



Active Beam Range

Introduction

The Waterloo ABM Series Active Chilled Beams is a compact ceiling or surface mounted unit for heating and cooling. With the supply of primary air through nozzles, secondary room air is inducted through a heat exchanger. This is then supplied with cold or hot water, for chilling, or warming, and a multitude of nozzle configurations are available to meet any project requirements. The weight of the unit relative to its high capacity for heating and cooling is remarkable, and the shape of the unit gives a flat horizontal air supply pattern providing good throw characteristics. Through its clever modular design the ABM modules can be fitted together to maintain aesthetic consistency. The ABM is available in widths from 300 to 600mm to integrate into most ceiling systems.

Product Description

Module Sizes

ABM 300 1200 mm up to 3000 mm.

Application

Cooling and heating of spaces. Easy installation in many standard ceiling systems.

Finishes

Front Plate: PPM 9010 as standard, other colours available on request.

Plenum Box: Zintec

Heat Exchanger: Copper / Aluminium.

Features

- High heating and cooling capacity.
- Low weight
- Mixing supplied air with room air (induction).
- Heat exchanger easily accessible through an optional opening front plate.

Options

- Hinged Front Plate for Additional Access
- Thermally Lined Plenum Box
- Low Profile Plenum Chamber
- Choice of Duct Connection Sizes
- Luminaires, Sprinkler Apertures and P.A.
- Integration
- Wide range of Finishes
- Many Facia Styles (linear or perforated)
- Left or Right Hand Water Connections
- Vertical or Horizontal Water Connections
- Side or End Entry Plenum Chambers
- 1 or 2 Way Blow
- Variable Nozzle Option



Model shown above is the ABM 300 with optional spotlights fitted

Order Example	
ABM 300-1720-1270-B-L/PPM9010	
Type	_____
Length of Unit	_____
Length of Heat Exchanger	_____
Nozzle Type	_____
Water Connection Left or Right Hand Side	_____
Finish	_____

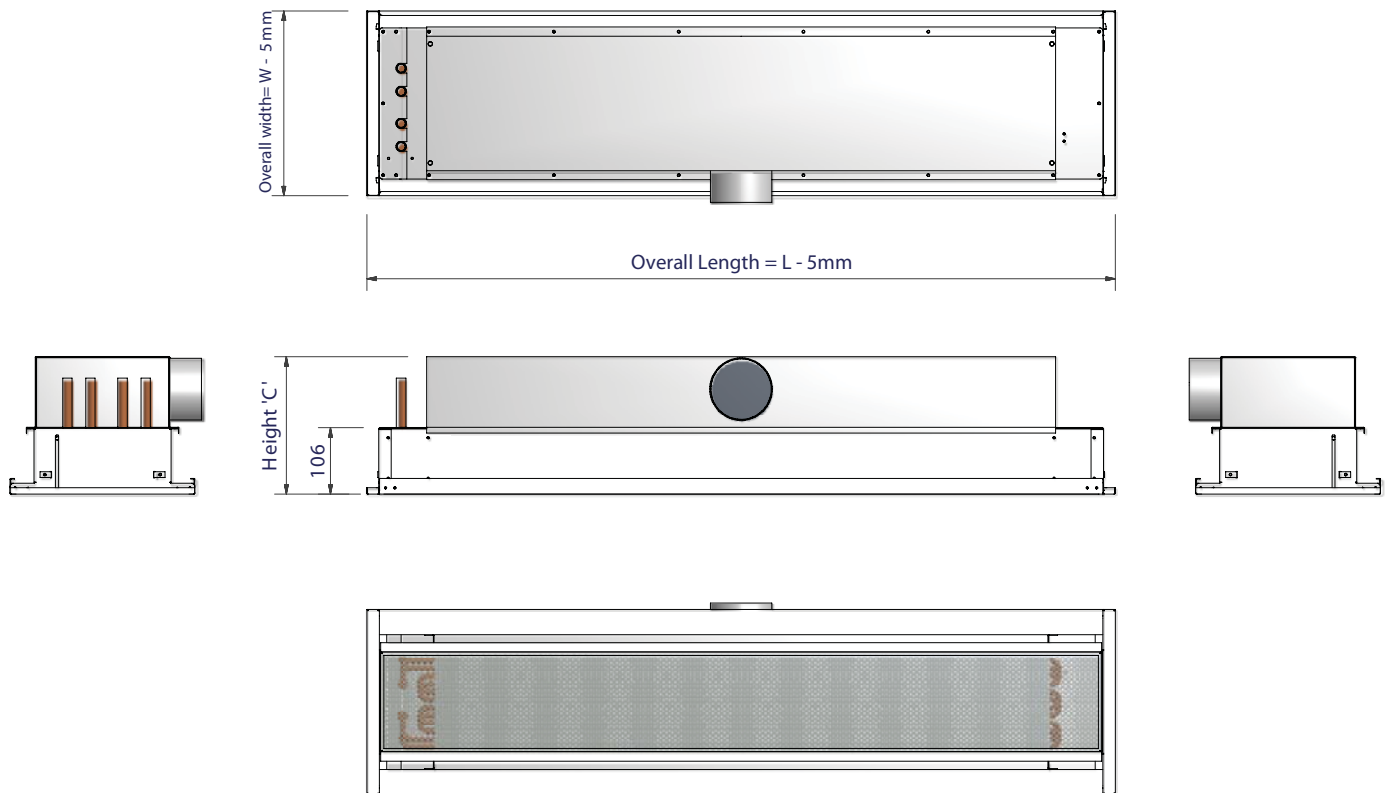
Table 1 - Approximate ABM weights

UNIT LENGTH	1200 mm	1350 mm	1500 mm	1800 mm	2400 mm	2700 mm	3000 mm
ABM 300	14 kg	16 kg	18 kg	22 kg	30 kg	34 kg	38 kg
ABM 600	17 kg	20 kg	22 kg	27 kg	37 kg	42 kg	46 kg



Unit Dimensions

Figure 1 - Overall Dimensions (mm) without factory-mounted controls



Sizes

- W is the nominal Width 300.
- L is the nominal Length (1200 - 3000).
- C is the nominal Height 250 for 125 Ø and 230 for 100 Ø.

Table 2 - Overall Dimensions(mm) without factory-mounted controls

Dimensions L	1200	1500	1800	2400	3000	1500	1800	2400	3000	1800	2400	3000	2400	3000	3000
Coil length	980					1270				1570			2170		2770
Plenum length	1004					1294				1594			2194		2794
Overall width	300, 600														

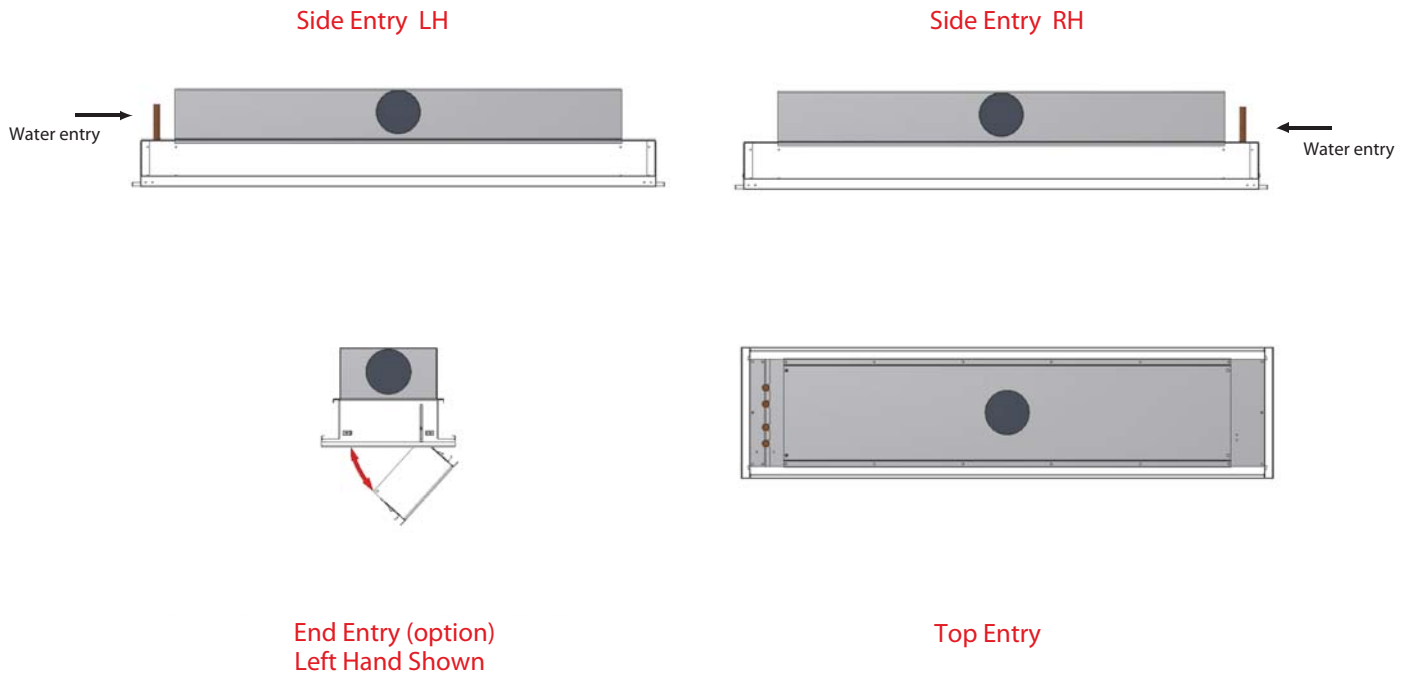


Air Entry Options

Handling the unit

WARNING! Wear protection gloves when handling the unit. When removing the unit from its pallet, do not handle it by pipes, spigots, valves or fresh air inlet. Take precaution to not damage the unit.

Figure 2 - Possible air intake positions



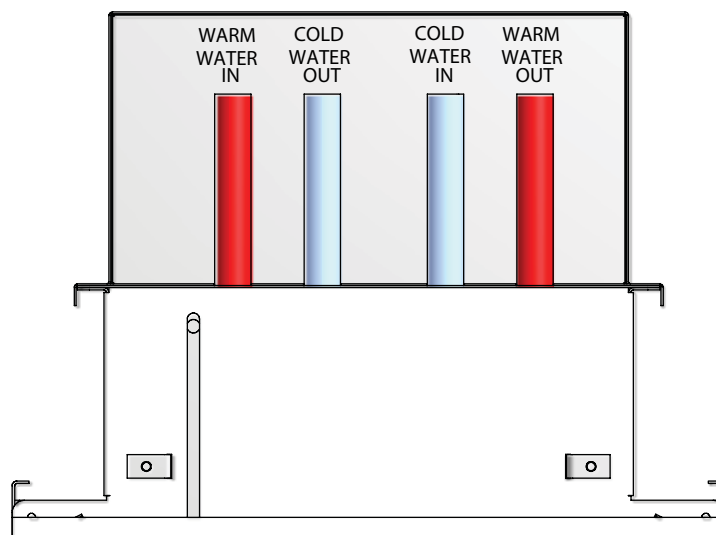
Water connection

Waterloo ABM300 series chilled beams are fitted with 15mm diameter copper water connections as standard.

These connections are always laid out in the same order as illustrated in the figure 3.

CAUTION! The use of untreated or improperly treated water in this equipment may result in scaling, slime, erosion or corrosion. The services of a qualified water treatment specialist should be engaged to determine what treatment, if any, is advisable. Waterloo will not accept any liability in regards of damage due to the use of untreated or improperly treated water.

Figure 3 Inlet and outlet water connections (15mm)





Labelling

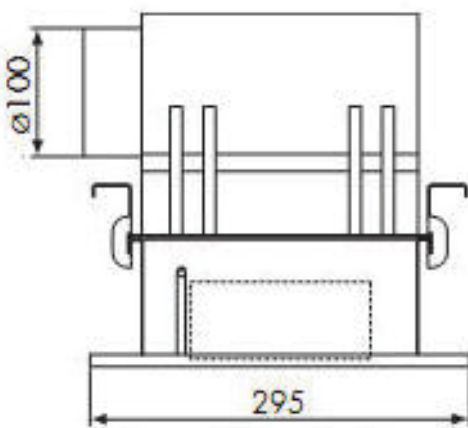
Unit identification

Units arrive on site with an unit model size, coil type, presence identification sticker with of an electric heater, unit handing pictograms, which clearly indicates important information such as the customer order number, job name, unit model, size, coil type, presence of electrical components, handling etc, (See Figure 4).

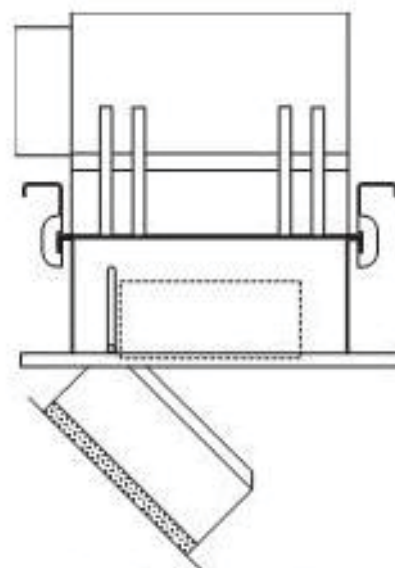
Figure 4 - Unit Identification Sticker



Hinged Front Plate



Shown with optional hanging brackets



Opening front plate