

# HRP MODEL

ALUMINUM RETURN GRILLE,  
1" SPACING, 45° BLADES TO  
THE LONG DIMENSION FOR  
TEE CEILING



- Appropriate to be mounted on "T" profiles of reticular false ceiling, with a frame of thin edges that allow a non-visible appearance when installed.
- Baffles Fixed blades to 45° that provide a non-vision appearance when are installed with openings to the closest wall.
- Optional reduction box made of steel sheet with round or square neck.

**CONSTRUCTION:** Extruded aluminum.

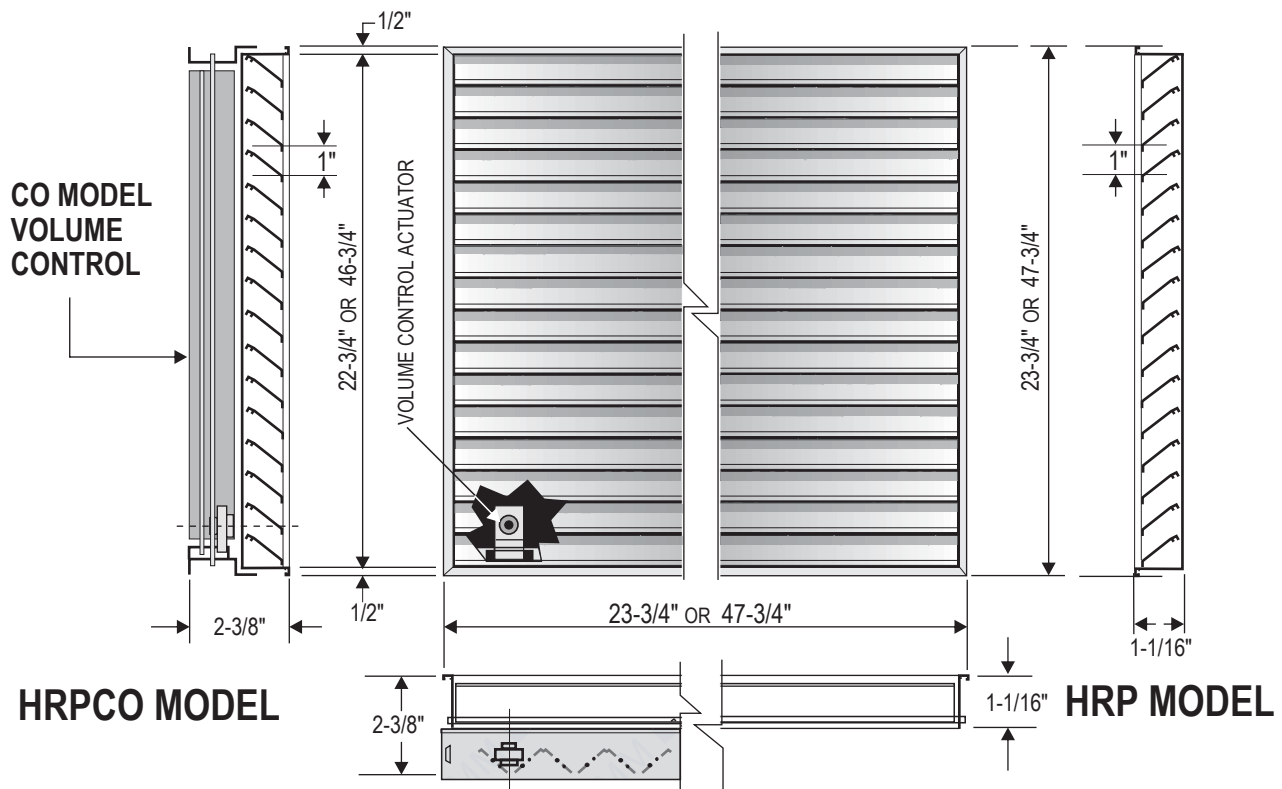
**FINISH:** Standard white Anodic acrylic paint.

**PERFORMANCE:** Up to 70 % effective free area which minimizes the input speed (Vk), reduces the pressure drop and provides a smooth operation.

**HRPCO RETURN REGISTERS:** Provides optional with opposed blades volume control, CO Model, that offers maximum air volume.

Minimum measure of 1 piece: 72"x 12"  
Maximum measure of 1 piece: 6"x 6"

## Dimensional Data



## RETURN GRILLES & REGISTERS

TABLE 1 PERFORMANCE DATA

NOMINAL SIZES (INCHES)		FREE CORE AREA (FT. <sup>2</sup> )	VELOCITY Feet/Min.									
			NC20			NC30			NC40			
			200	300	400	500	600	700	800	900	1000	
8 x 4	6 x 6	0.19	CFM	38	57	76	95	114	133	152	171	190
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	10	18	24	28	30	33	36	38	40
12 x 4	8 x 6	0.26	CFM	52	78	104	130	156	182	208	234	260
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	11	19	25	29	32	35	38	40	42
14 x 4	10 x 6 8 x 8	0.33	CFM	66	99	132	165	198	231	264	297	330
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	12	20	25	30	33	36	39	41	43
18 x 4 12 x 6	9 x 8	0.38	CFM	76	114	152	190	228	266	304	342	380
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	13	21	27	31	34	37	40	42	44
20 x 4	14 x 6 10 x 8	0.44	CFM	88	132	176	220	264	308	352	396	440
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	14	22	27	32	35	38	41	43	45
24 x 4 16 x 6	12 x 8 10 x 10	0.52	CFM	104	156	208	260	312	364	416	468	520
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	14	22	28	32	36	39	41	44	46
30 x 4 20 x 6	14 x 8 12 x 10	0.70	CFM	140	210	280	350	420	490	560	630	700
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	15	23	29	33	37	40	42	45	47
36 x 4 24 x 6	18 x 8 14 x 10 12 x 12	0.91	CFM	182	273	364	455	546	637	728	819	910
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	16	24	30	34	38	41	43	46	48
48 x 4 34 x 6 24 x 8	20 x 10 16 x 12 14 x 14	1.18	CFM	236	354	472	590	708	826	944	1062	1180
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	17	25	31	35	39	42	44	47	49
54 x 4 36 x 6 28 x 8	18 x 12 16 x 14	1.32	CFM	264	396	528	660	792	924	1056	1188	1320
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	18	25	31	35	39	42	45	47	49
60 x 4 40 x 6	30 x 8 24 x 10 20 x 12	1.58	CFM	316	474	632	790	948	1106	1264	1422	1580
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	19	27	32	36	40	43	45	48	50
48 X 6 36 x 8 30 x 10	24 x 12 18 x 16	1.78	CFM	356	534	712	890	1068	1246	1424	1602	1780
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	19	27	32	36	40	43	46	48	50
54 x 6 40 x 8 32 x 10	20 x 16 18 x 18	1.93	CFM	386	579	772	965	1158	1351	1544	1737	1930
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	19	27	33	37	41	44	46	48	51
56 x 6 42 x 8 34 x 10	24 x 14 34 x 10	2.08	CFM	416	624	832	1040	1248	1456	1664	1872	2080
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	19	27	33	37	41	44	46	48	51
60 x 6 46 x 8 36 x 10	30 x 12 26 x 14 20 x 18	2.42	CFM	484	726	968	1210	1452	1694	1936	2178	2420
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	20	28	33	38	41	44	47	49	51
64 x 6 48 x 8 38 x 10 30 x 14	28 x 14 22 x 18 20 x 20	2.76	CFM	552	828	1104	1380	1656	1932	2208	2484	2760
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	20	28	34	38	42	45	47	49	52
72 x 8 54 x 10 48 x 12 46 x 14	36 x 16 34 x 16 30 x 18 24 x 24	3.59	CFM	718	1077	1436	1795	2154	2513	2872	3231	3590
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	21	29	35	39	42	45	48	50	52
54 x 12 48 x 14 40 x 16 36 x 18	32 x 20 28 x 24	4.27	CFM	854	1281	1708	2135	2562	2989	3416	3843	4270
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	22	30	35	40	43	46	49	51	53
72 x 10 60 x 12 48 x 16	40 x 18 36 x 20 30 x 24	4.60	CFM	920	1380	1840	2300	2760	3220	3680	4140	4600
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	22	30	35	40	43	46	49	51	53
72 x 12 60 x 14 48 x 18	42 x 20 36 x 24	5.50	PCM /CFM	1100	1650	2200	2750	3300	3850	4400	4950	5500
			(-)TP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370
			NC	23	30	36	40	44	47	50	52	54

(-)TP= NEGATIVE TOTAL PRESSURE, Inches Water Column

## RETURN GRILLES & REGISTERS

**TABLE 2 PERFORMANCE DATA**

NOMINAL SIZES (INCHES)	FREE CORE AREA (FT. <sup>2</sup> )		VELOCITY Feet/Min.									
			NC20		NC30		NC40		NC50			
			200	300	400	500	600	700	800	900	1000	
56X16 38X24 50X18 30X30	5.95	CFM	1190	1785	2380	2975	3570	4165	4760	5355	5950	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	18	27	34	39	44	47	51	54	57	
72X14 46X22 62X16 42X24 56X18 36X28	6.67	CFM	1334	2000	2668	3335	4002	4668	5336	6000	6670	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	18	27	34	40	44	48	51	54	57	
64X16 40X26 58X18 32X32 52X20	6.80	CFM	1360	2040	2720	3400	4080	4760	5440	6120	6800	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	27	35	40	44	48	51	54	57	
68 X 16 42 X 26 60 X 18 36 X 30 54 X 20 34 X 32	7.20	CFM	1440	2160	2880	3600	4320	5040	5760	6480	7200	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	27	35	40	44	48	51	55	58	
72 X 16 36 X 32 <del>68 X 28</del> 34 X 34	7.64	CFM	1528	2292	3056	3820	4584	5348	6112	6876	7640	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	28	35	40	45	49	52	55	59	
68 X 18 40 X 30 62 X 20 36 X 34 48 X 26	8.20	CFM	1640	2460	3280	4100	4920	5740	6560	7380	8200	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	28	35	41	45	49	52	55	59	
70 X 18 42 X 30 64 X 20 40 X 32 58 X 22	8.40	CFM	1680	2520	3360	4200	5040	5880	6720	7560	8400	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	28	35	41	45	49	52	55	59	
72 X 18 46 X 28 54 X 24 36 X 36 50 X 26	8.60	CFM	1720	2580	3440	4300	5160	6020	6880	7740	8600	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	28	35	41	45	49	52	55	59	
72 X 20 42 X 34 60 X 24 40 X 36 48 X 30 38 X 38	9.58	CFM	1916	2874	3832	4790	5748	6706	7664	8622	9580	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	19	29	36	41	46	49	53	56	60	
58 X 26 42 X 36 54 X 28 40 X 38 50 X 30	10.15	CFM	2030	3045	4060	5075	6090	7105	8120	9135	10150	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	20	29	36	41	46	50	53	56	60	
72 X 22 56 X 28 66 X 24 52 X 30 60 X 26 46 X 34	10.52	CFM	2104	3156	4208	5260	6312	7364	8416	9468	10520	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	20	29	36	42	46	50	53	56	60	
62 X 26 42 X 38 58 X 28 40 X 40 54 X 30	10.84	CFM	2168	3252	4336	5420	6504	7588	8672	9756	10840	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	20	29	36	42	46	50	53	56	60	
72 X 24 58 X 30 62 X 28 48 X 36	11.60	CFM	2320	3480	4640	5800	6960	8120	9280	10440	11600	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	21	30	37	42	47	50	54	56	60	
68 X 26 44 X 40 46 X 38 42 X 42	11.80	CFM	2360	3540	4720	5900	7080	8260	9440	10620	11800	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	21	30	37	42	47	50	54	57	61	
70 X 28 48 X 40 64 X 30 46 X 42 58 X 34 44 X 44 54 X 36	13.04	CFM	2608	3912	5216	6520	7824	9128	10432	11736	13040	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	21	30	37	43	47	51	54	57	61	
72 X 28 48 X 42 56 X 36 46 X 44	13.38	CFM	2676	4014	5352	6690	8028	9366	10704	12042	13380	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	21	30	37	43	47	51	54	57	61	
72 X 30 60 X 36 68 X 32 54 X 40 64 X 34 46 X 46	14.36	CFM	2872	4308	5744	7180	8616	10052	11488	12924	14360	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	21	30	37	43	47	51	54	57	61	
62 X 36 50 X 40 58 X 38 48 X 46 56 X 40	14.81	CFM	2962	4443	5924	7405	8886	10367	11848	13329	14810	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	22	31	38	43	48	51	55	58	62	
72X32 56X42 68X34 54X44 66X36 48X48	15.42	CFM	3084	4626	6168	7710	9252	10794	12336	13878	15420	
		(-)TTP	0.016	0.034	0.062	0.096	0.140	0.189	0.248	0.310	0.370	
		NC	22	31	38	43	48	52	55	58	62	

NC 60

(-)TTP= NEGATIVE TOTAL PRESSURE, Inches Water Column