CMP-A – Ceiling Multi Pattern Diffuser (Aluminium)

Model: **CMP-A Ceiling Multi Pattern – Aluminium**

The Series CMP-A diffusers are a Louver Face Ceiling Diffuser of extruded aluminium construction, with removable core, available in a range of sizes and air distribution patterns, to suit numerous and varied requirements.

Construction

Series CMP-A diffusers are ruggedly constructed entirely of aluminium, are lightweight and have no heavy cast, or moulded components. Precision combination corner gussets and braces keep mitres to a hairline and aluminium rivets hold the core components rigidly together, eliminating the possibility of warping, flexing, or rattling.

Panel diffusers (Type 2 on page 144D), are mechanically secured to steel panels with the Unique Holyoake mounting pins, eliminating gaps and producing a super-fine junction between panel and extrusion.

Installation

The diffusers frame assembly is installed in the ceiling opening and attached and sealed to the supply duct. The extensive range of cores, all snap in to the frame surrounds, with nickel plated spring steel thumb clips.

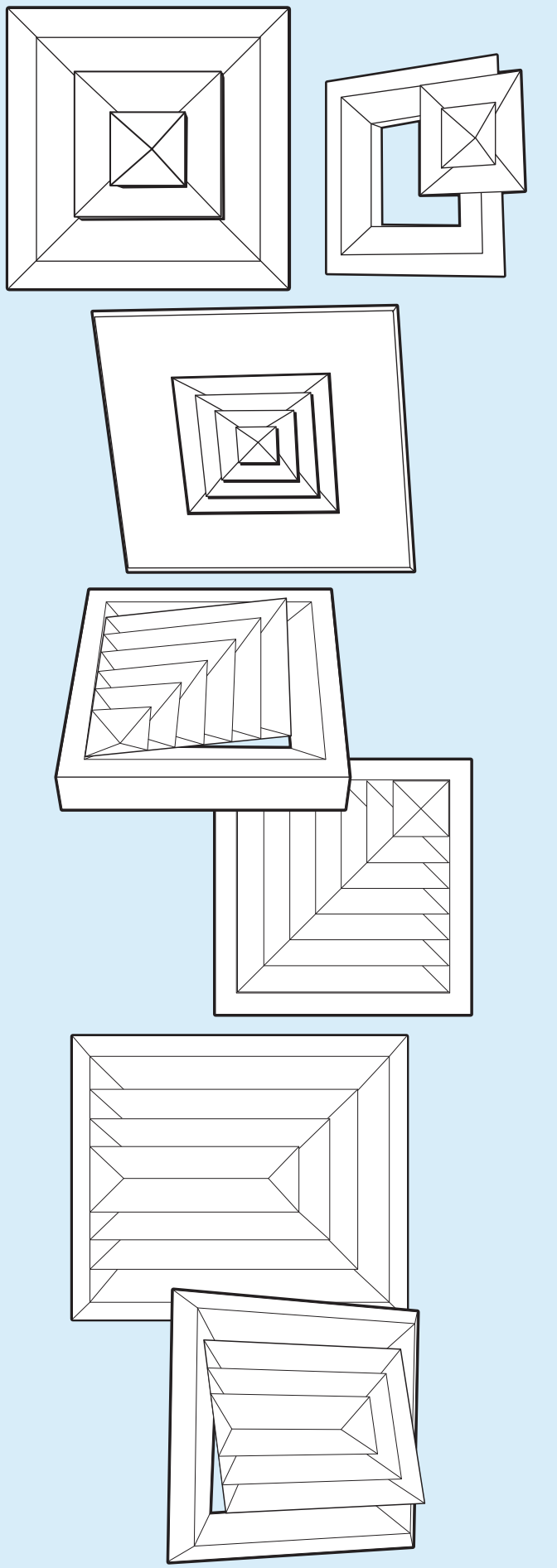
Finish

All Holyoake aluminium diffusers receive a three stage preparation, prior to final finishing; cleaning, chemical etch and drying. This preparation ensures powder coat adhesion and precludes powder peeling, or flaking after installation.
Standard colour is Holyoake White.

Features

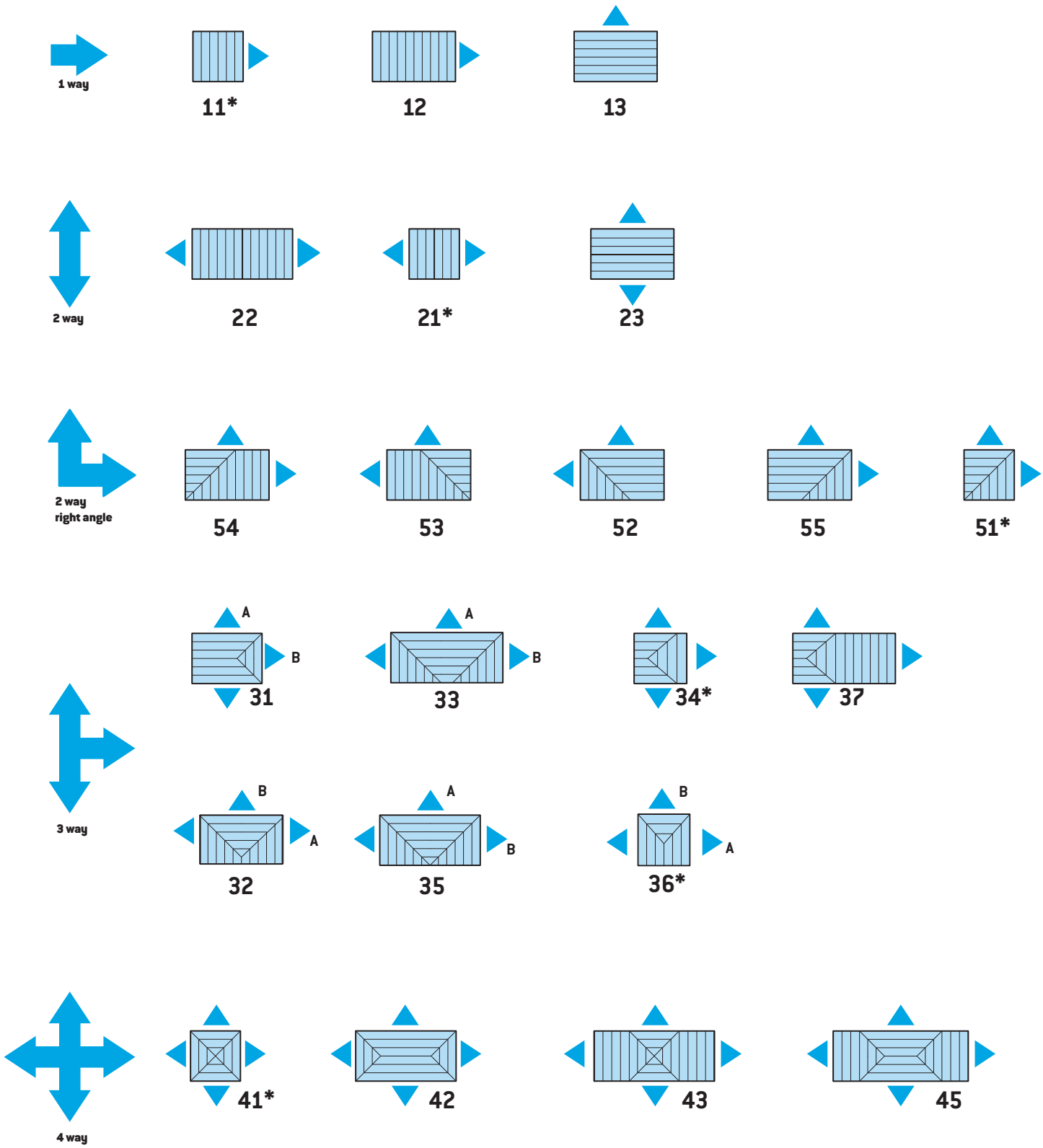
- All aluminium construction.
- Precision mitred corners.
- Selection of frame styles.
- Variety of throw patterns.
- Snap-in interchangeable cores.
- Tough powder coat finish.
- Lightweight Premi-Aire™ and galvanised cushion head boxes available.

Ceiling Diffuser



Due to a policy of continuous development and improvement the right is reserved to supply products which may differ slightly from those illustrated and described in this publication.

Model: **CMP** and **CMPH Core Styles**



* Square core patterns.
Diffusers are only available in standard sizes as listed in performance data.

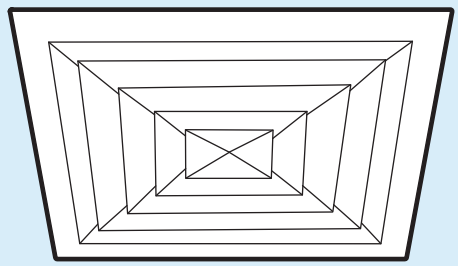
CMP-A – Ceiling Multi Pattern Diffuser (Aluminium)

Model: **CMP-A – Ceiling Multi Pattern Diffuser (Aluminium)**

Standard Flange Frame.

Designed for surface mounting on all types of ceilings, as well as lay-in ceiling tile applications.

Type 1

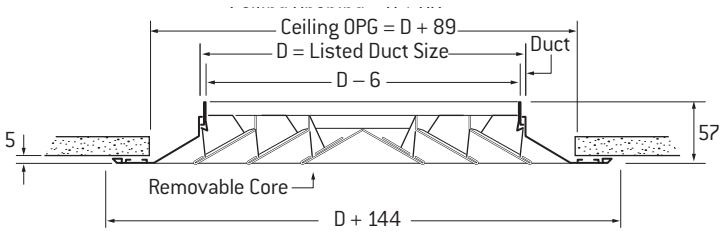


Construction

Aluminium:

0.75mm extruded 6063-T5 aluminium outer frame.

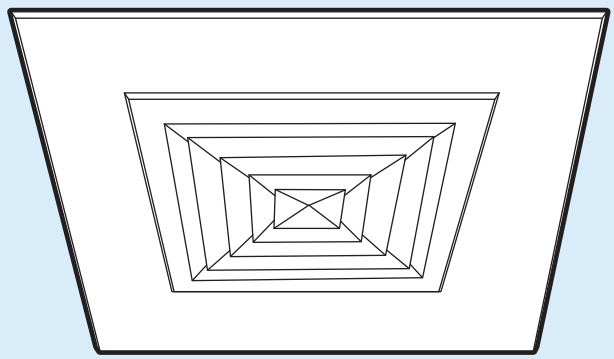
0.55mm removable aluminium core.



Panel Diffuser.

Lay-in type for installation in suspended "T-Rail" type ceilings. Standard panel overall size is 595 x 595 to suit a 600 x 600 grid. Size 450 x 450 has an overall face size of 595 x 595. It therefore does not require a panel in a 600 grid and fits "T-Rail" spacing with clearance*.

Type 2

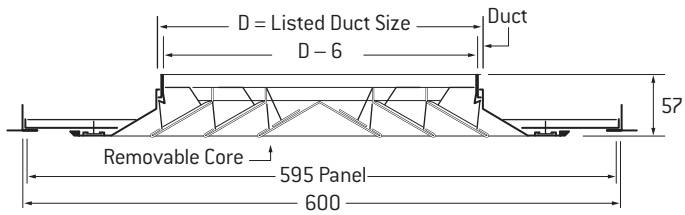


Construction

Aluminium:

0.75mm extruded 6063-T5 aluminium outer frame.

0.55mm removable aluminium core.



* Note: 0.75 mm Steel Panel on CMP-A Type 2.

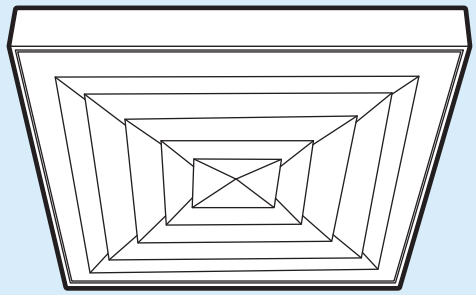
Product weights are shown on page 150D.

Model: **CMP-A – Ceiling Multi Pattern Diffuser (Aluminium)**

Drop Frame.

Lowers the face of the diffuser below the ceiling line. Can be used to reduce smudging, or against obstacles to minimise drafts. Can be supplied in any height from 50 - 81mm, but unless otherwise specified, frame height of 50 mm will be furnished. Special order only.

Type 3

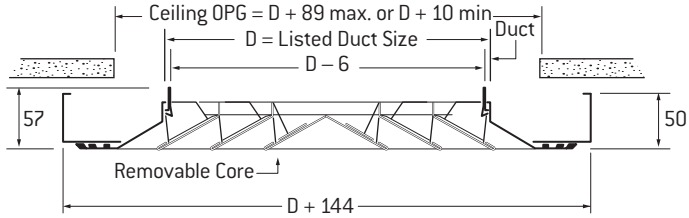


Construction

Aluminium:

0.75mm extruded 6063-T5 aluminium outer frame.

0.55mm removable aluminium core.

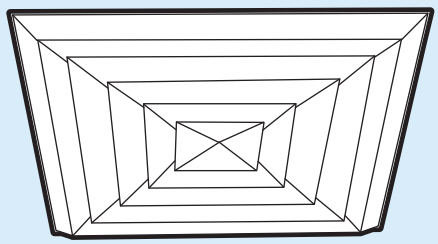


Bevelled Drop Frame.

Smartly styled bevelled type surround reduces ceiling smudging.

For all surface mounting applications. Special order only.

Type 4



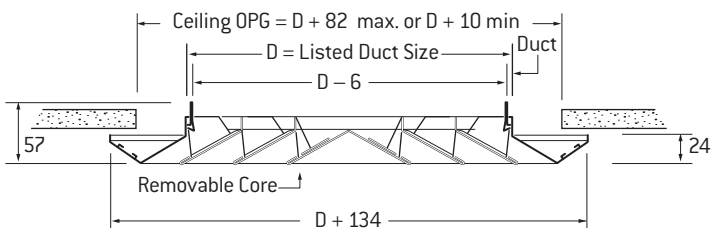
Construction

Aluminium:

0.75mm extruded 6063-T5 aluminium outer frame.

0.55mm removable aluminium core.

Product weights are shown on page 150D.



CMP – Octave Band Sound Data

Model: **CMP Supply**

Lp		OCTAVE BANDS, Lw					
NC	A-Scale	125	250	500*	1000	2000	4000
15	19	38-40-42-44	30-32-34-35	27-27-27-27	25-25-25-25	21-19-17-15	9-5 – –
20	24	40-42-44-46	33-35-37-38	31-31-31-31	30-30-30-30	27-25-23-21	17-13- 9 –
25	29	43-45-47-49	37-39-41-42	35-35-35-35	35-35-35-35	32-30-28-26	24-20-16-11
30	34	46-48-50-52	40-42-44-45	40-40-40-40	39-39-39-39	37-35-33-31	31-27-23-18
35	39	49-51-53-55	44-46-48-49	44-44-44-44	44-44-44-44	42-40-38-36	38-34-30-25
40	44	52-54-56-58	48-50-52-53	48-48-48-48	49-49-49-49	47-45-43-41	45-41-37-32
45	49	55-57-59-61	51-53-55-56	53-53-53-53	54-54-54-54	52-50-48-46	51-47-43-38
50	54	58-60-62-64	55-57-59-60	57-57-57-57	59-59-59-59	57-55-53-51	56-52-48-43

* Add 4dB for Aluminium Diffuser

1.49m² Duct
0.372m² Duct
0.092m² Duct
0.023m² Duct

Model: **CMP Return**

Lp		OCTAVE BANDS, Lw					
NC	A-Scale	125*	250	500	1000	2000	4000
15	18	24-29-34-40	26-27-28-29	25-26-27-28	25-25-25-25	22-22-22-21	18-17-16-16
20	23	28-33-38-44	30-31-32-33	29-30-31-32	30-30-30-30	27-27-27-26	24-23-22-22
25	28	33-38-43-49	35-36-37-38	34-35-36-37	35-35-35-35	32-32-31-30	29-28-27-27
30	33	37-42-47-53	39-40-41-42	38-39-40-41	39-39-39-39	37-37-36-35	35-34-33-33
35	38	41-46-51-57	43-44-45-46	42-43-44-45	44-44-44-44	42-42-41-40	41-40-39-39
40	43	46-51-56-62	48-49-50-51	47-48-49-50	49-49-49-49	47-46-45-44	46-45-44-44
45	48	50-55-60-66	52-53-54-55	51-52-53-54	54-54-54-54	52-51-50-49	51-51-50-50
50	53	54-59-64-70	56-57-58-59	55-56-57-58	59-59-59-59	57-56-55-54	56-56-55-55

* Subtract 9dB for Aluminium Diffuser

1.49m² Duct
0.372m² Duct
0.092m² Duct
0.023m² Duct

Notes on Sound Performance Data

The NC values are obtained from the performance tables on pages 148D to 157D, which are based on 8 dB room attenuation re 10^{-12} watts. The octave band dB values are sound power levels (Lw) re 10^{-12} watts. In the tables above, four values are shown for each octave band and NC value, with the first value for a duct area of 0.023m², second 0.092 m², third 0.372 m² and fourth for 1.49 m².

The A-scale dB values are based on a 8 dB room attenuation re 10^{-12} watts.

Lp - Sound pressure level, dB re 0.0002 microbars.

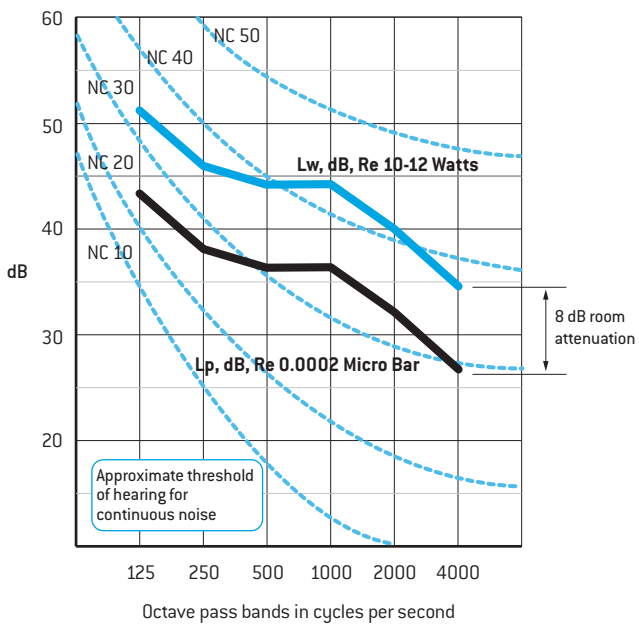
Lw - Sound power level, dB re 10^{-12} watts.

Example

A 300 x 300 CMP supplies 0.378 m³/s. List the complete sound analysis for this condition. (A 300 x 300 CMP has a duct area of 0.090 m²).

The Performance Table on Page 148D shows that a 300 x 300 CMP supplying 0.378 m³/s satisfies an NC35. The CMP Supply table above lists the following A-scale and octave band sound levels for an NC35 and 0.092 m² duct.

dB,	Lp	Octave Bands - dB, Lw					
NC	A	125	250	500	1000	2000	4000
35	39	51	46	44	44	40	34

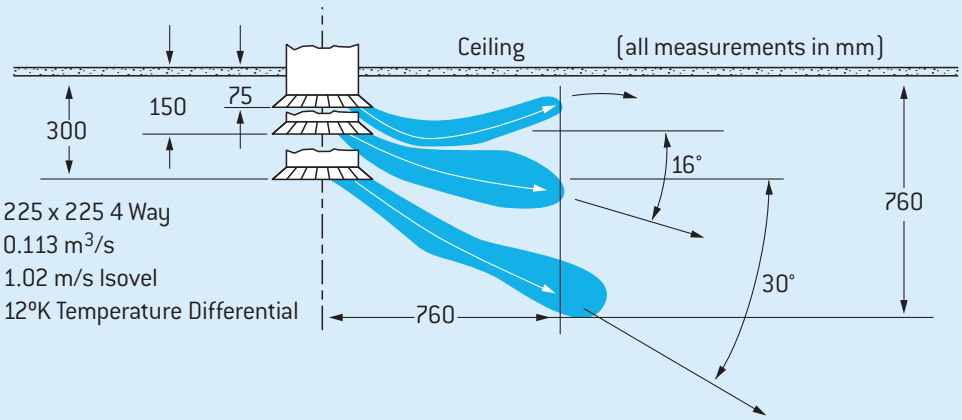


Above octave band sound power levels (Lw) plotted (top curve). The lower curve that satisfies an NC 35 was obtained by subtracting 8 dB (Room Attenuation) from each octave band sound power level.

Notes on Throw Performance Data

1. The CMP and CMPH Performance Data in the tables on the following pages (Pages 148D - 157D and 160D - 165D) applies when the outlet is mounted near the ceiling with ceiling effect.
2. Where no ceiling effect is present the horizontal throw will be about 25% less than shown in the tables.
3. The subsequent downward projection should be taken into account.

Effects of Mounting Position on Air Pattern



RECOMMENDED MAXIMUM AIR FLOW						
Ceiling Height, m.	2.40	2.70	3.00	3.60	4.20	4.80
Air Flow (m^3/s) per side	0.095	0.165	0.260	0.425	0.660	0.755

This data is based on 12°C Δt (temperature differential) during cooling.

General Performance Notes

1. Pressure: All pressures are in Pa (N/m²)

- TP = Total Pressure
- –SP = Negative Static Pressure

2. Throw: Maximum throws are to a terminal velocity of 0.25 m/s, middle to 0.5 m/s, and minimum to 0.75 m/s.

3. Sound: The NC values are based on a room absorption of 8 dB, re 10^{-12} watts and one steel diffuser. For aluminium diffusers, apply the following corrections to the listed data:

Supply:	NC = Listed + 3
	TP = Listed x 1.5
	THROW = Listed x 1.0
Return:	NC = Listed + 2
	–SP = Listed x 1.0

CMPH: Where table shows –, NC is below 20.

4. Return Factors: If the unit is used as a return inlet, the performance data is obtained by applying the return factors shown on each table in the following manner:

- **a. Sound: Add the factor shown to the NC value listed.**
- **b. Negative Static Pressure: Multiply the return factor by the total pressure listed.**

Return Example:

150 x 150 CMP with 0.071 m^3/s being returned through the unit.
Return NC = 20 + 1 = 21
Return Pressure (-SP) = TP x 1.1 = 25 (1.1) = 27.5 Pa (N/m²)

5. Size in mm: This is the Diffuser Listed Duct Size or Nominal Neck Opening

Symbols

m^3/s	Cubic metres per second	Pt	Total pressure Pa (= Ps + Pv)
m/s	Metres per second	Δt	Temperature differential, room to supply
Vk	Outlet velocity, m/s	Throw	Distance air travels from diffuser to a given Vt.
Vt	Air stream terminal velocity, m/s		Tables show throws to Vts of 0.75 (min);
Ak	Diffuser or register net jet area, m^2		0.5 and 0.25 (max) m/s.
AD or An	Inlet duct or neck area	NC	Noise criteria. Ratings are based on sound
Ps	Static pressure, Pa		power level (SWL) re. 10^{-12} watts minus 8 dB
Pv	Velocity pressure, Pa		room attenuation in all frequency bands.

Note

All ceiling diffusers, seismic restraints are required, but not supplied.

CMP – Performance Data

Size in mm	Patterns	Neck Vel m/s / TP Pa	1.57 / 6		2.10 / 11		2.62 / 18		3.15 / 25		3.67 / 35		4.19 / 45		4.72 / 57	
	Return Factors NC+1 -SP=1.1TP	Total m^3/s NC	0.036 / -		0.047 / 7		0.059 / 14		0.071 / 20		0.083 / 24		0.094 / 28		0.106 / 32	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 150	41	m^3/s side throw m	0.009		0.012		0.015		0.018		0.020		0.024		0.027	
			1.2		1.5		1.8		1.8		2.1		2.1		2.4	
			1.5		1.8		2.1		2.1		2.4		2.4		2.7	
			2.1		2.4		2.7		3.1		3.4		3.4		3.7	
	36 A/B	m^3/s side throw m	0.009	0.013	0.012	0.018	0.015	0.022	0.018	0.026	0.201	0.031	0.024	0.036	0.027	0.040
			1.2	1.5	1.5	1.8	1.8	2.1	1.8	2.1	2.1	2.4	2.1	2.4	2.4	2.7
			1.5	2.1	1.8	2.4	2.1	2.7	2.1	3.1	2.4	3.4	2.4	3.4	2.7	3.7
			2.1	3.1	2.4	3.4	2.7	4.0	3.1	4.3	3.4	4.6	3.4	4.9	3.7	5.2
	34 A/B *	m^3/s side throw m	0.018	0.009	0.024	0.012	0.029	0.015	0.036	0.018	0.041	0.021	0.047	0.024	0.053	0.027
			1.8	1.2	2.1	1.5	2.4	1.8	2.7	1.8	2.7	2.1	3.1	2.1	3.4	2.4
			2.4	1.5	2.7	1.8	3.1	2.1	3.4	2.1	3.7	2.4	4.0	2.4	4.3	2.7
			3.1	2.4	3.7	2.7	4.3	3.1	4.6	3.4	4.9	3.7	5.2	4.0	5.5	4.3
AD 0.023 m^2	21 / 51	m^3/s side throw m	0.018		0.024		0.029		0.036		0.042		0.049		0.053	
			2.1		2.4		2.7		3.1		3.4		3.4		3.7	
			2.4		2.7		3.1		3.4		3.7		4.0		4.3	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
	11	m^3/s side throw m	0.035		0.047		0.060		0.071		0.083		0.094		0.107	
			2.4		2.7		3.1		3.4		3.7		4.0		4.3	
			3.1		3.4		4.0		4.3		4.6		4.9		5.2	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
	Return Factors NC+3 -SP=1.3TP	Total m^3/s NC	0.080 / -		0.106 / 11		0.133 / 18		0.160 / 24		0.186 / 28		0.212 / 32		0.239 / 36	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
225 x 225	41	m^3/s side throw m	0.020		0.026		0.033		0.040		0.046		0.053		0.059	
			1.5		1.8		2.1		2.1		2.4		2.4		2.7	
			1.8		2.1		2.4		2.7		2.7		3.1		3.4	
			2.7		3.1		3.4		3.7		4.0		4.3		4.6	
	36 A/B	m^3/s side throw m	0.020	0.030	0.026	0.040	0.033	0.050	0.040	0.060	0.046	0.070	0.053	0.080	0.060	0.090
			1.5	2.1	1.8	2.4	2.1	2.7	2.1	3.1	2.4	3.4	2.4	3.4	2.7	3.7
			1.8	2.7	2.1	3.1	2.4	3.4	2.7	3.7	2.7	4.0	3.1	4.3	3.4	4.6
			2.7	3.7	3.1	4.3	3.4	4.9	3.7	5.2	4.0	5.5	4.3	6.1	4.6	6.4
	34 A/B *	m^3/s side throw m	0.034	0.023	0.044	0.031	0.056	0.039	0.067	0.046	0.078	0.054	0.089	0.062	0.100	0.070
			2.1	2.1	2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.4	3.4	3.7	3.7
			2.7	2.4	3.1	2.7	3.4	3.1	3.7	3.4	4.0	3.7	4.3	4.0	4.6	4.3
			3.7	3.4	4.3	4.0	4.9	4.6	5.2	4.9	5.5	5.2	6.1	5.5	6.4	6.1
AD 0.051 m^2	21 / 51	m^3/s side throw m	0.040		0.053		0.067		0.080		0.093		0.106		0.119	
			2.7		3.1		3.4		3.7		4.0		4.3		4.6	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
	11	m^3/s side throw m	0.080		0.106		0.133		0.160		0.186		0.212		0.239	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.8		6.7		7.6		8.2		8.8		9.5		10.1	
	Return Factors NC+5 -SP=1.4TP	Total m^3/s NC	0.142 / -		0.189 / 14		0.236 / 21		0.283 / 27		0.330 / 31		0.378 / 35		0.425 / 39	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
300 x 300	41	m^3/s side throw m	0.035		0.047		0.059		0.071		0.083		0.094		0.106	
			1.8		2.1		2.4		2.7		2.7		3.1		3.4	
			2.4		2.7		3.1		3.4		3.7		4.0		4.3	
			3.1		3.7		4.3		4.5		4.9		5.2		5.5	
	36 A/B	m^3/s side throw m	0.035	0.053	0.047	0.071	0.059	0.088	0.071	0.106	0.083	0.124	0.094	0.142	0.106	0.160
			1.8	2.4	2.1	2.7	2.4	3.1	2.7	3.4	2.7	3.7	3.1	4.0	3.4	4.3
			2.4	3.1	2.7	3.4	3.1	4.0	3.4	4.3	3.7	4.6	4.0	4.9	4.3	5.2
			3.1	4.3	3.7	4.9	4.3	5.5	4.6	6.1	4.9	5.4	5.2	7.0	5.5	7.3
	34 A/B *	m^3/s side throw m	0.053	0.044	0.071	0.059	0.088	0.074	0.106	0.088	0.124	0.103	0.142	0.118	0.160	0.133
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.4	3.4	4.0	4.0	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2
			4.3	4.3	4.9	4.9	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3	7.3
AD 0.090 m^2	21 / 51	m^3/s side throw m	0.071		0.094		0.118		0.142		0.165		0.189		0.212	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	11	m^3/s side throw m	0.142		0.189		0.236		0.283		0.390		0.378		0.425	
			4.0		4.6		5.2		5.5		6.1		6.4		7.0	
			4.9		5.5		6.4		6.7		7.3		7.6		8.2	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
	Return Factors NC+5 -SP=1.9TP	Total m^3/s NC	0.220 / 7		0.295 / 16		0.368 / 23		0.441 / 29		0.515 / 33		0.590 / 37		0.661 / 41	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
375 x 375	41	m^3/s side throw m	0.055		0.074		0.092		0.110		0.129		0.147		0.165	
			2.1		2.4		2.7		3.1		3.4		3.4		3.7	
			2.7		3.1		3.4		3.7		4.0		4.3		4.6	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
	36 A/B	m^3/s side throw m	0.055	0.083	0.074	0.111	0.092	0.138	0.110	0.166	0.129	0.193	0.147	0.221	0.165	0.249
			2.1	3.1	2.4	3.7	2.7	4.3	3.1	4.6	3.3	4.9	3.4	5.2	3.7	5.5
			2.7	3.7	3.1	4.3	3.4	4.9	3.7	5.2	4.0	5.5	4.3	6.1	4.6	6.4
			3.7	5.2	4.3	6.1	4.9	7.0	5.2	7.6	5.5	7.9	6.1	8.5	6.4	9.2
	34 A/B *	m^3/s side throw m	0.077	0.072	0.103	0.096	0.129	0.119	0.154	0.144	0.180	0.158	0.206	0.191	0.232	0.215
			2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3	4.6	4.6
			3.4	3.4	4.0	4.0	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1
			4.9	4.9	5.5	5.5	6.4	6.4	6.7	6.7	7.3	7.3	7.6	7.6	8.2	8.2
AD 0.141 m^2	21 / 51	m^3/s side throw m	0.111		0.147		0.184		0.221		0.258		0.295		0.330	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			6.4		7.3		8.2		9.2		9.8		10.4		11.0	
	11	m^3/s side throw m	0.220		0.295		0.368		0.441		0.515		0.590		0.661	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			5.5		6.4		7.3		7.9		8.5		9.2		9.8	
			7.9		9.2		10.4		11.3		12.2		12.8		13.7	

All ceiling diffusers, seismic restraints are required, but not supplied. * These cores are constructed to give as near as possible equal air flow in A & B directions.

Size in mm	Patterns	Neck Vel m/s / TP Pa	1.57 / 6		2.10 / 11		2.62 / 18		3.15 / 25		3.67 / 35		4.19 / 45		4.72 / 57	
	Return Factors NC+7 -SP=2.2TP	Total m³/s / NC	0.319 / 9		0.425 / 18		0.531 / 25		0.637 / 31		0.734 / 35		0.850 / 39		0.956 / 43	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
450 x 450	41	m³/s side throw m	0.079		0.106		0.132		0.159		0.188		0.212		0.238	
			2.4		2.7		3.1		3.4		3.7		4.0		4.3	
			3.1		3.4		4.0		4.3		4.6		4.9		5.2	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
	36	m³/s side throw m	0.079	0.119	0.106	0.159	0.132	0.199	0.159	0.239	0.186	0.279	0.212	0.319	0.239	0.359
			2.4	3.4	2.7	4.0	3.1	4.6	3.4	4.9	3.7	5.2	4.0	5.5	4.3	6.1
			3.1	4.3	3.4	4.9	4.0	5.5	4.3	6.1	4.6	6.4	4.9	7.0	5.2	7.3
			4.3	5.8	4.9	6.7	5.5	7.6	6.1	8.2	6.4	8.8	7.0	9.5	7.3	10.1
	34 *	m³/s side throw m	0.106	0.106	0.142	0.142	0.177	0.177	0.212	0.212	0.248	0.248	0.283	0.283	0.319	0.319
			3.4	3.4	4.0	4.0	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1
			4.3	4.3	4.9	4.9	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3	7.3
			5.8	5.8	6.7	6.7	7.6	7.6	8.3	8.3	8.8	8.8	9.5	9.5	10.1	10.1
AD 0.202 m²	21 / 51	m³/s side throw m	0.159		0.212		0.265		0.318		0.371		0.425		0.477	
			4.0		4.6		5.2		5.5		6.1		6.4		7.0	
			4.9		5.5		6.4		6.7		7.3		7.6		8.2	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
	11	m³/s side throw m	0.319		0.425		0.531		0.638		0.743		0.850		0.956	
			4.9		5.8		6.7		7.0		7.6		8.2		8.8	
			6.1		7.0		7.9		8.5		9.2		10.1		10.7	
			8.5		9.8		11.3		11.9		12.8		13.7		14.6	
	Return Factors NC+9 -SP=2.7TP	Total m³/s / NC	0.433 / 11		0.578 / 20		0.722 / 27		0.866 / 33		1.010 / 37		1.157 / 41		1.298 / 45	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
525 x 525	41	m³/s side throw m	0.109		0.144		0.180		0.217		0.253		0.289		0.325	
			2.7		3.1		3.4		3.7		4.0		4.3		4.6	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.9		5.5		6.4		6.7		7.3		7.6		8.2	
	36	m³/s side throw m	0.109	0.163	0.144	0.217	0.180	0.271	0.217	0.325	0.235	0.379	0.289	0.423	0.325	0.486
			2.7	3.7	3.1	4.3	3.4	4.9	3.7	5.2	4.0	5.5	4.3	6.1	4.6	6.4
			3.4	4.6	4.0	5.2	4.6	5.8	4.9	6.4	5.2	6.7	5.5	7.3	6.1	7.9
			4.9	6.4	5.5	7.3	6.4	8.2	6.7	9.2	7.3	9.8	7.6	10.4	8.2	11.0
	34 *	m³/s side throw m	0.139	0.146	0.186	0.194	0.232	0.243	0.279	0.292	0.325	0.340	0.369	0.389	0.418	0.438
			3.4	3.4	4.0	4.0	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1
			4.3	4.3	4.9	4.9	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3	7.3
			5.8	5.8	6.7	6.7	7.6	7.6	8.2	8.2	8.8	8.8	9.5	9.5	10.1	10.1
AD 0.276 m²	21 / 51	m³/s side throw m	0.216		0.289		0.361		0.433		0.505		0.578		0.649	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			5.5		6.4		7.3		7.9		8.5		9.2		9.8	
			7.9		9.2		10.4		11.3		12.2		12.8		13.7	
	11	m³/s side throw m	0.432		0.578		0.723		0.866		1.010		1.160		1.300	
			5.5		6.4		7.3		7.9		8.5		9.2		9.8	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
			9.5		11.0		12.5		13.4		14.6		15.6		16.5	
	Return Factors NC+9 -SP=2.83TP	Total m³/s / NC	0.566 / 12		0.755 / 21		0.944 / 28		1.130 / 34		1.320 / 38		1.510 / 42		1.700 / 46	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
600 x 600	41	m³/s side throw m	0.142		0.189		0.236		0.283		0.330		0.378		0.425	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	36	m³/s side throw m	0.142	0.212	0.189	0.280	0.236	0.354	0.283	0.425	0.330	0.496	0.378	0.567	0.425	0.638
			3.1	4.0	3.7	4.6	4.3	5.2	4.6	5.5	4.9	6.1	5.2	6.4	5.5	7.0
			3.7	4.9	4.3	5.5	4.9	6.4	5.2	6.7	5.5	7.3	6.1	7.6	6.4	8.2
			5.2	7.0	6.1	7.9	7.0	9.2	7.6	9.8	7.9	10.4	8.5	11.3	9.2	11.9
	34 *	m³/s side throw m	0.213	0.177	0.283	0.236	0.354	0.295	0.425	0.354	0.496	0.413	0.567	0.472	0.638	0.531
			4.0	3.7	4.6	4.3	5.2	4.9	5.5	5.2	6.1	5.5	6.4	6.1	7.0	6.4
			4.9	4.6	5.5	5.2	6.4	5.8	6.7	6.4	7.3	6.7	7.6	7.3	8.2	7.9
			7.0	6.4	7.9	7.3	9.2	8.2	9.8	9.2	10.4	9.8	11.3	10.4	11.9	11.0
AD 0.360 m²	21 / 51	m³/s side throw m	0.283		0.378		0.472		0.566		0.661		0.755		0.850	
			4.9		5.8		6.7		7.0		7.6		8.2		8.8	
			6.1		7.0		7.9		8.5		9.2		10.1		10.7	
			8.5		9.8		11.3		11.9		12.8		13.7		14.6	
	11	m³/s side throw m	0.566		0.755		0.944		1.130		1.320		1.510		1.700	
			6.1		7.0		7.9		8.5		9.2		9.8		10.7	
			7.3		8.5		9.8		10.4		11.3		12.2		12.8	
			10.7		12.2		14.0		14.9		16.2		17.1		18.3	
	Return Factors NC+9 -SP=3.3TP	Total m³/s / NC	0.885 / 15		1.180 / 24		1.480 / 31		1.770 / 37		2.070 / 41		2.360 / 45		2.660 / 49	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
750 x 750	41	m³/s side throw m	0.221		0.295		0.369		0.442		0.516		0.590		0.664	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.8		6.7		7.6		8.2		8.8		9.5		10.1	
	36	m³/s side throw m	0.221	0.332	0.295	0.443	0.369	0.553	0.442	0.663	0.516	0.774	0.590	0.885	0.664	0.996
			3.4	4.6	4.0	5.2	4.6	5.8	4.9	6.4	5.2	6.7	5.5	7.3	6.1	7.9
			4.3	5.5	4.9	6.4	5.5	7.3	6.1	7.9	6.4	7.9	7.0	9.2	7.3	9.8
			5.8	7.9	6.7	9.2	7.6	10.4	8.2	11.3	8.8	12.2	9.5	12.8	10.1	13.7
	34 *	m³/s side throw m	0.308	0.289	0.412	0.384	0.515	0.481	0.619	0.576	0.720	0.670	0.820	0.767	0.926	0.862
			4.3	4.3	4.9	4.9	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3	7.3
			5.2	5.2	6.1	6.1	7.0	7.0	7.6	7.6	7.9	7.9	8.5	8.5	9.2	9.2
			7.3	7.3	8.5	8.5	9.8	9.8	10.4	10.4	11.3	11.3	12.2	12.2	12.8	12.8
AD 0.562 m²	21 / 51	m³/s side throw m	0.442		0.590		0.737		0.885		1.030		1.180		1.330	
			5.5		6.4		7.3		7.9		8.5		9.2		9.8	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
			9.5		11.0		12.5		13.4		14.6		15.6		16.5	
	11	m³/s side throw m	0.885		1.180		1.480		1.770		2.070		2.360		2.660	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
			8.5		9.8		11.3		11.9		12.8		13.7		14.6	
			11.9		13.7		15.6		16.8		18.0		21.0		20.7	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

CMP – Performance Data

Size in mm	Patterns	Neck Vel m/s TP Pa	1.57 6		2.10 11		2.62 18		3.15 25		3.67 35		4.19 45		4.72 57	
	Return Factors NC+11 -SP=3.8TP	Total m^3/s NC	1.270 16		1.700 25		2.120 32		2.550 38		2.970 42		3.400 46		3.820 50	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
900 x 900	41	m^3/s side throw m	0.319 3.7 4.6 6.4		0.425 4.3 5.2 7.3		0.531 4.9 5.8 8.2		0.637 5.2 6.4 9.2		0.743 5.5 6.7 9.8		0.850 6.1 7.3 10.4		0.956 6.4 7.9 11.0	
	36 (A/B)	m^3/s side throw m	0.319 3.7 4.6 6.4	0.477 4.9 6.1 8.5	0.425 4.3 5.2 7.3	0.637 5.0 8.7 9.8	0.531 4.9 5.8 8.2	0.796 6.7 7.9 11.3	0.637 5.2 6.4 9.2	0.956 7.0 8.5 11.9	0.743 5.5 6.7 9.8	1.120 7.6 9.2 12.8	0.850 6.1 7.3 10.4	1.270 8.2 10.1 13.7	0.956 6.4 7.9 11.0	1.430 8.8 10.7 14.6
	34 * (A/B)	m^3/s side throw m	0.425 0.2 6.1 8.5	0.425 4.9 6.1 8.5	0.566 5.8 7.0 9.8	0.566 5.8 7.0 9.8	0.708 6.7 7.9 11.3	0.708 6.7 7.9 11.3	0.850 7.0 8.5 11.9	0.850 7.0 8.5 11.9	0.991 7.6 9.2 12.8	0.991 7.6 9.2 12.8	1.130 8.2 10.1 13.7	1.130 8.2 10.1 13.7	1.270 8.8 10.7 14.6	1.270 8.8 10.7 14.6
AD 0.81 m^2	21 / 51	m^3/s side throw m	0.637 6.1 7.3 10.7		0.850 7.0 8.5 12.2		1.060 7.9 9.8 14.0		1.270 8.5 10.4 14.9		1.490 9.2 11.3 16.2		1.700 9.8 12.2 17.1		1.910 10.7 12.8 18.3	
	11	m^3/s side throw m	1.270 7.6 9.2 13.1		1.700 8.8 10.7 15.3		2.120 10.1 12.2 17.4		2.550 11.0 13.1 18.6		2.970 11.6 14.0 20.1		3.400 12.5 14.9 21.7		3.820 13.4 16.2 22.9	
	Return Factors NC+14 -SP=4.5TP	Total m^3/s NC	2.270 19		3.020 28		3.780 35		4.530 41		5.290 45		6.040 49		6.800 53	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
1200 x 1200	41	m^3/s side throw m	0.566 4.6 5.5 7.9		0.755 5.2 6.4 9.2		0.944 5.8 7.3 10.4		1.130 6.4 7.9 11.3		1.320 6.7 8.5 12.2		1.510 7.3 9.2 12.8		1.700 7.9 9.8 13.7	
	36 (A/B)	m^3/s side throw m	0.566 4.6 5.5 7.9	0.850 6.1 7.3 10.7	0.755 5.2 6.4 92.0	1.130 7.0 8.5 12.2	0.944 5.8 7.3 10.4	1.420 7.9 9.8 14.0	1.130 6.4 7.9 11.3	1.700 8.5 10.4 14.9	1.320 6.7 8.5 12.2	1.980 9.2 11.3 16.2	1.510 7.3 9.2 12.8	2.270 9.8 12.2 17.1	1.700 7.9 9.8 13.7	2.550 10.7 12.8 18.3
	34 * (A/B)	m^3/s side throw m	0.779 5.8 7.3 10.1	0.743 5.8 7.3 10.1	1.040 6.7 8.2 11.6	0.991 6.7 8.2 11.6	1.300 7.6 9.5 13.1	1.240 7.6 9.5 13.1	1.560 8.2 10.1 14.3	1.440 8.2 10.1 14.3	1.820 8.8 11.0 15.3	1.740 8.8 11.0 15.3	2.080 9.5 11.6 16.5	1.980 9.5 11.6 16.5	2.340 10.1 12.5 17.4	2.230 10.1 12.5 17.4
AD 1.44 m^2	21 / 51	m^3/s side throw m	1.130 7.6 9.2 13.1		1.510 8.8 10.7 15.3		1.890 10.1 12.2 17.4		2.270 11.0 13.1 18.6		2.640 11.6 14.0 20.1		3.020 12.5 14.9 21.7		3.400 13.4 16.2 22.9	
	11	m^3/s side throw m	2.270 9.2 11.3 15.9		3.020 10.7 13.1 18.3		3.780 12.2 14.9 20.7		4.530 13.1 16.2 22.6		5.290 14.0 17.4 24.1		6.040 14.9 18.6 25.9		6.800 16.2 19.8 27.5	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

Guide Product Weights Approximate Weight in Kg.				
Size	CMPA141	CMPA136	CMPA151	CMPA121
150 x 150	0.60	0.65	0.54	0.53
225 x 225	0.80	0.80	0.83	0.81
300 x 300	1.20	1.32	1.18	1.14
375 x 375	1.60	1.56	1.66	1.60
450 x 450	2.00	1.91	2.14	2.10

Guide Product Weights Approximate Weight in Kg.				
Size	CMPA111	CMPA241	CMP-S	CMPS141
150 x 150	0.51	2.60	PANEL 595 SQ	1.00
225 x 225	0.79	2.70		1.50
300 x 300	1.13	2.70		1.90
375 x 375	1.56	2.70	2.00	2.98
450 x 450	2.03	2.70		3.40

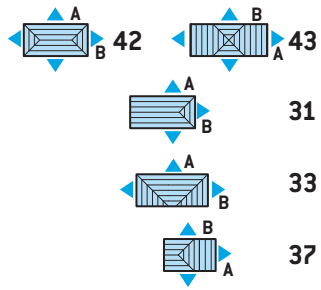
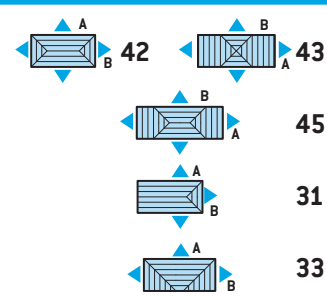
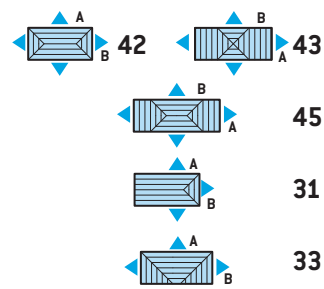
Size in mm	Patterns	Neck Vel m/s / TP Pa	1.57 / 6		2.10 / 11		2.62 / 18		3.15 / 25		3.67 / 35		4.19 / 45		4.72 / 57	
		Total m^3/s / NC	0.053 / -		0.071 / 10		0.088 / 17		0.106 / 23		0.124 / 27		0.142 / 31		0.159 / 35	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 225	Return NC+0	m^3/s side throw m	0.017	0.008	0.023	0.011	0.029	0.015	0.035	0.017	0.041	0.021	0.047	0.024	0.053	0.026
	Factors -SP=1.3 TP		1.8	1.2	2.1	1.5	2.4	1.8	2.7	1.8	2.7	2.1	3.1	2.1	3.4	2.4
			2.4	1.5	2.7	1.8	3.1	2.1	3.4	2.1	3.7	2.4	4.0	2.4	4.3	2.7
			3.1	2.1	3.7	2.4	4.3	2.7	4.6	3.1	4.9	3.4	5.2	3.4	5.5	3.7
	42 / 43	m^3/s side throw m	0.022	0.008	0.029	0.012	0.037	0.015	0.044	0.017	0.052	0.021	0.059	0.024	0.066	0.026
			2.1	1.2	2.4	1.5	2.7	1.8	3.1	1.8	3.4	2.1	3.4	2.1	3.7	2.4
			2.4	1.5	2.7	1.8	3.1	2.1	3.4	2.1	3.7	2.4	4.0	2.4	4.3	2.7
			3.4	2.1	4.0	2.4	4.6	2.7	4.9	3.1	5.2	3.4	5.5	3.4	6.1	3.7
	31	m^3/s side throw m	0.020	0.017	0.026	0.022	0.033	0.027	0.040	0.033	0.046	0.039	0.053	0.044	0.060	0.050
			1.8	1.5	2.1	1.8	2.4	2.1	2.7	2.1	2.7	2.4	3.1	2.4	3.4	2.7
			2.4	1.8	2.7	2.1	3.1	2.4	3.4	2.7	3.7	2.7	4.0	3.1	4.3	3.4
			3.1	2.7	3.7	3.1	4.3	3.4	4.6	3.7	4.9	4.0	5.2	4.3	5.5	4.6
	33	m^3/s side throw m	0.017	0.017	0.024	0.024	0.029	0.029	0.035	0.035	0.041	0.041	0.047	0.047	0.053	0.053
			1.8	1.8	2.1	2.1	2.4	2.4	2.7	2.7	2.7	2.7	3.1	3.1	3.4	3.4
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.7	3.7	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5
	37	m^3/s side throw m	0.026		0.035		0.044		0.053		0.062		0.071		0.079	
			2.4		2.7		3.1		3.4		3.7		4.0		4.3	
			3.1		3.4		4.0		4.3		4.6		4.9		5.2	
			4.0		4.6		5.2		5.5		6.1		6.4		7.0	
	22, 23	m^3/s side throw m	0.035	0.017	0.047	0.024	0.059	0.029	0.071	0.035	0.083	0.044	0.094	0.047	0.106	0.053
			2.4	1.8	2.7	2.1	3.1	2.4	3.4	2.7	3.7	2.7	4.0	3.1	4.3	3.4
			3.1	2.4	3.4	2.7	4.0	3.1	4.3	3.4	4.6	3.7	4.9	4.0	5.2	4.3
			4.3	3.0	4.9	3.6	5.5	4.3	6.1	4.6	6.4	4.9	7.0	5.2	7.3	5.5
AD 0.033 m^2	52 / 55 / 54 / 53	m^3/s side throw m	0.053		0.071		0.088		0.106		0.124		0.142		0.159	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.8		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	12, 13															
	Return NC+2	Total m^3/s / NC	0.071 / -		0.094 / 11		0.118 / 18		0.142 / 24		0.165 / 28		0.189 / 32		0.212 / 36	
	Factors -SP=1.7TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 300	42 / 43	m^3/s side throw m	0.026	0.009	0.035	0.012	0.044	0.015	0.055	0.018	0.062	0.021	0.071	0.024	0.080	0.026
			2.4	1.2	2.7	1.5	3.1	1.8	3.4	1.8	3.7	2.1	4.0	2.1	4.3	2.4
			3.1	1.5	3.4	1.8	4.0	2.1	4.3	2.1	4.6	2.4	4.9	2.4	5.2	2.7
			4.0	2.1	4.6	2.4	5.2	2.7	5.5	3.1	6.1	3.4	6.4	3.4	7.3	3.7
	45 *	m^3/s side throw m	0.018	0.018	0.024	0.024	0.029	0.029	0.035	0.035	0.041	0.041	0.047	0.047	0.053	0.053
			2.1	2.1	2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.4	3.4	3.7	3.7
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.4	3.4	4.0	4.0	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1
	31	m^3/s side throw m	0.031	0.009	0.041	0.012	0.052	0.015	0.062	0.018	0.072	0.020	0.083	0.024	0.093	0.026
			2.4	1.2	2.7	1.5	3.1	1.8	3.4	1.8	3.7	2.1	4.0	2.1	4.6	2.4
			3.1	1.5	3.4	1.8	4.0	2.1	4.3	2.1	4.6	2.4	4.9	2.4	5.5	2.7
			4.3	2.1	4.9	2.4	5.5	2.7	6.1	3.1	6.4	3.4	7.0	3.4	7.9	3.7
	33	m^3/s side throw m	0.035	0.018	0.047	0.024	0.060	0.029	0.071	0.035	0.083	0.041	0.094	0.047	0.107	0.053
			1.8	1.8	2.1	2.1	2.4	2.4	2.7	2.7	2.7	2.7	3.1	3.1	3.4	3.4
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.7	3.7	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5
	37	m^3/s side throw m	0.026	0.022	0.035	0.029	0.044	0.037	0.053	0.044	0.062	0.052	0.071	A59	0.080	0.066
			2.4	2.1	2.7	2.4	3.1	2.7	3.4	3.1	3.7	3.4	4.0	3.4	4.3	3.7
			3.1	2.7	3.4	3.1	4.0	3.4	4.3	3.7	4.6	4.0	4.9	4.3	5.2	4.6
			4.0	3.7	4.6	4.3	5.2	4.9	5.5	5.2	6.1	5.5	6.4	6.1	7.0	6.4
	22, 23	m^3/s side throw m	0.035		0.047		0.059		0.071		0.083		0.094		0.106	
			2.4		2.7		3.1		3.4		3.7		4.0		4.3	
			3.1		3.4		4.0		4.3		4.6		4.9		5.2	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
AD 0.045 m^2	52 / 55 / 54 / 53	m^3/s side throw m	0.053	0.018	0.071	0.024	0.089	0.029	0.106	0.035	0.124	0.041	0.142	0.047	0.160	0.053
			3.1	1.8	3.7	2.1	4.3	2.4	4.6	2.7	4.9	2.7	5.2	3.1	5.5	3.4
			3.7	2.4	4.3	2.7	4.9	3.1	5.2	3.4	5.5	3.7	6.1	4.0	6.4	4.3
			5.2	3.1	6.1	3.7	7.0	4.3	7.6	4.6	7.9	4.9	8.5	5.2	9.2	5.5
	12, 13	m^3/s side throw m	0.071		0.094		0.118		0.142		0.165		0.189		0.212	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	Return NC+2	Total m^3/s / NC	0.089 / -		0.118 / 12		0.147 / 19		0.177 / 25		0.207 / 29		0.236 / 33		0.266 / 37	
	Factors -SP=2.0TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 375	42 / 43	m^3/s side throw m	0.035	0.009	0.047	0.012	0.059	0.015	0.071	0.018	0.083	0.021	0.094	0.024	0.106	0.026
			2.4	1.2	2.7	1.5	3.1	1.8	3.4	1.8	3.7	2.1	4.0	2.1	4.3	2.4
			3.1	1.5	3.4	1.8	4.0	2.1	4.3	2.1	4.6	2.4	4.9	2.4	5.2	2.7
			4.3	2.1	4.9	2.4	5.5	2.7	6.1	3.1	6.4	3.4	7.0	3.4	7.3	3.7
	45 *	m^3/s side throw m	0.018	0.026	0.024	0.035	0.029	0.044	0.035	0.053	0.041	0.062	0.047	0.071	0.053	0.080
			2.1	2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.4	4.0	3.7	4.3
			2.4	3.1	2.7	3.4	3.1	4.0	3.4	4.3	3.7	4.6	4.0	4.9	4.3	5.2
			3.4	4.0	4.0	4.6	4.6	5.2	4.9	5.5	5.2	6.1	5.5	6.4	6.1	7.0
	31	m^3/s side throw m	0.040	0.009	0.053	0.012	0.066	0.015	0.080	0.018	0.093	0.021	0.106	0.024	0.119	0.026
			2.7	1.2	3.1	1.5	3.4	1.8	3.7	1.8	4.0	2.1	4.3	2.1	4.6	2.4
			3.1	1.5	3.7	1.8	4.3	2.1	4.6	2.1	4.9	2.4	5.2	2.4	5.5	2.7
			4.6	2.1	5.2	2.4	5.8	2.7	6.4	3.1	6.7	3.4	7.3	3.4	7.9	3.7
	33	m^3/s side throw m	0.053	0.018	0.071	0.024	0.089	0.029	0.106	0.035	0.125	0.041	0.142	0.047	0.160	0.053
			2.7	1.8	3.1	2.1	3.4	2.4	3.7	2.7	4.0	2.7	4.3	3.1	4.6	3.4
			3.1	2.4	3.7	2.7	4.3	3.1	4.6	3.4	4.9	3.7	5.2	4.0	5.5	4.3
			4.6	3.1	5.2	3.7	5.8	4.3	6.4	4.6	6.7	4.9	7.3	5.2	7.9	5.5
	37	m^3/s side throw m	0.026	0.031	0.035	0.042	0.044	0.052	0.055	0.062	0.062	0.072	0.071	0.083	0.080	0.093
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.4	3.4	4.0	4.0	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2
			4.0	4.3	4.6	4.9	5.2	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3
	22, 23	m^3/s side throw m	0.044		0.059		0.074		0.088		0.103		0.118		0.133	
			2.7		3.1		3.4		3.7		4.0		4.3		4.6	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.9		5.5		6.4		6.7		7.3		7.6		8.2	
AD 0.056 m^2	52 / 55 / 54 / 53	m^3/s side throw m	0.071	0.018	0.094	0.024	0.118	0.029	0.142	0.035	0.165	0.041	0.189	0.047	0.212	0.053
			3.1	1.8	3.7	2.1	4.3	2.4	4.6	2.7	4.9	2.7	5.2	3.1	5.5	3.4
			3.7	2.4	4.3	2.7	4.9	3.1	5.2	3.4	5.5	3.7	6.1	4.0	6.4	4.3
			5.2	3.1	6.1	3.7	7.0	4.3	7.6	4.6	7.9	4.9	8.5	5.2	9.2	5.5
	12, 13	m^3/s side throw m	0.089		0.118		0.147		0.177		0.207		0.236		0.266	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.8		6.7		7.6		8.2		8.8		9.5		10.1	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

CMP – Performance Data

Size in mm	Patterns	Neck Vel m/s	1.57		2.10		2.62		3.15		3.67		4.19		4.72	
		TP Pa	6		11		18		25		35		45		57	
	Return NC+3	Total m^3/s	0.106		0.142		0.177		0.212		0.248		0.283		0.319	
	Factors -SP=2.8 TP	NC	-		13		20		26		30		34		38	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 450	42	m^3/s side throw m	0.044	0.009	0.059	0.012	0.074	0.015	0.089	0.018	0.103	0.021	0.118	0.024	0.133	0.026
			2.7	1.2	3.1	1.5	3.4	1.8	3.7	1.8	4	2.1	4.3	2.1	4.6	2.4
			3.4	1.5	4	1.8	4.6	2.1	4.9	2.1	5.2	2.4	5.5	2.4	6.1	2.7
			4.9	2.1	5.5	2.4	6.4	2.7	6.7	3.1	7.3	3.4	7.6	3.4	8.2	3.7
	43	m^3/s side throw m	0.026	0.026	0.035	0.035	0.044	0.044	0.053	0.053	0.062	0.062	0.071	0.071	0.080	0.080
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.4	3.4	4.0	4.0	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2
			4.0	4.0	4.6	4.6	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0
	45 *	m^3/s side throw m	0.049	0.009	0.065	0.012	0.081	0.015	0.097	0.018	0.113	0.021	0.130	0.024	0.146	0.026
			2.7	1.2	3.1	1.5	3.4	1.8	3.7	1.8	4.0	2.1	4.3	2.1	4.6	2.4
			3.4	1.5	4.0	1.8	4.6	2.1	4.9	2.1	5.2	2.4	5.5	2.4	6.1	2.7
			4.9	2.1	5.5	2.4	6.4	2.7	6.7	3.1	7.3	3.4	7.6	3.4	8.2	3.7
	31	m^3/s side throw m	0.071	0.018	0.094	0.024	0.119	0.029	0.142	0.035	0.166	0.041	0.189	0.047	0.213	0.053
			3.1	1.8	3.7	2.1	4.3	2.4	4.6	2.7	4.9	2.7	5.2	3.1	5.5	3.4
			3.7	2.4	4.3	2.7	4.9	3.1	5.2	3.4	5.5	3.7	6.1	4.0	6.4	4.3
			5.2	3.1	6.1	3.7	7.0	4.3	7.6	4.6	7.9	4.9	8.5	5.2	9.2	5.5
	33	m^3/s side throw m	0.035	0.035	0.047	0.047	0.059	0.059	0.071	0.071	0.083	0.083	0.094	0.094	0.106	0.106
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.4	3.4	4.0	4.0	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2
			4.3	4.3	4.9	4.9	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3	7.3
	37	m^3/s side throw m	0.053		0.071		0.088		0.106		0.124		0.142		0.159	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	22, 23	m^3/s side throw m	0.088	0.018	0.118	0.024	0.148	0.029	0.177	0.035	0.207	0.041	0.236	0.047	0.266	0.053
			3.4	1.8	4.0	2.1	4.6	2.4	4.9	2.7	5.2	2.7	5.5	3.1	6.1	3.4
			4.3	2.4	4.9	2.7	5.5	3.1	6.1	3.4	6.4	3.7	7.0	4.0	7.3	4.3
			5.8	3.1	6.7	3.7	7.6	4.3	8.2	4.6	8.8	4.9	9.5	5.2	10.1	5.5
	52 55 54 53	m^3/s side throw m	0.106		0.142		0.177		0.212		0.248		0.283		0.319	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			6.4		7.3		8.2		9.2		9.8		10.4		11.0	
AD 0.068 m^2	12, 13															
	Return NC+4	Total m^3/s	0.124		0.165		0.206		0.248		0.289		0.330		0.372	
	Factors -SP=3.4TP	NC	-		13		20		26		30		34		38	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 525	42	m^3/s side throw m	0.053	0.009	0.071	0.012	0.088	0.015	0.106	0.018	0.124	0.021	0.142	0.024	0.159	0.026
			3.1	1.2	3.7	1.5	4.3	1.8	4.6	1.8	4.9	2.1	5.2	2.1	5.5	2.4
			3.7	1.5	4.3	1.8	4.9	2.1	5.2	2.1	5.5	2.4	6.1	2.4	6.4	2.7
			5.2	2.1	6.1	2.4	7.0	2.7	7.6	3.1	7.9	3.4	8.5	3.4	9.2	3.7
	43	m^3/s side throw m	0.026	0.035	0.035	0.047	0.044	0.059	0.053	0.071	0.062	0.083	0.071	0.094	0.080	0.106
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.4	3.4	4.0	4.0	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2
			4.0	4.3	4.6	4.9	5.2	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3
	45 *	m^3/s side throw m	0.058	0.009	0.077	0.012	0.096	0.015	0.115	0.018	0.134	0.021	0.153	0.024	0.172	0.026
			3.1	1.2	3.7	1.5	4.3	1.8	4.6	1.8	4.9	2.1	5.2	2.1	5.5	2.4
			3.7	1.5	4.3	1.8	4.9	2.1	5.2	2.1	5.5	2.4	6.1	2.4	6.4	2.7
			5.2	2.1	6.1	2.4	7.0	2.7	7.6	3.1	7.9	3.4	8.5	3.4	9.2	3.7
	31	m^3/s side throw m	0.088	0.018	0.118	0.024	0.148	0.029	0.177	0.035	0.207	0.041	0.236	0.047	0.266	0.053
			3.4	1.8	4.0	2.1	4.6	2.4	4.9	2.7	5.2	2.7	5.5	3.1	6.1	3.4
			4.3	2.4	4.9	2.7	5.5	3.1	6.1	3.4	6.4	3.7	7.0	4.0	7.3	4.3
			5.8	3.1	6.7	3.7	7.6	4.3	8.2	4.6	8.8	4.9	9.5	5.2	10.1	5.5
	33	m^3/s side throw m	0.044	0.040	0.059	0.053	0.074	0.066	0.088	0.079	0.103	0.093	0.118	0.106	0.133	0.119
			2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3	4.6	4.6
			3.4	3.1	4.0	3.7	4.6	4.3	4.9	4.6	5.2	4.9	5.5	5.2	6.1	5.5
			4.9	4.6	5.5	5.2	6.4	5.8	6.7	6.4	7.3	6.7	7.6	7.3	8.2	7.9
	37	m^3/s side throw m	0.062		0.083		0.103		0.124		0.144		0.165		0.186	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	22, 23	m^3/s side throw m	0.106	0.018	0.142	0.024	0.177	0.029	0.212	0.035	0.248	0.041	0.283	0.047	0.319	0.053
			3.7	1.8	4.3	2.1	4.9	2.4	5.2	2.7	5.5	2.7	6.1	3.1	6.4	3.4
			4.6	2.4	5.2	2.7	5.8	3.1	6.4	3.4	6.7	3.7	7.3	4.0	7.9	4.3
			6.4	3.1	7.3	3.7	8.2	4.3	9.2	4.6	9.8	4.9	10.1	5.2	11.0	5.5
	52 55 54 53	m^3/s side throw m	0.124		0.165		0.206		0.248		0.289		0.330		0.372	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			6.4		7.3		8.2		9.2		9.8		10.4		11.0	
AD 0.079 m^2	12, 13															
	Return NC+5	Total m^3/s	0.142		0.189		0.236		0.283		0.330		0.378		0.425	
	Factors -SP=4.1TP	NC	-		14		21		27		31		35		39	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
150 x 600	42	m^3/s side throw m	0.062	0.009	0.083	0.012	0.103	0.015	0.124	0.018	0.144	0.021	0.165	0.024	0.186	0.026
			3.1	1.2	3.7	1.5	4.3	1.8	4.6	1.8	4.9	2.1	5.2	2.1	5.5	2.4
			3.7	1.5	4.3	1.8	4.9	2.1	5.2	2.1	5.5	2.4	6.1	2.4	6.4	2.7
			5.2	2.1	6.1	2.4	7.0	2.7	7.6	3.1	7.9	3.4	8.5	3.4	9.2	3.7
	43	m^3/s side throw m	0.035	0.035	0.047	0.047	0.059	0.059	0.071	0.071	0.083	0.083	0.094	0.094	0.106	0.106
			2.4	2.4	2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3
			3.1	3.1	3.4	3.4	4.0	4.0	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2
			4.3	4.3	4.9	4.9	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0	7.3	7.3
	45 *	m^3/s side throw m	0.067	0.009	0.088	0.012	0.111	0.015	0.133	0.018	0.155	0.021	0.177	0.024	0.199	0.026
			3.1	1.2	3.7	1.5	4.3	1.8	4.6	1.8	4.9	2.1	5.2	2.1	5.5	2.4
			3.7	1.5	4.3	1.8	4.9	2.1	5.2	2.1	5.5	2.4	6.1	2.4	6.4	2.7
			5.2	2.1	6.1	2.4	7.0	2.7	7.6	3.1	7.9	3.4	8.5	3.4	9.2	3.7
	31	m^3/s side throw m	0.106	0.018	0.142	0.024	0.178	0.029	0.213	0.035	0.248	0.041	0.283	0.047	0.319	0.053
			3.7	1.8	4.3	2.1	4.9	2.4	5.2	2.7	5.5	2.7	6.1	3.1	6.4	3.4
			4.6	2.4	5.2	2.7	5.8	3.1	6.4	3.4	6.7	3.7	7.3	4.0	7.9	4.3
			6.4	3.1	7.3	3.7	8.2	4.3	9.2	4.6	9.8	4.9	10.4	5.2	11.0	5.5
	33	m^3/s side throw m	0.044	0.049	0.059	0.064	0.074	0.081	0.089	0.097	0.103	0.114	0.118	0.130	0.133	0.146
			2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3	4.6	4.6
			3.4	3.4	4.0	4.0	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1
			4.9	4.9	5.5	5.5	6.4	6.4	6.7	6.7	7.3	7.3	7.6	7.6	8.2	8.2
	37	m^3/s side throw m	0.071		0.094		0.118		0.142		0.165		0.189		0.212	
			3.1		3.7		4.3		4.6		4.9		5.2		5.5	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
	22, 23	m^3/s side throw m	0.123	0.018	0.165	0.024	0.207	0.029	0.248	0.035	0.289	0.041	0.330	0.047	0.372	0.053
			3.7	1.8	4.3	2.1	4.9	2.4	5.2	2.7	5.5	2.7	6.1	3.1	6.4	3.4
			4.6	2.4	5.2	2.7	5.8	3.1	6.4	3.4	6.7	3.7	7.3	4.0	7.9	4.3
			6.4	3.1	7.3	3.7	8.2	4.3	9.2	4.6	9.8	4.9	10.4	5.2	11.0	5.5
	52 55 54 53	m^3/s side throw m	0.142		0.189		0.236		0.283		0.330		0.378		0.425	
			4.0		4.6		5.2		5.5		6.1		6.4		7.0	
			4.9		5.5		6.4		6.7		7.3		7.6		8.2	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
AD 0.090 m^2	12, 13															

* These cores are constructed to give as near as possible equal air flow in A & B directions.

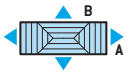
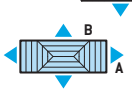
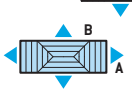
Size in mm	Patterns	Neck Vel m/s / TP Pa	1.57 / 6		2.10 / 11		2.62 / 18		3.15 / 25		3.67 / 35		4.19 / 45		4.72 / 57	
	Return NC+5	Total m^3/s / NC	0.106 / -		0.142 / 13		0.177 / 20		0.212 / 26		0.248 / 30		0.283 / 34		0.319 / 38	
	Factors -SP=4.1 TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
225 x 300	 42 43 31 33 37 22, 23 52 55 54 53 12, 13	m^3/s side throw m	0.033 2.1 2.7 3.7	0.020 1.5 1.8 2.7	0.044 2.4 3.1 4.3	0.026 1.8 2.1 3.1	0.055 2.7 3.4 4.9	0.033 2.1 2.4 3.4	0.067 3.1 3.7 5.2	0.040 2.1 2.7 3.7	0.077 3.4 4 5.5	0.046 2.4 2.7 4	0.089 3.4 4.3 6.1	0.053 2.4 3.1 4.3	0.100 3.7 4.6 6.4	0.060 2.7 3.4 4.6
		m^3/s side throw m	0.043 2.7 3.4 4.9	0.020 1.5 1.8 2.7	0.057 3.1 4.0 5.5	26.000 1.8 2.1 3.1	0.072 3.4 4.6 6.4	0.033 2.1 2.4 3.4	0.086 3.7 4.9 6.7	0.040 2.1 2.7 3.7	0.101 4.0 5.2 7.3	0.046 2.4 2.7 4.0	0.115 4.3 5.5 7.6	0.053 2.4 3.1 4.3	0.129 4.6 6.1 8.2	0.060 2.7 3.4 4.6
		m^3/s side throw m	0.035 2.4 3.1 4.0	0.035 2.4 3.1 4.0	0.047 2.7 3.4 4.6	0.047 2.7 3.4 4.6	0.059 3.1 4.0 5.2	0.059 3.1 4.0 5.2	0.071 3.4 4.3 5.5	0.071 3.4 4.3 5.5	0.083 3.7 4.6 6.1	0.083 3.7 4.6 6.1	0.094 4.0 4.9 6.4	0.094 4.0 4.9 6.4	0.106 4.3 5.2 7.0	0.106 4.3 5.2 7.0
		m^3/s side throw m	0.033 2.4 3.1 4.3	0.036 2.7 3.1 4.6	0.044 2.7 3.4 4.9	0.049 3.1 3.7 5.2	0.055 3.1 4.0 5.5	0.060 3.4 4.3 5.8	0.067 3.4 4.3 6.1	0.073 3.7 4.6 6.4	0.077 3.7 4.6 6.4	0.085 4.0 4.9 6.7	0.089 4.0 4.9 7.0	0.097 4.3 5.2 7.3	0.100 4.3 5.2 7.3	0.109 4.6 5.5 7.9
		m^3/s side throw m	0.053 3.1 3.7 5.2		0.071 3.7 4.3 6.1		0.089 4.3 4.9 7.0		0.106 4.6 5.2 7.6		0.124 4.9 5.5 7.9		0.142 5.2 6.1 8.5		0.159 5.5 6.4 9.2	
AD 0.068 m^2		m^3/s side throw m	0.067 3.1 3.7 5.2	0.040 2.4 3.1 4.0	0.089 3.7 4.3 6.1	0.055 2.7 3.4 4.6	0.111 4.3 4.9 7.0	0.067 3.1 4.0 5.2	0.133 4.6 5.2 7.6	0.080 3.4 4.3 5.5	0.155 4.9 5.5 7.9	0.093 3.7 4.6 6.1	0.177 5.2 6.1 8.5	0.106 4.0 4.9 6.4	0.199 5.5 6.4 9.2	0.119 4.3 5.2 7.0
		m^3/s side throw m	0.106 3.7 4.6 6.4		0.142 4.3 5.2 7.3		0.177 4.9 5.8 8.2		0.212 5.2 6.4 9.2		0.243 5.5 6.7 9.8		0.283 6.1 7.3 10.4		0.319 6.4 7.9 11.0	
	Return NC+4	Total m^3/s / NC	0.133 / -		0.177 / 14		0.222 / 21		0.266 / 27		0.310 / 31		0.354 / 35		0.400 / 39	
	Factors -SP=1.8 TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
225 x 375	 42 43 45 * 31 33 37 22, 23 52 55 54 53 12, 13	m^3/s side throw m	0.046 2.7 3.4 4.9	0.020 1.5 1.8 2.7	0.062 3.1 4.0 5.5	0.026 1.8 2.1 3.1	0.079 3.4 4.6 6.4	0.033 2.1 2.4 3.4	0.094 3.7 4.9 6.7	0.040 2.1 2.7 3.7	0.109 4.0 5.2 7.3	0.046 2.4 2.7 4.0	0.124 4.3 5.5 7.6	0.053 2.4 3.1 4.3	0.140 4.6 6.1 8.2	0.060 2.7 3.4 4.6
		m^3/s side throw m	0.033 2.4 3.1 4.3	0.033 2.4 3.1 4.3	0.044 2.7 3.4 4.9	0.044 2.7 3.4 4.9	0.055 3.1 4.0 5.5	0.055 3.1 4.0 5.5	0.067 3.4 4.3 6.1	0.067 3.4 4.3 6.1	0.077 3.7 4.6 6.4	0.077 3.7 4.6 6.4	0.089 4.0 4.9 7.0	0.089 4.0 4.9 7.0	0.100 4.3 5.2 7.3	0.100 4.3 5.2 7.3
		m^3/s side throw m	0.057 3.1 3.7 5.2	0.020 1.5 1.8 2.7	0.075 3.7 4.3 6.1	0.026 1.8 2.1 3.1	0.094 4.3 4.9 7.0	0.033 2.1 2.4 3.4	0.113 4.6 5.2 7.6	0.040 2.1 2.7 3.7	0.132 4.9 5.5 7.9	0.046 2.4 2.7 4.0	0.151 5.2 6.1 8.5	0.053 2.4 3.1 4.3	0.169 5.5 6.4 9.2	0.060 2.7 3.4 4.6
		m^3/s side throw m	0.039 2.7 3.1 4.6	0.055 2.1 2.7 3.7	0.052 3.1 3.7 5.2	0.073 2.4 3.1 4.3	0.065 3.4 4.3 5.8	0.093 2.7 3.4 4.9	0.078 3.7 4.6 6.4	0.110 3.1 3.7 5.2	0.091 4.0 4.9 6.7	0.128 3.4 4.0 5.5	0.103 4.3 5.2 7.3	0.147 3.4 4.3 6.1	0.117 4.6 5.5 7.9	0.166 3.7 4.6 6.4
		m^3/s side throw m	0.046 2.7 3.4 4.9	0.043 2.7 3.4 4.9	0.061 3.1 4.0 5.5	0.058 3.1 4.0 5.5	0.076 3.4 4.6 6.4	0.072 3.4 4.6 6.4	0.092 3.7 4.9 6.7	0.086 3.7 4.9 6.7	0.107 4.0 5.2 7.3	0.100 4.0 5.2 7.3	0.123 4.3 5.5 7.6	0.115 4.3 5.5 7.6	0.138 4.6 6.1 8.2	0.129 4.6 6.1 8.2
		m^3/s side throw m	0.066 3.1 3.7 5.2		0.088 3.7 4.3 6.1		0.111 4.3 4.9 7.0		0.133 4.6 5.2 7.6		0.155 4.9 5.5 7.9		0.177 5.2 6.1 8.5		0.199 5.5 6.4 9.2	
AD 0.084 m^2		m^3/s side throw m	0.093 3.4 4.3 5.8	0.040 2.4 3.1 4.0	0.124 4.0 4.9 6.7	0.053 2.7 3.4 4.6	0.155 4.6 5.5 7.6	0.067 3.1 4.0 5.2	0.186 4.9 6.1 8.2	0.080 3.4 4.3 5.5	0.217 5.2 6.4 8.8	0.093 3.7 4.6 6.1	0.248 5.5 7.0 9.5	0.106 4.0 4.9 6.4	0.279 6.1 7.3 10.1	0.119 4.3 5.2 7.0
		m^3/s side throw m	0.133 4.0 4.9 7.0		0.177 4.6 5.5 7.9		0.222 5.2 6.4 9.2		0.266 5.5 6.7 9.8		0.310 6.1 7.3 10.4		0.354 6.4 7.6 11.3		0.400 7.0 8.2 11.9	
	Return NC+4	Total m^3/s / NC	0.159 / -		0.212 / 15		0.265 / 22		0.319 / 28		0.372 / 32		0.425 / 36		0.478 / 40	
	Factors -SP=2.2 TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
225 x 450	 42 43 45 * 31 33 37 22, 23 52 55 54 53 12, 13	m^3/s side throw m	0.060 3.1 3.7 5.2	0.020 1.5 1.8 2.7	0.080 3.7 4.3 6.1	0.026 1.8 2.1 3.1	0.100 4.3 4.9 7.0	0.033 2.1 2.4 3.4	0.120 4.6 5.2 7.6	0.040 2.1 2.7 3.7	0.140 4.9 5.5 7.9	0.046 2.4 2.7 4.0	0.160 5.2 6.1 8.5	0.053 2.4 3.1 4.3	0.179 5.5 6.4 9.2	0.060 2.7 3.4 4.6
		m^3/s side throw m	0.033 2.4 3.1 4.3	0.049 2.7 3.4 4.9	0.044 2.7 3.4 4.9	0.062 3.1 4.0 5.5	0.055 3.1 4.0 5.5	0.077 3.4 4.6 6.4	0.067 3.4 4.3 6.1	0.093 3.7 4.9 6.7	0.077 3.7 4.6 6.4	0.109 4.0 5.2 7.3	0.089 4.0 4.9 7.0	0.124 4.3 5.5 7.6	0.100 4.3 5.2 7.3	0.140 4.6 6.1 8.2
		m^3/s side throw m	0.069 3.1 3.7 5.2	0.020 1.5 1.8 2.7	0.093 3.7 4.3 6.1	0.026 1.8 2.1 3.1	0.116 4.3 4.9 7.0	0.033 2.1 2.4 3.4	0.139 4.6 5.2 7.6	0.040 2.1 2.7 3.7	0.163 4.9 5.5 7.9	0.046 2.4 2.7 4.0	0.186 5.2 6.1 8.5	0.053 2.4 3.1 4.3	0.209 5.5 6.4 9.2	0.060 2.7 3.4 4.6
		m^3/s side throw m	0.079 2.4 3.1 4.3	0.040 2.4 3.1 4.0	0.106 2.7 3.4 4.9	0.053 2.7 3.4 4.6	0.133 3.1 4.0 5.5	0.067 3.1 4.0 5.2	0.159 3.4 4.3 6.1	0.080 3.4 4.3 5.5	0.186 3.7 4.6 6.4	0.093 3.7 4.6 6.1	0.212 4.0 4.9 7.0	0.106 4.0 4.9 6.4	0.239 4.3 5.2 7.3	0.119 4.3 5.2 7.0
		m^3/s side throw m	0.046 2.7 3.4 4.9	0.056 3.1 3.7 5.2	0.061 3.1 4.0 5.5	0.075 3.7 4.3 6.1	0.077 3.4 4.6 6.4	0.094 4.3 4.9 7.0	0.092 3.7 4.9 6.7	0.113 4.6 5.2 7.6	0.107 4.0 5.2 7.3	0.131 4.9 5.5 7.9	0.123 4.3 5.5 7.6	0.150 5.2 6.1 8.5	0.138 4.6 6.1 8.2	0.169 5.5 6.4 9.2
		m^3/s side throw m	0.077 3.4 4.3 5.8		0.106 4.0 4.9 6.7		0.133 4.6 5.5 7.6		0.159 4.9 6.1 8.2		0.186 5.2 6.4 8.8		0.212 5.5 7.0 9.5		0.239 6.1 7.3 10.1	
AD 0.101 m^2		m^3/s side throw m	0.119 3.7 4.6 6.4	0.040 2.4 3.1 4.0	0.160 4.3 5.2 7.3	0.053 2.7 3.4 4.6	0.199 4.9 5.8 8.2	0.067 3.1 4.0 5.2	0.239 5.2 6.4 9.2	0.080 3.4 4.3 5.5	0.279 5.5 6.7 9.8	0.093 3.7 4.6 6.1	0.319 6.1 7.3 10.4	0.106 4.0 4.9 6.4	0.358 6.4 7.9 11.0	0.119 4.3 5.2 7.0
		m^3/s side throw m	0.159 4.0 4.9 7.0		0.212 4.6 5.5 7.9		0.265 5.2 6.4 9.2		0.319 5.5 6.7 9.8		0.372 6.1 7.3 10.4		0.425 6.4 7.6 11.3		0.478 7.0 8.2 11.9	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

CMP – Performance Data

Size in mm	Patterns	Neck Vel m/s	1.57		2.10		2.62		3.15		3.67		4.19		4.72	
		TP Pa	6		11		18		25		35		45		57	
	Return NC+5	Total m^3/s	0.186		0.247		0.309		0.371		0.433		0.496		0.557	
	Factors -SP=2.6 TP	NC	-		15		22		28		32		36		40	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
225 x 525	42	m^3/s side throw m	0.073	0.020	0.097	0.026	0.122	0.033	0.146	0.040	0.170	0.046	0.195	0.053	0.219	0.060
			3.4	1.5	4	1.8	4.6	2.1	4.9	2.1	5.2	2.4	5.5	2.4	6.1	2.7
			4.3	1.8	4.9	2.1	5.5	2.4	6.1	2.7	6.4	2.7	7.0	3.1	7.3	3.4
			5.8	2.7	6.7	3.1	7.6	3.4	8.2	3.7	8.8	4	9.5	4.3	10.1	4.6
	43	m^3/s side throw m	0.046	0.046	0.062	0.062	0.077	0.077	0.093	0.093	0.108	0.108	0.123	0.123	0.139	0.139
			2.7	2.7	3.1	3.1	3.4	3.4	3.7	3.7	4.0	4.0	4.3	4.3	4.6	4.6
			3.4	3.4	4.0	4.0	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1
			4.9	4.9	5.5	5.5	6.4	6.4	6.7	6.7	7.3	7.3	7.6	7.6	8.2	8.2
	45 *	m^3/s side throw m	0.083	0.020	0.111	0.026	0.138	0.033	0.166	0.040	0.194	0.046	0.221	0.053	0.249	0.060
			3.4	1.5	4.0	1.8	4.6	2.1	4.9	2.1	5.2	2.4	5.5	2.4	6.1	2.7
			4.3	1.8	4.9	2.1	5.5	2.4	6.1	2.7	6.4	2.7	7.0	3.1	7.3	3.4
			5.8	2.7	6.7	3.1	7.6	3.4	8.2	3.7	8.8	4.0	8.5	4.3	10.1	4.6
	31	m^3/s side throw m	0.106	0.040	0.142	0.053	0.177	0.067	0.212	0.080	0.247	0.093	0.282	0.106	0.318	0.119
			3.7	2.4	4.3	2.7	4.9	3.1	5.2	3.4	5.5	3.7	6.1	4.0	6.4	4.3
			4.6	3.1	5.2	3.4	5.8	4.0	6.4	4.3	6.7	4.6	7.3	4.9	7.9	5.2
			6.4	4.0	7.3	4.6	8.2	5.2	9.2	5.5	9.8	6.1	10.4	6.4	11.0	7.0
	33	m^3/s side throw m	0.060	0.063	0.080	0.083	0.100	0.105	0.119	0.126	0.139	0.147	0.159	0.168	0.179	0.188
			3.1	3.1	3.7	3.7	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5
			3.7	3.7	4.3	4.3	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4
			5.2	5.2	6.1	6.1	7.0	7.0	7.6	7.6	7.9	7.9	8.5	8.5	9.2	9.2
	37	m^3/s side throw m	0.093		0.124		0.154		0.186		0.216		0.248		0.279	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.8		6.7		7.6		8.2		8.8		9.5		10.1	
	22, 23	m^3/s side throw m	0.145	0.040	0.195	0.053	0.243	0.067	0.291	0.080	0.340	0.093	0.389	0.106	0.438	0.119
			4.0	2.4	4.6	2.7	5.2	3.1	5.5	3.4	6.1	3.7	6.4	4.0	7.0	4.3
			4.9	3.1	5.5	3.4	6.4	4.0	6.7	4.3	7.3	4.6	7.6	4.9	8.2	5.2
			7.0	4.0	7.9	4.6	9.2	5.2	9.8	5.5	10.4	6.1	11.3	6.4	11.9	7.0
AD 0.118 m^2	52 55 / 54 53	m^3/s side throw m	0.186		0.247		0.309		0.371		0.433		0.496		0.557	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
			7.3		8.5		9.8		10.4		11.3		12.2		12.8	
	12, 13															
	Return NC+5	Total m^3/s	0.212		0.283		0.354		0.425		0.496		0.566		0.637	
	Factors -SP=3.0 TP	NC	-		16		23		29		33		37		41	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
225 x 600	42	m^3/s side throw m	0.086	0.020	0.115	0.026	0.144	0.033	0.173	0.040	0.202	0.046	0.230	0.053	0.259	0.060
			3.4	1.5	4.0	1.8	4.6	2.1	4.9	2.1	5.2	2.4	5.5	2.4	6.1	2.7
			4.3	1.8	4.9	2.1	5.5	2.4	6.1	2.7	6.4	2.7	7.0	3.1	7.3	3.4
			5.8	2.7	6.7	3.1	7.6	3.4	8.2	3.7	8.8	4.0	9.5	4.3	10.1	4.6
	43	m^3/s side throw m	0.047	0.060	0.062	0.080	0.077	0.100	0.093	0.119	0.109	0.139	0.124	0.159	0.140	0.179
			2.7	3.1	3.1	3.7	3.4	4.3	3.7	4.6	4.0	4.9	4.3	5.2	4.6	5.5
			3.4	3.7	4.0	4.3	4.6	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1	6.4
			4.9	5.2	5.5	6.1	6.4	7.0	6.7	7.6	7.3	7.9	7.6	8.5	8.2	9.2
	45 *	m^3/s side throw m	0.096	0.020	0.128	0.026	0.161	0.033	0.193	0.040	0.225	0.046	0.257	0.053	0.286	0.060
			3.4	1.5	4.0	1.8	4.6	2.1	4.9	2.1	5.2	2.4	5.5	2.4	6.1	2.7
			4.3	1.8	4.9	2.1	5.5	2.4	6.1	2.7	6.4	2.7	7.0	3.1	7.3	3.4
			5.8	2.7	6.7	3.1	7.6	3.4	8.2	3.7	8.8	4.0	9.5	4.3	10.1	4.6
	31	m^3/s side throw m	0.133	0.040	0.178	0.053	0.221	0.067	0.265	0.080	0.310	0.093	0.354	0.106	0.398	0.119
			4.0	2.4	4.6	2.7	5.2	3.1	5.5	3.4	6.1	3.7	6.4	4.0	7.0	4.3
			4.9	3.1	5.5	3.4	6.4	4.0	6.7	4.3	7.3	4.6	7.6	4.9	8.2	5.2
			7.0	4.0	7.9	4.6	9.2	5.2	9.8	5.5	10.4	6.1	11.3	6.4	11.9	7.0
	33	m^3/s side throw m	0.073	0.069	0.097	0.093	0.122	0.116	0.146	0.139	0.170	0.162	0.195	0.186	0.220	0.209
			3.1	3.1	3.7	3.7	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5
			3.7	3.7	4.3	4.3	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4
			5.2	5.2	6.1	6.1	7.0	7.0	7.6	7.6	7.9	7.9	8.5	8.5	9.2	9.2
	37	m^3/s side throw m	0.106		0.142		0.177		0.212		0.248		0.283		0.319	
			3.7		4.3		4.9		5.2		5.5		6.1		6.4	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			6.4		7.3		8.2		9.2		9.8		10.4		11.0	
	22, 23	m^3/s side throw m	0.172	0.040	0.230	0.053	0.288	0.067	0.345	0.080	0.403	0.093	0.460	0.106	0.518	0.119
			4.3	2.4	4.9	2.7	5.5	3.1	6.1	3.4	6.4	3.7	7.0	4.0	7.3	4.3
			5.2	3.1	6.1	3.4	7.0	4.0	7.6	4.3	7.9	4.6	8.5	4.9	9.2	5.2
			7.3	4.0	8.5	4.6	9.8	5.2	10.4	5.5	11.3	6.1	12.2	6.4	12.8	7.0
AD 0.135 m^2	52 55 / 54 53	m^3/s side throw m	0.212		0.283		0.354		0.425		0.406		0.566		0.637	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
			7.3		8.5		9.8		10.4		11.3		12.2		12.8	
	12, 13															
	Return NC+3	Total m^3/s	0.177		0.236		0.295		0.354		0.413		0.472		0.531	
	Factors -SP=1.7 TP	NC	-		16		23		29		33		37		41	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
300 x 375	42	m^3/s side throw m	0.053	0.035	0.071	0.047	0.088	0.059	0.106	0.071	0.124	0.083	0.142	0.094	0.159	0.106
			2.4	1.8	2.7	2.1	3.1	2.4	3.4	2.7	3.7	2.7	4.0	3.1	4.3	3.4
			3.4	2.4	3.4	2.7	4.0	3.1	4.3	3.4	4.6	3.7	4.9	4.0	5.2	4.3
			4.3	3.1	4.9	3.7	5.5	4.3	6.1	4.6	6.4	4.9	7.0	5.2	7.3	5.5
	43	m^3/s side throw m	0.071	0.035	0.094	0.047	0.118	0.059	0.142	0.071	0.165	0.083	0.189	0.094	0.212	0.106
			3.1	1.8	3.7	2.1	4.3	2.4	4.6	2.7	4.9	2.7	5.2	3.1	5.5	3.4
			3.7	2.4	4.3	2.7	4.9	3.1	5.2	3.4	5.5	3.7	6.1	4.0	6.4	4.3
			5.2	3.1	6.1	3.7	7.0	4.3	7.6	4.6	7.9	4.9	8.5	5.2	9.2	5.5
	31	m^3/s side throw m	0.061	0.055	0.081	0.074	0.102	0.092	0.122	0.111	0.142	0.129	0.162	0.147	0.183	0.166
			2.7	2.1	3.1	2.4	3.4	2.7	3.7	3.1	4.0	3.4	4.3	3.4	4.6	3.7
			3.1	2.7	3.7	3.1	4.3	3.4	4.6	3.7	4.9	4.0	5.2	4.3	5.5	4.6
			4.6	3.7	5.2	4.3	5.8	4.9	6.4	5.2	6.7	5.5	7.3	6.1	7.9	6.4
	33	m^3/s side throw m	0.053	0.062	0.071	0.083	0.088	0.103	0.106	0.124	0.124	0.144	0.142	0.165	0.159	0.186
			3.1	3.1	3.7	3.7	4.3	4.3	4.6	4.6	4.9	4.9	5.2	5.2	5.5	5.5
			3.7	3.7	4.3	4.3	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4
			5.2	5.2	6.1	6.1	7.0	7.0	7.6	7.6	7.9	7.9	8.5	8.5	9.2	9.2
	37	m^3/s side throw m	0.088		0.118		0.147		0.177		0.207		0.236		0.266	
			3.4		4.0		4.6		4.9		5.2		5.5		6.1	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.8		6.7		7.6		8.2		8.8		9.5		10.1	
	22, 23	m^3/s side throw m	0.106	0.071	0.142	0.094	0.177	0.118	0.212	0.142	0.248	0.165	0.283	0.189	0.319	0.212
			3.7	2.7	4.3	3.1	4.9	3.4	5.2	3.7	5.5	4.0	6.1	4.3	6.4	4.6
			4.6	3.4	5.2	4.0	5.8	4.6	6.4	4.9	6.7	5.2	7.3	5.5	7.9	6.1
			6.4	4.9	7.3	5.5	8.2	6.4	9.2	6.7	9.8	7.3	10.4	7.6	11.0	8.2
AD 0.112 m^2	52 55 / 54 53	m^3/s side throw m	0.177		0.236		0.295		0.354		0.413		0.472		0.531	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
			7.3		8.5		9.8		10.4		11.3		12.2		12.8	
	12, 13															

* These cores are constructed to give as near as possible equal air flow in A & B directions.

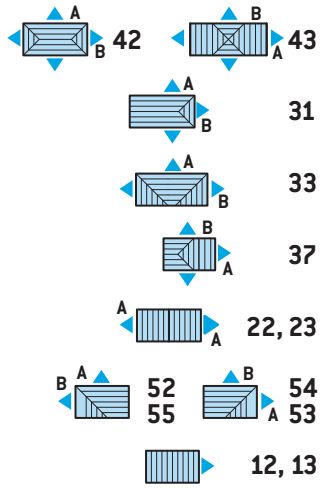
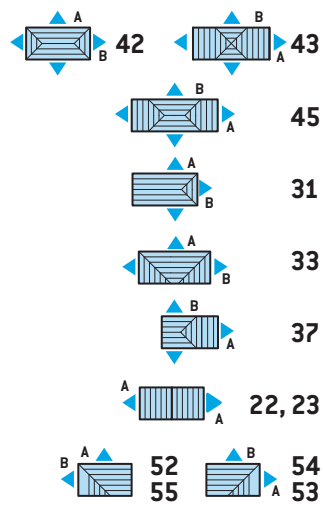
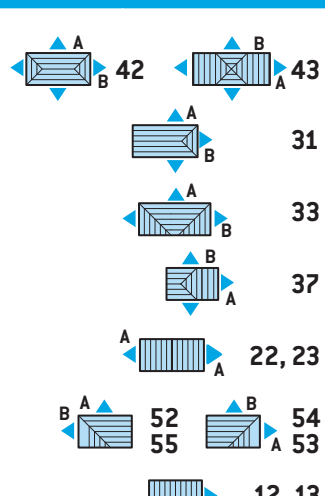
Size in mm	Patterns	Neck Vel m/s / TP Pa	1.57 / 6		2.10 / 11		2.62 / 18		3.15 / 25		3.67 / 35		4.19 / 45		4.72 / 57	
	Return NC+4	Total m³/s	0.212		0.283		0.354		0.425		0.496		0.566		0.637	
	Factors -SP=2.0 TP	NC	-		17		24		30		34		38		42	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
300 x 450	 42 43	m³/s side throw m	0.071 3.1 3.7 5.2	0.035 1.8 2.4 3.1	0.094 3.7 4.3 6.1	0.047 2.1 2.7 3.7	0.118 4.3 4.9 7	0.059 2.4 3.1 4.3	0.142 4.6 5.2 7.6	0.071 2.7 3.4 4.6	0.165 4.9 5.5 7.9	0.083 2.7 3.7 4.9	0.189 5.2 6.1 8.5	0.094 3.1 4 5.2	0.212 5.5 6.4 9.2	0.106 3.4 4.3 5.5
	 45 *	m³/s side throw m	0.053 3.1 3.7 5.2	0.053 3.1 3.7 5.2	0.071 3.7 4.3 6.1	0.071 3.7 4.3 6.1	0.088 4.3 4.9 7.2	0.088 4.3 4.9 7.2	0.106 4.6 5.2 7.6	0.106 4.6 5.2 7.6	0.124 4.9 5.5 7.9	0.124 4.9 5.5 7.9	0.142 5.2 6.1 8.5	0.142 5.2 6.1 8.5	0.159 5.5 6.4 9.2	0.159 5.5 6.4 9.2
	 31	m³/s side throw m	0.088 3.4 4.3 5.8	0.035 1.8 2.4 3.1	0.118 4.0 4.9 6.7	0.047 2.1 2.7 3.7	0.147 4.6 5.5 7.6	0.059 2.4 3.1 4.3	0.177 4.9 6.1 8.2	0.071 2.7 3.4 4.6	0.206 5.2 6.4 8.8	0.083 2.7 3.7 4.9	0.236 5.5 7.0 9.5	0.094 3.1 4.0 5.2	0.265 6.1 7.3 10.1	0.106 3.4 4.3 5.5
	 33	m³/s side throw m	0.067 2.7 3.4 4.9	0.079 2.4 3.1 4.3	0.088 3.1 4.0 5.5	0.106 2.7 3.4 4.9	0.111 3.4 4.6 6.4	0.133 3.1 4.0 5.5	0.133 3.7 4.9 6.7	0.159 3.4 4.3 6.1	0.155 4.0 5.2 7.3	0.186 3.7 4.6 6.4	0.177 4.3 5.5 7.6	0.212 4.4 4.9 7.0	0.199 4.6 6.1 8.2	0.239 4.3 5.2 7.3
	 37	m³/s side throw m	0.071 3.1 3.7 5.2	0.071 3.1 3.7 5.2	0.094 3.7 4.3 6.1	0.094 3.7 4.3 6.1	0.118 4.3 4.9 7.0	0.118 4.3 4.9 7.0	0.142 4.6 5.2 7.6	0.142 4.6 5.2 7.6	0.165 4.9 5.5 7.9	0.165 4.9 5.5 7.9	0.189 5.2 6.1 8.5	0.189 5.2 6.1 8.5	0.212 5.5 6.4 9.2	0.212 5.5 6.4 9.2
	 22, 23	m³/s side throw m	0.106 3.7 4.6 6.4		0.142 4.3 5.2 7.3		0.177 4.9 5.8 8.2		0.212 5.2 6.4 9.2		0.248 5.5 6.7 9.8		0.283 6.1 7.3 10.4		0.319 6.4 7.9 11.0	
AD 0.135 m²	 52 55 54 53	m³/s side throw m	0.142 3.1 4.9 7.0	0.071 2.7 3.4 4.9	0.189 4.6 5.5 7.9	0.094 3.1 4.0 5.5	0.236 5.2 6.4 9.2	0.118 3.4 4.6 6.4	0.283 5.5 6.7 9.8	0.142 3.7 4.9 6.7	0.330 6.1 7.3 10.4	0.165 4.0 5.2 7.3	0.378 6.4 7.6 11.3	0.189 4.3 5.5 7.6	0.425 7.0 8.2 11.9	0.212 4.6 6.1 8.2
	 12, 13	m³/s side throw m	0.212 4.3 5.2 7.3		0.283 4.9 6.1 8.5		0.354 5.5 7.0 9.8		0.425 6.1 7.6 10.4		0.496 6.4 7.9 11.3		0.566 7.0 8.5 12.2		0.637 7.3 9.2 12.8	
	Return NC+6	Total m³/s	0.248		0.330		0.413		0.496		0.578		0.661		0.743	
	Factors -SP=2.3 TP	NC	-		17		24		30		34		38		42	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
300 x 525	 42 43	m³/s side throw m	0.088 3.4 4.3 5.8	0.035 1.8 2.4 3.1	0.118 4.0 4.9 6.7	0.047 2.1 2.7 3.7	0.147 4.6 5.5 7.6	0.059 2.4 3.1 4.3	0.177 4.9 6.1 8.2	0.071 2.7 3.4 4.6	0.206 5.2 6.4 8.8	0.083 2.7 3.7 4.9	0.236 5.5 7.0 9.5	0.094 3.1 4.0 5.2	0.265 6.1 7.3 10.1	0.106 3.4 4.3 5.5
	 45 *	m³/s side throw m	0.053 3.1 3.7 5.2	0.071 3.1 3.7 5.2	0.071 3.7 4.3 6.1	0.094 3.7 4.3 6.1	0.088 4.3 4.9 7.0	0.118 4.3 4.9 7.0	0.106 4.6 5.2 7.6	0.142 4.6 5.2 7.6	0.124 4.9 5.5 7.9	0.165 4.9 5.5 7.9	0.142 5.2 6.1 8.5	0.189 5.2 6.1 8.5	0.159 5.5 6.4 9.2	0.212 5.5 6.4 9.2
	 31	m³/s side throw m	0.106 3.7 4.6 6.4	0.035 1.8 2.4 3.1	0.142 4.3 5.2 7.3	0.047 2.1 2.7 3.7	0.177 4.9 5.8 8.2	0.059 2.4 3.1 4.3	0.212 5.2 6.4 9.2	0.071 2.7 3.4 4.6	0.248 5.5 6.7 9.8	0.083 2.7 3.7 4.9	0.283 6.1 7.3 10.4	0.094 3.1 4.0 5.3	0.319 6.4 7.9 11.0	0.106 3.4 4.3 5.5
	 33	m³/s side throw m	0.070 2.7 3.4 4.9	0.109 2.7 3.4 4.9	0.093 3.1 4.0 5.5	0.144 3.1 4.0 5.5	0.116 3.4 4.6 6.4	0.180 3.4 4.6 6.4	0.139 3.7 4.9 6.7	0.217 3.7 4.9 6.7	0.163 4.0 5.2 7.3	0.253 4.0 5.2 7.3	0.186 4.3 5.5 7.6	0.289 4.3 5.5 7.6	0.209 4.6 6.1 82.0	0.325 4.6 6.1 8.2
	 37	m³/s side throw m	0.088 3.4 4.3 5.8	0.079 3.4 4.3 5.8	0.118 4.0 4.9 6.Y	0.106 4.0 4.9 6.7	0.148 4.6 5.5 7.6	0.133 4.6 5.5 7.6	0.177 4.9 6.1 8.2	0.159 4.9 6.1 8.2	0.206 5.2 6.4 8.8	0.186 5.2 6.4 8.8	0.236 5.5 7.0 9.5	0.212 5.5 7.0 9.5	0.265 6.1 7.3 10.1	0.239 6.1 7.3 10.1
	 22, 23	m³/s side throw m	0.124 3.7 4.6 6.4		0.165 4.3 5.2 7.3		0.206 4.9 5.8 8.2		0.248 5.2 6.4 9.2		0.289 5.5 6.7 9.8		0.330 6.1 7.3 10.4		0.372 6.4 7.9 11.0	
AD 0.157 m²	 52 55 54 53	m³/s side throw m	0.177 4.3 5.2 7.3	0.071 2.7 3.4 4.9	0.236 4.9 6.1 8.5	0.094 3.1 4.0 5.5	0.295 5.5 7.0 9.8	0.118 3.4 4.6 6.4	0.354 6.1 7.6 10.4	0.142 3.7 4.9 6.7	0.413 6.4 7.9 11.3	0.165 4.0 5.2 7.3	0.472 7.0 8.5 12.2	0.189 4.3 5.5 7.6	0.531 7.3 9.2 12.8	0.212 4.6 6.1 8.2
	 12, 13	m³/s side throw m	0.248 4.6 5.5 7.9		0.330 5.2 6.4 9.2		0.413 5.8 7.3 10.4		0.496 6.4 7.9 11.3		0.578 6.7 8.5 12.2		0.661 7.3 9.2 12.8		0.743 7.9 9.8 13.7	
	Return NC+6	Total m³/s	0.283		0.378		0.472		0.566		0.661		0.755		0.850	
	Factors -SP=2.7 TP	NC	9		18		25		31		35		39		43	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
300 x 600	 42 43	m³/s side throw m	0.106 3.7 4.6 6.4	0.035 1.8 2.4 3.1	0.142 4.3 5.2 7.3	0.047 2.1 2.7 3.7	0.177 4.9 5.8 8.2	0.059 2.4 3.1 4.3	0.212 5.2 6.4 9.2	0.071 2.7 3.4 4.6	0.248 5.5 6.7 9.8	0.083 2.7 3.7 4.9	0.283 6.1 7.3 10.4	0.094 3.1 4.0 5.2	0.319 6.4 7.9 11.0	0.106 3.4 4.3 5.5
	 45 *	m³/s side throw m	0.071 3.1 3.7 5.2	0.071 3.1 3.7 5.2	0.094 3.7 4.3 6.1	0.094 3.7 4.3 6.1	0.118 4.3 4.9 7.0	0.118 4.3 4.9 7.0	0.142 4.6 5.2 7.6	0.142 4.6 5.2 7.6	0.165 4.9 5.5 7.9	0.165 4.9 5.5 7.9	0.189 5.2 6.1 8.5	0.189 5.2 6.1 8.5	0.212 5.5 6.4 9.2	0.212 5.5 6.4 9.2
	 31	m³/s side throw m	0.124 3.7 4.6 6.4	0.035 1.8 2.4 3.1	0.165 4.3 5.2 7.3	0.047 2.1 2.7 3.7	0.206 4.9 5.8 8.2	0.083 2.4 3.1 4.3	0.248 5.2 6.4 9.2	0.071 2.7 3.4 4.6	0.289 5.5 6.7 9.8	0.083 2.7 3.7 4.9	0.330 6.1 7.3 10.4	0.094 3.1 4.0 5.2	0.372 6.4 7.9 11.0	0.106 3.4 4.3 5.5
	 33	m³/s side throw m	0.142 3.1 3.7 5.2	0.071 2.7 3.4 4.9	0.189 3.7 4.3 6.1	0.094 3.1 4.0 5.5	0.236 4.3 4.9 7.0	0.118 3.4 4.6 6.4	0.283 4.6 5.2 7.6	0.142 3.7 4.9 6.7	0.330 4.9 5.5 7.9	0.165 4.0 5.2 7.3	0.378 5.2 6.1 8.5	0.189 4.3 5.5 7.6	0.425 5.5 6.4 9.2	0.212 4.6 6.1 8.2
	 37	m³/s side throw m	0.088 3.4 4.3 5.8	0.097 3.4 4.3 5.8	0.118 4.0 4.9 6.7	0.130 4.0 4.9 6.7	0.148 4.6 5.5 7.6	0.162 4.6 5.5 7.6	0.177 4.9 6.1 8.2	0.195 4.9 6.1 8.2	0.206 5.2 6.4 8.8	0.227 5.2 6.4 8.8	0.236 5.5 7.0 9.5	0.259 5.5 7.0 9.5	0.275 6.1 7.3 10.1	0.292 6.1 7.3 10.1
	 22, 23	m³/s side throw m	0.142 4.0 4.9 7.0		0.189 4.6 5.5 7.9		0.236 5.2 6.4 9.2		0.283 5.5 6.7 9.8		0.330 6.1 7.3 10.4		0.378 6.4 7.6 11.3		0.425 7.0 8.2 11.9	
AD 0.180 m²	 52 55 54 53	m³/s side throw m	0.212 4.3 5.2 7.3	0.071 2.7 3.4 4.9	0.283 4.9 6.1 8.5	0.094 3.1 4.0 5.5	0.354 5.5 7.0 9.8	0.118 3.4 4.6 6.4	0.425 6.1 7.6 10.4	0.142 3.7 4.9 6.7	0.496 6.4 7.9 11.3	0.165 4.0 5.2 7.3	0.566 7.0 8.5 12.2	0.189 4.3 5.5 7.6	0.637 7.3 9.2 12.8	0.212 4.6 6.1 8.2
	 12, 13	m³/s side throw m	0.283 4.9 6.1 8.5		0.378 5.8 7.0 9.8		0.472 6.7 7.9 11.3		0.566 7.0 8.5 11.9		0.661 7.6 9.2 12.8		0.775 8.2 10.1 13.7		0.850 8.8 10.7 14.6	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

CMP – Performance Data

Size in mm	Patterns	Neck Vel m/s	1.57		2.10		2.62		3.15		3.67		4.19		4.72	
		TP Pa	6		11		17		24		33		43		54	
	Return NC+5	Total m^3/s	0.265		0.354		0.442		0.531		0.619		0.708		0.796	
	Factors -SP=2.1 TP	NC	9		18		25		31		35		39		43	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
375 x 450	42 / 43	m^3/s side throw m	0.077 2.7 3.4 4.9	0.055 2.1 2.7 3.7	0.103 3.1 4 5.5	0.074 2.4 3.1 4.3	0.129 3.4 4.6 6.4	0.092 2.7 3.4 4.9	0.155 3.7 4.9 6.7	0.111 3.1 3.7 5.2	0.181 4 5.2 7.3	0.129 3.4 4 5.5	0.207 4.3 5.5 7.6	0.147 3.4 4.3 6.1	0.232 4.6 6.1 8.2	0.166 3.7 4.6 6.4
	31	m^3/s side throw m	0.105 3.7 4.6 6.4	0.055 2.1 2.7 3.7	0.140 4.3 5.2 7.3	0.074 2.4 3.1 4.3	0.175 4.9 5.8 8.2	0.092 2.7 3.4 4.9	0.210 5.2 6.4 9.2	0.111 3.1 3.7 5.2	0.245 5.5 6.7 9.8	0.129 3.4 4.0 5.5	0.280 6.1 7.3 10.4	0.147 3.4 4.3 6.1	0.315 6.4 7.9 11.0	0.166 3.7 4.6 6.4
	33	m^3/s side throw m	0.093 3.4 4.3 5.8	0.080 2.4 3.1 4.3	0.124 4.0 4.9 6.7	0.106 2.7 3.4 4.9	0.155 4.6 5.5 7.6	0.133 3.1 4.0 5.5	0.186 4.9 6.1 8.2	0.159 3.4 4.3 6.1	0.217 5.2 6.4 8.8	0.186 3.7 4.6 6.4	0.248 5.5 7.0 9.5	0.212 4.0 4.9 7.0	0.279 6.1 7.3 10.1	0.239 4.3 5.2 7.3
	37	m^3/s side throw m	0.077 3.4 4.3 5.8	0.094 3.4 4.3 5.8	0.103 4.0 4.9 6.7	0.126 4.0 4.9 6.7	0.129 4.6 5.5 7.6	0.157 4.6 5.5 7.6	0.154 4.9 6.1 8.2	0.188 4.9 6.1 8.2	0.180 5.2 6.4 8.8	0.220 5.2 6.4 8.8	0.206 5.5 7.0 9.5	0.251 5.5 7.0 9.5	0.232 6.1 7.3 10.1	0.282 6.1 7.3 10.1
	22, 23	m^3/s side throw m	0.133 4.0 4.9 7.0		0.177 4.6 5.5 7.9		0.221 5.2 6.4 9.2		0.265 5.5 6.7 9.8		0.310 6.1 7.3 10.4		0.354 6.4 7.6 11.3		0.398 7.0 8.2 11.9	
AD 0.169 m^2	52 / 55 / 54 / 53	m^3/s side throw m	0.155 4.9 6.1 8.5	0.111 3.4 4.3 5.8	0.207 5.8 7.0 9.8	0.147 4.0 4.9 6.7	0.258 6.7 7.9 11.3	0.184 4.6 5.5 7.6	0.310 7.0 8.5 11.9	0.221 4.9 6.1 8.2	0.362 7.6 9.2 12.8	0.258 5.2 6.4 8.8	0.414 8.2 10.1 13.7	0.295 5.5 7.0 9.5	0.465 8.8 10.7 14.6	0.331 6.1 7.3 10.1
	12, 13	m^3/s side throw m	0.265 4.6 5.5 7.9		0.354 5.2 6.4 9.2		0.442 5.8 7.3 10.4		0.531 6.4 7.9 11.3		0.619 6.7 8.5 12.2		0.708 7.3 9.2 12.8		0.796 7.9 9.8 13.7	
	Return NC+6	Total m^3/s	0.309		0.413		0.515		0.619		0.723		0.826		0.930	
	Factors -SP=2.2 TP	NC	9		18		25		31		35		39		43	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
375 x 525	42 / 43	m^3/s side throw m	0.099 3.7 4.6 6.4	0.055 2.1 2.7 3.7	0.133 4.3 5.2 7.3	0.074 2.4 3.1 4.3	0.166 4.9 5.8 8.2	0.092 2.7 3.4 4.9	0.199 5.2 6.4 9.2	0.111 3.1 3.7 5.2	0.233 5.5 6.7 9.8	0.129 3.4 4.0 5.5	0.266 6.1 7.3 10.4	0.147 3.4 4.3 6.1	0.299 6.4 7.9 11.0	0.166 3.7 4.6 6.4
	45 *	m^3/s side throw m	0.077 3.4 4.3 5.8	0.077 3.4 4.3 5.8	0.103 4.0 4.9 6.7	0.103 4.0 4.9 6.7	0.129 4.6 5.5 7.6	0.129 4.6 5.5 7.6	0.154 4.9 6.1 8.2	0.154 4.9 6.1 8.2	0.180 5.2 6.4 8.8	0.180 5.2 6.4 8.8	0.206 5.5 7.0 9.5	0.206 5.5 7.0 9.5	0.232 6.1 7.3 10.1	0.232 6.1 7.3 10.1
	31	m^3/s side throw m	0.127 3.7 4.6 6.4	0.055 2.1 2.7 3.7	0.170 4.3 5.2 7.3	0.074 2.4 3.1 4.3	0.212 4.9 5.8 8.2	0.092 2.7 3.4 4.9	0.254 5.2 6.4 9.2	0.111 3.1 3.7 5.2	0.297 5.5 6.7 9.8	0.129 3.4 4.0 5.5	0.339 6.1 7.3 10.4	0.147 3.4 4.3 6.1	0.382 6.4 7.9 11.0	0.166 3.7 4.6 6.4
	33	m^3/s side throw m	0.101 3.1 3.7 5.2	0.109 2.7 3.4 4.9	0.134 3.7 4.3 6.1	0.144 3.1 4.0 5.5	0.168 4.3 4.9 7.0	0.180 3.4 4.6 6.4	0.201 4.6 5.2 7.6	0.217 3.7 4.9 6.7	0.235 4.9 5.5 7.9	0.253 4.0 5.2 7.3	0.269 5.2 6.1 8.5	0.289 4.3 5.5 7.6	0.303 5.5 6.4 9.2	0.325 4.6 6.1 8.2
	37	m^3/s side throw m	0.100 3.7 4.6 6.4	0.105 3.7 4.6 6.4	0.133 4.3 5.2 7.3	0.140 4.3 5.2 7.3	0.166 4.9 5.8 8.2	0.175 4.9 5.8 8.2	0.199 5.2 6.4 9.2	0.210 5.2 6.4 9.2	0.232 5.5 6.7 9.8	0.245 5.5 6.7 9.8	0.266 6.1 7.3 10.4	0.280 6.1 7.3 10.4	0.299 6.4 7.9 11.0	0.315 6.4 7.9 11.0
	22, 23	m^3/s side throw m	0.154 4.0 4.9 7.0		0.206 4.6 5.5 7.9		0.258 5.2 6.4 9.2		0.310 5.5 6.7 9.8		0.362 6.1 7.3 10.4		0.413 6.4 7.6 11.3		0.465 7.0 8.2 11.9	
AD 0.197 m^2	52 / 55 / 54 / 53	m^3/s side throw m	0.199 4.3 5.2 7.3	0.111 3.4 4.3 5.8	0.266 4.9 6.1 8.5	0.147 4.0 4.9 6.7	0.331 5.5 7.0 9.8	0.184 4.6 5.5 7.6	0.398 6.1 7.6 10.4	0.221 4.9 6.1 8.2	0.465 6.4 7.9 11.3	0.258 5.2 6.4 8.8	0.532 7.0 8.5 12.2	0.295 5.5 7.0 9.5	0.599 7.3 9.2 12.8	0.331 6.1 7.3 10.1
	12, 13	m^3/s side throw m	0.309 4.9 6.1 8.5		0.413 5.8 7.0 9.8		0.515 6.7 7.9 11.3		0.619 7.0 8.5 11.9		0.723 7.6 9.2 12.8		0.826 8.2 10.1 13.7		0.930 8.8 10.7 14.6	
	Return NC+7	Total m^3/s	0.354		0.472		0.590		0.708		0.826		0.944		1.060	
	Factors -SP=2.7 TP	NC	10		19		26		32		36		40		44	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
375 x 600	42 / 43	m^3/s side throw m	0.122 3.7 4.6 6.4	0.055 2.1 2.7 3.7	0.162 4.3 5.2 7.3	0.074 2.4 3.1 4.3	0.203 4.9 5.8 8.2	0.092 2.7 3.4 4.9	0.244 5.2 6.4 9.2	0.111 3.1 3.7 5.2	0.284 5.5 6.9 9.8	0.129 3.4 4.0 5.5	0.325 6.1 7.3 10.4	0.147 3.4 4.3 6.1	0.365 6.4 7.9 11.0	0.166 3.7 4.6 6.4
	45 *	m^3/s side throw m	0.077 3.4 4.3 5.8	0.100 3.7 4.6 6.4	0.103 4.0 4.9 6.7	0.133 4.3 5.2 7.3	0.129 4.6 5.5 7.6	0.166 4.9 5.8 8.2	0.154 4.9 6.1 8.2	0.199 5.2 6.4 9.2	0.180 52.0 6.4 8.8	0.232 5.5 6.7 9.8	0.206 5.5 7.0 9.5	0.266 6.1 7.3 10.4	0.232 6.1 7.3 10.1	0.299 6.4 7.9 11.0
	31	m^3/s side throw m	0.149 4.0 4.9 7.0	0.055 2.1 2.7 3.7	0.199 4.6 5.5 7.9	0.074 2.4 3.1 4.3	0.249 5.2 6.4 9.2	0.092 2.7 3.4 4.9	0.299 5.5 6.7 9.8	0.111 3.1 3.7 5.2	0.348 6.1 7.3 10.4	0.129 3.4 4.0 5.5	0.398 6.4 7.6 11.3	0.147 3.4 4.3 6.1	0.448 7.0 8.2 11.9	0.166 3.7 4.6 6.4
	33	m^3/s side throw m	0.100 3.7 4.6 6.4	0.142 3.0 3.7 5.2	0.142 4.3 5.2 7.3	0.189 3.7 4.3 6.1	0.177 4.9 5.8 8.2	0.236 4.3 4.9 7.0	0.212 5.2 6.4 9.2	0.283 4.6 5.2 7.6	0.248 5.5 6.7 9.8	0.330 4.9 5.5 7.9	0.283 6.1 7.3 10.4	0.378 5.2 6.1 8.5	0.319 6.4 7.9 11.0	0.425 5.5 6.4 9.2
	37	m^3/s side throw m	0.122 3.7 4.6 6.4	0.116 3.7 4.6 6.4	0.162 4.3 5.2 7.3	0.155 4.3 5.2 7.3	0.203 4.9 5.8 8.2	0.194 4.9 5.8 8.2	0.244 5.2 6.4 9.2	0.232 5.2 6.4 9.2	0.284 5.5 6.7 9.8	0.271 5.5 6.7 9.8	0.325 6.1 7.3 10.4	0.310 6.1 7.3 10.4	0.366 6.4 7.9 11.0	0.348 6.4 7.9 11.0
	22, 23	m^3/s side throw m	0.177 4.3 5.2 7.3		0.236 4.9 6.1 8.5		0.295 5.5 7.0 9.8		0.354 6.1 7.6 10.4		0.413 6.4 7.9 11.3		0.472 7.0 8.5 12.2		0.531 7.3 9.2 12.8	
AD 0.225 m^2	52 / 55 / 54 / 53	m^3/s side throw m	0.244 4.6 5.5 7.9	0.111 3.4 4.3 5.8	0.325 5.2 6.4 9.2	0.147 4.0 4.9 6.7	0.406 5.8 7.3 10.4	0.184 4.6 5.5 7.6	0.405 6.4 7.9 11.3	0.221 4.9 6.1 8.2	0.568 6.7 8.5 12.2	0.258 5.2 6.4 8.8	0.650 7.3 9.2 12.8	0.295 5.5 7.0 9.5	0.731 7.9 9.8 13.7	0.331 6.1 7.3 10.1
	12, 13	m^3/s side throw m	0.354 5.2 6.4 9.2		0.472 6.1 7.3 10.4		0.590 7.0 8.2 11.9		0.708 7.6 9.2 12.8		0.826 7.9 9.8 13.7		0.944 8.5 10.4 14.6		1.060 9.2 11.0 15.6	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

Size in mm	Patterns	Neck Vel m/s / TP Pa	1.57 / 6		2.10 / 11		2.62 / 17		3.15 / 24		3.67 / 33		4.19 / 43		4.72 / 54	
	Return NC+6	Total m^3/s / NC	0.372 / 9		0.496 / 19		0.618 / 26		0.743 / 32		0.869 / 36		0.991 / 40		1.110 / 44	
	Factors -SP=2.3 TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
450 x 525	 42 43 31 33 37 22, 23 52 55 54 53 12, 13	m^3/s side throw m	0.106	0.080	0.142	0.106	0.177	0.132	0.212	0.159	0.248	0.186	0.283	0.212	0.318	0.239
			3.1	2.4	3.7	2.7	4.3	3.1	4.6	3.4	4.9	3.7	5.2	4	5.5	4.3
			3.7	3.1	4.3	3.4	4.9	4	5.2	4.3	5.5	4.6	6.1	4.9	6.4	5.2
			5.2	4.3	6.1	4.9	7	5.5	7.6	6.1	7.9	6.4	8.5	7	9.2	7.3
		m^3/s side throw m	0.146	0.080	0.195	0.106	0.243	0.133	0.292	0.159	0.341	0.186	0.389	0.212	0.438	0.239
			4.0	2.4	4.6	2.7	5.2	3.1	5.5	3.4	6.1	3.7	6.4	4.0	7.0	4.9
			4.9	3.1	5.5	3.4	6.4	4.0	6.7	4.3	7.3	4.6	7.6	4.9	8.2	5.2
			7.0	4.3	7.9	4.9	9.2	5.5	9.8	6.1	10.4	6.4	11.3	7.0	11.9	7.3
		m^3/s side throw m	0.132	0.109	0.176	0.144	0.219	0.180	0.263	0.217	0.308	0.253	0.351	0.289	0.395	0.325
			4.0	2.7	4.6	3.1	5.2	3.4	5.5	3.7	6.1	4.0	6.4	4.3	7.0	4.6
			4.9	3.4	5.5	4.0	6.4	4.6	6.7	4.9	7.3	5.2	7.6	5.5	8.2	6.1
			7.0	4.9	7.9	5.5	9.2	6.4	9.8	6.7	10.4	7.3	11.3	7.6	11.9	8.2
		m^3/s side throw m	0.133	0.119	0.177	0.159	0.221	0.198	0.266	0.238	0.310	0.278	0.354	0.317	0.399	0.357
			4.0	3.7	4.6	4.3	5.2	4.9	5.5	5.2	6.1	5.5	6.4	6.1	7.0	6.4
			4.9	4.6	5.5	5.2	6.4	5.8	6.7	6.4	7.3	6.7	7.6	7.3	8.2	7.9
			7.0	6.4	7.9	7.3	9.2	8.2	9.8	9.2	10.4	9.8	11.3	10.4	11.9	11.0
		m^3/s side throw m	0.186		0.248		0.309		0.372		0.434		0.496		0.557	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.2		6.1		7.0		7.6		7.9		8.5		9.1	
			7.3		8.5		9.8		10.4		11.3		12.2		12.8	
AD 0.236 m^2		m^3/s side throw m	0.212	0.160	0.283	0.212	0.359	0.264	0.425	0.319	0.496	0.373	0.566	0.425	0.637	0.477
			4.3	3.7	4.9	4.3	5.5	4.9	6.1	5.2	6.4	5.5	7.0	6.1	7.3	6.4
			5.2	4.6	6.1	5.2	7.0	5.8	7.6	6.4	7.9	6.7	8.5	7.3	9.1	7.9
			7.3	6.4	8.5	7.3	9.8	8.2	10.4	9.2	11.3	9.8	12.2	10.4	12.8	11.0
		m^3/s side throw m	0.372		0.496		0.618		0.743		0.869		0.991		1.110	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
			6.4		7.3		8.2		9.2		9.8		10.4		11.0	
			9.2		10.4		11.9		12.8		13.7		14.6		15.6	
	Return NC+7	Total m^3/s / NC	0.425 / 11		0.566 / 20		0.708 / 27		0.851 / 33		0.991 / 37		1.130 / 41		1.270 / 45	
	Factors -SP=2.6 TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
450 x 600	 42 43 45 * 31 33 37 22, 23 52 55 54 53 12, 13	m^3/s side throw m	0.133	0.080	0.177	0.106	0.221	0.133	0.266	0.159	0.310	0.186	0.354	0.212	0.398	0.239
			4.0	2.4	4.6	2.7	5.2	3.1	5.5	3.4	6.1	3.7	6.4	4.0	7.0	4.3
			4.9	3.1	5.5	3.4	6.4	4.0	6.7	4.3	7.3	4.6	7.6	4.9	8.2	5.2
			7.0	4.3	7.9	4.9	9.2	5.5	9.8	6.1	10.4	6.4	11.3	7.0	11.9	7.3
		m^3/s side throw m	0.106	0.106	0.142	0.142	0.177	0.177	0.212	0.212	0.248	0.248	0.283	0.283	0.319	0.319
			3.7	3.7	4.3	4.3	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4
			4.6	4.6	5.2	5.2	5.8	5.8	6.4	6.4	6.7	6.7	7.3	7.3	7.9	7.9
			6.4	6.4	7.3	7.3	8.2	8.2	9.2	9.2	9.8	9.8	10.4	10.4	11.0	11.0
		m^3/s side throw m	0.173	0.080	0.230	0.106	0.288	0.133	0.345	0.159	0.403	0.186	0.460	0.212	0.518	0.239
			4.3	2.4	4.9	2.7	5.5	3.1	6.1	3.4	6.4	3.7	7.0	4.0	7.3	4.3
			5.2	3.1	6.1	3.4	7.0	4.0	7.6	4.3	7.9	5.2	8.5	4.9	9.2	5.2
			7.3	4.3	8.5	4.9	9.8	5.5	10.4	6.1	11.3	6.4	12.2	7.0	12.8	7.3
		m^3/s side throw m	0.142	0.142	0.189	0.189	0.236	0.236	0.283	0.283	0.330	0.330	0.378	0.378	0.425	0.425
			4.0	3.1	4.6	3.7	5.2	4.3	5.5	4.6	6.1	4.9	6.4	5.2	7.0	5.5
			4.9	3.7	5.5	4.3	6.4	4.9	6.7	5.2	7.3	5.5	7.6	6.1	8.2	6.4
			7.0	5.2	7.9	6.1	9.2	7.0	9.8	7.6	10.4	7.9	11.3	8.5	11.9	9.2
		m^3/s side throw m	0.133	0.146	0.177	0.195	0.221	0.243	0.266	0.292	0.310	0.340	0.354	0.389	0.399	0.438
			4.0	4.0	4.6	4.6	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4	7.0	7.0
			4.9	4.9	5.5	5.5	6.4	6.4	6.7	6.7	7.3	7.3	7.6	7.6	8.2	8.2
			7.0	7.0	7.9	7.9	9.2	9.2	9.8	9.8	10.4	10.4	11.3	11.3	11.9	11.9
		m^3/s side throw m	0.212		0.283		0.354		0.425		0.496		0.566		0.637	
			4.3		4.9		5.5		6.1		6.4		7.0		7.3	
			5.2		6.1		7.0		7.6		7.9		8.5		9.2	
			7.3		8.5		9.8		10.4		11.3		12.2		12.8	
AD 0.27 m^2		m^3/s side throw m	0.265	0.160	0.354	0.212	0.443	0.265	0.531	0.319	0.620	0.372	0.708	0.425	0.797	0.478
			4.6	3.7	5.2	4.3	5.8	4.9	6.4	5.2	6.7	5.5	7.3	6.1	7.9	6.4
			5.5	5.2	6.4	5.5	7.3	5.8	7.9	6.4	8.5	6.7	9.2	7.2	9.8	7.9
			7.9	6.4	9.2	7.3	10.4	8.2	11.3	9.2	12.2	9.8	12.8	10.4	13.7	11.1
		m^3/s side throw m	0.425		0.566		0.708		0.850		0.991		1.133		1.270	
			5.5		6.4		7.3		7.6		8.5		9.2		9.8	
			7.0		7.9		9.2		9.8		10.4		11.3		11.9	
			9.5		11.0		12.5		13.4		14.6		15.6		16.5	
	Return NC+8	Total m^3/s / NC	0.496 / 12		0.661 / 21		0.826 / 28		0.991 / 34		1.156 / 38		1.322 / 42		1.490 / 46	
	Factors -SP=3.2 TP		A	B	A	B	A	B	A	B	A	B	A	B	A	B
525 x 600	 42 43 31 33 37 22, 23 52 55 54 53 12, 13	m^3/s side throw m	0.139	0.109	0.186	0.144	0.233	0.180	0.279	0.217	0.326	0.253	0.372	0.289	0.419	0.325
			3.4	2.7	4.0	3.1	4.6	3.4	4.9	3.7	5.2	4.0	5.5	4.3	6.1	4.6
			4.3	3.4	4.9	4.0	5.5	4.6	6.1	4.9	6.4	5.2	7.0	5.5	7.3	6.1
			5.8	4.9	6.7	5.5	7.6	6.4	8.2	6.7	8.8	7.3	9.5	7.6	10.1	8.2
		m^3/s side throw m	0.194	0.109	0.258	0.144	0.323	0.180	0.387	0.217	0.452	0.253	0.517	0.289	0.581	0.325
			4.3	2.7	4.9	3.1	5.5	3.4	6.1	3.7	6.4	4.0	7.0	4.3	7.3	4.6
			5.2	3.4	6.1	4.0	7.0	4.6	7.6	4.9	7.9	5.2	8.5	5.5	9.2	6.1
			7.3	4.9	8.5	5.5	9.8	6.4	10.4	6.7	11.3	7.3	12.2	7.6	12.8	8.2
		m^3/s side throw m	0.177	0.142	0.236	0.189	0.295	0.236	0.354	0.283	0.414	0.331	0.471	0.377	0.532	0.426
			4.3	3.1	4.9	3.7	5.5	4.3	6.1	4.6	6.4	4.9	7.0	5.2	7.3	5.5
			5.2	3.7	6.1	4.3	7.0	4.9	7.6	5.2	7.9	5.5	8.5	6.1	9.2	6.4
			7.3	5.2	8.5	6.1	9.8	7.0	10.4	7.6	11.3	7.9	12.2	8.5	12.8	9.2
		m^3/s side throw m	0.170	0.163	0.227	0.217	0.283	0.271	0.340	0.326	0.397	0.380	0.453	0.434	0.510	0.486
			3.7	3.7	4.3	4.3	4.9	4.9	5.2	5.2	5.5	5.5	6.1	6.1	6.4	6.4
			4.6	4.6	5.2	5.2	5.8	5.8	6.4	6.4	6.7	6.7	7.3	7.3	7.9	7.9
			6.4	6.4	7.3	7.3	8.2	8.2	9.2	9.2	9.8	9.8	10.4	10.4	11.0	11.0
		m^3/s side throw m	0.248		0.330		0.413		0.496		0.578		0.661		0.744	
			4.6		5.2		5.8		6.4		6.7		7.3		7.9	
			5.5		6.4		7.3		7.9		8.5		9.2		9.8	
			7.9		9.2		10.4		11.3		12.2		12.8		13.7	
AD 0.315 m^2		m^3/s side throw m	0.279	0.217	0.372	0.289	0.465	0.361	0.577	0.434	0.652	0.505	0.744	0.578	0.838	0.650
			4.9	4.0	5.8	4.6	6.7	5.2	7.0	5.5	7.6	6.1	8.2	6.4	8.8	7.0
			6.1	4.9	7.0	5.5	7.9	6.4	8.5	6.7	9.2	7.3	10.1	7.6	10.7	8.2
			8.5	7.0	9.8	7.9	11.3	9.2	11.9	9.8	12.8	10.4	13.7	11.3	14.6	11.9
		m^3/s side throw m	0.496		0.661		0.826		0.991		1.160		1.320		1.490	
			5.8		6.7		7.6		8.2		8.8		9.5		10.1	
			7.3		8.2		9.5		10.1		11.0		11.6		12.5	
			10.1		11.6		13.1		14.3		15.3		16.5		17.4	

* These cores are constructed to give as near as possible equal air flow in A & B directions.

CMP-A, CMP-ADJ & CMPH

Product Ordering Key and Suggested Specifications

CMP	–	A	–	1	–	41	–	450x450	–	600x600	–	OBD	–	TRV	–	SRA 300 DIA CH 300 DIA	–	FINISH
Ceiling Multi Pattern		Aluminium		Frame Style		Core Pattern		Duct Size		Module Size		Opposed Blade Damper Attached		Throw Reducing Vanes		Square to Round Adaptor, or Cushion Head		Holyoake White Mill Aluminium Powder Coat

Ceiling Multi Pattern Louver Face diffusers shall be type CMP-A and be all Aluminium construction with removable core, to give the air distribution pattern shown on the drawings. They shall be available with a range of frame styles and purpose made accessories for both throw adjustment and volume control.

All shall be as manufactured by Holyoake.

CMP-ADJ	–	2	–	41	–	225x225	–	600x600	–	OBD	–	TRV	–	SRA 150 DIA CH 150 DIA	–	FINISH
Ceiling Multi Pattern - Adjustable		Frame Style		Core Pattern		Duct Size		Module Size		Opposed Blade Damper Attached		Throw Reducing Vanes		Square to Round Adaptor, or Cushion Head		Holyoake White Mill Aluminium Powder Coat

Ceiling Multi Pattern - Adjustable Louver Face diffusers shall be type CMP-ADJ. They shall be of all Aluminium construction, with removeable cores. CMP-ADJ are fitted with vanes which can easily be adjusted to enable vertical, or horizontal throw.

All shall be as manufactured by Holyoake.

CMPH	–	2	–	41	–	300x300	–	600 x 600	–	OBD	–	TRV	–	SRA 150 DIA CH 150 DIA	–	FINISH
Ceiling Multi Pattern Horizontal		Frame Style		Core Pattern		Duct Size		Module Size		Opposed Blade Damper Attached		Throw Reducing Vanes		Square to Round Adaptor, or Cushion Head		Holyoake White Mill Aluminium Powder Coat

Ceiling Multi Pattern Horizontal Louver Face diffusers shall be type CMPH and be all Aluminium construction with additional horizontal blades. Complete with removeable core to give multiple air distribution patterns. They shall be available with a range of frame styles and accessories for both throw adjustment and volume control.

All shall be as manufactured by Holyoake.

Note: All ceiling diffusers, seismic restraints required, but not supplied.

CMPP & CMP - TL

Product Ordering Key and Suggested Specifications

CMPP	–	1	–	300x300	–	450 x 450	–	OBD	–	SRA 300 DIA CH 300 DIA	–	FINISH
Ceiling Multi Pattern Plaque		Frame Style		Duct Size		Module Size		Opposed Blade Damper Attached		Square to Round Adaptor, or Cushion Head		Holyoake White Mill Aluminium Powder Coat

Ceiling Multi Pattern - Plaque Louver Face diffusers shall be type CMPP. They shall be of all Aluminium construction, with removeable plaque core. CMPP have a range of frame styles and accessories for installation and volume control.

All shall be as manufactured by Holyoake.

CMP-TL	–	1	–	450x450	–	SRA 300 DIA CH 300 DIA	–	FINISH
Ceiling Multi Pattern - Thermal Low Cost		Frame Style		Neck Size		Square to Round Adaptor, or Cushion Head		Holyoake White Mill Aluminium Powder Coat

Ceiling Multi Pattern - Thermal Low Cost Louver Face diffusers shall be type CMP-TL. They shall be of Aluminium construction, with removeable cores. CMP-TL central cores, are complete with a vertical supply section controlled by a thermally actuated damper. Supply air is diffused horizontally below temperatures of 24°C and vertically with temperatures above 30°C.

All shall be as manufactured by Holyoake.

Note: All ceiling diffusers, seismic restraints required, but not supplied.