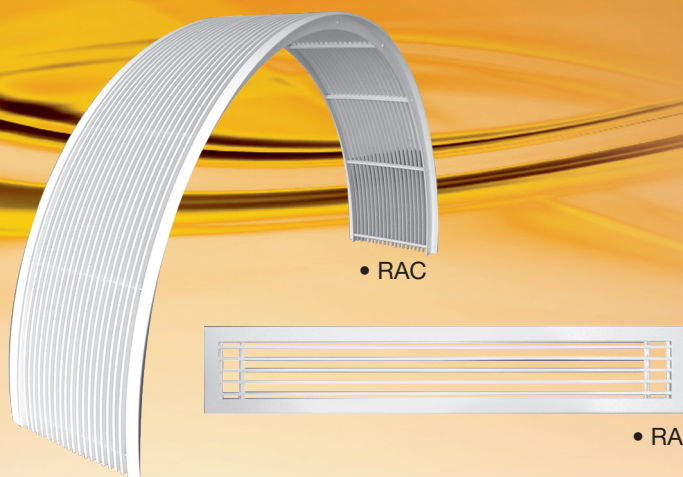


RA/RAC Bar Grille



ASLI RA/RAC is a type of grille which has fix blades. The curve type linear bar grilles, RAC, has aesthetic appearance so it is suitable to install at round column or curved wall.

Materials

Frame : Aluminium Extrusion A6063
Blade : Aluminium Extrusion A6063
(0° deflection or 15° deflection)

Surface Finish

Baked white powder coated as standard.
*Others are available upon request.

Size

All size are available upon request.

Features

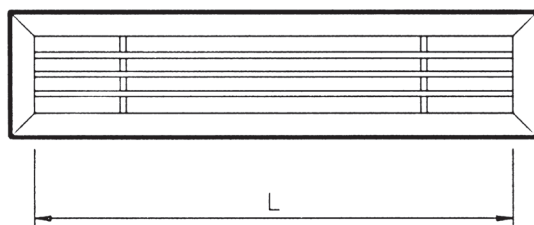
- The bar grille air blades are fixed & not adjustable. Maximum single length is 2700mm. Above this length, the grille will come in multiple section.
- The neck sizes (w) are proportional to the number of linear bar blades. Please refer to table Bar Grille vs Width.
- Two different types of linear bar face deflection angle are available.
- The bar grilles that come with plenum boxes are known as RAB
- Approximately 65% free area.

Accessories

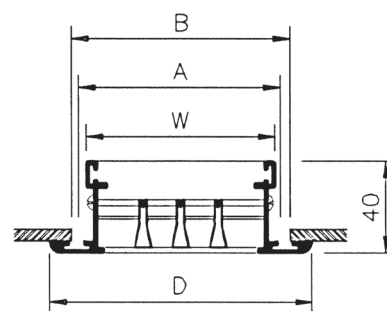
PB Plenum box blade

G1 Opposed Blade Damper

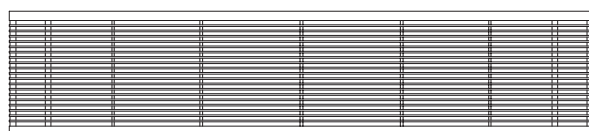
RA/RAC Physical Dimension *Unit : mm*



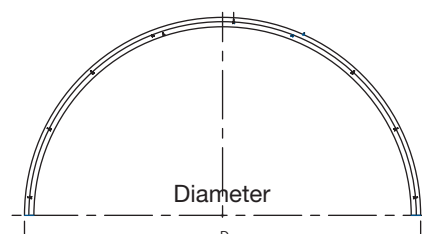
Top View (RA)



Sectional View (RA)



Top View (RAC)



Sectional View (RAC)

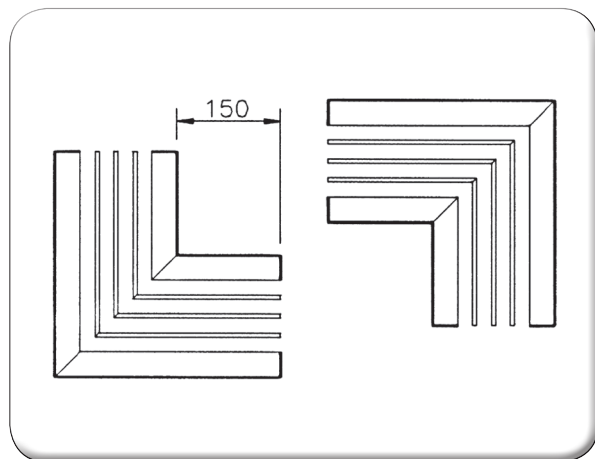
Model	L x W Neck Size	A Duct Size	B Wall Size	D Face Size	
RA-A / RA-C	L: To suit design Length W: To suit No. of Blade	L+10 W+10	L+15 W+15	RA-A	L+29 W+29
				RA-C	L+45 W+45

RA/RAC Bar Grille

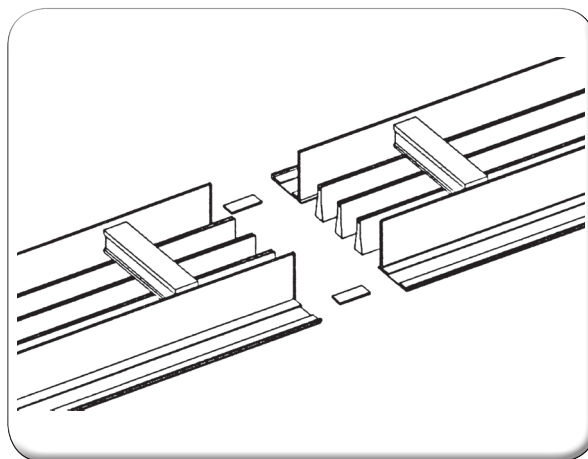
Bar Grille Vs Width *Unit : mm*

No. of Blade	2	3	4	5	6	7	8	10	12	14	16	18	20
Neck Width	45	60	75	90	105	120	135	165	195	225	255	285	315

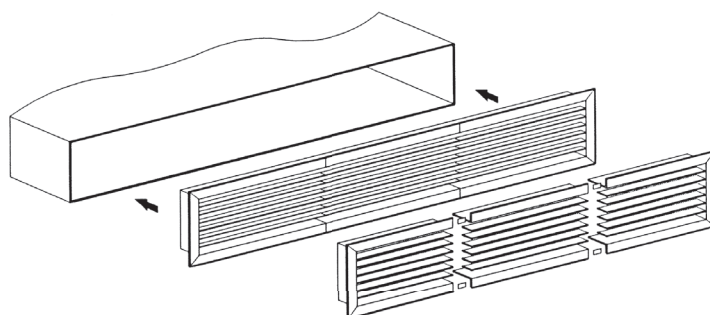
RA Linear Bar Grille with multiple sections



- 90° mitred corner sections for linear bar grilles are available.
- Joining strips are available for continuous installation of the mitred corner section & the linear bar grille.



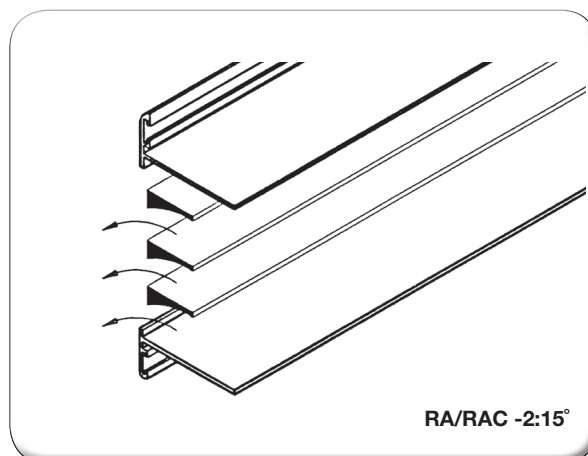
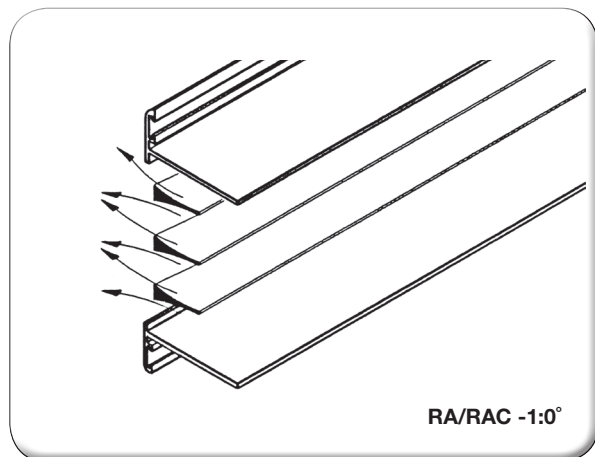
- Maximum length of a single linear bar grille is 2700mm. Above 2700mm, the grille will come in multiple section.
- Joining strips are available for multiple section of linear bar grille.



Example of installation of RA with multiple sections

RA Bar Deflection Angle

- Two different linear bar face deflection angles are available.
- Deflection for RA/RAC -1:0°
RA/RAC -2:15°



RA/RAC Bar Grille

RA/RAC -1 (0°) - Supply Performance Data (1)

Neck Width (mm)	Neck Vel. (m/s)		1.0	1.5	2.0	2.5	3.0	3.5
	Tot. Press (mmAq)		0.4	0.6	0.9	1.6	2.2	3.0
45	CMH		162	243	324	405	486	567
	Throw (m)	Ceiling	0.3 - 0.3	1.2 - 1.2	2.1 - 2.1	2.7 - 3.0	3.3 - 3.6	4.2 - 4.8
		Wall	1.5 - 2.1	2.4 - 3.6	3.3 - 4.8	4.2 - 6.0	5.1 - 6.9	5.7 - 7.8
	NC		-	-	21	26	31	35
60	CMH		216	324	432	540	648	756
	Throw (m)	Ceiling	0.4 - 0.4	1.7 - 1.7	2.8 - 2.9	3.5 - 3.8	4.4 - 4.7	5.1 - 5.4
		Wall	1.9 - 2.6	2.8 - 4.0	4.0 - 5.3	4.9 - 6.5	5.6 - 7.4	6.6 - 8.6
	NC		-	-	20	25	30	34
75	CMH		270	405	540	675	810	945
	Throw (m)	Ceiling	0.8 - 0.8	2.3 - 2.3	3.4 - 3.5	4.3 - 4.6	5.3 - 5.6	6.1 - 6.6
		Wall	2.1 - 3.0	3.4 - 4.6	4.6 - 5.9	5.6 - 7.4	6.6 - 8.2	7.6 - 9.4
	NC		-	-	20	25	30	34
90	CMH		324	486	648	810	972	1134
	Throw (m)	Ceiling	0.9 - 0.9	2.7 - 2.7	3.9 - 3.9	4.8 - 5.1	6.0 - 6.3	6.9 - 7.2
		Wall	2.4 - 3.3	3.9 - 5.1	5.1 - 6.3	6.0 - 7.5	7.5 - 9.0	8.4 - 10.2
	NC		-	-	21	26	31	35
105	CMH		378	567	756	945	1134	1323
	Throw (m)	Ceiling	1.1 - 1.1	3.0 - 3.0	4.2 - 4.2	5.2 - 5.2	6.5 - 6.8	7.2 - 7.3
		Wall	2.8 - 3.7	4.2 - 5.4	5.5 - 6.8	6.5 - 8.0	8.0 - 9.5	8.9 - 10.7
	NC		-	-	21	26	31	35
120	CMH		432	648	864	1080	1296	1512
	Throw (m)	Ceiling	1.3 - 1.3	3.0 - 3.0	4.4 - 4.4	5.5 - 5.5	6.8 - 6.8	7.4 - 7.4
		Wall	3.2 - 4.1	4.4 - 5.6	5.9 - 7.1	6.8 - 8.3	8.3 - 9.8	9.4 - 11.2
	NC		-	-	21	26	31	35

- Above performance data is also applicable for RAC with one meter curve length.
- Throw values are based on an entire section one meter long.
- Throw is based on terminal velocities of 0.5 m/s - 0.25 m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10⁻¹² watts.
- Dash (-) in space indicates NC value less than 20.
- Corrected values for throw and NC value as the length changes.

RA/RAC Bar Grille

RA/RAC -1 (0°) - Supply Performance Data (2)

Neck Width (mm)	Neck Vel. (m/s)		1.0	1.5	2.0	2.5	3.0	3.5
	Tot. Press (mmAq)		0.4	0.6	0.9	1.6	2.2	3.0
135	CMH		486	729	972	1215	1458	1701
	Throw (m)	Ceiling	1.5 - 1.5	3.0 - 3.0	4.5 - 4.5	5.5 - 5.5	6.9 - 6.9	7.5 - 7.5
		Wall	3.6 - 4.5	4.8 - 6.0	6.0 - 7.2	7.2 - 8.7	8.7 - 10.2	9.9 - 11.7
	NC		-	-	22	27	32	36
165	CMH		594	891	1188	1485	1782	2079
	Throw (m)	Ceiling	1.8 - 1.8	3.3 - 3.3	4.8 - 4.8	6.1 - 6.1	7.5 - 7.7	8.2 - 8.2
		Wall	4.2 - 5.1	5.4 - 6.6	6.6 - 7.8	8.0 - 9.3	9.3 - 10.8	10.5 - 12.3
	NC		-	-	22	27	32	36
195	CMH		702	1053	1404	1755	2106	2457
	Throw (m)	Ceiling	2.0 - 2.0	3.5 - 3.5	5.0 - 5.0	6.3 - 6.3	7.8 - 7.9	8.5 - 8.5
		Wall	4.8 - 5.8	5.9 - 7.1	7.0 - 8.1	8.6 - 9.8	9.8 - 11.2	11.1 - 12.9
	NC		-	-	23	28	33	37
225	CMH		810	1215	1620	2025	2430	2835
	Throw (m)	Ceiling	2.3 - 2.3	3.8 - 3.8	5.2 - 5.2	6.6 - 6.6	8.0 - 8.0	8.8 - 8.8
		Wall	5.5 - 6.5	6.4 - 7.6	7.4 - 8.4	9.2 - 10.3	10.3 - 11.7	11.8 - 13.6
	NC		-	-	23	28	33	37
255	CMH		918	1377	1836	2295	2754	3213
	Throw (m)	Ceiling	2.6 - 2.6	4.0 - 4.0	5.4 - 5.4	6.9 - 6.9	8.2 - 8.2	9.0 - 9.0
		Wall	6.2 - 7.4	7.0 - 8.1	7.9 - 8.8	9.8 - 10.8	10.8 - 12.1	12.5 - 14.2
	NC		-	-	24	29	34	38
285	CMH		1026	1539	2052	2565	3078	3591
	Throw (m)	Ceiling	2.8 - 2.8	4.2 - 4.2	5.6 - 5.6	7.2 - 7.2	8.3 - 8.3	9.2 - 9.2
		Wall	7.1 - 8.3	7.6 - 8.7	8.3 - 9.1	10.5 - 11.3	11.3 - 12.6	13.3 - 15.0
	NC		-	-	24	29	34	38
315	CMH		1134	1701	2268	2835	3402	3969
	Throw (m)	Ceiling	3.1 - 3.1	4.5 - 4.5	5.9 - 5.9	7.5 - 7.5	8.5 - 8.5	9.5 - 9.5
		Wall	8.3 - 9.4	8.3 - 9.3	8.8 - 9.5	11.2 - 11.9	11.9 - 13.1	14.1 - 15.7
	NC		-	20	25	30	35	39

- Above performance data is also applicable for RAC with one meter curve length.
- Throw values are based on an entire section one meter long.
- Throw is based on terminal velocities of 0.5 m/s - 0.25 m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10⁻¹² watts.
- Dash (-) in space indicates NC value less than 20.
- Corrected values for throw and NC value as the length changes.

Length (M)	0.5	1	1.5	2
NC	-2	0	+2	+3
Terminal Vel. 0.5m/s	0.8	1	1.1	1.2
Terminal Vel. 0.25m/s	0.9	1	1.15	1.2

Eg: When length is 2m, Throw: use a multiple of 1.2. NC: NC plus 3

RA/RAC Bar Grille

RA/RAC -2 (15°) - Supply Performance Data (1)

Neck Width (mm)	Neck Vel. (m/s)		1.0	1.5	2.0	2.5	3.0	3.5
	Tot. Press (mmAq)		0.4	0.6	0.9	1.6	2.2	3.0
45	CMH		162	243	324	405	486	567
	Throw (m)	Ceiling	0.3 - 0.3	1.2 - 1.2	2.1 - 2.1	2.7 - 3.0	3.3 - 3.6	4.2 - 4.8
		Wall	1.5 - 2.1	2.4 - 3.6	3.3 - 4.8	4.2 - 6.0	5.1 - 6.9	5.4 - 7.5
	NC		-	-	26	31	36	40
60	CMH		216	324	432	540	648	756
	Throw (m)	Ceiling	0.4 - 0.4	1.6 - 1.6	2.6 - 2.8	3.4 - 3.7	4.5 - 4.8	5.2 - 5.7
		Wall	1.8 - 2.5	2.8 - 4.0	3.7 - 5.2	5.0 - 6.5	5.9 - 7.7	6.7 - 8.5
	NC		-	-	25	30	35	39
75	CMH		270	405	540	675	810	945
	Throw (m)	Ceiling	0.6 - 0.6	2.0 - 2.0	3.4 - 3.4	4.0 - 4.3	5.2 - 5.5	6.1 - 6.4
		Wall	2.0 - 2.9	3.2 - 4.4	4.4 - 5.8	5.3 - 6.9	6.4 - 8.1	7.5 - 9.3
	NC		-	-	25	30	35	39
90	CMH		324	486	648	810	972	1134
	Throw (m)	Ceiling	0.9 - 0.9	2.4 - 2.7	3.9 - 3.9	4.8 - 4.8	5.7 - 6.0	6.6 - 6.9
		Wall	2.4 - 3.3	3.6 - 4.8	5.1 - 6.3	5.7 - 7.2	7.2 - 8.7	8.1 - 9.9
	NC		-	-	26	31	36	40
105	CMH		378	567	756	945	1134	1323
	Throw (m)	Ceiling	1.1 - 1.1	2.6 - 2.7	4.2 - 4.2	5.0 - 5.1	6.2 - 6.5	7.1 - 7.2
		Wall	2.8 - 3.7	4.0 - 5.2	5.5 - 6.8	6.2 - 7.7	7.5 - 9.2	8.6 - 10.5
	NC		-	-	26	31	36	40
120	CMH		432	648	864	1080	1296	1512
	Throw (m)	Ceiling	1.3 - 1.3	2.8 - 2.8	4.3 - 4.3	5.3 - 5.3	6.6 - 6.7	7.4 - 7.4
		Wall	3.2 - 4.0	4.4 - 5.6	5.8 - 7.1	6.6 - 8.1	7.7 - 9.5	8.8 - 10.7
	NC		-	-	26	31	36	40
135	CMH		486	729	972	1215	1458	1701
	Throw (m)	Ceiling	1.5 - 1.5	3.0 - 3.0	4.5 - 4.5	5.4 - 5.4	6.9 - 6.9	7.5 - 7.5
		Wall	3.3 - 4.2	4.8 - 6.0	6.0 - 7.2	7.2 - 8.4	8.1 - 9.6	9.0 - 10.8
	NC		-	20	27	32	37	41
165	CMH		594	891	1188	1485	1782	2079
	Throw (m)	Ceiling	1.8 - 1.8	3.3 - 3.3	4.8 - 4.8	6.0 - 6.0	7.5 - 7.7	8.1 - 8.1
		Wall	3.6 - 4.5	5.4 - 6.6	6.6 - 7.8	7.9 - 9.0	8.5 - 10.1	9.6 - 11.4
	NC		-	20	27	32	37	41
195	CMH		702	1053	1404	1755	2106	2457
	Throw (m)	Ceiling	2.0 - 2.0	3.5 - 3.5	5.0 - 5.0	6.3 - 6.3	7.8 - 7.9	8.5 - 8.5
		Wall	3.9 - 4.8	6.0 - 7.1	7.0 - 8.2	8.5 - 9.5	8.8 - 10.4	10.0 - 11.7
	NC		-	22	28	33	38	42
225	CMH		810	1215	1620	2025	2430	2835
	Throw (m)	Ceiling	2.3 - 2.3	3.8 - 3.8	5.2 - 5.2	6.6 - 6.6	8.0 - 8.0	8.8 - 8.8
		Wall	4.3 - 5.2	6.7 - 7.7	7.4 - 8.6	9.2 - 9.9	9.2 - 9.9	10.4 - 12.1
	NC		-	22	28	33	38	42

- Above performance data is also applicable for RAC with one meter curve length.
- Throw values are based on an entire section one meter long.
- Throw is based on terminal velocities of 0.5 m/s - 0.25 m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10⁻¹² watts.
- Dash (-) in space indicates NC value less than 20.
- Corrected values for throw and NC value as the length changes.

RA/RAC Bar Grille

RA/RAC -2 (15°) - Supply Performance Data (2)

Neck Width (mm)	Neck Vel. (m/s)		1.0	1.5	2.0	2.5	3.0	3.5
	Tot. Press (mmAq)		0.4	0.6	0.9	1.6	2.2	3.0
255	CMH		918	1377	1836	2295	2754	3213
	Throw (m)	Ceiling	2.6 - 2.6	4.0 - 4.0	5.4 - 5.4	6.9 - 6.9	8.2 - 8.2	9.0 - 9.0
		Wall	4.7 - 5.5	7.4 - 8.3	7.9 - 9.0	10.0 - 10.4	9.6 - 11.0	10.8 - 12.5
	NC		-	23	29	34	39	43
285	CMH		1026	1539	2052	2565	3078	3591
	Throw (m)	Ceiling	2.8 - 2.8	4.2 - 4.2	5.6 - 5.6	7.2 - 7.2	8.3 - 8.3	9.2 - 9.2
		Wall	5.1 - 5.9	8.2 - 9.0	8.3 - 9.5	10.7 - 10.9	9.9 - 11.4	11.2 - 12.8
	NC		-	23	29	34	39	43
315	CMH		1134	1701	2268	2835	3402	3969
	Throw (m)	Ceiling	3.1 - 3.1	4.5 - 4.5	5.9 - 5.9	7.5 - 7.5	8.5 - 8.5	9.5 - 9.5
		Wall	5.5 - 6.3	9.1 - 9.7	8.8 - 10.0	11.6 - 11.5	10.3 - 11.7	11.7 - 13.2
	NC		-	25	30	35	40	44

- Above performance data is also applicable for RAC with one meter curve length.
- Throw values are based on an entire section one meter long.
- Throw is based on terminal velocities of 0.5 m/s - 0.25 m/s respectively.
- NC value is based on a room absorption of 10 dB, re 10⁻¹² watts.
- Dash (-) in space indicates NC value less than 20.
- Corrected values for throw and NC value as the length changes.

Length (M)	0.5	1	1.5	2
NC	-2	0	+2	+3
Terminal Vel. 0.5m/s	0.8	1	1.1	1.2
Terminal Vel. 0.25m/s	0.9	1	1.15	1.2

Eg: When length is 2m, Throw: use a multiple of 1.2. NC: NC plus 3

RA/RAC Bar Grille

RA/RAC - Return Performance Data

Neck Width (mm)	Neck Vel. (m/s)	1.0	1.5	2.0	2.5	3.0	3.5
	Vel. Press (mmAq)	0.25	0.55	1.0	1.55	2.2	3.0
	Neg. SP. (mmAq)	0.3	0.5	0.7	1.2	1.7	2.3
45	CMH	162	243	324	405	486	567
	NC	-	-	24	29	34	38
60	CMH	216	324	432	540	648	756
	NC	-	-	23	28	33	37
75	CMH	270	405	540	675	810	945
	NC	-	-	23	28	33	37
90	CMH	324	486	648	810	972	1134
	NC	-	-	24	29	34	38
105	CMH	378	567	756	945	1134	1323
	NC	-	-	24	29	34	38
120	CMH	432	648	864	1080	1296	1512
	NC	-	-	24	29	34	38
135	CMH	486	729	972	1215	1458	1701
	NC	-	-	25	30	35	39
165	CMH	594	891	1188	1485	1782	2079
	NC	-	-	25	30	35	39
195	CMH	702	1053	1404	1755	2106	2457
	NC	-	21	26	31	36	40
225	CMH	810	1215	1620	2025	2430	2835
	NC	-	21	26	31	36	40
255	CMH	918	1372	1836	2295	2754	3213
	NC	-	22	27	32	37	41
285	CMH	1026	1539	2052	2565	3078	3591
	NC	-	22	27	32	37	41
315	CMH	1134	1701	2268	2835	3402	3969
	NC	-	22	28	33	38	42

- Above performance data is also applicable for RAC with one meter curve length.
- NC value is based on a room absorption of 10 dB, re 10⁻¹² watts.
- Dash (-) in space indicates NC value less than 20.
- Corrected values for throw and NC value as the length changes.

Length (M)	0.5	1	1.5	2
NC	-2	0	+2	+3

RA Order Code

Model	Materials	Accessories	W	L
RA	A	PB	120	1000

Example : RA - A + PB - 1000 x 120