

# plan-40 ext

03/18 250



## PLAN-40 EXT

Very low emission cement based self levelling compound suitable for interior and exterior areas.

PLAN-40 EXT is characterised as a multipurpose, for average loading, very low shrinkage and high thickness (3-40 mm) levelling compound.

## substrate preparation

**TECHNOKOLLA**





Blender/  
Pump



18±1%



5-30°C



Surface blade/  
Screed rake



40 min



40 mm



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## MAIN FEATURES

- Self levelling
- Suitable for application on subfloor heating systems
- Layer thickness up to 60 mm with aggregates
- Low tension
- Pumpable
- Exterior use when covered
- Suitable for castor wheels loading according to EN 12529
- Suitable to build bonded screeds under ceramic tiles on cementitious substrates

## APPEARANCE

Grey powder

## STORAGE

6 months in dry place. Do not store below +5 °C

## FIELDS OF USE

- PLAN-40 EXT is suitable for filling, smoothing and levelling of suitable substrates before applying parquet, ceramic tiles, seamless resin floors, textile and elastic floor coverings for interior and exterior residential and non-industrial areas.

## SUBSTRATES

Suitable substrates are: Concrete, cement and rapid cement screeds, calcium sulphate based screeds, ceramic tiles and natural stones, magnesia screeds

## SUBSTRATE QUALITY / PRE-TREATMENT

Adequate strength, load bearing capacity, dimensional stability and permanent dryness. Must be sound and clean, free of all contaminations, e.g. dust, dirt, oil, grease and loose particles. Separation layers, sinter layers, and other similar contamination should be removed through appropriate measures, such as sanding, brushing, abrasive blast cleaning, milling or thorough cleaning.

Old, loose and weak levelling layers should be removed mechanically.

Surface treatments or any friable areas of the subfloor must be mechanically removed. Layers of water-soluble adhesives, e.g. sulphite-waste-adhesives, are to be mechanically removed. Old water resistant adhesives are to be mechanically removed as thoroughly as possible.

Old, ceramic and natural stones coverings should be firmly laid, thoroughly cleaned and sanded.

Use PRIMER-T PLUS and PRIMER-101 for a pore free surface with very good adhesion. Refer to the relevant Product Data Sheet.

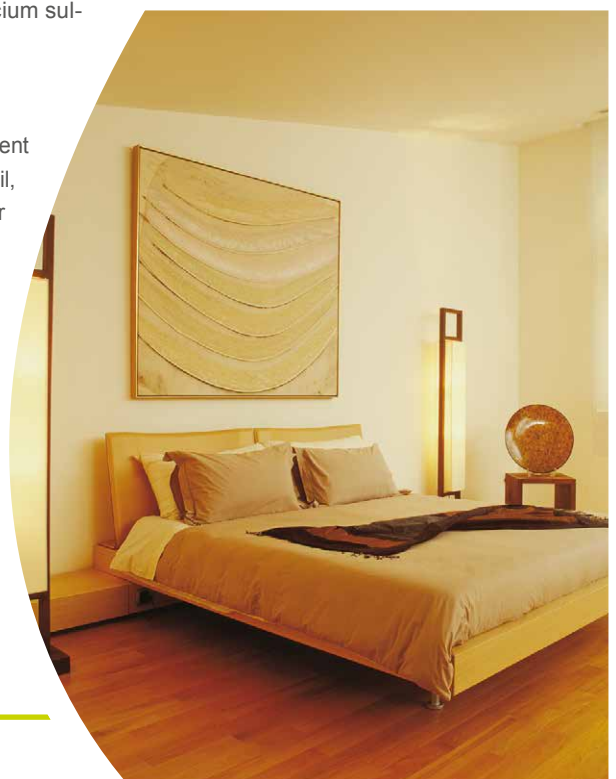
Do not apply on substrates with rising moisture. If rising moisture can occur an effective damp proof membrane must be applied and be in compliance with

## substrate preparation



LOW-VOC  
product

TESTED BY  
EUROFINS

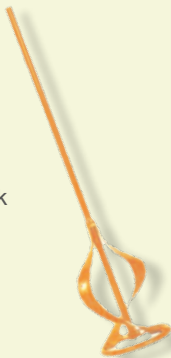


## RECOMMENDED ACCESSORIES

Blender



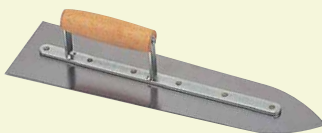
Swivel stick



Spiked roller



Flat trowel



the relevant national standard.

The requirements of the relevant valid standards, guidelines and data sheets apply.

SUITABLE SUPPORTS	Normal absorbent substrates such as concrete, cement screeds, rapid cement screeds	Floated concrete	Magnesia screeds (not xylolite)	CALCIUM SULPHATE SUBSTRATES	Non absorbent substrates	subfloor heating screeds
PRE-TREATMENT						
PRIMER-T PLUS	X			X*		X
PRIMER-101		X	X		X	

\* 2 layers

### NATURE OF THE PRODUCT

PLAN-40 EXT mainly consists of high-strength cements, selected mineral charges, organic copolymers and specific additives. For further details, ask the technical office for the safety brief or download it from the web site [www.technokolla.com](http://www.technokolla.com).

### APPLICATION

Before PLAN-40 EXT is applied, it is very important to make sure that the substrate is compact, clean and dust-free. Substrates must be pretreated with Primer-T a few hours before the skimming compound is applied. If the substrate is very absorbent, apply two coats of Primer-T, the second about two hours after the first.

For further details about how to prepare substrates, consult the "notes" document, which can be downloaded from the website [www.technokolla.com](http://www.technokolla.com).

### HOW TO PREPARE THE MIXTURE

Add PLAN-40 EXT to cold clean water using a clean container and mix for ~2 min until a homogeneous mixture has been achieved. Use of a mixer with disc stirring rod is recommended. After a short maturing time, mix again thoroughly.

Note: Do not mix PLAN-40 EXT with cement or other cementitious product, and if applicable aggregates are added last.

Mixing with aggregates: Add 16 kg or 10 L of quartz sand 0.1–3.0 mm for 25 kg PLAN-40 EXT (~65 % by weight) ≤ 4.5 L water for 25 kg PLAN-40 EXT.

### APPLICATION OPERATIONS

After mixing spread PLAN-40 EXT using a suitable tool (surface blade, screed rake or pin leveller) and remove the entrapped air using a spike roller.

Edge and movement joints must be brought through to the finished surface and should be protected against levelling compound to run in.

The levelling works should be applied to an adequate thickness and surface flatness as required by the manufacturer of the tile or flooring finish.

In case of high layer-thickness, contact with vertical structures should be avoided by placing a perimeter isolating strip.

If a second layer of levelling compound is to be applied, the first levelling compound layer should be primed with the PRIMER-T PLUS (diluted with water, ratio 1:1). The maximum layer thickness may not be exceeded in case of two layer application. The second layer may not exceed the layer thickness of the first.

Contact to metal like water bearing pipes must be avoided (e.g. sealing of pipe penetrations), because especially galvanised steel pipes have no sufficient corrosion protection.

Protect curing PLAN-40 EXT levelling layers from high ambient temperatures, direct sunlight and draughts.

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## WARNINGS AND RECOMMENDATIONS

- when PLAN-40 EXT is to be used exterior or in wet areas a subsequent robust waterproofing layer is required
- use full surface levelling with a minimum layer thickness of 5 mm when covered with parquet or resin floors systems
- do not exceed 10 mm thickness on calcium sulphate substrate
- do not apply to surfaces subject to flexural stress
- do not use on substrates subject to rising damp
- do not exceed the thicknesses mentioned in this Product Data Sheet
- do not add anything to the product that is not specified in this data sheet
- do not use the product once it has started to set, by adding water to make it more workable. Prepare fresh mixture
- do not apply at temperatures lower than 5°C or higher than 30°C and relative air Humidity > 75%

## CONSUMPTION

1.8 Kg/m<sup>2</sup> per mm of thickness

TECHNICAL DATA	VALUE	STANDARD
Appearance	Grey powder	
Water required for mixing	5.75 l. per 25 kg bag	
Mixing with aggregates	16 kg of quartz sand 0.1–3.0 mm for 25 kg bag	
Pot life	approx. *40 min	
Minimum thickness	3 mm	
Min thickness with aggregates	10 mm	
Maximum thickness	40 mm	
Max thickness with aggregates	60 mm	
Treadable after	approx *4 h	
Overcoating time: tiles	~4 h (≤ 60 mm)**	
Can be covered after: all kind of coverings	*~24 h (≤ 5 mm); ~72 h (≤ 10 mm)	
Compressive strength	≥ 25 N/mm <sup>2</sup> (28 days at 23°C)	EN 13892-2
Flexural strength	≥ 6,0 N/mm <sup>2</sup> (28 days at 23°C)	EN 13892-2

\* time intervals refer to a temperature of 20°C-65% R.H. and temperature of substrate +15 °C. They become shorter with higher temperatures and longer at lower temperatures. When covering the PLAN-40 EXT always ensure the moisture content has achieved the required value for the product to cover, as the waiting time will vary with the application thickness and ambient humidity. (Refer to the covering product data sheet)

\*\* applied on concrete or cementitious screeds interior

## SPECIFICATION

Horizontal substrates must be leveled with quick-setting cement-based self-leveling skimming plaster such as TECHNOKOLLA's PLAN-40 EXT, which can be covered with resilient materials and parquet.

**Technokolla** reminds you to examine the “**notes**” document that completes the information in this data sheet. The document can be downloaded in the pdf format from the website [www.technokolla.com](http://www.technokolla.com).

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