

Mapecoat TNS Remove



MULTI-LAYERED FLOORING SYSTEM OF ACRYLIC RESIN IN WATER DISPERSION COMBINED WITH SELF-LAYING FIBRE-REINFORCED PVC MAT FOR PRO-GRADE INDOOR AND OUTDOOR TENNIS COURTS AND PLAYING SURFACE FOR TEMPORARY SPORTS EVENTS

Products used for the system:

Mapecoat TNS Line, Mapecoat TNS Color, Mapecoat TNS White Base coat, Mapecoat TNS Finish 1.3.4, Mapecoat TNS RE Play, Ultrabond Turf 2 Stars and Ultrabond Turf Tape 100

DESCRIPTION

MAPECOAT TNS REMOVE is a multi-layered flooring system of acrylic resin in water dispersion and selected fillers combined with self-laying, fibre-reinforced PVC mat thermo-bonded to a non-woven fabric backing which may be used to make pro-grade indoor and outdoor tennis courts with high resistance to wear.

MAPECOAT TNS REMOVE may be applied over existing painted indoor flooring or on new cementitious or asphalt flooring which needs to be dressed.

When **MAPECOAT TNS REMOVE** is used to dress surfaces, it forms a playing surface with excellent playing comfort and excellent performance characteristics, such as regular bounce of the ball, quick, safe changes in direction and an excellent compromise between balance and slide for players.

MAPECOAT TNS REMOVE is a highly ductile self-laying system which may even be used on concrete playing surfaces with rising damp.

Surfaces dressed with **MAPECOAT TNS REMOVE** also have a very attractive finish and may be renewed easily and rapidly.

PERFORMANCE AND ADVANTAGES

- Excellent playing comfort.
- Durable, characterised by high resistance to wear and abrasion from constant foot traffic.
- Solvent-free and eco-friendly.
- Forms attractive, flat, seamless and highly functional surfaces.
- Quick application, reduces the time required to carry out work and the down time of playing surfaces.
- Wide range of colours available.
- Guarantees an excellent cost-performance ratio.

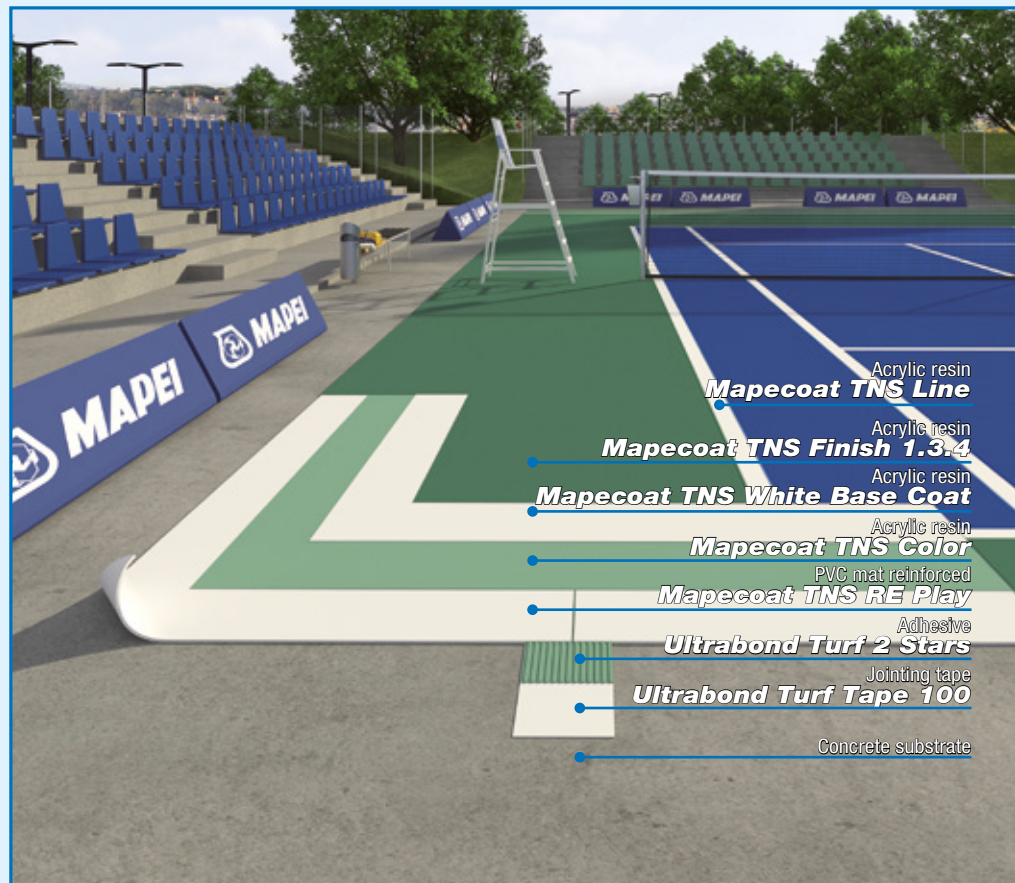
CHEMICAL RESISTANCE

Floors covered with **MAPECOAT TNS REMOVE** are resistant to:

- diluted acids;
- alkalis, including 50% sodium hydroxide and detergents normally used for cleaning floors up to a concentration of 20-30%;
- mineral oils, diesel, petrol and kerosene.

COLOURS AVAILABLE

MAPECOAT TNS REMOVE is available in 24 different colours from the standard colour chart or in personalised colours upon request.



Mapecoat TNS Remove

CONSUMPTION RATES

The consumption rates indicated below consider a cycle applied at a temperature of between +15°C and +35°C on a smooth, flat, compact, fibre-reinforced PVC surface. Surfaces that are not flat and lower temperatures lead to higher consumption rates and longer hardening times.

MAPECOAT TNS REMOVE

Average thickness of system 5 mm

Fibre-reinforced PVC mat:

MAPECOAT TNS RE PLAY

Extra support for bonding joints with:

ULTRABOND TURF TAPE 100

Bonding the joints in the fibre-reinforced PVC mat with:

ULTRABOND TURF 2 STARS

0.600-0.700 kg/m²

1° layer:

MAPECOAT TNS COLOR

0.8 kg/m² (one coat)

2° layer:

MAPECOAT TNS WHITE BASE COAT

0.7 kg/m² (one coat)

Finish:

MAPECOAT TNS FINISH 1.3.4

1.5 kg/m² (3 coats)

Marking out the court with

MAPECOAT TNS LINE

SURFACE PREPARATION

1. Characteristics of the substrate

Before applying the **MAPECOAT TNS REMOVE** system, the substrate on which it is to be applied must be carefully analysed. To get the best results, the following must be checked:

- there must be no materials or debris on the substrate which could potentially impede adhesion of each layer, such as:
 - cement laitance;
 - dust or detached or loose material;

TECHNICAL DATA FOR MAPECOAT TNS RE PLAY

Thickness:	3.6 mm
Density (kg/m ²):	4.3

TECHNICAL DATA FOR MAPECOAT TNS FINISH (after 7 days at +23°C)

Wet abrasion (DIN 53778) (cycles):	> 15,000
Taber abrasion test after 7 days at +23°C - 50% R.H. H22 disk / 500 revs/1,000 g (loss in weight):	2.8 g (6%)
Taber abrasion test after 7 days at +23°C - 50% R.H. CS17 disk / 1,000 revs (loss in weight):	< 0.1 g (< 1%)
Shore A hardness:	60
Ultimate tensile strength (DIN 53504) after 7 days at +23°C:	0.7 N/mm ²
Elongation at failure (DIN 53504) after 7 days at +23°C:	110%
Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1)	
– blue:	ΔE < 0.8
– green:	ΔE < 0.5
– sky blue:	ΔE < 0.5
– red:	ΔE < 0.5
– white:	ΔE < 0.5
Vapour diffusion resistance coefficient (μ) (ISO 7783/2):	200
Resistance to the passage of vapour of a 0.10 mm thick dry layer S _D (m) (ISO 7783/2):	0.02
Capillary action water absorption factor W ₂₄ [kg/(m ² ·h ^{0.5})] (ISO 1062/3):	0.09
Adhesion to concrete (N/mm ²):	2.40

- protective wax, curing products, paraffin or efflorescence;
- oil stains or layers of dirty resin;
- traces of paint or chemical products.

Any other kind of pollutant which may affect adhesion of the various layers must be removed before starting work. If such materials or substances are present, it is ESSENTIAL that the substrate is prepared using a suitable preparation method. If required, contact Mapei Technical Services for advice on the most suitable method.

- The substrate must be as flat as possible, and in all cases, with a maximum slope of 1.5%.

2. Substrate preparation

It is very important that the surface is prepared correctly to guarantee correct installation and to get the best

performance from the **MAPECOAT TNS REMOVE** acrylic system.

Repair any defects in concrete surfaces beforehand, such as holes, pitting, cracking, etc., with **EPORIP**, **MAPEGROUT** or **PLANITOP SMOOTH&REPAIR**, depending on the width and depth of the defects and cracks.

For asphalt surfaces, we recommend applying a 3 cm thick bitumen mat made from particles from 0 to 6 mm. Apart from the checks carried out as described in section 1 “Characteristics of the substrate” no other surface preparation is required. Repair defects such as holes, pitting, cracking, hollows, etc. with **ADESILEX G19**.

3. Preliminary checks before application

Make sure that all the checks

indicated in point 1 “Characteristics of the substrate” have been carried out, and that all the operations indicated in point 2 “Substrate preparation” have been carried out correctly.

The surrounding temperature must be between +15°C and +30°C and the temperature of the substrate must be at least 3°C above the dew-point temperature.

4. Preparation and application of the products

Carefully follow the preparation instructions contained in the Technical Data Sheet for each single product used to form the complete system: **ULTRABOND TURF TAPE 100**, **ULTRABOND TURF 2 STARS**, **MAPECOAT TNS RE PLAY**, **MAPECOAT TNS WHITE BASE COAT**, **MAPECOAT TNS FINISH 1.3.4**, **MAPECOAT TNS COLOR** and **MAPECOAT TNS LINE**.

Thickness of system 5 mm

- **Base layers (ULTRABOND TURF TAPE 100, ULTRABOND TURF 2 STARS and MAPECOAT TNS RE PLAY).**

We recommend rolling out the **MAPECOAT TNS RE PLAY** so it may acclimatise sufficiently before laying. Fold back the joints between the sheets of **MAPECOAT TNS RE PLAY** so that may be bonded in place with **ULTRABOND TURF TAPE 100** and **ULTRABOND TURF 2 STARS** (before applying the adhesive make sure there are no loose or weak areas in the surface). Fold the **MAPECOAT TNS RE PLAY** onto the **ULTRABOND TURF 2 STARS** while it is still wet (within one hour at +23°C) and carefully massage the joints so they come into full contact with the adhesive and also to remove any air bubbles. If the mat is not perfectly flat, put weights (such as bags of sand or other material) on the uneven areas, and on the joints and the ends of the mat.

- **Sealing (ULTRABOND TURF 2 STARS).**
Remove all loose material from the surfaces to be sealed. Apply masking tape along the edges of the joint, extrude the sealant into



the joint, clean off any excess sealant and then immediately remove the masking tape.

- **Base layer (MAPECOAT TNS COLOR).**
Apply **MAPECOAT TNS COLOR** diluted with 10-15% of clean water. Mix with a drill at low-speed with a mixing attachment to form a smooth even paste. Pour the mixed product onto the surface to be coated and spread it out evenly and uniformly using a rubber rake. This cycle requires one coat of **MAPECOAT TNS COLOR**.
- **Surface protection (MAPECOAT TNS COLOR).**
Protect surfaces just coated with **MAPECOAT TNS COLOR** from rain, strong air currents, high temperatures, falling leaves or other such objects which could damage the surface.
- **Cleaning**
Clean tools used to mix and apply **MAPECOAT TNS COLOR** with clean water. Once dry, traces of the product may only be removed mechanically.
- **Coating (MAPECOAT TNS WHITE BASE COAT).**
Apply **MAPECOAT TNS WHITE BASE COAT** diluted with 10-15% of clean water. Mix with

a drill at low-speed with a mixing attachment to form a smooth even paste. Pour the mixed product onto the surface to be coated and spread it out evenly and uniformly using a rubber rake. This cycle requires 1 coat of **MAPECOAT TNS WHITE BASE COAT**.

- **Surface protection (MAPECOAT TNS WHITE BASE COAT).**
Protect surfaces just coated with **MAPECOAT TNS WHITE BASE COAT** from rain, strong air currents, high temperatures, falling leaves or other such objects which could damage the surface.
- **Cleaning**
Clean tools used to mix and apply **MAPECOAT TNS WHITE BASE COAT** with clean water. Once dry, traces of the product may only be removed mechanically.
- **Finish (MAPECOAT TNS FINISH 1.3.4).**
Apply **MAPECOAT TNS FINISH 1.3.4** diluted with 10-15% of clean water. Mix with a drill at low-speed with a mixing attachment to form a smooth even paste. Pour the mixed product onto the surface to be coated and spread it out evenly and uniformly using a rubber rake. This cycle requires three coats of **MAPECOAT TNS FINISH 1.3.4**. Wait 12 hours between each coat

in normal temperature and humidity conditions.

- **Surface protection (MAPECOAT TNS FINISH 1.3.4).**

Protect surfaces just treated with **MAPECOAT TNS FINISH 1.3.4** from rain, strong air currents, high temperatures, falling leaves or other such objects which could damage the surface.

- **Cleaning**

Clean tools used to mix and apply **MAPECOAT TNS FINISH 1.3.4** with clean water. Once dry, traces of the product may only be removed mechanically.

- **Line marking (MAPECOAT TNS LINE).**

Apply **MAPECOAT TNS LINE** directly over **MAPECOAT TNS FINISH 1.3.4** when dry. Dilute with 10-15% of clean water and mix with a drill at low-speed with

a mixing attachment to form a smooth, even paste. Apply the mixed product on the surface with a brush, roller or by spray. To improve the cover of **MAPECOAT TNS LINE** we recommend applying two coats; wait 8-12 hours between each coat.

5. Hardening and step-on times

At +25°C **MAPECOAT TNS FINISH 1.3.4** sets to foot traffic after 12 hours.

Lower temperatures lead to longer hardening and step-on times.

CLEANING AND MAINTENANCE

Regular cleaning and maintenance operations increase the life of dressed surfaces, improves their appearance and reduces their tendency to collect dirt. Polishing surfaces made with the **MAPECOAT TNS REMOVE** system are generally easy to clean with 5-10% of neutral or alkali detergent diluted with water.

Suitable detergents and cleaning tools are readily available for cleaning this type of surface. Manufacturers of these detergents supply all the information required on the cleaning procedures to apply. Our Technical Services Department is also available for any information required.

NOTES

Recommendations regarding safe use and handling of the products are contained in the Material Safety Data Sheet for each single material in the system. The use of protective clothing and equipment is recommended when mixing and applying the products.

If the cycle is applied on surfaces, in climatic conditions and/or for final uses not mentioned above, please contact the Technical Services Department at MAPEI S.p.A.