



# PALLMANN P104

1-component reaction resin rapid primer for wood flooring installations

## Description

One-component polyurethane fast dry primer for flooring installations using reaction resin adhesives. This product acts as a primer/surface strengthener on absorbent and non-absorbent surfaces and as a moisture vapor retarder on moisture resistant substrates with an MVER of up to 7 lbs (ASTM F1869-11) or 90% RH (ASTM F2170-11). A 2 coat application is required as a moisture vapor retarder (no leveling). A 3 coat application is required as a moisture vapor retarder (with leveling). Suitable for most residential and commercial applications.

Suitable for/as:

- A fast dry primer for glue down wood floor installations
- Strengthening of absorbent substrates such as gypsum concrete or porous concrete
- Moisture vapor retarder up to 7 lbs MVER or 90% RH
- Residential and commercial installations
- Concrete, gypsum concrete and OSB
- Radiant heat systems

## Product Properties

Ready to use fast-dry primer and vapor retarder product for residential and commercial use.



## Features

- Single component
- Fast drying
- Strengthens gypsum concrete substrates
- Low viscosity
- Moisture-cured, modified polyurethane pre-polymers
- Water-free, solvent-free
- Meets EMICODE EC 1 R

## Technical Data

Packaging:  
Curing Times:  
  
Stability:  
Color:  
VOC Content:  
  
Coverage:  
  
Working °F/C:

\*At 70°F and 65% rel. humidity.

## Benefits

- Ready to use, no mixing
- Time-saving glue-down wood floor installations on absorbent substrates
- Excellent for priming over radiant heat floor systems embedded in gypsum concrete
- Easy roller or trowel application and excellent surface penetration
- Very rapid hardening and excellent surface penetration
- Very fast drying
- Very low emission

1 gal. plastic container  
Absorbent surfaces: 40 – 90 min\*  
Dense Surfaces: 60 – 150 min\*  
Min. 12 months  
Brown  
Does not exceed 15 grams per liter. P104 is a LEED contributing product (IEQ credit 4.1).  
500 sq. ft per gal (depending on substrate porosity)  
Min. 60°F (16°C) at floor level (60 – 80°F) [16 – 27 °C] on radiant heat systems

# Pallmann P104 Directions for Use:

**BEFORE USING READ ALL DIRECTIONS AND MATERIAL SAFETY DATA SHEETS.** This product meets or exceeds all state and federal clean air quality standards and reflects our commitment to personal health, indoor air quality and the environment. **DO NOT THIN** this product. Call UFLOOR Systems Inc. before using for technical advice if needed. (1-866-505-4810).

## SUBSTRATE PREPARATION

The subfloor must be structurally sound, solid, free from active cracks, surface dry (no standing or pooling water) clean and free of all contaminants (bond breakers) such as grease, oil, paint, wax, curing and sealing compounds which may impair adhesion. Thoroughly brush, abrade, grind or shot-blast to remove weakly-bonded or soft surface areas. Thoroughly vacuum off any loose material or dust. On substrates that conform to standards and are suitable for wood floor installation, the use of a primer is not necessary.

All substrates should be tested for moisture content and moisture vapor emission levels before applying adhesive. Refer to NWFPA substrate moisture testing procedures and applicable ASTM slab moisture testing standards.

For wood or concrete substrates that do not meet industry standards for flatness or level please refer to Pallmann leveling product data sheets. For leveling uneven surfaces we recommend using Pallmann P25 leveling compound to a min. 1/8" thickness to achieve improved surface levels according to manufacturer's requirements.

## APPLICATION

1. Allow the contents of the container to come to room temperature before use. Shake well. Pour the contents into a clean paint tray for easy roller application.
2. Apply a thin, even coat of primer using the Item #9394 Nylon Fiber Roller or Item #9194 Foam Roller (see application table below for proper roller). Avoid any pooling. Too heavy of an application or pooling will cause the P104 to not cure or seriously retard the curing time.
3. When priming for wood floor installations, the wood flooring must be installed within 48 hours of the P104 application. After 48 hours, floor must be abraded with 40 – 60 grit prior to wood floor installation. P104 can be used to prime for solid or engineered wood floor glue down applications using Pallmann P5, P7 or P9 adhesives.
4. When used to strengthen highly absorbent surfaces that are not adequately sound or ready for a glue down installation, apply P104 in 1 to 2 coats using the Item #9394 Nylon Fiber Roller to enhance the substrate surface integrity.
5. When used as a moisture vapor retarder under leveling compound, 3 coats are required. The second coat must be allowed to dry overnight. Broadcast sand over the last coat while wet, completely covering the P104 (25# per 100 s/f; .4 mm or smaller; clean, washed and dry). When dry, brush and vacuum off any loose sand.
6. Clean tools immediately after use with mineral spirits. Hardened material can only be removed by mechanical means.

## Coverage Rate

Substrate	Application Equipment	Drying Time Per Coat	Spread Rate
Dense to slightly absorbent surfaces (concrete)	Item #9194 Foam roller	*40 – 90 min.	approx. 500 sq. ft. per gallon
Absorbent surfaces (gypsum concrete)	Item #9394 Nylon Fiber roller	*40 – 60 min.	approx. 350 sq. ft. per gallon
Existing surfaces with well-bonded adhesive residues	Item #9194 Foam roller	*60 – 90 min.	approx. 500 sq. ft. per gallon

\*When used as a moisture vapor retarder under leveling compound, the 2nd coat must be allowed to dry overnight.

## IMPORTANT NOTES

- Shelf life minimum 12 months in original containers when stored in relatively cool conditions. Tightly re-seal opened containers and use as quickly as possible. Before use, allow to come to room temperature.
- Optimum ambient installation conditions are 64 – 77°F (18 – 25°C) with floor temperature above 60°F (16°C). Low temperatures lengthen, while high temperatures shorten the dry/curing time.
- On highly absorbent surfaces, the application of a second coat should be considered in preliminary calculations.
- Direct bonding with reaction resin adhesives must follow within 48 hours after application of the primer. After 48 hours of dry time it is recommended to abrade surface with 40-60 grit abrasive to improve adhesion.
- In the case of moisture values higher than 7 lbs MVER or 90% RH, use 2-component Pallmann P108 Primer-Sealer.
- The following standards, regulations and notices are applicable and especially recommended:
  - ASTM C 109 modified "Test method for compressive strength of hydraulic cement mortars"
  - ASTM F 1869-11 "Measuring moisture vapor emission rate of concrete subfloors using Anhydrous calcium chloride"
  - ASTM F 2170-11 "Determining moisture humidity in concrete floor slabs using in-situ probes"

## PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT

1-component solvent free polyurethane primer, with a VOC content less than 15 grams per liter. Suitable as a substitute material for high solvent content primers used for hardwood flooring.

## PRECAUTIONS

**CAUTION:** Harmful on inhalation. Contains diphenyl-methane-4,4'-diisocyanate (MDI). Keep out of reach of children. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Avoid contact with skin and eyes. During application, ventilate well and use barrier cream, protective clothing, gloves and eye/face protection. Sensitized persons should not be exposed to liquid product.

**FIRST AID:** In case of contact with eyes, rinse immediately with plenty of water and seek medical attention. Remove contaminated clothing immediately. After skin contact, wash immediately with plenty of soap and water. In case of accident or if you feel ill, seek medical attention immediately (show this label if possible).

Observe safety information on product label as well as material safety data sheet (MSDS). Presents no physiological or ecological risk when fully cured.

DOT UN-Number: Not regulated

Hazard Class/PG: Not regulated

## DISPOSAL

Disposal should be in accordance with local, state and federal regulations. Where possible, collect product residues and re-use. Do not allow into drains, waterways or landfill. Empty plastic or metal containers are recyclable.

The above information is based on our experience and careful investigations. The variety of associated materials and different construction and working conditions cannot be individually checked or influenced by us. The quality of your work depends on your own professional judgement and product usage. If in doubt, conduct a small test or obtain technical advice. Observe the installation recommendations of the flooring manufacturer. The publication of this Product Data Sheet invalidates all previous product information.

## Recommended Application Tools

Item # 9394 - Nylon Roller

Item #9194 - Foam Roller

Item # 12494 - Roller Handle

Item # 12503 - Telescoping Ext. Pole

