

## 12 POLYURETHANE ADHESIVE (PU 105)

DISCLAIMER: Refer to page [4](#) of this document.

### 12.1 DESCRIPTION

PU 105 is a high performance two-part polyurethane adhesive for both indoor installations of Mondo rubber and PVC floor covering and outdoor installations of Mondo rubber flooring. It has excellent resistance to moisture, heat and water, plus outstanding adhesion at low temperatures.

**NOTE: Mondo polyurethane adhesives like PU 100 and PU 105 are the only suitable adhesives for installing over Mondo Everlay.**

**NOTE: Mondo polyurethane adhesives like PU 100 and PU 105 are the only suitable adhesives to use when the area to be installed will be subject to falling impacts, such as free weights/dumbbells.**

**NOTE: For installations over asphalt, the ONLY suitable adhesive to use is Mondo PU 100. DO NOT USE PU 105 OVER ASPHALT. Call the Mondo Technical Department for asphalt preparation recommendations.**

### 12.2 LIMITATIONS

- 1) Protect from freezing in transit and storage. If frozen, allow it to return to room temperature without stirring.
- 2) **Do not use** when the substrate temperature is below 50°F (10°C) or above 86°F (30°C).
- 3) Concrete floors must be completely cured (28 days minimum) and free from moisture vapor emissions and alkaline conditions. An anhydrous calcium chloride test should not exceed 5 lbs/1,000 ft<sup>2</sup> (1.36 kg/93 m<sup>2</sup>) in 24 hours, tested in accordance with ASTM F1869. Relative humidity tests should not exceed 80%, tested in accordance with ASTM F2170.
- 4) **Do not apply** over gypsum base surfaces.

### 12.3 SURFACE PREPARATION

All subfloors must be structurally sound, smooth, solid, level, well fastened, dry, clean and free of dust, oil, grease, paint, tar, wax or any deleterious substances which may prevent or reduce adhesion. The subfloor should be inspected and must meet Mondo specifications (refer to current Subfloor Preparation Guide).

### 12.4 MIXING

Create a mixing station by selecting a location, away from the installation area, and protecting it with a 6' x 6' scrap piece of material, Kraft paper or other suitable product. This polyurethane adhesive consists of two parts and the proportions for the mix are ready to use. Pour the small container of part B in the large pail of part A and stir thoroughly with a **variable speed** mixer (6 amps minimum) until a homogeneous and smooth consistency is obtained. **The complete contents of both parts of the adhesive must be used at once.** Improper mixing may result in a poor bond. Using a variable speed

mixer should not take longer than 2 minutes to mix the two parts to a creamy texture. Overmixing will cause the catalyst to set up too fast, thus reducing pot life and entrapping air which may reduce bond performance. **The adhesive has to be applied immediately after mixing, otherwise it will thicken and be much harder to trowel. The flooring must be installed while the adhesive is wet. The mix must be used within 60 minutes.**

## 12.5 TROWEL SIZE

Trowel size must comply with our recommendations for the product to be installed. See Mondo Installation Manual for details on the recommended trowel or for more information please contact the Mondo Technical Department. Jobsite/substrate conditions will affect spread rate, it may be necessary to adjust trowel size or perform additional surface preparation. **It is recommended to change trowels every so often in order to assure the teeth are not worn out and that the adhesive spread is consistent throughout.**

## 12.6 APPLICATION

- 1) Refer to the appropriate section of the Mondo Installation Manual for the complete installation procedure of the specified sport or commercial product.
- 2) A bond test should be performed before proceeding with an installation using PU 105 (refer to current Subfloor Preparation Guide for instructions).
- 3) Use the recommended notched trowel with sufficient depth to ensure that at least 90% of the adhesive transfers to the material backing.
- 4) Special care must be taken that the adhesive is not applied too thinly. Because the instant grab of PU 105 is low, grey concrete utility bricks (2" x 4" x 8") should be used to cover every seams when installing Mondo sport products (for commercial flooring installations, oblong sandbags can be used to address challenging areas) in order to maintain contact between the material and the adhesive until it has fully set. Mondo recommends leaving the weights on the seam for a period of 24 hours. **Please refer to our installation manual for the specific quantity of bricks used for each sport product.**
- 5) **Do not spread more adhesive than can be covered with material within 30 minutes.** (Note: floor and ambient temperatures directly affects setting time: The warmer it gets, the faster it sets).
- 6) **Install the flooring material onto the fresh adhesive.** Proper adhesive transfer to the material backing should be confirmed periodically by lifting the flooring material and inspecting the backing for a minimum 90% transfer.
- 7) Push out air using the recommended method, as described in the specified product's installation procedure.
- 8) Adhesive setting time will depend mainly on the temperature of the substrate, the floor covering, and jobsite conditions. The initial setting time is seven (7) hours at 73°F (23°C) and the final setting time is twenty-four (24) hours at 73°F (23°C).
- 9) **Do not walk over a newly laid installation before 24 hours** and do not allow heavy or rolling traffic before 72 hours. If needed, protect the installation with 1/8" Masonite or 1/4" plywood.
- 10) **Cleaning or removal of adhesive must be done with denatured alcohol while the adhesive is still wet.**



## 12.7 PHYSICAL PROPERTIES

|   |  |
|---|--|
| Open time at 73°F (23°C)  |  |
| 50% relative humidity.....  | 60 min.  |
| Initial setting time at 73°F (23°C).....  | 7 hours  |
| Final setting time at 73°F (23°C).....  | 24 hours   |
| Freeze/thaw stability at 0°F (-18°C).....   | Stable 5 cycles  |
| Flammability Part A.....  | >61 °C (>142 °F)   |
| Flammability Part B.....  | >87 °C (>187 °F)   |
| Tolerance of vapor emissions from concrete slab<br>(ASTM F1869 Anhydrous Calcium Chloride Test).....        | 5lbs./1,000ft <sup>2</sup> /24 hrs. or less                        |
| Tolerance of relative humidity in concrete slab<br>(ASTM F2170 Relative Humidity Test (in-situ probes)..... | 80% or less<br>(or additional ASTM F1869 test may<br>be required). |
| Cleaning.....   | Denatured alcohol while<br>adhesive is wet                         |
| Color.....  | White/Cream  |
| Consistency.....  | Buttery  |

**Pails: 1.98 US gal. (7.5 L)**

**Shelf life is approximately 24 months when stored in original containers at room temperature in a dry heated area.**

**Actual jobsite coverage may vary according to substrate conditions, type of trowel and setting practices.**

## 12.8 PROTECTION

- 1) **Provide for heated storage on site and deliver all materials at least 24 hours before work begins.**
- 2) **No foot traffic for a minimum of 24 hours after installation and no heavy or rolling loads (wheels, carts, etc.) for a minimum of 72 hours in order to allow proper adhesive set-up and curing. Failure to follow this recommendation can lead to dispersion of adhesive under the flooring prior to proper setting and can result in unwanted air pockets and bubbles.**

**NOTE: Refer to material safety data sheets (MSDS) for more information regarding use, application, limitations and safety.**

**THIS PRODUCT IS NOT CONTROLLED UNDER THE CANADIAN REGULATION WHMIS.**

**CONTENT: - NJ TNRN 930 – This product does not contain any chemicals reportable under American Federal OSHA 29CFR 1910.1200.**

In the event of a chemical emergency, spill, leak, exposure or accident,  
in Canada call **CANUTEC 613 996-6666**  
in USA call **CHEMTREC 800 424-9300**

**KEEP OUT OF THE REACH OF CHILDREN.**



## DISCLAIMER

These instructions conform to commonly accepted installation techniques in use with Mondo floor coverings. However, Mondo will not accept any liability whatsoever for any incorrect implementation of these instructions nor for any failure of equipment, paint & primers, leveling compounds, adhesives or other products not manufactured by Mondo that are referenced in these instructions nor for any adverse handling, climatic or environmental conditions that may affect such installation.

The above installation recommendations are provided for general guidance only. Mondo assumes no responsibility neither for actual work performed nor for loss or damage that may result from the use of this information due to variations of processing or working conditions outside our control. Users are advised to confirm suitability of products by their own tests.

Warranty only extends to quality and performance of rubber flooring.

**WARNING: Should you have any concerns or be unsure about subfloor conditions or installation procedures, please call our Technical Department. We shall not be liable for incidental and consequential damages, as defined under the uniform commercial code, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. Our liability is expressly limited to replacement of defective goods. Any claims shall be deemed waived unless made in writing to use within thirty (30) days from date it was or reasonably should have been discovered.**

Mondo America Inc., Technical Department, 2655 Francis-Hughes, Laval, QC H7L 3S8  
Telephone: (450) 967-5800 • Facsimile: (450) 663-7927 • USA: 800 361-3747 • Canada: 800 663-8138  
Email: [technical@mondousa.com](mailto:technical@mondousa.com)