



Technical Datasheet  
Flow Applied Polyurethane Flooring

# PUMADUR M.D.

## DESCRIPTION

The Pumadur M.D system is a heavy duty flow applied topping based upon polyurethane technology which provides excellent resistances to abrasion, chemical attack and other physical aggression.

## COMPOSITION

Water dispersed polyurethane resin system combined with graded silica aggregates.

## APPEARANCE

Seamless matt, smooth finish of uniform colour.

## DURABILITY

Highest order of durability, resistance to abrasion, impact, chemical attack and penetration.

## THICKNESS

Pumadur M.D – Applied between 3 and 5mm

## TYPICAL INSTALLATIONS

The Pumadur M.D system is ideally suited to areas subject to heavy duty use:-

Chemical processing  
Food processing/wet areas  
Brewing/dairy clean areas  
Engineering process areas

## SUBSTRATES

Concrete, polymer reinforced screeds, grano concrete, mild steel and water resistant 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" reference TD102. 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 8mm wide, running at 150mm from and parallel with the walls.

## APPLICATION CONDITIONS

5-30° C Maximum moisture content of 75% RH

## PRIMING

Priming of all surfaces should be undertaken with Pumaprime S.F. Please refer to technical data sheet reference TD002. The primer should be allowed to cure for a minimum of 16 hours prior to application of the Pumadur M.D system. (Maximum overcoating time at 20°C – 48 hours).

## MIXING

Pumadur M.D is a three-component product. Pre-mixing of the coloured liquid resin component is recommended to ensure any light settlement is reincorporated. Thoroughly drain the contents of the brown hardener component into the liquid coloured component and mix for a minimum of 1 minute or until a homogeneous mix is obtained. The resultant resin blend should then be loaded into a rotary drum mixer and the aggregate component added in stages, mixing until a lumpfree, smooth mix is obtained.

## APPLICATION TECHNIQUE

Apply to pre-primed areas levelling to the required thickness with a steel trowel and aided by a Resdev spiked roller. Spiked rolling should be carried out within 3 minutes of application in order to avoid interfering with the film gel time.

## COVERAGE RATES

|                            |       |       |       |
|----------------------------|-------|-------|-------|
| Pumadur M.D at             | 4.0mm | 5.0mm | 6mm   |
| Coverage kg/m <sup>2</sup> | 7.60  | 9.50  | 11.40 |

## SPECIFICATION DETAIL

Pumaprime S.F. at 100-175g/m<sup>2</sup>. Please refer to technical data sheet reference TD002.

Pumadur M.D. at coverage rates as 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 may be employed. Early trafficking prior to full cure being achieved can in some instances ingrain into the surface contamination which may produce a cosmetic loss but does not detract from the performance of the system.

## 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         | - | 4-6 hours |
| Cure time to light wheeled traffic at 20° C | - | 16 hours  |
| Cure time to heavy duty traffic at 20° C    | - | 48 hours  |
| Full Chemical 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. Only when full chemical cure has taken place. Please refer to technical data sheet reference TD112.

## COLOURS AVAILABLE

All standard Resdev colours except white, and magnolia.

## TECHNICAL DATA

|  |           |
|--|-----------|
| Compressive strength to BS6319 Part 2 (N/mm <sup>2</sup> )-                  | 62.0      |
| Tensile strength to BS2782:320D (N/mm <sup>2</sup> ) -                       | 15.0      |
| Flexural strength to A.S.T.M. D790-84a (N/mm <sup>2</sup> )-                 | 35.0      |
| Elastic modulus to BS2782:320D (N/mm <sup>2</sup> ) -                        | 1530.0    |
| Slant shear bond strength to BS6319 (N/mm <sup>2</sup> )-                    | 55.0      |
| Abrasion resistance by Taber mg loss/1000 cycles/<br>1kg load with H18 wheel | - 900     |
| TRRL slip resistance   | - 65 Dry  |
| Surface spread of flame to BS 476 Part 7                                     | - Class 2 |

## 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.

## STORAGE, MIXING & APPLICATION

The storage, mixing and application conditions can affect the quality of the finish produced. Please read technical data sheet reference TD104.

## TECHNICAL ADVICE

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