

SYLWRAP Universal Pipe Repair Kit

Description

The SylWrap Universal Pipe Repair Kit will permanently fix a leaking pipe even when pressure **cannot** be turned off. Repairs can be made in under 30 minutes to steel, copper, malleable iron, GRP, ceramic, clay, most plastics, concrete, rubber and lead.



A number of different sized Kits are available, capable of repairing pipe diameters up to 600mm. Repairs can be built to have pressure resistance up to 30 bar, temperature resistance up to 250°C and are effective on pipes carrying hot and cold water and chemicals. The SylWrap Universal Pipe Repair Kit has WRAS approval, meaning it is safe to use on pipes and fittings carrying drinking water.

Kit Contents and Directions for Use

The SylWrap Universal Pipe Repair Kit contains **Superfast Epoxy Putty**, **Wrap & Seal Pipe Burst Tape** and a **SylWrap HD Pipe Repair Bandage**.

If pressure cannot be turned off, Wrap & Seal is used to seal the live leak. The self-amalgamating silicone tape stretches by three times its length, bonding to both the pipe surface and itself as it is wrapped. Once fused, it forms a solid rubber band which maintains pressure over the leak, thus sealing it. Repairs made using the live leak method are temperature resistant to 250°C.

Multiple Wrap & Seals applied on top of each other will fuse together in the same way, capable of building pressure resistance up to 30 bar. Additional Tapes can be purchased separately if required.

If pressure can be turned off, then the Putty is used to seal the leak. It is kneaded by hand until it turns a uniform colour and is then pushed into holes and cracks.

Within 5-10 minutes, it will harden to fill the damage with a watertight material. Repairs made using the pressure off method are pressure resistant to 30 bar and temperature resistant to 200°C.

The initial sealant is then overwrapped with SylWrap HD. Wetting the bandage activates the resin within the wrap. SylWrap HD is wrapped and smoothed over the repair area, it will set after around 5 minutes to form an impact resistant protective shell around the pipe.

Advantages

- No need to shutdown systems to make live leak repair
- Permanent pipe repair in 30 minutes
- Repairs possible on pipes up to 600mm diameter
- Effective on elbows, tees, saddles and other complex shapes
- Repairs can be made pressure resistant to 30 bar and temperature resistant to 250°C

Applications

Water and wastewater:	Used by water companies to repair leaks on the supply network and at treatment plants
Petrochemical plants:	Repair gas, oil and water supply pipes without using tools
Quarries:	Leaks on wash plant pipework
Power stations:	Ash transfer systems, pulverised fuel tubes, cooling water lines
Steel works:	Steam and water pipes, sludge and slurry lines
Hospitality and leisure:	Air conditioning system pipes, heating systems
Marine:	Emergency repairs in dock or whilst at sea to fuel lines, water pipes and waste pipes
Domestic:	Leaks on domestic water pipes in homes and workplaces, rubber hose repairs



When pressure cannot be stopped, pipe burst tape is wrapped tightly around the leak area



When pressure can be stopped, epoxy putty fills in holes, cracks and missing sections

Whilst all reasonable care is taken in compiling technical data on the Company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy themselves that each product is fit for the purpose for which they intend to use it, that the actual conditions of use are suitable and that in the light of our continual research and development programme the information relating to each product has not been superseded.

Technical Data

SylWrap Working time	2-5 minutes depending upon temperature
Cured material life	10-20 years depending upon repair quality, repair thickness, condition of pipe, environmental conditions, pipe temperature, etc. Consult Sylmasta for further information and design life for specific applications
Functional cure	30-45 minutes
Full cure (maximum properties)	24 hours
Coefficient of thermal expansion	$7.1 \times 10^{-5} / ^\circ\text{C}$ (SylWrap composite wrap)
Service conditions	
Max service temperature	250°C / 480°F using Wrap & Seal and SylWrap HD (SylWrap HD has been used at 250°C with steam at 20 bar for a two week temporary repair and at 200°C at 20 bar for more than six weeks) (Lab tests show thermal stability up to 300°C)
Max pressure resistance	30 bar / 435 psi using Superfast Epoxy Putty and SylWrap HD, depending on nature of leak. For live leak pressure resistance using Wrap & Seal, see table below
Chemical resistance	Acetone, ammonia, sulphuric acid (30%), ethyl alcohol, mineral spirits, gasoline, MEK, toluene, diesel, hydrochloric acid, Varsol, ethylene glycol, crude oil, hydraulic oil (test period of 40 days)

SylWrap Universal Pipe Repair Kit Sizes and Maximum Pressure Resistance

There are 10 different sizes of SylWrap Universal Pipe Repair Kits for application on different pipe diameters.

Pressure figures show the maximum resistance which can be obtained when a single Wrap & Seal Pipe is wrapped directly over a pinhole leak. Pressure values serve as a guide to potential maximum pressure resistance only. Actual pressure resistance depends upon pipe material, condition, hole size, leak type and tension maintained during wrapping.

If you are unsure, more than one Wrap & Seal can be used to stop the leak. To determine the number of Wrap & Seal needed for a specific repair based on pipe diameter and hole size, use the repair calculator on Sylwrap.com/wrap-seal-burst-tape or contact Sylmasta. Additional Wrap & Seal can be purchased separately.

Product Code:	SylWrap Size:	Wrap & Seal Size:	Pipe Diameter:	Max Live Leak Pressure Resistance Using 1 x Wrap & Seal against Outside Diameter:
SYL-106-UP	25mm x 1.8m	25mm x 2m	Up to 15mm	Up to 15mm: 30 bar
SYL-206-UP	50mm x 1.8m	25mm x 2m	15 - 25mm	15mm: 30 bar / 25mm: 25 bar
SYL-212-UP	50mm x 3.6m	25mm x 2m	25 - 50mm	25mm: 25 bar / 50mm: 12 bar
SYL-309-UP	75mm x 2.7m	25mm x 2m	25 - 50mm	25mm: 25 bar / 50mm: 12 bar
SYL-312-UP	75mm x 3.6m	25mm x 2m	50 - 75mm	50mm: 12 bar / 75mm: 8 bar
SYL-412-UP	100mm x 3.6m	25mm x 2m	50 - 100mm	50mm: 12 bar / 75mm: 8 bar / 100mm: 6 bar
SYL-416-UP	100mm x 5.0m	25mm x 2m	75 - 125mm	75mm: 8 bar / 100mm: 6 bar / 125mm: 5 bar
SYL-616-UP	150mm x 5.0m	25mm x 2m	100 - 150mm	100mm: 6 bar / 125mm: 5 bar / 150mm: 4 bar
SYL-633-UP	150mm x 10.0m	50mm x 4m	150 - 300mm	150mm: 8 bar / 225mm: 5 bar / 300mm: 4 bar
SYL-866-UP	200mm x 20.0m	50mm x 11m	300 - 600mm	300mm: 9 bar / 450mm: 6 bar / 600mm: 4 bar

Storage

SylWrap Universal Pipe Repair Kits should be stored in their packaging in cool, dry conditions. SylWrap HD Bandage should be kept unopened in its original foil pouch. Piercing or damaging the pouch will cause SylWrap to cure prematurely. Under such conditions, SylWrap Universal Pipe Repair Kit has a shelf life of at least 24 months from date of manufacture.

Health & Safety Use

SylWrap HD contains a urethane pre-polymer. Plastic gloves should be worn to avoid unnecessary skin contact with the uncured material. If working on live pipework, take every safety precaution necessary to avoid exposure to the leaking material. For further health and safety information, please refer to the relevant Safety Data Sheets for Superfast Epoxy Putty, Wrap & Seal and SylWrap HD Bandage.

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