Technical Datasheet
Anti-Static Flow Applied Polyurethane Flooring

PUMANTISTAT PUSL

DESCRIPTION
Pumantistat PUSL is a medium duty anti-static, flow applied, smooth floor system based upon polyurethane technology and designed to provide excellent resistances to abrasion, chemical attack and other physical aggression. This product is designed to be compliant with BS2050 (A.4.1) in providing anti-static performance suited to industrial application.

COMPOSITION
Water dispersed polyurethane resin system combined with graded silica and conductive aggregates.

APPEARANCE
Totally seamless, matt, smooth finish of uniform colour.

DURABILITY
Highest order of durability, resistances to abrasion, impact and chemical attack.

THICKNESS
Typically applied between 2mm and 3.5mm.

TYPICAL INSTALLATIONS
The Pumantistat PUSL system is ideally suited to areas subject to heavy duty use:- Chemical processing, Food processing, brewing, engineering process areas etc. and wherever the potential of static build up poses a hazard to operatives and workforce. This system is to be applied in reference to BS2050 Page 3, Item 2 (Flooring for antistatic purposes) only, and not for explosive handling areas

SUBSTRATES
Concrete, polymer reinforced screeds, grano concrete, mild steel or water resistant marine plyboard.

SURFACE PREPARATION
To be assured of maximum adhesion and properties from Resdev resin products the correct surface preparation is essential. Please refer to technical data sheet “Surface Preparation” 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 10mm deep by 6mm wide, running at 150mm from and parallel with the walls and all areas of termination.

APPLICATION CONDITIONS
Between 10and 30° C Maximum moisture content of Subtrate 5% or 75% Rh.

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 PUSL system. The copper strip network should be finally secured to a main earthing frame system.

PRIMING
Priming of all surfaces should be undertaken with Pumantistat primer. Then scattered with conductive aggregate This primer should be allowed to cure for a minimum of 16 hours prior to application of the Pumantistat PUSL (Maximum overcoating time at 20° C – 72 hours).

MIXING
Pre-mixing of the coloured liquid component is essential to ensure all of the conductive elements are 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 rotary drum mixer and the aggregate component loaded in stages, mixing until a lump free mix is obtained. It is imperative that consistent mix times are maintained throughout the installation as shading may occur due to the effects

APPLICATION TECHNIQUE
Apply to pre-primed areas and level as necessary, with a steel float. The resultantly applied product should be treated with a Resdev spiked roller in order to aid air release and flow. Spiked rollering should be carried out within three minutes of application in order to avoid interfering with the film gel time.

COVERAGE RATES

Pumantistat PUSL @	2.0mm	2.5mm
Coverage rate in kg/m²	3.63	4.54

SPECIFICATION DETAIL
Pumantistat primer typically applied at 220g/m². Pumantistat PUSL applied between 2 and 3.5mm at the spreading rates noted above.

MAINTENANCE
Providing contamination is not allowed to build up, regular scrubbing and mopping will maintain these systems in serviceable condition. Normal proprietary cleaning agents in combination with pressure washing/steam cleaning may be employed.

CURE SCHEDULE

Usable Life of full unit/mix at 20° C	-15 mins
Initial film gel time (joining up) at 20° C	-20 mins
Cure time to light traffic at 20° C	-5-7 hours
Cure time to light wheeled traffic at 20° C	-12-16 hours
Cure time to heavy duty traffic at 20° C	-24 hours
Full cure at 20° C	-3-5 days

CHEMICAL RESISTANCE
Excellent resistances to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents. Please refer to technical data sheet reference TD112.

COLOURS AVAILABLE
All standard Resdev colours excluding colours lighter than mid grey.

TECHNICAL DATA

Compressive strength to BS6319 Part 2 (N/mm²)		-62.0
Tensile strength to BS2782:320D (N/mm²)		-12.0
Flexural strength to A.S.T.M. D790-84a (N/mm²)		-40.0
Elastic modulus to BS2782:320D (N/mm²)		-1530.0
Slant shear bond strength to BS6319 (N/mm²)		-55.0
Abrasion resistance by Taber mg loss/1000 cycles/ 1kg load with H18 wheel		-900
TRRL slip resistance	45 Wet	-80 Dry
BS2050 (A.4.1)	0.05—100 megaohms Surface Resistivity	

HEALTH AND SAFETY
Please read specific health and safety data for this product provided in compliance with the requirements of EC Directive 91/155.

STORAGE, MIXING & APPLICATION
The storage, mixing and application conditions can affect the quality of the finish produced. Please read technical data sheet.

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

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