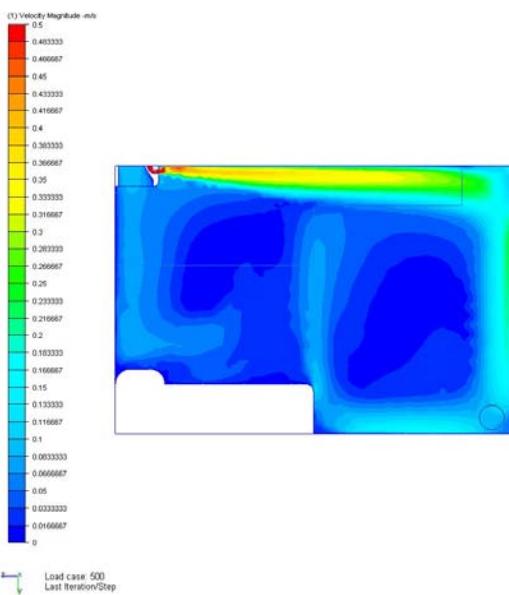




■ The operation of the CornerAir

The CornerAir is an induction type air-conditioning unit for exposed installations, which is suited for ventilation, cooling and heating. Primary air is supplied through special, adjustable nozzles at approx. 0.2 to 0.6 inWC, as required. A volume of secondary air is then induced from the room through the finned cooling and heating coil. The conditioned air is then mixed with the primary air and discharged back into the room along the ceiling.

■ CornerAir CFD modelling



■ Description of the CornerAir beam

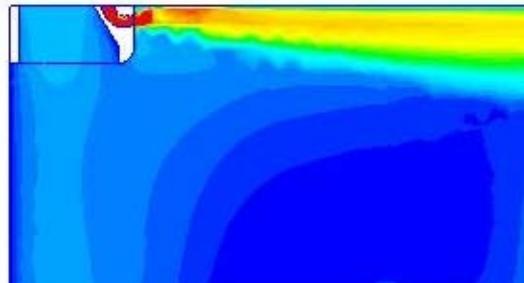
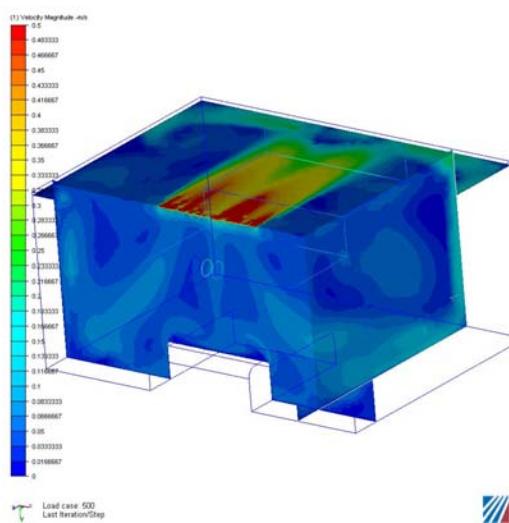
In the pressure chamber (primary air box), an adjustable nozzle blade can be found, which allows the air flow to be adjusted in three steps, by using a long-stem 5 mm Allen key.

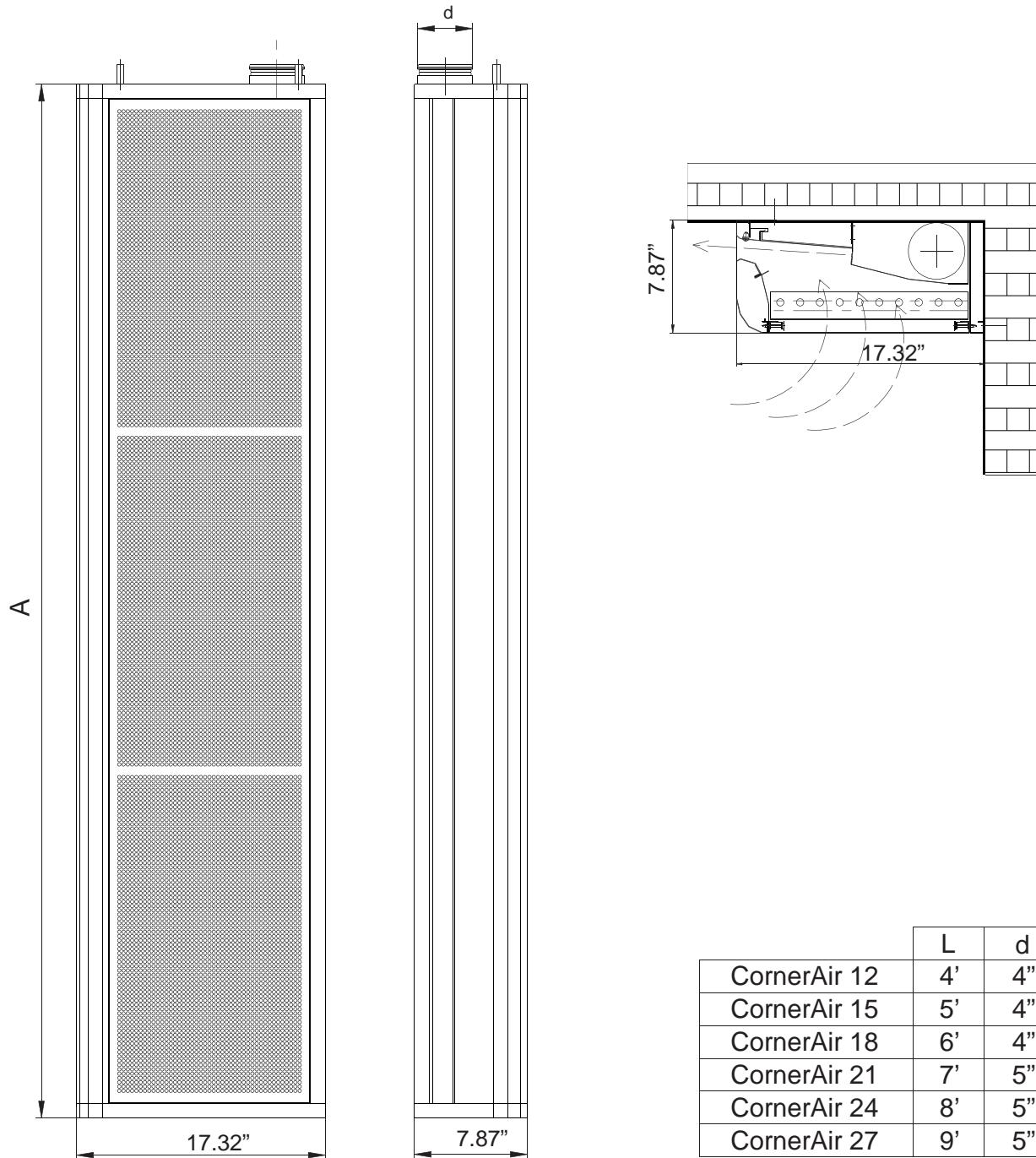
The coil can be supplied as a 2-pipe unit (HTG or CLG with change-over valve) or as a 4-pipe unit with separate HTG and CLG circuits.

The CornerAir chilled beams are supplied with a 4"-5" duct collar, depending on the volume of primary air.

The CornerAir chilled beam can be fitted into the corner at the junction of wall and ceiling, by using hidden screws.

As an option, a complete regulating automation unit can as well be ordered for the CornerAir chilled beam.



Sizes


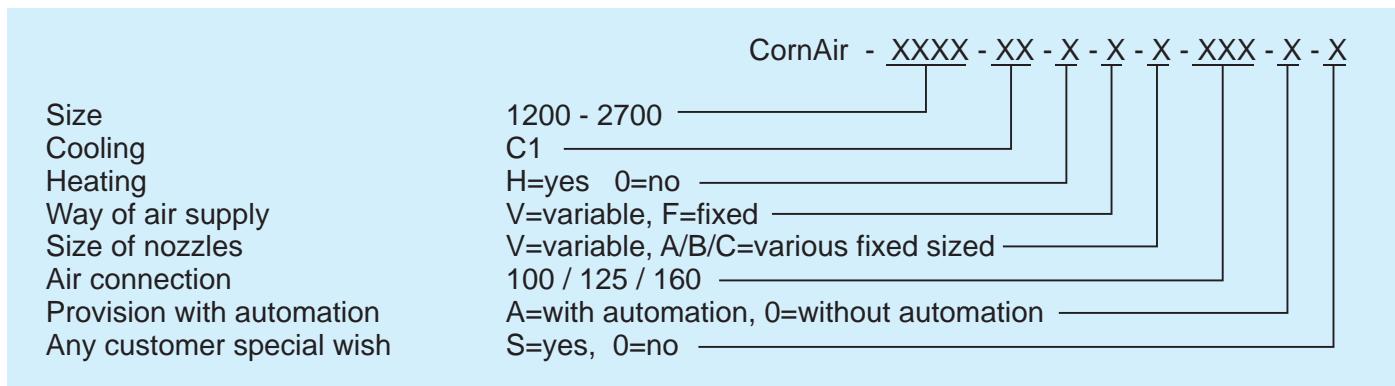
■ CornerAir cooling and heating capacities (metric)

Table No. 1

Type	Nozzle	Air flow l/s 60 Pa	Cooling capacity W/°C 60 Pa	Air flow l/s 100 Pa	Cooling capacity W/°C 100 Pa	Heating capacity W/°C 60 Pa	Heating capacity W/°C 100 Pa
CA 12	A	8,75	33,6	11,3	42,8	23,1	29,9
	B	11,62	43,8	15	53	30,6	37
	C	14,56	51,9	18,8	61,1	36,2	42,6
CA 15	A	10,46	38,5	13,5	48,8	27	34,1
	B	12,78	46,6	16,5	56,9	32,6	39,7
	C	15,72	54,9	20,3	65,2	38,4	45,5
CA 18	A	11,62	44,1	15	57,8	30,9	40,4
	B	14,56	56,2	18,8	70	39,3	48,8
	C	17,43	65,9	22,5	79,6	46	55,5
CA 21	A	12,78	52,9	16,5	69	37,1	48,3
	B	15,7	65,9	20,3	82,1	46,2	57,4
	C	20,37	82,3	26,3	98,4	57,6	68,8
CA 24	A	14,56	58,77	18,8	75	40,9	52,5
	B	19,21	76,4	24,8	92,9	53,5	65,1
	C	23,24	88,7	30	105,1	62,1	73,7
CA 27	A	15,72	64	20,3	82,5	44,8	57,8
	B	21,53	86,8	27,8	105,2	60,8	73,8
	C	26,18	100,9	33,8	119,4	70,7	83,7

Designing/dimensioning of the chilled beams can be performed by using the CornerAir Selection Software. Please contact Barcol-Air Ltd for details.

■ CHILLED BEAM CODE (ORDERING) SYSTEM (metric)

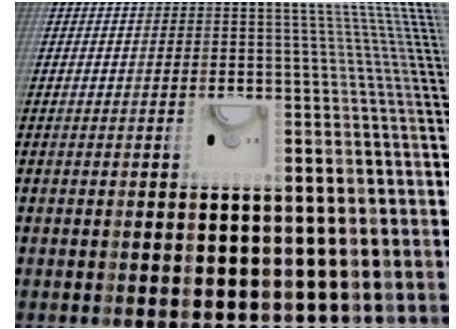


OPTIONS

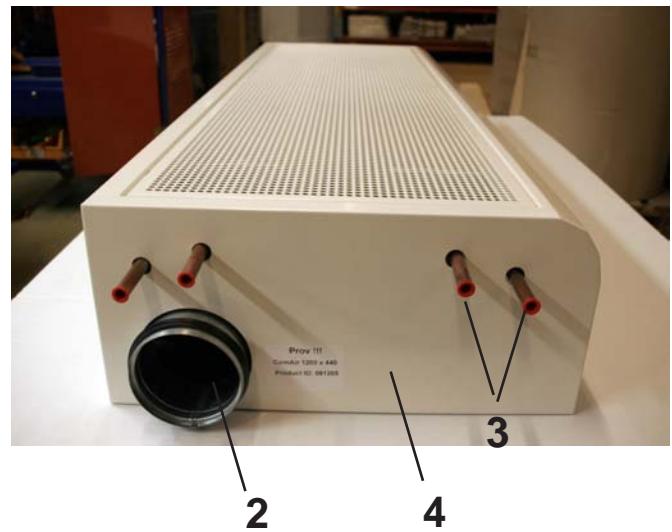
The CornerAir chilled beam is available in several versions (various water and air connections). In addition numerous options can be ordered, such as follows:

- temperature and air controllers in different versions
- cooling and heating valves,
- suspension, support structure

CornerAir equipped with automation



MAINTENANCE



Description of parts

1. Perforated induction grille
2. Duct collar
3. Cooling and heating connections
4. End part
5. Discharge slot

For maintenance, open and swing down the grille.

- clean the air chambers and the heat exchanger with a vacuum cleaner.
- clean the grille and casing using a soft cloth. If necessary, apply mild detergent.
- carry out maintenance operation at least once a year