

# 90° Pipe Repair Kits

## No Dig Localised repair of DN100 & 150 Pipe Bends

Mission 90° Pipe Repair Kits together with Mission Bendy Packers provide a reliable and cost effective system for the permanent and watertight localised repair of pipe bends

Each Kit contains all the materials required for a single repair and by reducing both preparation time and wastage is a cost effective alternative to purchasing materials in bulk.



### CONTENTS

- 2 part resin in separate bottles for ease of mixing and use
- Polyester tube
- 2 packer protection sleeves
- Protective groundsheet
- 2 pairs protective gloves
- Spreader
- Cable and wire ties

### BENEFITS

- Minimum disruption due to No-Dig application
- Quick and easy to use
- Permanent and watertight repair
- Reduces preparation time and wastage
- Pre-measured components ensures accurate mixing of resin
- Elimination of resin mixing buckets and measuring cylinders
- 50 year projected lifespan for the completed repair

### APPLICATIONS

Repair of cracked, fractured and broken pipes, including clay, concrete, pitch fibre, asbestos cement, cast iron and PVCu pipes.  
Repair of pipe joints damaged by root intrusion or ground movement  
Bonds to most pipe materials

### MATERIALS

**Resin**  
The resin is supplied in two grades for winter use, ambient temperature 3°C to 20°C, and for summer use, ambient temperature over 20°C. It is a two-component organic-mineral resin developed specifically to impregnate glass fibre matting for the internal repair of sewers and drains.

#### Properties

- Low viscosity, ideal for the repair of sewers and drains exposed to constant humidity
- Resistant to the range of acids and alkalis normally found in sewers and drains
- Good adhesion to damp pipe surfaces
- Can be used on most pipe materials including, clay, concrete, pitch fibre, asbestos cement, cast iron and PVCu
- Harmless once cured

#### Tubing

The tube is made from a special grade of woven polyester

#### Pipe Repair Kits

MRK1008BP 100mm dia. repair kit 800mm long  
MRK1508BP 150mm dia. repair kit 800mm long

#### Bendy Packers

PMT71008BP 70-100mm bendy packer  
PMT101508BP 100-150mm bendy packer

Before carrying out any repair ensure that the pipe is clear of any debris, roots etc. and the walls are cleaned if necessary using a high-pressure jetter.

Measure accurately the distance from the manhole to the area to be repaired and transfer this dimension to the packer and pushrod assembly.

Ensure that the packer is protected from the resin at all times.

Ensure that the packer is the correct size for the pipe.

Ensure that the packer is not over inflated.

Wear both pairs of gloves when applying the resin and discard the top pair when finished handling the resin mat.



**1** Slide the packer into one of the protective sleeves and secure at both ends with the cable ties then cut off any excess length of sleeve. The tie at the end furthest from the air supply should be pulled tight but the end nearest the air supply should be slack to allow air to escape when the packer is inflated against the inside of the pipe. Place this assembly into the second protective sleeve and secure with one cable tie only at the end furthest away from the air supply.



**5** Turn the polyester tube over, pour on remainder of resin and spread evenly over the surface making sure that the whole area is covered.



**2** Lay out the protective plastic sheet and place the polyester tube on the sheet.



**6** Pass the packer through the tube then using the metal ties secure the mat onto the packer. These ties should be positioned 25mm from each end of the tube. Secure the ties by turning the ends 2 or 3 half turns and cut off any excess wire. Slightly inflate the packer to help retain the tube on the packer.



**3** Pour the small bottle of hardener into the larger bottle containing the resin, seal and shake vigorously until the mixture is a uniform caramel colour.



**7** Connect the short inflation hose and the required number of push rods onto the packer. Ensure the locking rings on the push rods are tightened.



**4** Pour one half of the resin onto the polyester tube. Using the spreader provided, spread the resin evenly over the surface of the tube making sure that the whole area is covered.



**8** Insert the packer into the pipe and slide it into position at the centre of the repair. Inflate the packer to the required pressure and allow the resin to cure. Approximately 2 hours, but times may vary according to temperature. Deflate the packer and remove from the pipe to provide a permanent repair. Take care on inflation of the packer in old or badly damaged pipes as full pressure may cause further damage.

**For more information please contact us**

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