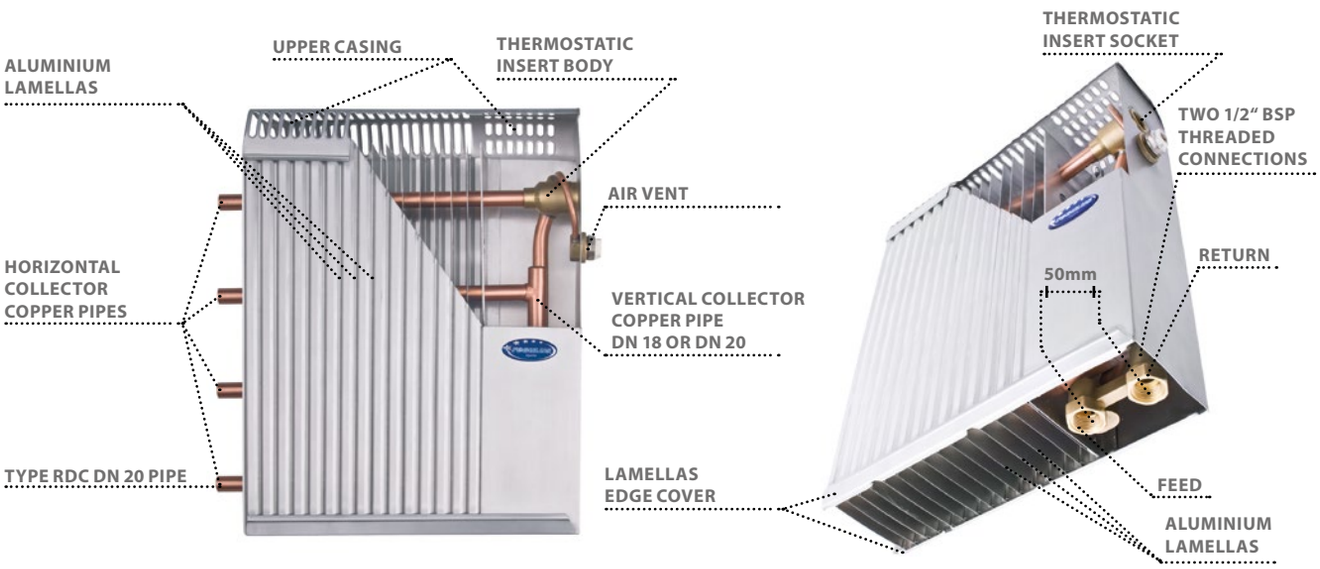
CENTRAL HEATING RADIATORS AND TRENCH FLOOR HEATING

regulus®

REGULUS®-system REGULLUS and REGULUS®-system SOLLARIUS COPPER-ALUMINUM WALL MOUNTED RADIATORS

REGULLUS RADIATOR - bottom feed



TECHNOLOGY

The radiators are made of two systems: the water system and the heat transfer system. The water system is simply a copper exchanger - a package of horizontal DN15 copper pipes connected with DN18 copper pipes called vertical collectors. The heat dissipation system contains horizontal copper pipes connected with vertical aluminum lamellas. Lamellas create a dense pipe ribbing forming numerous convection channels. They are also part of undulated front and rear of the radiator surface. Lamellas receive heat from the surface of copper pipes. The casing elements are also made of aluminum. The installation water flowing through the radiator has contact only with copper.

HOW IT WORKS

Room heating takes place in a mixed way: through intense wide-angle heat radiation from the undulated front surface of the radiator, as well as through convection. The latter one happens when the air is sucked in from the bottom by numerous convection chimneys of the radiator. When flowing through its interior, it absorbs heat from the surface of the pipes and lamellas and then flows out through the perforated top of the casing. This dual method of heat emission creates a uniform distribution of heating throughout the room.

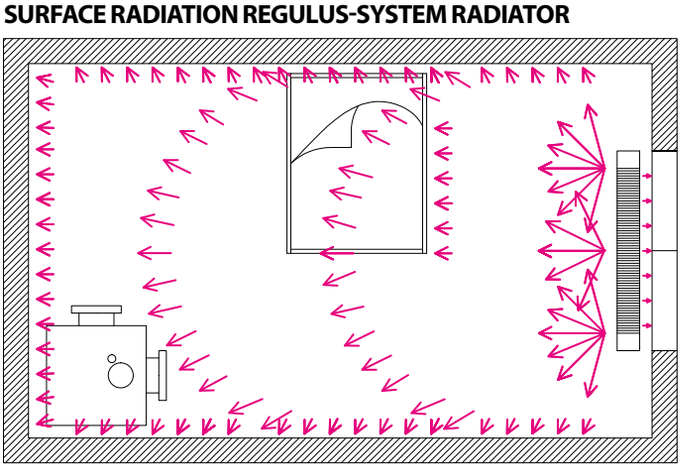
UNIVERSAL APPLICATION

REGULUS®-system wall radiators can be used in any type of installation – copper, plastic or traditional steel. They work with electric, gas and oil boilers and can be connected to the municipal heating network. They work perfectly well with low-temperature boilers, such as condensing boilers and can also be used with heat pumps. Due to their higher efficiency resulting from a significantly larger heat exchange surface they turn out to outperform other types of radiators while working at high or low installation temperatures. They can be filled with water or non-freezing liquid (i.e. holiday homes used periodically). It is also allowed to power them with steam or they can be used in open-vented CH systems (solid fuel boilers).

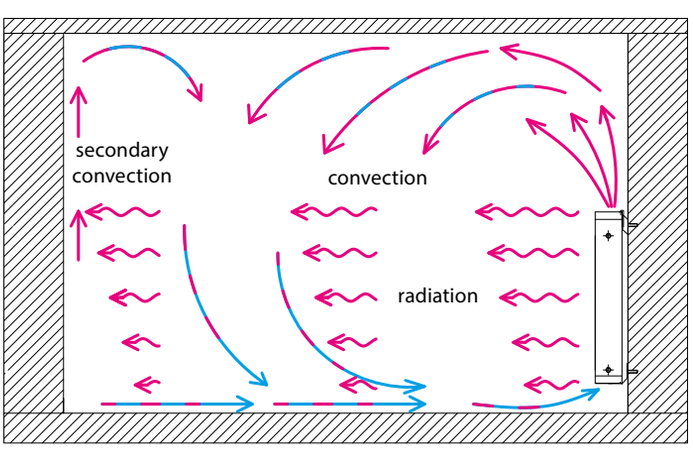
They are used in all types of buildings. Their desirable benefits make them readily installed in private and commercial properties, such as HMOs, student accommodation, hotels, places of worship, sports facilities, high humidity buildings (i.e. swimming pools, car washes).

REGULLUS and SOLLARIUS models can support much slower underfloor heating systems, which is especially important during the transitional periods of autumn and spring. They can be used in new and existing installations.

ILLUSTRATION OF HEAT DISSIPATION BY MULTIDIRECTIONAL SURFACE RADIATION REGULUS-SYSTEM RADIATOR



HOW THE REGULUS-SYSTEM RADIATORS EMIT HEAT



REGULLUS - radiator with oval upper casing

- standard version – white RAL 9003, free of charge upgrade to all colours from RAL K7 palette
- height: 125-1120 mm; length: 400-2000 mm; depth: 90 mm
- connection: side, throughout, bottom, bottom central

After mounting on the hanger the radiator's distance from the wall is 20 mm.

The radiators are reversible - they can be connected to the right or left.

Swimming pool construction - a special layer of varnish protects not only against moisture but also against the influence of chemical cleaning agents that are used in swimming pools, car washes and other similar facilities.

SOLLARIUS – a radiator with a flat top casing

- standard version – white RAL 9003, free of charge upgrade to all colours from RAL K7
- height: 120-1115 mm; length: 400-2000 mm; depth: 90 mm
- connection: side, throughout, bottom, bottom central

They are very light and easy to install even on plasterboard walls.

Owing to the large number of lamellas they boost a large heating surface.

For radiators painted in gold pearl (RAL 1036), we offer a golden TRV head (heads in white and silver satin are also available).

SOLLARIUS PLAN – a radiator with a flat smooth front

- standard version – white RAL 9003, free of charge upgrade to all colours from RAL K7
- height: 120-1115 mm; length: 400-2000 mm; depth: 90 mm
- connection: side, throughout, bottom, bottom central

The lowest available height of the radiator is only 120 mm – so it can be used under very low windowsills and in rooms with large windows.

The bottom feed radiator has a permanently installed brass module to which the radiator connections are screwed. The spacing of the connections is 50 mm.

SOLLARIUS DECOR
– tall radiator with a smooth flat front

- standard version – white RAL 9003, free of charge upgrade to all colours from RAL K7
- height: 1400-2000 mm; width: 400, 500, 600, 700, 800 mm; depth: 90 mm
- connection: bottom central

Due to its size, SOLLARIUS DECOR is intended for mounting on a free wall, a pillar or next to a door.

Despite its large dimensions it has a relatively small mass. As a results, it is energy-saving and easy to control.

It is only made with the centre-feed version (connection spacing 50 mm), which allows the installation of a radiator of any length at the last stage of work.

SOLLARIUS DUBEL – double radiator

- standard version – white RAL 9003, free of charge upgrade to all colours from RAL K7
- height: 120-570 mm; length: 400-2000 mm; depth: 180 mm
- connection: side, throughout, bottom, bottom central

It has much greater power compared to a standard size radiator. It is an alternative to steel three-plate radiators.

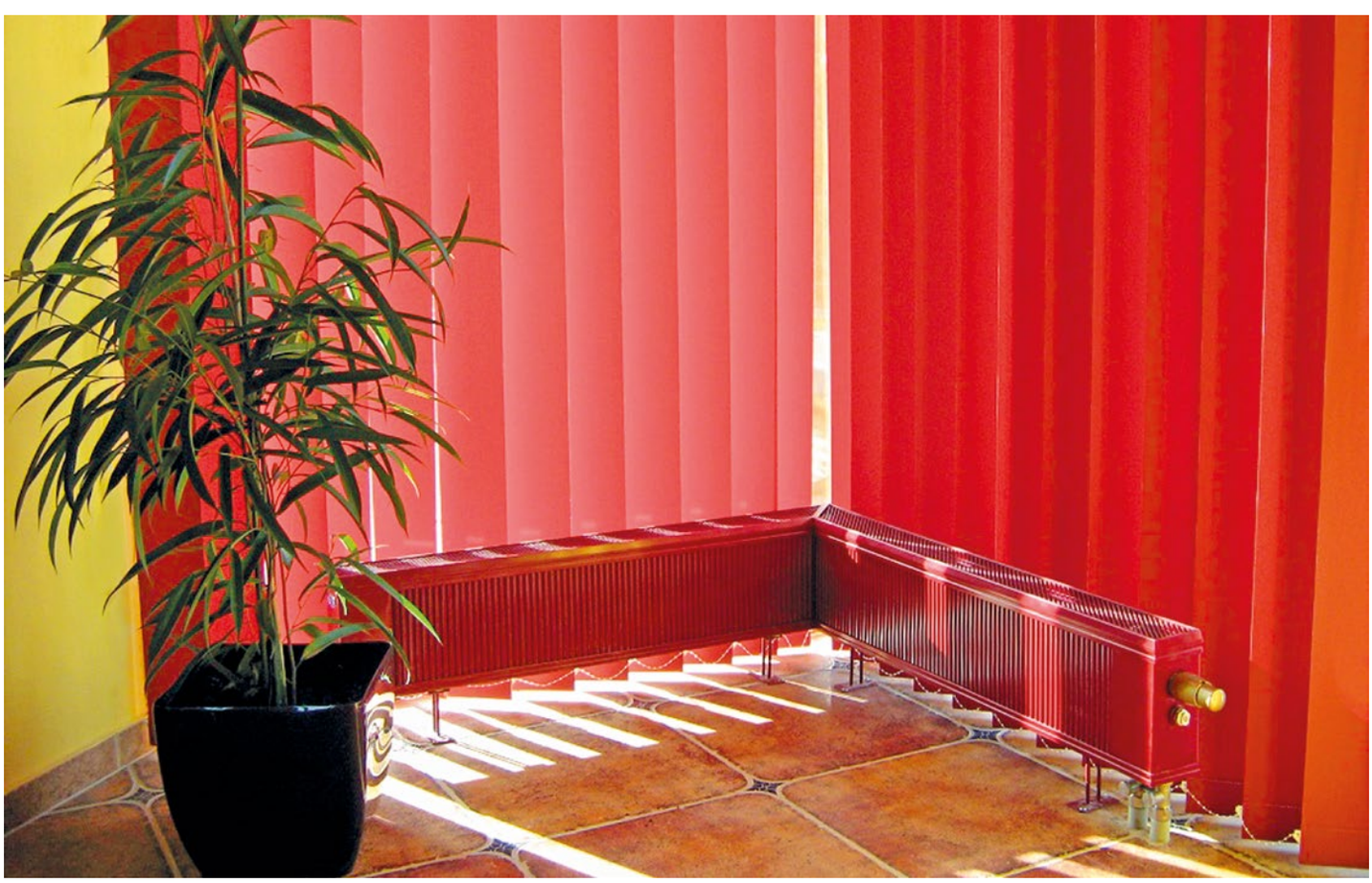
It works well under large windows, in places where a large wall mounted radiator cannot be installed and where the installation of a trench system is impossible.

A choice of two options for mounting the radiator, on wall hangers or on mounting floor stands (the height of the stand depends on the height of the heater - 4 models to choose from).

SOLLARIUS S-CORNER – corner radiator, arms at an angle of 90°

- standard version – white RAL 9003, free of charge upgrade to all colours from RAL K7
- height: 120-570 mm; length: 800-2000 mm; depth: 90 mm
- connection: side, bottom, throughout

The radiator arms can have different lengths. The sum of arms length cannot exceed 2000 mm, the maximum length of one arm is 1400 mm.



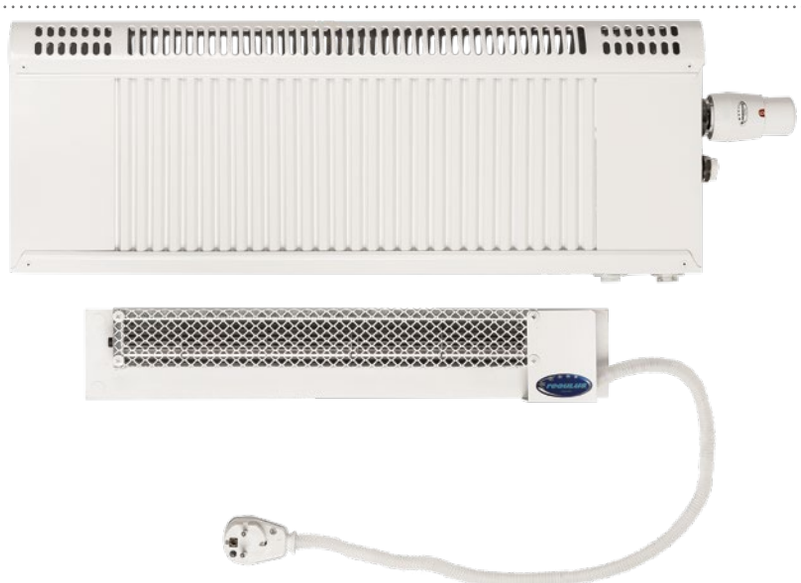
S-CORNER can be installed in the corner of a room or in the corner window, anywhere where it is not possible to use the wall or ducted channel floor radiators.

E-VENT – radiator with a fan, 30% more power

- available in the following versions: REGULLUS and SOLLARIUS
- height: 300-1120 mm; length: 600, 1000, 1400, 1800 mm; depth: 90 or 180 mm
- connection: side, bottom

REGULUS®-system E-VENT radiator is factory adjusted to the fan assembly. The fan is mounted in the lower part on the inside of the radiator – the magnetic mounting makes it easy to install or de-install.

For the wall radiator of any production, you can buy a fan (fans) on a special base, which is mounted to the wall under the radiator.



A fan for mounting in any type of REGULUS® radiator system. The fan is equipped with magnets and an adaptation set (mounting plate with accessories). The plate is mounted at the bottom part of the radiator and then using the magnet, the fan can be connected with the radiator.

TRENCH FLOOR HEATING COMPONENTS

RADIATOR – a trench exchanger made of copper heating pipes connected to aluminium lamellas. It comes in black matt as standard – RAL 9005.

TRENCH TUB – made of galvanised steel sheet. It comes in black matt as standard – RAL 9005.

GRILLE – the only visible element of the trench floor heating system. Available in wood or aluminium. Details on the next page.

AFTER SEASON PLATFORM – inserted in place of grille after the heating season.

PLATFORM FRAMEWORK – an element that carries the weight from the grille onto the floor (mounted on the flange of the tub permanently).

FAN – significantly increases the power of the exchanger, it is used in shallow heating trenches (TRIOVENT, QUATTROVENT).

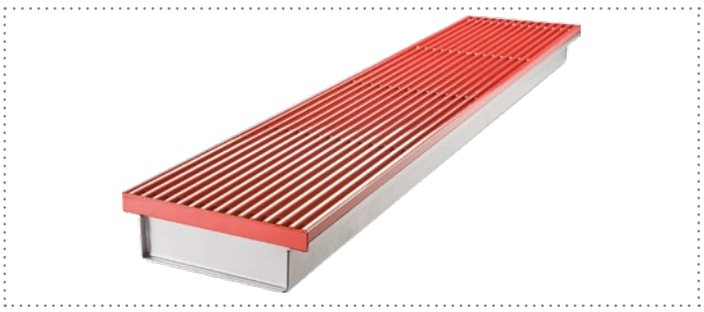
CONTROL – several variants available, including a room timer with direct temperature measurement of the heated room.

SPECIFICATION OF THE PLATFORMS

The grille covering the ducted heating trench can be made of aluminium or wood.

Aluminium grilles

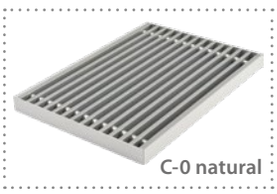
Available in two designs: with rungs along the trench axis and across the trench axis. They can be fixed or rolled. The roll option makes it easier to store the grille when it is replaced by a post heating season platform. It also allows easier access to the inside of the trench during cleaning. Longitudinal grilles are only available in the fixed version. There are three variants of the distance between the rungs: 7, 10 or 13 mm. Profiles, distance sleeves, and platform frame come as standard in pearl silver or can be custom painted using any colour from the RAL K7 palette (free of charge).



ALUMINUM GRILLE, LONGITUDINAL, FIX, RAL 3001

ALUMINUM GRILLE, STANDARD TYPE- SILVER, PEARL

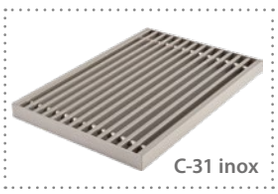
Anodised aluminium grilles are also available (they are characterised by greater resistance to corrosion, abrasion and chemical agents). All profiles, spacers as well as the frame of the grilles are anodised. There are four colour versions to choose from: C-0 natural, C-33 olive, C-35 black and C-31 inox.



C-0 natural

C-33 olive

C-35 black

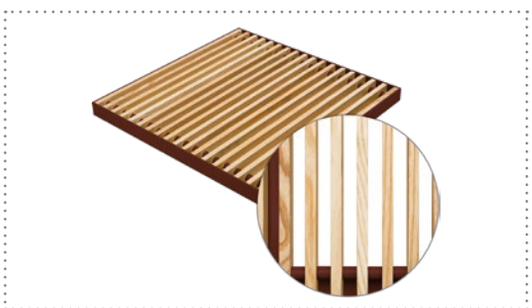


C-31 inox

Wooden grilles

Wooden grilles are made of high quality wood: oak and beech. They are impregnated with a 50% clear nitro lacquer. Wooden grilles are only available in rolled version. The offer includes two designs: “bone“ and “strip“. The distance between the rungs is 17 mm for the “bone“ pattern and 11 mm for the “strip“ pattern. Grille bushings in the “strip“ pattern are made of aluminium and painted chestnut brown as standard (RAL 8015). The grille bushings can come in any colour from the RAL K7 palette on request, free of charge.

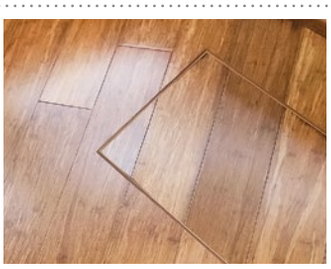
WOODEN GRILLE – “BONE” PATTERN



WOODEN GRILLE – “STRIP” PATTERN

POST HEATING SEASON PLATFORM

It is used for installation outside of the heating season in place of the grille. It masks and protects the trench and the exchanger against dirt. The user fills an empty post heating season platform with the material the floor is made of, or in any other way. Filling the platform can be done by keeping the floor pattern (e.g. the same arrangement of ceramic tiles or parquet flooring). The post heating season platform is made of short sections, up to 1.4 m.



FULL POST HEATING SEASON PLATFORM

EMPTY POST HEATING SEASON PLATFORM

SOLO

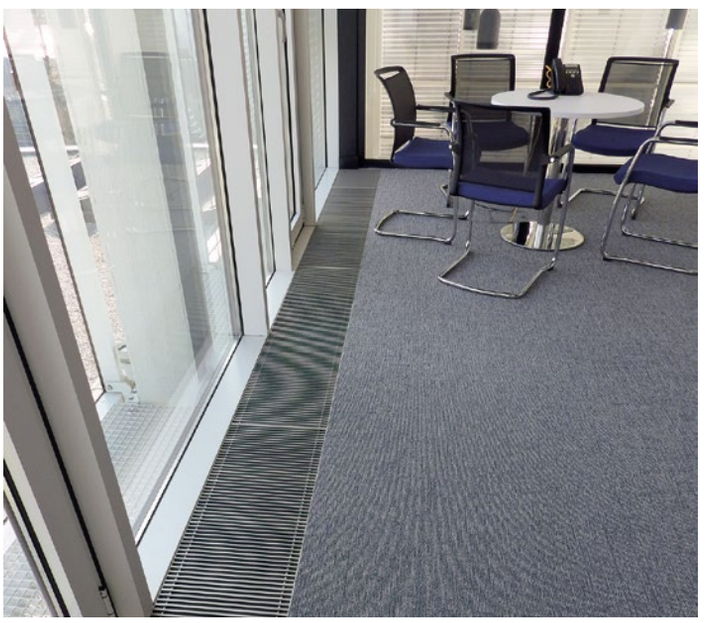
NATURAL CONVECTION

TUB - WIDTH: 200 mm
BORDER - EXTERNAL WIDTH: 250 mm
EXCHANGER - WIDTH: 90 mm

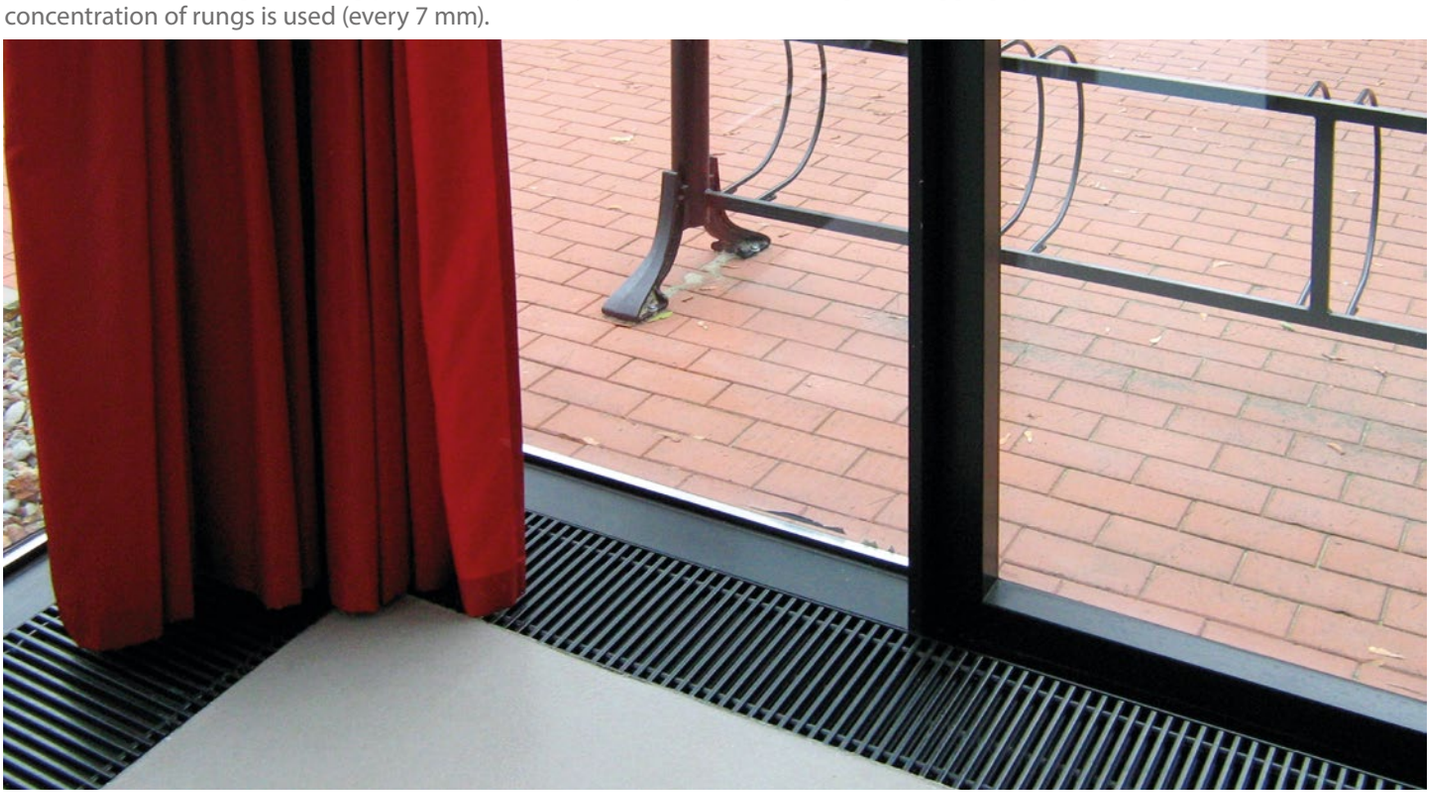
Height [mm]: **170, 270, 400, 500, 600, 700**
Minimal length [mm]: **600**
Maximum length [mm]: **no limits**
The length of a single element [mm]: **up to 3000**
Grille width [mm]: **243**
Feeding method: **front of the tub**
Feeding side: **universal (reversible set)**

SOLO 170

Gaps between the aluminium rungs could be between 7, 10 to 13 mm. In weight bearing places (i.e. doorways) denser concentration of rungs is used (every 7 mm).



Trench heaters also work as air curtains – they protect the window against fogging up.



Mounting platform colours do not need to be colour coordinated with the floor, but constitute an interesting contrast or match window frames.

DUO, QUATTRO

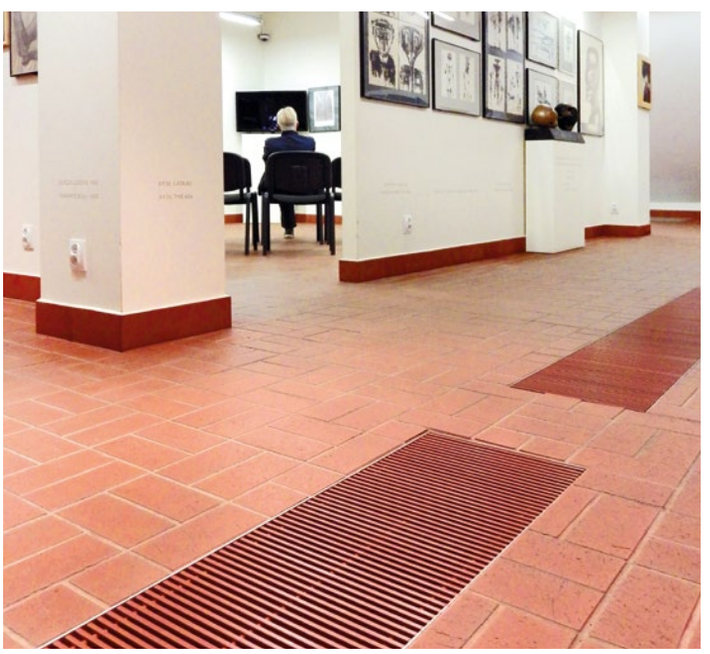
NATURAL CONVECTION

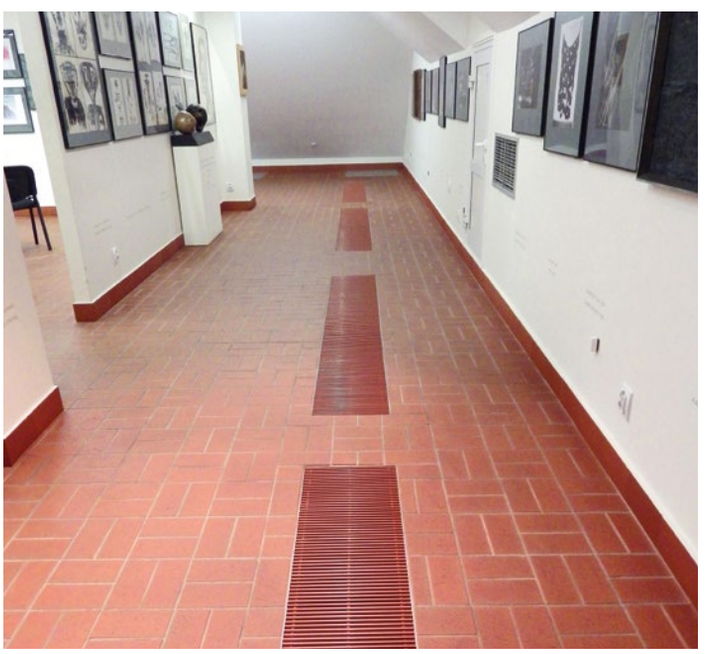
TUB – WIDTH: 300 mm
BORDER – EXTERNAL WIDTH: 350 mm
EXCHANGER – WIDTH: 155 mm

Height [mm]: **100, 150, 200, 270**
Minimal length [mm]: **600**
Maximum length [mm]: **no limits**
The length of a single element [mm]: **up to 3000**
Grille width [mm]: **343**
Feeding method: **front of the tub**
Feeding side: **universal (reversible set)**

DUO 100

QUATTRO 200





Trench heating works perfectly well in museums and showrooms – that is in places with limited scope for wall mounted radiators.

It is possible to produce corner trench heaters – with an angle from 90° to 180°.

Wooden grilles come only in the rolled version. The width between individual rungs in the bone design is 17 mm.

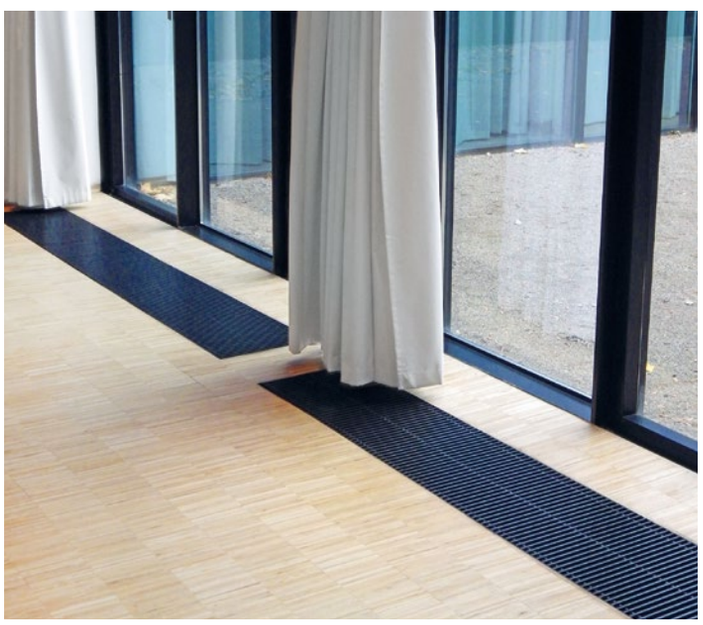
DUBEL

NATURAL CONVECTION

TUB – WIDTH: 350 mm
BORDER – EXTERNAL WIDTH: 400 mm
EXCHANGER – WIDTH: 180 mm

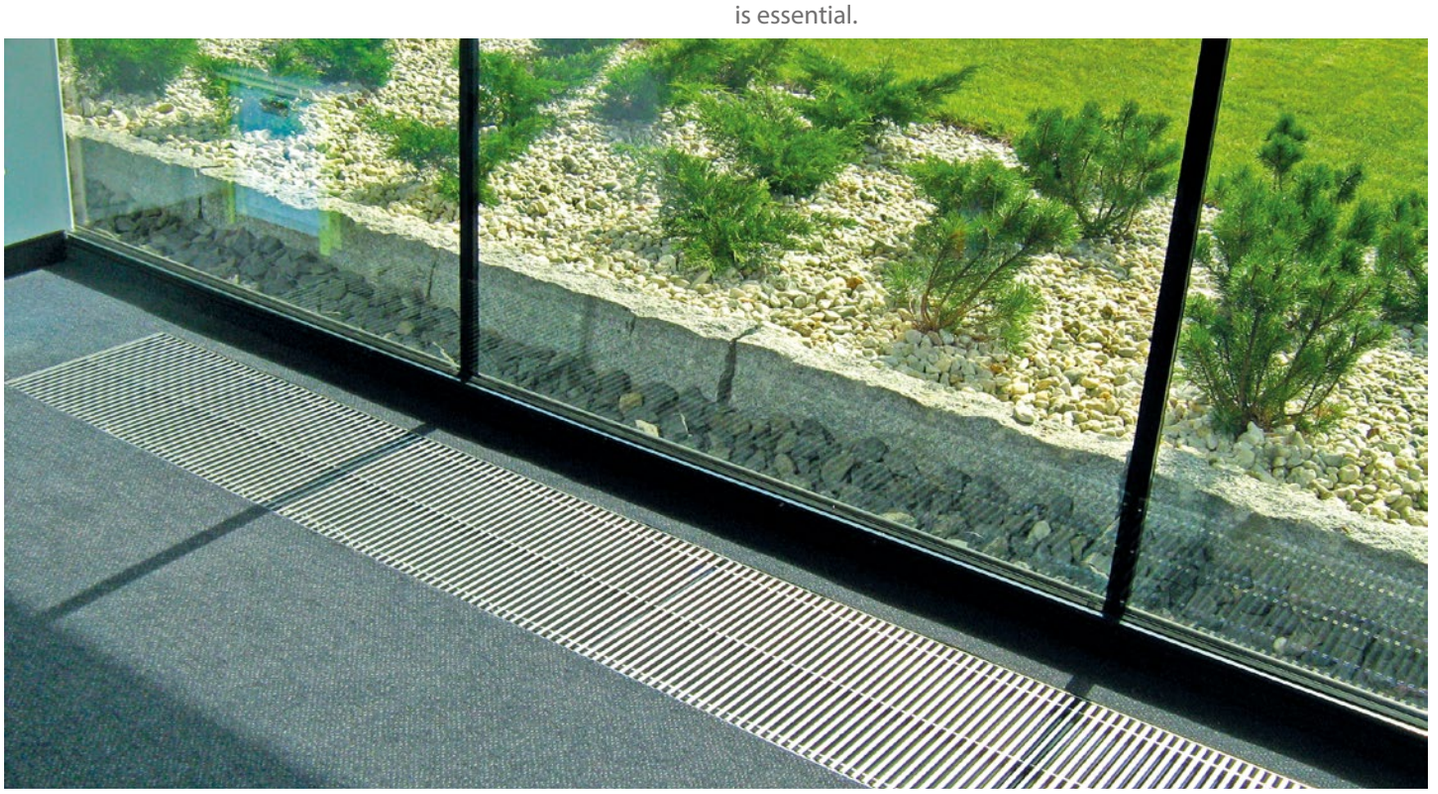
Height [mm]: **170, 270, 400, 500, 600, 700**
Minimal length [mm]: **600**
Maximum length [mm]: **no limits**
The length of a single element [mm]: **up to 3000**
Grille width [mm]: **393**
Feeding method: **front of the tub**
Feeding side: **universal (reversible set)**

DUBEL 270



Trench heating system prevents cold air areas from happening near windows.

Trench heating systems are installed in places where besides heating, maintaining clear visibility through the windows is essential.



Trench heating systems can be installed in all types of floors: parquet, wooden boards, laminates, tiles, carpets.

TRIOVENT, QUATTROVENT

FAN SUPPORTED AIR CIRCULATION
TUB – WIDTH: 250 mm
BORDER – EXTERNAL WIDTH: 300 mm
EXCHANGER – WIDTH: 155 mm

Height [mm]: **80, 100**
Minimal length [mm]: **750**
Maximum length [mm]: **no limits**
The length of a single element [mm]: **750, 1250, 1750, 2250, 2750**
Grille width [mm]: **293**
Feeding method: **front of the tub**
Feeding side: **right**
Fan location: **from glazing**

TRIOVENT 80

QUATTROVENT 100

Trench heating can be used as a sole heating system. Its fan version gives additional control over the heating process (3 fan speeds).

Trench heating systems are usually installed along large glazed areas.

A maximum single length of a rolled aluminium grille can be 3.5 m.

HEATING
DISCREET
DYNAMIC
EFFECTIVE AND
COMFORTABLE

REGULUS®-system
ul. GRAŻYŃSKEIGO 51
43-300 BIELSKO-BIAŁA
POLAND
TEL. +48 33-815-10-25
TEL. +48 33-812-36-69
http://www.regulus.com.pl/en
export@regulus.com.pl
regulus@regulus.com.pl

Distributor