Construct a sustainable future

Timber Substrate Use

CEMIMAX DL59 Flex

Fiber-Reinforced cementitious self-leveling smoothing compound with enhanced flexural strength

Description:

DL59 Flex is a Fiber-Reinforced cementitious self-leveling smoothing compound with enhanced flexural strength. It resists cracking and provides an exceptionally smooth, hard surface for use on timber substrate in residential and commercial areas.

Product Properties/Benefits:

Plastic dry cement mortar with finely graded fillers. When mixed with water, produces a hydraulic-setting smoothing compound with good flow properties and high coverage.

Composition:

Special cements, mineral fillers, polyvinyl-acetate-copolymers, flow agents and additives.

- Fiber-reinforced, resists cracking or shrinking
- Super smooth – requires no sanding
- Extremely high strength of compressive and bending
- Versatile – apply 1.5mm to 100mm in one application
- Rapid hardening – walkable from 2 hours
- Superior flow – fast application
- Flexible – hand mix or pump application
- Can be polished
- For Interior and Exterior use
- Suitable for Radiant Floor Heating systems
- Suitable for use over acoustic underlays
- Pigments can be added for colour
- Aggregates can be added for exposed stone effect
- Suitable for timber flooring as direct stick and for overlayment over the timber substrate.

Technical Data:

Consistency:	fine powder
Colour:	grey
Specific gravity (kg/m³):	1300
Dry solid content (%):	100
APPLICATION DATA (at +23°C and 50% R.H.)	
Mixing ratio:	4.4 - 4.6 L / 20 kg
Thickness per coat:	1.5 to 100 mm
Self-levelling:	yes
Specific gravity of mix (kg/m³):	2100
pH of the mix:	approx. 12
Application temperature range:	from +5°C to +30°C
Open time:	20-30 mins
Walkable:	2 hours
Waiting time before bonding:	1 day depending on the thickness
Shelf-life:	Min,12 months
Coverage:	Approximately 4m² at 3mm thick
Drying time:	8-12 hours
VOC Level:	<0.5 mg/m³
FINAL PERFORMANCES (7 days at +23°C)	
Compressive strength (N/mm²): – after 1 day – after 7 days – after 28 days	 15MPa 25MPa 40MPa
Flexural strength (N/mm²): – after 1 day – after 7 days – after 28 days	 5MPa 7MPa 8MPa
Resistance to abrasion: – after 28 days	 2.5

Limitations for installation:

DL59 Flex can be applied from 1.5mm to 100mm thickness in one application.

Substrate Preparation:

The substrate must be sound, load-bearing, dry, free from cracks and free from materials (dirt, oil, grease) that would impair adhesion. Cement and calcium sulphate screeds must be abraded and vacuumed. Test the substrate in accordance with applicable standard or notices and report any deficiencies. Any adhesion-reducing or unstable layers, e.g. release agents, loose adhesives, compounds, covering or paint residues, etc. must be removed, e.g. by brushing, abrading, grinding or shot-blasting. Thoroughly vacuum loose material and dust. Use a suitable primer according to the type and condition of the substrate. Allow any primer that is applied to dry completely. The datasheets for other used products have to be observed.

Application:

- Put 4.4 - 4.6 litres of cold clean water into a clean container. Sprinkle in the sack contents (20kg) whilst stirring briskly and mix to a thick-fluid. Lump-free consistency. Use a drill or mixer fitted with a Mixing Paddle. Do not mix too thinly.
- Pour the mixture on the area to be applied, spread the material uniformly to Required thickness using toothed rake. It is the next step to remove entranced air by particular roller.
- Drying time at 20℃ is approx 24 hours. Abrading using 40-60 grit sanding paper improves both the surface quality and the absorbency. Poor air-flow and lower temperatures will significantly affect drying times.

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Important Notes:

- Minimum shelf-life 12months in original packaging and in dry storage conditions. Tightly seal opened packaging and use the contents as quickly as possible.
- Best applied at 18-25℃, floor temperature above 15℃ and relative humidity below 75%. Low temperatures and high humidity delays setting, drying and readiness for covering. High temperatures shorten the working time. Therefore use the coldest possible mixing water during the summer.
- Protect freshly smoothed surfaces from draughts direct sunlight and influences of heat.
- The product should be protected against frost and direct light during transportation, storage and application. Application temperature should not be lower than 5℃.
- Can be pumped with continuous, forced-action mixer pumps, e.g. from manufacturers such as m-tec, P.F.T. and others.
- The substructure of wooden floors must be dry to prevent damage due to damp through rotting or mould formation. Adequate ventilation or rear-ventilation must be provided especially when installing impermeable flooring, e.g. by removing the existing expansion strip or by installing special skirting with vent openings.
- Minimum thickness for resistance of castors is 1.5 mm. On non-absorbent substrates such as old screeds with closed, fixed, waterproof adhesive residues, a thickness of 2 - 3 mm must be used.
- When applying in several coats, allow the compound to dry completely. Then apply non porous primer as a intermediate primer and leave to dry, before applying subsequent coats.
- The minimum thickness below wood flooring is 2 mm. Pay particular attention to a sufficient drying of the levelling compound prior to installation of wood flooring.
- Protect freshly applied areas from draughts, direct sunlight and sources of heat. Cement-based compounds tend to form cracks on soft or tacky substrates. These soft and tacky layers must therefore be removed as much as possible before applying the compound. Leaving such compounds open for too long also promotes such cracking and should therefore be avoided.
- Do not use as a screed or as a wear surface, a surface covering must always be applied.
- Compounds must not enter between insulation and heating pipes because of the risk of corrosion. This applies in particular for heating pipes made from galvanized steel. Insulation may only be cut off after smoothing.
- Follow the generally acknowledged rules of the trade and technology for the installation of wood flooring and floor covering in respective of the applicable national standards (e.g. EN, DIN, OE, SIA, etc.)

Protection of the workplace and the enviroment:

Contains cement low in chromate acc. Regulation (EC) No 1907/2006 (REACH). Keep out of reach of children! Keep children away from fresh product / installation material. Store in a dry and cool place. Once opened, immediately close packaging tightly. Wear nitrile impregnated cottongloves and long trousers. During mixing wear a suitable dust-mask and goggles. Thorough ventilation must be ensured during and after the installation and drying time of the product. Drinking, eating and smoking are prohibited during the installation. In case of eye contact, wash immediately with plenty of water and seek medical attention. Avoid prolonged skin contact with the product. After skin contact thoroughly rinse with water immediately.The longer the freshly mixed product remains on the skin, the greater the risk of serious skin damage. Do not allow dispersal into drains, sewers or ground. Rinse tools with water and soap immediately after use. Presents no physiological or ecological risk when fully cured. Basic prerequisites for best possible indoor air quality following floor covering work are conformity to standards of the working conditions, as well as thoroughly dry substrate, primer and smoothing compound.

Disposal:

Where possible, collect product residues and re-use. Do not allow to get into drains, sewers or ground. Empty paper packaging is recyclable. Collect waste product, mix with water, allow to harden, then dispose as Construction Waste.