

# Ultratop

**Ultra-fast setting,  
self-levelling mortar  
based on special  
hydraulic binders for  
abrasion-resistant  
flooring with thickness  
from 3 to 40 mm**



## **WHERE TO USE**

**Ultratop** is used internally in public and industrial buildings, for levelling and smoothing new or existing concrete and ceramic substrates in thickness from 3 to 40 mm, to make them suitable for heavy pedestrian use in shopping centres, offices, shops, showrooms and areas where rubber-wheeled vehicles are in use.

Thanks to its high mechanical strength and resistance to abrasion, **Ultratop** may be left as a finished floor.

## **Some application examples**

- New floor coverings in shopping centres, supermarkets, restaurants, shops and showrooms.
- Abrasion-resistant floor coverings on surfaces in concrete, old terrazzo, ceramic tiles and natural stone.
- Industrial floor coverings which must be protected with epoxy coatings and paints in chemical and food processing plants, textile mills and tanneries.

## **TECHNICAL CHARACTERISTICS**

**Ultratop** is a white or grey powder made up of

special quick-drying and quick-setting binders, specially graded silica sand, synthetic resins and special additives according to a special blend developed in MAPEI's own research laboratories.

When mixed with water, **Ultratop** forms a self-levelling compound which is easy to apply either by hand or pump in thickness from 3 to 40 mm.

After setting, which takes place in only a few hours, **Ultratop** has a high level of compressive and flexural strength, bonds perfectly to the substrate material and, thanks to its special composition, dries quickly so that any further finishing coat or decoration may be applied after a very short time.

Under normal conditions of temperature and humidity, resinous coverings may be laid after 24-36 hours.

## **RECOMMENDATIONS**

- Do not add more water to the mix once **Ultratop** starts to set.
- Do not add lime, cement, gypsum or other binders to the **Ultratop** mix.

# Ultratop



Preparation of the substrate by peening



Preparation of the product with a drill



Mechanical preparation of the product before pumping

- Do not use **Ultratop** on substrates which are subject to rising damp.
- Do not use **Ultratop** for floating screeds. **Ultratop** must always be fixed to a solid, compact substrate.
- On porous substrates, apply two coats of **Primer G**, or one coat of **Eporip** epoxy resin for cold joints.
- Do not use **Ultratop** on surfaces where water has collected. Remove the excess water and then dry the substrate.
- Do not use **Ultratop** on metallic surfaces.
- Do not use **Ultratop** at temperatures lower than +5°C and higher than +35°C.

## APPLICATION PROCEDURE

### Preparing the substrate

The substrate must be dry, sound and free of dust, loose parts, paint, waxes, oil, rust or any other type of material which could affect the bonding.

Concrete surfaces must be prepared mechanically by peening or milling and treated with two coats of **Primer G** (the first coat diluted 1:1 and the second coat diluted 1:1 or 1:2 depending on the absorption).

Ceramic or natural stone surfaces must be treated with a coat of **Mapeprim SP**, after cleaning with a suitable cleaner and a mechanical abrasion operation.

Smooth before **Mapeprim SP** is completely set (when touched, an impression or sign remains).

Cracks in the substrate must be repaired beforehand with **Eporip**.

**Eporip** may also be used as an adhesive primer for concrete substrates.

### Preparing the mix

Pour the content of a 25 kg bag of **Ultratop** into a container with 5 to 5.5 litres of clean water while mixing, and continue mixing with a low-speed electric mixer until a smooth, self-levelling, lump-free mix is formed.

Larger quantities may be prepared in a cement mixer.

Let the mix stand for 2-3 minutes and, before applying, remix it for a few minutes. Only prepare the quantity of **Ultratop** which will be applied within 15 minutes at a temperature of +23°C. The pot life of the mix varies according to the temperature and reduces as the temperature increases.

### Applying the mix

Lay **Ultratop** in a single coat from 3 to 40 mm with a metal trowel or a double rubber squeegee.

**Ultratop** may also be applied with a mortar pump. Thanks to its self-levelling properties, **Ultratop** eliminates all the imperfections and signs left by the trowel.

Respect the position of expansion joints in the substrate when applying **Ultratop**. With very large surfaces, make fraction joints at least every 50 m<sup>2</sup>.

### Cleaning

If it is still fresh, **Ultratop** may be cleaned from hands and tools with water.

### CONSUMPTION

The consumption of **Ultratop** is 16.5 to 17.5 kg/m<sup>2</sup> per cm of thickness.

### PACKAGING

**Ultratop** is available in 25 kg bags.

### STORAGE

**Ultratop** remains stable for at least 12 months if stored in a dry place.

If stored for longer periods, the setting time of **Ultratop** may increase but without affecting its final characteristics.

### SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

The product contains special hydraulic binders which, if they come into contact with perspiration or other body fluids, may cause an irritating alkaline reaction. Use protective gloves and goggles.

For further information, please refer

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

<b>Consistency:</b>	fine powder
<b>Colour:</b>	light grey, dark grey and white
<b>Bulk density (kg/m³):</b>	1300
<b>Dry solids content (%):</b>	100
<b>Storage:</b>	12 months in original packaging in a dry place
<b>Hazard classification according to CE 99/45:</b>	none. Before using the product, refer to the "Safety instructions" section and the information contained on the packaging and Safety Data Sheet
<b>Customs class:</b>	3824 50 90

### COMPOSITION AND PROPERTIES OF THE MIXTURE at +23°C and 50% R.H.

<b>Mixing ratio:</b>	approx. 20-22 parts water per 100 parts in weight of <b>Ultratop</b>
<b>Thickness applied (mm):</b>	from 3 to 40
<b>Self-levelling:</b>	yes
<b>Density of mix (kg/m³):</b>	2000 to 2100
<b>pH of mix:</b>	approx. 12
<b>Application temperature range:</b>	from +5°C to +35°C
<b>Pot life:</b>	15 minutes
<b>Setting time:</b>	90 minutes
<b>Set to light foot traffic:</b>	3-4 hours

### FINAL PERFORMANCES

<b>Compressive strength (N/mm²):</b>	<b>dark grey</b>	<b>light grey</b>	<b>white</b>
- after 1 day:	≥ 23	≥ 20	≥ 20
- after 3 days:	≥ 30	≥ 25	≥ 25
- after 7 days:	≥ 34	≥ 30	≥ 30
- after 28 days:	≥ 40	≥ 38	≥ 38
<b>Flexural strength (N/mm²):</b>			
- after 1 day:	≥ 6.0	≥ 5.0	≥ 5.0
- after 3 days:	≥ 7.5	≥ 6.0	≥ 6.0
- after 7 days:	≥ 8.5	≥ 8.0	≥ 8.0
- after 28 days:	≥ 9.0	≥ 9.0	≥ 9.0
<b>Abrasion resistance</b> Taber abrasion test (H22 disk - 500 g - 200 rpm) expressed as loss in weight (g):			
- after 7 days:	0.55	0.86	0.86
- after 28 days:	0.50	0.75	0.75
<b>Abrasion resistance according to EN 13813 : 2002</b> Böhme abrasion test expressed as reduction of thickness (mm):			
- after 7 days:	1.60	2.0	2.0



Mechanical application of Ultratop



Manual application of Ultratop



Checking the fluidity with a vibro-board





# Ultratop

to the Safety Data Sheet which is available upon request for professional users.

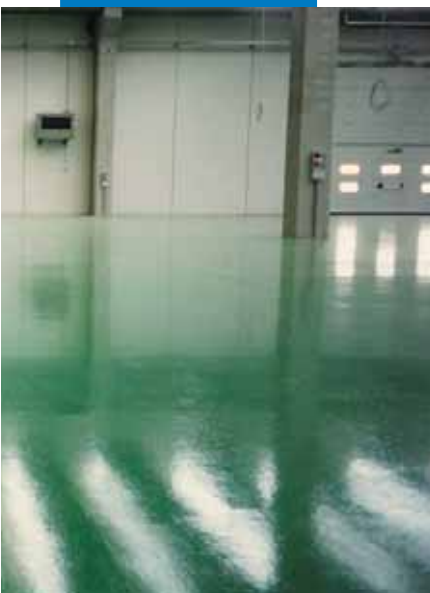
FOR PROFESSIONALS.

## 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**



Example of finished floors in Ultratop



(GB) A.G. BETA

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