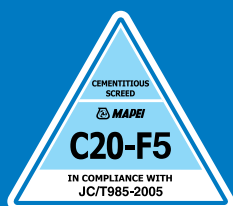




Novoplan 21 CN



**Fast hardening
self-levelling
smoothing compound
for thicknesses from
1 to 5 mm**



WHERE TO USE

Novoplan 21 CN is used for levelling and smoothing new or existing substrates and provides an underlayment for receiving PVC, linoleum, rubber, cork, textile and non-woven flooring in areas where a good resistance to loads and traffic in offices and public areas is required.

Novoplan 21 CN must only be used in interior conditions in thicknesses from 1 to 5 mm.

SOME APPLICATION EXAMPLES

- Smoothing of concrete slabs and cementbased screeds or **Topcem**, **Topcem Pronto**, **Mapecem** or **Mapecem Pronto** screeds.
- Smoothing of anhydrite screeds.
- Smoothing of under-floor heating installations.
- Smoothing over existing ceramic tile, terrazzo, natural stone and magnesite floors.

TECHNICAL CHARACTERISTICS

Novoplan 21 CN is a grey powder comprising of special fast-setting and hydrating cements, specially graded silica sand, special resins and additives prepared and developed in the MAPEI research laboratories.

When mixed with water, **Novoplan 21 CN** becomes a very fluid, easily workable mix with excellent self-levelling properties and cures rapidly. **Novoplan 21 CN** can also be applied with an appropriate pump.

Novoplan 21 CN is strong enough to withstand wheelchair traffic.

Novoplan 21 CN can be applied in thicknesses up to 5 mm per single coat without significant shrinkage that might cause cracks or crazing.

Once completely dry **Novoplan 21 CN** has good compressive and flexural strength as well as resistance to impact and abrasion.

Flooring can be installed once **Novoplan 21 CN** has dried, after 24-48 hours, depending on the thickness, temperature and moisture of the environment.

RECOMMENDATIONS

- Do not add more water to the mix once it has begun to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use for smoothing in exteriors or for substrates subject to rising damp.

Novoplan 21 CN



Applying the Novoplan 21CN paste on the substrate



Applying Novoplan 21 CN with a metal trowel on a cementitious screed primed with Primer G



Using a spiked roller over a fresh coat of Novoplan 21 CN

- Do not apply another coat of **Novoplan 21 CN**, once the previous one has dried completely, without first applying diluted **Primer G** (1 part by weight of Primer G diluted with 3 parts water).

- Do not use **Novoplan 21 CN** at temperatures below +5°C or above +35°C.

- Not suitable for installing wood and parquet floor and wall coverings.

- Do not apply **Novoplan 21 CN** in thicknesses less than 1 mm.

- Do not use for levelling over wooden substrates.

APPLICATION PROCEDURE

Preparing the substrate

The substrates must be dry, solid, free from dust, loose materials, paints, wax, oils, rust and traces of gypsum.

Cement based surfaces which are not sufficiently solid must be removed, or wherever possible, consolidated with **Prosfas**, **Primer EP** or **Primer MF**.

Cracks or crazing in substrates must be repaired with **Eporip**.

In order to fix dust and to provide uniform absorbency of the substrate, dusty or very porous concrete surfaces must be treated with a coat of **Primer G** (1 part **Primer G** with 3 parts of water) or with **Livigum** (1 part **Livigum** with 5 parts water).

Anhydrite screeds can be levelled with **Ultraplan** only after the application of a coat of **Primer G** or **Primer EP**.

On existing ceramic or natural stone surfaces apply a coat of **Mapeprim SP** after the surfaces have been cleaned with detergents and mechanically abraded. Level before **Mapeprim SP** has dried completely (it must still be tacky).

Preparing the mix

While mixing with a low speed electric mixer, pour a 25 kg bag of **Novoplan 21 CN** into a bucket containing 5.25-5.5 litres of clean water and mix until a uniform lump-free paste is obtained. Larger quantities of **Novoplan 21 CN** can be prepared in suitable mortar mixers. Let the mix stand for several minutes before remixing for a short time, the mix is then ready to be applied. The amount of mixed **Novoplan 21 CN** must be used within 30 minutes (at a temperature of +23°C).

Applying the mix

Apply **Novoplan 21 CN** in a single coat from 1 to 5 mm thick with a large metal trowel or a squeegee, keeping the trowel slightly inclined to obtain the desired thickness.

Novoplan 21 CN can be also applied with a suitable pump.

When a second coat is required, it is recommended to apply it as soon as the previous coat is set to light foot traffic (approx. 3 hours at +23°C).

Installing the flooring

Once **Novoplan 21 CN** dries, resilient, textile and ceramic flooring can be installed over it.

All of the MAPEI adhesive products are designed to be applied over **Novoplan 21 CN**.

Waiting time before installation can vary according to the humidity and ambient temperature, and the thickness and type of flooring to be installed (from 24 to 48 hours).

CONSUMPTION

1.6 kg/m² per mm of thickness.

CLEANING

While it is still fresh, **Novoplan 21 CN** can be removed from tools with water.

PACKAGING

Novoplan 21 CN is available in 25 kg bags.

STORAGE

12 months in a dry place and unopened packing.

Novoplan 21 CN could, over time, have a shortened setting time, however this will not affect its performance in service.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Contains cement, that in contact with sweat or other body fluids produces an irritant alkaline reaction and allergic reactions to those predisposed. Avoid contact with the eyes. Use protective gloves and goggles.

For further information consult the safety data sheet.

FOR PROFESSIONALS.

TECHNICAL DATA (typical values)	
	JC/T985 C20-F5
PRODUCT DETAILS	
Consistency:	fine powder
Colour:	grey
Bulk density (kg/m ³):	1,200
Dry solids content (%):	100
Storage:	12 months in a dry place in original packing
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
APPLICATION DATA at +23°C and 50% R.H.	
Mixing ratio:	approximately 21-22 parts water for 100 parts by weight of Novoplan 21 CN
Thickness per coat (mm):	from 1 to 5
Self-levelling:	good
Density of mix with water (kg/m ³):	2,000
pH of mix:	approx. 12
Application temperature range:	from +5°C to +30°C
Pot life:	approx. 20-30 minutes
Setting time:	approx. 50-70 minutes
Set to light foot traffic:	3-4 hours
Waiting time before bonding:	24 hours
FINAL PERFORMANCES at +23°C and 50% R.H.	
Compressive strength (EN 196) (N/mm ²):	
– after 28 days:	22.0
Flexural strength (EN 196) (N/mm ²):	
– after 28 days:	7.0
Resistance to abrasion-weight loss	
(with Taber abrasion meter, H22 disk, weight 550 g after 200 rev.):	
– after 28 days curing:	3.5 g

Novoplan 21 CN



WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

**All relevant references
of the product are available
upon request
www.mapei.com.cn**

(CN) GZ

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BUILDING THE FUTURE

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4017-3-2012