

# RL – Exhaust & Return Grilles

## Model: RLL-25

Features one set of fixed curved blades parallel to long dimension, 12.5 centres & 30°.

## Model: RLL-25/OBD

Features one set of fixed curved blades parallel to long dimension, 12.5 centres & 30° and an attached opposed blade damper.

## Model: RLL-23

Similar to RLL-25, but with blades set at 20mm spacing.

## Model: RLL-23/OBD

Similar to RLL-25/OBD, but with blades set at 20mm spacing.

Guide Product Weights	
Approximate Weight in Kg.	
Size	RLL23RCEN
195 x 195	0.69

## Model: RLHL\*\*

Features one set of 45° fixed blades parallel to long dimension, set at 20mm spacing.

Guide Product Weights	
Approximate Weight in Kg.	
Size	RLHL-EN
395 x 195	1.07

## Model: RLHL/OBD\*\*

Similar to RLHL, but with opposed blade damper attached.

\*\*Suitable for Passive Ventilation (Do not exceed core velocity of 2.5m/sec).

## Model: RLS-25

Features one set of fixed curved blades parallel to short dimension, 12.5 centres & 30°.

## Model: RLS-25/OBD

Features one set of fixed curved blades parallel to short dimension, 12.5 centres & 30° and an attached opposed blade damper.

## Model: RLS-23

Similar to RLS-25, but with blades set at 20mm spacing.

## Model: RLS-23/OBD

Similar to RLS-25/OBD, but with blades set at 20mm spacing.

## Model: RLHS\*\*

Features one set of 45° fixed blades parallel to short dimension, set at 20mm spacing.

## Model: RLHS/OBD\*\*

Similar to RLHS, but with opposed blade damper attached.

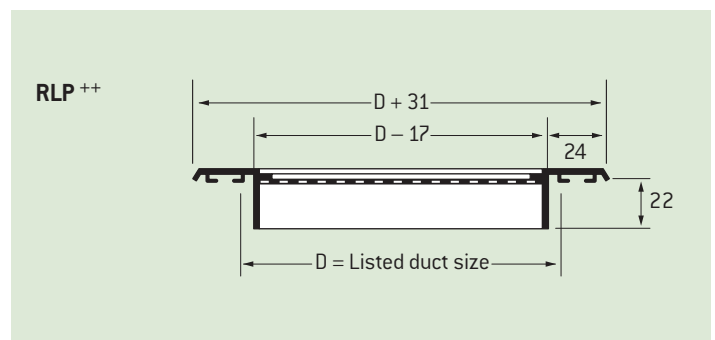
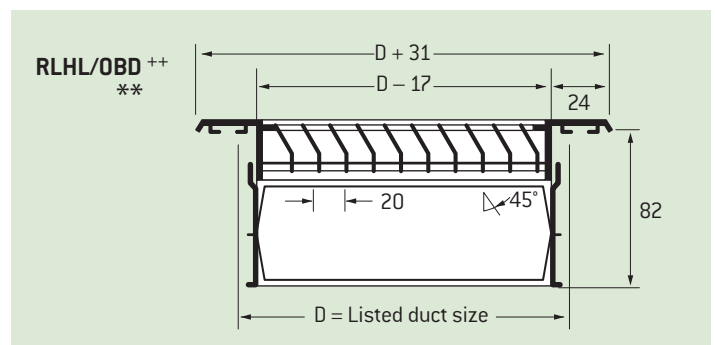
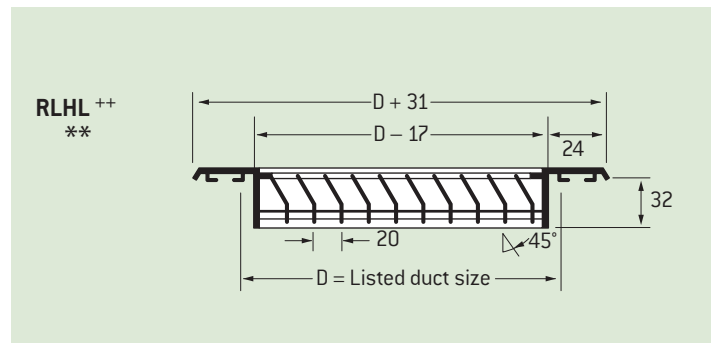
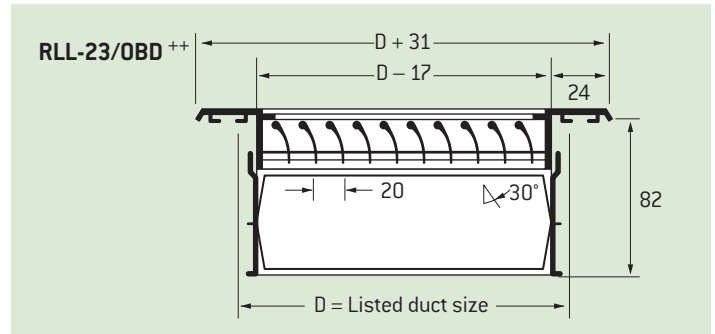
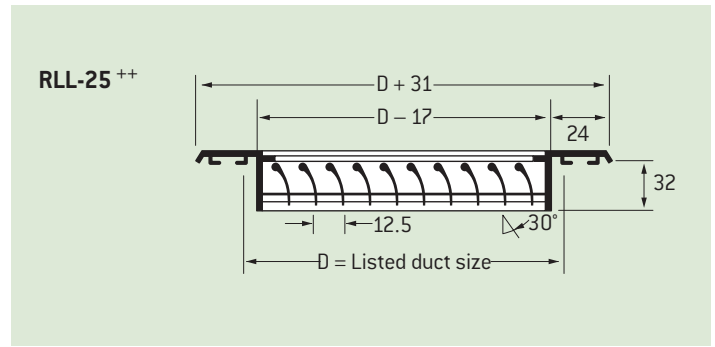
## Model: RLP

Perforated face return, or exhaust grille.

Guide Product Weights	
Approximate Weight in Kg.	
Size	RLP
595 x 595	1.98

Option: 40mm flanged surround.

++ (Excluding FR Models).



## Model: RL25

CORE AREA m <sup>2</sup>	NOMINAL SIZE(mm)	CORE VEL. m/s	NC 20 NC 30									
			1.02	1.28	1.53	1.79	2.04	2.55	3.06	3.57	4.08	4.59
			VEL. PRESS	1	1	2	2	3	4	6	8	10
		NEG. SP	5	8	11	15	19	29	41	56	73	93
0.014	175 x 100	m <sup>3</sup> /s	0.014	0.017	0.021	0.025	0.028	0.035	0.042	0.050	0.057	0.064
	150 x 125	NC	-	-	-	-	-	13	20	26	31	36
0.017	200 x 100 150 x 150	m <sup>3</sup> /s	0.017	0.021	0.025	0.030	0.034	0.042	0.051	0.059	0.068	0.076
	175 x 125	NC	-	-	-	-	-	14	22	28	33	37
0.020	250 x 100 175 x 150	m <sup>3</sup> /s	0.021	0.026	0.031	0.036	0.042	0.052	0.062	0.073	0.083	0.093
	200 x 125	NC	-	-	-	-	-	16	23	29	34	39
0.024	300 x 100 200 x 150	m <sup>3</sup> /s	0.025	0.031	0.037	0.043	0.049	0.061	0.074	0.086	0.098	0.110
	250 x 125	NC	-	-	-	-	-	17	24	30	35	40
0.028	350 x 100	m <sup>3</sup> /s	0.028	0.035	0.042	0.050	0.057	0.071	0.085	0.099	0.113	0.127
		NC	-	-	-	-	-	18	25	31	36	41
0.032	400 x 100 250 x 150	m <sup>3</sup> /s	0.032	0.040	0.048	0.056	0.064	0.080	0.096	0.112	0.128	0.144
	300 x 125	NC	-	-	-	-	10	19	26	32	37	42
0.036	450 x 100 300 x 150	m <sup>3</sup> /s	0.037	0.046	0.055	0.065	0.074	0.092	0.110	0.129	0.147	0.166
	350 x 125 200 x 200	NC	-	-	-	-	11	20	27	33	38	43
0.043	500 x 100 350 x 150	m <sup>3</sup> /s	0.043	0.054	0.065	0.076	0.087	0.109	0.130	0.152	0.174	0.195
	400 x 125 250 x 200	NC	-	-	-	-	13	21	28	34	40	44
0.048	600 x 100 400 x 150	m <sup>3</sup> /s	0.049	0.061	0.074	0.086	0.098	0.123	0.147	0.172	0.196	0.221
	450 x 125	NC	-	-	-	-	13	22	29	35	40	45
0.056	700 x 100 450 x 150 250 x 250	m <sup>3</sup> /s	0.057	0.071	0.085	0.099	0.113	0.142	0.170	0.198	0.227	0.255
	500 x 125 300 x 200	NC	-	-	-	-	14	23	30	36	42	46
0.064	750 x 100 500 x 150 300 x 250	m <sup>3</sup> /s	0.065	0.082	0.098	0.114	0.130	0.163	0.195	0.228	0.260	0.293
	600 x 125 350 x 200	NC	-	-	-	-	15	24	31	37	43	47
0.075	900 x 100 550 x 150 350 x 250	m <sup>3</sup> /s	0.076	0.095	0.115	0.134	0.153	0.191	0.229	0.268	0.306	0.344
	700 x 125 400 x 200	NC	-	-	-	11	17	25	32	39	44	48
0.084	1000 x 100 650 x 150 400 x 250	m <sup>3</sup> /s	0.085	0.106	0.127	0.149	0.170	0.212	0.255	0.297	0.340	0.382
	750 x 125 450 x 200	NC	-	-	-	11	17	26	33	39	45	49
0.099	1225 x 100 750 x 150 350 x 300	m <sup>3</sup> /s	0.101	0.126	0.152	0.177	0.202	0.253	0.303	0.354	0.404	0.455
	900 x 125 450 x 250	NC	-	-	-	13	19	27	35	41	46	50
0.110	850 x 150 500 x 250 350 x 350	m <sup>3</sup> /s	0.111	0.139	0.167	0.195	0.223	0.278	0.334	0.390	0.446	0.501
	600 x 200 400 x 300	NC	-	-	-	13	19	28	35	41	46	51
0.124	1525 x 100 900 x 150 400 x 350	m <sup>3</sup> /s	0.126	0.158	0.190	0.221	0.253	0.316	0.379	0.443	0.506	0.569
	1225 x 125 450 x 300	NC	-	-	-	14	20	29	36	42	47	52
0.149	1825 x 100 600 x 250 450 x 350	m <sup>3</sup> /s	0.151	0.189	0.227	0.264	0.302	0.378	0.453	0.529	0.604	0.680
	750 x 200 550 x 300 400 x 400	NC	-	-	-	16	22	30	37	43	49	53
0.167	900 x 200 600 x 300 450 x 400	m <sup>3</sup> /s	0.170	0.212	0.255	0.297	0.340	0.425	0.510	0.595	0.680	0.764
	1225 x 150 750 x 250 500 x 350	NC	-	-	11	16	22	31	38	44	50	54
0.193	1000 x 200 750 x 300 500 x 400	m <sup>3</sup> /s	0.196	0.245	0.294	0.344	0.393	0.491	0.589	0.687	0.785	0.883
	900 x 250 600 x 350 450 x 450	NC	-	-	12	18	24	32	39	45	51	55
0.228	1825 x 150 800 x 300 600 x 400	m <sup>3</sup> /s	0.231	0.289	0.347	0.404	0.462	0.578	0.694	0.809	0.925	1.040
	1225 x 200 650 x 350 500 x 450	NC	-	-	13	19	25	33	41	47	52	56
0.258	900 x 300 650 x 400 550 x 500	m <sup>3</sup> /s	0.262	0.328	0.394	0.459	0.525	0.656	0.787	0.918	1.050	1.180
	750 x 350 600 x 450	NC	-	-	14	20	26	34	41	47	53	57
0.289	1000 x 300 750 x 400 600 x 500	m <sup>3</sup> /s	0.294	0.367	0.440	0.513	0.587	0.734	0.881	1.030	1.170	1.320
	1225 x 250 900 x 350 650 x 450	NC	-	-	15	20	26	35	42	48	54	58
0.335	1825 x 200 1225 x 300 750 x 450	m <sup>3</sup> /s	0.341	0.426	0.511	0.596	0.681	0.852	1.020	1.190	1.360	1.530
	1525 x 250 900 x 400 600 x 600	NC	-	10	16	21	28	36	43	49	55	59
0.399	1225 x 350 800 x 500	m <sup>3</sup> /s	0.405	0.506	0.607	0.708	0.810	1.010	1.220	1.420	1.620	1.870
	900 x 450 700 x 600	NC	-	12	18	23	29	38	45	51	56	60
0.432	1825 x 250 900 x 500	m <sup>3</sup> /s	0.439	0.548	0.658	0.768	0.878	1.000	1.320	1.540	1.760	1.980
	1225 x 400 750 x 600	NC	-	12	18	23	29	38	45	51	56	61
0.518	1825 x 300 1225 x 450	m <sup>3</sup> /s	0.527	0.658	0.790	0.922	1.050	1.320	1.580	1.840	2.110	2.370
	1525 x 350 900 x 600	NC	-	13	19	25	31	39	47	53	58	62
0.581	1825 x 350 1225 x 500	m <sup>3</sup> /s	0.590	0.737	0.885	1.030	1.180	1.480	1.770	2.060	2.360	2.650
	1525 x 400	NC	-	14	20	26	32	40	47	53	59	63

NC 40

NC 50

NC 60

Return & Exhaust Grilles

- Neg. SP is negative static pressure.
- All pressures are in pascals.
- NC values are based on room absorption of 10 db, re 10<sup>-12</sup> watts.
- Heavy dividing lines denote ranges of NC values.

Models: **RL23** and **RLHL** \*\*

CORE AREA m <sup>2</sup>	NOMINAL SIZE(mm)	CORE VEL. m/s	NC 20      NC 30      NC 40									
			2.04	2.55	3.06	3.57	4.08	4.59	5.00	5.50	6.10	6.60
			VEL. PRESS	3	4	6	8	10	13	16	19	23
		NEG. SP	8	12	16	23	29	37	45	54	65	88
0.014	175 x 100	m <sup>3</sup> /s	0.028	0.035	0.042	0.050	0.057	0.064	0.071	0.078	0.085	0.092
	150 x 125	NC				15	20	25	29	33	36	39
0.017	200 x 100 150 x 150	m <sup>3</sup> /s	0.034	0.042	0.051	0.059	0.068	0.076	0.085	0.093	0.102	0.110
	175 x 125	NC	-	-	11	17	22	26	30	34	38	41
0.020	250 x 100 175 x 150	m <sup>3</sup> /s	0.042	0.052	0.062	0.073	0.083	0.093	0.104	0.114	0.125	0.135
	200 x 125	NC	-	-	12	18	23	28	32	36	39	42
0.024	300 x 100 200 x 150	m <sup>3</sup> /s	0.049	0.061	0.074	0.086	0.098	0.110	0.123	0.135	0.147	0.159
	250 x 125	NC	-	-	13	19	24	29	33	37	40	43
0.028	350 x 100	m <sup>3</sup> /s	0.057	0.071	0.085	0.099	0.113	0.127	0.142	0.156	0.170	0.184
		NC	-	-	14	20	25	30	34	38	41	44
0.032	400 x 100 250 x 150	m <sup>3</sup> /s	0.064	0.080	0.096	0.112	0.128	0.144	0.160	0.176	0.193	0.209
	300 x 125	NC	-	-	15	21	26	31	35	39	42	45
0.036	450 x 100 300 x 150	m <sup>3</sup> /s	0.074	0.092	0.110	0.129	0.147	0.166	0.184	0.202	0.221	0.239
	350 x 125 200 x 200	NC	-	-	16	22	27	32	36	40	43	46
0.043	500 x 100 350 x 150	m <sup>3</sup> /s	0.087	0.109	0.130	0.152	0.174	0.195	0.217	0.239	0.260	0.282
	400 x 125 250 x 200	NC	-	10	17	23	29	33	37	41	44	48
0.048	600 x 100 400 x 150	m <sup>3</sup> /s	0.098	0.123	0.147	0.172	0.196	0.221	0.245	0.270	0.294	0.319
	450 x 125	NC	-	11	18	24	29	34	38	42	45	48
0.056	700 x 100 450 x 150 250 x 250	m <sup>3</sup> /s	0.113	0.142	0.170	0.198	0.227	0.255	0.283	0.311	0.340	0.368
	500 x 125 300 x 200	NC	-	12	19	25	31	35	39	43	46	50
0.064	750 x 100 500 x 150 300 x 250	m <sup>3</sup> /s	0.130	0.163	0.195	0.228	0.260	0.293	0.326	0.358	0.391	0.423
	600 x 125 350 x 200	NC	-	13	20	26	32	36	40	44	47	51
0.075	900 x 100 550 x 150 350 x 250	m <sup>3</sup> /s	0.153	0.191	0.229	0.268	0.306	0.344	0.382	0.420	0.459	0.497
	700 x 125 400 x 200	NC	-	14	21	28	33	37	41	45	49	52
0.084	1000 x 100 650 x 150 400 x 250	m <sup>3</sup> /s	0.170	0.212	0.255	0.297	0.340	0.382	0.425	0.467	0.510	0.552
	750 x 125 450 x 200	NC	-	15	22	28	34	38	42	46	49	52
0.099	1225 x 100 750 x 150 350 x 300	m <sup>3</sup> /s	0.202	0.253	0.303	0.354	0.404	0.455	0.505	0.555	0.606	0.656
	900 x 125 450 x 250	NC	-	16	24	30	35	39	43	47	51	54
0.110	850 x 150 500 x 250 350 x 350	m <sup>3</sup> /s	0.223	0.278	0.334	0.390	0.446	0.501	0.557	0.612	0.668	0.724
	600 x 200 400 x 300	NC	-	17	24	30	35	40	44	48	51	54
0.124	1525 x 100 900 x 150 400 x 350	m <sup>3</sup> /s	0.253	0.316	0.379	0.443	0.506	0.569	0.632	0.696	0.759	0.822
	1225 x 125 450 x 300	NC	-	18	25	31	36	41	45	49	52	55
0.149	1825 x 100 600 x 250 450 x 350	m <sup>3</sup> /s	0.302	0.378	0.453	0.529	0.604	0.680	0.755	0.831	0.906	0.982
	750 x 200 550 x 300 400 x 400	NC	11	19	26	32	38	42	46	50	54	57
0.167	900 x 200 600 x 300 450 x 400	m <sup>3</sup> /s	0.340	0.425	0.510	0.595	0.680	0.764	0.849	0.934	1.020	1.100
	1225 x 150 750 x 250 500 x 350	NC	11	20	27	33	39	43	47	51	54	58
0.193	1000 x 200 750 x 300 500 x 400	m <sup>3</sup> /s	0.393	0.491	0.589	0.687	0.785	0.883	0.982	1.080	1.180	1.280
	900 x 250 600 x 350 450 x 450	NC	13	21	28	34	40	44	48	52	55	59
0.228	1825 x 150 800 x 300 600 x 400	m <sup>3</sup> /s	0.462	0.578	0.694	0.809	0.925	1.040	1.160	1.270	1.390	1.500
	1225 x 200 650 x 350 500 x 450	NC	14	22	30	36	41	45	50	53	57	60
0.258	900 x 300 650 x 400 550 x 500	m <sup>3</sup> /s	0.525	0.656	0.787	0.918	1.050	1.180	1.310	1.440	1.570	1.710
	750 x 350 600 x 450	NC	15	23	30	36	42	46	50	54	58	61
0.289	1000 x 300 750 x 400 600 x 500	m <sup>3</sup> /s	0.587	0.734	0.881	1.030	1.170	1.320	1.470	1.610	1.760	1.910
	1225 x 250 900 x 350 650 x 450	NC	15	24	31	37	43	47	51	55	58	62
0.335	1825 x 200 1225 x 300 750 x 450	m <sup>3</sup> /s	0.681	0.852	1.020	1.190	1.360	1.530	1.700	1.870	2.040	2.220
	1525 x 250 900 x 400 600 x 600	NC	17	25	32	38	44	48	52	56	59	63
0.399	1225 x 350 800 x 500	m <sup>3</sup> /s	0.810	1.010	1.220	1.420	1.620	1.820	2.020	2.230	2.430	2.630
	900 x 450 700 x 600	NC	18	27	34	40	45	49	54	57	61	64
0.432	1825 x 250 900 x 500	m <sup>3</sup> /s	0.878	1.100	1.320	1.540	1.760	1.980	2.190	2.410	2.630	2.860
	1225 x 400 750 x 600	NC	18	27	34	40	45	50	54	58	61	64
0.518	1825 x 300 1225 x 450	m <sup>3</sup> /s	1.050	1.320	1.580	1.840	2.110	2.370	2.630	2.900	3.160	3.420
	1525 x 350 900 x 600	NC	20	28	36	42	47	51	56	59	63	66
0.581	1825 x 350 1225 x 500	m <sup>3</sup> /s	1.180	1.470	1.770	2.060	2.360	2.650	2.950	3.240	3.540	3.830
	1525 x 400	NC	21	29	36	42	48	52	56	60	63	67

\*\*Suitable for Passive Ventilation (Do not exceed core velocity of 2.5m/sec).

- Neg. SP is negative static pressure.
- All pressures are in pascals.
- NC values are based on room absorption of 10 db, re 10<sup>-12</sup> watts.
- Heavy dividing lines denote ranges of NC values.

Model: RLP

CORE AREA m <sup>2</sup>	NOMINAL SIZE(mm)	CORE VEL. m/s	NC 20					NC 30			NC 40	
			1.52	2.03	2.54	3.05	3.56	4.06	4.57	5.10	6.10	7.11
			VEL. PRESS	2	3	4	6	8	10	13	16	23
		NEG. SP	8	14	22	31	43	56	70	88	124	169
0.014	175 x 100	m <sup>3</sup> /s	0.021	0.028	0.035	0.042	0.049	0.057	0.064	0.071	0.085	0.099
	150 x 125	NC	-	-	-	18	22	26	30	33	38	42
0.017	200 x 100 150 x 150	m <sup>3</sup> /s	0.025	0.034	0.042	0.051	0.059	0.068	0.076	0.085	0.102	0.119
	175 x 125	NC	-	-	17	20	24	28	33	36	42	47
0.020	250 x 100 175 x 150	m <sup>3</sup> /s	0.031	0.042	0.052	0.063	0.073	0.083	0.093	0.104	0.125	0.145
	200 x 125	NC	-	-	19	23	27	32	37	41	47	52
0.028	350 x 100	m <sup>3</sup> /s	0.042	0.057	0.071	0.085	0.099	0.113	0.127	0.142	0.169	0.198
		NC	-	-	20	25	29	34	39	42	49	54
0.032	400 x 100 250 x 150	m <sup>3</sup> /s	0.048	0.064	0.080	0.096	0.112	0.128	0.144	0.160	0.193	0.225
	300 x 125	NC	-	-	21	27	30	35	40	43	50	55
0.036	450 x 100 300 x 150	m <sup>3</sup> /s	0.055	0.074	0.092	0.110	0.129	0.147	0.166	0.184	0.221	0.258
	350 x 125 200 x 200	NC	-	-	22	28	32	37	41	44	51	56
0.043	500 x 100 350 x 150	m <sup>3</sup> /s	0.065	0.087	0.109	0.130	0.159	0.174	0.195	0.217	0.260	0.304
	400 x 125 250 x 200	NC	-	-	23	29	34	38	42	45	52	57
0.048	600 x 100 400 x 150	m <sup>3</sup> /s	0.074	0.098	0.123	0.147	0.172	0.196	0.220	0.245	0.294	0.344
	450 x 125	NC	-	17	24	30	35	39	43	46	53	58
0.056	700 x 100 450 x 150 250 x 250	m <sup>3</sup> /s	0.085	0.113	0.142	0.169	0.198	0.227	0.255	0.283	0.339	0.396
	500 x 125 300 x 200	NC	-	17	24	30	35	39	43	46	53	58
0.064	750 x 100 500 x 150 300 x 250	m <sup>3</sup> /s	0.098	0.130	0.163	0.195	0.228	0.260	0.293	0.326	0.388	0.456
	600 x 125 350 x 200	NC	-	17	24	30	35	39	43	46	53	58
0.075	900 x 100 550 x 150 350 x 250	m <sup>3</sup> /s	0.115	0.153	0.191	0.229	0.268	0.306	0.344	0.382	0.459	0.535
	700 x 125 400 x 200	NC	-	18	24	30	35	40	44	47	54	59
0.084	1000 x 100 650 x 150 400 x 250	m <sup>3</sup> /s	0.127	0.170	0.212	0.255	0.297	0.340	0.382	0.425	0.510	0.595
	750 x 125 450 x 200	NC	-	18	24	30	35	40	44	47	54	59
0.099	1225 x 100 750 x 150 350 x 300	m <sup>3</sup> /s	0.151	0.202	0.252	0.303	0.353	0.404	0.454	0.505	0.606	0.707
	900 x 125 450 x 250	NC	-	18	25	31	36	40	44	47	54	59
0.110	850 x 150 500 x 250 350 x 350	m <sup>3</sup> /s	0.167	0.223	0.278	0.334	0.390	0.445	0.501	0.557	0.668	0.780
	600 x 200 400 x 300	NC	-	19	25	31	36	41	45	48	55	60
0.124	1525 x 100 900 x 150 400 x 350	m <sup>3</sup> /s	0.190	0.253	0.316	0.379	0.443	0.506	0.569	0.632	0.759	0.885
	1225 x 125 450 x 300	NC	-	19	25	31	36	41	45	48	55	60
0.149	1825 x 100 600 x 250 450 x 350	m <sup>3</sup> /s	0.227	0.302	0.378	0.453	0.530	0.604	0.680	0.755	0.906	1.060
	750 x 200 550 x 300 400 x 400	NC	-	19	26	31	36	41	45	48	55	60
0.167	900 x 200 600 x 300 450 x 400	m <sup>3</sup> /s	0.255	0.340	0.425	0.510	0.595	0.680	0.764	0.849	1.020	1.190
	1225 x 150 750 x 250 500 x 350	NC	-	19	26	32	37	41	45	48	55	60
0.193	1000 x 200 750 x 300 500 x 400	m <sup>3</sup> /s	0.294	0.393	0.491	0.589	0.687	0.785	0.883	0.982	1.180	1.370
	900 x 250 600 x 350 450 x 450	NC	-	20	26	32	37	41	45	48	55	60
0.228	1825 x 150 800 x 300 600 x 400	m <sup>3</sup> /s	0.346	0.462	0.578	0.694	0.809	0.925	1.040	1.160	1.390	1.620
	1225 x 200 650 x 350 500 x 450	NC	-	20	26	32	37	42	46	49	56	61
0.258	900 x 300 650 x 400 550 x 500	m <sup>3</sup> /s	0.394	0.525	0.656	0.787	0.918	1.050	1.180	1.310	1.570	1.840
	750 x 350 600 x 450	NC	-	20	27	35	38	42	46	49	56	61
0.289	1000 x 300 750 x 400 600 x 500	m <sup>3</sup> /s	0.440	0.587	0.734	0.881	1.030	1.170	1.320	1.470	1.760	2.050
	1225 x 250 900 x 350 650 x 450	NC	-	20	27	35	38	42	46	49	56	61
0.335	1825 x 200 1225 x 300 750 x 450	m <sup>3</sup> /s	0.511	0.681	0.851	1.020	1.190	1.360	1.530	1.700	2.040	2.380
	1525 x 250 900 x 400 600 x 600	NC	16	21	28	34	39	43	48	51	57	61
0.399	1225 x 350 800 x 500	m <sup>3</sup> /s	0.607	0.810	1.010	1.210	1.420	1.620	1.820	2.020	2.430	2.830
	900 x 450 700 x 600	NC	16	21	28	35	39	44	48	51	57	62
0.432	1825 x 250 900 x 500	m <sup>3</sup> /s	0.658	0.878	1.100	1.320	1.540	1.750	1.970	2.190	2.630	3.070
	1225 x 400 750 x 600	NC	17	22	28	35	40	44	49	52	58	62
0.518	1825 x 300 1225 x 450	m <sup>3</sup> /s	0.790	1.050	1.320	1.580	1.840	2.120	2.370	2.630	3.160	3.690
	1525 x 350 900 x 600	NC	17	22	29	36	40	45	49	52	58	63
0.581	1825 x 350 1225 x 500	m <sup>3</sup> /s	0.885	1.180	1.470	1.770	2.060	2.360	2.650	2.950	3.540	4.130
	1525 x 400	NC	17	22	29	36	41	45	49	52	58	63

- Neg. SP is negative static pressure.
- All pressures are in pascals.
- NC values are based on room absorption of 10 db, re 10<sup>-12</sup> watts.
- Heavy dividing lines denote ranges of NC values.

# RLW & AMG – Return Louvers & Grilles

## Model: RLW

RLW grilles are designed for return and exhaust air applications and are complete with 29mm wide blade spacing. Removable and hinged core sections are available for easy access to dampers and removable filter where fitted (Filter non-standard).

All components are manufactured in long lasting maintenance free aluminium extrusion.

### Sizes

- RLW maximum one-piece construction size is 2000x2000mm. Larger sizes can be made in multiple sections.
- RLWFR maximum one-piece construction size is 1200x1200mm. Larger sizes can be made in multiple sections.

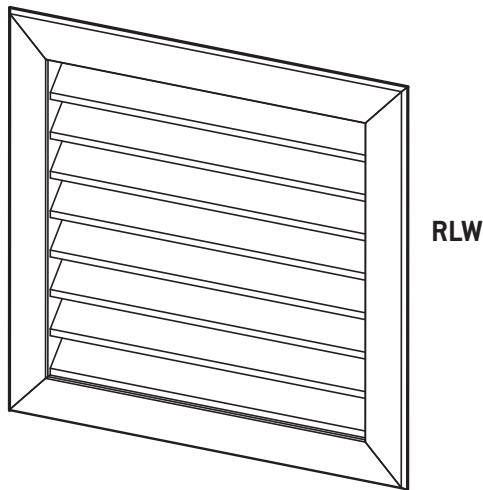
### Accessories

OBD - Opposed Blade Damper.

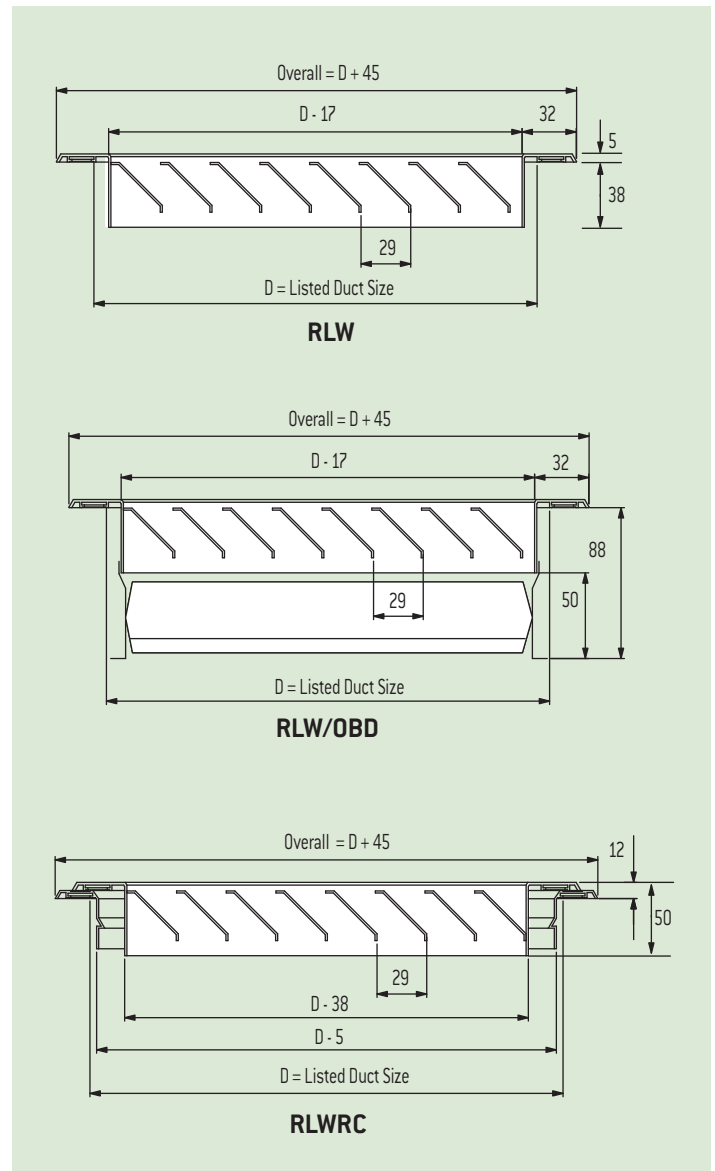
### Product Codes

RLWL - Return Louver Wide Spacing – Blades parallel to long dimension.  
 RLWS - Return Louver Wide Spacing – Blades parallel to short dimension.  
 RLW/OBD - Return Louver Wide Spacing with Opposed blade Damper.  
 RLWRC - Return Louver Wide Spacing with Removable Core.  
 RLWFR – Return Louver Wide Spacing with Filtered Hinged Frame.

Contact your local Holyoake branch for dimensional details.



RLW



## Model: AMG

AMG Grilles can be used in simple return, or exhaust applications. The AMG consists of an aluminium flanged surround and a aluminium diamond mesh core (35mm x 15mm pattern). The AMG can be supplied with a removable core.

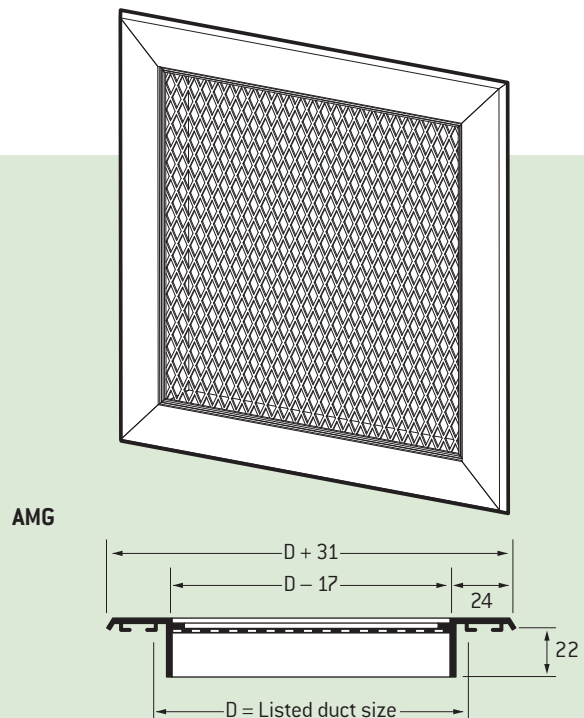
### Product Codes

- AMG – Standard Aluminium Mesh Grille.
- AMG/OBD – Aluminium Mesh Grille with opposed blade damper.
- AMGRC – Aluminium Mesh Grille with Removable Core.
- AMGFR – Aluminium Mesh Grille with Filtered Hinged Frame.

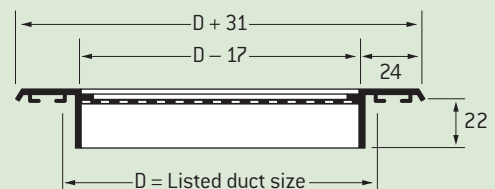
Steel mesh is available as an option.

Consult your local Holyoake branch for further information.

Option: 40mm flanged surround (Excluding FR Models).



AMG



## Model: RLW

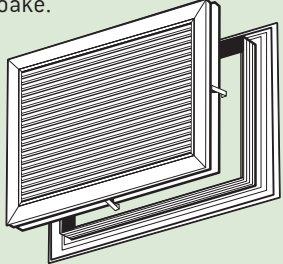
CORE AREA m <sup>2</sup>	NOMINAL SIZE (mm)	CORE VEL. m/s	1.43	1.75	2.06	2.44	2.76	3.18	3.46	3.61	3.94	4.75	
		VEL. PRESS	2	4	5	7	9	12	14	15	18	26	
		NEG. SP	8	12	16	23	29	37	45	54	65	88	
0.014	175x100 150x175	m <sup>3</sup> /s	0.024	0.030	0.035	0.043	0.048	0.054	0.060	0.066	0.072	0.084	NC 30
		NC	-	-	-	-	15	19	22	24	26	29	
0.017	200x100 150x150 175x125	m <sup>3</sup> /s	0.029	0.037	0.043	0.052	0.059	0.066	0.073	0.080	0.087	0.102	NC 30
		NC	-	-	-	-	15	19	23	25	27	31	
0.020	250x100 175x150 200x125	m <sup>3</sup> /s	0.034	0.043	0.051	0.062	0.069	0.077	0.086	0.094	0.103	0.120	NC 30
		NC	-	-	-	-	15	20	24	26	28	31	
0.028	350x100	m <sup>3</sup> /s	0.047	0.061	0.071	0.086	0.096	0.108	0.120	0.131	0.144	0.168	NC 30
		NC	-	-	-	15	19	23	25	28	29	33	
0.032	400x100 250x150 300x125	m <sup>3</sup> /s	0.054	0.069	0.081	0.099	0.110	0.124	0.137	0.150	0.164	0.192	NC 30
		NC	-	-	-	15	19	23	25	29	30	34	
0.036	450x100 300x150 350x125 200x200	m <sup>3</sup> /s	0.058	0.072	0.084	0.101	0.113	0.132	0.140	0.152	0.167	0.194	NC 30
		NC	-	-	-	15	19	23	26	29	31	35	
0.043	500x100 350x150 400x125 250x200	m <sup>3</sup> /s	0.061	0.075	0.089	0.105	0.119	0.137	0.149	0.155	0.169	0.204	NC 30
		NC	-	-	-	15	19	23	26	30	31	36	
0.048	600x100 400x150 450x125	m <sup>3</sup> /s	0.069	0.084	0.099	0.117	0.133	0.153	0.166	0.173	0.189	0.228	NC 30
		NC	-	-	-	15	19	24	27	31	32	37	
0.056	700x100 450x150 250x250 500x125 300x200	m <sup>3</sup> /s	0.080	0.098	0.115	0.137	0.155	0.178	0.194	0.202	0.221	0.266	NC 30
		NC	-	-	-	15	20	24	28	32	32	38	
0.064	750x100 500x150 300x250 600x125 350x200	m <sup>3</sup> /s	0.091	0.112	0.132	0.156	0.177	0.203	0.222	0.231	0.252	0.304	NC 40
		NC	-	-	-	15	20	24	28	33	33	39	
0.075	900x100 550x150 350x250 700x125 400x200	m <sup>3</sup> /s	0.107	0.131	0.154	0.183	0.207	0.238	0.260	0.271	0.296	0.356	NC 40
		NC	-	-	-	15	20	25	29	33	34	40	
0.084	1000x100 650x150 400x250 750x125 450x200 300x300	m <sup>3</sup> /s	0.120	0.147	0.173	0.205	0.232	0.267	0.291	0.303	0.331	0.399	NC 40
		NC	-	-	-	15	20	25	30	34	34	41	
0.099	1200x100 750x150 350x300 900x125 450x250	m <sup>3</sup> /s	0.155	0.205	0.236	0.282	0.312	0.334	0.362	0.405	0.439	0.563	NC 40
		NC	-	-	-	16	24	29	31	35	38	48	
0.110	850x150 500x250 350x350 600x200 400x300	m <sup>3</sup> /s	0.173	0.227	0.262	0.314	0.347	0.371	0.402	0.450	0.487	0.626	NC 40
		NC	-	-	-	16	25	29	32	35	39	49	
0.124	1500x100 900x150 400x350 1200x125 450x300	m <sup>3</sup> /s	0.195	0.256	0.295	0.354	0.391	0.418	0.454	0.508	0.549	0.706	NC 40
		NC	-	-	-	16	26	30	33	36	39	49	
0.149	1800x100 600x250 450x350 750x200 550x300 400x400	m <sup>3</sup> /s	0.234	0.308	0.355	0.425	0.470	0.502	0.545	0.610	0.660	0.848	NC 40
		NC	-	-	-	16	27	31	36	38	41	49	
0.167	1500x125 900x200 600x300 450x400 750x250 500x350	m <sup>3</sup> /s	0.267	0.331	0.387	0.463	0.522	0.595	0.653	0.691	0.756	0.902	NC 40
		NC	-	-	-	22	28	33	38	40	41	49	
0.193	1000x200 750x300 1500x150 900x250 600x350 450x450	m <sup>3</sup> /s	0.308	0.383	0.447	0.535	0.603	0.687	0.755	0.799	0.874	1.043	NC 50
		NC	-	-	15	23	28	33	40	41	41	49	
0.228	1800x150 800x300 600x400 1200x200 650x350 500x500	m <sup>3</sup> /s	0.346	0.429	0.502	0.600	0.676	0.771	0.847	0.897	0.980	1.170	NC 50
		NC	-	-	15	23	29	33	40	41	41	51	
0.258	900x300 650x400 550x500 750x350 600x450	m <sup>3</sup> /s	0.370	0.453	0.533	0.632	0.715	0.823	0.896	0.933	1.020	1.229	NC 50
		NC	-	-	15	23	29	34	40	41	42	51	
0.289	1500x200 1000x300 750x400 600x500 1200x250 900x350	m <sup>3</sup> /s	0.414	0.507	0.597	0.707	0.801	0.921	1.004	1.046	1.142	1.377	NC 50
		NC	-	-	15	23	29	34	40	41	42	51	
0.335	1800x200 1200x300 750x450 1500x250 900x400 600x600	m <sup>3</sup> /s	0.480	0.588	0.692	0.820	0.928	1.068	1.164	1.212	1.324	1.596	NC 50
		NC	-	-	15	24	30	34	40	41	43	52	
0.399	1200x350 800x500 900x450 700x600	m <sup>3</sup> /s	0.572	0.700	0.824	0.977	1.105	1.272	1.386	1.444	1.577	1.901	NC 50
		NC	-	-	16	26	31	34	41	42	44	52	
0.432	1800x250 900x500 1200x400 750x600	m <sup>3</sup> /s	0.619	0.758	0.892	1.057	1.197	1.377	1.501	1.563	1.707	2.058	NC 50
		NC	-	16	19	26	32	35	41	42	44	52	
0.518	1800x300 1200x450 1500x350 900x600	m <sup>3</sup> /s	0.742	0.909	1.070	1.268	1.435	1.651	1.800	1.874	2.047	2.468	NC 50
		NC	-	16	20	26	33	38	41	42	46	53	
0.581	1800x350 1200x500 1500x400	m <sup>3</sup> /s	0.832	1.020	1.200	1.422	1.609	1.852	2.019	2.102	2.296	2.768	NC 50
		NC	-	16	21	29	34	39	41	43	48	54	

- Neg. SP is negative static pressure.
- All pressures are in pascals.
- NC values are based on room absorption of 10 db, re 10<sup>-12</sup> watts.
- Heavy dividing lines denote ranges of NC values.

## Grille Description Code Examples and Suggested Specifications

DG	-	[ 52 17 *1700 ]	-	[ BFL BFS AL AS BL BS ]	-	W x H	-	FINISH
Door Grille.		Model (Including Blade Configuration).		Frame Style.		Width x Height 'Nominal Opening Dimensions'.		Satin Anodised (DG52 Only). Holyoake White. Mill Aluminium. Powder Coat.

\*Model 1700 is a double thickness Model 17, suitable for light proof applications. It is available with a Matt Black Finish.



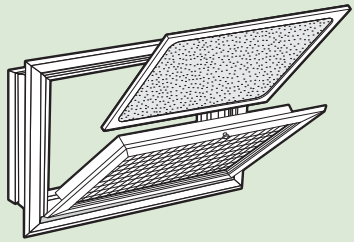
Door grilles shall be of rattle-free, all aluminium construction, with sight proof blades of Chevron design, assembled in either a flanged, or channel type frame, presenting a similar appearance from both sides. Purpose made back flanges shall be available for flanged units, standard models shall be available to suit any door thickness from 28mm to 52mm. All shall be as manufactured by Holyoake.

[ RLL - RLS ]	-	[ 23 25 ]	-	[ RC FR ]	-	OBD	-	W x H	-	FINISH
Return Louver, Long Blades.		Blade Spacing/Shape Code (23 = 20mm, 25 = 12.5mm/Set at 30°).		Frame Style (Removeable Core, or Filter Return).		Opposed Blade Damper.		Width x Height 'Nominal Size' (Duct, or Trimmed Hole).		Holyoake White. Mill Aluminium. Powder Coat.
Return Louver, Short Blades.										

Return and/or exhaust louvers shall be of extruded aluminium, rattle-free construction, of the model shown on the drawings, or elsewhere in this specification. Blades shall be mechanically locked to mullions and frames. Frames shall have close mitred corners, reinforced and secured with aluminium gussets. Filter returns, where specified, shall be of similar construction, mounted in a hinged subframe and held closed with a positive latch. Filters are 'EU2' washable type. All shall be as manufactured by Holyoake.

[ RLHL - RLHS ]	-	[ RC FR ]	-	OBD	-	W x H	-	FINISH
Return Louver, Long Blades (20mm spacing, set at 45°).		Frame Style (Removeable Core, or Filter Return).		Opposed Blade Damper.		Width x Height 'Nominal Size' (Duct, or Trimmed Hole).		Holyoake White. Mill Aluminium. Powder Coat.
Return Louver, Short Blades (20mm spacing, set at 45°).								

\*\*Suitable for Passive Ventilation (Do not exceed core velocity of 2.5m/sec).



[ RLP ]	-	[ RC FR ]	-	OBD	-	W x H	-	FINISH
Return Louver Model (Perforated, Egg-Crate, or Obscured Egg-Crate).		Frame Style (Removeable Core, or Filter Return).		Opposed Blade Damper.		Width x Height 'Nominal Size' (Duct, or Trimmed Hole).		Holyoake White. Mill Aluminium. Powder Coat.
EC-125 HI-35								

**Note** When ceiling mounted, seismic restraints may be required, but are not supplied.

## Grille Description Code Examples and Suggested Specifications

**RLW** – **[L]** – **[RC]** – **OBD** – **W x H** – **FINISH**  
**[S]** – **[FR]**

Return Louver Wide.

Blades Parallel to long, or short dimension.

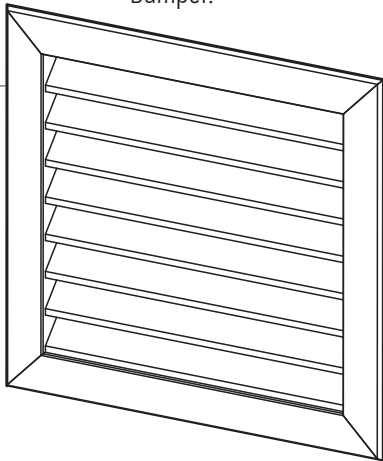
Frame Style (Removeable Core, or Filter Return).

Opposed Blade Damper.

Width x Height 'Nominal Size' (Duct, or Trimmed Hole).

Holyoake White. Mill Aluminium. Powder Coat.

Return and/or exhaust louvers shall be of extruded aluminium, rattle-free construction, of the model shown on the drawings, or elsewhere in this specification. Blades shall be mechanically locked to mullions and frames. Frames shall have close mitred corners, reinforced and secured with aluminium gussets. Filter returns, where specified, shall be of similar construction, mounted in a hinged subframe and held closed with a positive latch. Filters are 'EU2' washable type. All shall be as manufactured by Holyoake.



Guide Product Weights	
Approximate Weight in Kg.	
Size	RLW
300 x 300	2
500 x 500	11
900 x 900	22

**AMG** – **[RC]** – **OBD** – **W x H** – **FINISH**  
**[FR]**

Aluminium Mesh Grille.

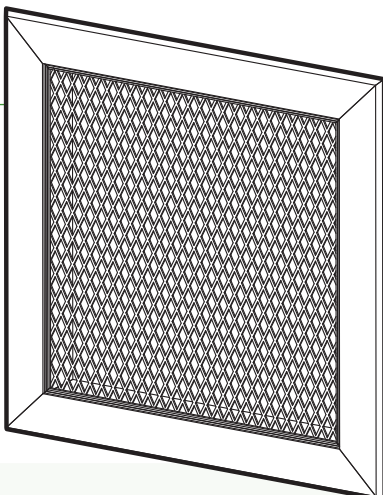
Frame Style (Removeable Core, or Filter Return).

Opposed Blade Damper.

Width x Height 'Nominal Size' (Duct, or Trimmed Hole).

Holyoake White. Mill Aluminium. Powder Coat.

Return and/or exhaust Grilles shall be an aluminium frame with aluminium mesh core. They shall be of rattle-free construction, of the model shown on the drawings, or elsewhere in this specification. Frames shall have close mitred corners, reinforced and secured with aluminium gussets. Filter returns, where specified, shall be of similar construction, mounted in a hinged subframe and held closed with a positive latch. Filters are 'EU2' washable type. All shall be as manufactured by Holyoake.



Guide Product Weights	
Approximate Weight in Kg.	
Size	AMG
200 x 200	0.38
300 x 300	0.58
500 x 500	1.05

### Note

When ceiling mounted, seismic restraints may be required, but are not supplied.