Technical guide for the building site

Laying of floors and coverings

 \rightarrow Ceramic, porcelain tiles, mosaic and natural stone

kerakoll

Systems index

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Tiling on terraces and balconies

Tiling in swimming pools	15
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Tiling with thin and large format tiles	21
Tiling to heated screeds	23

Tiling to flooring grade bitumen or asphalt substrates

Tiling to calcium sulphate screeds and gypsum based substrates

- \rightarrow Guarantees safe laying on calcium sulphate substrates
- \rightarrow Ideal for new and existing substrates
- \rightarrow Compatible with heated and unheated screeds
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators



Expansion joints
Silicone Color

Grouting

Fugabella Color

Decorative sealant for tiles and mosaic in 50 design colours.

Rating 3 Coverage see data sheet

Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.	Rating 2 Coverage see data sheet	
Tile laying on floor		
H40 Advanced		
Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 3 Coverage Grey ≈ 1.3 kg/m ² per mm of thickness White ≈ 1.2 kg/m ² per mm of thickness	
Biotex		
Recycled and thermo-bonded polyester, reinforced membrane, specifically designed to absorb shear stresses between substrates and bonded coatings; suitable as reinforcement for the laying of ceramic tiles of all kinds, large formats, porcelain tiles and natural stone.		
H40 Advanced		
Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 3 Coverage Grey ≈ 1.3 kg/m ² per mm of thickness White ≈ 1.2 kg/m ² per mm of thickness	
Tile laying on wall		
H40 Gel		
Standard setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 4 grey Rating 3 white Coverage Grey \approx 1.3 kg/m ² per mm of thickness White \approx 1.2 kg/m ² per mm of thickness	žeren na se
Preparation of substrates		
Primer A Eco		

Certified, eco-friendly, water-based primer for dry, absorbent mineral/cement/gypsum or calcium sulphate-based substrates.

Rating 5 Coverage ≈ 0,15 - 0,25 kg/m²



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2 Calcium sulphate screed

1 Insulation and underfloor heating pipes

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Tiling to wooden substrates with heating system

- \rightarrow Guarantees safe laying on high-deformation substrates
- \rightarrow Optimises heating system performance
- \rightarrow Insensitive to changes in temperature
- \rightarrow Fast completion of work
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators





Expansion joints Silicone Color Decorative sealant for tiles and mosaic in 50 design colours. Rating 3 Coverage see data sheet





Fugabella Color

Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.

Rating 2 Coverage see data sheet



application tools



H40 Advanced

Tile laying

Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone. Rating 3 Coverage Grey ≈ 1.3 kg/m² per mm of thickness White ≈ 1.2 kg/m² per mm of thickness



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Substrate levelling

Levelfle	x Gel		
compou	tting fibre reinforced self levelling nd with Gel-Technology. Free flowing able rheology and prolonged ty.	Rating 4 Coverage ≈ 1.525 kg/m² per mm of thickness	l

3 Heating system



Keragrip Eco Certified, eco-friendly, water-based adhesion Rat promoter for compact, absorbent and nonabsorbent substrates. Cov

Rating 5 Coverage ≈ 0.1 - 0.2 kg/m²



Substrate

1 Timber panel

Tiling to existing tiles and natural stone

- \rightarrow Guarantees safe laying on existing floors and walls
- \rightarrow Ideal in renovation work
- \rightarrow Reduces operation times
- \rightarrow Avoids the costs and inconvenience of removal and disposal of the existing floor and wall tiles
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators





Expansion joints Silicone Color

Decorative sealant for tiles and mosaic in 50 design colours.

Rating 3 Coverage see data sheet



application tools

Grouting



Fugabella Color

Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.

Rating 2 Coverage see data sheet





Tile laying on floor H40 Advanced

Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.

Rating 3 Coverage Grey ≈ 1.3 kg/m² per mm of thickness White ≈ 1.2 kg/m² per mm of thickness



Tile laving on wall

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H40 Gel		
Standard setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 4 grey Rating 3 white Coverage Grey \approx 1.3 kg/m ² per mm of thickness White \approx 1.2 kg/m ² per mm of thickness	<u></u>

Substrate

Before levelling and/or fixing, clean the old flooring thoroughly, making sure you eliminate all traces of dirt using specific cleaning products. If in doubt, sand the surface. Fix loose elements or elements that are not perfectly fixed, and fill in any gaps with specific product.

Tiling to low profile heating panels

- \rightarrow Guarantees safe laying
- \rightarrow Optimises heating system performance
- \rightarrow Insensitive to changes in temperature
- \rightarrow Fast completion of work
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators





Expansion joints Silicone Color Decorative sealant for tiles and mosaic in 50 Rating 3 design colours.

Coverage see data sheet



application tools

Grouting



Fugabella Color

Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.

Rating 2 Coverage see data sheet





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Tile laying H40 Advanced

Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.

Rating 3 Coverage Grey ≈ 1.3 kg/m² per mm of thickness White ≈ 1.2 kg/m² per mm of thickness



Substrate levelling

Substrate ferening		
Levelflex Gel		
Rapid-setting fibre reinforced self levelling compound with Gel-Technology. Free flowing with variable rheology and prolonged workability.	Rating 4 Coverage ≈ 1.525 kg/m² per mm of thickness	
Keragrip Eco		
Certified, eco-friendly, water-based adhesion promoter for compact, absorbent and non- absorbent substrates.	Rating 5 Coverage ≈ 0.1 – 0.2 kg/m²	

Substrate

3 Low profile heating panel

2 Adhesive

1 Timber panel

Tiling in damp environments and showers on wooden substrates

- \rightarrow Guarantees the water protection of adjacent rooms
- \rightarrow Suitable for renovation work
- \rightarrow High level of chemical stability
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators



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Expansion joints
Silicone Color

Decorative sealant for tiles and mosaic in 50 design colours.

waterproof, stain-proof, silk-effect grouting of

porcelain tiles, natural stones and glass mosaic.

Water-based hypo-allergenic resin for

Rating 3 Coverage see data sheet

Rating 3

Coverage

Rating 5

Coverage

≈ 1.5 kg/m²

Rating 5

see data sheet

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Tile laying H40 Gel

Waterproofing

Grouting

Fugalite Bio

Standard setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.

Certified, eco-friendly, organic, water-based,

Rating 4 grey/ 3 white Coverage Grey ≈ 1.3 kg/m² per mm of thickness White ≈ 1.2 kg/m² per mm of thickness



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mineral waterproofing product for absorbent substrates in damp environments. Aquastop 120 Flexible NBR waterproof joint for perimeter and fractionizing joints in waterproofing systems. For use under ceramic and porcelain tiles and natural stone. Bonds directly on application. Nanodefense Eco (1st coat)

Nanodefense Eco (2nd coat)

Certified, eco-friendly, organic, water-based, mineral waterproofing product for absorbent su

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mineral waterproofing product for absorbent substrates in damp environments.	Coverage ≈ 1.5 kg/m²	
4 Cement board		
H40 Advanced		
Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 3 Coverage Grey ≈ 1.3 kg/m ² per mm of thickness White ≈ 1.2 kg/m ² per mm of thickness	ž
Preparation of substrates		



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Keragrip Eco
Certified, eco-friendly, water-based adhesion
promoter for compact, absorbent and non-

Rating 5 Coverage ≈ 0.1 - 0.2 kg/m²



Substrate

absorbent substrates.

1 Timber panel on floor / Backer Board panel on wall

Tiling on terraces and balconies

- \rightarrow Guarantees safe laying in difficult temperature and humidity conditions
- \rightarrow Ensures protection of the underlying structure
- \rightarrow Guarantees excellent resistance to temperature variations
- \rightarrow Complete hydrophobicity
- \rightarrow Fast completion of work
- \rightarrow System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators



Expansion joints

design colours.

application tools

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Grouting Fugalite Bio

-	
Water-based hypo-allergenic resin for waterproof, stain-proof, silk-effect grouting of porcelain tiles, natural stones and glass mosaic.	
porceiain tiles, natural stones and glass mosaic.	

Decorative sealant for tiles and mosaic in 50

Tile laying



H40 Advanced

Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone. Rating 3 Coverage Grey \approx 1.3 kg/m² per mm of thickness White \approx 1.2 kg/m² per mm of thickness

Rating 3

Coverage see data sheet

Rating 3 Coverage see data sheet

Rating 3

Coverage

≈ 1.15 kg/m²

per mm of thickness



Waterproofing

Aquastop Nanoflex (2nd coat)

Certified, eco-friendly, breathable, anti-alkali and chlorine-resistant, mineral membrane for the flexible waterproofing with high levels of adhesion and durability of substrates before laying with adhesives.

Aquastop AR1

Special reinforcing mesh made of alkaliresistant glass fibre.

Aquastop Nanoflex (1st coat)

Certified, eco-friendly, breathable, anti-alkali and chlorine-resistant, mineral membrane for the flexible waterproofing with high levels of adhesion and durability of substrates before laying with adhesives. Rating 3 Coverage ≈ 1.15 kg/m² per mm of thickness





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Aquastop 120

Flexible NBR waterproof joint for perimeter and fractionizing joints in waterproofing systems. For use under ceramic and porcelain tiles and natural stone. Bonds directly on application.



Susbtrate Keracem Eco

Certified, eco-friendly, normal-setting and quick-drying mineral hydraulic binder for high-performance screeds. Ideal for underfloor heating systems. Rating 2 Coverage ≈ 2 - 2.5 kg/m² per cm of thickness

Tiling in swimming pools

- \rightarrow Ensures safe laying under continuous immersion
- \rightarrow It is not affected by aggressive water
- \rightarrow Increases the hygiene
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators



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7	Silicone Color		
	Decorative sealant for tiles and mosaic in 50 design colours.	Rating 3 Coverage see data sheet	
	Grouting		
6	Fugalite Bio		
	Water-based hypo-allergenic resin for waterproof, stain-proof, silk-effect grouting of porcelain tiles, natural stones and glass mosaic.	Rating 3 Coverage see data sheet	
	Tile laying		
5	H40 Gel		
	Standard setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 4 grey/3 white Coverage Grey ≈ 1.3 kg/m ² per mm of thickness White ≈ 1.2 kg/m ² per mm of thickness	Erroren .
	Waterproofing		
4	Aquastop Nanosil		
01	Eco-friendly rigid neutral silane adhesive sealant for waterproof sealing of hydraulic and electric systems, through elements and construction elements in swimming pools and in Kerakoll Laminate systems.	Rating 4 Coverage ≈ 10 m (joint 5x5 mm) with 1 cartridge (290 ml)	AT
3	Aquastop Nanoflex (1 st coat) (2 nd coat)		
	Certified, eco-friendly, breathable, anti-alkali and chlorine-resistant, mineral membrane for the flexible waterproofing with high levels of adhesion and durability of substrates before laying with adhesives. To be reinforced with Aquastop AR1 , special reinforcing mesh made of alkali-resistant glass fibre.	Rating 3 Coverage ≈ 1.15 kg/m² per mm of thickness	
2	Aquastop 120		
Busch Calcula	Flexible NBR waterproof joint for perimeter and fractionizing joints in waterproofing systems. For use under ceramic and porcelain tiles and natural stone. Bonds directly on application.		
	Wall levelling		
1	Keralevel Eco LR		
-	Certified, fast-acting, eco-friendly, mineral levelling product for the high-performance, high-thickness correction of irregular substrates.	Rating 3 Coverage ≈ 1.3 kg/m² per mm of thickness	

Expansion joints

application tools

Tiling to external surfaces

- \rightarrow It waterproofs any surface, old or new, damp or dry, cracked or subject to dimensional variations
- ightarrow It compensates for hygrometric shrinkage and thermal deformation stress
- → It reduces on-site working times: waterproofing and laying of the coating without waiting, withstands foot traffic immediately
- \rightarrow It solves the problem of respecting substrate joints





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Expansion joints		application too
Silicone Color		
Decorative sealant for tiles and mosaic in 50 design colours.	Rating 3 Coverage see data sheet	A
Grouting		
Fugalite Bio		
Water-based hypo-allergenic resin for waterproof, stain-proof, silk-effect grouting of porcelain tiles, natural stones and glass mosaic.	Rating 3 Coverage see data sheet	
Tile laying		
H40 Advanced		
Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.	Rating 3 Coverage Grey ≈ 1.3 kg/m ² per mm of thickness White ≈ 1.2 kg/m ² per mm of thickness	
Waterproofing		
Aquastop 120		
Flexible NBR waterproof joint for perimeter and fractionizing joints in waterproofing systems. For use under ceramic and porcelain tiles and natural stone. Bonds directly on application.		
Aquastop Fix		
One-component organic sealant for waterproof sealing with high adhesion with Aquastop tapes in the Laminate No Crack and Laminate Vapor Pro systems, ready to use, eco-friendly.	Rating 5 Coverage ≈ 0.6 kg/m ²	
Aquastop Green		
Anti-cracking waterproof membrane with high adhesion for balconies, terraces and horizontal surfaces before the laying of ceramic tiles, natural stone and hardwood floors; it creates a waterproof surface even when overlaid on cracked supports, supports that have not been perfectly cured or supports that might contain vapour pressure due to residual substrate moisture content.	Coverage 23 m ² with 1 roll 20 m	



Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.

Rating 3 Coverage Grey \approx 1.3 kg/m² per mm of thickness White \approx 1.2 kg/m² per mm of thickness

Substrates: screeds, marble floor tiles, natural stone floorings anchored to the substrate, fibre-cement and plaster-board panels anchored to the substrate. Check mechanical performance and substrates integrity; check the surface cleaning.

Tiling to raised access flooring

- \rightarrow Guarantees safe laying
- \rightarrow Low profile system
- \rightarrow Fast completion of work
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators





Expansion joints

Decorative sealant for tiles and mosaic in 50 design colours.

Rating 3 Coverage see data sheet



application tools

Grouting

Fugabella Color Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.

Rating 2 Coverage see data sheet



Tile laying H40 Extreme

Biotex



Hybrid, structural, multi-purpose, extra-flexible, extra-workable Gel-Adhesive. For all types and sizes of porcelain tiles, ceramic tiles and natural stone.

Recycled and thermo-bonded polyester, reinforced membrane, specifically designed to absorb shear stresses between substrates and bonded coatings; suitable as reinforcement for the laying of ceramic tiles of all kinds, large formats, porcelain tiles and natural stone.

Rating 2 Coverage ≈ 1.45 kg/m² per mm of thickness







H40 Extreme

Hybrid, structural, multi-purpose, extra-flexible, extra-workable Gel-Adhesive. For all types and sizes of porcelain tiles, ceramic tiles and natural stone.

Rating 2 Coverage ≈ 1.45 kg/m² per mm of thickness

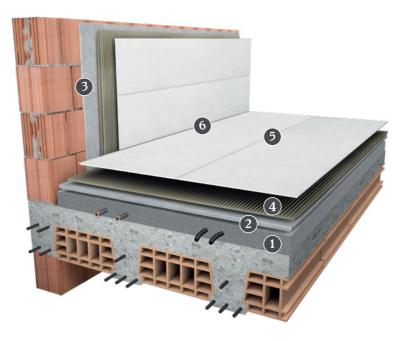


Substrate

1 Raised access flooring system

Tiling with thin and large format tiles

- \rightarrow Guarantees safe laying of thin elements
- \rightarrow Ensures high resistance to compression
- \rightarrow Suitable for renovation work
- \rightarrow Reduces operation times
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators



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Expansion joints application tools Silicone Color Decorative sealant for tiles and mosaic in 50 Rating 3 design colours. Coverage see data sheet Grouting **Fugabella Color** Decorative Resina-cemento (resin-cement) for Rating 2 grouting of ceramic and porcelain tiles, mosaic Coverage and natural stone in a 50-colour design range. see data sheet



H40 Gel

Tile laying

Standard setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone. Rating 4 grey/3 white Coverage Grey \approx 1.3 kg/m² per mm of thickness White \approx 1.2 kg/m² per mm of thickness



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Wall levelling

Certified, fast-acting, eco-friendly, mineral levelling product for the high-performance, high-thickness correction of irregular substrates.

Rating 3 Coverage ≈ 1.3 kg/m² per mm of thickness





Substrate levelling

Levelflex Gel Rapid-setting fibre reinforced self levelling compound with Gel-Technology. Free flowing with variable rheology and prolonged workability.

Rating 4 Coverage ≈ 1.525 kg/m² per mm of thickness



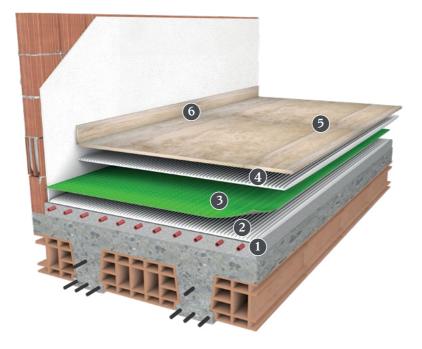
Substrate Keracem Eco

Certified, eco-friendly, normal-setting and quick-drying mineral hydraulic binder for high-performance screeds. Ideal for underfloor heating systems. Rating 2 Coverage $\approx 2 - 2.5 \text{ kg/m}^2$ per cm of thickness



Anti-cracking tiling to screed with heating system

- \rightarrow Specifically for cancelling out cracks and joints in the substrate
- \rightarrow Uncoupling system to compensate for hygrometric shrinkage stresses
- \rightarrow Practical and fast, immediately accessible to foot traffic
- \rightarrow Guarantees safe laying in difficult conditions
- \rightarrow System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators





Grouting

design colours.

	Fugabella	Color
_		

Tile laying

H40 Advanced

natural stone.

Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.

Rapid setting, multipurpose Gel-Adhesive,

structural, highly flexible, thixo & fluid. For all

types and sizes of porcelain, ceramic tiles and

Decorative sealant for tiles and mosaic in 50

Rating 2 Coverage see data sheet

Rating 3

Coverage

Grey ≈ 1.3 kg/m² per mm of thickness

White ≈ 1.2 kg/m² per mm of thickness

Rating 3

Coverage see data sheet



application tools











Anti-cracking Aquastop Green Anti-cracking waterproof membrane with high Coverage 23 m² adhesion for balconies, terraces and horizontal with 1 roll 20 m surfaces before the laving of ceramic tiles, natural stone and hardwood floors: it creates a waterproof surface even when overlaid on cracked supports, supports that have not been perfectly cured or supports that might contain vapour pressure due to residual substrate moisture content. H40 Advanced Rating 3 Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all Coverage types and sizes of porcelain, ceramic tiles and Grey ≈ 1.3 kg/m² natural stone. per mm of thickness White ≈ 1.2 kg/m² per mm of thickness





Substrate Keracem Eco

Certified, eco-friendly, normal-setting and quick-drying mineral hydraulic binder for high-performance screeds. Ideal for underfloor heating systems.

Rating 2 Coverage ≈ 2 – 2.5 kg/m² per cm of thickness



Tiling to flooring grade bitumen or asphalt substrates

- \rightarrow Guarantees safe laying
- \rightarrow Ideal in renovation work
- \rightarrow Fast completion of work
- → System with very low VOC emissions, improves the quality of air and increases the level of health protection for operators



Expansion joints Silicone Color

design colours.

Decorative sealant for tiles and mosaic in 50

Rating 3 Coverage see data sheet



application tools

Grouting



Fugabella Color

Decorative Resina-cemento (resin-cement) for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range.

Rating 2 Coverage see data sheet



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Tile laying
H40 Advanced

Rapid setting, multipurpose Gel-Adhesive, structural, highly flexible, thixo & fluid. For all types and sizes of porcelain, ceramic tiles and natural stone.

Rating 3 Coverage Grey ≈ 1.3 kg/m² per mm of thickness White ≈ 1.2 kg/m² per mm of thickness





Preparation of substrates **Keragrip Eco**

Certified, eco-friendly, water-based adhesion promoter for compact, absorbent and nonabsorbent substrates.

Rating 5 Coverage ≈ 0.1 - 0.2 kg/m²



Substrate

1 Bitumen/asphalt

This Technical Guide has been drafted on the basis of the best technical and practical knowledge of Kerakoll S.p.A. It is, however, a set of guides and information of a general nature that do not consider the real situations of individual structures.

Kerakoll does not intervene directly in the building site conditions, the specific design of the project, and the execution of the work; the information and guidelines mentioned here do not commit Kerakoll in any way.

The designer in charge is responsible for the entire structural design in accordance with Italian Ministerial Decree 17/01/2018 and its amendments or additions.

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