



# GEO HORIZONTAL

Style and substance

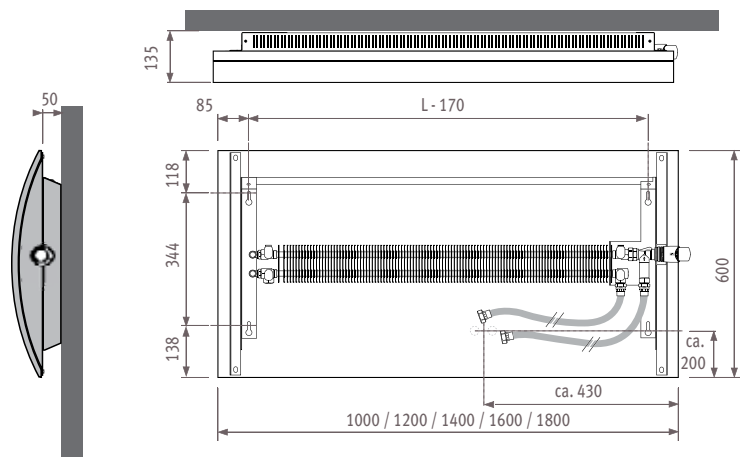


**jaga**

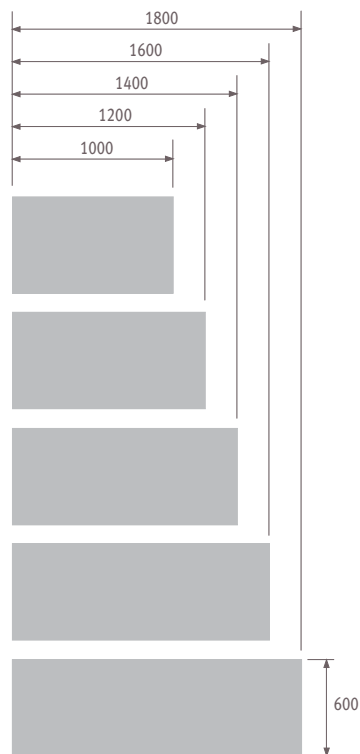
# Geo Horizontal

## Dimensions

Product code: GEHW



## Geo Horizontal Range



## Connections

Connection set included

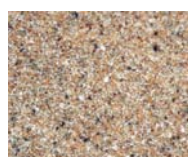
- Fully pre-mounted
- Including right handed connection with Jaga valve
- Chrome-plated thermostatic head
- Extension pipe
- Flexible hoses 1/2" (L=600mm) for connection to the wall

## Finishes



603

black



604

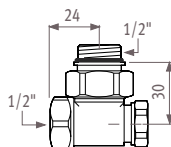
sand

## Options

Lockshield 1/2" 90° - connection to the wall

Nickle-plated

Order code: 5090.110



## Outputs

Outputs in watts at 75/65/20°C & 55/45/20, in accordance with EN442

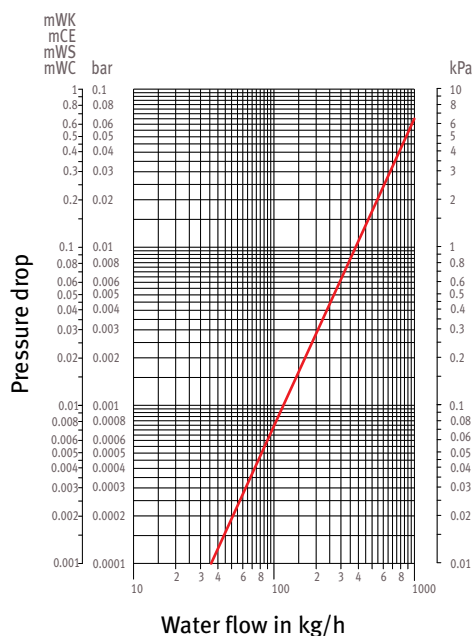
code height length colour (Example order code shown is for a 600mm high radiator, 1000mm long)  
 ORDER CODE: GEHW 060 100 603

H		L 1000	1200	1400	1600	1800
600	75/65/20	1099	1375	1652	1924	2191
	55/45/20	544	685	828	969	1110

### Supplied as Standard

- Built-in low H2O heat exchanger
- Flexible hoses 1/2", 600mm length - for connection to the wall
- Extended air vent and drain plug 1/2"
- Plugs and screws
- Jaga valve with Deco thermostatic head chrome and extension pipe

## Pressure drop



## Weight & water content

### Water content in litres

Length	600mm height
1000	4.4
1200	4.8
1400	5.2
1600	5.6
1800	6.0

### Weight in kg

Length	600mm height
1000	46
1200	50
1400	59
1600	64
1800	71

EN 442 Output measured in accordance with EN442, at a water temperature of 75/65°C and a room temperature of 20°C ( $\Delta T=50$ ).

All dimensions are shown in millimetres

## Correction factors

### Average correction factors according to EN442 - 75/65/20°C

TV	TL	TR_20	25	30	35	40	45	50	55	60	65	70	75	80	85
90	20	0.65	0.70	0.76	0.82	0.88	1.94	1.00	1.06	1.12	1.19	1.25	1.31	1.38	1.44
	24	0.56	0.61	0.67	0.73	0.78	0.84	0.90	0.96	1.02	1.09	1.15	1.21	1.27	1.34
85	20	0.59	0.65	0.70	0.76	0.82	0.88	0.94	1.00	1.06	1.12	1.19	1.25	1.31	
	24	0.50	0.56	0.61	0.67	0.73	0.78	0.84	0.90	0.96	1.02	1.09	1.15	1.21	
80	20	0.54	0.59	0.65	0.70	0.76	0.82	0.88	0.94	1.00	1.06	1.12	1.19		
	24	0.45	0.50	0.56	0.61	0.67	0.73	0.78	0.84	0.90	0.96	1.02	1.09		
75	20	0.48	0.54	0.59	0.65	0.70	0.76	0.82	0.88	0.94	1.00	1.06			
	24	0.40	0.45	0.50	0.56	0.61	0.67	0.73	0.78	0.84	0.90	0.96			
70	20	0.43	0.48	0.54	0.59	0.65	0.70	0.76	0.82	0.88	0.94				
	24	0.35	0.40	0.45	0.50	0.56	0.61	0.67	0.73	0.78	0.84				
65	20	0.38	0.43	0.48	0.54	0.59	0.65	0.70	0.76	0.82					
	24	0.30	0.35	0.40	0.45	0.50	0.56	0.61	0.67	0.73					
60	20	0.33	0.38	0.43	0.48	0.54	0.59	0.65	0.70						
	24	0.25	0.30	0.35	0.40	0.45	0.50	0.56	0.61						
55	20	0.28	0.33	0.38	0.43	0.48	0.54	0.59							
	24	0.20	0.25	0.30	0.35	0.40	0.45	0.50							
50	20	0.23	0.28	0.33	0.38	0.43	0.48								
	24	0.16	0.20	0.25	0.29	0.35	0.40								
45	20	0.18	0.23	0.28	0.33	0.38									
	24	0.11	0.16	0.20	0.25	0.30									
40	20	0.14	0.18	0.23	0.28										
	24	0.08	0.12	0.16	0.20										
35	20	0.10	0.14	0.18											
	24	0.04	0.08	0.12											
30	20	0.06	0.10												
	24	0.01	0.04												

The indicated outputs with  $\Delta T$  50°C and  $\Delta T$  30°C are the exact outputs.  $\Delta T$  50°C outputs are measured in accordance with EN442 and  $\Delta T$  30°C outputs are calculated according to EN442.

An average correction factor is given in this table for outputs at other  $\Delta T$  and is applicable for all dimensions.

## How to choose the right radiator?

### Rapid estimation of heat losses

Calculate the volume of the room (L x W x H) and multiply this by the Watts/m<sup>3</sup> figure given in the table below. Choose according to the level of insulation and the desired room temperature.

Insulation	20°	24°
excellent	45	55
good	65	75
average	85	95
poor	100	115

Required output in Watts/m<sup>3</sup>

### Example

Use the table to determine the relevant correction factor with a water temperature of 80/60°C with a room temperature of 24°C.

The correction factor = 0.90

Required output 1000 watts : 1000 divided by 0.90 = 1111 watts therefore search in this leaflet's standard output table for a product with an output of at least 1111 watts. Alternatively use the "Radiator Finder" search function on [www.jaga.co.uk](http://www.jaga.co.uk) to identify all Jaga heating products with this required output.

**KEY**  
 Tv = flow temperature  
 Tr = return temperature  
 Tl = desired air temperature



Output calculated in accordance with EN442, at a water temperature of 75/65°C and a room temperature of 20°C ( $\Delta T=50$ ).

## Product description

### Geo Horizontal

#### Material

The Geo Horizontal is a heavy radiator formed completely from granulated natural stone: a composition of mineral materials. It is available in a range of 2 stone colours, which combine perfectly with all natural materials. Geo Horizontal has a slightly curved smooth and seamless surface and is very easy to maintain.

Geo Horizontal is supplied with a built-in Low-H2O heat exchanger with flexible hoses with female thread 1/2" (length 60 cm) for connection to the wall. This Low-H2O heat exchanger is composed of round, seamless circulation tubes made of pure red copper, with pure aluminium fins and 4 brass collectors.

Are included:

- extended air vent
- drain plug 1/2"
- fixing set
- right hand side mounted Jaga valve with Deco thermostatic head chrome
- extension pipe

Brackets: steel plate thickness 2 mm, lacquered in sandblast grey metallic. These brackets also cover both right and left side of the Geo Top grille: galvanised steel plate thickness 1 mm, lacquered in sandblast grey metallic, with perpendicular slits to the wall

Pressure test: 10 bar

Working Pressure: 7 bar

#### Colour

Standard colours:

black 603 / sand 604

#### Connection

The Low-H2O heat exchanger has flexible hoses 1/2" (60 cm) for invisible connection to the wall. Provided with an extended air vent 1/8", extension pipe and drain plug 1/2".

#### How to install

The building services engineer chooses the radiators considering following conditions:

- A heat output calculation according to the standard.
- The heat output and the dimensions of the Geo Horizontal radiators according to EN 442.
- The radiators may be wall mounted when using the wall fixings supplied.
- They can be connected to plastic central heating service pipes/ RPEALU. tube / copper tube / steel pipe.

# Jaga Guarantee Information

- 1** The guarantee is valid only if the equipment is properly and correctly used, by its first owner and if installed in accordance with the norms and instructions as detailed in the instruction leaflet and current industry standard practices.
- 2** The guarantee only applies to the equipment and the spare parts supplied by Jaga. Jaga has the choice between repair and replacement of the equipment or the spare parts. If any modifications have been made by Jaga to the standard product design, Jaga reserves the right to replace the guaranteed equipment with equivalent products or spare parts.
- 3** The period of guarantee is mentioned in this certificate. The guarantee decreases every year on a straight line basis by an equal percentage in order to reach a zero guarantee at the end of the guarantee period (e.g. for a period of 10 years the annual decrease of the guarantees 10% of the invoiced value). Repaired or replaced product is guaranteed through to the end of the original guarantee period.
- 4** The guarantee is valid only on products displaying the appropriate identification information concerning product type and series. No guarantee is granted on equipment or spare parts lacking this information, on equipment where this information has been removed or altered, or on equipment that has been repaired or modified by persons not authorised by Jaga to carry out this work.
- 5** The customer is responsible for any damage caused as a result of errors in installation or use of incorrect fittings, or for any damage caused by electrical connections, faulty or damaged electrical installations or appliances, erroneous voltage or hydraulic pressure and all other errors not directly related to the product delivered by Jaga. The guarantee is also revoked when unsuitable parts or components are used. The guarantee for our heat exchangers is not valid if they are regularly drained, or if they are heated by means of industrial water, steam or water saturated by excessive quantities of oxygen. The quality of the system after has to be in accordance with the VDI 2035-2 directives. The guarantee is also not applicable if the heat exchangers are placed in unsuitable atmospheric surroundings, such as but not exclusively ammonia, caustic substances etc.
- 6** This guarantee excludes damage due to incorrect handling and/or use of the equipment, or due to formation of lime deposits, incorrect use of the safety valve, or to all equipment that is incorporated into the building in a way that means it cannot be accessed normally.
- 7** Any work undertaken or product supplied as a result of a guarantee claim that proves not to be valid will be charged for. Product supplied will be invoiced at the customer's standard purchasing terms, and labour will be charged at £50 per hour with a minimum labour charge of £200.
- 8** The guarantee period starts from the date of the invoice for supply of the products covered by the guarantee. If the invoice is not available, the date of production will be used based on the product ID number/series.
- 9** Only the courts of judicial district Hasselt (Belgium) are authorised to deal with disputes arising from this guarantee. It will apply Belgian law even when sales involved are subjects of EU member states as well as non-EU member countries.

Low H2O Heat exchanger



Casings and components



Valves for Low-H2O heat exchangers

