

## Plastipur®

MTF Polyurethane concrete flooring  
Self-smoothing, flexible

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### Product description

**Plastipur® MTF** is a three component, flexible, self-smoothing and hard wearing polyurethane resin floor screed. **Plastipur®MTF** can be supplied with an optional broadcast finish to create an anti-slip profile or as the standard smooth, semi-gloss finish. **Plastipur® MTF** is ideal for use over structurally smooth suspended wood or steel mezzanine substrates and substrates susceptible to flexing movement.

### Key facts:

Flexible yet resilient once cured  
Wear and impact resistant  
Abrasion resistant  
Chemical resistant  
Easy to clean, semi gloss finish  
Optional anti-slip finish, multi-layer coating system

### Performance data:

Density (ASTM C64-82):	1500 kg/m <sup>3</sup>
Dynamic E-Modulus (ASTM C597-83):	6000N/mm <sup>2</sup>
Tensile Strength (ISO R527):	10 N/mm <sup>2</sup>
Tensile Elongation at Break (ISO R527):	40%
Linear Shrinkage on Cure (ASTM C490-85):	0.05
Coefficient of Thermal Expansion (ASTM C531 part 4.05):	oC-1 7.5x10 <sup>-5</sup>
Abrasion Resistance:	CS17 Wheel: 77mg loss (ASTM D4060 Taber Abrader 1kg load, 1k cycles) H22 Wheel: 246mg loss
Temperature Resistance:	At 3mm: Constant -10°C to 70°C
Flash Steam Cleanable:	Yes
Water Permeability:	Zero

All figures are measured and expressed under laboratory conditions: Actual performance may vary from the above values depending upon site conditions.

### Physical properties:

Primer(s):	1 scratch coat <b>Plastipur® 427</b> Primer and silica sand/mineral flint broadcast to 1.5 to 2 kg/m <sup>2</sup>
System:	1 application <b>Plastipur® MTF</b>
Sealer Coat(s):	None
Optional Variations:	Anti-slip finish Multi-layer coating system
System Details:	
Finish:	Smooth, semi gloss or anti-slip
Thickness:	1.5mm to 3mm

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### **Chemical Resistance:**

Highly resistant to a wide range of chemicals including dilute mineral acids, strong alkalis and certain solvents including aliphatic hydrocarbons. For full details consult the Plasti-Chemie technical Dept.

### **Curing Time:**

A completed resin floor can go into service after the following minimum cure periods at 18° C and above:

Foot Traffic:	24 hours
Light traffic:	48 hours
Heavy traffic/Full Chemical Cure:	5 days

### **Shelf Life and Storage:**

The product should be kept in its original unopened container until use. The product should be stored in weather tight conditions at temperatures between 10 °C and 25 °C, avoiding direct sunlight. Under these conditions this product has a shelf life of up to 6 months.

Other Products:

The following products from Plasti-Chemie International GmbH are recommended for use with **Plastipur®** MTF:

**Plastipur®** WR resin render screed

### **Standard Colour Range:**

Red	Buff	Terracotta
Green	Grey	Cream

As screen and print settings are beyond our control, these colours are an indication only. Please request product samples for accurate colour information of any of these six standard colours.

### **Application:**

Suspended Substrates with Flexing Movement  
Dry Processing, Assembly and Packing  
Warehousing and Storage, including Chemical Storage  
Pharmaceutical Production Workshops and Plant Rooms

### **Application Temperature:**

Correct temperature is critical to the successful application of **Plastipur®** MTF and air temperatures should be maintained

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between 18°C and 23°C during the application and curing period of this product. If temperatures fall below 18°C the application could become prone to installation difficulties. The application area should be heated to temperatures of between 18°C and 23°C for up to 24 hours prior to application to allow the ambient and substrate temperatures to regulate before the application commences. Materials should also be kept in a warm area of 15°C minimum temperature for 12 hours prior to application. De-humidifiers must be used where high humidity conditions prevail. Ensure adequate ventilation during application.

### Priming:

The dry, prepared, dust-free and rust-free substrate should receive scratch coat of **Plastipur®** primer applied with a squeegee or short pile roller then dry silica sand or mineral flint is broadcast onto the surface at a rate of 1.5kg to 2kg/m<sup>2</sup>. Once the scratch coat has initially cured, the **Plastipur®** MTF can be applied. NB: wooden or steel substrates should be scrim bonded across joints; impregnated with **Plastipur®** primer.

### System Application:

The **Plastipur®** MTF should be mixed and poured onto the substrate then trowelled to a thickness of between 1.5mm and 3mm. A spike roller should be passed through the trowelled material to assist flow and release any trapped air. To achieve an anti-slip finish mineral flint is broadcast onto the uncured **Plastipur®** MTF to saturation: once cured excess flint is removed. The surface then receives two or three roller-applied sealer coats of **Plastipur®** MTF resin sealer. Sealer coats should be applied at a minimum temperature of 18° C, the second coat being applied 8-10 hours after the first.

### Coating System:

The **Plastipur®** MTF coating is mixed and roller applied; two or three coats to 250-750 microns total thickness.

### Joints:

All known expansion joints should be followed through the resin floor finish using a PU Jointing Mastic. If concrete movement or cracking takes place after application then reflective cracking of the topping may occur.

Note: The texture of **Plastipur®** MT on the finished floor surface may appear banded or slightly variable. This is a natural, visual aspect of the system, which can also be influenced by atmospheric conditions and is not defective in anyway. Polyurethane systems have limited colour stability which can result in discoloration of the floor over a period of time upon exposure to UV light. Our standard colour range has been carefully chosen to provide a colour range limiting the extent of discolouration.

### In-Service Maintenance:

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Good housekeeping and regular cleaning can considerably extend the service life of a resin screed floor and will enhance the floor's appearance and reduce soiling tendencies. Suitable cleaning methods for this product include: Rotary scrubbing machine or hot water washing (up to 70° C) with suitable detergent products. Flash steam clean is suitable on an occasional basis.

Data concerning our products and devices as well as concerning our data and procedures are based on an extensive research work and an application technology experience. We obtain these results, with which we do not take over adhesion going beyond the respective single contract, in word and writing after best knowledge, reserve ourselves we however technical changes in the course of the product development. That does not relieve the user however to examine our data and recommendations before their use responsible for the own use. That applies also regarding the keeping of patent rights third as well as for applications and procedures, which are not expressly in writing indicated by us.