100 .001 .005	200 .002 .019	300 .006 .042	400 .010 .075	500 .016 .117	600 .022 .169	700 .031 .230	800 .040 .300	900 .050 .380	1000 .062 .469
32 x 32	36 x 30 38 x 28	46 x 22	6.84	6.34	CFM Noise Criteria	684 -	1368 16	2052 21	2736 28	3420 34	4104 40	4788 44	5472 49	6156 53	6840 57
48 x 24	34 x 34 36 x 32	38 x 30 48 x 28	7.69	7.13	CFM Noise Criteria	769 -	1538 17	2307 22	3076 28	3845 34	4614 40	5383 45	6152 49	6921 53	7690 57
36 x 36	38 x 34 42 x 30	46 x 28 48 x 26	8.69	8.02	CFM Noise Criteria	869 -	1738 18	2607 22	3476 29	4345 34	5214 41	6083 46	6952 50	7821 54	8690 58
38 x 38	42 x 34 44 x 34	48 x 30	9.70	8.94	CFM Noise Criteria	970 -	1940 19	2910 23	3880 29	4850 35	5820 41	6790 46	7760 50	8730 54	9700 58
40 x 40	42 x 36 46 x 34	48 x 32	10.77	9.90	CFM Noise Criteria	1077 –	2154 19	3231 24	4308 30	5385 36	6462 42	7539 48	8616 51	9693 56	10770 60
42 x 42	44 x 40 46 x 38	48 x 36	11.89	10.92	CFM Noise Criteria	1189 15	2378 20	3567 25	4756 31	5945 37	7134 43	8323 48	9512 52	10701 56	11890 60
44 x 44	46 x 42		13.07	11.98	CFM Noise Criteria	1307 15	2614 20	3921 25	5228 31	6535 37	7842 43	9149 48	10456 52	11763 56	13070 60
46 x 46			14.30	13.10	CFM Noise Criteria	1430 16	2860 21	4290 26	5720 32	7150 38	8580 44	10010 49	11440 53	12870 57	14300 61
48 x 48			15.59	14.26	CFM Noise Criteria	1559 16	3118 21	4677 26	6236 32	7795 38	9354 44	10913 49	12472 53	14031 57	15590 61

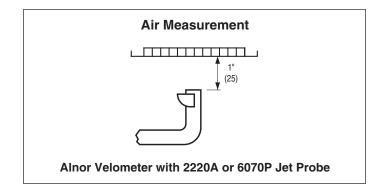
Performance Notes:

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

Neg. Static Pressure Listed Value x 0.91.

Noise Criteria Listed value - 4.

- 4. 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.
- 5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 2006.



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.