

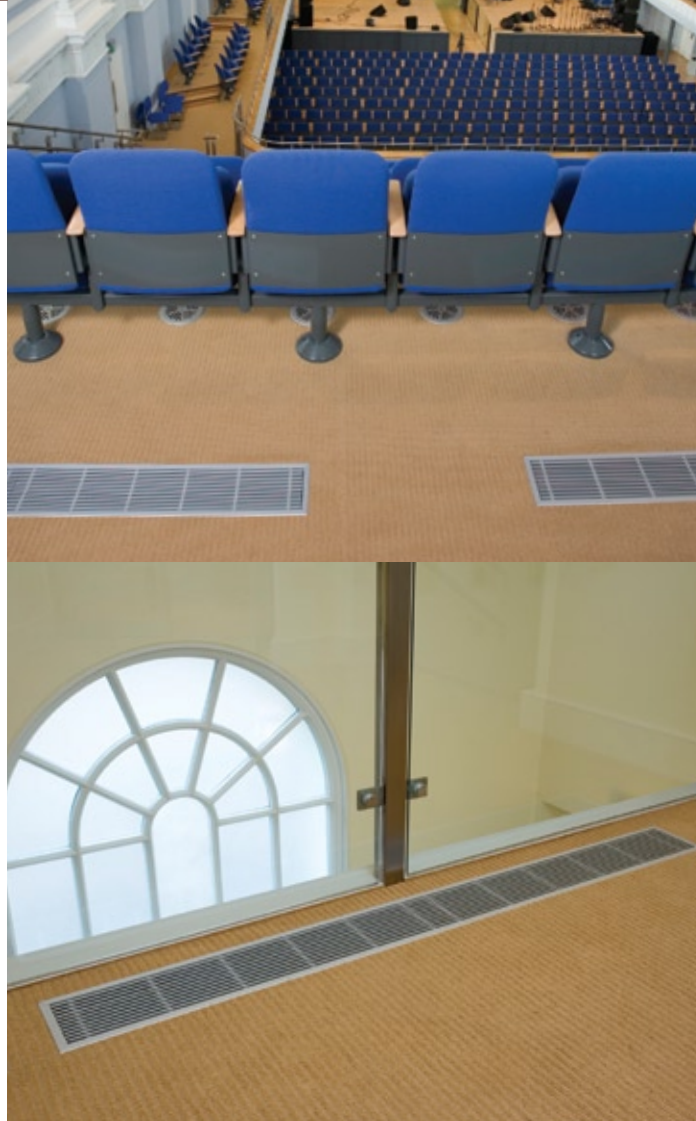


The Clima Canal is quiet even at high outputs, making it a **discreet and effective** heater for almost any situation

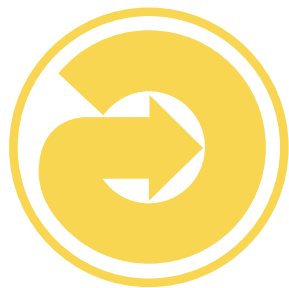
A selection of grilles and finishes are available. Installation is simple and hassle-free due to the **one-piece design** and simple height adjustment feature

A fan assisted trench heating and ventilation system perfect for use in:

- Large offices
- Poorly ventilated areas
- Large glazed areas
- Schools and universities



Low voltage DC-controlled technology improves airflow and provides a powerful output. This gives the Clima Canal full **compatibility** with low flow temperature systems, such as **heat pumps**



jaga



CLIMA CANAL

the greatest comfort control

Outputs

Outputs in watts at 75/65/20°C, in accordance with EN442



Model ▼	Depth ▼	Length ▼	Width ▼	100% fan speed*	70% fan speed**
01	85 > 130	570	170	800	700
02	85 > 130	970	170	1600	1350
03	85 > 130	1370	170	2400	2050
04	85 > 130	1770	170	3200	2700

All dimensions in millimetres.

*Noise level at 100% fan speed approx 34-40db(A) depending on unit selected

**Noise level at 70% fan speed approx 24-30db(A) depending on unit selected

To calculate output, fan speed, air volume and acoustic data exactly across the range, please email jaga@jaga.co.uk to request a copy of our Clima Canal estimating tool.

Correction Factor Equations

Equation to determine the mean water temperature difference, minus ambient air (ΔT)

Equation to determine water mass flow rate (m)

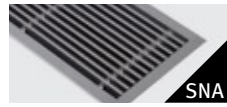
T_F = Water flow temperature °C
 T_R = Water flow return temperature °C
 amb = Ambient temperature °C

Q = Total heat emitted by unit (kW)
 m = Water mass flow rate (kg/s)
 C_p = Specific heat capacity (4.187 kJ/kg °C) Approximate

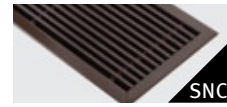
$$\text{Equation 1: } \Delta T = \frac{T_F + T_R}{2} - \text{amb}$$

$$\text{Equation 2: } m = \frac{Q}{(T_F - T_R) \times C_p}$$

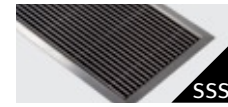
As this is a dynamic product, outputs are not affected by grille finish



Anodized aluminium
natural colour



Aluminium laquered
natural colour



Stainless steel



Oak natural

Correction Factors

Outputs at 75/65/20°C, average correction factors measured in accordance with EN442

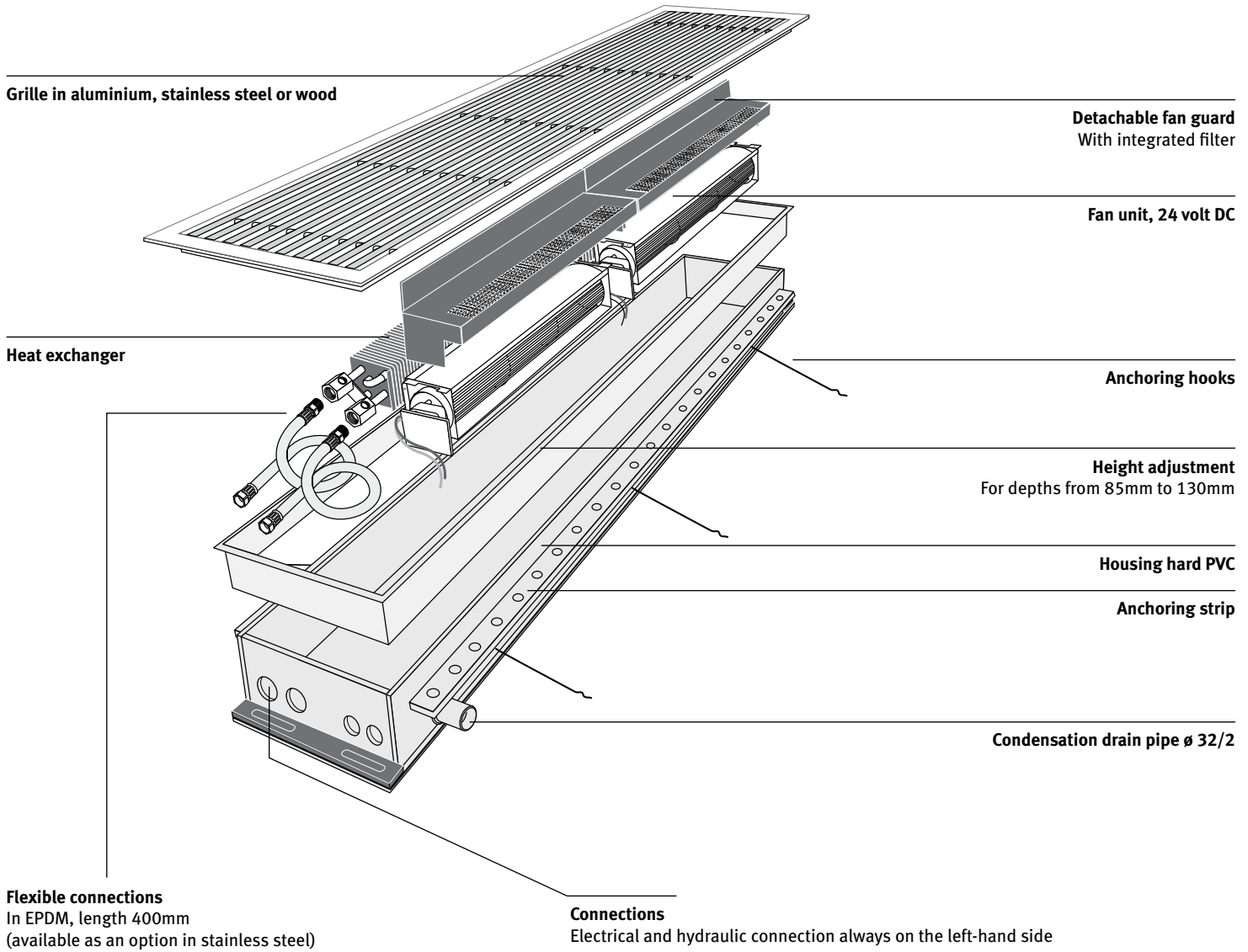
T _F ▼	T _L ▼	T _R ▶								
		30	35	40	45	50	55	60	65	70
80	20	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
	24	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.97	1.02
75	20	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05
	24	0.57	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.95
70	20	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	
	24	0.52	0.57	0.62	0.67	0.72	0.77	0.82	0.87	
65	20	0.55	0.60	0.65	0.70	0.75	0.80	0.85		
	24	0.47	0.52	0.57	0.62	0.67	0.72	0.77		
60	20	0.50	0.55	0.60	0.65	0.70	0.75			
	24	0.42	0.47	0.52	0.57	0.62	0.67			
55	20	0.45	0.50	0.55	0.60	0.65				
	24	0.37	0.42	0.47	0.52	0.57				
50	20	0.40	0.45	0.50	0.55					
	24	0.32	0.37	0.42	0.47					
45	20	0.35	0.40	0.45						
	24	0.27	0.32	0.37						
40	20	0.30	0.35							
	24	0.22	0.27							



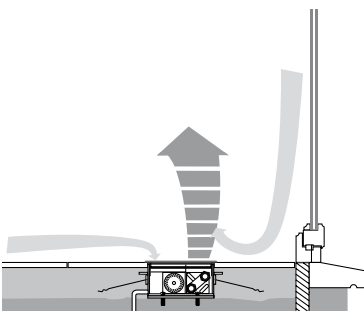
KEY
 T_F = Flow temperature °C
 T_R = Return temperature °C
 T_L = Desired air temperature °C

The indicated outputs ΔT 50 °C are the exact outputs, and are calculated in accordance with EN 442. An average correction factor is given in this table for outputs at other ΔT , and is applicable for all dimensions. For comprehensive correction factors table see page 83.

Clima Canal



Floor Model



Duct:

Shall be pre-mounted duct in watertight anthracite grey 3mm thick synthetic material. The housing shall be complete with a galvanized steel extendable insert. Specified lengths will comprise suitable unitary lengths of up to 1770mm. Where longer lengths are required, separate units will be joined to form continuous lengths to suit site requirements.

The Duct shall be complete with four pre-perforated holes for pipework and electrical accommodation.

The trench is to be of sufficient quality to be provided with the manufacturer's 10 year guarantee.

Heat Exchanger:

Shall be manufactured from seamless copper tubes, fitted with aluminium fins. The fins shall provide high contact area to the tubes, guaranteeing optimum efficiency, across a wide range of flow & return water temperatures. The heat exchanger shall be complete with 2No. Brass 1/2" BSP connections. Generally these shall be same end connections and be suitable for left-hand installation. The exchanger shall be complete with 2No. 400mm long flexible connections to facilitate easy cleaning of the completed unit.

The complete heat exchanger assembly shall be non corrosive and the whole assembly shall be electro statically lacquered with dirt repellent and dust proof anthracite grey epoxy polyester lacquer RAL 7024- gloss degree 70%.

The heat exchanger shall be supplied complete with 1/8" BSP air vent & 1/2" BSP drain cock, and the whole assembly to be pressure tested to 20 bar, with a maximum working pressure of 10 bar.

The element shall be of sufficient quality to be provided with the manufacturer's 2 year guarantee.

Frame:

The frame shall be constructed from reinforced L- profile, anodized aluminium, with a height of 31.5mm and a width of 24mm.

The frame shall be pre-mounted on the mini floor duct, but includes a removable feature to avoid deformation during installation or floor construction.

The frame shall be supplied to the specified finish and colour.

Where a lacquered colour is specified, it shall be lacquered in a scratch resistant epoxy- polyester powder, sprayed electro statically, and baked to 200°C. The colour shall be UV resistant due to ASTM G53.

The frame shall be of sufficient quality to be provided with the manufacturer's 10 year guarantee.

Fan Unit:

The unit shall be complete with one or more tangential fan activators. The sections shall be powered by a 24 volt electrical supply, and be capable of being controlled by a 0 – 10 volt signal or via a pulse width modulating (PWM) signal to produce a duty from 0 – 100% airflow. Each activator shall be complete with an integrated stainless steel mesh filter, electrical connecting block and internal cable ducts. A complete range of control devices shall also be available as optional extras, if requested.

Grilles:

Grilles shall be of the specified material and finish, and to the relevant specification as follows:

Rigid Aluminium Grille:

Shall be constructed from anodized aluminium profiled slats placed lengthways (5.5 x 18.5mm), with 7mm space between. The slats shall be mechanically connected with crossways supporting slats (8mm dia.), with maximum 160mm space between. The grilles shall be mounted in a one-piece frame

Rigid Stainless Steel Grille:

Shall be constructed from A1S1 304 profiled slats placed lengthways. The slats shall be mechanically connected with crossways supporting slats with maximum. The grilles shall be mounted in a one-piece frame

Rigid Wooden Grille:

Shall be constructed from wooden profiled slats placed crossways (5.5 x 18.5 mm), with 7mm space between. The slats shall be glued to the one-piece frame.

The grille shall be supplied to the specified finish and colour. Where a lacquered colour is specified for the aluminium grilles, it shall be lacquered in a scratch resistant epoxy- polyester powder, sprayed electro statically, and baked to 200°C. The colour shall be UV resistant due to ASTM G53. And the frame shall be of sufficient quality to be provided with the manufacturer's 10 year guarantee.

Note:

Each measured trench duct supplied fully assembled and shall come complete with factory pressure tested heat exchanger, grille, frame and height adjusters, ready to install.

