



# Ultrabond<sup>®</sup> Turf PU 1K-HV

## High-Viscosity, Urethane Adhesive for Turf Seams



### DESCRIPTION

*Ultrabond Turf PU 1K-HV* is a high-viscosity, moisture-curing, one-component, urethane adhesive specifically designed for bonding of synthetic turf in high-performance sports installations. Offering excellent weather resistance, *Ultrabond Turf PU 1K-HV* can be used in interior and exterior applications. It meets FIFA requirements for bond strength in sports-turf applications.

### FEATURES AND BENEFITS

- Fast-setting
- Excellent handling characteristics and superior green strength
- Exceeds FIFA standards for bond strength

### INDUSTRY STANDARDS AND APPROVALS

- Exceeds FIFA Joint Strength (EN 12228 and EN 13744)

LEED v4 Points Contribution

LEED Points

Health Product Declaration (HPD)\* .....Up to 2 points

\* *Using this product may help contribute to LEED certification of projects in the category shown above. Points are awarded based on contributions of all project materials.*

Additional Green Certifications

- Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC's Website.

### WHERE TO USE

- Interior and exterior synthetic turf installations

- Professional and educational synthetic sports field arenas
- Commercial and residential landscaping applications of synthetic turf

### LIMITATIONS

- Install only in areas recommended by the turf manufacturer
- Use only when the surface temperature is between 41°F and 95°F (5°C and 35°C), and when the ambient relative humidity is between 20% and 80%. When the ambient relative humidity is lower than 20%, longer cure times can be expected.
- Do not use to install nonporous turf backings over nonporous surfaces.

### SUITABLE SUBSTRATES

- *Ultrabond Turf Tape* or manufacturer-recommended seaming tape
- Exterior- and marine-grade plywood, as well as pressure-treated lumber
- Other approved wood underlayments (per manufacturer recommendations)
- Concrete
- Cement-based, exterior-rated patching and repair compounds
- Existing, cured asphalt pavement in good condition

### SURFACE PREPARATION

- All surfaces must be prepared in accordance with the manufacturer of the synthetic playing surface for the type of intended use and must comply with current regulations or standards.
- All surfaces must be structurally sound, dry, solid, stable, even, flat and smooth.



Ultrabond<sup>®</sup>  
**Turf PU**  
**1K-HV**

- Surface should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, old adhesive residues, and any other substance or condition that may prevent or reduce adhesion.

## PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Cut the knob of the *Ultrabond Turf PU 1K-HV* cartridge.
2. Screw the nozzle tip into the cartridge.
3. Cut the nozzle tip to the desired opening size.
4. Pull back the synthetic turf in the area of the repair.
5. Apply *Ultrabond Turf PU 1K-HV* in a zigzag pattern to cover most of the repair area.
6. Immediately place the turf into the freshly applied adhesive and place weight on the repair area to keep it secure during curing.

Note: Use for small repairs only. A light misting of water will speed up the curing time of *Ultrabond Turf PU 1K-HV*, allowing quicker repairs. Weights may be required on turf seams to ensure proper bonding and even thatch heights.

## CLEANUP

- Clean any adhesive smudges from the turf surface with a white cloth and mineral spirits while the adhesive is still fresh/wet. Clean tools with mineral spirits while the adhesive is still fresh/wet. *Ultrabond Turf PU 1K-HV* is extremely difficult to remove when cured.

## PROTECTION

- Protect the installation from light traffic for at least 12 hours. Protect it from heavy traffic for at least 24 hours.
- Protect the installation from rain/water exposure and freezing conditions for 12 hours after installation.

## Product Performance Properties

Laboratory Tests	Results
Polymer type	Polyurethane
Solids content	100%
VOCs (Rule #1168 of California's SCAQMD)	4 g per L
Joint/bond strength – EN 12228 and EN 13744	> 25 N per 100 mm
Flash point (Tag)	> 200°F (93°C)

## Shelf Life and Product Characteristics

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C)
Storage conditions	50°F to 90°F (10°C to 32°C)

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

## Application Properties at 73°F (23°C) and 50% relative humidity

Flash time*	0 minutes
Working time**	30 to 45 minutes
Set time***	45 to 90 minutes

\* Flash time is the recommended amount of time for a freshly applied adhesive to remain exposed to the air following application before the installation of a floor covering.

\*\* Working time is the maximum amount of time that an adhesive can remain exposed to the air and still effectively bond to the floor covering.

\*\*\* Set time is the window of time when adjustments can still be made to the position of the floor covering without compromising the bond of the adhesive.

Flash time, working time and set time vary based on temperature, humidity, surface porosity and jobsite conditions. For example, high heat and humidity will reduce working time and set time; low temperatures and humidity will extend working time and set time.

## Packaging and Color

Plastic cartridge: 29 U.S. oz. (858 mL)	Green
---	-------

## Approximate Coverage† per 29 U.S. oz. (858 mL) cartridge

Thickness	Coverage
With a 1/4" (6 mm) bead	About 88 linear ft. (26,8 linear m)

† Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to surface conditions and setting practices.

Ultrabond  
**Turf PU  
 1K-HV**



Refer to the SDS for specific data related to health and safety as well as product handling.

**LEGAL NOTICE**

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

[www.mapei.com](http://www.mapei.com). **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.** Before using, the user must determine the suitability of our products for the intended use,

and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

We proudly support the following industry organizations:



**MAPEI Headquarters of North America**  
 1144 East Newport Center Drive  
 Deerfield Beach, Florida 33442  
 1-888-US-MAPEI (1-888-876-2734) /  
 (954) 246-8888

**Technical Services**  
 1-800-992-6273 (U.S. and Puerto Rico)  
 1-800-361-9309 (Canada)  
**Customer Service**  
 1-800-42-MAPEI (1-800-426-2734)

**Services in Mexico**  
 0-1-800-MX-MAPEI (0-1-800-696-2734)  
**Edition Date:** January 2, 2018  
 PR: 8667 MKT: 17-2694