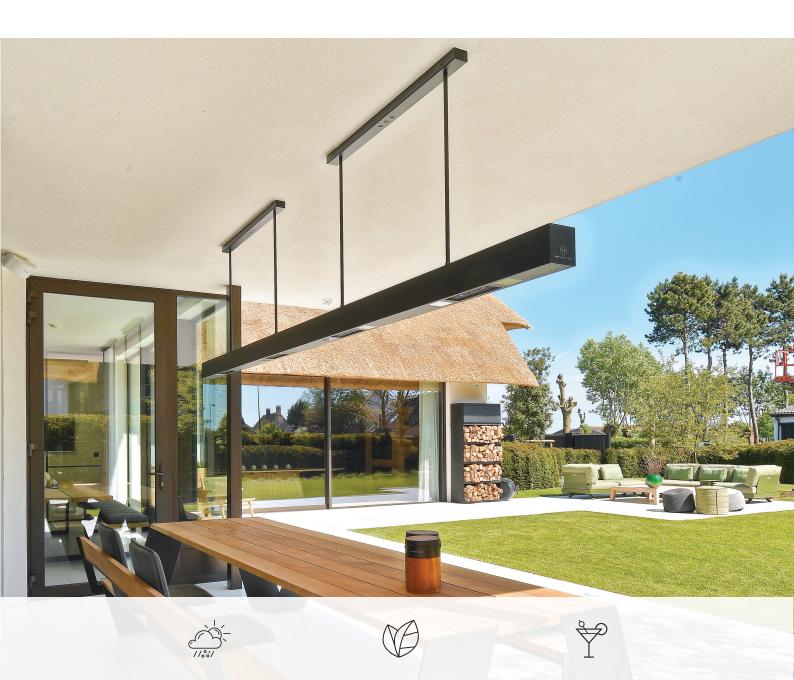


TECHNICAL INFORMATION



RUSTPROOF & WEATHERPROOF

LOW ENERGY USAGE ZERO CO2 EMISSION

MINIMUM OF MAINTENANCE



FEATURES







By using highly-efficient and durable ceramic heating elements and the best materials, the BEEM is virtually maintenance free.



RUSTPROOF &

WEATHERPROOF

The BEEM is made with high quality aluminium and stainless steel, making it suitable for outdoor use.

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UNIQUE VERSATILITY The BEEM is available in four different sizes and with several options making it suitable for almost every location.



LOW ENERGY USAGE ZERO CO2 EMISSION

With an energy consumption of only 3,24 - 4,32 kW/h, the BEEM uses less energy than similar products while still delivering optimal heating.

W: www.heatsail.com



Headquarters

Prins Boudewijnlaan 7 Unit A 08 2550 Kontich Belgium

+ 32 3 502 99 88

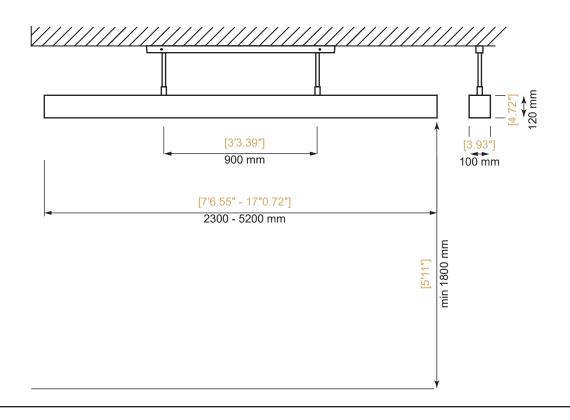
North American office

10440 N Central Expressway Suite 800, Dallas, Texas 75231 United States + 1 (214) 808 5091

y **E:** sales@heatsail.com



DIMENSIONS



SPECIFICATIONS

Model	BEEM 230	BEEM 290	BEEM 390	BEEM 520
Heat output (W)	3000 W	3000 W	4000 W	4000 W
Light Output (W)	max 240 W	max 240 W	max 320 W	max 320 W
Electrical connection	230V AC - 50Hz 16 A		230V AC - 50Hz 20 A	
Dimensions (WxDxH)	2300 x 120 x 100 mm	2900 x 120 x 100 mm	3900 x 120 x 100 mm	5200 x 120 x 100 mm
Mounting height requirement to ground	min 1800 mm; max 2150 mm			
Ceiling height	min 2120 mm; max 3770 mm			
Weight	+/- 22 kg	+/- 26 kg	+/- 35 kg	+/- 44 kg
Approvals	CE, IEC 60335-2-30, CAN/CSA-C22.2 No. 60335-1:16, CAN/CSA-E60335-2-30:13, UL 60335-1			





ELECTRICAL SAFETY REQUIREMENTS

The use of the BEEM requires an electrical installation with reliable safety grounding.

The installation's electrical safety can only be guaranteed if the device has been correctly connected to an grounding system built in accordance with the safety instructions. A preliminary inspection is absolutely essential. In the event of any uncertainty, a careful inspection must be made by a qualified and authorized technician. Heatsail will not be held responsible for injury and/or damage resulting from an ungrounded installation.

The installation of the BEEM's electrical components requires a mains connection of 230V AC-50 Hz(16-20 Amp fuse EN 30 mA RCD): the connection must be properly implemented in accordance with the applicable IEC-CEI standards. Please note: statutory and other regulation may apply locally.

The electrical power supply will need to be interrupted using lock-out/tog-out procedures before connecting and/or other work on the electrical components can be carried out. Everyone must satisfy themselves that the power cannot be switched on again accidentally. Electrical adapters, power strips and/or extension cords may not be used for the BEEM's electrical supply. A switch must be installed between the BEEM and the fuse box at all times.

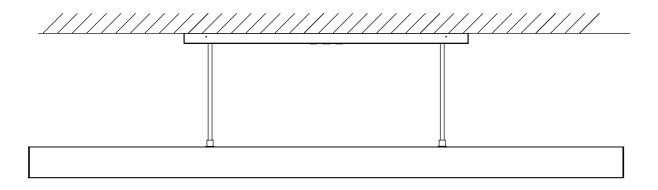
Non-compliance with these instructions may compromise the safety of the device. Heatsail will not be held liable for any damage resulting from this.

NOTE: The BEEM will be delivered with a supply cord bold wall plug.

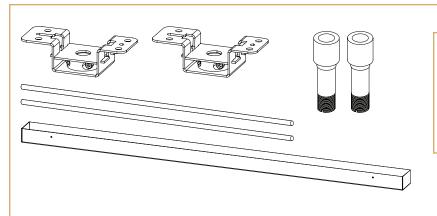




MOUNTING METHODS: BRACKETS AND STEMS







Included per set:

- 2 x ceiling Mounting brackets
- 2 x BEEM bolts
- 2 x stainless steel stems
- 1 x ceiling canopy with electronics

- Use: Indoor and outdoor (sheltered)
- For horizontal ceilings
- Fixed position between the stems: 900 mm
- Maximum length of the stems: 1500 mm
- ! Supplied stems are 1500 mm: the length needs to be cut by the end user
- ! Always use the correct ceiling anchors and screws according to the mounting surface



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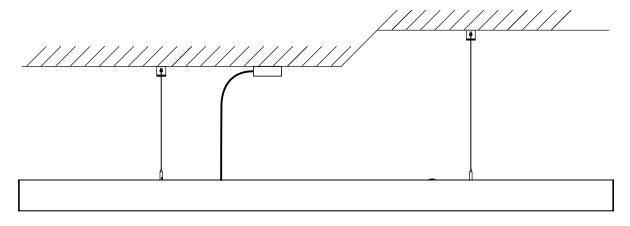
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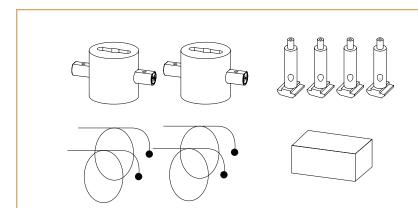
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MOUNTING METHODS: SUSPENSION CABLES







Included per set:

- 2 x ceiling Mounts
- 4 x suspension systems
- 4 x stainless steel cables
- 1 x control box with electronics

- Use: Indoor and/or completely sheltered
- For slanted and horizontal ceilings
- Position between mounts is variable
- Maximum length of the steel cables: 4000 mm
- ! Only to be used in a wind-free environment
- ! Always use the correct ceiling anchors and screws according to the mounting surface



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ELECTRICAL OVERVIEW

The BEEM consists out of an aluminium enclosure with three to four modules with rectangular heating elements and halogen lamps. Each module has two heating elements of 500 W at 230V AC and two G9 halogen lamps of max 40 W at 230V AC.

Because of the high heat an LED lamp is not possible, LED cannot withstand high temperatures that the BEEM outputs.

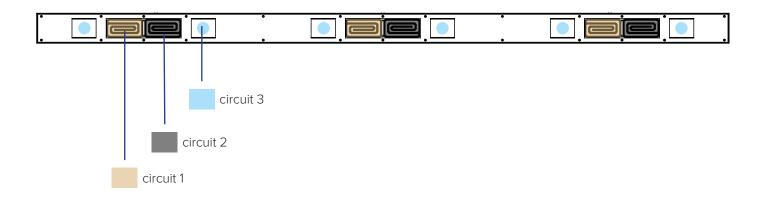
There are three electrical circuits in the BEEM. These circuits total 16-20 Amps at 230V AC.

B230 B290

- Circuit 1: Heating circuit 1 consists of three rectangular heater elements and has a total heat output of 1500 W at 230V AC
- Circuit 2: Heating circuit 2 consists of three rectangular heater elements and has a total heat output of 1500 W at 230V AC
- Circuit 3: Lighting circuit consists of six G9 bulbs of max 40 W at 230V AC

B390 B520

- Circuit 1: Heating circuit 1 consists of four rectangular heater elements and has a total heat output of 2000 W at 230V AC
- Circuit 2: Heating circuit 2 consists of four rectangular heater elements and has a total heat output of 2000 W at 230V AC
- Circuit 3: Lighting circuit consists of eight G9 bulbs of max 40 W at 230V AC



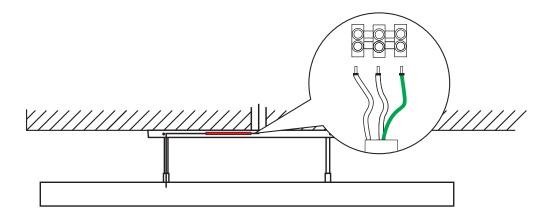




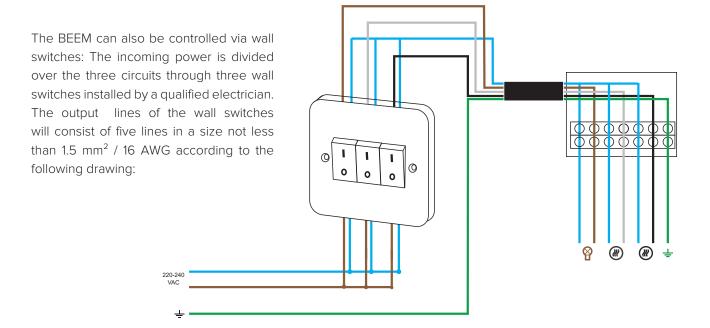
ELECTRICAL CONNECTION

The incoming power is divided over the three circuits through an electronic control board, mounted in the ceiling rose. The control board is operated by an app.

Always ensure that the power between the main circuit breaker and the BEEM can be switched off by other means than the remote control, by use of a two-pole switch.



To connect the BEEM to the main power, a three pole connection is required consisting of two hot wires (with an output of 230V AC-50 Hz) and one grounding wire in a size not less than 1.5 mm² / 16 AWG. For safety reasons 2.5 mm² / 14 AWG is recommended.





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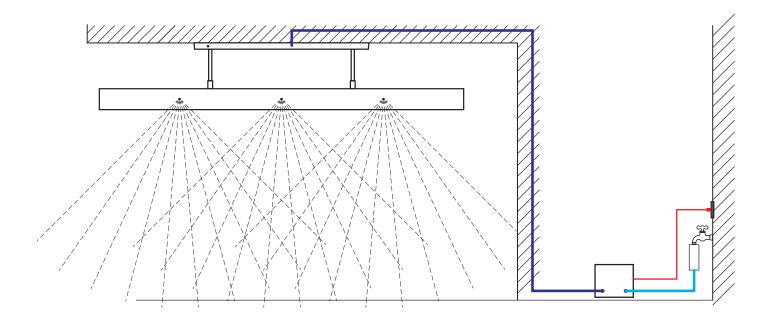
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MISTING: SUMMARY

An addition to the standard BEEM is an integrated misting system consisting of a high pressure stainless tubing system and high quality nozzles with an orifice between 0.10 and 0.20 mm and 6.35 mm PA12 tubing, to cool down the surrounding temperature up to 10 °C, depending on climate and humidity.

The mist is produced by means of a pump that pressurizes water up to 70 bar forcing the water out of the nozzles at high pressure, cooling the surrounding air.

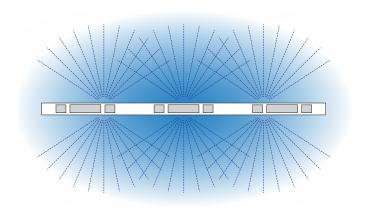


MISTING: CAPACITY

The misting version of the B230 and B290 will hold 2 x 3 misting nozzles and will have a cooling capacity of approx 12 \mbox{m}^2

The misting version of the B390 and B520 will hold 2 x 4 misting nozzles and will have a cooling capacity of approx $16\ m^2$

Plugs are available to close nozzles if necessairy.





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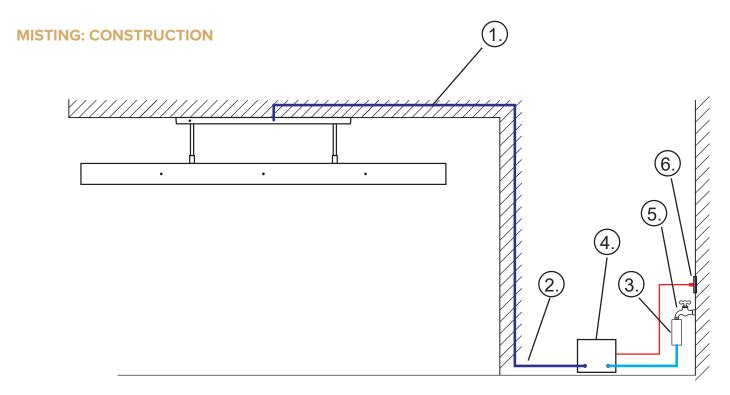
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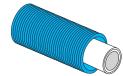
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1.



[Art.170.10.010] Tube in tube, to be installed by a plumber at construction*.





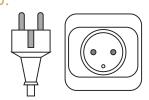
[Art.170.10.030] A misting pump is required to be installed providing pressure up to 70 bar*.

2.



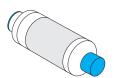
[Art.170.10.001] PA12 Tube (6.35 mm dia). 5m is supplied with the product. Longer tubing is available*.





A power supply is required to power the misting pump.

3.



[Art.170.10.020] A Calcium filter should be placed in between the water supply and the misting pump*.

6.



A water supply is required at the inlet of the misting pump.

*sold seperately.



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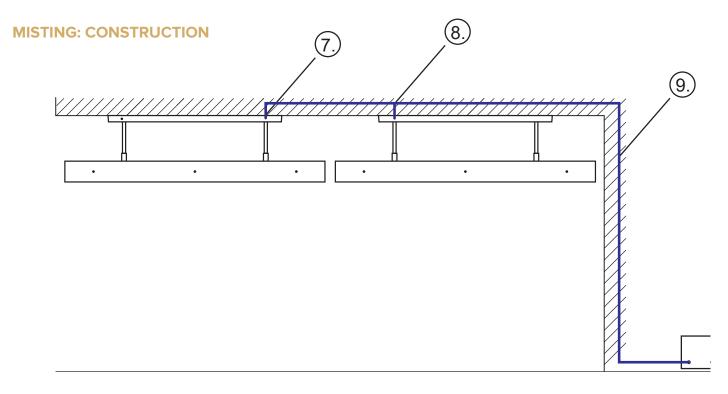
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7.



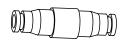
[Art.170.10.002] L-piece quick connector for 6.35 mm tubing. 2 pieces included.

8.



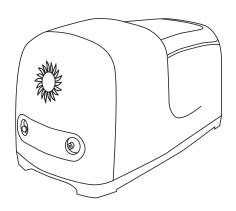
[Art.170.10.003] T-piece quick connector for 6.35 mm tubing*.

9.



[Art.170.10.004] Pipe extender for 6.35 mm tubing*.

Pressure	70 bar/ 1000psi	
Motor	230V AC	
Power	180W	
Noise with pressure	56 dB	
Maintainance time	800-1000h	
Operation	app / buttons, switch	



*sold seperately.



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