

DESCRIPTION

PUR-FLOW is a single component, high strength, non-shrink, self leveling mortar that provides a flat, smooth, durable wear surface. It can be used for decorative and industrial indoor flooring applications and can be incorporated with integral color, colored aggregates and unique surface treatments. PUR-FLOW uses a polymer modified binder system that when mixed only with water, poured or pumped onto the floor, will level and smooth concrete and other subfloors. PUR-FLOW provides a superior bond to the substrate when used in conjunction with PRIMER, and can be applied from 6mm (1/4") up to 50mm (2") in a single operation and up to 125mm (5") in depth, with proper aggregate extension and accepts foot traffic in 2-3 hours and floor treatments in 18 hours.

TYPICAL USES

- Leveling rough uneven concrete floor surfaces
- Leveling hardwood or plywood floors
- Leveling existing ceramic tile, terrazzo and wood floors to provide a smooth even finish
- Showroom floors, commercial shopping centre
- Decorative store floors

ADVANTAGES

- Low in place cost, easy to use
- No troweling required, self leveling
- Rapid early strength gain
- Mixes with water only
- Very fluid, ideal for pouring and pumping
- Installable from 5 mm (1/4") to 125mm (5") thick
- Non-shrink and non dusting
- Superior bond
- Maintains workability for 25 minutes at 21°C (70°F)
- Not a gypsum based product
- No sanding or grinding
- Floor Covering Adhesive compatible
- Can be coated with Polyurethane or Epoxy within 18 hours

TECHNICAL DATA

PACKAGING	22.7KG (50 LBS) BAG	
COVERAGE PER 22.7KG (50 LBS) BAG	NOMINAL THICKNESS	APPROXIMATE COVERAGE
	6.0mm (1/4")	2m ² (21 ft ²)
	12.0mm (1/2")	1m ² (11 ft ²)
	2.5cm (1")	0.5m ² (5 ft ²)
STORAGE	STORE IN A DRY AREA.	

COMPRESSIVE STRENGTH [(ASTM 109*, 50MM (2") CUBES] @ 22.20C (720F)

COMPRESSIVE STRENGTH	TIME	MPA	PSI
	1 HR.	13.8	2000
	3 HRS.	27.6	4000
	1 DAY	41.4	6000
	3 DAYS	51.7	7500
	7 DAYS	55.2	8000
	28 DAYS	66.6	9600
FLEXURAL STRENGTH ASTM C-78	28 DAYS	8.8 MPA	1280 PSI
TENSILE STRENGTH ASTM C190	28 DAYS	4.0 MPA	570 PSI
SET TIME ASTM C191* @ 210C	INITIAL	45 MINUTES	
	FINAL	60 MINUTES	

SURFACE PREPARATION

CONCRETE	Surface must be solid, completely clean, free of oil, wax, grease, sealers, curing compounds, asphalt, paint, dirt, loose surface material and any contaminate that will act as a bondbreaker. Weak concrete surfaces must be cleaned down to solid sound concrete by mechanical means. Acid etching or chemical cleaning is not acceptable. Joints in the substrate must be reflected through the applied underlayment.
PREPARATION OF SUBSTRATES	Ceramic tile, terrazzo, quarry tile and stone must be solid, well bonded, clean and free of any bond breaking contaminates such as glazes, was, oil, sealers etc... Surfaces must be mechanically sanded until a "profile" is obtained for the maximum bonding of PUR-FLOW. Wet mop the floor removing all debris, dust and loose material prior to installing the primer.
SUBSTRATE PRIMING	All substrates must be clean, dry and primed before PUR-FLOW is applied. Subfloor temperature must be at least 10°C (50°F). 3.8L (1 gal) of PRIMER or PRIMER PLUS mixed with 3.8L (1 gal) of clean potable water will cover approximately 32m ² -37m ² (350-400ft ²) of floor area. Primer must be applied evenly with a nylon pushbroom with exploded tips. Do Not use paint rollers, mops, or spray equipment. Apply a thin primer layer leaving no bare spots, puddles or excess primer. Allow to dry to a clear, thin film (usually 2-3 hours, but less than 24 hours).

SURFACE PREPARATION (CONT.)

SUBSTRATE PRIMING PRECAUTIONS

VERY ABSORBENT CONCRETE:

To avoid the development of bubbles and pin holes in the PUR-FLOW, very absorbent concrete may require two applications of PRIMER PLUS. Apply the first coat of PRIMER PLUS diluted with 2 parts water, let completely dry and install a second application of Primer mixed 1:1 with water. Let dry, then apply PUR-FLOW.

NON-POROUS SUBFLOORS, WOOD AND CUTBACK:

Prime above subfloors using PRIMER UNDILUTED. Apply a thin layer using a pushbroom, covering all areas, and not leaving any excess primer or puddles. Allow to completely dry, then apply PUR-FLOW.

Note: Low subfloor temperatures, or high humidity will slow primer drying. Never place PUR-FLOW until the primer is COMPLETELY dry.

MIXING

Mix 5.2L (5.5 qts) clean water per 22.7kg (50 lbs) bag of PUR-FLOW. Mix 2 bags of PUR-FLOW at a time. For each bag add 5.2L (5.5 qts) clean potable water into a mixing drum. Then add the PUR-FLOW bags, while mixing at full speed with a paddle mixer attached to a heavy duty ½" drill (min. 650 rpm). Mix completely for a minimum of 2-3 minutes until lump free, adding no additional water. Over wood subfloors the addition of EMULSION is recommended to increase the resiliency of PUR-FLOW. Mix 1.9L (2 qts) of EMULSION with 3.3L (3.5 qts) of water for each bag of PUR-FLOW used and combine as outlined above.

PUR-FLOW will level itself for 20 minutes at 21°C (70°F) no troweling needed. Pour the blended PUR-FLOW on the floor and disperse with a spreader, followed by smoothing the material with a smoother or flat trowel. Cleated shoes must be worn to avoid leaving marks. It is recommended that two (2) PUR-FLOW mixing drums be used simultaneously. Mixing in one while pouring the other. This way there is no job slow down and still allows mixing for the required 2-3 minutes. PUR-FLOW can also be pumped affording high productivity and continuous smooth placement.

Consult your representative for pump information.

APPLICATION

Placing:

All applications require the use of PRIMER or PRIMER PLUS prior to the placement of PUR-FLOW. Floor preparation is crucial in obtaining a successful underlayment installation. The contractor is responsible for ensuring the substrate is properly prepared prior to application of PUR-FLOW. Do not apply over lightweight or gypsum base concrete. A test application is recommended.

Thickness:

PUR-FLOW can be applied from a 6mm (1/4") to 50mm (2") without extension with aggregate, and up to 125mm (5") extended. Blend the PUR-FLOW with washed, dried, clean 1/4" pea gravel or other decorative stone. Mix PUR-FLOW first with water, then add 15 lbs of the aggregate, mixing until the added stonel is coated, then place on substrate. Be aware that wet aggregate may cause overwatering and the addition of aggregate will reduce the workability and may necessitate a finish coat. Allow the extended layer to dry, normally 16-18 hours. Prime the surface with PRIMER PLUS as per the priming instructions outlined. When this primer is completely dry, install the smooth unextended finish layer.

APPLICATION (CONT.)

Curing:

PUR-FLOW is self curing. The application of concrete cures is not required. PUR-FLOW is walkable in 2-3 hours and will accept floor coverings in 18 hours. All floor adhesives compatible with concrete may be used on PUR-FLOW. Note: PUR-FLOW is cement based, therefore follow ACI rules of concrete work. Follow good warm and cold weather placement procedures. Hot temperatures will reduce working time, therefore use cold water. Do Not place below 5°C (40°F), do not allow to freeze, protect from wind, direct sunlight and do not mix with admixtures. Any questions call your representative.

Clean-up:

Use water to clean all tools immediately after use.

RESTRICTIONS

- For interior use only
- Do not install below 5°C (40°F)
- Do not install over gypsum based surfaces
- Do not overwater
- Always install a test area, ensuring suitability of PUR-FLOW for intended use
- Rely upon floor covering manufacturer for directions concerning maximum moisture content of subfloor, adhesive selection etc...
- Contains Portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Consult the material safety data sheet for further information.

IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of PurEpoxy. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. PurEpoxy assumes no legal responsibility for use upon these data. PurEpoxy assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.