

DATA SHEET

PENDONG 122 PU SCREED **HEAVY DUTY POLYURETHANE FLOORING**

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V1-22/05/2023

GENERAL DESCRIPTION

- Pendong 122 PU Screed is a heavy-duty based flooring system, designed to provide excellent resistance to abrasion, chemical attack & other physical aggression.

COPOSITION

Water dispersed polyurethane resin system combined with graded silica aggregates.

APPEARANCE

- A level mottled aggregate surface with chosen background colour providing a light slip resistant texture.
- The floor will result in a uniform finish.

DURABILITY

- P122 PU Screed has the highest order of durability, resistance to abrasion, impact & chemical attack.
- It is also stable to steam cleaning.



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THICKNESS

- Typically available in 3mm, 6mm & 9mm(Also available in 1mm & 4mm on request)

TYPICAL INSTALLATIONS

- Heavy duty applications, Chemical processing plants, Food processing facilities, Breweries, Wine Cellars
- Heavy duty traffic & plant vehicles, engineering process areas etc.

BENEFITS

- Antimicrobial performance
- High chemical resistance
- Easy to clean & sterilize, anti-slip surface, minimal joints
- Heat resistant up to 120 degrees Celsius
- Steam cleanable
- Freeze/thaw resistant
- Non-tainting & non dusting
- High abrasion resistance
- Withstands high mechanical stress
- Suitable alternative to expensive acid resistant tiles
- Low odour during application
- Positive slip resistance



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SUBSTRATES

- Concrete, polymer-reinforced screeds, grano, concrete.

SUBSTRATES REQUIREMENTS

- Concrete substrates must have a minimum compressive strength of 25 MPa, a minimum tensile pull-off strength of pf 1.5 MPa & be free of oil, fat, grease, dust & loose friable materials.
Moisture content must be below 10%

SURFACE PREPERATION

- To be assured of maximum adhesion & properties from polyurethane resin products, the correct preparation is essential.
- A clean, dry surface, void of contamination & oils, mechanically grinded or abraded.
- Remove all previous coatings, unbounded concrete & laitance mechanically through diamond grinding, abrasive blasting or scarifying to obtain a sound & porous surface. Sweep dust & loose debris followed by industrial vacuuming to obtain a dry & dust-free surface.

APPLICATION CONDITIONS

- Application temperature 5-30 °C
- Maximum moisture content of substrate 10%



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PRIMING

- Priming of all correctly prepared surfaces should be undertaken. Primer should be allowed to cure for a minimum of 16 hours, prior to application of the PU Screed.
- (Maximum cover coating time at 20° C within 48 hours)
- Primer to be applied at approximately 6-7m²/lt

MIXING

- Open all aggregate bags before mixing starts to ensure no time is wasted between mixes. Set up the mixing machine as close to the floor as possible (Use two mixing vessels to ensure time between mixes / kits is minimized).
- Prior to mixing, the temperature of all components must be between 15 & 25°C.
- Pre-mix the resin component before use. Add the hardener component to the resin component & mix using a low-speed electric mixer (300-400 rpm) for 1 minute or until homogeneous.
- Decant the mixture into a rotary drum mixer & add the aggregate component in stages, mixing for a minimum of 2 minutes until a uniform colored, lump-free mix is obtained.
- Apply to the primed areas to the required thickness using a steel float.
- Ensure that anchor grooves are fully wetted out with material.

Note: Due to the high resin content, excessive “back-rolling” of PU Screed can lead to an increased risk of pin-holing & texture in the surface.

AVERAGE SPREAD RATES

- 9mm @ 1.8m²
- 6mm @ 2.2m²
- 4mm @ 3.2m²
- 3 mm @ 4m²
- 1 mm @ 5m²



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MAINTENANCE

- Regular cleaning of the applied system is recommended to maintain slip resistant agents in combination with pressure washing / steam cleaning may be employed.

ANCHOR JOINTS

- Anchor joints must be present in the surface of the concrete within 50mm to 75mm of all joints, column base, perimeter walls, drainage channels & door threshold etc.

CURE SCHEDULE

- Usable life of full unit/mix at 20°C 15 min
- Initial film gel time (joining up) at 20°C at 9mm build 20 min
- Cure time to light pedestrian traffic 12 hours
- Cure time to light wheeled traffic 24 hours
- Cure time to heavy duty traffic 48 hours
- Full chemical resistance 7 days

CHEMICAL RESISTANCE

- Excellent resistances to organic & inorganic acids, alkalis, fuel & hydraulic oils, aromatic & aliphatic solvents.

COLOURS AVAILABLE

- All standard colours – REFER TO COLOUR CHART AS INDICATION
- Always refer to physical sample



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EQUIPMENT CARE

- All tools should be cleaned with thinners or xylene immediately after use.

PACKAGING

- Supplied in 2.90 Liter Resin, 2.45 Liter Hardener & 25 kg Aggregate

HEALTH & SAFETY

- All protective clothing must be worn & used in accordance with safety regulations.

STORAGE

- The storage, mixing & application conditions can affect the quality of the finish produced.
- Always store in a cool & dry place.
- Store off the ground in un-opened packs in a dry store, undercover between 10°C & 30°C out of direct sunlight.
- Protect from frost.

SHELF LIFE

- Resin & Hardener components: 12 months
- Aggregate component: 6 months



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TECHNICAL DETAILS

- Compressive Strength > 50MPa
- Tensile Strength >12 MPa BS6319
- Flexural Strength > 20 MPa
- Concrete Adhesion > 1.5 MPa (Concrete failure)
- ASTM P7234 Impact Resistance 1 kg> 1.8 m 2 kg> 1.5m ISO6272 – 1:2011
- Hardness 80 Shore D
- Slip Resistance Dry > 70 Wet >25 TRRL Pendulum Slip Test
- Vapor Permeability 3g/m² / 24 hours @ 9mm ASTM E96: ninety
- Water Uptake (Permeability) Nil Karsten Test
- Heat Resistance -5°C to 90°C @ 6mm - 15°C to 110°C @ 8mm
- Chemical Resistance Refer to chemical chart
- Foot traffic 12-16 hours
- Heavy traffic 24 hours

The technical data furnished is obtained from controlled laboratory tests under ideal application conditions. No guarantee of any performance characteristic is therefore given or implied and we do not hold ourselves responsible for any consequential damage of whatsoever nature that may arise from use of our products. In the event of a proven fault our liability will be limited to the replacement of the product only. It is the users' responsibility to confirm the currency of product data sheets.

