



Residential
Grilles, Registers & Diffusers
Edition 8

RESIDENTIAL

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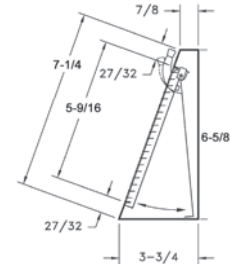
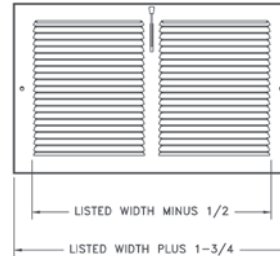
Baseboard Registers & Grilles



655 Baseboard Register with Damper

- All-steel construction
- 1/3" spaced fins set at 20 degrees
- Volume-control damper
- Bright White enamel finish

655 Available Sizes (in.)				
HT	WIDTH			
	8	10	12	14
6	X	X	X	X

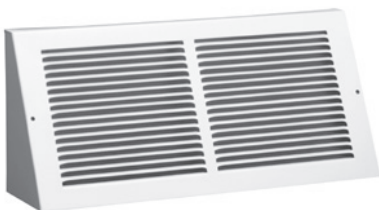
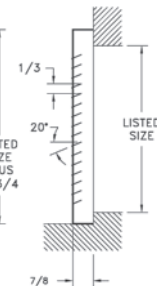
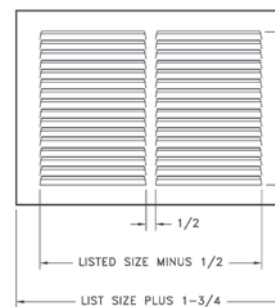


657 Baseboard Return Air Grille

- One-piece steel construction
- 1/3" spaced fins set at 20 degrees
- 7/8" margin turnback
- Exceptional free area
- Install with fins upward or downward for best duct concealment
- Complementary return air grille for Model 654 or 664 supply
- Golden Sand or Bright White enamel finish

657 Standard Sizes (in.)								
HT	WIDTH							
	10	12	14	16	20	24	30	36
4			X					
6	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X
10			X		X	X	X	
12			X			X	X	

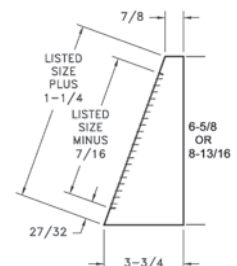
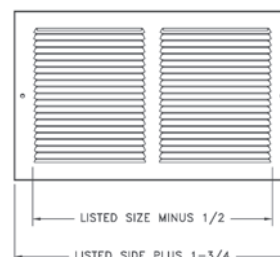
Contact factory for sizes not listed.



658 Baseboard Return Air Grille

- All-steel construction
- 1/3" spaced fins set at 20 degrees
- Complementary return air grille for Model 655 supply
- Bright White enamel finish

658 Available Sizes (in.)					
HT	WIDTH				
	10	12	14	24	30
6	X	X	X	X	X
8			X	X	X



406 18" Baseboard Diffuser (Page 8)

Face Velocity		300	400	500	600	700	800
Pressure Loss		.013	.022	.035	.048	.067	.088
Ak .260	CFM	80	105	130	155	180	210
	Spread	4.5	6.5	7.5	8.5	9.5	11.0
	Throw	5.0	7.0	8.0	9.0	10.0	11.0

Terminal Velocity of 50 FPM

406 15" Baseboard Diffuser (Page 8)

Face Velocity		300	400	500	600	700	800	900	1000
15"	CFM	48	63	79	95	111	127	143	159
	Ps	.005	.009	.014	.020	.027	.035	.044	.053
Ak .159	CFM	5.5	7.5	9.0	11.0	13.0	14.5	16.5	18.5
	Ps	5.5	7.5	7.5	11.5	13.5	15.0	17.0	19.0
Throw	CFM	3.0	3.5	4.5	5.5	6.5	7.5	8.5	9.0
	Ps	3.0	3.5	4.5	5.5	6.5	7.5	9.0	9.5
Spread	CFM	2.0	2.5	3.0	3.5	4.5	5.0	5.5	6.0
	Ps	2.0	2.5	3.0	3.5	4.5	5.0	5.5	6.0

462 & 464 Baseboard Diffusers (Page 9, 10)

Airflow (CFM)		300	400	500	600	700	800
2 feet 27 sq. in. Ak .187	CFM	55	75	95	110	130	150
	Spread	6.5	7.5	8.0	8.5	9.0	11.0
	Throw	7.0	8.0	9.5	10.5	12.0	13.0
	Pressure Loss	.009	.017	.029	.038	.054	.072
4 feet 54 sq. in. Ak .375	CFM	110	150	185	225	260	300
	Spread	12.0	15.0	17.5	19.0	20.0	21.0
	Throw	7.5	9.0	10.0	11.5	12.5	13.5
	Pressure Loss	.031	.058	.090	.124	.178	.224

Terminal Velocity of 50 FPM

472 & 474 Baseboard Return (Page 9, 10)

Face Velocity		300	400	500	600	700
2 feet Ak .325	CFM	100	130	165	195	230
	Ps	.010	.028	.046	.064	.090
4 feet Ak .650	CFM	195	260	325	390	455
	Ps	.015	.026	.040	.060	.078

Velocity measured on the face

654, 655 Baseboard/Sidewall Registers (Page 11)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
8 x 6 Ak .180	CFM	55	72	90	108	125	145	162	180
	Throw	7.5	10.0	12.5	15.0	17.5	20.5	23.0	25.0
10 x 6 Ak .230	CFM	70	92	115	140	160	185	205	230
	Throw	9.0	11.5	14.5	17.5	20.0	23.0	25.5	29.0
12 x 6 Ak .290	CFM	85	115	145	175	205	230	260	290
	Throw	10.0	13.0	17.0	20.0	23.5	26.5	30.0	33.0
14 x 6 Ak .340	CFM	102	135	170	205	240	270	305	340
	Throw	11.0	14.5	18.0	22.0	25.5	29.0	32.5	36.0

Terminal Velocity of 75 FPM

657/658 Baseboard Return Grille (Page 11)

Average Face Velocity*		300	400	500	600	700
10 x 6 Ak .38	CFM	115	150	190	225	265
	Pt	.013	.023	.037	.052	.072
12 x 6 Ak .46	CFM	135	180	230	280	320
	Pt	.013	.022	.035	.051	.070
10 x 8 Ak .51	CFM	150	205	255	305	355
	Pt	.012	.022	.035	.050	.068
14 x 6 Ak .53	CFM	160	210	265	320	370
	Pt	.012	.022	.035	.050	.068
12 x 8 Ak .61	CFM	180	245	305	365	430
	Pt	.012	.022	.034	.049	.066
14 x 8 Ak .72	CFM	215	288	360	430	505
	Pt	.012	.021	.033	.047	.065
20 x 6 Ak .75	CFM	225	300	375	450	525
	Pt	.012	.021	.033	.047	.064
16 x 8 Ak .83	CFM	250	330	415	500	580
	Pt	.012	.021	.033	.046	.063
14 x 10 and 24 x 6 Ak .92	CFM	275	365	460	550	640
	Pt	.011	.020	.032	.045	.062
14 x 12 Ak 1.08	CFM	320	430	540	650	755
	Pt	.011	.020	.031	.045	.060
30 x 6 Ak 1.12	CFM	335	445	560	670	780
	Pt	.011	.020	.031	.044	.060
24 x 8 Ak 1.21	CFM	365	485	605	730	850
	Pt	.011	.020	.031	.044	.059
20 x 10 Ak 1.25	CFM	375	500	630	750	880
	Pt	.011	.019	.030	.043	.059
24 x 10 and 30 x 8 Ak 1.50	CFM	450	600	750	890	1040
	Pt	.011	.019	.030	.042	.057
24 x 12 Ak 1.82	CFM	550	730	910	1100	1270
	Pt	.010	.018	.029	.041	.056
30 x 10 Ak 1.91	CFM	575	760	960	1150	1330
	Pt	.010	.018	.029	.041	.055
30 x 12 Ak 2.25	CFM	680	900	1130	1350	1570
	Pt	.010	.018	.028	.040	.054

*Velocity measured 1" from face

664 Baseboard Register (Page 12)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
8 x 6 Ak .180	CFM	55	70	90	110	125	145	160	180
	Throw	5.5	7.0	9.0	10.5	12.5	14.0	16.0	18.0
10 x 6 and 12 x 5 Ak .245	CFM	75	100	125	145	170	195	220	245
	Throw	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
14 x 6 Ak .360	CFM	110	145	180	215	252	290	325	360
	Throw	7.0	9.5	12.0	14.0	16.5	19.0	21.5	24.0
12 x 8 Ak .425	CFM	130	170	215	255	300	340	385	425
	Throw	7.5	10.0	12.5	15.0	18.0	20.5	23.0	25.5

Terminal Velocity of 75 FPM