

DESIGN RADIATORS & TOWEL WARMERS



VIENNARAIL.

General Specifications

Approval and Certification

VOGEL&NOOT offers strong products that meet the highest quality standards during manufacture and operation. All information on the quality and performance of **VOGEL&NOOT** towel warmers are verified and confirmed by recognised European institutions on an ongoing basis, thereby guaranteeing the highest level of heating performance and optimum product quality.



When used in systems designed and installed in accordance with the good practice recommendations given in the 'Application' section, the **VIENNARAIL** towel warmer carries a five year guarantee from date of purchase against defects caused by faulty materials or manufacture. However, failure to pay attention to these recommendations (in new or existing systems) may invalidate the manufacturer's warranty.

Paint Finish

Unlike other manufactures, all our plating is carried out in-house, hence our attention to detail can be meticulous and perfect quality is ensured every time. A four layer plating process is applied to steel; pre nickel, bright copper, bright nickel and chrome plate layers. A further nineteen processes are applied to obtain a perfect hard-wearing, non-rusting and easy-to-clean smooth finish.

Packaging

All our towel warmers are individually wrapped in heavy duty polythene shrink-wrapping and are clearly marked externally with type and size.

Fixings

All **VIENNARAIL** towel warmers are supplied with mounting brackets.

For the correct installation of radiators it is essential that the fixing of the radiator is carried out in such a way that it is suitable for intended use AND predictable misuse. A number of elements need to be taken into consideration including the fixing method used to secure the radiator to the wall, the type and condition of the wall itself, and any additional potential forces or weights that may happen to be applied to the radiator, prior to finalising installation. **IN ALL CASES IT IS STRONGLY RECOMMENDED THAT A SUITABLY QUALIFIED PROFESSIONAL INSTALLER OR SIMILAR TRADESPERSON CARRIES OUT THE INSTALLATION.**

PLEASE NOTE: The fixing materials provided are only intended for installation on walls made of solid wood, bricks, concrete or on timber-frame stud walls where the fixing is into the timber. All walls being considered should have no more than a maximum of 3mm wall finishing. For walls made of other materials, for example hollow bricks, please consult your installer and/or specialist supplier. **ONCE AGAIN, IF YOU ARE UNSURE, IT IS STRONGLY RECOMMENDED THAT A SUITABLY QUALIFIED PROFESSIONAL INSTALLER OR SIMILAR TRADESPERSON CARRIES OUT THE INSTALLATION.**

Connections

All **VIENNARAIL** towel warmers are fitted with 2 x internal thread 1/2" BSP connections.

Operating Pressures

Every **VIENNARAIL** towel warmer is tested to a pressure of 6.9 bar and is suitable for a working pressure of up to 5.3 bar.

Application

VIENNARAIL towel warmers are for use in indirect or closed circuit heating systems only, which have been properly designed and installed in accordance with the recommendations of BS EN 12828:2003 or BS EN 12831:2003. In open-vented systems, special attention should be paid to the correct location of the pump in relation to the cold feed and vent pipe connections, to avoid ingress of air or water discharge through the open vent.

All installation work should be carried out in accordance with recognised good practice to ensure long life. In particular, careful attention should be paid to the following:

- Soldered joints should be made with a minimum amount of solder and flux. Choose a flux which is readily soluble in water.
- Copper pipes should be cut and cleaned in such a way as to avoid small copper particles being left in the system (this can lead to electrolytic action and eventual corrosion in the radiator).
- Corrosion inhibitors should be used strictly in accordance with the manufacturer's instructions.

Individual installation instructions are supplied in each radiator package.

Safety Precautions

Towel warmers are hot when in use, and as such, present a risk of burns to users on prolonged contact. The temperature of a towel warmer is dependent on the temperature of the system water, as set by the system installer or user. Installers and users should ensure that those who may come into close proximity to hot towel warmers are aware of the risk of burns. Installers and users should take all necessary steps to minimise the risks of burns.

Distinguished by the ECO seal of quality



All towel warmers from **VOGEL&NOOT** bear the ECO seal of quality, which stands for all-round compatibility with all (renewable) energy sources. It guarantees that the radiators can be operated in an economical and ecologically-sound manner, with significant savings on heating costs (an average of 15%*) and an enormous reduction in CO₂ emissions.

*On average, in comparison with old sectional radiators, test results based on data from Pinkafeld University of Applied Sciences.

General Specifications (continued...)

Heat Output

The radiator outputs quoted in this brochure are based on a mean water temperature in the radiator of 70°C (158°F) and a room temperature of 20° (68°F) - Delta T50.

For other operating conditions - i.e. differences between mean water temperature and room temperature other than 50°C - the correction factors below should be applied (see example right).

Centigrade	Factor	Fahrenheit
15°C	0.21	27°F
20°C	0.30	36°F
25°C	0.41	45°F
30°C	0.51	54°F
35°C	0.63	63°F
40°C	0.75	72°F
45°C	0.87	81°F
50°C	1.00	90°F
55°C	1.13	99°F
60°C	1.27	108°F
65°C	1.41	117°F
70°C	1.55	126°F

An example of radiator selection at a non-standard temperature difference is given below:

Example:

Heat emission required: 2000 Watts
 Room air temperature required: 20°C
 Mean water temperature in radiator: 65°C

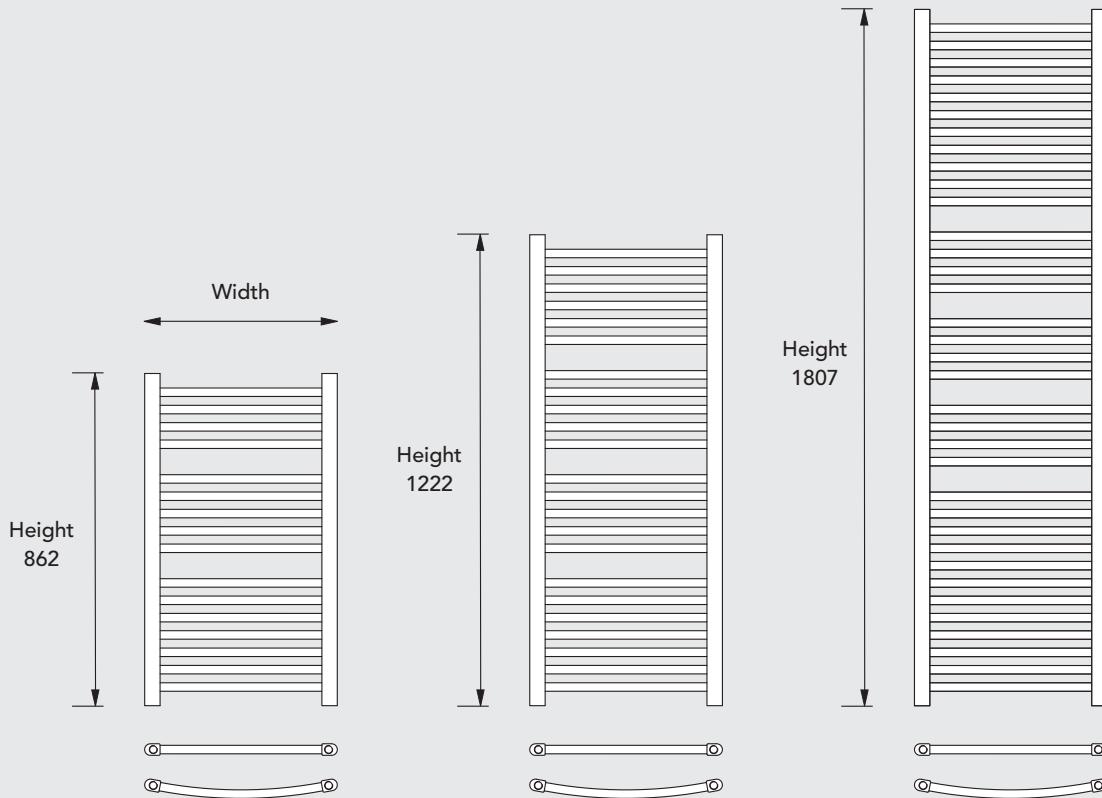
1. Temperature difference = 65-20 = 45°C

2. From Factor Table 45°C gives a factor of: 0.87

3. Divide required heat emission by factor = $\frac{2000}{0.87}$ = 2298 Watts

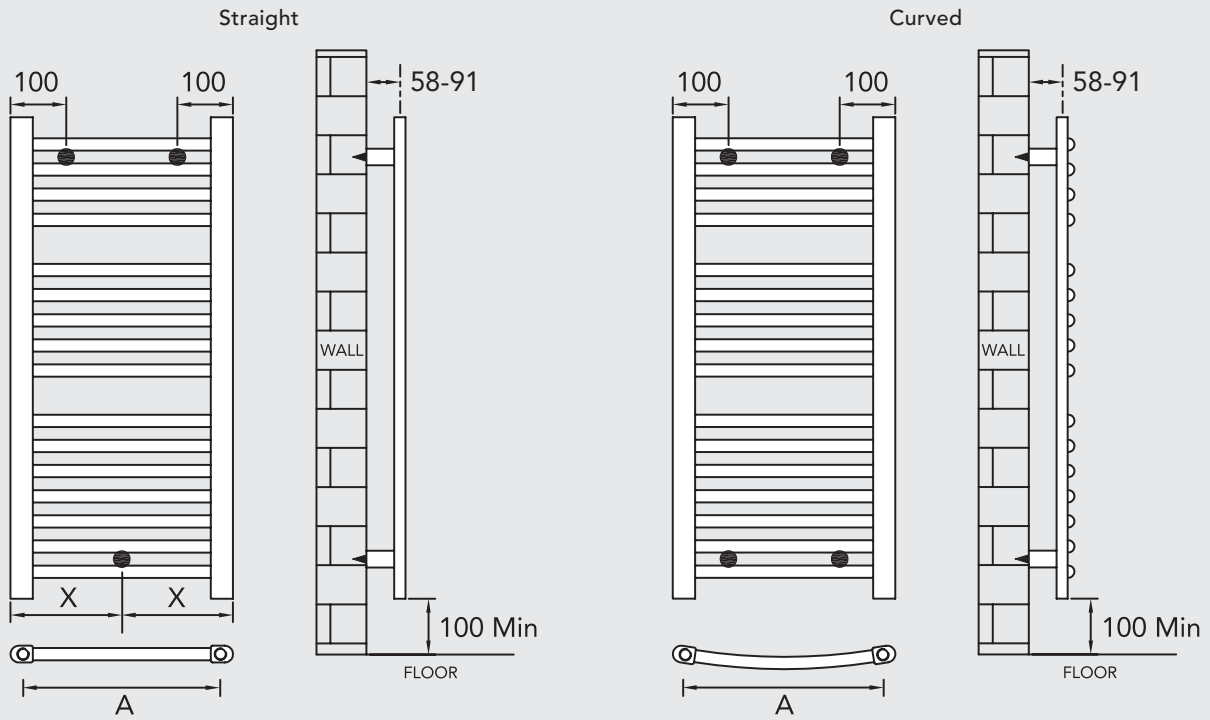
4. From selection tables choose any radiator rated at 2298 Watts or more.

Model Overview

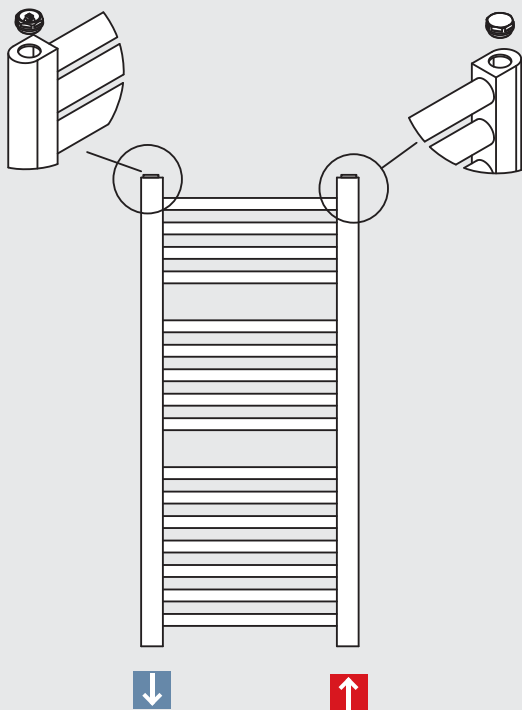


		Straight						Curved												
Height (mm)		862			1222			1807			Height (mm)	862			1222			1807		
Width (mm)		400	500	600	400	500	600	400	500	600	Width (mm)	500	600	500	600	500	600	500	600	

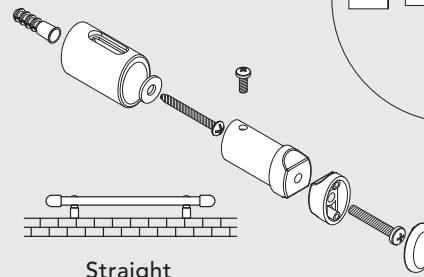
Mounting and Bracket Positions and Dimensions



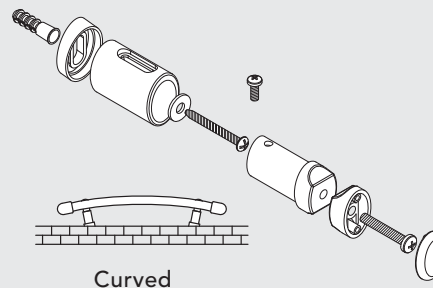
Width (mm)	A (mm)	X (mm)
400	355	200
500	455	250
600	555	300



Brackets



Straight



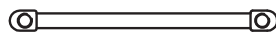
Curved

Weight and Water Content per Metre Length

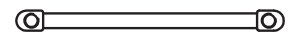
Height (mm)	Width (mm)											
	400				500				600			
	Straight		Curved		Straight		Curved		Straight		Curved	
	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)	Water Content (l)	Weight (kg)
862	3.37	7.50	N/A	N/A	3.90	8.00	3.90	8.40	4.43	9.00	4.43	9.36
1222	4.81	10.14	N/A	N/A	5.58	11.25	5.58	11.90	6.33	13.20	6.33	13.50
1807	7.23	15.00	N/A	N/A	8.39	15.85	8.39	16.85	9.54	17.48	9.54	18.95

Heat Outputs

Straight Chrome



Straight White



Nominal Height	Width (mm - inches)	Straight Chrome			Straight White		
		Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code
862 mm - 33 in	400 - 16	207	706	HL84CS			
	500 - 20	249	850	HL85CS	370	1262	HL85WS
	600 - 24	289	986	HL86CS	427	1457	HL86WS
1222 mm - 48 in	400 - 16	285	972	HL124CS			
	500 - 20	343	1170	HL125CS	511	1744	HL125WS
	600 - 24	398	1358	HL126CS	590	2013	HL126WS
1807 mm - 71 in	400 - 16	433	1477	HL184CS			
	500 - 20	520	1774	HL185CS	768	2620	HL185WS
	600 - 24	603	2057	HL186CS	886	3023	HL186WS

N.B. The tabulated heat outputs are quoted at a mean water to air temperature difference of 50°C.

Curved Chrome



Curved White



Nominal Height	Width (mm - inches)	Curved Chrome			Curved White		
		Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code
862 mm - 33 in	500 - 20	249	850	HL85CC	370	1262	HL85WC
	600 - 24	289	986	HL86CC	427	1457	HL86WC
1222 mm - 48 in	500 - 20	343	1170	HL125CC	511	1744	HL125WC
	600 - 24	398	1358	HL126CC	590	2013	HL126WC
1807 mm - 71 in	500 - 20	520	1774	HL185CC	768	2620	HL185WC
	600 - 24	603	2057	HL186CC	886	3023	HL186WC

N.B. The tabulated heat outputs are quoted at a mean water to air temperature difference of 50°C.