Full Snap Wrap Kit Installation Guide

The following pictures provide the full contents of a Snap Wrap repair kit supplied as standard.

Adhesive, Filler and activators

Snap Wrap Sleeves – Inside, second and final Layer
The Snap Wrap pre-manufactured sleeves consisting of uni-direction fibres for the inside & second layer and bi-directional fibres for the final layer.

Procedure for installing a repair are as follows:-

- Before starting, put on your PPE:- coveralls, safety footwear, safety glasses, hearing protection, gloves, hardhat and vapour mask (if in a poorly ventilated area as per the MSDS/COSHH guidance)
- Suitable work table covered with polyene and waste bag taped to one corner
- Pipe work identified for the repair to be installed
- Pipe work has been surfaced prepared to SA2.5 (maximum bond strength)
  - Or ST3 (giving 70% of maximum bond strength)
  - Or ST2 (giving 25% of maximum bond strength)
- Defect identified and will be in the centre of the installed sleeves
- Take the inside sleeve (marked on edge as inside) and position it on the pipework to ensure it is the correct diameter for the pipe
- At this point clamp the sleeve tight with gloved hands
- Whilst it is on the pipe check down the edge to determine any noticeable gaps (ovality) whilst on the pipe in addition to the defect location
- This will give you a good indication at what clock face positions to apply dollops of filler in the next few stages of the first layers install
- Ensure the sleeve is positioned with the defect in the middle of this layer
- Take the wooden blocks from the kit and tape at the six O'clock position
- Take the second block and tape at the 12 O'clock position

See example photo below:

- Remove sleeve, prepare filler and adhesive
**Preparation of Filler**

The filler has two main purposes for use in the repair.

- To directly fill any defects and noticeable areas of wall loss
- And to ensure that the pipe is symmetrically round. (not all pipe work has a uniform symmetry)

Follow the guidance on the Adhesive packaging to determine the approximate weight of Activator (red packet) required to be mixed with the adhesive in relation to the temperature working time. For example:

450g of adhesive requires 20g of activator for a temperature range of 10C to 17C. Giving a working time of 45mins.

Using a clean mixing area (clean piece of card board can be used) approximately put the required amount of adhesive onto the mixing area. Rather than mix up the complete content of the filler, you can separate the content into approximately two equal halves by:

- Using the supplied black plastic mixing tool

Separating the filler, whilst still contained in the silver foil is the best way to achieve a half quantity. Note that you should use the back of the spreaders edge and draw from the centre to the edge. (see arrow above).

- Cut open the silver foil at the centre and empty the contents on to the mixing area
- Cut open the red activator and empty the required amount onto the mixing area, again the spreader can help to release it from the polyene packaging
- Mix both the filler and activator until it is a uniform colour
• Now apply suitable amounts of mixed filler onto the defect area
• Apply additional quantities of mixed filler at regular points circumferentially around the centre of the pipe. For example 6, 9, 12 and 3 O’clock positions

**Adhesive Preparation**

Similar to the filler instructions regarding quantity of activator (Blue) to the adhesive quantity on the back of the tin.

• Open the tin lid using the supplied tool

• Put the required quantity of activator directly into the tin
• Either using the supplied mixing stick or mixing rod (can be used in an air drill chuck or similar mechanical device) and mix to one uniform colour
• Use the black tool provided to ensure any additional residue on the inside of the tin sides is also mixed in

• Checking that all the adhesive and required quantity of activator have been mixed to one uniform colour (Light blue with ‘No Streaks’), pour into the supplied orange roller tray
• Using the roller, apply the mixed adhesive to the complete area of the pipe work where the inside sleeve will be installed
• Check and ensure there are no dry spots/missed areas

Any mixed compound (adhesive and filler) waste and packaging can be placed in the black general waste bag. **Keep your work area neat and tidy.**

Unused adhesive and filler not opened can be returned to stores after the repair has been completed.

Please also note that an exothermic reaction takes place when activator is mixed with the adhesive/filler and generates heat as a result. Do not put the lid back on mixed adhesive as a build up of pressure, due to the heat generated, will expand in the tin.

• If there is limited access to the pipe work surface, you can apply the mixed adhesive using the supplied brushes
• Take the inside sleeve and install on the pipe work
• Ensure the edge butts up against the two wooden blocks
• The longitudinal edges of the sleeve should be at 180 degrees from the defect position
• Apply sufficient mixed filler to the longitudinal seam of the installed sleeve (this ensures that the void is in-filled)
• Apply further mixed adhesive to the complete surface of the first installed sleeve
• Again, ensure there are no dry spots/missed areas
• Where the sleeve joins itself infill with additional mixed adhesive (use the paint brush if require.
• Install the second sleeve, with its join at 90 degrees from the inside sleeves join
• Again, apply sufficient mixed filler to the longitudinal seam of the installed sleeve (this ensures that the void is in-filled)
• Apply further mixed adhesive to the second layers surface
• Again, check to ensure there are no dry spots/missed areas
• Install the final outside sleeve to the pipe work and again ensure its longitudinal seam is 90 degrees from the previous layers seam
• You will notice that excess adhesive and filler will start to be squeezed out of the ends and seams of the layers
• Excessive adhesive and filler should be removed using the spreader to keep the repair neat and tidy
• Next procedure is the installing of the supplied steel bands

• Note that during the install of the sleeves, the layers may have moved away from the blocks and should be pushed back into position
• Position the first steel band in the centre of the repair and use the tightening tool

• At this stage it does not need to be tightened up fully

• Position the remaining four steel bands equally distant from the centre band

• Again tighten the two adjacent bands from the centre band first, but not fully tightening
• The outermost bands should be positioned about 5mm from the edge of the repair
• Tighten the two outer bands sufficiently similar to the other bands

• Check again to ensure the sleeves are still butted up to the blocks
• Excessive adhesive and filler will continue to ooze from the extremities of the installed sleeves and should be cleaned off
• From the centre band outwards, continue to tighten the bands
• Again excess will continue to ooze and clean accordingly
• Over the next five minutes, continue to tighten all bands – centre outwards
• Once fully tightened, the repair is near to completion
• At this point the wooden blocks can be removed
• With the supplied brush, achieve a 45 degree taper of adhesive on the full circumferential edges of the sleeves. Deficient adhesive can be reapplied to provide a neat and tidy edge

• After two hours, remove the steel banding

The completed installation of the Snap Wrap can be coated as required.

Finally clear up the work area. Any mixed filler/adhesive can be disposed of as general waste. For completeness, any unused adhesive/filler should be mixed with their corresponding activator and can then be disposed of as general waste once cured.
QA/QC Process

It is mandatory for the QA/QC checks to be carried out and photographic evidence of the repair to be taken.

Pictures should be taken of the defect area before the work scope starts and throughout the repair procedure, showing:

1. Applied filler and adhesive before the first layer is installed
2. When the second application of adhesive is applied
3. Install of the second layer
4. Application of adhesive on the second installed layer
5. Install of the final layer
6. Position of the temporary steel banding
7. Cleaning up and tapering of the repair edges
8. Final picture of the completed repair

The attached is the QAQC sheet to be completed by the installer.

Note:

This document requires all the fields to be completed. Where there is uncertainty in the completion of the document, you should contact Clock Spring/NCompassPiping for clarity and support.