

STELRAD THERMOBREEZE NET ZERO

The heat pump radiator





NET ZERO OR ZERO EMISSIONS

is the ultimate climate goal

Net Zero or zero emissions is the climate goal where we remove **as much greenhouse gas from the atmosphere as we emit**.

We're facing the greatest challenge of our time: removing billions of tons of carbon from the air to **limit global warming to 1.5°C by 2050**.

To get there, we need to:

- drastically cut CO₂ emissions
- remove the remaining emissions from the atmosphere

The only way forward is together, by choosing sustainable solutions like green energy, smart technologies, and conscious decisions from governments, businesses, and every one of us.

Why is Net Zero so important?

Our climate is changing

Global warming is altering our climate, leading to extreme weather events like heatwaves, droughts, and floods.

Nature is off balance

Many plants and animals can't adapt quickly enough, causing species to disappear and precious biodiversity to be lost.

How can we achieve this goal?

Reducing our emissions

We do this by transitioning to green energy as much as possible.

Compensating emissions

For the CO₂ emissions we can't avoid, we need to neutralize them by removing carbon from the air using smart technology.

**Only by radically switching to renewable energy
can we reduce global CO₂ emissions to zero.**

**Supported by international legislation, this is the only path toward
a sustainable future and the preservation of our environment.**

STELRAD FOCUSES ON SUSTAINABILITY!

Sustainability starts with yourself.

At Henrad, we consciously prioritize ecology. For our production facility in Nuth and the logistics centre in Heerlen, this means:

- **100% green electricity**, with more than 50% generated in-house through **solar panels**
- Over 4 years, we reduced our electricity consumption by 44%, gas consumption by 41%, and water consumption by 53%
- **Ecological impact** plays a role in product development from the concept phase
- We continuously strive for **environmentally friendly packaging**
- **Suppliers** are selected and monitored based on their ecological footprint
- All company vehicles and forklifts are now **100% electric**.

EFFICIENT AND GREEN HEATING SOLUTIONS

The climate crisis comes down to one key factor: the amount of carbon in the air.

This directly impacts the Earth's temperature, and the rapid rise is alarming!

Heating is a big part of the problem:

It accounts for around 32% of the CO₂ emissions in an average household.

To cut down on emissions, we need to move away from fossil fuel.

The easiest and most effective solution?

Heating with a heat pump, paired with a system that uses lower temperatures.

That's exactly where Stelrad's **THERMOBREEZE NET ZERO** radiator fits in perfectly!



THERMOBREEZE NET ZERO

The heat pump radiator

Sustainable heating with low temperature

Sustainable heating is done with a heat pump, which is a great alternative to fossil fuels. To get the best performance, the system needs to use low-temperature heating. That's why picking the right heating system is so important.



Specifically designed for heat pumps

ThermoBreeze is specially developed to work perfectly with heat pumps, even at very low supply temperatures. This makes the system highly energy-efficient and seamlessly aligned with your heat pump's temperature settings.

Comfort in every season

Thanks to its **quick response time**, ThermoBreeze immediately adjusts to temperature changes, ensuring a constant and comfortable indoor climate. Plus, the unit provides not just **heating**, but also active **cooling**, so you can enjoy optimal comfort all year round.

Smart and easy control

Using the ThermoBreeze is **simple and user-friendly**. With an intuitive thermostat, you can easily switch between heating and cooling, and quickly set your desired temperature. The fan speed adjusts automatically for ideal air circulation. Prefer to set it yourself? No problem, you can choose from five manual speed settings for full control.

The perfect indoor climate at all times

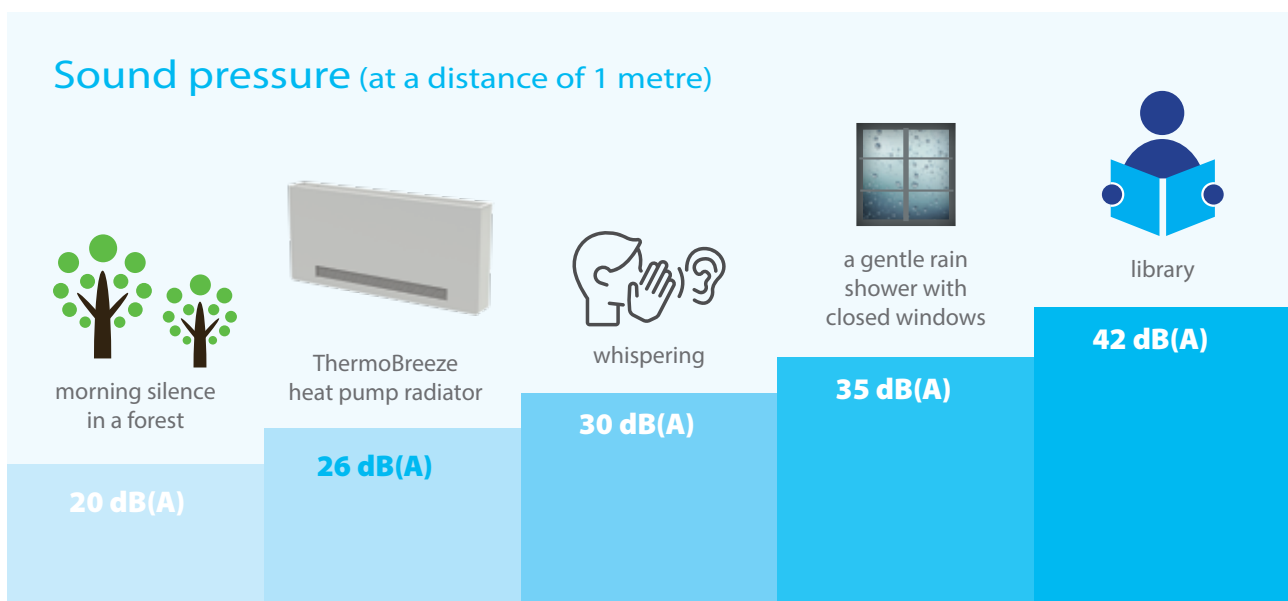
With these versatile features, ThermoBreeze takes your home comfort to the next level.

SILENT POWER SOURCE

Create a pleasant indoor environment

Whisper-quiet comfort thanks to smart ventilation control

Once the unit reaches the set temperature, the continuously adjusting fan automatically reduces its speed, resulting in lower noise levels. The average sound pressure level in automatic mode of the ThermoBreeze with a length of 800 mm is 26 dB(A) at a distance of 1 metre.



Low supply temperature, high efficiency

With a ThermoBreeze of 1000 mm in length, you achieve **high heat output at the lowest supply temperatures**. At a supply/return temperature of 35/30°C and a room temperature of 20°C, the unit still delivers an output of up to 2500 watts.

Make the most of your heat pump

Heat pumps work most efficiently at low supply temperatures, using less energy to heat your home and greatly improving the COP (Coefficient of Performance). Additionally, the ThermoBreeze, with its strong tangential fan, provides even and comfortable heat distribution throughout your home – a clear enhancement to your overall comfort.

Sustainable advantage

With ThermoBreeze, you get **more efficiency** from your system, save on energy costs, and reduce your carbon footprint.



COOLING

Summers are getting warmer, but keep a cool head

Increasingly warm summers are causing even well-insulated homes to heat up. Because of the insulation, that heat has a hard time escaping, leading to an uncomfortable, sometimes even unhealthy, indoor climate. **That's why cooling has become just as essential as heating.**

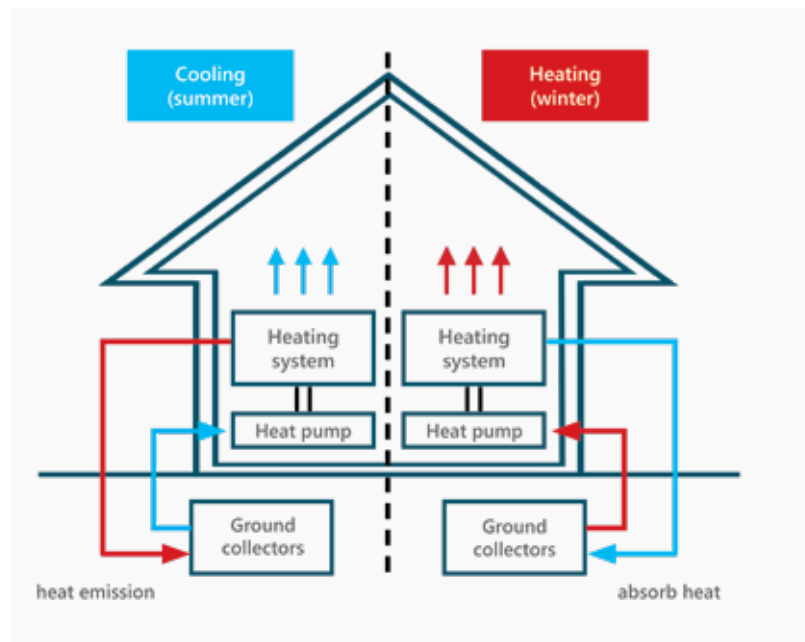


DEEP COOLING

Powerful cooling below the dew point, with a focus on proper installation

Deep Cooling – or **cooling below the dew point** – provides **fast, effective temperature reduction**. The environment feels fresher and more comfortable, and **air quality improves** as moisture is removed from the air. On hot, humid days, it truly makes a difference in comfort and **helps prevent moisture-related issues**.

Important: This technique has specific installation requirements. Since Deep Cooling causes condensation, it must be drained through pipes. Additionally, all pipes must be carefully insulated to avoid moisture problems. That makes Deep Cooling particularly efficient, but less straightforward in renovations. The optional centre connection is not suitable for cooling below the dew point (Deep Cooling).



COOLING

Cooling is becoming crucial

With ThermoBreeze, **combined with a heat pump with cooling mode**, you can enjoy a comfortable indoor climate all year round. Ready for any season!



LIGHT COOLING

Light Cooling – or cooling above the dew point – provides a pleasant cooling

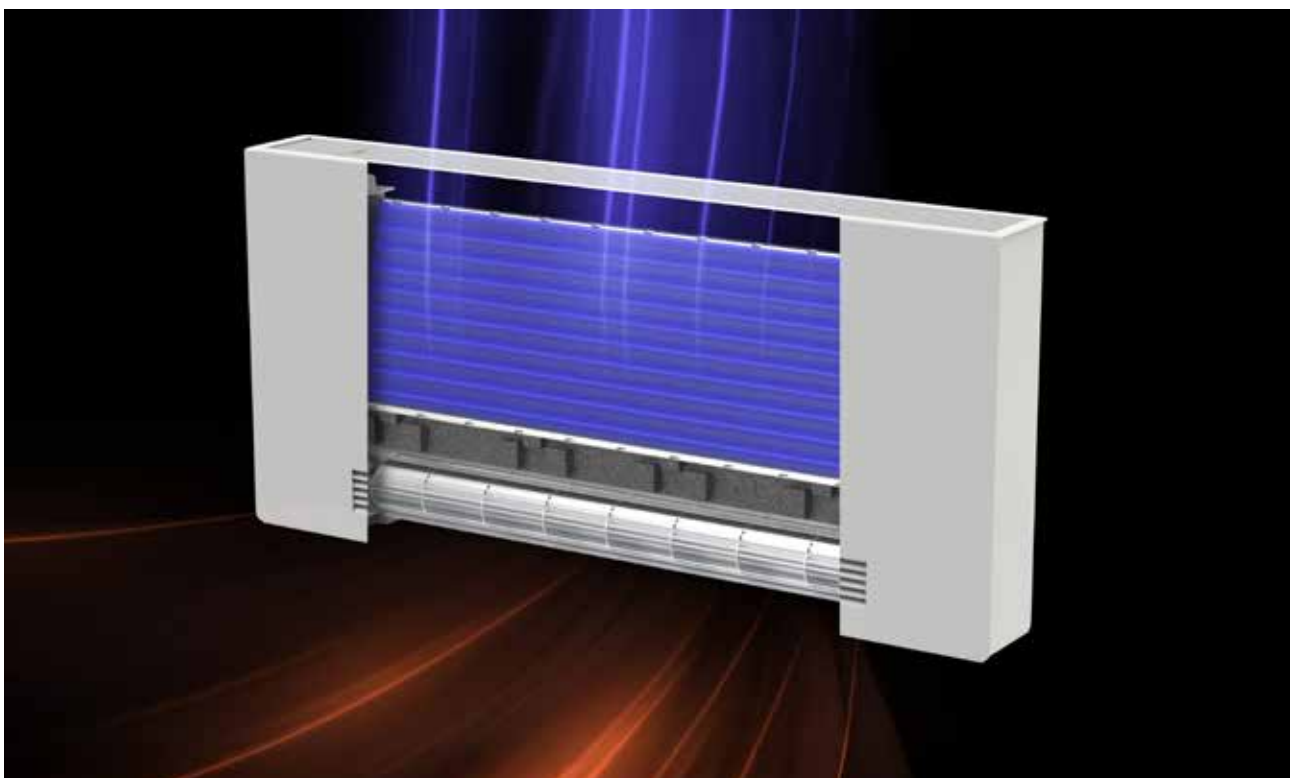
Light Cooling – or **cooling above the dew point** – provides a pleasant cooling effect without creating condensation. This gentle cooling technique **lowers the indoor temperature in a soft, natural way**, without making the air dry or uncomfortable.

Light Cooling is suitable for any type of home, regardless of the level of insulation, where comfort and energy efficiency are the focus.

Important to know: The ThermoBreeze does not have automatic condensate monitoring. Since the dew point changes daily, it is important to monitor this yourself.

On the Henrad website, you can easily calculate the dew point using our dew point calculator:
<https://stelrad.eu/en-gb/dew-point>

However, you can easily set the minimum cooling temperature to your preference via the thermostat.



RENOVATE

with Thermobreeze!



Smart choice for renovation

ThermoBreeze is also a smart choice for renovations. The system **can be easily combined with existing heating sources** such as a gas or oil boiler. You immediately benefit from the advantages of lower supply temperatures while preparing your home for a future switch to a heat pump, without having to replace your entire installation.

High performance, minimal adjustments

Thanks to its **high heat output**, ThermoBreeze is perfect for renovated homes. In many cases, even **the existing piping can be retained**, simplifying installation and keeping costs low.

Convectors with high heat output also require a high water flow rate. This can be a point of attention in renovation projects.

For illustration:

- A 15 mm pipe handles a maximum of 180 litres per hour
- A 25 mm pipe can handle up to 400 litres per hour

A well-designed system is therefore crucial for optimal performance..

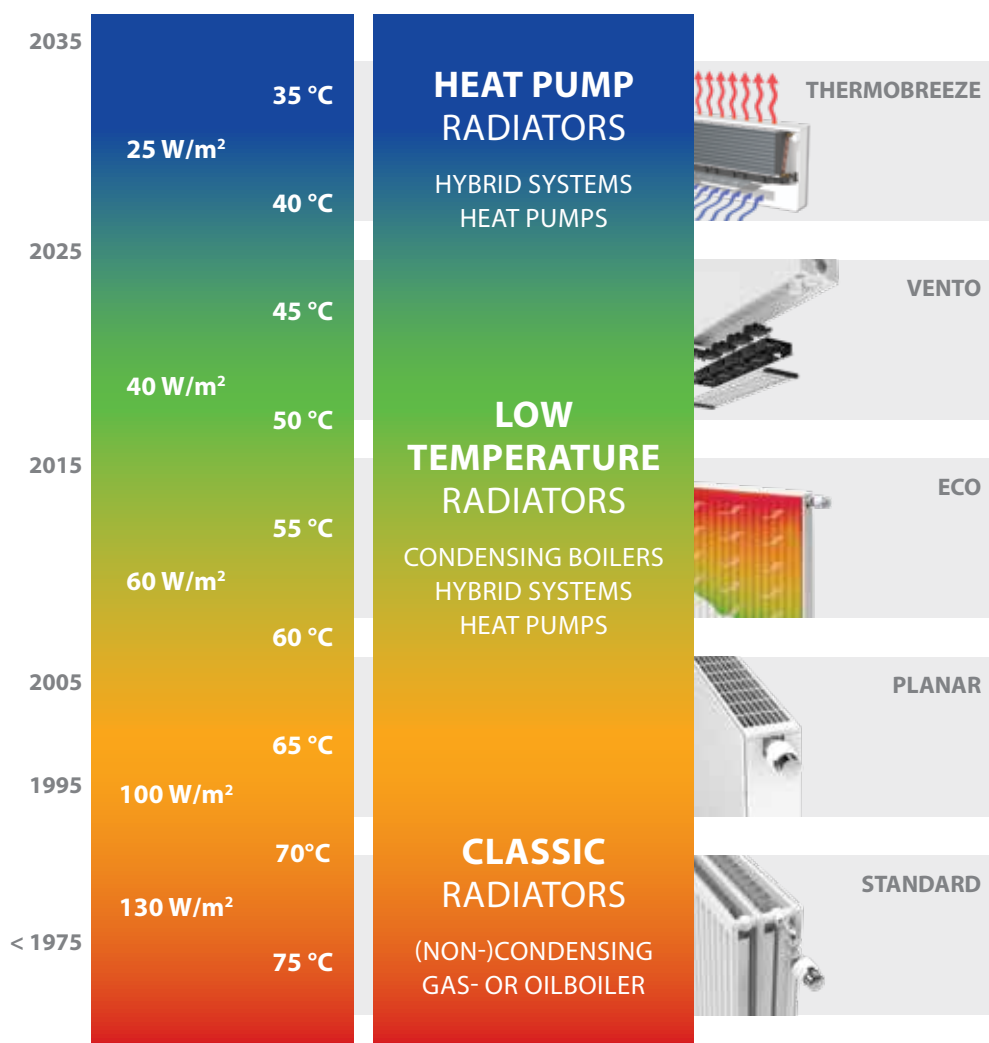
For more information, please consult your installer.

CHOOSE SMART

the ideal heat distribution system for your home

Want to live comfortably without wasting energy?

Then choose the heat distribution system that fits your needs. The table below shows which type of radiator is suitable for a 100 m² home, depending on heat loss and system temperature, along with an estimate of how many radiators you'll need.



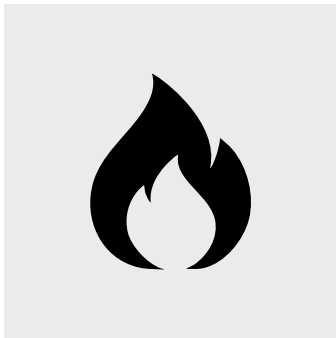
Insulation determines efficiency

The better your home is insulated, the more efficiently your heating system works. In poorly insulated homes, higher system temperatures are needed, requiring different types of heat distribution systems. On the other hand, a well-insulated home can be heated with lower supply temperatures, which not only increases the efficiency of your system but also reduces your energy bill and carbon footprint.

THERMOBREEZE

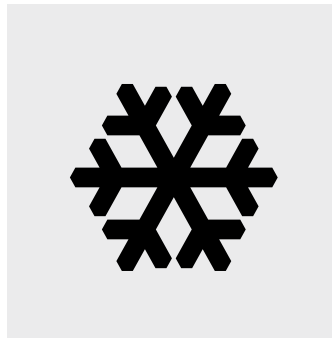
Your benefits at a glance!

Energy-efficient, without compromising on comfort



Heating

High output at the lowest supply temperatures



Cooling

Both Light and Deep Cooling are possible



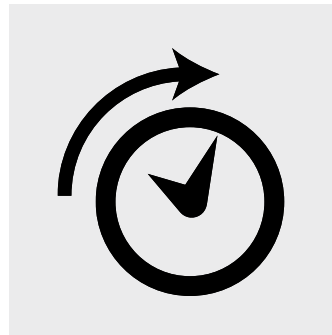
Ventilation

For better air circulation



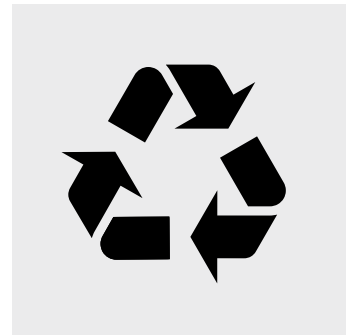
Whisper-quiet

Thanks to smart control, you can enjoy whisper-quiet comfort



Fast response time

Thanks to smart control, you can enjoy whisper-quiet comfort

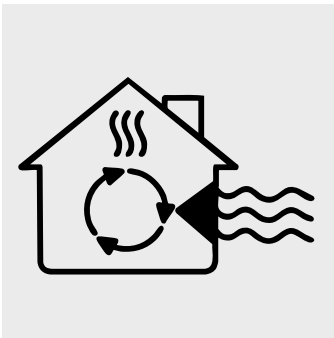


Circular

Defective parts can be replaced quickly and easily

THERMOBREEZE

Future-proof and ready to go



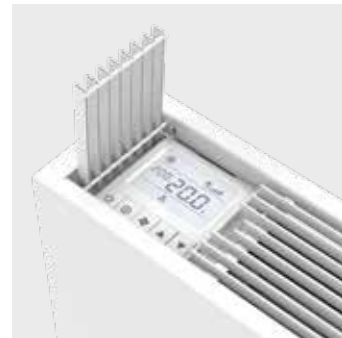
Heat Pump

Sustainable heating with an ultra-low supply temperature



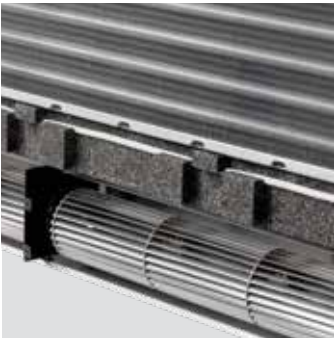
Sleek & slim design

Only 465 mm high and 120 mm deep



Easy control

With the thermostat you can easily adjust the temperature and fan speed



High-quality tangential fan

Very powerful yet quiet



Filter cleaning

The filter is easy to clean and simple to remove



All-inclusive

Including valves, controls, thermostat, mounting, and drip tray

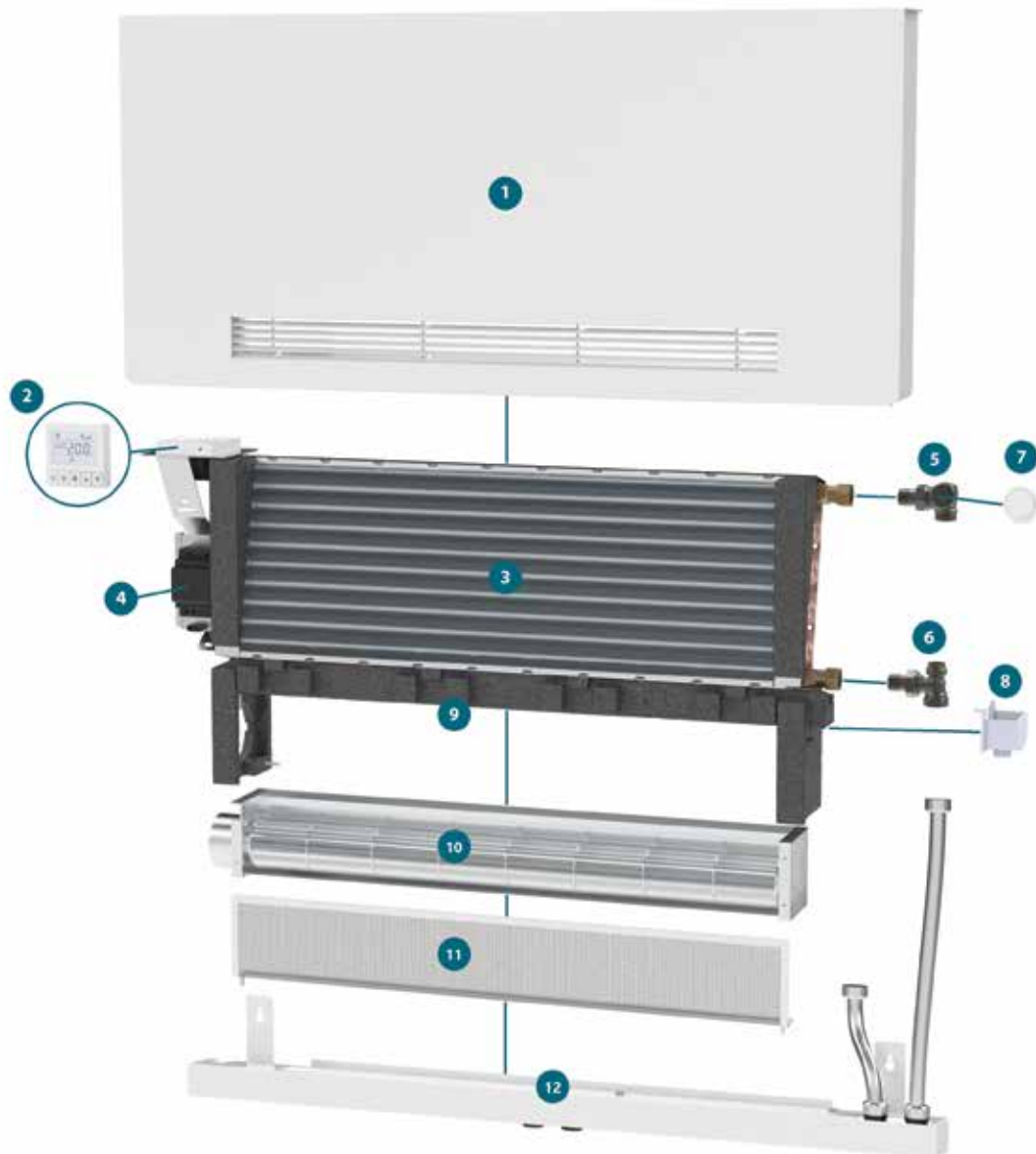
TECHNICAL DATA

specifications

		Lenght Art. nr.	L 800 91010465500800	L 1000 91010465501000	L 1200 91010465501200	L 1400 91010465501400	
Cooling capacity	7/12/28°C	Min.	W	203	284	366	447
		Med.	W	687	961	1.236	1.510
		Max.	W	1.006	1.408	1.811	2.213
Heat output	45/40/20°C	Min.	W	428	600	771	942
		Med.	W	1.115	1.561	2.007	2.453
		Max.	W	1.441	2.017	2.593	3.170
Housing	Colour		NT110 Papyrus white	NT110 Papyrus white	NT110 Papyrus white	NT110 Papyrus white	
	Material		Steel plate	Steel plate	Steel plate	Steel plate	
Dimensions	Unit of measurement	Height	mm	465	465	465	465
		Length	mm	800	1000	1200	1400
		Overall depth	mm	120	120	120	120
	Shipping package	Height	mm	505	505	505	505
		Length	mm	820	1020	1220	1420
		Depth	mm	135	135	135	135
Weight	Unit of measurement	kg	13,6	16	18,4	20,9	
Packaging	Material		Corrugated cardboard	Corrugated cardboard	Corrugated cardboard	Corrugated cardboard	
	Weight	kg	0,96	0,126	0,132	0,168	
Water circuit	Heat exchanger	Quantity		1	1	1	1
		Volume	L	0,8	1	1,2	1,4
	Pipes	Diameter	in	9,52	9,52	9,52	9,52
		Material		Copper	Copper	Copper	Copper
	Pressure - heating	Max.	bar	10	10	10	10
	Mass flow - heating 45/40/20°C	Min.	kg/h	74	103	133	162
		Med.	kg/h	192	268	345	422
		Max.	kg/h	248	347	446	545
	Mass flow - cooling 7/12/28°C	Min.	kg/h	35	49	63	77
		Med.	kg/h	118	165	213	260
Max.		kg/h	173	242	311	381	
Sound pressure level (at 1 m distance) According to EN12102 (EN3741)	Min.	dB(A)	9,3	12,8	16,2	19,7	
	Med.	dB(A)	35	36,9	38,7	40,6	
	Max.	dB(A)	50,7	51,5	52,2	53	
Operating range	Heating – water circuit	Min.	°C	20	20	20	20
		Max.	°C	65	65	65	65
	Cooling – water circuit	Min.	°C	5	5	5	5
		Max.	°C	25	25	25	25
	Ambient temperature	Min.	°C	5	5	5	5
		Max.	°C	55	55	55	55
Control system	Built-in thermostat			Including	Including	Including	Including
Regulation system	Integrated in the inner unit			Yes	Yes	Yes	Yes
Filter				Including	Including	Including	Including
Power supply	Protection class			Class I - IPX0	Class I - IPX0	Class I - IPX0	Class I - IPX0
	Grounding connection			Required	Required	Required	Required
	Voltage supply	Frequency	Hz	~50	~50	~50	~50
		Voltage	V	220-240	220-240	220-240	220-240
Output	Max.	W	19	29	33	42	
	Min.	W	0,75	0,75	0,75	0,75	

CONVECTOR

composition



- | | |
|--------------------------------------|---|
| 1 Enclosure | 7 Motorised actuator |
| 2 Thermostat | 8 Condensate tray |
| 3 Heat exchanger | 9 EPP parts |
| 4 Power supply | 10 Tangential fan |
| 5 Thermostatic valve | 11 Stainless steel dust filter |
| 6 Adjustable and closable foot valve | 12 Centre connection (not for Deep Cooling, to be ordered separately) |

Colour your warmth

Stelrad is delighted to introduce you to our *palette of warm colours*. A shade for every room, for *every interior*. pt for warm elegance, the baroque ambience or modern minimalism; with Stelrad, you can heat your home in *colour*.

COLOURS OF NATURE



NT110 Papyrus white NT120 Pearl white NT130 Champagne NT140 Beige NT160 Pebble grey NT170 Quartz grey NT180 Soft black

METALLIC COLOURS



ML110 Dove grey ML120 Titanium grey ML134 Blue grey ML140 Granite ML150 Cappuccino ML160 Terra brown ML170 Graphite black

COLOURS FOR SANITARY WARES



SN110 Cream white SN120 Cream SN130 Mocca SN140 Bordeaux SN150 Sepia SN160 Pale blue SN170 Black

RAL COLOURS



A1004 Golden yellow A2003 Pastel orange A3002 Carmine red A5002 Ultramarine blue A6018 Yellow green A7001 Silver grey A7011 Iron grey



A7016 Iron grey A7030 Stone grey A7035 Light grey A8017 Chocolate brown A9003 Signal white A9005 Jet black A9010 Pure white

How do I order a coloured radiator?

Firstly, the radiator's item number then the item number of the colour + description.

ex. 91010465501000 SN170 Black

The colours are illustrative only.

In addition to our *35 trendy, very popular and carefully selected colours* we now offer *many more RAL* colours.*

Shades of yellow

RAL 1000	E1000	RAL 1012	E1012	RAL 1018	E1018
RAL 1001	E1001	RAL 1014	E1014	RAL 1019	E1019
RAL 1002	E1002	RAL 1015	E1015	RAL 1021	E1021
RAL 1003	E1003	RAL 1016	E1016	RAL 1023	E1023
RAL 1007	E1007	RAL 1017	E1017		

Shades of orange

RAL 1034	E1034
RAL 2002	E2002
RAL 2004	E2004
RAL 2008	E2008
RAL 2009	E2009
RAL 2010	E2010
RAL 2011	E2011

Shades of red

RAL 3000	E3000	RAL 3011	E3011
RAL 3001	E3001	RAL 3013	E3013
RAL 3004	E3004	RAL 3016	E3016
RAL 3005	E3005	RAL 3020	E3020
RAL 3007	E3007	RAL 3027	E3027
RAL 3009	E3009		



How to order a coloured radiator based on the multitude of RAL colours?

First enter the article number of the radiator, then complete with the colour code.

*2 gloss level variations available
(Gloss degree according to ISO2813):

Gloss level = 70% ± 5%
(Code "E") :
e.g. 91010465501000 E10000

Gloss level = 30% ± 5%
(Code "F") :
e.g. 91010465501000 F1000

Shades of blue

RAL 5000	E5000	RAL 5014	E5014
RAL 5003	E5003	RAL 5015	E5015
RAL 5004	E5004	RAL 5017	E5017
RAL 5005	E5005	RAL 5018	E5018
RAL 5007	E5007	RAL 5019	E5019
RAL 5008	E5008	RAL 5020	E5020
RAL 5009	E5009	RAL 5021	E5021
RAL 5010	E5010	RAL 5022	E5022
RAL 5011	E5011	RAL 5023	E5023
RAL 5012	E5012	RAL 5024	E5024
RAL 5013	E5013		

Shades of green

RAL 6000	E6000	RAL 6009	E6009	RAL 6017	E6017	RAL 6027	E6027
RAL 6001	E6001	RAL 6010	E6010	RAL 6019	E6019	RAL 6027	E6027
RAL 6002	E6002	RAL 6011	E6011	RAL 6020	E6020	RAL 6028	E6028
RAL 6003	E6003	RAL 6012	E6012	RAL 6021	E6021	RAL 6029	E6029
RAL 6004	E6004	RAL 6013	E6013	RAL 6022	E6022	RAL 6032	E6032
RAL 6005	E6005	RAL 6014	E6014	RAL 6024	E6024	RAL 6033	E6033
RAL 6006	E6006	RAL 6015	E6015	RAL 6025	E6025	RAL 6034	E6034
RAL 6007	E6007	RAL 6016	E6016				

Shades of grey

RAL 7000	E7000	RAL 7015	E7015	RAL 7037	E7037
RAL 7002	E7002	RAL 7021	E7021	RAL 7038	E7038
RAL 7003	E7003	RAL 7022	E7022	RAL 7039	E7039
RAL 7004	E7004	RAL 7023	E7023	RAL 7040	E7040
RAL 7005	E7005	RAL 7024	E7024	RAL 7042	E7042
RAL 7006	E7006	RAL 7026	E7026	RAL 7043	E7043
RAL 7008	E7008	RAL 7031	E7031	RAL 7044	E7044
RAL 7009	E7009	RAL 7032	E7032	RAL 7045	E7045
RAL 7010	E7010	RAL 7033	E7033	RAL 7046	E7046
RAL 7012	E7012	RAL 7034	E7034	RAL 7047	E7047
RAL 7013	E7013	RAL 7036	E7036	RAL 7048	E7048

Shades of brown

RAL 8001	E8001
RAL 8002	E8002
RAL 8003	E8003
RAL 8004	E8004
RAL 8007	E8007
RAL 8008	E8008
RAL 8011	E8011
RAL 8012	E8012
RAL 8014	E8014
RAL 8015	E8015

Shades of black and white

RAL 8016	E8016	RAL 9001	E9001
RAL 8019	E8019	RAL 9002	E9002
RAL 8022	E8022	RAL 9004	E9004
RAL 8023	E8023	RAL 9011	E9011
RAL 8025	E8025	RAL 9017	E9017
RAL 8028	E8028	RAL 9018	E9018

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