

DonProof PR Method Statement

(A flexible PVC waterproofing membrane for roofs)

Section A : General Comments

Equipment

It is suggested that the following list of equipment is adopted as a minimum requirement:

Protective clothing : Protective overalls

: Good quality gloves and goggles

Equipment : Hot air welding machine

: Pressure roller

: Scissors

: Seam probe tool: Wire brush

Section B : Application

1.0 Substrate Preparation

- 1.1 Surfaces to which a waterproofing system is to be applied should be clean, dry, free from contamination, smooth and without projections that may damage the membrane. Any projection should be removed.
- 1.2 All areas where DonProof PR is to be applied should be covered with **Geotex** (non-woven geotextile).

Note: It is important that the Geotex is not fixed in place with tension or loose folds.

2.0 Preparing the Welding Machine

- 2.1 It is important to clean the welding machine, nozzle pieces and tools well with a wire brush and clean water.
- 2.2 The welding temperature should be set between 450°C and 500°C depending on the ambient conditions of the site.
- 2.3 Prior to the installation of DonProof PR, a welded sample should be tested on site, to set the correct temperature for the automatic and/or manual welding machines. The welded sample should be tested by peeling the two membranes apart and breaking the weld.
 - 2.3.1 If the joint is easily broken, then the welding temperature is lower than the recommended.
 - 2.3.2 If the membrane deforms while welding, then the temperature is higher than the recommended.

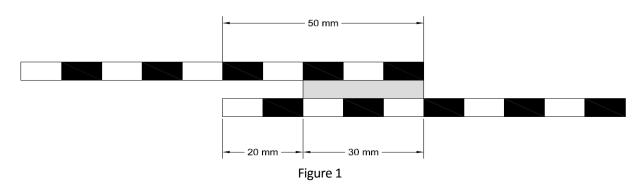
Note: It is recommended to use an automatic welding machine to achieve the perfect combination between pressure, temperature and speed. Manual welding machines are preferred for detailed work and in conditions were an automatic welding machine cannot be used.



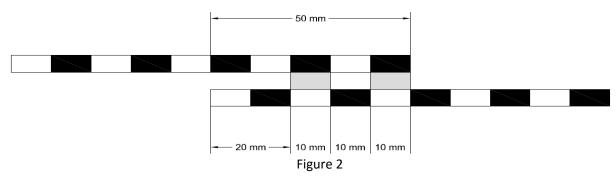


3.0 Installation of DonProof PR Membrane

- 3.1 Subsequent sheets of DonProof PR should be placed adjacent to each other avoiding T crossing.
- 3.2 When using a hand held welding machine, it is important to start by spot welding the joints to keep the membrane in place, insuring that there will be no extra tension after welding.
- 3.3 DonProof PR can be applied by loosely laying it on the substrate or by mechanical fixation:
 - i. Loose-laid
 - a. If a hand held welding machine is used, the welding should start from the inner side moving outwards while maintain the pressure with the roller on the joint.
 - b. If a single weld joint system is being adopted then the membrane overlapping should be 50 mm in width with at least 30 mm welded section (Figure 1).



c. If a double weld joint is being adopted then the membrane overlapping should be 50 mm in width with 2×10 mm welded sections and 10 mm space in between each joint (Figure 2).

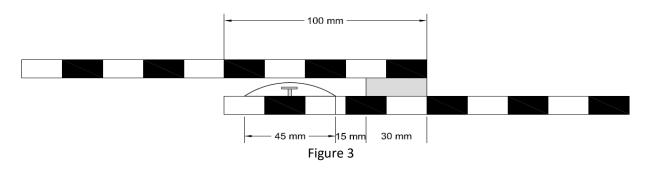


- ii. Mechanical fixation (Figure 3):
 - a. The total width of the joint should be 100 mm.
 - b. Start by fixing the membrane onto the substrate leaving 10 mm from the edge of the membrane.





c. Weld a 30 mm joint leaving approximately 15 mm between the weld and the mechanical fixation.



3.4 For vertical surfaces, fix a PVC termination bar on the surface and weld DonProof PR on it.

Note: When placing the membrane, bear in mind the intersection between vertical and horizontal joints, to keep extra material in order to overlap and weld at the edges.

4.0 Testing of the Welded Seams and Joints

- 4.1 After welding each section, the seam should be tested. Slide a seam probe tool along the side of the seam while applying some pressure and visually checking for a weak weld.
- 4.2 All weak welded joints should be marked and repaired.

Section C : Approval and variations

This method statement is offered by DCP as a 'standard proposal' for the application of **DonProof PR**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.