

uponor

Uponor Minitec

EN

Recommended floor systems and levelling materials



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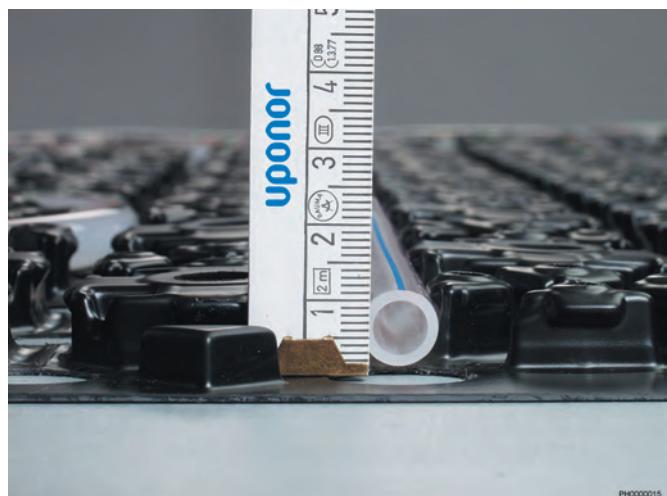
1 System description

1.1 Low element height, rapid regulation

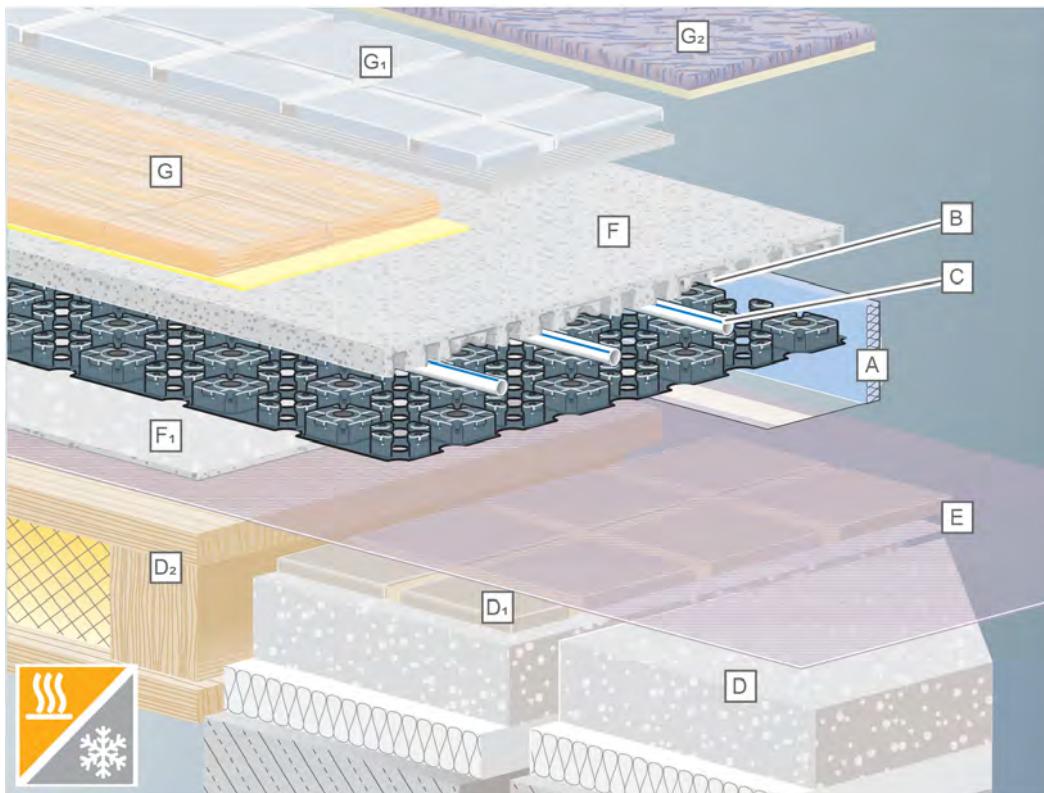
Quick installation, fast heating up times: The Uponor Minitec low installation system offers many advantages. The Uponor Minitec foil element can be easily laid on existing screed, timber or tiled coverings with Uponor Comfort Pipes 9.9 x 1.1 mm. Thanks to its low element height of around 1 cm, Uponor Minitec is the perfect system for renovation projects.

There are prefabricated holes at regular intervals in the fixation nuts and intermediate areas which ensure that the compensating material flows in well and is able to bind with the substrate after the pipe has been laid. In addition, there is an adhesive layer on the back of the element which provides a secure bond between the substrate and system during assembly. The self-adhesive edge insulating tape in the L-profile ensure a secure sealing to the wall.

The levelling material is applied just above the studs. After a short drying time, the desired floor covering can be laid directly on top. The close proximity of the floor covering to the pipes allows for short heating up times, which in turn enables fast-acting regulation with low hot water temperatures.



Low element height of about one centimetre.



7F 170 -F
PE-Xa 9,9x1,1

ED0000005

A Uponor Multi insulation tape

B Uponor Minitec foil element

C Uponor Minitec Comfort Pipe 9,9 x 1,1 mm

D Existing screed with heat and impact sound insulation already laid beneath

D₁ With tiled covering

D₂ Wooden beam ceiling

E Priming of the prepared substrate

F Self-flowing levelling material

F₁ Additional levelling material for a wooden beam ceiling

G Parquet with parquet adhesive

G₁ Tiled covering with tile adhesive and joint grout

G₂ Carpet with carpet adhesive

2 Installation instructions

2.1 Quick to lay and safe to walk over in a short period of time

The stable, self-adhesive and universal for all room geometries Uponor Minitec foil elements are easily accessible and guarantee a quick and cost-effective 90° and 45° installation of the Uponor Comfort Pipes by one-man assembly.

Please follow the Uponor Minitec installation manual both before and during the installation. You can download the manual from the Uponor Download Center at www.uponor.de/downloadcenter.

2.2 Uponor Minitec installation steps (example)



1) The Uponor Multi insulation tape with adhesive strips on the reverse are applied to all ascending structural elements such as walls, steps, etc. with no gaps.



3) No tools are required for the installation of the Uponor Minitec Comfort Pipes. They are simply pressed into the studs of the foil elements at angles of 90° or 45°.



2) Then, the self-adhesive Uponor Minitec foil elements are laid out on the prepared substrate with gaps of approx. 5 cm between each one and are connected to each other with triangular studs.



4) Finally, the levelling material only needs to be placed on the laid and finished Uponor Minitec surface and levelled with minimal coverage. The perforation of the foil elements ensures an optimal binding of the levelling material and substrate.

3 Manufacturers of levelling materials

In the tables on the following pages you can find the component systems from different manufacturers with which the Uponor Minitec low installation system can be laid on various available substrates (load distribution layer), and indeed with various new floor coverings.

In addition, you can find manufacturer specifications for the respective structure heights and time periods required. According to the information supplied by the manufacturer, there is a list of the components which have been tested and which are suitable for use with Uponor Minitec.

However, the respective current manufacturer information must also be taken into consideration, as we cannot assume any liability for the correctness and up-to-dateness of the manufacturer statements. The flooer must also check the suitability for the specific application. For the coordination of the construction site processes, corresponding agreements must be made between the people responsible for applying the levelling material, the installation and for laying the floor covering. The Uponor Minitec installation manual must be observed (www.uponor.de/downloadcenter).



Manufacturers of levelling materials.

4 Ardex

		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screeed 	Primer	Ardex P51	Ardex P51	Ardex P51	Ardex P51
	Levelling material for Uponor Minitec	Ardex FA 20, Ardex K 80			
	Adhesive	Ardex X78	Ardex S28 + Ardex E90	Ardex Premium AF 2420	Ardex Premium AF 2220
	Grout	Ardex G8 S FLEX	Ardex MG		
Tiles 	Primer	Ardex EP 2000 or Ardex P4			
	Sanding (only required with Ardex EP 2000)	Quartz sand (grain size 0.3 - 0.6 mm)	Quartz sand (grain size 0.3 - 0.6 mm)	Quartz sand (grain size 0.3 - 0.6 mm)	Quartz sand (grain size 0.3 - 0.6 mm)
	Levelling material for Uponor Minitec	Ardex FA 20, Ardex K 80			
	Adhesive	Ardex X78	Ardex S28 + Ardex E90	Ardex Premium AF 2420	Ardex Premium AF 2220
	Grout	Ardex G8 S FLEX	Ardex MG		

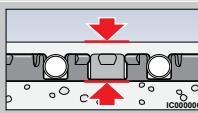
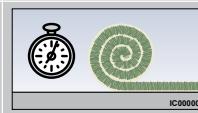
	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
Ardex	≥ 15 mm	≥ 2 hours	After 3 days/for 2 days	2 days after functional heating	≥ 7 days

5 Bostik

		New floor covering			
		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Preparation	Sand off and vacuum clean			
	Primer	Nibogrund G17 - Cement screed; Nibogrund E30 - Anhydrite screed (floating)	Nibogrund G17 - Cement screed; Nibogrund E30 - Anhydrite screed (floating)	Nibogrund G17 - Cement screed; Nibogrund E30 - Anhydrite screed (floating)	Nibogrund G17 - Cement screed; Nibogrund E30 - Anhydrite screed (floating)
	Levelling material for Uponor Minitec	Niboplan DE	Niboplan DE	Niboplan DE	Niboplan DE
	Adhesive	Ardal Floorflex	Ardal Floorflex	Nibofloor PK Elastic	Bostik Power Tex
	Grout	Ardal Flexfuge	Ardal Flexfuge		
Tiles 	Preparation	Sand off and vacuum clean			
	Primer	Nibogrund E30	Nibogrund E30	Nibogrund E30	Nibogrund E30
	Levelling material for Uponor Minitec	Niboplan DE	Niboplan DE	Niboplan DE	Niboplan DE
	Adhesive	Ardal Floorflex	Ardal Ardaflex Marmor	Nibofloor PK Elastic	Bostik Power Tex
	Grout	Ardal Flexfuge	Ardal Flexfuge		
Wood planks, chipboards, dry screed 	Preparation	Sand off and vacuum clean			
	Primer	Nibogrund Elasto Fill	Nibogrund Elasto Fill	Nibogrund Elasto Fill	Nibogrund Elasto Fill
	Filler layer, min. 3 mm	Niboplan FA 600	Niboplan FA 600	Niboplan FA 600	Niboplan FA 600
	Board adhesive	Flexmörtel	Flexmörtel	Flexmörtel	Flexmörtel
	Decoupling layer	Tile decoupling panel	Tile decoupling panel	Tile decoupling panel	Tile decoupling panel
	Levelling material for Uponor Minitec	Niboplan DE	Niboplan DE	Niboplan DE	Niboplan DE
	Adhesive	Ardal Floorflex	Ardal Ardaflex Marmor	Nibofloor PK Elastic	Bostik Power Tex
	Grout	Ardal Flexfuge	Ardal Flexfuge		
Poured asphalt 	Preparation	Sand off and vacuum clean			
	Primer	Bostik Nibogrund E 30 is only to be used for renovations	Bostik Nibogrund E 30 is only to be used for renovations	Bostik Nibogrund E 30 is only to be used for renovations	Bostik Nibogrund E 30 is only to be used for renovations
	Create a flat surface	Bostik Niboplan 300 max. overall thickness: 5 mm	Bostik Niboplan 300 max. overall thickness: 5 mm	Bostik Niboplan 300 max. overall thickness: 5 mm	Bostik Niboplan 300 max. overall thickness: 5 mm
	Board adhesive	Ardal Flexmörtel	Ardal Flexmörtel	Ardal Flexmörtel	Ardal Flexmörtel
	Decoupling layer	Ardal, Tile decoupling panel			
	Levelling material for Uponor Minitec	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total
	Adhesive	Ardal Floorflex	Ardal Ardaflex Marmor	Bostik Nibofloor PK Elastic	Bostik Power Tex
	Grout	Ardal Flexfuge	Ardal Flexfuge		
Concrete floor 	Preparation	Sand off and vacuum clean			
	Primer	Bostik Nibogrund E 30	Bostik Nibogrund E 30	Bostik Nibogrund E 30 ₁₎	Bostik Nibogrund E 30
	Levelling material for Uponor Minitec	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total
	Adhesive	Ardal Floorflex	Ardal Ardaflex Marmor	Bostik Nibofloor PK Elastic	Bostik Power Tex

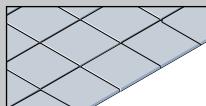
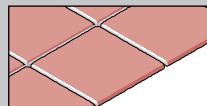
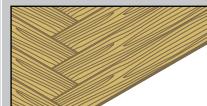
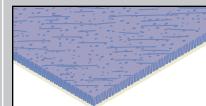


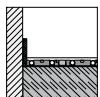
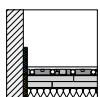
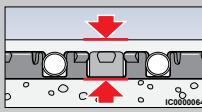
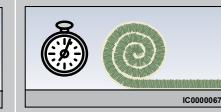
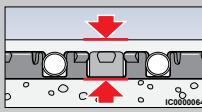
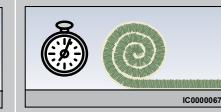
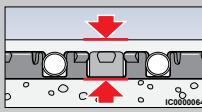
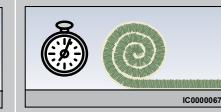
		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Grout	Ardal Flexfuge	Ardal Flexfuge		
	Preparation	Sand off and vacuum clean			
	Primer	Bostik Nibogrund G17	Bostik Nibogrund G17	Bostik Nibogrund G17	Bostik Nibogrund G17
	Create a flat surface	Bostik Niboplan Fa 600 min. 3 mm/max. 15 mm	Bostik Niboplan Fa 600 min. 3 mm/max. 15 mm	Bostik Niboplan Fa 600 min. 3 mm/max. 15 mm	Bostik Niboplan Fa 600 min. 3 mm/max. 15 mm
	Board adhesive	Ardal Flexmörtel	Ardal Flexmörtel	Ardal Flexmörtel	Ardal Flexmörtel
	Decoupling layer	Ardal, Tile decoupling panel			
	Levelling material for Uponor Minitec	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total	Bostik Niboplan DE min. 3 mm coverage, max. 20 mm total
	Adhesive	Ardal Floorflex	Ardal Ardaflex Marmor	Bostik Nibofloor PK Elastic	Bostik Power Tex
	Grout	Ardal Flexfuge	Ardal Flexfuge		

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
 Bostik	 ≥ 15 mm	 ≥ 3 hours	 After 3 days/for 2 days	 1 day after functional heating	 ≥ 6 days

1) Caution! With any subsequent parquet laying, the epoxy resin primer Nibogrund E 30 must be applied twice to create a barrier against any capillary rising moisture.

6 Botament

BOTAMENT® SYSTEMBAUSTOFFE		New floor covering			
					
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Preparation	Cleaning/remove loose parts	Cleaning/remove loose parts	Cleaning/remove loose parts	Cleaning/remove loose parts
	Primer substrate	BOTACT D 11	BOTACT D 11	BOTAFLOR G 110	BOTAFLOR G 110
	Levelling material for Uponor Minitec	BOTACEM M 53 Extra	BOTACEM M 53 Extra	BOTAFLOR A 220 (Cement screed) BOTAFLOR A 240 (Anhydrite screed)	BOTAFLOR A 220 (Cement screed) BOTAFLOR A 240 (Anhydrite screed)
	Primer levelling material	BOTACT D 11	BOTACT D 11		
	Adhesive	BOTACT M 29 HP MULTISTAR	MULTISTONE	BOTAFLOR P 450	BOTAFLOR T 350 (Carpet) BOTAFLOR L 610 (Linoleum) BOTAFLOR K 550 (PVC)
Tiles 	Grout	MULTIFUGE MULTIFUGE narrow	MULTIFUGE MULTIFUGE narrow		
	Preparation	Cleaning/degreasing	Cleaning/degreasing	Cleaning/degreasing	Cleaning/degreasing
	Primer	BOTACT D 15	BOTACT D 15	BOTAFLOR G 120	BOTAFLOR G 120
	Levelling material for Uponor Minitec	BOTACEM M 53 Extra	BOTACEM M 53 Extra	BOTAFLOR A 220	BOTAFLOR A 220
	Primer levelling material	BOTACT D 11	BOTACT D 11		
Wood planks, chipboards, dry screed 	Adhesive	BOTACT M 29 HP MULTISTAR	MULTISTONE	BOTAFLOR P 450	BOTAFLOR T 350 (Carpet) BOTAFLOR L 610 (Linoleum) BOTAFLOR K 550 (PVC)
	Grout	MULTIFUGE MULTIFUGE narrow	MULTIFUGE MULTIFUGE narrow		
	Preparation	Cleaning/tighten	Cleaning/tighten	Cleaning/tighten	Cleaning/tighten
	Primer substrate	BOTACT D 15 (wood-based and non-absorbent substrates) BOTACT D 11 (absorbent, mineral substrates)	BOTACT D 15 (wood-based and non-absorbent substrates) BOTACT D 11 (absorbent, mineral substrates)	BOTAFLOR G 120 (wood-based and non-absorbent substrates) BOTAFLOR G 110 (absorbent, mineral substrates)	BOTAFLOR G 120 (wood-based and non-absorbent substrates) BOTAFLOR G 110 (absorbent, mineral substrates)
	Levelling material for Uponor Minitec	BOTACEM M 53 Extra	BOTACEM M 53 Extra	BOTAFLOR A 260	BOTAFLOR A 260
Poured asphalt 	Primer levelling material	BOTACT D 11	BOTACT D 11		
	Adhesive	BOTACT M 29 HP MULTISTAR	MULTISTONE	BOTAFLOR P 450	BOTAFLOR T 350 (Carpet) BOTAFLOR L 610 (Linoleum) BOTAFLOR K 550 (PVC)
	Grout	MULTIFUGE MULTIFUGE narrow	MULTIFUGE MULTIFUGE narrow		
	Preparation	Cleaning/remove loose parts	Cleaning/remove loose parts	Cleaning/remove loose parts	Cleaning/remove loose parts
	Primer substrate	BOTACT D 15	BOTACT D 15	BOTAFLOR G 120	BOTAFLOR G 120
Levelling material for Uponor Minitec	BOTACEM M 53 Extra	BOTACEM M 53 Extra	BOTAFLOR A 260	BOTAFLOR A 260	
	Primer levelling material	BOTACT D 11	BOTACT D 11		

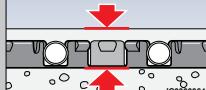
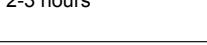
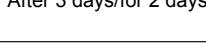
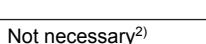
		New floor covering																					
		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC																		
Existing substrate		BOTACT M 29 HP MULTISTAR	MULTISTONE	BOTAFLOR P 450	BOTAFLOR T 350 (Carpet) BOTAFLOR L 610 (Linoleum) BOTAFLOR K 550 (PVC)																		
	Adhesive																						
	Grout	MULTIFUGE MULTIFUGE narrow	MULTIFUGE MULTIFUGE narrow																				
Concrete floor 	Preparation	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean																		
	Primer substrate	BOTACT D 11	BOTACT D 11	BOTAFLOR G 110	BOTAFLOR G 110																		
	Levelling material for Uponor Minitec	BOTACEM M 53 Extra	BOTACEM M 53 Extra	BOTAFLOR A 220	BOTAFLOR A 220																		
	Primer levelling material	BOTACT D 11	BOTACT D 11																				
	Adhesive	BOTACT M 29 HPMULTISTAR	MULTISTONE	BOTAFLOR P 450	BOTAFLOR T 350 (Carpet) BOTAFLOR L 610 (Linoleum) BOTAFLOR K 550 (PVC)																		
	Grout	MULTIFUGE MULTIFUGE narrow	MULTIFUGE MULTIFUGE narrow																				
Gypsum fiber boards 	Preparation	Cleaning/tighten	Cleaning/tighten	Cleaning/tighten	Cleaning/tighten																		
	Primer substrate	BOTACT D 11	BOTACT D 11	BOTAFLOR G 110	BOTAFLOR G 110																		
	Levelling material for Uponor Minitec	BOTACEM M 53 Extra	BOTACEM M 53 Extra	BOTAFLOR A 260	BOTAFLOR A 260																		
	Primer levelling material	BOTACT D 11	BOTACT D 11																				
	Adhesive	BOTACT M 29 HP MULTISTAR	MULTISTONE	BOTAFLOR P 450	BOTAFLOR T 350 (Carpet) BOTAFLOR L 610 (Linoleum) BOTAFLOR K 550 (PVC)																		
	Grout	MULTIFUGE MULTIFUGE narrow	MULTIFUGE MULTIFUGE narrow																				
<table border="1"> <thead> <tr> <th></th><th>Structure height</th><th>Accessibility</th><th>Functional heating period</th><th>Readiness for covering</th><th>Total period</th></tr> </thead> <tbody> <tr> <td></td><td>≥ 15 mm</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Botament</td><td>≥ 15 mm</td><td>≥ 3 hours</td><td>After 3 days/for 2 days</td><td>1 day after functional heating</td><td>≥ 6 days</td></tr> </tbody> </table>							Structure height	Accessibility	Functional heating period	Readiness for covering	Total period		≥ 15 mm					Botament	≥ 15 mm	≥ 3 hours	After 3 days/for 2 days	1 day after functional heating	≥ 6 days
	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period																		
	≥ 15 mm																						
Botament	≥ 15 mm	≥ 3 hours	After 3 days/for 2 days	1 day after functional heating	≥ 6 days																		

The current manufacturer specifications have primary importance and take precedence if there are any discrepancies.

We accept no liability for the up-to-dateness and the correctness of the information.

7 Codex/UZIN

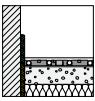
codex X UZIN		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Preparation	Sand off and vacuum clean			
	Pre-primer (if required for an even substrate)	codex FG 300	codex FG 300	UZIN PE 360 PLUS	UZIN PE 360 PLUS
	Pre-filler (if required for an even substrate)	codex FM 50 Turbo	codex FM 50 Turbo	UZIN NC 195 / UZIN SC 997	UZIN NC 195 / UZIN SC 997
	Primer	codex FG 300	codex FG 300	UZIN PE 360 PLUS	UZIN PE 360 PLUS
	Levelling material for Uponor Minitec	codex FM 50 Turbo	codex FM 50 Turbo	UZIN NC 195 / UZIN SC 997	UZIN NC 195 / UZIN SC 997
	Primer (if required)	codex FG 300	codex FG 300	/	UZIN PE 360 PLUS ¹⁾
	Filler layer 2 mm (if required)	codex FM 20	codex FM 20	/	UZIN 170 Levelstar/ UZIN NC 110
	Intermediate priming (if required)	codex FG 300	codex FG 300	UZIN PE 414 Turbo	/
	Adhesive for decoupling layer (if required)	codex Power RX 6	codex Power RX 6	UZIN MK 92 S (B1)	/
	Decoupling layer (if required)	codex Hydrostop	codex Hydrostop	UZIN Multimoll Fleece	/
Adhesive		codex Power CX 5	codex Stone SX 80 cristal	UZIN MK 92 S (B11)	UZIN UZ 88 (Carpet) UZIN LE 44 (Linoleum) UZIN KE 66 (PVC)
Grout		codex Brilliant Cristal	codex Brilliant Cristal	/	/

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
 UZIN NC 195	> 20 mm	 IC0000065	 IC0000066	After 3 days/for 2 days 1 day after functional heating	> 7 days
 UZIN SC 997	> 20 mm	 IC0000065	 IC0000066	After 3 days/for 3 days 1 day after functional heating	> 7 days
 codex FM 50 Turbo	> 15 mm	 IC0000065	 IC0000066	Not necessary ²⁾ After 2-3 hours for tiles After 3 days for natural stone	> 2 days for tiles > 4 days for natural stone

1) Apply primer on day 4 if required (see table)

2) The functionality and tightness of the heating system must be checked by the installer

8 Henkel

Henkel		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Primer	Ceresit CT17, CN94	Ceresit CT17, CN94	Thomsit R766	Thomsit R766
	Levelling material for Uponor Minitec	Ceresit CN72, CN73	Ceresit CN72, CN73	Thomsit XXL-Xpress Thomsit DS40	Thomsit XXL-Xpress Thomsit DS40
	Adhesive	Ceresit CM24, CM90	Ceresit CM15, CM25	Thomsit P618, P625, P685	Thomsit T440, T410, TK199
	Grout	Ceresit CE37, CE46	Ceresit CE38, CE42		
Tiles 	Basic cleaning	Thomsit PRO040/black pad rinse clean/sand off	Thomsit PRO040/black pad rinse clean/sand off	Thomsit PRO040/black pad rinse clean/sand off	Thomsit PRO040/black pad rinse clean/sand off
	Primer	Ceresit CK740	Ceresit CK740	Thomsit R75 Epoxy primer	Thomsit R75 Epoxy primer
	Sanding	Quartz sand (grain size 0.3 - 0.6 mm)	Quartz sand (grain size 0.3 - 0.6 mm) alternatively: Thomsit R790 or R766	Quartz sand (grain size 0.3 - 0.6 mm) alternatively: Thomsit R790 or R766	Quartz sand (grain size 0.3 - 0.6 mm) alternatively: Thomsit R790 or R766
	Levelling material for Uponor Minitec	Ceresit CN72, CN73	Ceresit CN72, CN73	Thomsit XXL-Xpress Thomsit DS40	Thomsit XXL-Xpress Thomsit DS40
	Adhesive	Ceresit CM24, CM90	Ceresit CM15, CM25	Thomsit P618, P625, P685	Thomsit T440, T410, TK199
	Grout	Ceresit CE37, CE46	Ceresit CE38, CE42		
Wood planks, chipboards, dry screed 	Primer	Ceresit CT17, CN94	Ceresit CT17, CN94	Thomsit R790	Thomsit R790
	Levelling material for Uponor Minitec	Ceresit CN72, CN73	Ceresit CN72, CN73	Thomsit XXL-Xpress Thomsit DS40	Thomsit XXL-Xpress Thomsit DS40
	Adhesive	Ceresit CM24, CM90	Ceresit CM15, CM25	Thomsit P618, P625, P685	Thomsit T440, T410, TK199
	Grout	Ceresit CE37, CE46	Ceresit CE38, CE42		

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
Thomsit XXL-Express	> 15/20 mm ¹⁾	> 2-3 hours	After 2 days/for 2 days ²⁾	1 day after functional heating	> 5 days
Thomsit DS40	> 15/20 mm ¹⁾	> 2 hours	After 2 days/for 2 days ²⁾	1 day after functional heating	> 6 days

1) With tiles, natural stone and parquet as a new floor covering:
> 15 mm structure height. With carpet, linoleum and PVC as a new floor covering: > 20 mm structure height

2) Max. operating temperature 45 °C

9 Kiesel

Existing substrate		New floor covering	
		Tiles	Natural stone
Kiesel Rapid system			
Screed, concrete and ceramic floor coverings	Primer	Okatmos UG 30/Okatmos DSG	
	Optional: Level out any unevenness	Servoplan Ki 1/Servoplan S 444	
	Optional: Primer	If applicable, Okatmos UG 30/Okatmos DSG	
	Levelling material for Uponor Minitec	Servoplan Ki 1 ³⁾ /Servoplan E 600 ³⁾	
	Decoupling layer	Kiesel Decoupling fabric ¹⁾ /Okalift SuperChange ²⁾	
	Adhesive ⁴⁾	Servoflex K-Plus SuperTec, Servoflex-Trio-SuperTec/Servoflex-Trio-schnell, SuperTec Servolight S1 SuperTec	ServoStar 4000 Flex schnell, Servoflex K-Schnell SuperTec, Servoflex-Trio-schnell SuperTec white/grey
	Grout	Servoperl royal schnell/Servoflex F	
Wood planks, laying panels V 100 (OSB 3) screwed down	Preparation	Sand off, vacuum clean and seal joints with Oka MK if necessary	
	Primer	Okatmos UG 30/Okatmos DSG/Servofix RSG	
	Optional: Level out any unevenness	Servoplan Ki 1 with Kiesel reinforcement fibres/Servoplan S 444	
	Optional: Primer	If applicable, Okatmos UG 30/Okatmos DSG	
	Thermal insulation/decoupling	Okaphone 4, Okaphone 9/Okaphone 15 ¹⁾	
	Solidification	2 x Okamul PU-V schnell and 1 x Okatmos UG 30	
	Levelling material for Uponor Minitec	Servoplan Ki 1 ³⁾ /Servoplan E 600 ³⁾	
	Decoupling layer	Kiesel Decoupling fabric ¹⁾ /Okalift SuperChange ²⁾	
	Adhesive ⁴⁾	Servoflex K-Plus SuperTec, Servoflex-Trio-SuperTec/Servoflex-Trio-schnell, SuperTec Servolight S1 SuperTec	ServoStar 4000 Flex schnell, Servoflex K-Schnell SuperTec, Servoflex-Trio-schnell SuperTec white/grey
	Grout	Servoperl royal schnell/Servoflex F	
Poured asphalt	Primer	Okatmos UG 30/Okatmos DSG/Servofix RSG	
	Optional: Level out any unevenness	Servoplan Ki 1/Servoplan S 444 – on poured concreted max. layer thickness: 10 mm	
	Optional: Primer	If applicable, Okatmos UG 30/Okatmos DSG	
	Thermal insulation/decoupling	Okaphone 4, Okaphone 9/Okaphone 15 ¹⁾	
	Solidification	2 x Okamul PU-V schnell and 1 x Okatmos UG 30	
	Levelling material for Uponor Minitec	Servoplan Ki 1 ³⁾ /Servoplan E 600 ³⁾	
	Decoupling layer	Kiesel Decoupling fabric ¹⁾ /Okalift SuperChange ²⁾	
	Adhesive ⁴⁾	Servoflex K-Plus SuperTec, Servoflex-Trio-SuperTec/Servoflex-Trio-schnell, SuperTec Servolight S1 SuperTec	ServoStar 4000 Flex schnell, Servoflex K-Schnell SuperTec, Servoflex-Trio-schnell SuperTec white/grey
	Grout	Servoperl royal schnell/Servoflex F	
Dry screed, e.g. gypsum fibre. Floor elements are screwed down	Primer	Okatmos UG 30/Okatmos DSG/Servofix RSG	
	Level out any unevenness	Servoplan Ki 1/Servoplan S 444 – max. layer thickness: 5 mm	
	Primer	If applicable, Okatmos UG 30/Okatmos DSG	
	Levelling material for Uponor Minitec	Servoplan Ki 1 ³⁾ /Servoplan E 600 ³⁾	
	Decoupling layer	Kiesel Decoupling fabric ¹⁾ /Okalift SuperChange ²⁾	
	Adhesive ⁴⁾	Servoflex K-Plus SuperTec, Servoflex-Trio-SuperTec/Servoflex-Trio-schnell, SuperTec Servolight S1 SuperTec	ServoStar 4000 Flex schnell, Servoflex K-Schnell SuperTec, Servoflex-Trio-schnell SuperTec white/grey



Existing substrate		New floor covering	
		Tiles	Natural stone
Screed, concrete - sloping surface, e.g for level-access showers	Grout	Servoperl royal schnell/Servoflex F	
	Primer	Okatmos UG 30/Okatmos DSG	
	Optional: Level out any unevenness	Servocret RS	
	Optional: Primer	If applicable, Okatmos UG 30/Okatmos DSG	
	Levelling material for Uponor Minitec	Servocret RS ³⁾	
	Sealer	Kiesel sealing sheet ⁽¹⁾⁵⁾	
	Adhesive ⁴⁾	Servoflex K-Plus SuperTec, ServoStar 2000 Plus Flex, Servoflex-Trio-SuperTec, Okapox	ServoStar 4000 Flex schnell, Servoflex K-Schnell SuperTec, Okapox
	Grout	Servoperl royal schnell/Okapox Designfuge ⁶⁾ /Okapox royal ⁶⁾	

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period

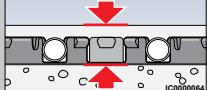
- 1. Bonded with Servoflex K-Schnell SuperTec
- 2. Bonded with Okalift SuperChange adhesive
- 3. Depending on the construction, hairline cracks may form within the integrated levelling material after the functional / ready for covering heating
- 4. Max. field sizes 25 m²
- 5. Adhere to the specifications in the technical data sheet
- 6. With natural stone, only use after consulting with Kiesel application engineers

Existing substrate		New floor covering	
		Elastic floor	Textile floor
Kiesel Rapid system			Parquet
Screed, concrete and ceramic floor coverings	Primer	Okatmos EG 20/Okatmos DSG	
	Optional: Level out any unevenness	Servoplan Ki 1/Servoplan S 444	
	Optional: Primer	If applicable, Okatmos EG 20/Okatmos DSG	
	Levelling material for Uponor Minitec	Servoplan Ki 1 ¹⁾³⁾ /Servoplan E 600 ¹⁾³⁾	
	Decoupling layer	—	Okavlies ²⁾
	Adhesive ⁴⁾	Okatmos star 100 Plus, Okatmos star 600, Okatmos star 120, Okatmos star 110	Bakit EK new, Bakit ESP, Bakit FPK, Bakit PU-1K, Bakit PU-P

Wood planks, laying panels V 100 (OSB 3) screwed down	Preparation	Sand off, vacuum clean and seal joints with Oka MK if necessary
	Primer	If applicable, Okatmos EG 20/Okatmos DSG
	Optional: Level out any unevenness	Servoplan Ki 1/Servoplan S 444
	Optional: Primer	If applicable, Okatmos EG 2/Okatmos DSG
	Thermal insulation/decoupling	Okaphone 4, Okaphone 9/Okaphone 15 ⁵⁾
	Solidification	2 x Okamul PU-V schnell and 1 x Okatmos EG 20

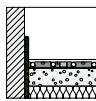
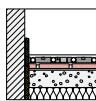
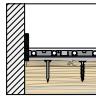
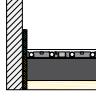
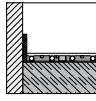
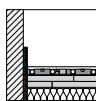
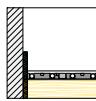


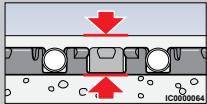
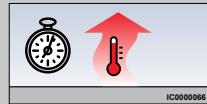
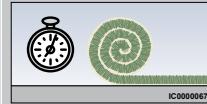
		New floor covering		
Existing substrate		Elastic floor	Textile floor	Parquet
	Levelling material for Uponor Minitec	Servoplan Ki 1 ^{1) 3)} /Servoplan E 600 ^{1) 3)}		
	Decoupling layer	—	—	Okavlies ²⁾
	Adhesive ⁴⁾	Okatmos star 100 Plus, Okatmos star 600, Okatmos star 120, Okatmos star 110	Okatmos star 600, Okatmos EN 30	Bakit EK new, Bakit ESP, Bakit FPK, Bakit PU-1K, Bakit PU-P
Poured asphalt 	Primer	Okatmos EG 20/Okatmos DSG/Servofix RSG		
	Optional: Level out any unevenness	Servoplan Ki 1/Servoplan S 444 – on poured concreted max. layer thickness: 10 mm		
	Optional: Primer	If applicable, Okatmos EG 20/Okatmos DSG		
	Thermal insulation/decoupling	Okaphone 4, Okaphone 9/Okaphone 15 ⁵⁾		
	Solidification	2 x Okamul PU-V schnell and 1 x Okatmos EG 20		
	Levelling material for Uponor Minitec	Servoplan Ki 1 ³⁾ /Servoplan E 600 ³⁾		
	Decoupling layer	—	—	Okavlies ²⁾
	Adhesive ⁴⁾	Okatmos star 100 Plus, Okatmos star 600, Okatmos star 120, Okatmos star 110	Okatmos star 600, Okatmos EN 30	Bakit EK new, Bakit ESP, Bakit FPK, Bakit PU-1K, Bakit PU-P
Dry screed, e.g. gypsum fibre. Floor elements are screwed down 	Primer	If applicable, Okatmos EG 20/Okatmos DSG		
	Optional: Level out any unevenness	Servoplan Ki 1/Servoplan S 444 – max. layer thickness: 5 mm		
	Optional: Primer	If applicable, Okatmos EG 20/Okatmos DSG		
	Levelling material for Uponor Minitec	Servoplan Ki 1 ^{1) 3)} /Servoplan E 600 ^{1) 3)}		
	Decoupling layer	—	—	Okavlies ²⁾
	Adhesive ⁴⁾	Okatmos star 100 Plus, Okatmos star 600, Okatmos star 120, Okatmos star 110	Okatmos star 600, Okatmos EN 30	Bakit EK new, Bakit ESP, Bakit FPK, Bakit PU-1K, Bakit PU-P

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
	 IC0000064	 IC0000065	 IC0000066	 IC0000067	 IC0000068
	≥ 15 mm	≥ 2 hours	After 1 day/for 2 days 1 day at 25 °C/1 day at 45 °C supply temperature	1 day after functional heating	≥ 3 days

1. If the floor covering places higher requirements on the level tolerances than specified in DIN 18202 Table 3, Part 3, a thin layer of filler may need to be applied
2. Bonded with the same adhesive used on the parquet which is to be bonded
3. Depending on the construction, hairline cracks may form within the integrated levelling material after the functional/readily for covering heating
4. Max. field sizes 25 m²
5. Bonded with Bakit EK new, Bakit FPK, Bakit ESP, Bakit PU 1-K, Bakit PU-P

10 Knauf

		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Composite construction with existing substrate					
Screed 	Preparation of the substrate	2 x Knauf screed primer diluted 1:1 with water	2 x Knauf screed primer diluted 1:1 with water	2 x Knauf screed primer diluted 1:1 with water	2 x Knauf screed primer diluted 1:1 with water
	Levelling material for Uponor Minitec	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430
Tiles 	Preparation of the substrate	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²
	Levelling material for Uponor Minitec	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430
Wood planks, chipboard 	Preparation of the substrate	Seal any joints Knauf special adhesive primer Knauf N 320 Flex 2 mm	Seal any joints Knauf special adhesive primer Knauf N 320 Flex 2 mm	Seal any joints Knauf special adhesive primer Knauf N 320 Flex 2 mm	Seal any joints Knauf special adhesive primer Knauf N 320 Flex 2 mm
	Levelling material for Uponor Minitec	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430
Poured asphalt²⁾ 	Preparation of the substrate	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²	2 x Knauf FE impregnation + coarse sand 0.5-1.2 mm, fill up with approx. 1.5 kg/m²
	Levelling material for Uponor Minitec	Knauf N 440 ¹⁾ Knauf N 430	Knauf N 440 ¹⁾ Knauf N 430	Knauf N 440 ¹⁾ Knauf N 430	Knauf N 440 ¹⁾ Knauf N 430
Concrete floor 	Preparation of the substrate	Sand off and vacuum clean 2 x Knauf screed primer diluted 1:1 with water	Sand off and vacuum clean 2 x Knauf screed primer diluted 1:1 with water	Sand off and vacuum clean 2 x Knauf screed primer diluted 1:1 with water	Sand off and vacuum clean 2 x Knauf screed primer diluted 1:1 with water
	Levelling material for Uponor Minitec	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430	Knauf N 440 Knauf N 430
Gypsum fiber boards 	Preparation of the substrate	1 x Knauf screed primer diluted 1:1 with water	1 x Knauf screed primer diluted 1:1 with water	1 x Knauf screed primer diluted 1:1 with water	1 x Knauf screed primer diluted 1:1 with water
	Levelling material for Uponor Minitec	Knauf N 440	Knauf N 440	Knauf N 440	Knauf N 440
Composite construction with existing substrate					
Decoupling layer 	Preparation of the substrate	Knauf Schrenzlage Wood fibre insulation up to 20 mm EPS DEO insulation up to 40 mm	Knauf Schrenzlage Wood fibre insulation up to 20 mm EPS DEO insulation up to 40 mm	Knauf Schrenzlage Wood fibre insulation up to 20 mm EPS DEO insulation up to 40 mm	Knauf Schrenzlage Wood fibre insulation up to 20 mm EPS DEO insulation up to 40 mm
	Levelling material for Uponor Minitec	Knauf N 440 (tile edge length max. 60 cm)	Knauf N 440 (natural stone edge length max. 40 cm)	Knauf N 440 (mosaic and multi-layer parquet can be bonded, other types of parquet on request)	Knauf N 440 (possible levelling with Knauf N 410 after previous priming with Knauf screed primer which has been diluted 1:1 with water)

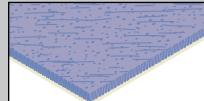
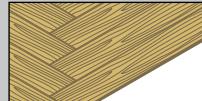
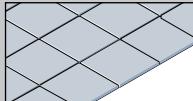
	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
	 IC000064	 IC000065	 IC000066	 IC000067	 IC000068
Knauf N 430	≥ 16 mm in composite	≥ 3 hours	With accessibility/for 6 days	1 day after functional heating	≥ 7 days
Knauf N 440	≥ 20 mm in composite	≥ 5 hours	After 2 days/for 4 days	1 day after functional heating	≥ 7 days
Knauf N 440	≥ 32 mm on separation layer / decoupling layer	≥ 5 hours	After 2 days/for 4 days	1 day after functional heating	≥ 9 days

1) Always leave approx. 24 hours waiting time between applying the primer and the levelling material

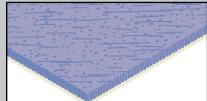
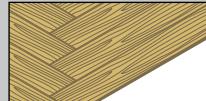
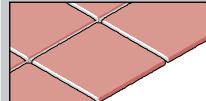
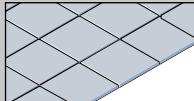
2) Not suitable as a substrate in cases of plastic deformation

11 Mapei

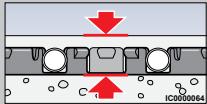
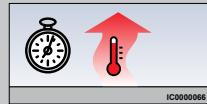
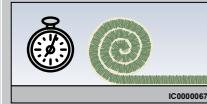
 MAPEI 		New floor covering			
		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Primer	Eco Prim T Plus; diluted 1:3 with water to CT Eco Prim T Plus; diluted 1:2 with water to CA	Eco Prim T Plus; diluted 1:3 with water to CT Eco Prim T Plus; diluted 1:2 with water to CA	Eco Prim T Plus; diluted 1:3 with water to CT Eco Prim T Plus; diluted 1:2 with water to CA	Eco Prim T Plus; diluted 1:3 with water to CT Eco Prim T Plus; diluted 1:2 with water to CA
	Levelling material for Uponor Minitec	Ultraplan Maxi Planitex PRO	Ultraplan Maxi Planitex PRO	Ultraplan Xtra Planitex Fast	Ultraplan Xtra Planitex Fast
	Intermediate priming on Planitex PRO	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	—	—
	Adhesive	Keraflex Maxi S1 Keraflex Vario Quick S1 Ultralite S1 Ultralite S1 Quick Ultralite S2 Ultralite S2 Quick	Mapestone 1 Elastorapid	Ultrabond Eco S968 1K (Solid parquet) Ultrabond Eco S948 1K (Sandwich parquet)	Ultrabond Eco 4 LVT (Design cover) Ultrabond Eco V4 SP (PVC) Ultrabond Eco V4 SP (Kautschuk) Ultrabond Eco 530 (Linoleum) Ultrabond Eco TX3 (Textile)
	Grout	Ultracolor Plus	Ultracolor Plus	Ultracoat Binder	Flexcolor 4 LVT (Design cover, optional)
	Surface protection			Ultracoat HT 2K (Varnish) Ultracoat Oil Wax (Oil)	
	Silicone/sealant	Mapesil AC	Mapesil LM		
Tiles 	Primer	Eco Prim Grip Plus	Eco Prim Grip Plus	Eco Prim Grip Plus	Eco Prim Grip Plus
	Levelling material for Uponor Minitec	Ultraplan Maxi Planitex Pro	Ultraplan Maxi Planitex Pro	Ultraplan Xtra Planitex Fast	Ultraplan Xtra Planitex Fast
	Intermediate priming on Planitex PRO	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	—	—
	Adhesive	Keraflex Maxi S1 Keraflex Vario Quick S1 Ultralite S1 Ultralite S1 Quick Ultralite S2 Ultralite S2 Quick	Mapestone 1 Elastorapid	Ultrabond Eco S968 1K (Solid parquet) Ultrabond Eco S948 1K (Sandwich parquet)	Ultrabond Eco 4 LVT (Design cover) Ultrabond Eco V4 SP (PVC) Ultrabond Eco V4 SP (Kautschuk) Ultrabond Eco 530 (Linoleum) Ultrabond Eco TX3 (Textile)
	Grout	Ultracolor Plus	Ultracolor Plus	Ultracoat Binder	Flexcolor 4 LVT (Design cover, optional)
	Surface protection			Ultracoat HT 2K (Varnish) Ultracoat Oil Wax (Oil)	


New floor covering


Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Silicone/sealant	Mapesil AC	Mapesil LM		
	Primer	Primer MF EC Plus + quartz sand 0.7 mm	Primer MF EC Plus + quartz sand 0.7 mm	Planipatch Xtra + Latex Plus, followed by Eco Prim T Plus (diluted 1:2 with water)	Planipatch Xtra + Latex Plus, followed by Eco Prim T Plus (diluted 1:2 with water)
	Levelling material for Uponor Minitec	Fiberplan Xtra Planitex Pro + Mapefibre 6 mm	Fiberplan Xtra Planitex Fast + Mapefibre 6 mm	Fiberplan Xtra Planitex Fast + Mapefibre 6 mm	Fiberplan Xtra Planitex Fast + Mapefibre 6 mm
	Intermediate priming on Planitex PRO	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	—	—
	Adhesive	Ultralite S2 Ultralite S2 Quick	Elastorapid	Ultrabond Eco S968 1K (Solid parquet) Ultrabond Eco S948 1K (Sandwich parquet)	Ultrabond Eco 4 LVT (Design cover) Ultrabond Eco V4 SP (PVC) Ultrabond Eco V4 SP (Kautschuk) Ultrabond Eco 530 (Linoleum) Ultrabond Eco TX3 (Textile)
	Grout	Ultracolor Plus	Ultracolor Plus	Ultracoat Binder	Flexcolor 4 LVT (Design cover, optional)
	Surface protection			Ultracoat HT 2K (Varnish) Ultracoat Oil Wax (Oil)	
	Silicone/sealant	Mapesil AC	Mapesil LM		
	Primer	Eco Prim T Plus, diluted 1:1 with water	Eco Prim T Plus, diluted 1:1 with water	Eco Prim T Plus, diluted 1:1 with water	Eco Prim T Plus, diluted 1:1 with water
	Levelling material for Uponor Minitec	Planitex Pro	Planitex Pro	Planitex Fast	Planitex Fast
	Intermediate priming on Planitex PRO	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling.	—	—
	Adhesive	Ultralite S2 Ultralite S2 Quick	Elastorapid	Ultrabond Eco S968 1K (Solid parquet) Ultrabond Eco S948 1K (Sandwich parquet)	Ultrabond Eco 4 LVT (Design cover) Ultrabond Eco V4 SP (PVC) Ultrabond Eco V4 SP (Kautschuk) Ultrabond Eco 530 (Linoleum) Ultrabond Eco TX3 (Textile)
	Grout	Ultracolor Plus	Ultracolor Plus	Ultracoat Binder	Flexcolor 4 LVT (Design cover, optional)
	Surface protection			Ultracoat HT 2K (Varnish) Ultracoat Oil Wax (Oil)	
	Silicone/sealant	Mapesil AC	Mapesil LM		
Concrete floor without rising damp	Primer	Eco Prim T Plus, diluted 1:3 with water	Eco Prim T Plus, diluted 1:3 with water	Primer MF EC Plus + quartz sand 1.2 mm	Primer MF EC Plus + quartz sand 1.2 mm


New floor covering


Existing substrate	Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Levelling material for Uponor Minitec —	Ultraplan Maxi —	Ultraplan Maxi —	Ultraplan Xtra —
	Adhesive Keraflex Maxi S1 Keraflex Vario Quick S1 Ultralite S1 Ultralite S1 Quick Ultralite S2 Ultralite S2 Quick	Mapestone 1 Elastorapid	Ultrabond Eco S968 1K (Solid parquet) Ultrabond Eco S948 1K (Sandwich parquet)	Ultrabond Eco 4 LVT (Design cover) Ultrabond Eco V4 SP (PVC) Ultrabond Eco V4 SP (Kautschuk) Ultrabond Eco 530 (Linoleum) Ultrabond Eco TX3 (Textile)
	Grout Surface protection	Ultracolor Plus Ultracoat HT 2K (Varnish) Ultracoat Oil Wax (Oil)	Ultracoat Binder	Flexcolor 4 LVT (Design cover, optional)
	Silicone/sealant Primer Levelling material for Uponor Minitec Intermediate priming on Planitex PRO Adhesive	Mapesil AC Eco Prim T Plus, diluted 1:2 with water Planitex Pro Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling. Ultralite S2 Ultralite S2 Quick	Mapesil LM Eco Prim T Plus, diluted 1:2 with water Planitex Pro Eco Prim T Plus, diluted 1:2 with water. When laying tiles over 1600 cm ² , it is necessary to prime with Primer MF EC Plus + quartz sand sprinkling. Elastorapid	Eco Prim T Plus, diluted 1:2 with water Planitex Fast — Ultrabond Eco S968 1K (Solid parquet) Ultrabond Eco S948 1K (Sandwich parquet) Ultrabond Eco 4 LVT (Design cover) Ultrabond Eco V4 SP (PVC) Ultrabond Eco V4 SP (Kautschuk) Ultrabond Eco 530 (Linoleum) Ultrabond Eco TX3 (Textile)
	Grout Surface protection	Ultracolor Plus Ultracoat HT 2K (Varnish) Ultracoat Oil Wax (Oil)	Ultracoat Binder	Flexcolor 4 LVT (Design cover, optional)
	Silicone/sealant	Mapesil AC	Mapesil LM	

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
	 IC000064	 IC000065	 IC000066	 IC000067	 IC000068
Ultraplan Xtra	≥ 15 mm	≥ 2 hours	After 3 days/duration 7 days	After functional heating	Approx. 10 days
Ultraplan Maxi	≥ 15 mm	≥ 3 hours	After 3 days/duration 7 days	After functional heating	Approx. 10 days
Planitex Fast	≥ 15 mm	≥ 1 hour	After 3 days/duration 7 days	After functional heating	Approx. 10 days
Planitex Pro	≥ 15 mm	≥ 1 hour	After 3 days/duration 7 days	After functional heating	Approx. 10 days

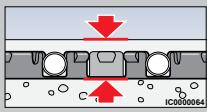
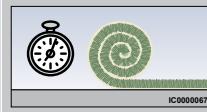
*) For tile sizes over 1,2 m², S2 adhesive mortars should generally be used.

**) Except for solid floor boards and wood paving. With gypsum fibre boards and wooden sub-floors, an additional decoupling layer may be necessary for solid parquet. In this case please consult the application technology department.

12 PCI

PCI®		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Primer	PCI Gisogrund 404 ²⁾	PCI Gisogrund 404 ²⁾	VG 2 universal primer ²⁾	VG 2 universal primer ²⁾
	Levelling material for Uponor Minitec	PCI Periplan Extra	PCI Periplan Extra	HSP 34 wooden floor filler	HSP 34 wooden floor filler
	Adhesive	PCI Nanoflott light/ PCI Rapidflott	PCI Carraflex/ PCI Carraflott NT	PAR 362 powder parquet adhesive/ PAR 365 MS parquet adhesive	UKL 302 universal floor adhesive
Tiles 	Grout	PCI Rapidfug	PCI Carrafug		
	Primer	PCI Gisogrund 404	PCI Gisogrund 404	VG 2 universal primer	VG 2 universal primer
	Levelling material for Uponor Minitec	PCI Perifplan Extra	PCI Perifplan Extra	HSP 34 wooden floor filler	HSP 34 wooden floor filler
	Adhesive	PCI Nanoflott light/ PCI Rapidflott	PCI Carraflex/ PCI Carraflott NT	PAR 362 powder parquet adhesive/ PAR 365 MS parquet adhesive	UKL 302 universal floor adhesive
Wood planks, installation boards 	Grout	PCI Rapidfug	PCI Carrafug		
	Primer	PCI Gisogrund 404	PCI Gisogrund 404	VG 2 universal primer	VG 2 universal primer
	Levelling material for Uponor Minitec	PCI Periplan Extra	PCI Periplan Extra	HSP 34 wooden floor filler	HSP 34 wooden floor filler
	Adhesive	PCI Nanoflott light/ PCI Rapidflott	PCI Carraflex/ PCI Carraflott NT	PAR 362 powder parquet adhesive/ PAR 365 MS parquet adhesive	UKL 302 universal floor adhesive
Poured asphalt 	Grout	PCI Rapidfug	PCI Carrafug		
	Primer/sanding	PCI Epoxigrund 390 + Quartz sand 0.3-0.8 mm	PCI Epoxigrund 390 + Quartz sand 0.3-0.8 mm	VG 7 Epoxy primer Quartz sand 0.3-0.8 mm	VG 7 Epoxy primer Quartz sand 0.3-0.8 mm
	Filler layer	PCI Periplan fine, approx. 2-3 mm	PCI Periplan fine, approx. 2-3 mm	USP 32 universal filler approx. 2-3 mm	USP 32 universal filler approx. 2-3 mm
	Primer	PCI Gisogrund 404	PCI Gisogrund 404	VG 2 universal primer	VG 2 universal primer
	Levelling material for Uponor Minitec	PCI Periplan Extra < 17 mm	PCI Periplan Extra < 17 mm	HSP 34 wooden floor filler < 17 mm	HSP 34 wooden floor filler < 17 mm
	Adhesive	PCI Nanoflott light/ PCI Rapidflott	PCI Carraflex/ PCI Carraflott NT	PAR 362 powder parquet adhesive/ PAR 365 MS parquet adhesive	UKL 302 universal floor adhesive
Concrete floor 	Grout	PCI Rapidfug	PCI Carrafug		
	Primer	PCI Gisogrund 404 or PCI Epoxigrund 390 ²⁾	PCI Gisogrund 404 or PCI Epoxigrund 390 ²⁾	VG 2 universal primer VG 7 epoxy primer ²⁾	VG 2 universal primer VG 7 epoxy primer ²⁾
	Levelling material for Uponor Minitec	PCI Periplan Extra min. 5 mm above pipe	PCI Periplan Extra min. 5 mm above pipe	HSP 34 wooden floor filler HSP 34 min. 5 mm above pipe	HSP 34 wooden floor filler HSP 34 min. 5 mm above pipe
	Adhesive	PCI Nanoflott light/ PCI Rapidflott	PCI Carraflex/ PCI Carraflott NT	PAR 362 powder parquet adhesive/ PAR 365 MS parquet adhesive	UKL 302 universal floor adhesive
Gypsum fiber boards 	Grout	PCI Rapidfug	PCI Carrafug		
	Primer	PCI Gisogrund 404	PCI Gisogrund 404	VG 2 universal primer	VG 2 universal primer
	Create a flat surface	PCI Periplan Extra min. 3 mm	PCI Periplan Extra min. 3 mm	HSP 34 wooden floor filler HSP 34 min. 3 mm	HSP 34 wooden floor filler HSP 34 min. 3 mm
	Primer	PCI Gisogrund 404	PCI Gisogrund 404	VG 2 universal primer	VG 2 universal primer

		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Levelling material for Uponor Minitec	PCI Periplan Extra min. 5 mm above pipe	PCI Periplan Extra min. 5 mm above pipe	HSP 34 wooden floor filler HSP 34 min. 5 mm above pipe	HSP 34 wooden floor filler HSP 34 min. 5 mm above pipe	HSP 34 wooden floor filler HSP 34 min. 5 mm above pipe
Adhesive	PCI Nanoflott light/ PCI Rapidflott	PCI Carraflex/ PCI Carrafrott NT	PAR 362 powder parquet adhesive/ PAR 365 MS parquet adhesive	UKL 302 universal floor adhesive	
Grout	PCI Rapidfug	PCI Carrafug			

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
	 $\geq 15 \text{ mm}$	 $\geq 3 \text{ hours}$	 After 1 day/for 2 days 1-3*)	 After cooling the filling material to room temperature again after the functional heating	 $\geq 3 \text{ days}$

1. *) Start with a supply temperature of +25 °C and heat at this temperature for a period of 24 hours.

2. *) Heat for another 24 hours with the maximum permissible supply temperature.

3. *) Turn off the heating.

1) The substrate has to be dry, firm, free of cracks, weight-bearing, free of dust and clean. Oil stains, surfaces reducing adhesion and impurities are to be removed thoroughly.

The substrate has to be prepared correctly, depending on its condition, by means of the suitable measures, e.g. sanding, shot-blasting (milling, if appropriate) and vacuum cleaning with an industrial vacuum cleaner.

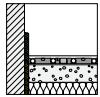
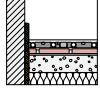
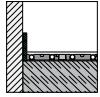
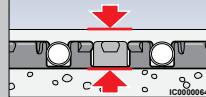
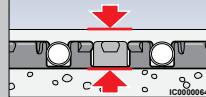
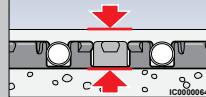
- Tiles/boards which do not adhere firmly must be removed and imperfections must be levelled out with PCI Rapidflott.
- Wooden substrates are to be sanded and vacuum cleaned thoroughly.
- The joints of chipboards/OSB boards have to be glued.
- Loose, springing or creaking boards are to be fastened by screwing them down.
- Joints, cracks and holes in wooden substrates are to be closed, e.g. with acrylic sealant.
- Existing cover bonding residues are to be sanded carefully.
- Any remaining residues have to be clean and load-bearing, and must also adhere firmly to the substrate. There may be no remaining loose adhesive residues.
- The specifications in the relevant technical data sheets must be observed!

2) In the case of excessive residual moisture from cement substrates up to 5 CM %, PCI Epoxygrund 390 or VG 7 Epoxy pre-coating must be used (apply twice and sprinkle the second application with quartz sand).

3) Uponor Minitec cannot be used for cooling under parquet/laminate!

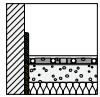
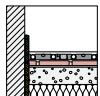
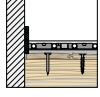
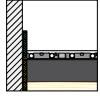
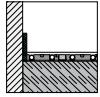
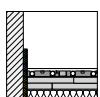
4) If the floor covering places higher requirements on the level tolerances than specified in DIN 18202 Table 3, Line 3, a thin layer of a suitable PCI floor levelling compound may need to be applied before the covering is laid.

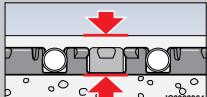
13 Quick-Mix

quick-mix		New floor covering																					
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC																		
Screed 	Primer	HE Bonding emulsion, and with anhydrite substrates EG epoxy resin primer and sand	HE Bonding emulsion, and with anhydrite substrates EG epoxy resin primer and sand	HE Bonding emulsion, and with anhydrite substrates EG epoxy resin primer and sand	HE Bonding emulsion, and with anhydrite substrates EG epoxy resin primer and sand																		
	Levelling material for Uponor Minitec	Renovating screed RE 50	Renovating screed RE 50	Renovating screed RE 50	Renovating screed RE 50																		
	Sealing			ESA epoxy resin protective coating	ESA epoxy resin protective coating																		
	Adhesive	Flexkleber FX 900/ Flexkleber FX 930	Marmorkleber MK 900/ Marmorkleber schnell MK 911																				
	Grout	Flexfuge FF 911	Marmorfuge MF 911																				
Tiles 	Primer	Quartz primer QG or Epoxy resin primer EG and sand	Quartz primer QG or Epoxy resin primer EG and sand	Quartz primer QG or Epoxy resin primer EG and sand	Quartz primer QG or Epoxy resin primer EG and sand																		
	Levelling material for Uponor Minitec	Renovating screed RE 50	Renovating screed RE 50	Renovating screed RE 50	Renovating screed RE 50																		
	Sealing			ESA epoxy resin protective coating	ESA epoxy resin protective coating																		
	Adhesive	Flexkleber FX 900/ Flexkleber FX 930	Marmorkleber MK 900/ Marmorkleber schnell MK 911																				
	Grout																						
Concrete floor 	Preparation of the substrate	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean																		
	Primer	Bonding emulsion HE, or epoxy resin primer EG and sand	Bonding emulsion HE, or epoxy resin primer EG and sand	Bonding emulsion HE, or epoxy resin primer EG and sand	Bonding emulsion HE, or epoxy resin primer EG and sand																		
	Levelling material for Uponor Minitec	Renovating screed RE 50	Renovating screed RE 50	Renovating screed RE 50	Renovating screed RE 50																		
	Sealing			ESA epoxy resin protective coating	ESA epoxy resin protective coating																		
	Adhesive	Flexkleber FX 900/ Flexkleber FX 930	Marmorkleber MK 900/ Marmorkleber schnell MK 911																				
	Grout	Flexfuge FF 911	Marmorfuge MF 911																				
<table border="1"> <thead> <tr> <th></th> <th>Structure height</th> <th>Accessibility</th> <th>Functional heating period</th> <th>Readiness for covering</th> <th>Total period</th> </tr> </thead> <tbody> <tr> <td> IC0000064</td> <td>≥ 32 mm</td> <td> IC0000065</td> <td> IC0000066</td> <td> IC0000067</td> <td> IC0000068</td> </tr> <tr> <td>quick-mix¹⁾</td> <td>≥ 32 mm</td> <td>+ ≥ 1 day</td> <td>After 1 day/for 2 days</td> <td>2 days after functional heating</td> <td>≥ 6 days</td> </tr> </tbody> </table>							Structure height	Accessibility	Functional heating period	Readiness for covering	Total period	 IC0000064	≥ 32 mm	 IC0000065	 IC0000066	 IC0000067	 IC0000068	quick-mix ¹⁾	≥ 32 mm	+ ≥ 1 day	After 1 day/for 2 days	2 days after functional heating	≥ 6 days
	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period																		
 IC0000064	≥ 32 mm	 IC0000065	 IC0000066	 IC0000067	 IC0000068																		
quick-mix ¹⁾	≥ 32 mm	+ ≥ 1 day	After 1 day/for 2 days	2 days after functional heating	≥ 6 days																		

- If the floor covering places higher requirements on the level tolerances than specified in DIN 18202 Table 3, Row 3, a thin layer of filler may need to be applied

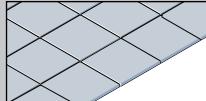
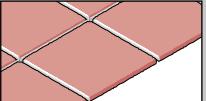
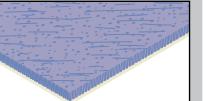
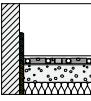
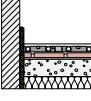
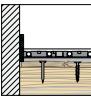
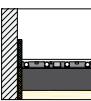
14 Sakret

		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Primer	SAKRET UG	SAKRET UG	SAKRET UG	SAKRET UG
	Levelling material for Uponor Minitec	SAKRET MAM, SAKRET ZFE fast	SAKRET MAM, SAKRET ZFE fast	SAKRET MAM	SAKRET MAM
	Adhesive	SAKRET FBM, SAKRET PF	SAKRET KSK, SAKRET PF-Fast		
	Grout	SAKRET CFF elegance, SAKRET FFM	SAKRET NKF		
Tiles 	Primer	SAKRET SHG	SAKRET SHG	SAKRET SHG	SAKRET SHG
	Levelling material for Uponor Minitec	SAKRET MAM, SAKRET ZFE fast	SAKRET MAM, SAKRET ZFE fast	SAKRET MAM	SAKRET MAM
	Adhesive	SAKRET FBM, SAKRET PF	SAKRET KSK, SAKRET PF-Fast		
	Grout	SAKRET CFF elegance, SAKRET FFM	SAKRET NKF		
Wood planks, chipboards, dry screed 	Primer	SAKRET UG, SAKRET MHG fast	SAKRET UG, SAKRET MHG fast	SAKRET UG, SAKRET MHG fast	SAKRET UG, SAKRET MHG fast
	Levelling material for Uponor Minitec	SAKRET LSM	SAKRET LSM	SAKRET LSM	SAKRET LSM
	Decoupling layer	SAKRET MFG	SAKRET MFG		
	Adhesive	SAKRET FBM	SAKRET KSK		
	Grout	SAKRET CFF elegance, SAKRET FFM	SAKRET NKF		
Poured asphalt 	Decoupling layer	SAKRET FDS	SAKRET FDS	SAKRET FDS	SAKRET FDS
	Levelling material for Uponor Minitec	SAKRET LSM	SAKRET LSM	SAKRET LSM	SAKRET LSM
	Adhesive	SAKRET FBM	SAKRET KSK		
	Grout	SAKRET CFF elegance, SAKRET FFM	SAKRET NKF		
Concrete floor 	Primer	SAKRET UG	SAKRET UG	SAKRET UG	SAKRET UG
	Levelling material for Uponor Minitec	SAKRET MAM, SAKRET ZFE fast	SAKRET MAM, SAKRET ZFE fast	SAKRET MAM	SAKRET MAM
	Adhesive	SAKRET FBM, SAKRET PF	SAKRET KSK, SAKRET PF-Fast		
	Grout	SAKRET CFF elegance, SAKRET FFM	SAKRET NKF		
Gypsum fiber boards 	Primer	SAKRET UG	SAKRET UG	SAKRET UG	SAKRET UG
	Levelling material for Uponor Minitec	SAKRET MAM	SAKRET MAM	SAKRET MAM	SAKRET MAM
	Adhesive	SAKRET FBM	SAKRET KSK		
	Grout	SAKRET CFF elegance, SAKRET FFM	SAKRET NKF		

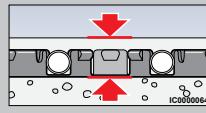
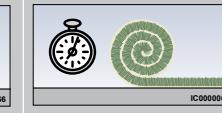
	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
SAKRET	 $\geq 15 \text{ mm}$	 $\geq 3 \text{ hours}$	 After 2 days/for 2 days 1 day at 25 °C/1 day at 45 °C supply temperature	 1 day after functional heating	Σ  $\geq 5 \text{ days}$

Field sizes of 30 m² with a maximum side length of 6 m should not be exceeded

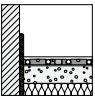
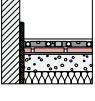
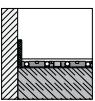
15 Schönox

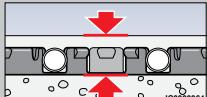
		New floor covering			
					
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Primer	SCHÖNOX KH 1:5 (CT) or SCHÖNOX KH 1:1 (CAF)	SCHÖNOX KH 1:5 (CT) or SCHÖNOX KH 1:1 (CAF)	SCHÖNOX VD 1:3 (CT) or SCHÖNOX VD 1:1 (CAF)	SCHÖNOX VD 1:3 (CT) or SCHÖNOX VD 1:1 (CAF)
	Levelling material for Uponor Minitec	SCHÖNOX SPF	SCHÖNOX SPF	SCHÖNOX ADE	SCHÖNOX ADE ¹⁾
	Thin-bed mortar, adhesive	SCHÖNOX TT S8	SCHÖNOX Q9 W	SCHÖNOX MS-ELASTIC	e.g. SCHÖNOX EMICLASSIC
	Grout	SCHÖNOX SU	SCHÖNOX SU SCHÖNOX UF PREMIUM		
	Preparation	Basic cleaner, black pad, sand off if needed	Basic cleaner, black pad, sand off if needed	Basic cleaner, black pad, sand off if needed	Basic cleaner, black pad, sand off if needed
	Primer	SCHÖNOX SHP	SCHÖNOX SHP	SCHÖNOX SHP	SCHÖNOX SHP
	Levelling material for Uponor Minitec	SCHÖNOX SPF	SCHÖNOX SPF	SCHÖNOX ADE	SCHÖNOX ADE A ¹⁾
	Thin-bed mortar, adhesive	SCHÖNOX TT S8	SCHÖNOX Q9 W	SCHÖNOX MS-ELASTIC	e.g. SCHÖNOX EMICLASSIC
	Grout	SCHÖNOX SU	SCHÖNOX SU SCHÖNOX UF PREMIUM		
	Preparation	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean
	Primer	SCHÖNOX KF pur	SCHÖNOX KF pur	SCHÖNOX VD pur	SCHÖNOX VD pur
	Possible levelling material for wooden planks	SCHÖNOX SPF + SCHÖNOX PZG	SCHÖNOX SPF + SCHÖNOX PZG	SCHÖNOX AP-FASER	SCHÖNOX AP-FASER
	Primer	Without primer	Without primer	SCHÖNOX VD 1:1	SCHÖNOX VD 1:1
	Adhesive for decoupling layer	N/A	N/A	SCHÖNOX FS/SCHÖNOX TT S8	SCHÖNOX FS/SCHÖNOX TT S8
	Decoupling layer	N/A	N/A	SCHÖNOX EDP min. 4 mm	SCHÖNOX EDP min. 4 mm
	Levelling material for Uponor Minitec	SCHÖNOX SPF	SCHÖNOX SPF	SCHÖNOX ADE	SCHÖNOX ADE
	Thin-bed mortar, adhesive	SCHÖNOX SEK	SCHÖNOX Q9 W	SCHÖNOX MS-ELASTIC	e.g. SCHÖNOX EMICLASSIC
	Grout	SCHÖNOX SU	SCHÖNOX SU SCHÖNOX UF PREMIUM		
	Primer (is only to be used for renovations)	SCHÖNOX SHP	SCHÖNOX SHP	SCHÖNOX SHP	SCHÖNOX SHP
	Filler layer	SCHÖNOX AP	SCHÖNOX AP	SCHÖNOX AP	SCHÖNOX AP
	Primer	SCHÖNOX KH 1:1	SCHÖNOX KH 1:1	SCHÖNOX VD 1:1	SCHÖNOX VD 1:1
	Adhesive for decoupling layer	SCHÖNOX TT S8	SCHÖNOX TT S8	SCHÖNOX FS/SCHÖNOX TT S8	SCHÖNOX FS/SCHÖNOX TT S8
	Decoupling layer	SCHÖNOX EDP min. 9 mm	SCHÖNOX EDP min. 9 mm	SCHÖNOX EDP min. 9 mm	SCHÖNOX EDP min. 9 mm
	Levelling material for Uponor Minitec	SCHÖNOX ADE	SCHÖNOX ADE	SCHÖNOX ADE	SCHÖNOX ADE
	Primer	SCHÖNOX EG ²⁾ or SCHÖNOX GEA ²⁾	SCHÖNOX EG ²⁾ or SCHÖNOX GEA ²⁾	Without primer	Without primer
	Thin-bed mortar, adhesive	SCHÖNOX TT S8	SCHÖNOX Q9 W	SCHÖNOX MS-ELASTIC	e.g. SCHÖNOX EMICLASSIC
	Grout	SCHÖNOX SU	SCHÖNOX SU SCHÖNOX UF PREMIUM		

		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Concrete floor 	Primer	SCHÖNOX KH 1:3	SCHÖNOX KH 1:3	SCHÖNOX VD 1:3	SCHÖNOX VD 1:3
	Levelling material for Uponor Minitec	SCHÖNOX SPF	SCHÖNOX SPF	SCHÖNOX ADE	SCHÖNOX ADE ¹⁾
	Thin-bed mortar, adhesive	SCHÖNOX TT S8	SCHÖNOX Q9 W	SCHÖNOX MS-ELASTIC	e.g. SCHÖNOX EMICLASSIC
	Grout	SCHÖNOX SU	SCHÖNOX SU SCHÖNOX UF PREMIUM		
Gypsum fiber boards 	Preparation	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean	Sand off and vacuum clean
	Create a flat surface	SCHÖNOX SP	SCHÖNOX SP	SCHÖNOX AP-FASER	SCHÖNOX AP-FASER
	Primer	Without primer	Without primer	SCHÖNOX VD 1:1	SCHÖNOX VD 1:1
	Adhesive for decoupling layer	SCHÖNOX TT S8	SCHÖNOX TT S8	SCHÖNOX FS SCHÖNOX TT S8 SCHÖNOX PFK	SCHÖNOX FS SCHÖNOX TT S8 SCHÖNOX PFK
	Decoupling layer	SCHÖNOX EDP min. 4 mm	SCHÖNOX EDP min. 4 mm	SCHÖNOX EDP min. 4 mm	SCHÖNOX EDP min. 4 mm
	Levelling material for Uponor Minitec	SCHÖNOX SPF	SCHÖNOX SPF	SCHÖNOX ADE	SCHÖNOX ADE ¹⁾
	Thin-bed mortar, adhesive	SCHÖNOX TT S8	SCHÖNOX Q9 W	SCHÖNOX MS-ELASTIC	e.g. SCHÖNOX EMICLASSIC
	Grout	SCHÖNOX SU	SCHÖNOX SU SCHÖNOX UF PREMIUM		

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
Schönox ADE	 ≥ 15 mm (pipe covering by the filled layer min. 3 mm)	 ≥ 4 hours	 1 day after application: 25 °C Day 2 to 9: 45 °C (full load) Day 10: Switching off	 1 to 3 days after functional heating (≤ 1.0 CM-%, measurement required). Surface temperature = room temperature or ≤ 23 °C	 ≥ 5 days
Schönox SPF	 ≥ 15 mm (pipe covering by the filled layer min. 3 mm)	≥ 4 hours	Day 3 after application: 25 °C Day 4 to 7: 45 °C (full load) Day 8: Switching off	1 day after functional heating (≤ 1.0 CM-%, measurement required). Surface temperature = room temperature or ≤ 23 °C	

16 Sopro

		New floor covering			
		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Existing substrate					
	Primer	Sopro Multigrund MGR 637			
	Levelling material for Uponor Minitec	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel
	Adhesive	Sopro's No.1 Sopro VarioFlex XL	Sopro Marmor-FlexKleber	Suitable bonding agent for the respective covering	Suitable bonding agent for the respective covering
	Grout	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge		
	Primer	Sopro HaftPrimer S	Sopro HaftPrimer S	Sopro HaftPrimer S	Sopro HaftPrimer S
	Levelling material for Uponor Minitec	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel
	Adhesive	Sopro's No.1 Sopro VarioFlex XL	Sopro Marmor-FlexKleber	Suitable bonding agent for the respective covering	Suitable bonding agent for the respective covering
	Grout	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge		
	Primer	Sopro Primer	Sopro Primer	Sopro Primer	Sopro Primer
	Decoupling layer	Sopro Fliesen-DämmPlatte (laid with Sopro Flexkleber)			
	Levelling material for Uponor Minitec	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel
	Adhesive	Sopro's No.1 Sopro VarioFlex XL	Sopro Marmor-FlexKleber	Suitable bonding agent for the respective covering	Suitable bonding agent for the respective covering
	Grout	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge		
	Primer	Sopro Primer	Sopro Primer	Sopro Primer	Sopro Primer
	Levelling material for Uponor Minitec	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel	Sopro FließSpachtel FS 15 plus Sopro FließSpachtel FS 30 maxi Sopro FaserFließ-Spachtel
	Adhesive	Sopro's No.1 Sopro VarioFlex XL	Sopro Marmor-FlexKleber	Suitable bonding agent for the respective covering	Suitable bonding agent for the respective covering
	Grout	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge	Sopro FlexFuge Sopro Saphir PerlFuge Sopro Brillant PerlFuge		

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
	 IC000064	 IC000065	 IC000066	 IC000067	 IC000068
Sopro	Pipe covering \geq 5 mm	\geq 3 hours	After 2 days/for at least 2 days	1 day after functional heating	\geq 5 days

The respective field sizes should not exceed 40 m². When installing during cold weather, a supply temperature of 15 °C must be maintained. The substrate for laying must be sufficiently stable.

The commissioning of the heating structure is possible after 7 days if rapid adhesives (at least C2) are used. If Flexkleber which harden normally is used (at least C2), then the structure can be commissioned after 14 days.

With the processing of the above-mentioned products, the instructions and guidelines of the corresponding product information must be observed. Building site conditions cannot be entirely recorded in this table.

In individual cases, please request technical advice from Sopro Bauchemie application engineers:

Tel.: +49 (0)611 1707 111, Fax: +49 (0)611 1707 280

17 Stauf

STAUF seit 1828		New floor covering			
		Parquet	Carpet	Linoleum	PVC
Screed in accordance with DIN 18356 and 18365	Primer	VDP 130	VDP 130	VDP 130	VDP 130
	Levelling material for Uponor Minitec	XP 40, XP 20, FZ	XP 20, FZ	XP 20, FZ	XP 20, FZ
	Adhesive	e.g. SMP 930, SMP 950, SPU 460, SPU 570	D 11, D 20	D 8	D 5, D 50, D 20
Cleaned and sanded tiles	Primer	VDP 160, VEP 195 + Sand	VDP 160, VEP 195 + Sand	VDP 160, VEP 195 + Sand	VDP 160, VEP 195 + Sand
	Levelling material for Uponor Minitec	XP 40, XP 20, FZ	XP 20, FZ	XP 20, FZ	XP 20, FZ
	Adhesive	e.g. SMP 930, SMP 950, SPU 460, SPU 570	D 11, D 20	D 8	D 5, D 50, D 20
Wood planks, installation boards	Primer	VDP 130	VDP 130	VDP 130	VDP 130
	Levelling material for Uponor Minitec	XP 40, XP 20, FZ	XP 20, FZ	XP 20, FZ	XP 20, FZ
	Adhesive	e.g. SMP 930, SMP 950, SPU 460, SPU 570	D 11, D 20	D 8	D 5, D 50, D 20
Concrete floor	Primer	VDP 160, VEP 195 + Sand	VDP 160, VEP 195 + Sand	VDP 160, VEP 195 + Sand	VDP 160, VEP 195 + Sand
	Levelling material for Uponor Minitec	XP 40, XP 20, FZ	XP 20, FZ	XP 20, FZ	XP 20, FZ
	Adhesive	e.g. SMP 930, SMP 950, SPU 460, SPU 570	D 11, D 20	D 8	D 5, D 50, D 20

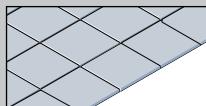
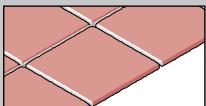
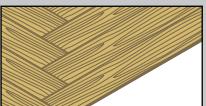
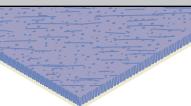
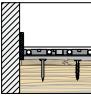
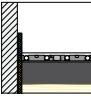
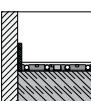
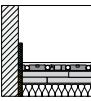
The following applies for all filler materials: min. 3, preferably 6 mm covering, on separation layers min. 20 mm covering.

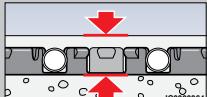
The filler material can additionally be blended with STAUF reinforcement fibres.

The degree of success of laying a floor covering largely depends on the preparation of the corresponding substrate. In accordance with VOB DIN 18356 "Parquet work" and 18365 "Floor covering work", in particular the dryness, evenness and stability must be tested by the layer; the floor covering work must be done according to the generally acknowledged rules of the trade. In addition, the current technical data sheets and the instructions on the labels of our product containers must be observed. In case of any doubt, consult a Stauf application engineer.

The installation instructions provided by the floor covering manufacturer must be observed.

18 Wakol

 New floor covering					
					
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Preparation of the substrate	Sand off and vacuum clean			
	Primer	WAKOL D 3040 pre-coating concentrate/WAKOL D 3035 dispersion-based primer			
	Levelling material for Uponor Minitec	WAKOL Z 670 wooden floor filler/WAKOL Z 615 low-dust, fibre-reinforced levelling material/WAKOL Z 510 thin screed			
	Adhesive		WAKOL MS 260 parquet adhesive, firm-elastic	WAKOL D 3360 VersaTack	
	Preparation of the substrate	Basic cleaning of the fixed tiles with WAKOL R 4514 tile cleaner, sand off and vacuum clean			
	Primer	WAKOL D 3040 pre-coating concentrate/WAKOL D 3035 dispersion-based primer/WAKOL D 3045 special primer			
	Levelling material for Uponor Minitec	WAKOL Z 670 wooden floor filler/WAKOL Z 615 low-dust, fibre-reinforced levelling material/WAKOL Z 510 thin screed			
	Adhesive		WAKOL MS 260 parquet adhesive, firm-elastic	WAKOL D 3360 VersaTack	
	Preparation of the substrate	Sand off and vacuum clean			
	Primer	WAKOL D 3040 pre-coating concentrate/WAKOL D 3035 dispersion-based primer			
	Levelling material for Uponor Minitec	WAKOL Z 670 wooden floor filler/WAKOL Z 615 low-dust, fibre-reinforced levelling material/WAKOL Z 510 thin screed			
	Adhesive		WAKOL MS 260 parquet adhesive, firm-elastic	WAKOL D 3360 VersaTack	
	Preparation of the substrate	Sand off and vacuum clean			
	Primer	WAKOL PU 280 polyurethane pre-coating			
	Adhesive for decoupling layer	WAKOL PU 210 parquet adhesive			
	Decoupling layer	WAKOL RP 109 decoupling panel			
	Levelling material for Uponor Minitec	WAKOL A 620 anhydrite levelling material			
	Adhesive		WAKOL MS 260 parquet adhesive, firm-elastic	WAKOL D 3360 VersaTack	
	Preparation of the substrate	Sand off and vacuum clean			
	Primer	WAKOL PU 280 polyurethane pre-coating + WAKOL S 28 sprinkle sand/WAKOL D 3045 special pre-coating			
	Levelling material for Uponor Minitec	WAKOL Z 670 wooden floor filler/WAKOL Z 615 low-dust, fibre-reinforced levelling material/WAKOL Z 510 thin screed			
	Adhesive		WAKOL MS 260 parquet adhesive, firm-elastic	WAKOL D 3360 VersaTack	
	Preparation of the substrate	Sand off and vacuum clean			
	Primer	WAKOL D 3040 pre-coating concentrate/WAKOL D 3035 dispersion-based primer			
	Levelling material for Uponor Minitec	WAKOL A 620 anhydrite levelling material			
	Adhesive		WAKOL MS 260 parquet adhesive, firm-elastic	WAKOL D 3360 VersaTack	

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
Wakol	 ≥ 15 mm	 ≥ 2.5 hours	 After 2 days/for 2 days	 1 day after functional heating	 ≥ 5 days

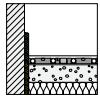
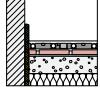
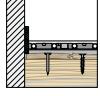
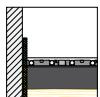
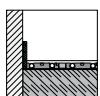
All products are EC1 PLUS or EC1 PLUS R according to the Emicode classification in accordance with the GEV criteria. For details about the classification, please see our homepage.

The different, previously unknown to us, specific site conditions exclude any claim to liability relating to this information. Therefore, we recommend that you perform sufficient in-house tests. The generally acknowledged rules of trade, the currently applicable standards and data sheets, and the installation instructions provided by the floor covering manufacturer are all to be observed. Please observe our processing information in the technical information provided for the respective products. We are available for any questions that you may have and for any building-specific construction recommendations.

With the publication of these recommendations, all previous versions are no longer valid.

Wakol GmbH, Application Technology, Bottendorfer Str. 30, 66954 Pirmasens. T 049 (0)6331 8001-187. Fax: 049 (0)6331 8001-852.
www.wakol.com

19 Weber

		New floor covering			
		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed 	Primer	weber.floor 4716 diluted 1:3 at CT diluted 1:1 at CA	weber.floor 4716 diluted 1:3 at CT diluted 1:1 at CA	weber.floor 4716 diluted 1:3 at CT diluted 1:1 at CA	weber.floor 4716 diluted 1:3 at CT diluted 1:1 at CA
	Levelling material for Uponor Minitec	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160
	Adhesive	weber.xerm 853 F	weber.xerm 864 F	weber.floor 4830, 4835	weber.floor 4805, 4825, 4815
	Grout	weber.fug 875 F	weber.fug 875 F		
Tiles 	Preparation	Sand off with fine paper and vacuum clean	Sand off with fine paper and vacuum clean	Sand off with fine paper and vacuum clean	Sand off with fine paper and vacuum clean
	Primer	weber.floor 4716 diluted 1:1	weber.floor 4716 diluted 1:1	weber.floor 4716 diluted 1:1	weber.floor 4716 diluted 1:1
	Levelling material for Uponor Minitec	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160
	Adhesive	weber.xerm 853 F	weber.xerm 864 F	weber.floor 4830, 4835	weber.floor 4805, 4825, 4815
	Grout	weber.fug 875 F	weber.fug 875 F		
Wooden substrate 	Preparation	Sand off, vacuum clean and seal joints			
	Primer	weber.floor 4716 diluted 1:1 weber.floor 4712 EP priming at chipboards	weber.floor 4716 diluted 1:1 weber.floor 4712 EP priming at chipboards	weber.floor 4716 diluted 1:1 weber.floor 4712 EP priming at chipboards	weber.floor 4716 diluted 1:1 weber.floor 4712 EP priming at chipboards
	Levelling material for Uponor Minitec	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160
	Adhesive	weber.xerm 853 F	weber.xerm 864 F	weber.floor 4830, 4835, 4837	weber.floor 4805, 4825, 4815
	Grout	weber.fug 875 F	weber.fug 875 F		
Poured asphalt 	Preparation	Sand off and vacuum clean if necessary			
	Primer	weber.floor 4716 priming at chipboards weber.floor 4712 EP on smooth GA	weber.floor 4716 priming at chipboards weber.floor 4712 EP on smooth GA	weber.floor 4716 diluted 1:1 on new, sanded GA weber.floor 4712 EP on smooth GA	weber.floor 4716 diluted 1:1 on new, sanded GA weber.floor 4712 EP on smooth GA
	Levelling material for Uponor Minitec	weber.floor 4190	weber.floor 4190	weber.floor 4190	weber.floor 4190
	Adhesive	weber.xerm 853 F	weber.xerm 864 F	weber.floor 4830, 4835	weber.floor 4805, 4825, 4815
	Grout	weber.fug 875 F	weber.fug 875 F		
Concrete floor¹⁾ 	Primer	weber.floor 4716 diluted 1:3 As needed: weber.floor 4712 primer EC 1 in 2 passes with subsequent quartz sand spreading	weber.floor 4716 diluted 1:3 As needed: weber.floor 4712 primer EC 1 in 2 passes with subsequent quartz sand spreading	weber.floor 4716 diluted 1:3 As needed: weber.floor 4712 primer EC 1 in 2 passes with subsequent quartz sand spreading	weber.floor 4716 diluted 1:3 As needed: weber.floor 4712 primer EC 1 in 2 passes with subsequent quartz sand spreading

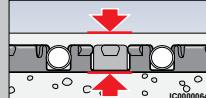
		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
	Levelling material for Uponor Minitec	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160	weber.floor 4320 with weber.floor 4945 system fabric or weber.floor 4190 or weber.floor 4160
	Adhesive	weber.xerm 853 F	weber.xerm 864 F	weber.floor 4830, 4835	weber.floor 4805, 4825, 4815
	Grout	weber.fug 875 F	weber.fug 875 F		
	Preparation	Sand off and vacuum clean if necessary			
	Primer	weber.floor 4716 diluted 1:1			
	Create a flat surface	weber.floor 4095, 2-3 mm			
	Primer	weber.floor 4716 diluted 1:1			
	Levelling material for Uponor Minitec	weber.floor 4190	weber.floor 4190	weber.floor 4190	weber.floor 4190
	Adhesive	weber.xerm 853 F	weber.xerm 864 F	weber.floor 4830, 4835	weber.floor 4805, 4825, 4815
	Grout	weber.fug 875 F	weber.fug 875 F		

	Structure height	Accessibility	Functional heating period	Readiness for covering	Total period
	≥ 20 mm	≥ 4 hours	After 2 days/for at least 2 days	After 1 day/for 1 day	≥ 2 days
	≥ 20 mm	≥ 4 hours	After 1 day/for 1 day	Immediately after the functional heating	≥ 2 days
	≥ 20 mm	≥ 4 hours	After 6 hours/for 8 days	Immediately after the functional heating	≥ 8 days

1) Caution! In case of follow-up moisture during parquet laying, apply an epoxy resin moisture barrier!

2) 25-28 °C supply temperature/laying of tiles immediately after the functional heating - linoleum, PVC, carpet after 3 days - parquet and laminate after 7 days. Normal heating operation after 28 days.

20 Wico

WICO		New floor covering			
Existing substrate		Tiles	Natural stone	Parquet	Carpet, linoleum, PVC
Screed	Primer 	Bonding bridge 499 Levelling material for Uponor Minitec	Bonding bridge 499 Thin screed 433DE	Bonding bridge 499 Thin screed 433DE	Bonding bridge 499 Thin screed 433DE
Tiles	Primer 	Synthetic resin with quartz spreading Levelling material for Uponor Minitec	Synthetic resin with quartz spreading Thin screed 433DE	Synthetic resin with quartz spreading Thin screed 433DE	Synthetic resin with quartz spreading Thin screed 433DE
Wood planks, chipboards, dry screed	Primer 	Bonding bridge 499 Levelling material for Uponor Minitec	Bonding bridge 499 Thin screed 433DE	Bonding bridge 499 Thin screed 433DE	Bonding bridge 499 Thin screed 433DE
Concrete floor	Primer 	Synthetic resin with quartz spreading Levelling material for Uponor Minitec	Synthetic resin with quartz spreading Thin screed 433DE	Synthetic resin with quartz spreading Thin screed 433DE	Synthetic resin with quartz spreading Thin screed 433DE
		Structure height	Accessibility	Functional heating period	Readiness for covering
Wicoplan		 ≥ 15 mm	 ≥ 2 days	 After 6 hours/for 8 days	 Immediately after the functional heating
				Total period	
				 ≥ 9 days	 IC0000068

Delivery area Bavaria/Baden, Würtemberg, Austria

uponor

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1095407 v2_10_2020_EN
Production: Uponor/ELO

Uponor reserves the right to make changes, without prior notification,
to the specification of incorporated components in line with its policy of
continuous improvement and development.



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