



Technical Datasheet  
Anti-Static Flow Applied Polyurethane Flooring

# PUMANTISTAT T.Z.E.F

## DESCRIPTION

Pumantistat T.Z.E.F. is a heavy duty anti-static terrazzo floor produced by the combination of inert coloured granite aggregates within a high performance polyurethane resin system. The resultant floor finish provides all the beauty of conventional marble terrazzo combined with the advantage of heavy duty, seamless, high chemical resistance polyurethane finish with inherent anti-static properties complying with BS2050 – industrial applications.

## COMPOSITION

Water dispersed polyurethane resin system combined with graded silica and conductive aggregates, and conductive carbon fibres.

## APPEARANCE

Pumantistat T.Z.E.F. is produced in a range of background colours (Not Available in light colours) including 3-4mm granite aggregates providing a terrazzo effect which is ultimately ground off to provide a smooth polished cosmetic finish., typically 8mm ground down to 6mm.

## TYPICAL INSTALLATIONS

Prestige industrial areas such as pharmaceutical preparation, museums, foyers, etc.

## SUBSTRATES

Concrete and grano.

## SURFACE PREPARATION

To be assured of maximum adhesion and properties from Resdev resin products the correct surface preparation is essential. In order to ensure the finished system remains fully bonded to the subfloor, it is recommended that the edges of the floor area adjoining the walls are rebated to produce a cross-section of 20mm deep by 6mm wide, running at 150mm from and parallel with the walls.

## PRIMING

Priming of all surfaces should be undertaken with Pumantistat primer. This primer should be allowed to cure for a minimum of 16 hours prior to application of the Pumantistat T.Z.E.F. system (Maximum overcoating time at 20° C – 72 hours).

## MIXING

Pre-mixing of the coloured liquid component is essential to ensure any light settlement is reincorporated. Thoroughly drain the contents of the brown hardener component into the coloured resin component and mix for a minimum of 1 minute or to provide a homogeneous mix. The resultant mixture should then be loaded into a cretriangle, Pennine, danes or similar drum mixer and the aggregate component loaded in stages, mixing for 23 minutes or until a lump free mix is obtained. DO NOT USE A DRILL AND PADDLE. At this point sprinkle the fourth component of conductive fibres ensuring good dispersion over a further 2 minutes. Apply to pre-primed areas and level between battens as necessary, with a steel float. The mortar is allowed to cure for 48 hours before grinding. A typical method of grinding would be: 1st cut: Dry cut with a 20-segment diamond grinder. 2nd cut: wet cut with a 120 grade steel/polymer diamond. Apply grout with a steel trowel with a scrape-on/scrape-off technique to infill voids only. Allow grout to cure for 24 hours, then repeat 2nd cut followed by a wet polish with a polymer/diamond round disc, grade 100. This product will be considerably more difficult to apply than standard Terrazzo.

## APPLICATION CONDITIONS

Between 5 and 30° C Maximum moisture content of 75% RH  
Please note contact must be made with the Technical Department to discuss the unique application properties of this system.

## COVERAGE RATES

Pumantistat T.Z.E.F. at 8mm – 16kg/m<sup>2</sup>.

## SPECIFICATION DETAIL

Pumantistat Primer at 220g/m<sup>2</sup>  
Pumantistat T.Z.E.F. at 8mm – 16kg/m<sup>2</sup>  
After grinding – grouting with Pumadur Grout.

## SEALING

Pumantistat T.Z.E.F. does not require sealing, but may be treated by the following:

1) Conductive Wax polishing.

The beauty of this finish will develop over a period as is the case with conventional marble terrazzo.

## MAINTENANCE

Pumantistat T.Z.E.F. is an attractive heavy duty finish and in order to maintain its cosmetic features it is essential that it is continually kept clean by regular mopping or scrubbing with mild proprietary detergents and polishing etc.

## CURE SCHEDULE

Usable Life of full unit/mix at 20° C	-20 mins
Initial film gel time (joining up) at 20° C	-25 mins
Cure time to light traffic at 20° C	-5-7 hours
Cure time prior to grinding at 20° C	-minimum 24 hours
Full cure at 20° C	-3-5 days

## CHEMICAL RESISTANCE

Contact the Technical Department for specific chemical resistance.

## TECHNICAL DATA

Compressive strength to BS6319 Part 2 (N/mm <sup>2</sup> )	-59.0
Tensile strength to BS2782:320D (N/mm <sup>2</sup> )	-6.5
Flexural strength to A.S.T.M. D790-84a (N/mm <sup>2</sup> )	-40.0
Elastic modulus to BS2782:320D (N/mm <sup>2</sup> )	-1350.0
Slant shear bond strength to BS6319 (N/mm <sup>2</sup> )	-51.0
Abrasion resistance by Taber mg loss/1000 cycles/1kg load with H18 wheel	-1100
TRRL slip resistance	-40 Wet-65 Dry
Surface spread of flame to BS 476 Part 7	-class 2
Anti-static performance to BS2050	0.5 x 10 <sup>4</sup> -10 <sup>9</sup> ohms

## HEALTH AND SAFETY

Please read technical data sheet reference TD103 and specific health and safety data for this product provided in compliance with the requirements of EC Directive 91/155.

## EARTHING PROCEDURE

Providing the substrate has intimate contact with underlying ground, no additional earthing requirements will be needed. However in the instance of raised or insulated floor levels, a network of copper strip should be fixed to the blasted floor surface prior to priming and laying of the Pumantistat T.Z.E.F. system. The copper strip network may be finally secured to a main earthing frame system.

## TECHNICAL ADVICE

For further information on this or any other Resdev product, please contact our Customer Care Department on 01422 379131.