

# PUDLO GB Reinforced Installation Guide



Part of the DBGroup

Liam Leonard - Technical Standards Manager AMICT CSSW



DB Group



Part of the DBGroup

## Contents

1. Introduction
2. PUDLO GB Reinforced
3. Membrane jointing - welded application
4. Membrane jointing - taped application
5. Repair and remediation
6. Corner units and top hats

## 1-Introduction

PUDLO Waterproofing Systems has been at the forefront of protecting structures from water ingress for over 140 years. In 2016, PUDLO introduced its first membranes into its waterproofing range. In 2017, PUDLO successfully added two more Type A membranes to its growing list of waterproofing systems.



## 2-PUDLO GB Reinforced

PUDLO GB Reinforced is a loose laid BBA approved membrane that provides protection from Carbon Dioxide, Methane and Radon, whilst also protecting the structure from water vapour.

PUDLO GB Reinforced is a multi-layer, LDPE membrane which that is reinforced with a polypropylene reinforcing grid complemented with an integral aluminium foil.

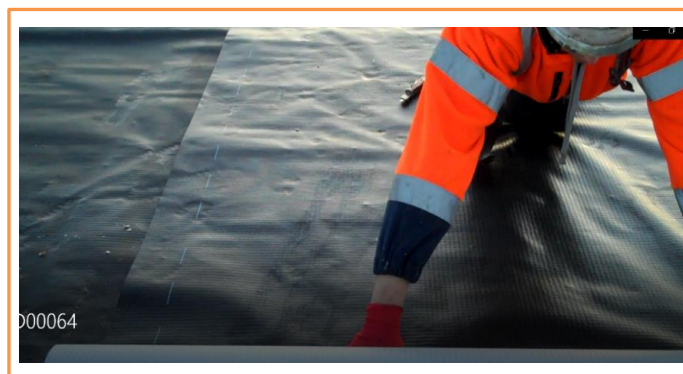
PUDLO GB can protect from hydrocarbon vapours where the membrane is separated from the ground. Most common in block and beam applications.

PUDLO GB Reinforced is a loose lay system. PUDLO recommends the membranes are installed with the following precautions in mind:

- Installed in ambient air temperatures in excess of 5°C.
- No membrane should be installed where live or standing water is present. Please contact PUDLO if this situation occurs on site
- All substrates should be flush and smooth, with no deep voids or uneven surfaces
- Both membranes should be installed by suitably qualified (NVQ level 2) installer or competent installer / company who has been trained by PUDLO Waterproofing Systems
- Protection boards should be placed once membrane has been installed to avoid damage to the system
- Foot traffic / vehicle traffic should be avoided
- Naked flames / smoking should be avoided and kept away from the system

## Membrane jointing - welded application

PUDLO recommends using welded joints to provide the most effective gas protection. Prior to welding membranes. This also in effective provides the structure with long term design life than that of taped systems



## Membrane joining - taped application

PUDLO will accept the use of taped systems where this has been specified by us and accepted by ourselves as a taped system. Even though we accept taped systems, we still recommend that, for optimal performance, these membranes are welded.

Please see below steps for taping the membrane:

- Membrane overlaps should be staggered and have at least 100mm of overlap
- PUDLO GB Tape must be used for all taped joints.
- For taping joints, please ensure the first layer of membrane is laid with the surface clean, dry and free from frost, dirt and debris. Begin by peeling one side of the protective coating from the tape, applying the tape along the outside edge of the 100mm guideline. Next, unroll the second layer of membrane ensuring a 150mm overlap is maintained. Slowly remove the upper layer of protective film from the tape and pressing firmly on the taped joint with a silicone roller to remove trapped air
- To finish the joint, apply an appropriate sealing of tape over the joint to provide a smooth finish

*Note; the continuity of the gas protection membrane must extend over the footprint of the building, and the membrane must be sealed to a gas resistant DPC such as PUDLO GB DPC (refer to data sheet for more information). To seal PUDLO GB Reinforced to PUDLO GB DPC this can be done by welding or using PUDLO GB Lap Tape.*

## Repair & Maintenance

As with any membrane system, it is not always possible to avoid damage to the system.

Any damage to the membrane must be repaired using a patch of the membrane, and laps welded or sealed with PUDLO GB

Tape and secure. All patched areas must extend a minimum of 100 mm from the damaged area. If required by the local authority, repair work should be confirmed by an independent validation report, as all gas membrane installations should be subject to third-party validation in accordance with BS 8485:2015.

## Corner Units and Top Hats

### Corner Units

- Build the masonry up to the height of the horizontal joint where the cavity tray is to be built in. Place the preformed upstand unit tight into the corner of the masonry wall.
- Remove the protective paper from the back of the PUDLO GB Tape and apply it to the upstand unit at a height that will ensure a good overlap when the downstand unit is in place. Remove the protective paper from the face of the tape.
- Place the preformed downstand unit tight into the corner with the horizontal element sitting on the masonry wall. Press the vertical leg of the downstand unit firmly against the upstand unit, starting at the internal corner and working outwards.
- Apply two lengths of PUDLO GB Tape vertically across both upstand and downstand units, one on each return wall, ready to receive the lengths of cavity tray. When the cavity trays are sealed to the upstand units, join them to the floor membrane.
- If prefabricated units are sealed with thermal jointing - tapes are not required.

### Top Hats

- Cut a circular hole in the membrane as close as possible to the pipe
- slide the preformed top hat over the pipe and mark the extent of the square horizontal skirt over the membrane and mark the line of the top of the top hat unit around the pipe.



Part of the DBGroup

- Raise the top hat unit and cut four lengths of PUDLO GB Tape, one for each side of the horizontal skirt. Allowing for an overlap at each corner. Cut one length to go round the pipe.
- Start to remove the protective paper from the PUDLO GB Tape around the pipe and raise it up at an angle so that it will project above the top hat unit when it is stuck to the membrane.
- Release the protective paper from each of the four lengths of PUDLO GB Tape. Lower the top hat unit, ensuring that the free end of the protective paper around the pipe is reachable, and seal the horizontal skirt to the membrane
- Gradually remove the remainder of the protective paper from the PUDLO GB Tape around the pipe.
- Seal the junction of the horizontal skirt and the membrane with the appropriate sealing tape and secure the top hat unit to the pipe with a jubilee clip.
- If prefabricated top-hats are sealed with thermal jointing - tapes are not required.

## Limited Warranty

- **PUDLO GB Reinforced** should only be installed once the site ground conditions are suitable to receive the waterproofing product. **PUDLO GB Reinforced** is designed to be used on most substrates and is NOT designed to waterproof against hydrostatic pressure as a single system or movement / expansion joints. Please consult PUDLO for special installation guidelines. The information and data contained herein is believed to be accurate and reliable. Specifications and other information contained within this 'guide' supersede all previously printed material and is subject to change without prior notice. Manufacturer's warranty of the installed system is available. Please contact PUDLO for terms and limitations. All goods sold by the seller are warranted to be free from defects in material and workmanship. The warranty is in lieu of and excludes all other warranties not

expressly set forth herein. Seller shall not be liable for incidental or consequential losses, damages or expenses, directly or indirectly arising from the sale, handling or use of goods, or from any other cause relating thereto, and seller's liability hereunder in any case is expressly limited to the replacement (in the form originally shipped) of goods not complying with this agreement or at seller's election, to the repayment of, or crediting buyer with, an amount equal to the purchase price of such goods, whether such claims are for breach of warranty or negligence. Any claim by buyer with reference to the goods sold hereunder for any cause shall be deemed waived by buyer unless submitted to seller in writing within 30 days from the date buyer discovered or should have discovered any claimed breach.

- Materials should be inspected and tested by purchaser prior to their use if product quality is subject to verification after shipment. Performance guarantees are normally supplied by the applicator of the **PUDLO GB Reinforced System**.