

Waterstop &
Waterproofing System

UNIFIX

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UNIFIX M-1500

HIGH PRESSURE INJECTION PUMP



Product Features

UNIFIX M-1500 is an advanced, **high-pressure injection pump** specifically engineered for demanding structural restoration and concrete repair applications. Designed to deliver superior performance in stopping water ingress and filling internal structural voids, this versatile pump efficiently injects both **epoxy and polyurethane filling resins** directly into compromised concrete elements. Featuring a **compact and lightweight body weighing just 7.5 kg**, the **UNIFIX M-1500** offers outstanding portability and maneuverability across tight jobsite conditions, while remaining built for long-term durability and simplified, hassle-free on-site maintenance.

Engineered to handle critical structural repairs with precision, the **UNIFIX M-1500** is capable of generating powerful **working pressures up to 15,000 psi** within seconds of activation. This immediate high-pressure output ensures deep resin penetration and full coverage, allowing operators to reliably seal ultra-fine hairline fissures and cracks as small as **0.01 mm**. By combining rapid pressure delivery with versatile chemical compatibility, the **UNIFIX M-1500** provides concrete repair professionals with a highly dependable, efficient solution for long-lasting structural sealing and waterproofing.

Advantages

High-pressure injection up to 15,000 psi.
Lightweight (7.5 kg), portable, and easy to maintain.
Designed for professional crack injection works.
Compatible with PU foam, epoxy resins, and other non-granular liquid injection materials.

Fields of Application

Basement and foundation waterproofing.
Floor slab crack and joint injection.
Subway and tunnel crack injection.
Continuous walls and diaphragm walls.
General water seepage control and leak stoppage.

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Physical Properties

Machine Weight	:	7.5 kg
Maximum Output Pressure	:	15,000 psi
Pressure to Restart	:	7,000 psi
Safe Range of High-Pressure Hose	:	10,000 psi
Safe Range of Switch Valve	:	15,000 psi
Power Drill Motor Requirement	:	910 W, 220-240V
Flow Rate (Typical)	:	~0.5–1.0 L/min
Operating Temperature Range	:	5°C – 40°C

Package Contents

Power Drill	:	910 W
High Pressure Hose	:	1 roll 5m
Shut-Off Valve	:	1 set
Repairing Kit	:	1 set
Seal Set	:	1 set
T Type Wrench	:	1 set

- Package is supplied with the contents mentioned.

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UNIFIX Injection Packer & Connector



Model	Size	Packing
UNIFIX A10	13mm x 90mm	50 pcs / bag
UNIFIX A15	13mm x 130mm	50 pcs / bag
UNIFIX A20	13mm x 180mm	50 pcs / bag
UNIFIX A25	13mm x 240mm	50 pcs / bag
UNIFIX A30	13mm x 280mm	50 pcs / bag
UNIFIX B8	10mm x 80mm	100 pcs / bag
UNIFIX B10	10mm x 100mm	100 pcs / bag
GREASE HEAD	A10 / B10 Connector	10 pcs / box

Pressure Injection Hose



Working Pressure	0 - 10,000 Psi
Size (Length)	5 meter long

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UNIFIX - PU200

SINGLE COMPONENT OIL-BASED HYDROPHOBIC RIGID PU GROUT



Product Features

UNIFIX-PU200 is a high-performance, hydrophobic hydro-active injection grout formulated from an MDI (methylenediphenylisocyanate) polyurethane base. Engineered for rapid water-stopping applications, it features an exceptionally fast reaction time paired with high tensile strength.

Upon contacting water, **UNIFIX-PU200** initiates a rapid foaming and expansion process that fills deep cracks and voids, effectively halting active leaks within seconds. Its superior seal-forming capability and proven reliability make it one of the most trusted choices among professional contractors for heavy-duty concrete waterproofing.

Advantages

- **Fast Leak Arrest:** Expands rapidly on water contact to stop active leaks within seconds.
- **Hydrophobic Barrier:** Cures into a water-repellent seal that will not absorb water post-cure.
- **High Tensile Strength:** Withstands heavy hydrostatic pressure and structural stress.
- **Rapid Reaction:** Accelerates repairs with fast-acting expansion in cracks and voids.
- **Industry-Proven Reliability:** Widely preferred for severe concrete waterproofing applications.

Fields of Application

- Permanent sealing of non-moving cracks in basement walls and slabs that are damp rather than running
- Filling large voids and cavities behind tunnel linings and walls
- Sealing construction joints and static cracks that go through wet-dry cycles
- Sealing gaps around pipes, ducts and structural penetrations, repairing leaks in culverts, drains and box culverts
- Crack injection in roof slabs, podiums and planter boxes where wetting is occasional

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UNIFIX - PU200

Physical Properties

Material	:	MDI Polyurethane
Appearance	:	Dark Brown
Packing	:	10 kg / pail

Technical Properties

Elongation	:	5%
Tensile Strength	:	1.03 - 1.10 MPa (150 - 160 psi)
Adhesive Strength	:	0.21 MPa (30 psi)
Corrosiveness	:	Non-corrosive
Storage T.P. 20°C	:	12 months
Toxicity	:	Cured material is essentially non-toxic
Shrinkage	:	No changes
Gel Time	:	30 sec (25°C)
Setting Time	:	648 sec (25°C)
Solid	:	80%
Density , g/ml	:	1.12 g/cm³
Viscosity	:	570 cps
Weight Per Gallon	:	9.17 lb
Expansion Rate	:	2000 - 3000%

- The technical properties detailed above reflect the final performance characteristics of the fully cured material.

Important Note / Special Note

- Flush the pump, hose and tools with xylene only. Do not use water: it reacts with the resin and blocks equipment.
- **Do Not Overtighten:** Tighten injection packers carefully to a secure fit only; excessive torque can damage the packer.

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Accessories



HIGH PRESSURE INJECTION MACHINE M-1500



HIGH PRESSURE INJECTION HOSE



PACKERS & CONNECTORS

Shelf Life & Storage

UNIFIX-PU200 SHOULD BE STORED IN A DRY AND COOL PLACE AT AROUND 20°C. Temperature above 50°C may cause premature formation of insoluble solids. **UNIFIX-PU200** maintains a shelf life of **12 months** when stored unopened in its original, undamaged packaging under dry, cool conditions away from direct sunlight.

Health & Safety

Contains isocyanates. Flammable liquid before cure. Avoid contact with skin and eyes; use gloves, goggles, and protective clothing. Use full-face protection during injection. Ensure adequate ventilation. Refer to the Safety Data Sheet (SDS) for detailed guidance.

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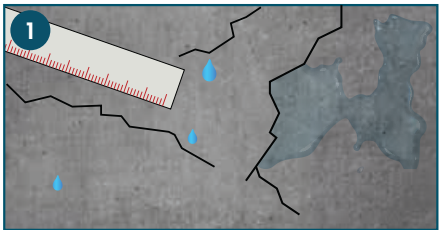
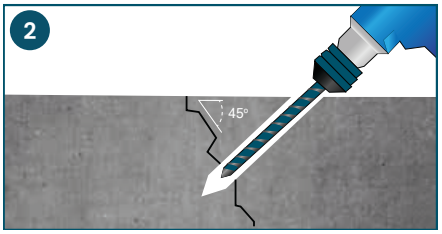
Installation Procedures

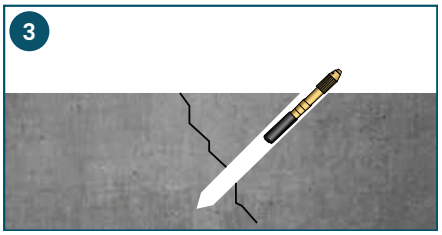
1 Surface Preparation | 2 Injection | 3 Finishing



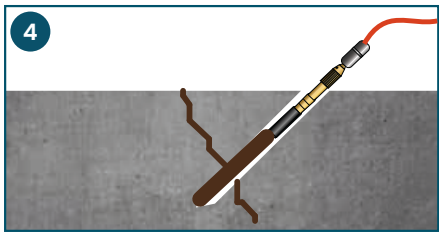
PREPARATION



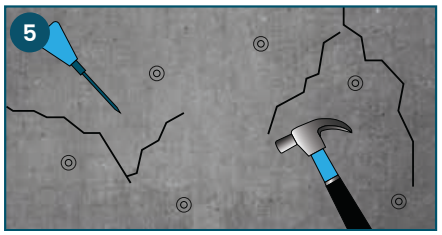
DRILLING



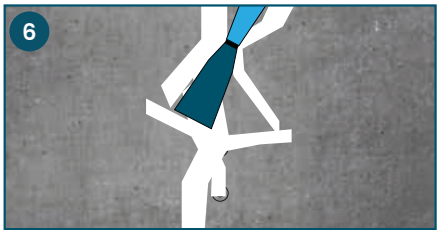
PACKER INSTALLATION



INJECTION



REMOVING OF PACKER



FINISHING

Step 1
SURFACE PREPARATION

1 Preparation
Clean the concrete surface, measure the width and thickness of the crack and inspect the leakage condition of the structure.

2 Drilling
Drill 10 mm or 13 mm holes about 40–50 mm away from the leaking spot at about 45° until the hole intercepts the crack or leaking point. Use a drill bit of the same diameter as the injection packer.

Step 2
INJECTION

3 Packer installation
Clean the drilled hole with an air blower or water, insert the packer and tighten the rubber sleeve securely. Do not over-tighten, as the packer may be damaged.

4 Injection
Inject UNIFIX-PU200 with the M-1500 high-pressure injection machine and hold the pressure at 5000 psi for a few minutes before moving to the next point. Re-inject points as needed, replacing used packers, until the crack is fully filled and no leakage remains.

Step 3
FINISHING

5 Removing of packer
Allow UNIFIX-PU200 to cure for 24 hours, then remove the packers by breaking them off with a plier or hammer.

6 Finishing
Remove cured grout from the surface and plug all holes with suitable mortar. Flush the pump, hose and tools with xylene immediately after use to prevent blockage. Do not use water: it reacts with the resin.

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UNIFIX - PU60

SINGLE COMPONENT WATER-BASED HYDROPHILIC FLEXIBLE PU GROUT



Product Features

UNIFIX-PU60 is a hydrophilic hydro-active injection grout based on an MDI (methylenediphenylisocyanate) polyurethane. **UNIFIX-PU60 has very fast reaction time and strong tensile strength.** When **UNIFIX-PU60** reacts with water, **it starts to foam and expand very quickly.** As the grout reacts, it expands and stops the water leak within a very short period of time. **UNIFIX-PU60** is **one of most popular choices among all the waterproofing grout.**

Another major advantage in our newest **UNIFIX-PU60** is the ease of application. Unlike other leading two-component grout in the market, **UNIFIX-PU60** polyurethane grout is a one-component resin.

No catalyst or second component is needed during the injection mixing. Expansion ratio depends on the amount of water added to the resin mixture and the moisture level in its environment. **It reacts to a very dense and highly flexible material foam.**

Advantages

- **Fast Leak Sealing:** Rapidly expands upon water contact to stop active leaks in seconds.
- **Single-Component Convenience:** Ready to inject directly with no secondary catalyst or mixing required.
- **Flexible & Dense Foam:** Cures into a tough, flexible foam that withstands structural movement.
- **High Tensile Strength:** Delivers strong structural performance against high water pressure.
- **Hydro-Active Reaction:** Actively binds with ambient moisture for reliable void-filling.
- **Adaptive Expansion:** Expansion ratio automatically responds to the moisture level present.

Fields of Application

- Stopping running or gushing water through cracks and construction joints in basements, lift pits and retaining walls
- Sealing leaks in tunnels, culverts and underground car parks
- Sealing leaks in water tanks, reservoirs and pump pits, and around pipe penetrations
- Curtain grouting behind basement walls and diaphragm walls to form a water-stopping zone
- Consolidating loose soil and filling fine voids behind structures where the ground stays wet

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UNIFIX - PU60

Physical Properties

Material	:	MDI Polyurethane
Appearance	:	Yellow
Packing	:	10 kg / pail

Technical Properties

Elongation	:	100%
Tensile Strength	:	0.49 MPa (71 psi)
Adhesive Strength	:	0.21 MPa (30 psi)
Corrosiveness	:	Non-corrosive
Storage T.P. 20°C	:	12 months
Toxicity	:	Cured material is essentially non-toxic
Shrinkage	:	No changes
Gel Time	:	≤ 150 sec (25°C)
Setting Time	:	300 sec (25°C)
Solid	:	≥ 75%
Density , g/ml	:	≥ 1.00 g/cm³
Viscosity	:	≤ 1,000 cps
Expansion Rate	:	≥ 350% (Foaming Rate), ≥ 20% (Water Expansion)
Foaming Time	:	180 sec @ 25°C

Important Note / Special Note

- Do not use water to flush or clean the pump, hose or tools (it reacts with the resin and blocks equipment)
- **Do Not Overtighten:** Tighten injection packers carefully to a secure fit only; excessive torque can damage the packer.

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Accessories



HIGH PRESSURE INJECTION MACHINE M-1500



HIGH PRESSURE INJECTION HOSE



PACKERS & CONNECTORS

Shelf Life & Storage

UNIFIX-PU60 SHOULD BE STORED IN A DRY AND COOL PLACE AT AROUND 20°C. Temperature above 50°C may cause premature formation of insoluble solids. **UNIFIX-PU60** maintains a shelf life of **12 months** when stored unopened in its original, undamaged packaging under dry, cool conditions away from direct sunlight.

Health & Safety

Contains isocyanates. Flammable liquid before cure. Avoid contact with skin and eyes; use gloves, goggles, and protective clothing. Use full-face protection during injection. Ensure adequate ventilation. Refer to the Safety Data Sheet (SDS) for detailed guidance.

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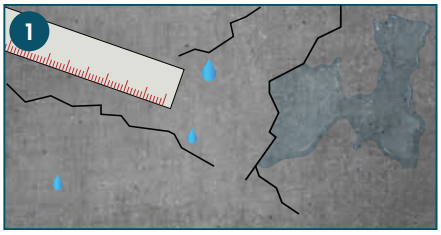
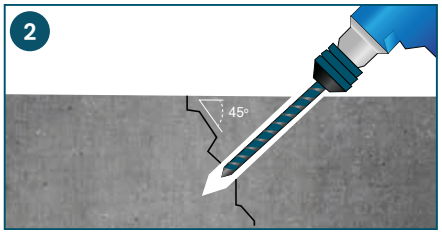
Installation Procedures

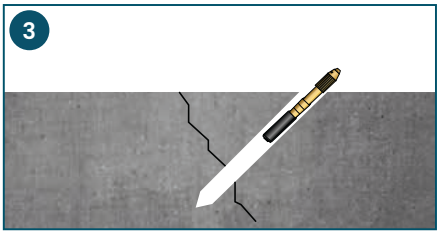
1 Surface Preparation | 2 Injection | 3 Finishing



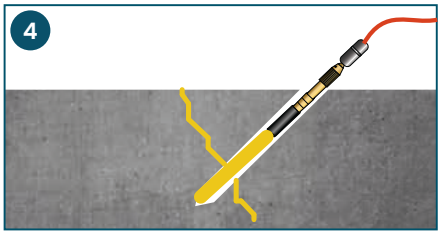
PREPARATION



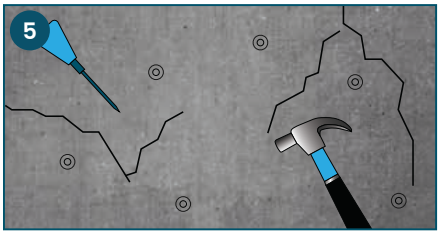
DRILLING



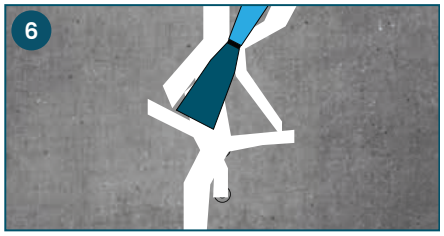
PACKER INSTALLATION



INJECTION



REMOVING OF PACKER



FINISHING

Step 1
SURFACE PREPARATION

1 Preparation
Clean the concrete surface, measure the width and thickness of the crack and inspect the leakage condition of the structure.

2 Drilling
Drill 10 mm or 13 mm holes about 40–50 mm away from the leaking spot at about 45° until the hole intercepts the crack or leaking point. Use a drill bit of the same diameter as the injection packer.

Step 2
INJECTION

3 Packer installation
Clean the drilled hole with an air blower or water, insert the packer and tighten the rubber sleeve securely. Do not over-tighten, as the packer may be damaged.

4 Injection
Inject UNIFIX-PU60 with the M-1500 high-pressure injection machine and hold the pressure at 5000 psi for a few minutes before moving to the next point. Re-inject points as needed, replacing used packers, until the crack is fully filled and no leakage remains.

Step 3
FINISHING

5 Removing of packer
Allow UNIFIX-PU60 to cure for 24 hours, then remove the packers by breaking them off with a plier or hammer.

6 Finishing
Remove cured grout from the surface and plug all holes with suitable mortar. Clean tools with thinner immediately after use to prevent blockage. Do not use water.

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UNIFIX TPE-FELT

EXPANSION JOINT TAPE WITH FELT CARRIER



Product Features

UNIFIX TPE-FELT is a high-performance expansion joint waterproofing tape with a felt carrier. It has a flexible thermoplastic elastomer (TPE) centre section, laminated with polyester (PES) felt along both sides. The elastic centre takes up the movement of the joint, while the felt edges give the adhesive a mechanical key and keep the tape stable along its length during installation.

UNIFIX TPE-FELT is installed with **UNISTICK EA 5537** epoxy adhesive, which anchors the felt edges to the concrete substrate and forms a watertight seal across the joint that accommodates structural movement and resists water pressure.

Use **UNIFIX TPE-FELT** for moving expansion joints. For non-moving construction joints, **UNIFIX TPE-CJ FELT** is the cost-saving choice.

Advantages

Resists water pressure above 5 bar
Good dimensional stability under tension
Good flexibility. Can accommodate structural movements
Felt on both sides for a strong bond with the adhesive
Resistance to plant roots
High UV resistance

Fields of Application

Expansion Joints	Building Abutments & Interface Joints
Parapets	Swimming Pool
Wide and Irregular Cracks	Basements & Underground Structures
Roof Decks & Terraces	Water Reservoirs

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UNIFIX TPE-FELT

Physical Properties

Material	:	Thermoplastic elastomer (TPE) core with polyester (PES) felt edges	
Colour	:	Grey	
Size & Packaging	:	UNIFIX TPE-FELT UNISTICK EA 5537	: 300mm x 1mm x 25m : 5kg / set
Roll Length	:	UNIFIX TPE-FELT	: 25m / roll

Technical Properties

Property	Test Method	Values
Thickness, (mm)	DIN EN 1849 - 1	1 mm
Tensile Strength (Transverse)	EN-ISO 527-3	4.7 MPa
Elongation at Maximum Load (Transverse)	EN-ISO 527-3	580 %
Tear Propagation Strength (Transverse)	EN-ISO 12310-2	48 N
Hardness	ISO 868	70 Shore A
Water Pressure Resistance	EN 1928	> 5 Bar
Service Temperature	SIA V280/3+4	-30 / + 80 °C
Chemical Resistance	Water-based and bitumen-based foundation insulations, sea water, waste water, UV rays, hydrolysis and microorganisms	

Important Note / Special Note

- Do not move the tape until the epoxy adhesive at the edges is fully cured.
- Protect the surface against water and mechanical damage until fully cured.
- Curing time of adhesive changes according to weather conditions.
- Do not apply during rain.
- Protect applied materials from rain, freezing, foot traffic, and continuous high humidity until completely dry.

Shelf Life & Storage

UNIFIX TPE-FELT has a shelf life of **24 months** when stored unopened in its original packaging in a dry, cool place away from direct sunlight.

Health & Safety

UNIFIX TPE-FELT tape presents no health hazard in normal handling. **UNISTICK EA 5537** is an epoxy adhesive: wear gloves and goggles, avoid skin and eye contact, and follow its safety data sheet.

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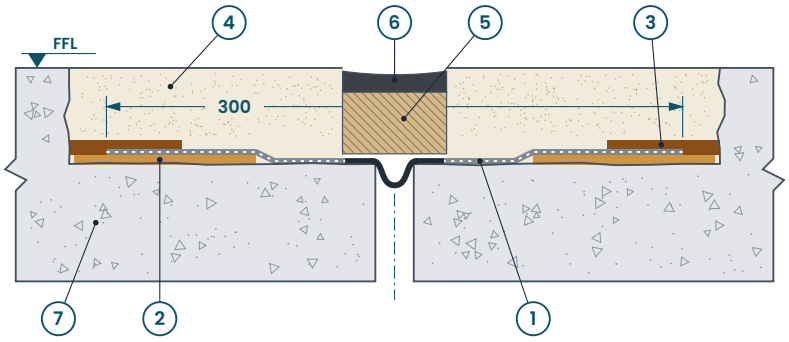
UNIFIX TPE-FELT

Installation Procedures

1 Surface Preparation | 2 UNISTICK EA 5537 Application | 3 Application

TYPICAL SECTION – CONCEALED EXPANSION JOINT

NOT TO SCALE



Dimensions in mm. Layer thicknesses exaggerated for clarity.

1. **UNIFIX TPE-FELT, 300 mm wide** elastic centre left unbonded over joint
2. **UNISTICK EA 5537 - 1st layer** 1.0 - 1.5 mm thick, min. 50 mm per side
3. **UNISTICK EA 5537 - 2nd layer** over felt edge, min. 20 mm past its edge
4. **Non-shrink grout** both sides of the fillerboard, flat to FFL
5. **UNIFLEX PE fillerboard** over the elastic centre, no grout on it
6. **UNISEAL PU joint sealant** over the fillerboard, at FFL
7. **Existing concrete** hacked back to form the recess

Step 1
SURFACE PREPARATION

UNIFIX TPE-FELT is concealed in the concrete, below finished floor level (FFL). For repair work, hack the existing concrete on both sides of the joint to form a recess. Clean the surface of dust, curing compound, oil and grease, and repair unsound concrete with a repair mortar.

Step 2
UNISTICK EA 5537 APPLICATION

UNISTICK EA 5537 is two-component. Mix **Component A (3.4 kg)** and **Component B (1.6 kg)** with a low-speed mixer until homogeneous.

Using a trowel or spatula, apply **UNISTICK EA 5537** about **1.0 – 1.5 mm** thick on both edges of the joint, at least **50 mm** wide on each side. Work the adhesive well into the substrate to ensure a strong bond.

Step 3
TAPE APPLICATION & COVERING

Cut the tape to length. Where lengths must be joined, weld them with a hot-air gun before application; **UNISTICK EA 5537** cannot be used for splicing. Lay **UNIFIX TPE-FELT** onto the adhesive and press with a roller for full contact between the felt and the adhesive.

Apply a second layer of **UNISTICK EA 5537**, **1.0 – 1.5 mm** thick, over the felt edges of the tape, overlapping the tape edge by at least **20 mm**. Do not move, lift or load the tape, and protect it from water, until the adhesive has fully cured.

Place **UNIFLEX PE** fillerboard over the elastic centre, then fill the recess on both sides with non-shrink grout, flat with the FFL surface. Grout must not sit on the elastic centre, so the joint stays free to move. When the grout has cured, seal over the fillerboard with **UNISEAL PU** joint sealant.

Note: The application temperature should be between 5°C and 55°C. Application procedures may vary slightly depending on site conditions; the steps above are general guidelines for the application of the waterproofing system.

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UNIFIX TPE-CJ FELT

CONSTRUCTION JOINT FELT CARRIER WATERPROOFING TAPE



Product Features

UNIFIX TPE-CJ FELT is an elastic waterproofing tape with non-woven felt edges, made for non-moving construction joints and wall-to-floor junctions. Laid into the corner, it replaces the conventional angle fillet. The felt edges are embedded in the waterproofing coating, so the tape becomes part of one continuous waterproofing layer.

For non-moving joints it is a cost-saving alternative to **UNIFIX TPE-FELT**. It is bonded with the liquid or cementitious waterproofing coating itself, so no epoxy adhesive is needed.

Advantages

High Resistance To Positive Water & Vapor Pressure
Cost-Saving Alternative To TPE-FELT For Non-Moving Joints
Replaces The Angle Fillet At Wall / Floor Junctions
High Puncture And Fatigue Resistance
No Epoxy Adhesive Needed – Bonds With The Coating
High UV Resistance

Fields of Application

Construction Joints	Wall / Floor Junctions
Parapet Upturns	Swimming Pools
Non-Moving Cracks	Underground Structures
Exposed Roof Decks & Terraces	Water Reservoirs & Tanks
Wet Areas & Bathrooms	Lift Pits & Sumps

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UNIFIX TPE-CJ FELT

Physical Properties

Material	:	Non-woven felt & elastomeric resin core	
Colour	:	Grey	
Size & Packaging	:	UNIFIX TPE-CJ FELT 120 UNIFIX TPE-CJ FELT 150	: 120 mm wide (70 mm elastic centre) : 150 mm wide (100 mm elastic centre)
Roll Length	:	UNIFIX TPE-CJ FELT	: 50m / roll

Technical Properties

Property	Test Method	Values
Thickness, (mm)	DIN EN 1849 - 1	0.5 mm
Tensile Strength (Transverse)	EN-ISO 527-3	30 MPa
Tensile Strength (Longitudinal)	EN-ISO 527-3	76 MPa
Elongation at Maximum Load (Transverse)	EN-ISO 527-3	139 %
Elongation at Maximum Load (Longitudinal)	EN-ISO 527-3	22 %
Hardness	ISO 868	70 Shore A
Water Pressure Resistance	EN 1928	> 1.5 Bar
Cold Folding	SIA 280/3	No cracking at -30°C
Service Temperature	SIA V280/3+4	-30 / + 90°C
Chemical Resistance	Alkalis (cement-based products), ozone and UV rays; resistant to many chemicals	

Important Note / Special Note

- Bond with the waterproofing coating (liquid or cementitious). No epoxy adhesive is needed.
- Protect the surface against water and mechanical damage until fully cured.
- Curing time of the coating changes according to weather conditions.
- Do not apply during rain.
- Protect applied materials from rain, freezing, foot traffic, and continuous high humidity until completely dry.

Shelf Life & Storage

UNIFIX TPE-CJ FELT has a shelf life of **24 months** when stored unopened in its original packaging in a dry, cool place away from direct sunlight.

Health & Safety

UNIFIX TPE-CJ FELT is a solid tape and presents no health hazard in normal handling. Wear gloves when cutting and when working with the waterproofing coating it is embedded in, and follow the safety data sheet of that coating. Dispose of offcuts in accordance with local regulations.

This technical data sheet is given in good faith and does not guarantee the application work.
All Unity Reliance technical data sheets & method statements are updated on a regular basis and can be subject to change without notice.
It is the user's responsibility to obtain the latest version of the information required.

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Installation Procedures

1 Surface Preparation | 2 Application

Installation Procedures

Step 1
SURFACE PREPARATION

Clean the surface thoroughly of all contaminants such as dust, laitance, traces of curing compound, oil and grease. The substrate must be sound and free of standing water.

Remove all surface imperfections, protrusions and structurally unsound or friable concrete, and repair with a concrete repair mortar.

Fill cracks wider than **3 mm** with a suitable mastic before applying the tape. Prime the surface if required by the waterproofing coating used.

Step 2
APPLICATION

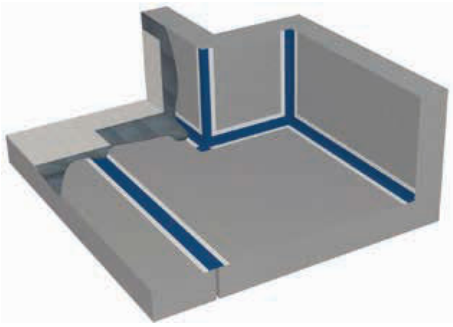
First coat: apply the waterproofing coating (liquid or cementitious) on both sides of the joint or corner, about the width of the felt edges, leaving the middle approximately **5 cm** uncoated.

Lay the tape: while the coating is still wet, lay **UNIFIX TPE-CJ FELT** centred over the joint or into the wall / floor corner (in place of an angle fillet). Press the felt edges fully into the coating with a brush or roller, working out air pockets and wrinkles. No epoxy adhesive is needed.

Keep the centre free: the middle elastic part must not stick to the substrate, so it can bridge the joint. At tape ends and junctions, overlap the tape and embed the overlap fully in the coating.

Second coat: after the first coat dries, apply a second coat over the felt edges so the felt is completely covered and sealed between the two layers, then continue the main waterproofing over the area so the tape becomes part of one continuous layer.

Protect the work from rain, foot traffic and mechanical damage until the coating is fully cured.



UNIFIX TPE-CJ FELT laid into the wall / floor corner, with the felt edges embedded in the waterproofing coating.

Note: The application temperature should be between 5°C and 55°C. Application procedures may vary slightly depending on site conditions; the steps above are general guidelines for the application of the waterproofing system.

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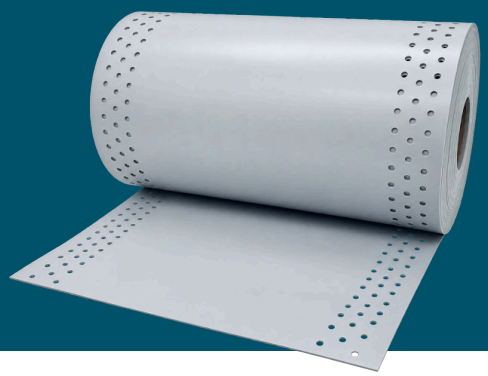
UNIFIX TPE

THERMOPLASTIC ELASTOMER EXPANSION JOINT TAPE



Product Features

UNIFIX TPE is a high-performance thermoplastic elastomer expansion joint sealing tape engineered to deliver permanent elasticity and watertight integrity across structural joints. Specifically developed to accommodate dynamic movement, it effectively bridges expansion joints, construction joints, and settlement gaps in wide-ranging building and civil engineering applications without compromising seal continuity.

To ensure maximum structural bonding and long-term durability, **UNIFIX TPE** is installed in system combination with high-performance **UNISTICK EA 5537**. Applying **UNISTICK EA 5537** along the joint edges creates an exceptional mechanical and chemical bond to the concrete substrate, locking the expansion tape securely in place while allowing its unbonded central zone to freely absorb structural shifts, thermal expansion, and hydrostatic pressure.

Advantages

High Resistance To Positive Water & Vapor Pressure
Hot-Air Weldable Joints
Over 500% Elongation
High Puncture And Fatigue Resistance
Resists Water Pressure Above 5 Bar
High UV Resistance

Fields of Application

Expansion Joints	Building Abutments & Interface Joints
Parapets	Swimming Pool
Wide and Irregular Cracks	Basements & Underground Structures
Exposed Roof Decks & Terraces	Water Reservoirs

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Physical Properties

Material	:	Thermoplastic elastomer (TPE) sealing tape	
Colour	:	Grey	
Size & Packaging	:	UNIFIX TPE UNISTICK EA 5537	: 200mm x 1mm x 25m / 300mm x 1mm x 25m : 5kg / set
Roll Length	:	UNIFIX TPE	: 25m / roll

Technical Properties

Property	Test Method	Values
Thickness, (mm)	DIN EN 1849 - 1	1 mm
Tensile Strength (Transverse)	EN-ISO 527-3	4.7 MPa
Tensile Strength (Longitudinal)	EN-ISO 527-3	4.8 MPa
Elongation at Maximum Load (Transverse)	EN-ISO 527-3	580 %
Elongation at Maximum Load (Longitudinal)	EN-ISO 527-3	532 %
Tear Propagation Strength (Transverse)	EN-ISO 12310-2	48 N
Tear Propagation Strength (Longitudinal)	EN-ISO 12310-2	42 N
Hardness	ISO 868	70 Shore A
Water Pressure Resistance	EN 1928	> 5 Bar
Service Temperature	SIA V280/3+4	-30 / + 80 °C
Chemical Resistance	Water-based and bitumen-based foundation insulations, sea water, waste water, UV rays, hydrolysis and microorganisms	

Important Note / Special Note

- Do not move the tape until the epoxy adhesive at the edges is fully cured.
- Protect the surface against water and mechanical damage until fully cured.
- Curing time of adhesive changes according to weather conditions.
- Do not apply during rain.
- Protect applied materials from rain, freezing, foot traffic, and continuous high humidity until completely dry.

Shelf Life & Storage

UNIFIX TPE has a shelf life of **24 months** when stored unopened in its original packaging in a dry, cool place away from direct sunlight.

Health & Safety

UNIFIX TPE tape presents no health hazard in normal handling. **UNISTICK EA 5537** is an epoxy adhesive: wear gloves and goggles, avoid skin and eye contact, and follow its safety data sheet.

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Installation Procedures

1 Surface Preparation

2 UNISTICK EA 5537 Application

3 UNIFIX TPE Expansion Joint Tape



Step 1
SURFACE PREPARATION

Clean the surface thoroughly of dust, curing compound, oil and grease. Remove protrusions and unsound or friable concrete, and repair with a concrete repair mortar.

Step 2
UNISTICK EA 5537 APPLICATION

UNISTICK EA 5537 is two-component. Mix **Component A (3.4 kg)** and **Component B (1.6 kg)** with a low-speed mixer until homogeneous.

Using a trowel or spatula, apply **UNISTICK EA 5537** about **1.0 – 1.5 mm** thick on both edges of the joint, at least **40 mm** wide on each side for the 200 mm tape and **50 mm** for the 300 mm tape. Work the adhesive well into the substrate to ensure a strong bond.

Step 3
UNIFIX TPE EXPANSION JOINT TAPE

Cut the tape to length. Where lengths must be joined, weld them with a hot-air gun before application; **UNISTICK EA 5537** cannot be used for splicing. Lay **UNIFIX TPE** onto the adhesive and press with a roller for full contact.

Apply a second layer of **UNISTICK EA 5537**, **1.0 – 1.5 mm** thick, over the edges of the tape, overlapping the tape edge by at least **20 mm**, and leave it to harden. Do not move, lift or load the tape, and protect it from water, until the adhesive has fully cured. Curing is slower in cold weather and faster in hot weather.

Note: The application temperature should be between 5°C and 55°C. Application procedures may vary slightly depending on site conditions; the steps above are general guidelines for the application of the waterproofing system.

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