

A Polyurethane Coving Mortar For Vertical Surfaces

Guardian PUMV is a seamless solvent free polyurethane coving mortar applied at 3-9 mm thickness available in a range of colours.

USES & ADVANTAGES

Guardian PUMV provides a heavy duty, thermal shock resistant coving to use in combination with **Guardian SLPU** & **Guardian PUFS-HD**. It will stand abrasive wear and a wide range of chemicals. Areas of use include covings, plinths and machine bases, drains, sumps and bund linings.

Advantages include:-

- Hygienic easy to maintain. Non tainting & non dusting. Contains an antimicrobial additive.
- Monolithic, easy to maintain and microbiologically inert.
- Excellent chemical resistance.
- High abrasion and impact resistance.
- Steam cleanable (at 6 mm.+).
- Non toxic.

PROPERTIES @28 Days 25°C

Components:	Part A – Base	Part B – Hardener	Part C – Colour	Part D – Filler
Compressive Strength:	> 40 N/mm ² .		(ASTM C579)	
Tensile Strength:	> 6 N/mm ²		(ASTM D638)	
Flexural Strength:	>15 N/mm ²		(ASTM C348)	
Concrete Adhesion:	Concrete failure			

Chemical Resistance: Resistant to sugars, mild detergents, some hydrocarbons, inorganic & organic acids such as:-

- | | | |
|-------------------------|-------------------|----------------------|
| • Hydrochloric acid 10% | • Methanol | • Sulphuric acid 10% |
| • Caustic soda 50% | • Citric acid 10% | • Petrol |
| • Acetic acid 5% | • Oil | • Lactic acid 10% |
| • Detergents | • Acetone | |

Values indicated are internal test results. Consult Guardian for detailed information.

Mixed Density:	2.0 ± 0.05 kg/ltr
Pot Life:	10-15 minutes at 20°C
Colours:	Yellow, Red, Green, Grey

Due to surface finish differences the coving mortar colour may be slightly different to the floor colour.

Guardian PUMV may discolour on ageing this is more noticeable in light colours but does not effect chemical resistance.

Service Temperatures:	3 mm thickness	-5°C to 60°C max.
	9 mm thickness	-20°C to 120°C max.

SURFACE PREPARATION

The concrete shall be sound, dry, and free from all contaminants. Captive shotblasting is recommended or scarifying. All dust, dirt, laitance, curing compounds, oil, grease, existing coatings etc. must be removed to create a sound substrate surface.

The minimum tensile (pull off) strength shall be 1.5 N/mm². New concrete shall have cured for at least 28 days and incorporate a continuous waterproofing membrane with a compressive strength greater than 25 N/mm². Concrete design shall provide for movement joints as needed and provision made for induced joints to allow for any shrinkage of the concrete along defined planes.

Anchorage grooves at least 8 mm wide & 8 mm deep should be formed at edges, bay joints, columns, drains, doorways and at regular centres across the floor.

Movement joints must be carried through **Guardian PUMV** and sealed. Construction joints and cracks may be covered but they may reflect through the **Guardian PUMV**. Coves are best installed once the floor has been laid. A straight edge should be provided to minimise the effect of colour differences.

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PRIMING

Guardian PUMV must be applied to surfaces primed with **Guardian TOPHD-Primer**. Surfaces to be primed must be clean, dry, dust free, free of laitance and all contaminants. Old concrete must be checked for contamination e.g. oils, fats and sugars. Surface preparation should be by shotblasting, scarifying, grinding and hot compressed air for oil contaminated surfaces. Acid etching must not be used and wire brushing is not recommended. All dust / debris must be removed, after preparation, by vacuuming.

Do not apply **Guardian PUMV** at material or floor temperatures below 10°C, temperatures must not fall below 5°C for the first 24 hours after application. **Guardian TOPHD-Primer** must only be applied by trained specialist applicators. Immediately after mixing apply the material using a short nap roller and or squeegee working well into the surface. For very porous surfaces where two coats are required the first coat must cure overnight before applying the second coat.

The consumption of **Guardian TOPHD-Primer** is approximately 5-7 m²/kg depending on substrate porosity, the texture of the surface applied to, method of application and temperature of substrate.

MIXING

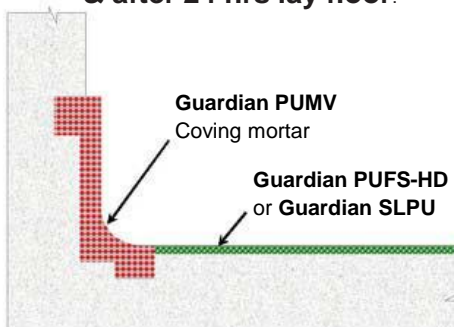
The components are preweighed. Do not split or change proportions of packs. Do not add to or remove anything from the mixes.

Agitate pigment pack first, add to Part A and mix for 20 seconds add Part B to this mixture mix for a further 20 seconds. Then add fillers Part C & mix for 2 minutes until uniform. Avoid entraining air use slow speed mixer.

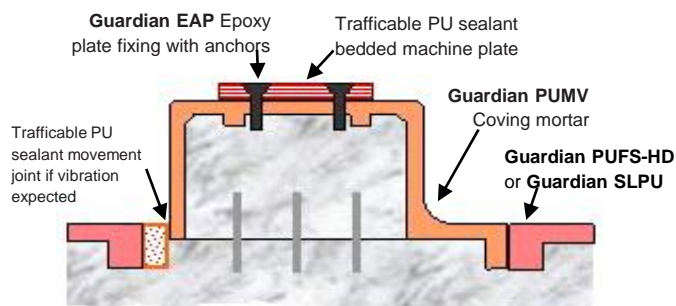
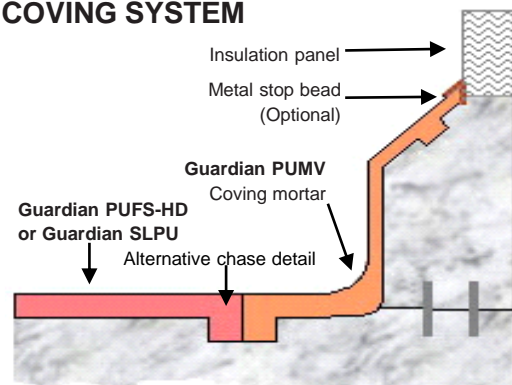
APPLICATION

Guardian PUMV must be applied by trained specialist applicators. Apply immediately after mixing to the vertical edge of the cove. Then apply the base level to the edge of the floor and lastly place a fillet of mortar to form the cove and finish with coving trowel to radius.

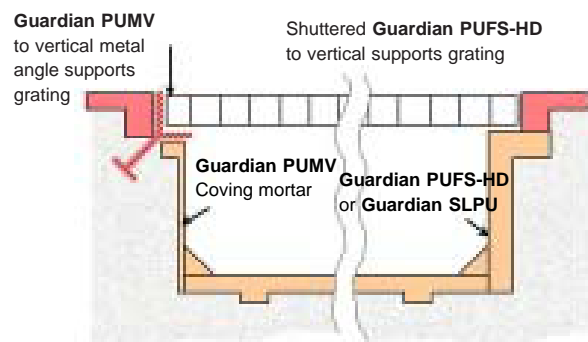
Cove first at the intersections & after 24 hrs lay floor.



COVING SYSTEM



Machine Plinth Coated with Guardian



Note: Guardian PUMV fillet is an optional Lined Channel

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CONSUMPTION RATES

Approximately 2.0 to 2.1 kg/m²/mm thickness (wastage not included).

CURING

20°C foot traffic 12 hours; light vehicular traffic 24 hours.

30°C foot traffic 8 hours; light vehicular traffic 16 hours.

Heavy traffic after 48 hours.

Full cure 3-5 days.

Do not wash or cover within the first 36 hours of curing.

CLEANING

Regular cleaning, both dry and wet using mechanical scrubbers or the use of hot water with detergent, will maintain the floors appearance and reduce soiling.

STORAGE & SHELF LIFE

Guardian PUMV can be stored for up to 9 months from manufacture date at 30°C providing stored above ground level, under cover in unopened original packaging, out of direct sunlight.

PACKAGING

Guardian PUMV is supplied in 25 kg pre-measured sets, never add or remove any of materials from packs.

HEALTH & SAFETY

Gloves and eye protection must be worn during mixing and application. Standard precautions should be taken as with handling all chemicals. Consult and follow the product material safety data sheet. Material splashed onto naked skin should be immediately removed with soap and copious water before curing.

TECHNICAL SERVICE

Guardian Coating Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

IMPORTANT NOTES

Retaining grooves should be placed at exposed edges. Do not apply over polymer modified cement screeds. Protect new floors for at least 24 hours before direct water contact. Protect from condensation when applying. Allow 48 hours after product application before placing into service close to food stuffs. Do not apply to cracked or unsound surfaces.

Guardian products are subject to discolouration when exposed to UV, the extent depends on the colour. There is no measurable change in the products properties. The products may be used outside providing the change in appearance is accepted by the clients.

Colour uniformity cannot be completely guaranteed from batch to batch. If in doubt ask Guardian.

Do not apply to green concrete or where moisture content > 5%. Do not mix by hand. Not recommended for shock freezers. Do not apply below 10°C or above 35°C or maximum relative humidity of 85% Hot steam cleaning may result in delamination due to thermal shock.

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QUALITY ASSURANCE (OEM)

ISO 9001: 2015 verified by TUV Nord.

ISO14001:2015 verified by Lloyd's Register International.

DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.

Guardian does not take responsibility nor need to defend others testing that does not achieve the published data.

The user must test the products suitability for the intended application and purpose. Guardian reserves the right to change the properties of the product.

Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advise offered