თვასები მოქმედებს 23 იანვრიდან 2023





თბილი იატაკი პანელების გამოყენებით





VarioComp boards

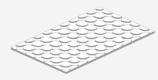
Pipe bracket and heat conducting board for pipe spacings of 100 mm or 150 mm.

Gypsum fibre board which has been tested for their healthy building properties 18 mm.

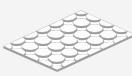


PG 050

Part No.	Pipe spacing	A [m²]	PKU	Weight/PKU	Pallet	€/m²
V290	100 mm	0.60	0.60 m ²	9.6 kg	30 m²	60.20
V295	150 mm	0.54	0.54 m2	9.6 kg	27 m ²	58.80



V290 | 100 mm | 1000 × 600 mm



PG 032

V295 | 150 mm | 900 × 600 mm

Not recommended for living or bare-foot areas!

VarioProFile pipe 11.6x1.5

Aluminium multi-layer composite pipe PE-RT/AL/PE 11.6x1.5

Tested as per EN ISO 21 003

 t_{max} = 70 °C | t_{mal} = 95 °C | p_{max} = 6 bar

- The perfect pipe for Modular Floor
- · Light and easily bendable
- · No oxygen diffusion whatsoever
- Profiled surface (+10 %) for optimum heat transfer



VarioComp filling compound T7

Special filling compound for filling out the laid VarioComp boards with inserted <u>VarioProFile pipe</u> 11.6x1.5.



Part No.	PKU	Weight/PKU	Pallet	€/bag
V291	1 bag	25 kg	42 bags	55.90

PKU = packaging unit, PG = product group; all prices excluding sales tax.

PG 030

PG 140

PG 140

VarioComp XPS and SILENT underlay boards

For use as a thermal/impact-sound insulation panel

S directly beneath VarioComp floor heating. The ideal addition between non-insulated subsurfaces (such as even screed) and the VarioComp board.

V2898: extruded polystyrene foam

V2899: wood fibre



PG 030



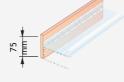
mpact sound reduction ΔL_w: up to 17 dB Thermal conductivity: 0.07 W/mK

			Compressive strength	EN 13501-1	PKU	Weight/PKU	Package	€/m²
Part-No.	Dim. [mm]	Thickness	at 10 % compression					
V2898	1250 × 600	10 mm	200 kPa (20 t/m2)	Е	0.750 m ²	250 g	30 m²	4.55
V2899	790 × 590	5 mm	150 kPa (15 t/m2)	E	0.466 m2	600 g	7 m2	3.55

Reaction to fire

Edge insulation strips 75 mm

as per EN 1264-4, 75 mm high, 10 mm thick, made of PE foam, front side with selfadhesive, welded overlapping foil for the sealed connection of edge insulation strips and PE construction foil, rear side with butyl rubber adhesive strips



Part No.	PKU	Weight/PKU	Bag	€/m
V299	25 m roll	0.8 kg	16 rolls	1.44

Blank board FBHK PG 021

Gypsum fibre board which has been tested for their healthy building properties, 18 mm, to compensate for free remaining areas without laid pipes (e.g. kitchen units)



Part No.	Dim. [mm]	A [m²]	PKU	Weight/PKU	Pallet	€/pce.
V021-029	1000 x 600	0.60	1 pce.	12.6 kg	50 pcs.	15.20

VarioRail 11.6

for affixing the VarioProFile pipes 11.6x1.5 (supply pipe) in the area in front of the heating distribution manifold. PE VarioRail with an installation height of only 17 mm. Grid spacing 38.5 mm



PG 015



Part No.	PKU	Weight/PKU	Carton	€/m
V2722	1 m	100 g	50 × 1 m	3.45

Bucket set PG 140

Bucket set consisting of:

- · Water bucket for the correct dosage
- · 30 litre bucket for mixing the VarioComp filling compound



Part No.	PKU	Weight/PKU	€/pce.
W028	1 set	1.2 kg	11.60

Cold shrink tape PG 031

For optimum corrosion resistance of press-fit coupling connections as per ÖN H 5155 Roll: 50 mm × 15 m, 1 roll is sufficient for approx. 35 press-fit coupling connections (with a 50 % overlap)



Part No.	PKU	Weight/PKU	Carton	€/pcs.
Z1699	1 pce.	990 g	20 pcs.	23.43

PE construction foil

for laying under the VarioComp board,

transparent recycled material, 0.1 mm thick Dimensions: $1030 \text{ mm x } 50 \text{ m} = 51.5 \text{ m}^2$ Usable area: $1000 \text{ mm x } 50 \text{ m} = 50.0 \text{ m}^2$

(with a 30 mm overlap)

Part No.	PKU	Weight/PKU	€/m²
V2895	50 m² roll	5.1 kg	0.95

Adhesive tape PG 031

For gluing the PE construction foil Roll: 50 mm x 66 m



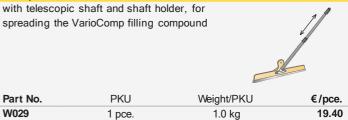
Part No.	PKU	Weight/PKU	Carton	€/pce.
V288	1 pce.	210 g	36 pce.	6.41

VarioComp mixing tool

the perfect mixing tool for mixing the VarioComp filling compound. Diameter 120 mm, required power for drive 1000 W, 600 min-1, min. drill chuck 13 mm

Part No. PKU Weight/PKU €/pce. W030 1 pce. 715 g 27.00

Scraper 600 mm with telescopic shaft and shaft holder, for



Planning and installation instructions

The respectively valid planning and installation instructions are part of our warranty and guarantee.





Accessories: see pages 36 to 45. Please be sure to allow for the necessary trimming on site when ordering materials (based on experience, approx. 5 % is usual for floor heating systems), please also check the supply pipe lengths when calculating the VarioPro- File pipe, the packaging units and accessories you require (heating/cooling distribution manifold, room thermostats ...).

"თბილი იატაკი"-ს მოდულური სისტემები

VarioClip floor heating system FBHC

Pipe spacing 100 mm

Calculation price for 1 m² consisting of:

- 1 m² Wire mesh
- · 20 pcs. VarioClip
- 10 m VarioProFile pipe 16x2 plus⁺

Part No.	Weight	€/m²
FBHC10	3.2 kg/m ²	31.50

Pipe spacing 150 mm

Calculation price for 1 m² consisting of:

- 1 m² Wire mesh
- 15 pcs. VarioClip
- 6.7 m VarioProFile pipe 16x2 plus*

Part No.	Weight	€/m²	
FBHC15	2.6 kg/m ²	23.50	

Pipe spacing 200 mm

Calculation price for 1 m² consisting of:

- 1 m² Wire mesh
- 10 pcs. VarioClip
- 5 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBHC20	2.2 kg/m ²	19.00

Pipe spacing 250 mm

Calculation price for 1 m² consisting of:

- 1 m² Wire mesh
- 8 pcs. VarioClip
- 4 m VarioProFile pipe 16x2 plus⁺

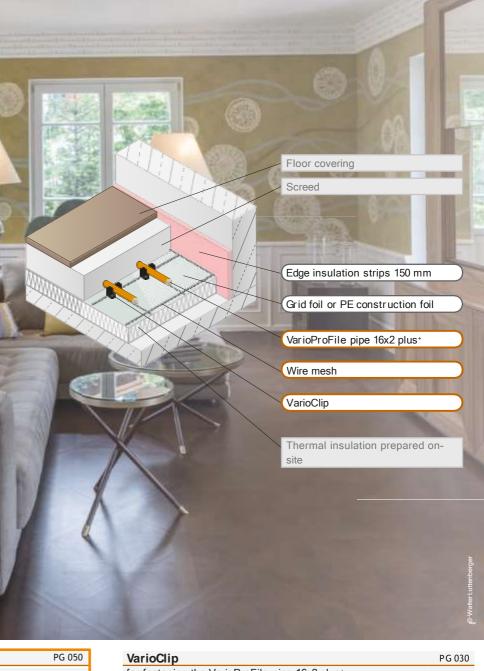
Part No.	Weight	€/m²
FBHC25	2.0 kg/m ²	16.50

Pipe spacing 300 mm

Calculation price for 1 m2 consisting of:

- 1 m² Wire mesh
- 6 pcs. VarioClip
- 3.4 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBHC30	1.8 kg/m²	15.00



VarioProFile pipe 16x2 plus+

Aluminium multi-layer composite pipe PE-RT/AL/PE 16x2

Tested as per EN ISO 21 003

 $t_{max} = 70 \, ^{\circ}\text{C} \, | \, t_{mal} = 95 \, ^{\circ}\text{C} \, | \, p_{max} = 6 \, \text{bar}$

• The perfect pipe for surface heating/cooling systems

- Easily bendable
- · No oxygen diffusion whatsoever
- Profiled surface (+15 %) for optimum heat transfer



Part No.	PKU	Weight/PKU	Pallet	€/100 m
VP16+100	100 m roll	10.3 kg	21 rolls	199.10
VP16+300	300 m roll	29.5 kg	10 rolls	199.10
VP16+500	500 m roll	49.0 kg	7 rolls	199.10

for fastening the <u>VarioProFile pipe 16x2 plus</u>to the wire mesh.

with tilt protection - clips do not fall over



Wire mesh PG 030 Spot-welded mesh made of galvanised wire, with edge wire Wire size: ø 2.9 mm Mesh width: 100 x 100 mm Dimensions: $2103 \times 1203 \text{ mm} = 2.53 \text{ m}^2$ Part No. Weight/PKU Pallet €/m² V2875 2.53 m2 3.0 kg 582 m2 6.84

PKU = packaging unit, PG = product group; all prices excluding sales tax.

PG 140

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VARIOTHER

Wire mesh connector PG 030 for joining the wire meshes

Part No. Weight/PKU Carton €/bag **PKU** V2856 100 g 3000 pcs. 6.50 Bag with 30 pcs.

Grid foil PG 030

For the necessary covering of the thermal insulation (separating layer) according to EN 1264-4, made of 100 % polyethylene recycled granulate with 50 mm grid imprint, 0.2 mm thick

Dimensions: $1030 \text{ mm x } 50 \text{ m} = 51.5 \text{ m}^2$ Usable area: $1000 \text{ mm x } 50 \text{ m} = 50.0 \text{ m}^2$

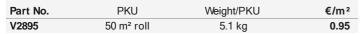
(with a 30 mm overlap)

Part No. €/m² PKU Weight/PKU V282 1.75 50 m² roll 10.4 kg

PE construction foil

For the necessary covering of the thermal insulation (separating layer), transparent recycled material, 0.1 mm thick Dimensions: 1030 mm x 50 m = 51.5 m² Usable area: $1000 \text{ mm x } 50 \text{ m} = 50.0 \text{ m}^2$

(with a 30 mm overlap)



Sleeve tube 400 mm

for protecting the VarioProFile pipe 16x2 in the area of movement joints, length: 400 mm



Sleeve tube 50 m PG 030

for protecting the VarioProFile pipe 16x2 in the area of movement joints, length: 50 m



Part No.	PKU	Weight/PKU	€/Roll
V2894R	1 roll	2.5 ka	93.90

T-joint profile 10/70

for movement joints, with adhesive strips



Part No.	PKU	Weight/PKU	€/m
V2893	1 m	50 g	8.95

Screed Admixture

Cement screed admixture for the liquification and plastification of the screed, increases flexural strength and initial strength

Consumption:

0.1-0.2 kg/m² with 70 mm cement screed (concentration 0.5-1 % of the cement weight)

Part No.	PKU	Weight/PKU	€/canister
V279	5 kg canister	5 kg	20.80
V284	10 kg canister	10 kg	41 60

Setter for VarioClip

for putting the VarioClips quickly



External bending spring ø 16 mm

Bending spring for easily bending Variotherm pipes over the entire length for pushing it further

PKU Weight/PKU Part No. €/pce.



Fixing anchor

PG 030

PG 030

for fastening the wire mesh to the thermal insulation.

Incl. fixing tool per PKU

Part No.	PKU	Weight/PKU	€/100 pcs.
V2775	100 pcs.	1.25 kg	19.20

Adhesive	tape			PG 031
for gluing t	he grid foil			
50 mm x 66	6 m roll			
Part No.	PKU	Weight/PKU	Carton	€/pce.
V288	1 pce.	210 g	36 pce.	6.41

Edge insulation strips 150 mm

as per EN 1264-4, 150 mm high, 10 mm thick, made of PE foam, with 40 mm fold, front side with self-adhesive, welded overlapping foil for the sealed connection of edge insulation strips and separating layer, rear side with butyl rubber adhesive strins

rabbor aari	corro ouripo			
Part No.	PKU	Weight/PKU	Bag	€/m
V278	50 m roll	2.2 ka	8 rolls	1.62

Cold shrink tape PG 031 For optimum corrosion resistance of press-fit coupling connections as per ÖN H 5155 Roll: 50 mm × 15 m, 1 roll is sufficient for approx. 35 press-fit coupling connections (with a 50 % overlap)

Weight/PKU Part No. PKU Carton €/pcs. Z1699 990 g 20 pcs. 23.43 1 pce.

Installation instructions and design manual for FBH PG 112

The respectively valid installation instructions are part of our warranty and guarantee.



Accessories: see pages 36 to 45. Please be sure to allow for the necessary trimming on site when ordering materials (based on experience, approx. 5 % is usual for floor heating systems), please also check the supply pipe lengths when calculating the VarioPro- File pipe, the packaging units and accessories you require (distribution manifold, room thermostats ...).

PG 031

,,თბილი იატაკი"-ს მოდულური სისტემები

VarioRast floor heating system FBH

Pipe spacing 100 mm

Calculation price for 1 m² consisting of:

- 1.1 m² grid foil
- 1.5 m VarioRail K16
- 3 pcs. fixing needles
- 10 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBH10	1.8 kg/m²	27.50

Pipe spacing 150 mm

Calculation price for 1 m² consisting of:

- 1.1 m² grid foil
- 1.5 m VarioRail K16
- · 3 pcs. fixing needles
- 6.7 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBH15	1.6 kg/m ²	21.00

Pipe spacing 200 mm

Calculation price for 1 m² consisting of:

- 1.1 m² grid foil
- 1.5 m VarioRail K16
- · 3 pcs. fixing needles
- 5 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²	
FBH20	1.2 kg/m ²	17.50	

Pipe spacing 250 mm

Calculation price for 1 m² consisting of:

- 1.1 m² grid foil
- 1.5 m VarioRail K16
- 3 pcs. fixing needles
- 4 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²	
FBH25	1.1 kg/m²	15.50	

Pipe spacing 300 mm

Calculation price for 1 m² consisting of:

- 1.1 m² grid foil
- 1.5 m VarioRail K16
- 3 pcs. fixing needles
- 3.4 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²	
FBH30	1.0 kg/m ²	14.50	







Floor covering

VarioRail K16/100

Grid foil
Fixing needle

Edge insulation strips 150 mm

VarioProFile pipe 16x2 plus+

Thermal insulation prepared on-



VarioProFile pipe 16x2 plus+

Aluminium multi-layer composite pipe PE-RT/AL/PE 16x2

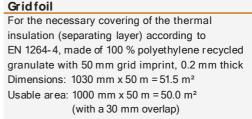
Tested as per EN ISO 21 003

 t_{max} = 70 °C | t_{mal} = 95 °C | p_{max} = 6 bar

- · The perfect pipe for surface heating/cooling systems
- · Easily bendable
- No oxygen diffusion whatsoever
- Profiled surface (+15 %) for optimum heat transfer

Part No.	PKU	Weight/PKU	Pallet	€/100 m
VP16+100	100 m roll	10.3 kg	21 rolls	199.10
VP16+300	300 m roll	29.5 kg	10 rolls	199.10
VP16+500	500 m roll	49.0 kg	7 rolls	199.10





Part No.	PKU	Weight/PKU	€/m²
V282	50 m² roll	10.4 kg	1.75

PKU = packaging unit, PG = product group; all prices excluding sales tax.

PG 030

VarioRail K16 PG 030 VarioRail made of PE, for latching the VarioProFile pipe 16x2 plus+, can be extended to any length required using special click technology, grid

spacing 50 mm, with adhesive strips

Part No.	PKU	Weight/PKU	Carton	€/m
VK1610	1 m	140 g	50 x 1 m	3.39

Fixing needles

for fastening the VarioRail to the thermal insulation

for movement joints, with adhesive strips

1 pce.

PKU

Length: 45 or 60 mm

T-joint profile 10/70

Height: 70 mm, length 1 m

Length

Part No.

W055

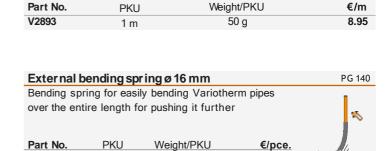


*	` ##
Weight/PKU	€/100 pcs.
700 a	10.20

23.10

/K1610	1 m	140 g	50 x 1 m	3.39	V277	45 mm	Bag with 500 pcs.	700 g	19.30
					V2771	60 mm	Bag with 500 pcs.	950 g	20.40

Edge insulat	ion strips 1	150 mm		PG 030
as per EN 1264	1-4, 150 mm	high, 10 mm thick,		-
made of PE foa	am, with 40 r	nm fold, front side		
with self-adhe	sive, welded	overlapping foil		
	arating layer	of edge insulation r, rear side with butyl	150	
Part No.	PKU	Weight/PKU	Bag	€/m
V278	50 m roll	2.2 kg	8 rolls	1.62



440 g

Sleeve tube 4	00 mm		PG 030			
for protecting the VarioProFile pipe 16x2 in						
the area of mov	ement joints, length	n: 400 mm				
, , ,						
Part No.	PKU	Weight/PKU	€/pce.			
		- 3				
V2894	10 pcs.	200 g	1.15			

Cold shrir	PG 031			
For optimur	m corrosion	resistance of pres	ss-fit	
coupling co	nnections a	s per ÖN H 5155		
Roll: 50 mm	approx. 35			
press-fit co	% overlap)			
Part No.	PKU	Weight/PKU	Carton	€/pcs.
Z1699	1 pce.	990 g	20 pcs.	23.43

5	Sleeve tube 50 m			PG 030
f	or protecting the V	arioProFile pipe	e 16x2 in	The state of the s
tl	the area of movement joints, length: 50 m			
F	Part No.	PKU	Weight/PKU	€/Roll
V	/2894R	1 roll	2.5 kg	93.90

Adhesive	tape			PG 031
for gluing the 50 mm x 66	-			
Part No.	PKU	Weight/PKU	Carton	€/pce.
V288	1 pce.	210 g	36 pce.	6.41

PG 031
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1
C€
€/canister
20.80
41.60

Installation	<u>instructions</u>	<u>s and design manua</u>	I for FBH	PG 112
The respective	ly valid insta	llation instructions		-
are part of our	warranty and	d guarantee.	FBH. FBH.	
			22	-
			4	Alterior .
			M	(株)
Part No.	PKU			€/pce.
VMONT3	1 pce.	Installation instru	ctions	
VPLAN3	1 pce	Design manu	al	

Accessories: see pages 36 to 45. Please be sure to allow for the necessary trimming on site when ordering materials (based on experience, approx. 5 % is usual for floor heating systems), please also check the supply pipe lengths when calculating the VarioPro- File pipe, the packaging units and accessories you require (distribution manifold, room thermostats ...).

თბილი იატაკი მჭიმი ბეტონის ქვეშ

VarioFix floor heating system FBHF

Pipe spacing 100 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioFix panel
- 10 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBHF10	2.2 kg/m ²	32.00

Pipe spacing 150 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioFix panel
- 6.7 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBHF15	1.9 kg/m ²	25.50

Pipe spacing 200 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioFix panel
- 5 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBHF20	1.7 kg/m²	22.00

Pipe spacing 250 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioFix panel
- 4 m VarioProFile pipe 16x2 plus⁺

Part No.	Weight	€/m²
FBHF25	1.6 kg/m²	20.00

Pipe spacing 300 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioFix panel
- 3.4 m VarioProFile pipe 16x2 plus+

Part No.	Weight	€/m²
FBHF30	1.5 kg/m²	19.00



VarioProFile pipe 16x2 plus+

Aluminium multi-layer composite pipe PE-RT/AL/PE 16x2

Tested as per EN ISO 21 003

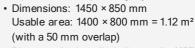
 t_{max} = 70 °C | t_{mal} = 95 °C | p_{max} = 6 bar

- · The perfect pipe for surface heating/cooling systems
- Easily bendable
- · No oxygen diffusion whatsoever
- ⁹ Profiled surface (+15 %) for optimum heat transfer



VarioFix panel

· Pipe bracket, separating layer



- Pipes can be installed diagonally (45°)
- Min. pipe spacing 50 mm
- Bridges raise the VarioProFile pipe from the panel
- Form-fitting connection as first rows of naps overlaps
- · Surface sufficiently stable to walk on



Part No.	PKU	Weight/PKU	Carton	€/m²
V2860	1.12 m ²	1.3 kg	13.44 m²	11.99

PKU = packaging unit, PG = product group; all prices excluding sales tax.

PG 030

PG 050

CREED

VARIOTHERM

14 pce.

Weight/PKU

50 g

5.70

PG 030

€/m

8.95



Adjustment element for VarioFix in the door, distribution manifold and edge areas Dimensions: 1400 × 200 mm Part No. PKU Weight/PKU Carton €/pce.

270 g

Fixing anch	nor		PG 030
for fastening	the VarioFix pane	I to the thermal	
insulation.			
Incl. fixing to	ol per PKU		
Part No.	PKU	Weight/PKU	€/100 pcs.
V2775	100 pcs.	1.25 kg	19.20

Sleeve tube 4	00 mm		PG 030	External I	ending sp	ring ø 16 mm		PG 140
	ne VarioProFile pipe ement joints, length			0 1	•	ily bending Variothe or pushing it furthe		16
Part No.	PKU	Weight/PKU	€/pce.	Part No. W055	PKU 1 pag	Weight/PKU	€/pce.	- 1/2
V2894	10 pcs.	200 g	1.15	AAOOO	1 pce.	440 g	23.10	

PG 031

V2890

Part No.

V2893

1 pce.

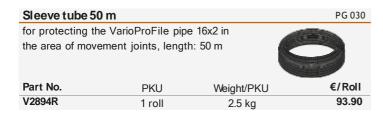
for movement joints, with adhesive strips

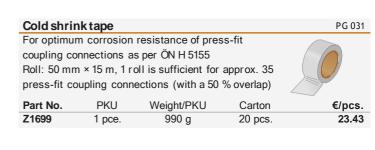
PKU

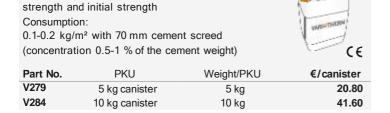
1 m

T-joint profile 10/70

Height: 70 mm, length 1 m



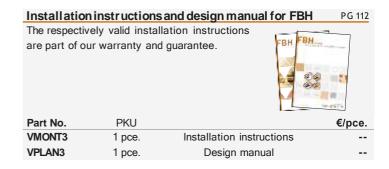




Cement screed admixture for the liquification and

plastification of the screed, increases flexural





Accessories: see pages 36 to 45. <u>Please be sure</u> to allow for the necessary trimming on site when ordering materials (based on experience, approx. 5 % is usual for floor heating systems), please also check the supply pipe lengths when calculating the VarioPro- File pipe, the packaging units and accessories you require (distribution manifold, room thermostats ...).

Screed Admixture

თბილი იატაკი მჭიმი ბეტონის ქვეშ

VarioRoll floor heating system FBHR

Pipe spacing 100 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioRoll thermal insulation and impact sound insulation
- · 20 pcs. stapler pins
- 10 m VarioProFile pipe 16x2 plus+

Part No.	Insulation	Weight	€/m²
FBHR10-20	20 mm	1.4 kg/m ²	29.00
FBHR10-30	30 mm	1.7 kg/m ²	31.00

Pipe spacing 150 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioRoll thermal insulation and impact sound insulation
- 15 pcs. stapler pins
- 6.7 m VarioProFile pipe 16x2 plus+

Part No.	Insulation	Weight	€/m²
FBHR15-20	20 mm	1.1 kg/m²	22.00
FBHR15-30	30 mm	1.4 kg/m ²	24.00

Pipe spacing 200 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioRoll thermal insulation and impact sound insulation
- 10 pcs. stapler pins
- 5 m VarioProFile pipe 16x2 plus+

Part No.	Insulation	Weight	€/m²
FBHR20-20	20 mm	0.9 kg/m ²	18.00
FBHR20-30	30 mm	1.2 kg/m ²	20.50

Pipe spacing 250 mm

Calculation price for 1 m² consisting of:

- 1 m² VarioRoll thermal insulation and impact sound insulation
- 8 pcs. stapler pins
- 4 m VarioProFile pipe 16x2 plus+

Part No.	Insulation	Weight	€/m²
FBHR25-20	20 mm	0.8 kg/m ²	16.00
FBHR25-30	30 mm	1.1 kg/m ²	18.00

Pipe spacing 300 mm

Calculation price for 1 m² consisting of:

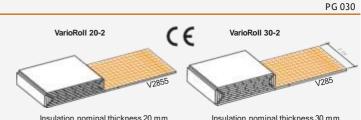
- 1 m² VarioRoll thermal insulation and impact sound insulation
- · 6 pcs. stapler pins
- 3.4 m VarioProFile pipe 16x2 plus+

Part No.	Insulation	Weight	€/m²
FBHR30-20	20 mm	0.7 kg/m ²	14.50
FBHR30-30	30 mm	1.0 kg/m²	17.00



VarioRoll thermal insulation & impact sound insulation

- Made from monitored impact sound polystyrene
- · Swift and easy installation
- · Reaction to fire: Euroclass E
- · Optimal retaining power for stapler pins via the incorporated weave
- Service load on screed (according to EN 13163) 5 kN/m²
- One-sided 30 mm overlap with self-adhesive strips
- · Special laminated weave foil with 50 mm grid as separating layer



Sound impact improvement 26 dB

Sound impact improvement 28 dB

	Insulation		Declared thermal		Dynamical			
Part No.	nominal thickness	Roll width	conductivity	Compressibility	stiffness	PKU	Weight/PKU	€/m²
V2855	20 mm	1 m	0.040 W/mK	≤ 2 mm	≤ 30 MN/m3	10 m² roll	4.1 kg	7.43
V285	30 mm	1 m	0.040 W/mK	≤ 2 mm	≤ 30 MN/m3	10 m ² roll	6.6 kg	9.53

PKU = packaging unit, PG = product group; all prices excluding sales tax.



VarioProFile pipe 16x2 plus⁺ Aluminium multi-layer composite pipe PE-RT/AL/PE 16x2 Tested as per EN ISO 21 003

 $t_{max} = 70 \, ^{\circ}\text{C} \, | \, t_{mal} = 95 \, ^{\circ}\text{C} \, | \, p_{max} = 6 \, \text{bar}$

- The perfect pipe for surface heating/cooling systems
- · Easily bendable
- · No oxygen diffusion whatsoever
- Profiled surface (+15 %) for optimum heat transfer

Part No.	PKU	Weight/PKU	Pallet	€/100 m
VP16+100	100 m roll	10.3 kg	21 rolls	199.10
VP16+300	300 m roll	29.5 kg	10 rolls	199.10
VP16+500	500 m roll	49.0 kg	7 rolls	199.10

T- joint profile 10/70 for movement joints, with adhesive strips Height: 70 mm, length 1 m Part No. PKU Weight/PKU €/m V2893 1 m 50 g 8.95

Sleeve tube 40	00 mm		PG 030
for protecting th	e VarioProFile pipe	e 16x2 in	_
the area of move	ement joints, length	: 400 mm	
Part No.	PKU	Weight/PKU	€/pce.
V2894	10 pcs.	200 g	1.15

Sleeve tube 50 m for protecting the VarioProFile pipe 16x2 in the area of movement joints, length: 50 m Part No. PKU Weight/PKU €/RoII V2894R 1 roll 2.5 kg 93.90

Adhesive	tape			PG 031
For gluing t	he wide side	e of the VarioRoll a	ınd	
VarioRoll re	emnants			
Roll: 50 mm	n x 66 m			
Part No.	PKU	Weight/PKU	Carton	€/pce.
V288	1 pce.	210 g	36 pce.	6.41

Cold shrir	nktape			PG 031
For optimur	m corrosion	resistance of pres	ss-fit	
coupling co	nnections a	s per ÖN H 5155		
Roll: 50 mm	n × 15 m, 1 r	oll is sufficient for	approx. 35	
press-fit co	oupling conn	ections (with a 50	% overlap)	
Part No.	PKU	Weight/PKU	Carton	€/pcs.
Z1699	1 pce.	990 g	20 pcs.	23.43
	•			



Stapler	pins		PG 030
For faste	ning the VarioProfile pipe to		
the Variol	Roll thermal and impact sound		
insulation	A new system holds the stapler	<i>তিবলৈককলকলক</i>	<i>₹₹₹₹₹₹₹₹₹₹₽</i>
magazine	together without adhesive strips,		$\cap \Omega$
which pre	events gluing of the stapler.		
Part No.	PKU	Weight/PKU	€/carton
V2853	Carton at 12 magazines at 25 ncs	500 a	23.20

Edge insu	lation strips 1	50 mm		PG 030
made of PE with self-ad for the seal strips and s	foam, with 40 m hesive, welded ed connection o	nigh, 10 mm thick, nm fold, front side overlapping foil f edge insulation rear side with butyl	150	
Part No.	PKU	Weight/PKU	Bag	€/m
V278	50 m roll	2.2 kg	8 rolls	1.62

*
,

Screed Adm	ixture		PG 031
Cement scree	d admixture for	the liquification and	
plastification	of the screed, inc	creases flexural	
strength and i	nitial strength		
Consumption:			WIRESTHERN
0.1-0.2 kg/m² with 70 mm cement screed			
(concentration	0.5-1 % of the	cement weight)	C€
Part No.	PKU	Weight/PKU	€/canister

Part No.	PKU	Weight/PKU	€/canister
V279	5 kg canister	5 kg	20.80
V284	10 kg canister	10 kg	41.60

Installation instructions and design manual for FBH

The respectively valid installation instructions

1 pce.

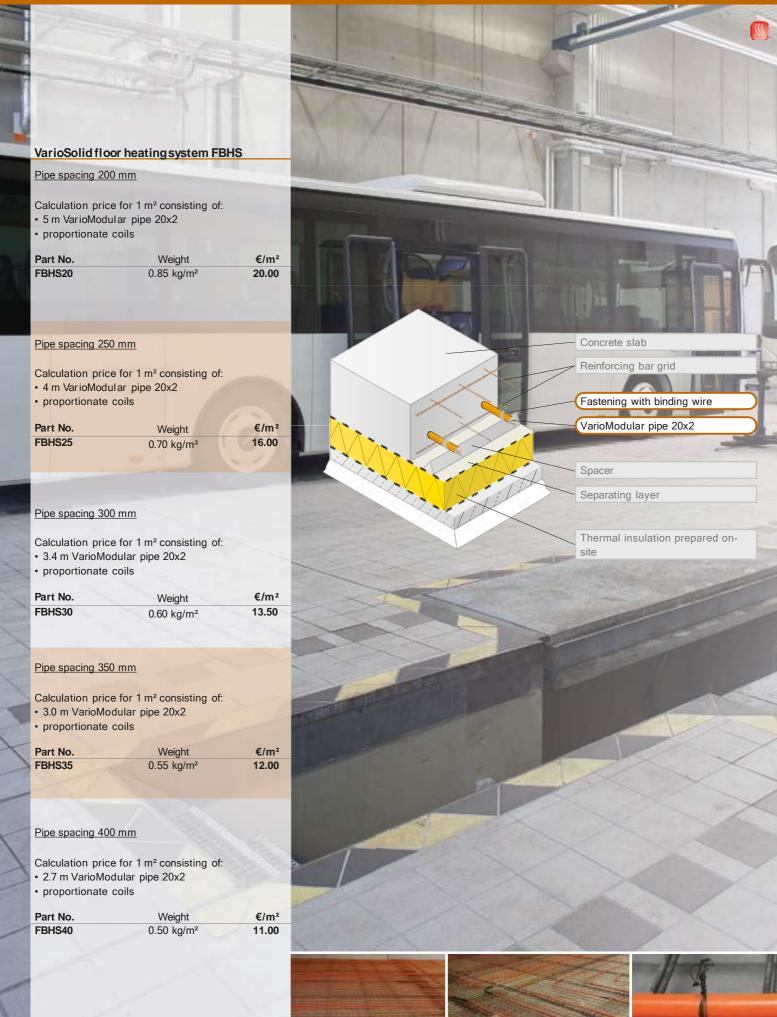
VMONT3	1 nce	Installation instructions	
Part No.	PKU		€/pce.
are part of our v	varranty an	nd guarantee.	PBH.

Accessories: see pages 36 to 45. <u>Please be sure</u> to allow for the necessary trimming on site when ordering materials (based on experience, approx. 5 % is usual for floor heating systems), please also check the supply pipe lengths when calculating the VarioPro- File pipe, the packaging units and accessories you require (distribution manifold, room thermostats ...).

Design manual

VPLAN3

ინდუსტრიული თბილი იატაკი



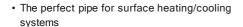
PKU = packaging unit, PG = product group; all prices excluding sales tax.

VarioModular pipe 20x2

Aluminium multi-layer composite pipe PE-RT/AL/PE 20x2

1 L-1(1/AL)1 L 20X2

Tested as per EN ISO 21 003 $t_{max} = 70~^{\circ}\text{C} \quad | \quad t_{mal} = 95~^{\circ}\text{C} \quad | \quad p_{max} = 6~\text{bar}$



- · Light and easily bendable
- · No oxygen diffusion whatsoever

Part No.	PKU	Weight/PKU	Pallet	€/100 m
VM20L-150	150 m roll	23.5 kg	13 rolls	389.50



PG 050

External bending spring ø 20 mm

PG 140

Bending spring for easily bending Variotherm pipes over the entire length for pushing it further



Part No.	PKU	Weight/PKU	€/pce.
W056	1 pce.	540 g	23.80

PG 030

€/pce.

4,773.50

Reel of solid wire for binding tools (W044/W045) With 95 m of plain solid wire, for approx. 120 connections.

PKU

1 pce.

Battery powered binding tool, complete

For rapid fastening of the VarioModular pipe

to the reinforcing bar grid, in a plastic case,

Battery powered binding tool MAX RB397

2x rechargeable batteries and chargerExtension arm for upright installation

containing:

work

Part No.

W044





Part No.	PKU	Weight/PKU	€/pce.
V2854	1 pce.	450 g	15.65

Weight/PKU

24.5 kg

Sleeve tube 50 m

PG 030

for protecting the VarioModular pipe 20x2 in the area of movement joints, length: $50\ m$



Part No.	PKU	Weight/PKU	€/Roll
V2897R	1 roll	3.6 kg	115.90

Press-fit coupling 20x20

Wire reel for binding tool

PG 100

TH press-fit contour, incl. galvanic isolation, visual monitoring of insertion depth. Suitable press-fitting jaws: REMS TH20 (page 44)



Part No.	PKU	Weight/PKU	€/pce.
Z1670	1 pce.	55 g	7.02

Cold shrink tape

PG 031

For optimum corrosion resistance of press-fit coupling connections as per ÖN H 5155
Roll: 50 mm × 15 m, 1 roll is sufficient for approx. 35 press-fit coupling connections (with a 50 % overlap)



Part No.	PKU	Weight/PKU	Carton	€/pcs.
Z1699	1 pce.	990 g	20 pcs.	23.43

Calibration and chamfering tool

PG 140

For VarioProFile pipe 16x2 and 11.6x1.5, preinsulated VarioModular pipe 16x2, VarioModular pipe 20x2 and 11.6x1.5



Part No.	PKU	Weight/PKU	€/pce.
W042	1 pce.	140 g	38.20

Clamping screw fitting 3/4" EUROx20

PG 100

Especially developed for the Variotherm pipes 20x2 on a 3/4" Eurocone, nickel plated, single-piece, with metal clamping ring and galvanic isolation, AF 30, tested according to EN 21003



Part No.	PKU	Weight/PKU	€/pce.
Z1500	1 pce.	70 g	6.02

Installation instructions for FBHS

PG 112

The respectively valid installation instructions are part of our warranty and guarantee.



Part No.	PKU		€/pce.
VMONT3S	1 pce.	Installation instructions	

Accessories: see pages 36 to 45. <u>Please be sure</u> to allow for the necessary trimming on site when ordering materials (based on experience, approx. 5 % is usual for floor heating systems), please also check the supply pipe lengths when calculating the Vario- Modular pipe, the packaging units and accessories you require (distribution manifold, room thermostats ...).

Certificates:















- EMC Guideline 2004/108/EG
 Machinery Guideline 2006/42/EG
 Low Voltage Guideline 2006/94/EG
 Com 998-1
 EN 13813
 EN 14313









GREENCLIMAT

დემეტრე თავდადებულის N-26 დიდი დიღომი თბილისი

მობ: 00995-595121265 info@greenclimat.co.uk www.greenclimat.co.uk