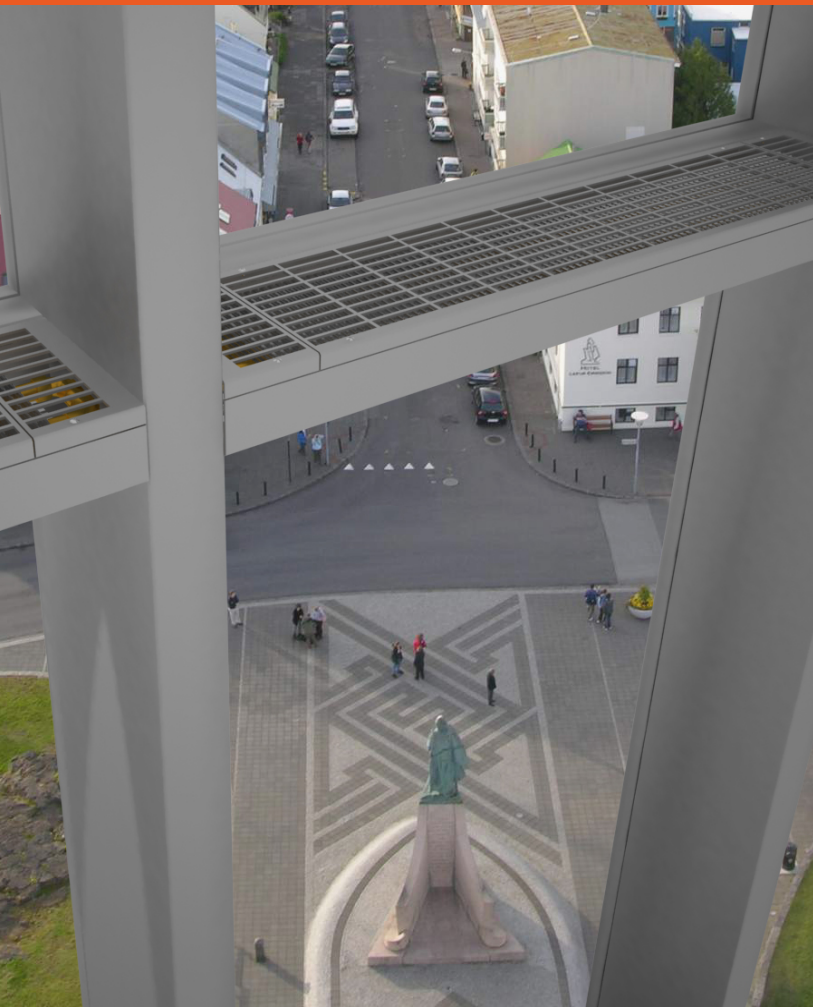


KORASPACE

Facade convectors





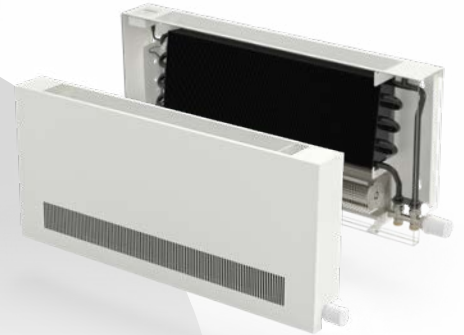
TRENCH HEATERS
KORAFLEX



FREE-STANDING
CONVECTORS
KORALINE



WALL-MOUNTED
CONVECTORS
KORAWALL



CONVECTORS
WITH FORCED
CONVECTION

FACADE
CONVECTORS
KORASPACE



CONVECTORS
WITH NATURAL
CONVECTION

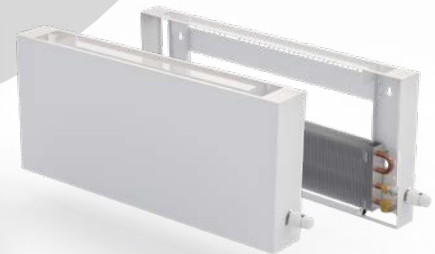


HEAT
EXCHANGERS
KORABASE

TRENCH
HEATERS
KORAFLEX



FREE-STANDING
CONVECTORS
KORALINE



WALL-MOUNTED
CONVECTORS
KORAWALL

PRODUCT PORTFOLIO

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



[KORASPACE FK

FACADE CONVECTORS with natural convection

Facade convectors are an ideal and effective solution for installations in buildings with large glass walls, where the transfer of the cold in the winter season considerably affects the interior microclimate. Facade convectors enable architects to achieve interesting designs while meeting operational and heating requirements of the entire building.



KORASPACE FK

KORASPACE 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 glass surface.

- design freedom
- high-performance Al/Cu heat exchangers
- excellent controllability and rapid temperature rise
- no heat transmission to the external facade
- space for further, parallel distribution systems

Standard contents

- casing made of galvanized RAL 9007 grey lacquered steel
- heat exchanger with low water content and uniquely shaped fins
- connecting elements
- durable packaging, installation instructions

Specifications

height [mm]	56
width [mm]	120, 150, 180
length [mm]	800 up to 3 000 (graduated by 200 mm)
heat output [W]	from 154 to 1 369
max. operating pressure [bar]	12
max. operating temperature (°C)	110
max. surface temperature (°C)	40
connecting thread	inner G 1/2"

ECONOMIC version • gray RAL 9007 lacquered casing, non-lacquered heat exchanger

EXCLUSIVE version • gray RAL 9007 lacquered casing, RAL 9007 lacquered heat exchanger

Optional

- Exclusive version
- other RAL colour chart lacquers available. Please consult with our staff prior to ordering.
- thermostatic valve and other regulation accessories – see p. 22



KORASPACE convector sections

Available sizes

KORASPACE FK-xxx/6/12-J1	KORASPACE FK-xxx/6/15-J2	KORASPACE FK-xxx/6/18-J2
height 56 mm	height 56 mm	height 56 mm
width 114 mm	width 150 mm	width 174 mm
with internal space for pipings	without internal space for pipings	with internal space for pipings

Heat output

Heat output (W) at $t_1/t_2/t_i$ = at 75/65/20 °C ($\Delta t=50$) and 65/55/20 °C ($\Delta t=40$) / EN 442

Height [cm]	Width [cm]	Δt	Length L [cm]												
			80	100	120	140	160	180	200	220	240	260	280	300	
Height 6	12	$\Delta t 50$	154	202	251	300	349	397	446	495	543	592	641	690	
		$\Delta t 40$	115	151	188	224	261	297	334	370	407	443	480	516	
Height 6	15	$\Delta t 50$	305	401	498	595	692	788	885	982	1078	1175	1272	1369	
		$\Delta t 40$	228	300	373	445	517	590	662	735	807	879	952	1024	
Height 6	18	$\Delta t 50$	305	401	498	595	692	788	885	982	1078	1175	1272	1369	
		$\Delta t 40$	228	300	373	445	517	590	662	735	807	879	952	1024	

15 cm and 18 cm wide convectors use the same heat exchanger, therefore the heat outputs are equal. The 18 cm wide convector has extra space for pipings.

Correction factor k_t for different temperature gradients Δt [K]

Δt [K]	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
k_t	0.265	0.284	0.304	0.324	0.344	0.364	0.385	0.406	0.427	0.449	0.471	0.493	0.515	0.537	0.560	0.583
Δt [K]	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
k_t	0.606	0.629	0.652	0.676	0.700	0.724	0.748	0.773	0.797	0.822	0.847	0.872	0.897	0.923	0.948	0.974
Δt [K]	50	51	52	53	54	55	56	57	58	59	60					
k_t	1.000	1.026	1.052	1.079	1.105	1.132	1.159	1.186	1.213	1.240	1.267					

• temperature exponent $m = 1.3$

For formulas and examples, see page 28.

Weights and water volumes of facade convectors

Type	6/12	6/15	6/18
[kg/m]	3.9	4.8	5.3
[l/m]	0.2	0.42	0.42

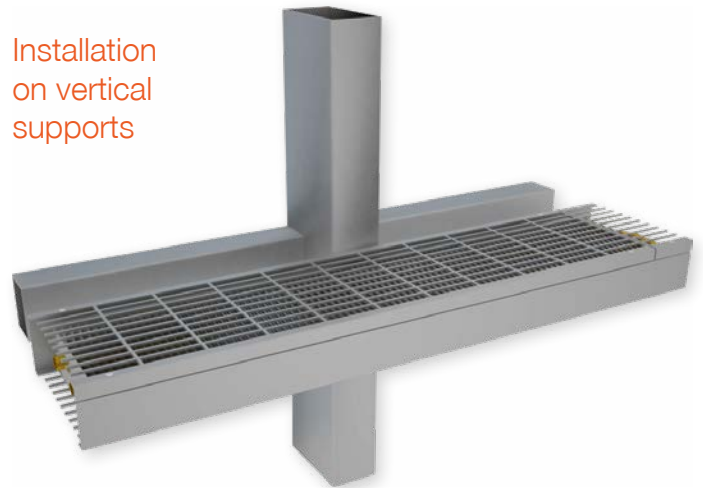
Weights shown not including packaging.

KORASPACE FK convector installation

Installation
on horizontal
crosspiece,
between vertical
supports



Installation
on vertical
supports



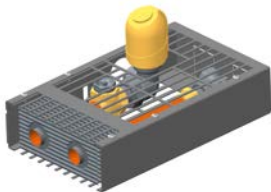
Installation procedure

Main load-bearing U-shaped part is fixed to the supporting elements of the facade. Consequently the heat exchanger is inserted and connected to the heating system. The assembly is

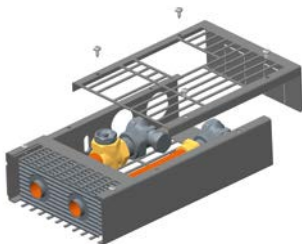
completed by fitting the upper and end parts and screwing all parts of the convector together.

KORASPACE FK convector components

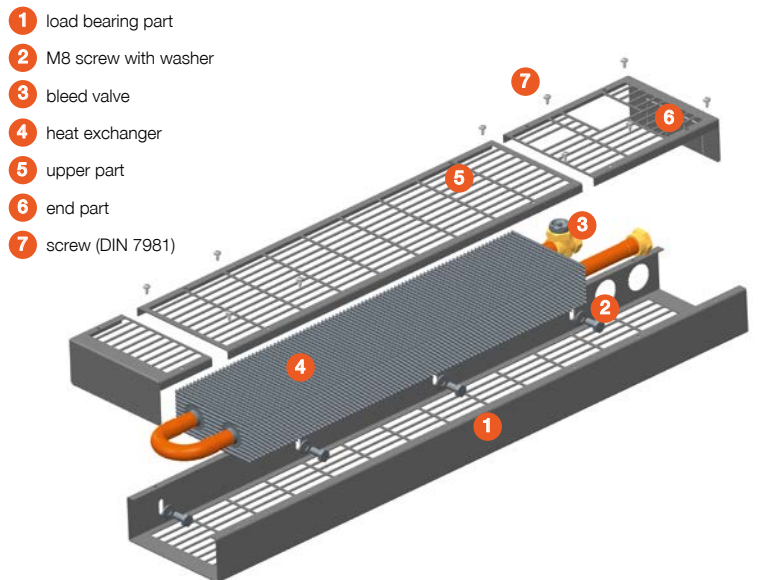
Installation with thermostatic valve
and thermoelectric drive



Installation with lockshield



Note: Facade convectors are exclusively a project solution – we always recommend to consult the way of installation to the facade with our staff.



Order code KORASPACE FK facade convectors

		length	height	width	Type of installation							
					A on horizontal crosspiece, between vertical supports							
					B on vertical supports							
Economic	lacquered steel casing/non-lacquered exchanger	FK	-	...	/	...	/	..	-	1	A	1
Exclusive	lacquered steel casing/lacquered exchanger	FK	-	...	/	...	/	..	-	1	A	5

Facade convectors
KORASPACE FK

Casing

- 1 grey RAL9007 lacquered
- galvanized steel

Heat exchanger colour

- 1 non-lacquered
- 5 RAL9007 lacquered

Quality

LICON s.r.o. is a certified ISO 9001 Quality Management supplier. Heat outputs are measured according to ČSN EN 16430 standards at the HLK Stuttgart (DE) and SZU Brno (CZ) testing facilities. Products comply with current legislation. The certification process was completed at the Engineering Test Institute, Brno (CZ).

Maintenance

Convectors must be kept clean. Before the start of the heating season it is especially important to remove all dirt and dust from the convector. Convectors with fans must be checked for mechanical blockages (items which have fallen in, layers of dust, etc.). For further details relating to the maintenance of individual types of convectors, please refer to the installation instructions or the Operating and warranty Conditions.

All materials relating to convectors are available to download at www.licon.cz

Guarantee

The warranty period is two years. 10 year guarantee against exchanger leaks. For full details of operating and warranty conditions, please visit our web pages. LICON s.r.o. reserves the right to alter specifications without notice. The full text of our General Terms and Conditions can be found on our web pages.

Transport and storage instructions

Units must be handled with care during transport and must be well secured and anchored to prevent movement and damage. Transport and storage areas must be dry and not exposed to the weather. Goods must not be stacked.



LICON s.r.o. reserves the right to alter specifications without notice.



Natural convection



Heating



Forced convection



Quiet operation



Cooling



Dry-cooling



Environmentally friendly



Minimal Energy consumption



Higher performance



Information



References



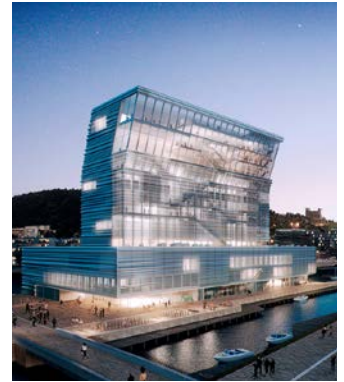
UBS Pleyad Business Centre
Saint-Denis, France



MCBA Museum,
Lausanne, Switzerland



Residence du Lac,
Morges, Switzerland



Museum Munch Oslo,
Norway



Lacta Centre,
Saint Petersburg, Russia



Neva Towers,
Moscow, Russia



Zolotoy Ostrov Moscow,
Russia



Fyrstikkalléen 1 AS Oslo,
Norway



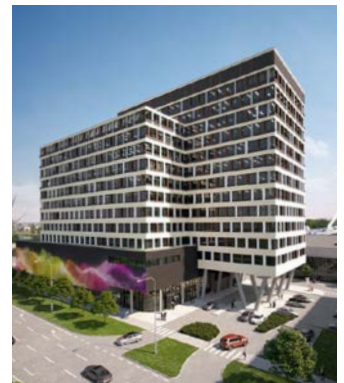
The Circle – airport,
Zurich, Switzerland



Panorama City,
Bratislava, Slovakia



NÚSCH Children's Cardiac
Centre, Bratislava, Slovakia



Panorama Business center,
Bratislava, Slovakia



Einsteinova Business Centre,
Bratislava, Slovakia



Harpa Concert Hall,
Reykjavik, Iceland



Nordea Headquarters,
Copenhagen, Denmark



Marina Lipno apartments,
Czech Republic

COLOUR CHART

			
code 10 White RAL 9016	code 39 Black RAL 9005	code 59 White texture RAL 9016	code 60 Black texture RAL 9005
			
code 14 Jasmine	code 16 Bahama	code 22 Manhattan	code 26 Pergamon
			
code 32 Anthrazit Metallic	code 35 Silber RAL 9006	code 37 Red RAL 3001	code 40 Alloy Black
			
code 42 Gold	code 45 Pearl Brown	code 47 RAL 9007	code 48 RAL 9006
			
code 49 RAL 7024	code 51 RAL 7016	code 54 RAL 7015	code 57 RAL 7040

Notice:

There is a potential for variations in colour between the colour chart and heating units. The standard colour version is white RAL 9016 or black RAL 9005. Other colours shown in the Colour Chart may be ordered at an extra charge according to the valid price list.

