

# FH

## TRENCH HEATERS FH4-H and FH4-M

Created for modern buildings and  
heat-pump systems



**HEATING**



**EC FANS**

MAXIMUM EFFICIENCY,  
MINIMUM NOISE



**10 YEARS**

WARRANTY

QUALITY | RELIABILITY | INNOVATION

MADE IN EUROPE

## ABOUT FH

# Created for modern buildings to work with heat pumps

FH trench heaters with EC fans are an advanced heating solution designed to ensure maximum comfort, efficiency and reliability even in the most demanding conditions.

A compact design, innovative solutions and the latest control options allow FH to match modern architecture perfectly and work together with contemporary heating systems.

QUALITY | RELIABILITY | INNOVATION

MADE IN EUROPE

## WHY FH?

# Advanced technology. Reliable result.

FH trench heaters combine high heating output, extremely quiet operation and durability. Every detail is designed to ensure flawless performance and maximum comfort every day.



**25 BAR**

working pressure

Suitable for very tall buildings



**EC FANS**

Maximum efficiency, minimum noise, low energy consumption



**10 YEARS**

warranty

Durability, reliability and peace of mind for many years



**86 MM**

height

Minimal dimensions - more possibilities in architecture

## WHERE DOES FH FIT?

# One solution - many different spaces



**Residential houses**



**Offices**



**Hotels**



**Restaurants**



**Glazed buildings**

FH trench heaters are perfect for A++ class buildings and heat-pump systems and any projects where aesthetics, comfort and energy efficiency matter

# HOW TO CHOOSE THE RIGHT MODEL?

FH trench heaters are designed to precisely match the needs of different projects. The right model choice ensures maximum comfort, efficiency and a seamless architectural solution.



## KEY SELECTION CRITERIA



### HEATING NEED

Choose a model according to the required thermal output and the room heat losses



### DIMENSIONS

Assess the installation conditions and the possible location by the window



### DESIGN NEEDS

Grille type, frame finish and visibility in the interior



### ACOUSTIC COMFORT

Both models emit the same sound level - the fans are identical



### INTEGRATION

The ability to integrate control into BMS systems and smart solutions

## MODEL SELECTION PROCESS

01



02



03



04



05

### ASSESS ROOM NEEDS

Determine the room heat losses

### CHOOSE A MODEL

Choose a model whose output matches the determined losses

### ASSESS THE INSTALLATION LOCATION

Assess whether the chosen model fits the designated installation location

### CHOOSE GRILLES AND FRAMES

Choose the grille material and colour according to the interior design requirements

### INTEGRATE THE CONTROL

Choose the control method: local or integrated into the building management system



### NEED HELP?

Our team will help select the optimal solution for your project - from technical analysis to implementation

### CONSULTATION AND TECHNICAL SUPPORT

+370 607 06303 | sales@konveka.lt | konveka.com

# FH4-H

VS

# FH4-M

## TWO MODELS. DIFFERENT DIMENSIONS. THE SAME COMFORT.

Both models are intended for heating only, have identical fans and the same sound level. The main difference is the size of the heat exchanger, which determines the width and the heating output.

### FH4-H

MORE POWERFUL MODEL



## 220 mm

WIDTH

**50% LARGER**  
HEAT EXCHANGER

**~15% LARGER**  
HEATING OUTPUT

#### PURPOSE

Recommended when the room heat losses are higher and maximum heating output is required

### FH4-M

COMPACT MODEL



## 177 mm

WIDTH

**50% SMALLER**  
HEAT EXCHANGER

**~15% SMALLER**  
HEATING OUTPUT

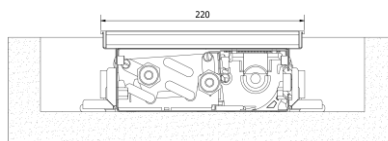
#### PURPOSE

Recommended when the room heat losses are lower and a smaller output is sufficient

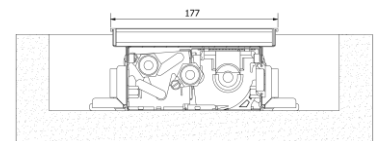
### WHICH MODEL TO CHOOSE?

If the heating output of the FH4-M is sufficient for your project - choose the FH4-M. It takes up less space, looks great by narrower windows and is the more optimal solution.

#### FH4-H

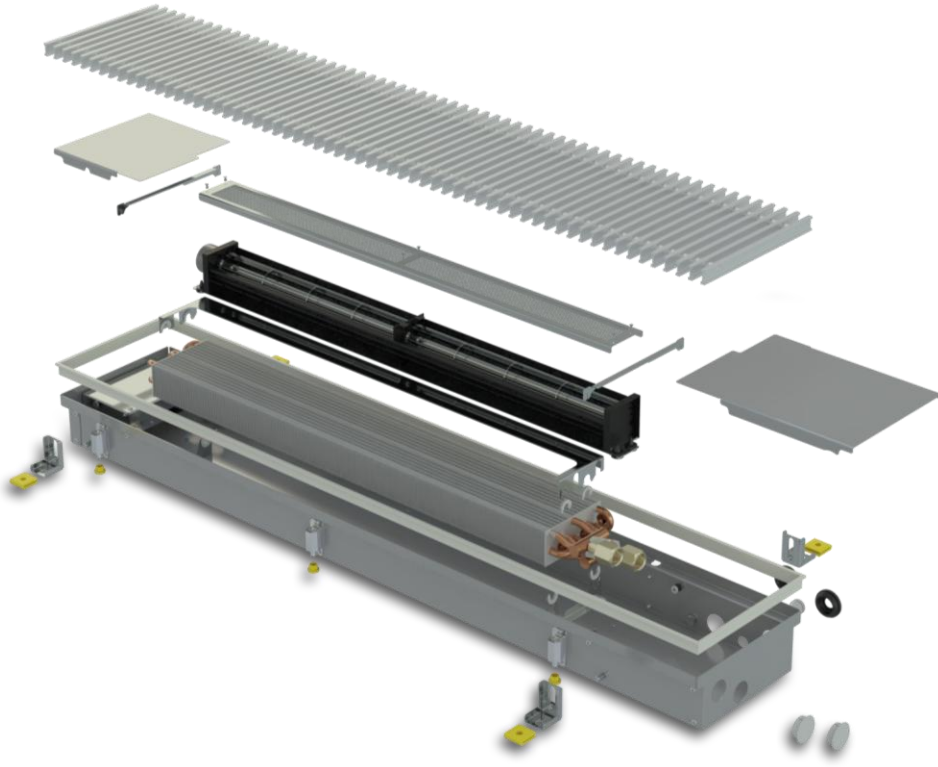


#### FH4-M



# ENGINEERING, THAT YOU CAN FEEL.

FH trench heaters are designed to ensure quiet operation, maximum comfort and durability in modern buildings



## FANS

- ✓ 24 V DC motors
- ✓ Low energy consumption
- ✓ Extremely quiet operation
- ✓ Precise control

FROM  
**17 dB(A)**



## ACOUSTIC INSULATION

- ✓ Vibration damping
- ✓ Lower noise transmission
- ✓ Comfort in living spaces

 **QUIET OPERATION**



## STAINLESS STEEL

- ✓ Corrosion resistance
- ✓ Durability
- ✓ Sturdy construction

 **FOR THE LONG TERM OPERATION**



## AIR FILTER

- ✓ Dust protection
- ✓ Always a clean heat exchanger
- ✓ Easier maintenance

 **CLEAN SYSTEM**



## EVERY DETAIL - PRECISELY THOUGHT OUT

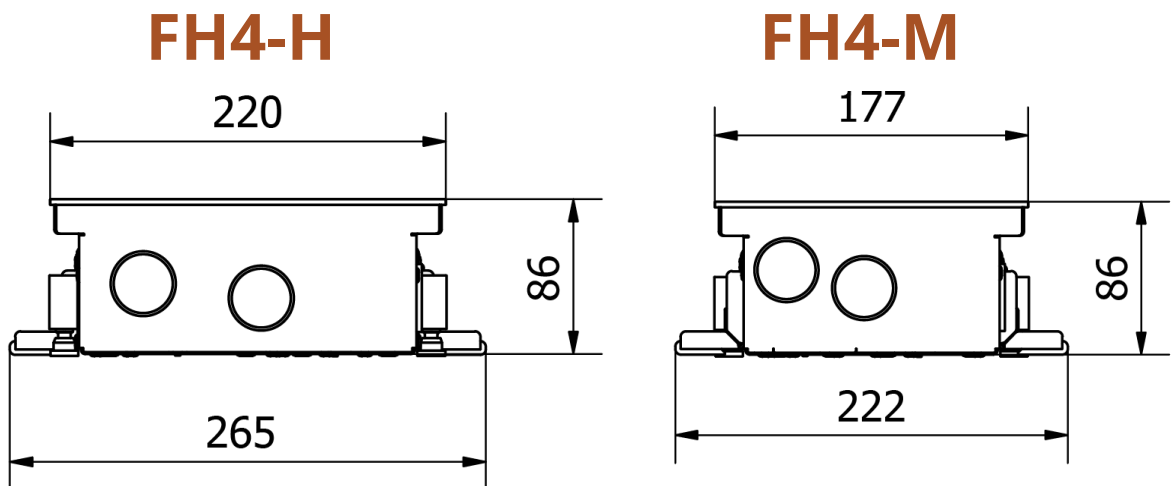
Top-quality materials and careful manufacturing ensure durability, reliability and comfort for many years

# TECHNICAL DATA

## KEY PARAMETERS

PARAMETER	FH4-H MORE POWERFUL MODEL	FH4-M COMPACT MODEL
Heating output (75/65/20 °C)	up to 7046 W	up to 7046 W
Air flow	up to 948 m³/h	up to 948 m³/h
Width	220 mm	177 mm
Height	86 mm	86 mm
Length	800 - 2960 mm	840 - 3000 mm
Fans	Tangential, with EC motors	Tangential, with EC motors
Sound pressure	up to 37 dB(A)	up to 37 dB(A)
Working pressure	25 bar	25 bar
Maximum temperature	110 °C	110 °C

## DIMENSIONS



### WE RECOMMEND

FH trench heaters match perfectly with modern heating, ventilation and control systems, ensuring maximum comfort and energy efficiency.



HEAT PUMPS



SMART CONTROL



VENTILATION SYSTEMS

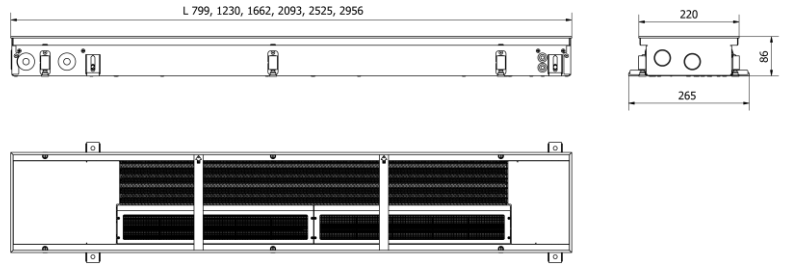


LOW-TEMPERATURE SYSTEMS

# FH4-H

## TECHNICAL DATA

Powerful trench heaters created for rooms with higher heat demands. Ideal for heat-pump systems

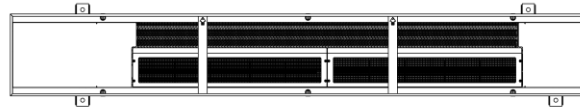
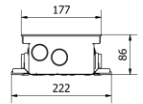
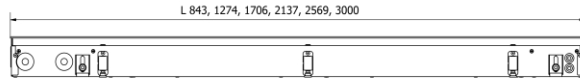


Model			FH4-H 80	FH4-H 123	FH4-H 166	FH4-H 209	FH4-H 252	FH4-H 296
Air flow	m3/h	100%	158	316	474	632	790	948
		80%	126	252	378	504	630	756
		60%	89	178	267	356	445	534
		40%	55	110	165	220	275	330
		20%	17	35	52	70	87	104
Heat output 55/45/20°C	Fan speed	100%	714	1 427	2 141	2 854	3 568	4 281
		80%	595	1 190	1 785	2 380	2 975	3 570
		60%	461	923	1 384	1 845	2 306	2 768
		40%	313	625	938	1 250	1 563	1 876
		20%	149	298	447	596	745	894
Supply voltage			220~230V / 1F / 50 or 60Hz					
Max. el. power (with actuator)	W		16,3	21,1	25,9	30,7	35,5	40,3
Max. el. current (with actuator)	A		0,07	0,09	0,11	0,13	0,15	0,18
Sound pressure level	dB(A)	100%	30	31	32	34	36	37
		80%	24	26	27	28	30	31
		60%	19	20	21	21	23	24
		40%	17	18	19	19	20	21
		20%	-	-	-	-	18	19
Max. water flow	l/h		61	123	184	245	307	368
Max. pressure loss	kPa		0,05	0,4	1,4	2,8	5,3	8,5
Max. working pressure	MPa		2,5					
Fan type	Tangential							
Motor type	Brushless EC							
Casing material	Stainless steel							
Heat exchanger material	Copper - aluminium							
Pipe connections	1/2" internal thread							
Unit dimensions	mm		798/220/86	1230/220/86	1661/220/86	2093/220/86	2524/220/86	2956/220/86
Package dimensions	mm		810/230/89	1240/230/89	1670/230/89	2105/230/89	2535/230/89	2970/230/89
Weight net	kg		4,75	6,62	9,74	11,3	14,5	16,51
Gross weight	kg		5,25	7,3	10,67	12,43	15,88	18,09

# FH4-M

## TECHNICAL DATA

Compact trench heaters with a narrower casing - a good choice for rooms with lower heat losses. High efficiency and a low noise level.



Model			FH4-M 84	FH4-M 127	FH4-M 170	FH4-M 214	FH4-M 257	FH4-M 300
Air flow	m <sup>3</sup> /h	100%	166	331	497	663	828	994
		80%	132	264	396	528	661	793
		60%	93	187	280	373	467	560
		40%	58	115	173	231	288	346
		20%	18	36	55	73	91	109
Heat output 55/45/20°C	Fan speed	100%	605	1 210	1 815	2 421	3 026	3 631
		80%	504	1 008	1 512	2 016	2 521	3 025
		60%	398	797	1 195	1 593	1 992	2 390
		40%	286	572	858	1 143	1 429	1 715
		20%	162	324	486	648	810	973
Supply voltage		220~230V / 1F / 50 or 60Hz						
Max. el. power (with actuator)	W		17,1	22,1	27,2	32,2	37,2	42,3
Max. el. current (with actuator)	A		0,07	0,10	0,12	0,14	0,16	0,18
Sound pressure level	dB(A)	100%	30	31	32	34	36	37
		80%	24	26	27	28	30	31
		60%	19	20	21	21	23	24
		40%	17	18	19	19	20	21
		20%	-	-	-	-	18	19
Max. water flow	l/h		52	104	156	208	260	312
Max. pressure loss	kPa		0,2	0,8	2,7	5,7	12,1	22,0
Max. working pressure	MPa	2,5						
Fan type	Tangential							
Motor type	Brushless EC							
Casing material	Stainless steel							
Heat exchanger material	Copper - aluminium							
Pipe connections	1/2" internal thread							
Unit dimensions	mm		842/177/86	1274/177/86	1705/177/86	2137/177/86	2568/177/86	3000/177/86
Package dimensions	mm		855/187/88	1285/187/88	1715/187/88	2150/187/88	2580/187/88	3010/187/88
Weight net	kg		4,74	6,26	9,00	10,27	12,81	15,34
Gross weight	kg		5,25	6,96	9,89	11,37	14,15	16,87

# CONTROL AND DIGITAL INTEGRATION

FH trench heaters are fully compatible with modern building management systems. Integrated 24 V DC fan control ensures precise, quiet and energy-saving operation in any conditions.



Room thermostat  
**TW24**

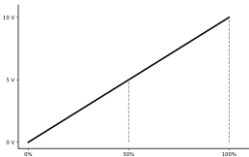


## CONTROL OPTIONS



### 0-10 V CONTROL

Integrated 0-10 V control allows precise fan-speed control across the whole range



### EC FANS

High efficiency EC fans with brushless 24 V DC motors



### SMART CONTROL

Controlled by WiFi room thermostats TW24 or BMS systems



### PRECISE COMFORT CONTROL

Precise temperature control on demand - this is maximum comfort and the lowest operating costs

## BIM AND DIGITAL DESIGN TOOLS



All Konveka products are available in BIM format (Revit) and in DWG drawings



All Konveka products are available and continuously updated on the MagiCAD and Sankom design platforms



Selection tables for all Konveka products are available at [konveka.com](http://konveka.com)

**konveka.com**

# ACCESSORIES

FH trench heaters are offered with a full range of accessories and control equipment, ensuring reliable operation, energy efficiency and easy integration into building management systems

## 01 THERMOSTATIC VALVE TVSP15



- Working temperature 10°C -120°C
- Thread 1/2"
- Pressure class PN10
- Kvs - 2,0

## 02 LOCKSHIELD VALVE (STRAIGHT) LS15



- Working temperature 10°C -120°C
- Thread 1/2"
- Pressure class PN10
- Kvs - 2,0

## 03 LOCKSHIELD VALVE (ANGLE) LA15



- Working temperature -10°C -120°C
- Thread 1/2"
- Pressure class PN10
- Kvs - 2,0

## 04 ACTUATOR A24NC



- Operating voltage 24 V DC
- El. power - 2.5 W
- Protection class - IP54
- Connection thread M30 x 1.5 mm
- Casing material PC/ABS

## 05 ROOM THERMOSTAT TW24



- Dimensions 88 x 88 x 43 mm
- Weekly temperature schedule programming
- Working temperature 5-35°C
- Operating voltage - 24V DC, current - 3A
- El. power - 1.5 W

## 06 CONTROL UNIT CB20



- 24V DC power supply
- Power - 20 W
- Current - 0.84 A
- Removable electrical connection terminals



### FULL SYSTEM INTEGRATION

Compatible with the most popular control systems



### ENERGY EFFICIENCY

Precise control ensures lower operating costs.



### SIMPLE INSTALLATION

Compact accessories and convenient installation



### RELIABLE OPERATION

High-quality components for long, trouble-free operation

# DECORATIVE GRILLES THAT BECOME PART OF THE INTERIOR

Elegant design.  
The highest-quality materials.  
Colours that create the character of a space

Choose the grilles that  
best reflect your project

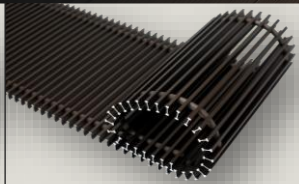
## COLLECTION OF COLOURS AND MATERIALS



### SILVER (ALS)

Natural aluminium colour

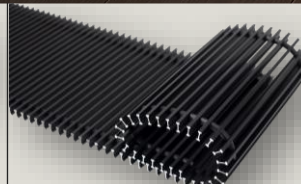
For bright, modern interiors.



### BROWN (AL 10)

A warm and elegant dark-brown coating

For cosy classic interiors



### BLACK (AL 50)

A matte black colour giving a character of luxury and modernity

For luxurious and modern interiors



### OAK

Natural oak solid-wood grille

For cosy and harmonious interiors



### PREMIUM QUALITY

Top-quality materials and coatings



### STRENGTH

Designed to withstand the weight of several adults



### DURABILITY

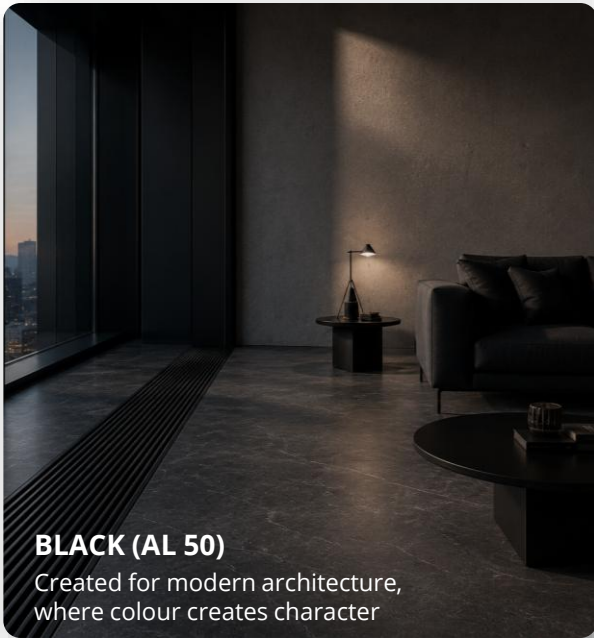
Materials and coatings resistant to corrosion and UV radiation



### EASY MAINTENANCE

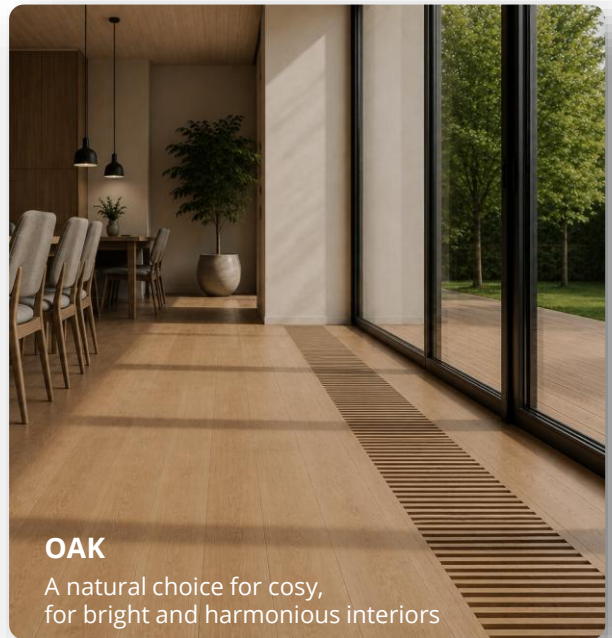
Easily removable - convenient to clean the inside of the heater

# DESIGN OPTIONS, TAILORED FOR EVERY INTERIOR



## BLACK (AL 50)

Created for modern architecture, where colour creates character



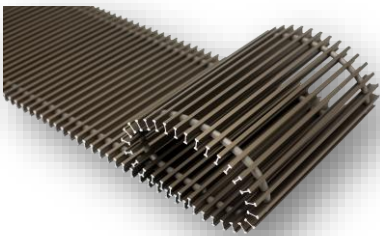
## OAK

A natural choice for cosy, for bright and harmonious interiors

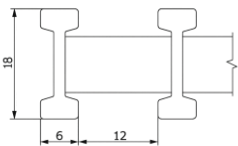
## GRILLE TYPES

### ROLL-UP ALUMINIUM GRILLES

A classic choice that ensures strength and timeless design



#### PROFILE CROSS-SECTION

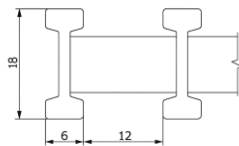


### LINEAR ALUMINIUM GRILLES

Elegant lines that visually extend the space and create a seamless look



#### PROFILE CROSS-SECTION

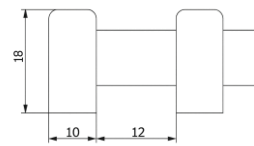


### WOODEN GRILLES

The natural beauty and warmth of wood, perfectly matching the highest-class interiors



#### PROFILE CROSS-SECTION

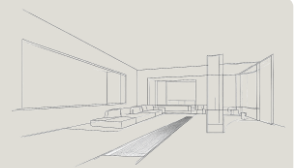


### CUSTOM SOLUTIONS

The length, width and colour of the grilles can be adapted to your project needs

### CREATED FOR ARCHITECTURE

Created for people who create exceptional spaces



# REAL PROJECTS

**KONVEKA** trench heaters are chosen in prestigious buildings worldwide, where comfort, reliability and architectural aesthetics matter most

## RIGA, LATVIA ADMINISTRATIVE BUILDING



**Application**  
Offices



**Product**  
FH4-H



**Grilles**  
Linear, aluminium



## PRIVATE HOUSE VILNIUS, LITHUANIA



**Application**  
Residential



**Product**  
FH4-H



**Grilles**  
Roll-up, aluminium



## HOTEL "BRITANIA" TRONDHEIM, NORWAY



**Application**  
Hotel



**Product**  
FH4-M



**Grilles**  
Roll-up, aluminium



## RESTAURANT "THE PAVILION" LONDON, UK



**Application**  
Restaurant



**Product**  
FH4-H



**Grilles**  
Linear, aluminium

# ABOUT KONVEKA

**KONVEKA** is a Lithuanian engineering company that has been creating top-quality convectors and fan coils for contemporary architecture for more than 20 years.

Our solutions combine efficiency, reliability and aesthetics - so that buildings are not only functional but also inspiring



**20+**

**YEARS OF EXPERIENCE**

For two decades we have specialized in the field of convectors and fan coils



**30+**

**COUNTRIES**

Our products are used worldwide



**1 000+**

**COMPLETED PROJECTS**

Reliable solutions in residential, commercial and public buildings



**EUROPEAN ENGINEERING**

Created in Lithuania, to the highest quality standards

## OUR VALUES



**ARCHITECTURE FIRST**

We create products that naturally blend into modern architecture



**RELIABILITY**

Top-quality materials and strict quality control



**EFFICIENCY**

Maximum thermal efficiency and low energy consumption



**COMFORT**

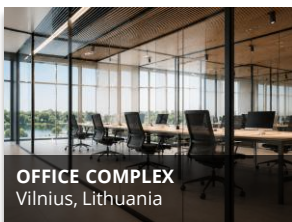
Quiet operation and even heat - for comfort every day



**FLEXIBLE SOLUTIONS**

A wide range for any project

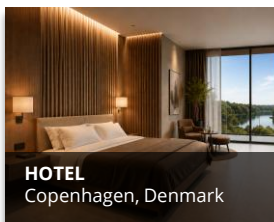
## KONVEKA SOLUTIONS - FOR CONTEMPORARY ARCHITECTURE



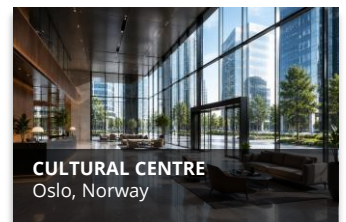
**OFFICE COMPLEX**  
Vilnius, Lithuania



**RESIDENTIAL COMPLEX**  
Stockholm, Sweden



**HOTEL**  
Copenhagen, Denmark



**CULTURAL CENTRE**  
Oslo, Norway



**THE CULTURE OF HEAT**



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