

# LICON s.r.o.

# Heating Cooling Ventilation



**Quality** Function **Design** Tradition



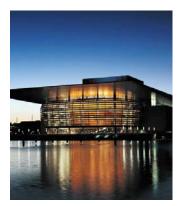
## REFERENCES



Sky Tower, Wrocław, Poland



World of Volvo, Göteborg, Sweden



Opera House, Copenhagen, Denmark



Museum Munch Oslo, Norway



SFU McTaggart Cowan Hall, Burnaby, Canada



Ferring, Copenhagen, Denmark



Landsbankinn, Reykjavik, Iceland



Fyrstikkalléen 1 AS Oslo, Norway



Central Plaza, Dublin, Ireland



MCBA Museum, Lausanne, Switzerland



Museum HC Andersens, Odense, Denmark



Quartier Arter Tallinn, Estonia



Raiqa, Innsbruck, Austria



Harpa Concert Hall, Reykjavik, Iceland



Nordea Headquarters, Copenhagen, Denmark



Lachta Centr, Saint Petersburg, Russia







CONVECTORS

KORALINE

## PRODUCT PORTFOLIO

We offer a very wide range of products under one brand which enables comprehensive solutions for all types of buildings and spaces, all of which contribute to maximum compatibility, simplicity of design and service, individual solutions and financial savings.

## LICON s.r.o.

A 55-year tradition in the manufacture of convection heaters. A member of the KORADO group since 2013. LICON s.r.o. offers tailor-made projects for every type of building. LICON s.r.o. insists on using the most modern research and development methods, and work closely with leading experts in the field, including higher education institutions (the Technical University of Liberec, the Czech Technical University in Prague, etc.). We use the most up-to-date machines for the manufacture of our products, employing the principles of lean production. Products are manufactured in the shortest possible time

while maintaining maximum materials and design quality. LICON s.r.o. is a certified ISO 9001 Quality Management supplier. Our products are manufactured and tested according to ČSN EN 442 and ČSN EN 16430 standards. CE marking indicates that LICON convectors conform to the conditions set out in the Declaration of Performance in accordance with Regulation No. 305/2011 of the European Parliament and of the European Council, and further confirmed by notified authority No. 1015, the Engineering Test Institute, Brno.



## Quality for over 55 years









1968

The first LIKOV steel convectors were manufactured in Liberec in 1968.

1995

Product portfolio modernisation.

Production of the first trench heaters.

2004

Comprehensive transformation of the company, replacing the original LIKOV name to LICON HEAT s.r.o. 2013

LICON HEAT s.r.o. acquired by KORADO.



## Why choose LICON convectors?











Our range includes trench, wall-mounted, free-standing and custom-made convectors. Installation is non-intrusive, including in historical buildings.















#### Extensive range...

Our extensive range of designs caters for every interior, for both humid and dry environments. The range includes convectors that achieve high heat outputs with a design to enhance even the most demanding interior.

#### Easy installation and maintenance...



WINTER heat pump



WINTER boilers, hot-water fireplaces, heaters













#### Effective heating...

The KORALINE Safe and Max ranges are characterised by a number of safety features that make them ideal for use in schools, healthcare and care facilities.











#### Top technology...

Convectors are compatible with heating systems operated with all types of heat sources (heat pumps, gas, electricity, solar heat, wood and biomass), including systems with a low temperature gradient. Convectors provide a safe solution, with a low surface temperature not exceeding 109 °F. KORALINE convectors include a high quality cover grille, including the option of a pencil proof version to ensure increased user safety.



**SUMMER** heat pump (dry cooling)











2020

New generation of KORAFLEX trench heaters

2022

The KORALINE free-standing convectors portfolio was significantly expanded to include new types, focusing on safety, design and high performance.

2023

The development of wall-mounted KORAWALL convectors with forced convection has expanded the portfolio to include units achieving high efficiency even at low temperature gradients. 2024

Change of name to LICON s.r.o., merger with the company ThermWet and production start of VENTBOX heat recovery units. Under the LICON s.r.o. brand, we will continue to improve, develop and offer quality products in the areas of heating, cooling and ventilation.

## **KORAFLEX**

#### TRENCH HEATERS WITH NATURAL CONVECTION



- 897 standard sizes
- 23 standard lengths
- 4 model lines

- Heat output up to 11 874 Btu/h
- 20 standard grilles
- Design solution options

## KORAFLEX Optimal **FKO** with natural convection

Our widest range of trench heaters. Available in Economic and Exclusive versions, may be fitted with the entire range of grilles and frames.



## **KORAFLEX Thin**



133

#### **FKT** with natural convection

Trench heater with lowest unit height 2.4". This model is particularly suited to interiors with low floor depth. Thin trench heaters may only be fitted with Thin grilles and Thin frames. Available in Economic and Exclusive versions.



Economic model suitable for design solutions. Manufactured from non-lacquered galvanized steel.

### **KORAFLEX Pool**





For humid environments, manufactured from AISI 316 stainless steel finished with hem, RAL 9006 grey lacquered heat exchanger.





### KORAFLEX

#### TRENCH HEATERS WITH FORCED CONVECTION





- 12 standard lengths
- 3 model lines
- Heat output up to 45 842 Btu/h
- Cooling output up to 3 531.57 Btu/h
- 20 standard grilles

- Safe regulation guaranteeing precise fan rotation and declared output
- 24 V DC or 230 V AC regulation
- Design solution options



#### KORAFLEX Pool-V **FVP** with forced convection



Model line for humid environments. Made of AISI 316 stainless steel, with sloping base and dividing partition as protection against flooding. Swimming pool model may be fitted with aluminium grille. Pool trench heaters are finished with hems replacing frames.





### **KORAFLEX Optimal-V FVO**

with forced convection

Our widest range of 24 V DC powered trench heater models with forced convection. Available in Economic and Exclusive versions, fitted with RAL 9005 black lacquered heat exchangers. The KORAFLEX Optimal range may be fitted will the entire range of grilles.



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# **KORAFLEX Energy**



FVE with forced convection

Derived from the Optimal range, extended by 7.9", housing electrical regulation and 230 V AC connection. Suitable for dry environments for heating only. Installation of the device must be carried out by persons with the relevant electro technical qualifications. Proper inspection and testing of the electrical installation must be carried out prior to commissioning.

## KORAFLEX HEATING AND COOLING

TRENCH HEATERS WITH FORCED CONVECTION



- 17 standard sizes
- 14 standard lengths
- 2 model lines

- Heat output up to 36 663 Btu/h
- Cooling output up to 8 070 Btu/h
- Design solution options







#### **KORAFLEX Variant F2V**

model, heating or cooling 2-pipe system

For heating or cooling. Achieves high heating and cooling performance. The F2V model is fitted with a stainless steel condensation drainage canal.







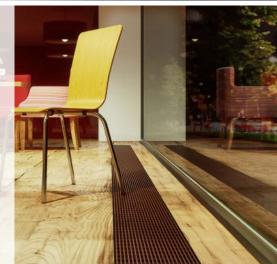




#### **KORAFLEX Variant F4V**

heating and cooling 4-pipe system

For heating and cooling. Achieves high heating and cooling performance. Equipped with a stainless steel condensation drainage canal. Available in Economic and Exclusive models.



## KORAFLEX GRILLES

#### **Aluminium elox**



Roll-up alu/silver



Roll-up alu/dark bronze



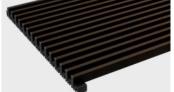
Roll-up alu/light bronze



Roll-up alu/black



Linear alu/silver



Linear alu/dark bronze

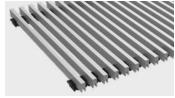


Linear alu/light bronze



Linear alu/black

Thin - aluminium elox



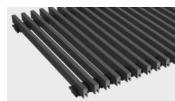
Roll-up alu/silver



Roll-up alu/dark bronze



Roll-up alu/light bronze



Roll-up alu/black

**Cross** 

Wood



Roll-up natural/lacquered beech



Roll-up natural/lacquered oak

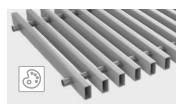


Roll-up natural/lacquered mahogany (upon request)

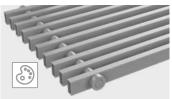


Cross/steel, RAL 9006 lacquer (upon request)

### **Steel**

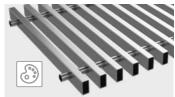


Roll-up steel, RAL 9006 lacquer

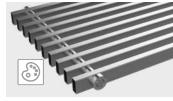


Linear steel, RAL 9006 lacquer

#### Stainless steel

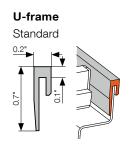


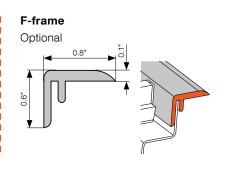
Roll-up/stainless steel

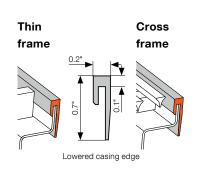


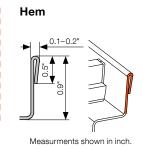
Linear/stainless steel

## KORAFLEX FRAMES





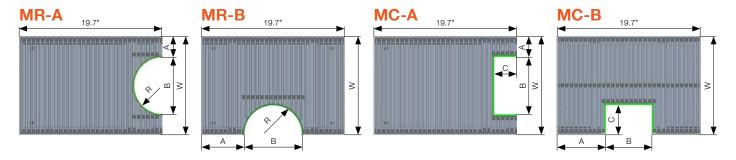




## **DESIGN MODULES**

#### TRENCH HEATERS

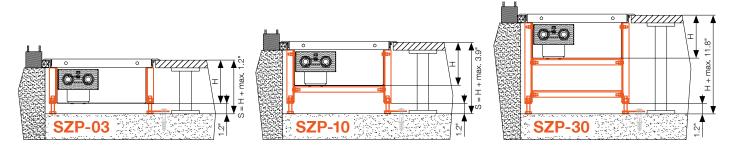
Our modular system was developed to simplify the installation of trench heaters in unusual interiors, and to enable rapid processing of orders and quotations for projects. Modules are design elements only – they are not fitted with heat exchangers. The wide range of design modules means quick and easy selection of trench heater systems made to suit your particular interior.



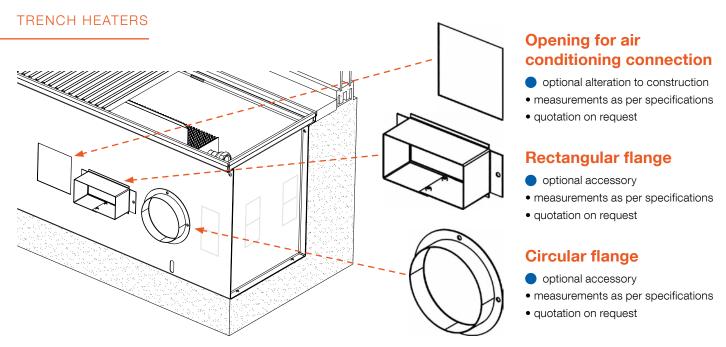
## RAISED FLOOR INSTALLATIONS IN &

Raised floor supports offer a stable and effective solution for raised floor trench heater installations. Supports are made of non-lacquered

steel, are suitable for raised floors for a depth of up to 19.69" and can be used with trench heaters with both natural or forced convection.

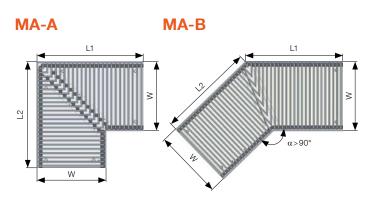


## AIR CONDITIONING CONNECTIONS



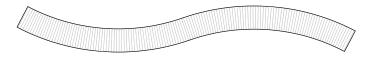
## **CORNER PARTS**

Corner parts are the ideal solution to ensure seamless connections of KORAFLEX trench heaters in the corners of rooms. Corner parts are design elements only – they are not fitted with heat exchangers.



## ANGLED AND CURVED DESIGNS

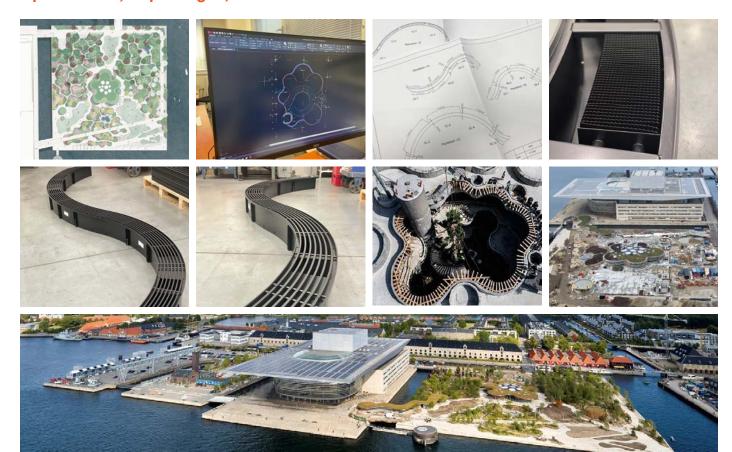
Unified style and technical design for every interior, elegant continuous convectors along the walls of an entire room, available in angled and curved designs. These elements are equipped with heat exchangers.





## PROJECT SHOWCASE

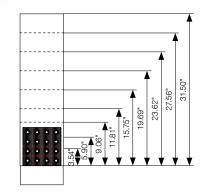
### Opera House, Copenhagen, Denmark

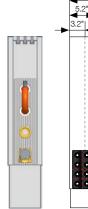


#### FREE-STANDING CONVECTORS WITH NATURAL CONVECTION AND DESIGN GRILLE



- 756 standard sizes
- 16 standard lengths
- 2 model lines
- Heat output up to 25 250 Btu/h
- May be installed on the floor or walls
- Low surface temperature
- High heat output
- Modern design



















### **KORALINE Optimal LKO**

with natural convection

Are characterized by design and output. They are fitted with a high quality silver elox aluminium grille. Given the diverse portfolio and the optimal output, convectors in this model line are ideal for heating private houses, residential and office buildings.



#### **KORALINE Power LKW**

with natural convection

Is the most extensive model line and features a high-performance heat exchanger with double the standard area of uniquely shaped fins. This model line provides high heat output while maintaining a modern design. Convectors are fitted with a high quality silver elox aluminium grille.

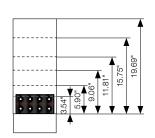


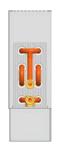


#### FREE-STANDING CONVECTORS WITH NATURAL CONVECTION AND PERFORATED SAFETY GRILLE



- 480 standard sizes
- 16 standard lengths
- 2 model lines
- Heat output up to 25 250 Btu/h
- May be installed on the floor or walls
- Low surface temperature
- High heat output
- Perforated safety grille





















#### **KORALINE Basic LKB**

#### with natural convection

Is the standard version of our low surface temperature free-standing convectors. In this model line the safety grille is perforated directly in the galvanized steel casing. Optimal outputs and a favourable price make KORALINE Basic the ideal model line for heating private homes, apartment complexes and office buildings.





#### **KORALINE Combi LKC**

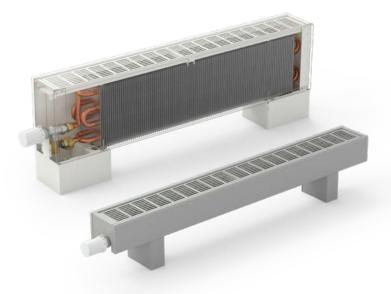
#### with natural convection

KORALINE Combi LKC models house a high performance heat exchanger with double the standard area of fins. A safety grille is an integral part of the casing - it is perforated directly in the galvanized steel casing body. Thanks to their compact dimension, maximal output, and low surface temperature, the KORALINE Combi LKC model is suitable for heating a variety of interiors starting from small family houses up to large public premises.



FREE-STANDING CONVECTORS WITH NATURAL CONVECTION

#### WITH SYMMETRIC SAFETY PENCILPROOF GRILLE AND RESISTANT DESIGN













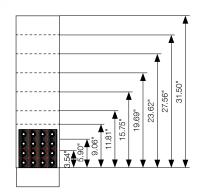


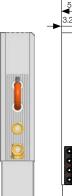


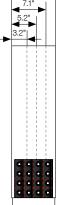




- 561 standard sizes
- 11 standard lengths
- 2 model lines
- Heat output up to 17 388 Btu/h
- May be installed on the floor or walls
- Low surface temperature
- High heat output
- Emphasis on safety







#### **KORALINE Safe LKS**

#### with natural convection

For safety reasons, the convector casing is made of 0.06" thick sheet steel, its front edge is bevelled, and is fitted with a symmetric pencil-proof grille. Thanks to its safety features and low surface temperature, this model line is ideal for installation in educational, healthcare, administrative and public premises.



#### **KORALINE Max LKM**

#### with natural convection

This line features a combination of hightened safety level and maximum output. The casing is made of 0.06" thick sheet steel and is equipped with a symmetric pencil-proof grille. The body houses a high-performance heat exchanger with double the standard area of aluminium fins.





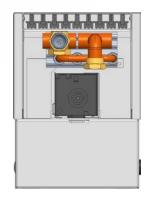
#### FREE-STANDING CONVECTORS WITH FORCED CONVECTION

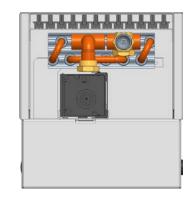






- 6 standard lengths
- 1 model lines
- Heat output up to 20 681 Btu/h
- May be installed on the floor
- Low surface temperature
- Version with forced convection
- High heat output



















#### **KORALINE Optimal-V LVO** with forced convection

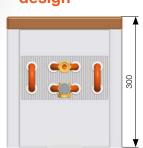
An exclusive version of free-standing convectors fitted with economical 24 V DC fans with minimum power input. Achieves very high performance even with low temperature gradients. The model is available, equipped with aluminium grilles.



#### BENCH CONVECTOR WITH WOODEN BENCH TOP



- 12 standard sizes
- 6 standard lengths
- 2 model size ranges
- Heat output up to 12 028 Btu/h
- Solid wood or veneer bench tops
- 3 bench top wood options: beech, oak or American walnut
- Version for damp/humid environments
- High heat output
- Sophisticated design





















### **KORALINE Optimal LDO**

with natural convection

Bench convectors fitted with beech, oak or American walnut bench tops. Manufactured from RAL 9016 white lacquered galvanized sheet steel. Designed for dry environments in halls or administrative buildings. Built to bear static weight and suitable for sitting.







#### **KORALINE Pool LDP**

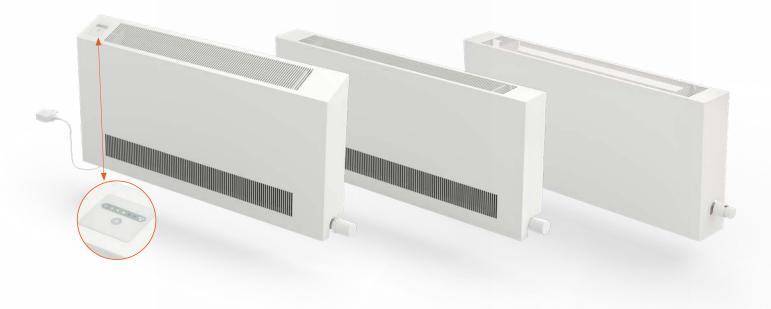
with natural convection

A proven smart combination of design, performance and characteristics. KORALINE Pool LDP is fitted with RAL 9016 white lacquered AISI 316 stainless steel casing. Where fitted with American walnut bench tops, this model is suitable for installation in environments with increased humidity.

### KORAWALL

#### WALL-MOUNTEDCONVECTORS





- 57 standard sizes
- 7 model size ranges
- Heat output up to 30 572.8 Btu/h

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- Cooling output up to 4 841.83 Btu/h
- Heating and cooling functions
- Models with forced and natural convection

#### **KORAWALL Optimal WKO**

#### with natural convection

Wall-mounted convectors have long been used in households and commercial premises. They achieve high performance even though they are small in size. KORAWALL convectors feature a very low and safe surface temperature.



#### KORAWALL Direct WVD

Wall-mounted convector with forced convection, autonomous control and 24 V DC connection



Ø | \$ | 230 | ₩ ₩ | V AC Wall-mounted convector with forced convection,

autonomous control and 230 V AC connection

Highly efficient wall-mounted convectors suitable for use with heat pumps. The convectors are equipped with autonomous control with an integrated keyboard, which allows the fans to be regulated directly on the units. Connection to the electrical network is via a prepared terminal block, which is safely built inside the heating body or via a network adapter directly into the electrical socket.

### **KORAWALL Optimal-V WVO, Pool-V WVP** with forced convection

Developed for low-temperature heating systems. High performance is guaranteed even at very low temperature gradients. Ideal for installation where the heat source is a heat pump, solar system or condensing boiler. In the summer months they can be used for cooling without causing condensation.





### KORABASE

HEAT EXCHANGERS

## KORASPACE

#### FACADE CONVECTORS





- 168 standard sizes
- 12 standard lengths
- 7 size ranges
- Heat output up to 18 767 Btu/h
- Design solution options
- Counter-flow and single-stream connections











- Optional colours available according to RAL colour chart
- Design solution options



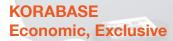












KORABASE heat exchangers are suitable for individual installations, especially in spaces where uniformity of interior design materials is paramount. Heat exchangers are manufactured from copper tubes and aluminium fins. Exclusive version is lacquered black RAL 9005.





#### KORASPACE FK with natural convection

Facade convectors are an ideal and effective solution for buildings with large all-glass facades, when the transmission of cold air during the winter months may significantly affect the microclimate of the interior. KO-RASPACE facade convectors are installed directly onto the facade, thereby preventing the direct transmission of cold air into the interior of the building. Warm air rising from the convector mixes with descending

cool air to create a thermal barrier, providing greater comfort without causing condensation on the surface of the glass.

- Excellent controllability and rapid temperature rise
- No transmission of heat to the exterior of the facade
- Space for further, parallel distribution systems

### **VENTBOX**

#### HEAT RECOVERY UNITS







- Centralized and decentralized configurations
- Optimum, Premium, Comfort variants
- For all building types
- High airflow rate















- Mounting options: ceiling, wall, or floor
- Fresh air without allergens, pollen, CO<sub>2</sub>, and radon
- Control via web interface

Radon is a naturally occurring invisible radioactive gas produced by the decay of uranium, thorium, and radium found in soil, rocks, and underground water. It is colorless, tasteless, and odorless, making it undetectable without special instruments.



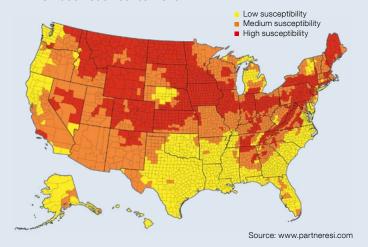
Radon accumulates primarily in enclosed spaces such as homes, schools, kindergartens, and offices, where it can reach dangerous concentrations. Its presence indoors is hazardous in the long term, so it is important to measure radon concentrations in buildings and take measures to reduce its infiltration.

# Central heat recovery units are key elements of modern living and working environments.

This innovative technology provides efficient ventilation while minimizing energy losses. These units offer the possibility of installing a radon sensor, which is particularly relevant in high radon concentrations. This innovative feature allows for continuous monitoring, providing users with an accurate overview of the levels of this radioactive gas in their living environment.

#### **Radon and VENTBOX ventilation units**

Heat recovery units VENTBOX are an effective solution for ensuring a healthy environment in homes and workplaces. These units can be equipped with a radon sensor that automatically monitors the indoor radon concentration.











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