



Ultrabond Turf 2 Stars



**Two-component,
solvent and water-free
polyurethane adhesive
for bonding jointing
strips between panels of
synthetic grass sheets**



WHERE TO USE

Bonding jointing strips between synthetic grass sheets, both indoors and outdoors (e.g. **Ultrabond Turf Tape 100**).

TECHNICAL CHARACTERISTICS

Ultrabond Turf 2 Stars is a two-component, solvent and water-free polyurethane adhesive. The two part component consists of component A, a thick paste, and component B, a fluid hardener. The mixing ratio between the two components is 90:10 (9:1). When the two components are mixed together, a uniform coloured paste which is easy to apply using a notched trowel is obtained and which has excellent rib stability. It is recommended in particular for those users allergic to epoxy or epoxy-polyurethane products. Use this product during the winter rather than an epoxy-polyurethane product which normally hardens more slowly at low temperatures. Also, because of its special formulation which allows it to harden more quickly, it is generally more suitable than other adhesives used to bond synthetic grass.

After hardening (24 hours at ambient temperature), which takes place due to chemical reaction and is without shrinkage, **Ultrabond Turf 2 Stars** becomes a tough film with high adhesion properties to any suitable support material.

When used to bond jointing tape, **Ultrabond Turf Tape 100** helps form a system that complies with FIFA standards.

RECOMMENDATIONS

- Do not use **Ultrabond Turf 2 Stars** at temperatures

less than 0°C. Where there are applications at high temperatures (higher than +35°C), the pot life of **Ultrabond Turf 2 Stars** may be greatly reduced. Before mixing store component B at temperatures higher than +5°C.

- Only mix complete kits, mixing only partial quantities requires considerable accuracy when weighing the two components.

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must be prepared according to instructions for the preparation of synthetic playing surfaces according to the type of use foreseen, and according to current regulations and standards.

Acclimatization

The single sheets must be unrolled a few hours before starting installation, and must be spread out to allow internal tension caused by the packaging to be reduced.

Mixing

The two components which make up **Ultrabond Turf 2 Stars** are contained in pre-dosed plastic containers:

- component A: 90 parts by weight;
- component B: 10 parts by weight.

If the ratio is modified, correct curing of the product will be impeded.

Mixing must be carried out using a low-speed mechanical mixer, until a smooth paste with a uniform colour is obtained. The setting time and pot life of the product depends on the ambient temperature at the

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	component B
Consistency:	thick paste	fluid liquid
Colour:	green, red, white	brown
Density (g/cm³):	1.70 ± 0.05	1.2 ± 0.01
Dry solids content (%):	100	100
Brookfield viscosity (mPa-s):	240,000 ± 40,000 (rotor 7 - 10 rpm)	200 ± 20 (rotor 1 - 50 rpm)
EMICODE:	EC1 R - very low emission	
APPLICATION DATA (at +23°C and 50% R.H.)		
Mixing ratio:	component A : component B: = 90 : 10	
Brookfield viscosity of mix (mPa-s):	35,000 ± 5,000 (rotor 7 - 50 rpm)	
Density of mix (g/cm³):	1.60 ± 0.05	
Pot life:	approx. 30 minutes	
Recommended application temperature range:	from +0°C to +30°C	
Open time:	40-45 minutes	
Start setting time:	approximately 2 hours	
End of setting time:	approximately 4 hours	
Set to light foot traffic:	after 12-24 hours	
Ready for use:	7 days	
FINAL PERFORMANCES		
Adhesion between Ultrabond Turf Tape 100 and synthetic grass (EN 12228/EN 13744):	> 1,500 N/100 mm (SHEAR) 100 N/100 mm (PEEL)	

moment of application. The chemical reaction is too slow if the temperature is less than 0°C and application is not recommended.

Spreading the adhesive

Apply **Ultrabond Turf 2 Stars** on the jointing strips of **Ultrabond Turf Tape 100** using a No. 3 or No. 4 MAPEI notched trowel. Spread the adhesive evenly over the entire surface of the jointing strips. The open time of the product is approximately 40-45 minutes under normal temperature conditions (+23°C).

LAYING THE SHEETS

Follow the indications given by the manufacturer of the synthetic grass sheets when laying the product. The sheets must be fixed along the jointing strips within 40-45 minutes from application of **Ultrabond Turf 2 Stars** (at +23°C) while it is still fresh, in order to guarantee full contact. If required, place weights along the joints to avoid irregularities in flatness.

READY FOR USE

The sheets are ready for service after approximately 7 days if laid as described above.

CONSUMPTION

Approximately 0.4-0.5 kg per metre of 40 cm-wide jointing strip (5 kg of product for 10 linear metres).

COLOUR

Ultrabond Turf 2 Stars is available in green, red and white.

PACKAGING

15 kg kits in plastic drums.
Also available in the **Ultrabond Turf 2 Stars Metal** version, in metallic drums of 15 kg.

STORAGE

Ultrabond Turf 2 Stars remains stable for at least 12 months if stored in its original, sealed containers under normal conditions.

Keep **Ultrabond Turf 2 Stars** away from frost during transport and storage. Do not expose it to temperatures lower than +5°C for long periods.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Turf 2 Stars component A is not considered hazardous according to current norms and guidelines regarding the classification of mixtures.

Ultrabond Turf 2 Stars component B is irritant to the eyes, skin and the respiratory tract, is harmful when inhaled and may cause irreversible damages. If it comes into contact with the skin or if inhaled, it may cause sensitization.

After repeated contact to the skin, allergic reactions may occur in subjects who are sensible to isocyanates.

When applying the product, we recommend using protective clothing, gloves, safety goggles, a safety mask to protect the respiratory system and to work only in well-ventilated areas.

If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

Ultrabond Turf 2 Stars component B may become harmful and may cause sensitization if inhaled when the product is used at temperatures higher than +60°C. If you feel unwell seek medical advice.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT ONLY FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



Our Commitment To The Environment
MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

All relevant references for the product are available upon request and from www.mapei.com



Ultrabond Turf
2 Stars



BUILDING THE FUTURE

6401-3-2014

Any reproduction of texts, photos and illustrations published
here is prohibited and subject to prosecution

(GB) A.G. BETA