

Welding for optimum results

The integrity and long term performance of Aquatite can be affected significantly by the way that it is welded. Here practical advice and guidance is provided to help maintain the integrity of Aquatite and ensure long lasting watertight results every time.

- After the gutter sections have been installed and mechanically jointed the joints to the valleys must be hot air welded immediately before they can become contaminated. Welding should also take place prior to any roofing sheets being installed as this will give the best access to the joints and ensure that there are no obstructions.
- If the gutters are allowed to get dirty the weld areas must be cleaned thoroughly using a PVC cleaner prior to welding. Furthermore, the mechanical joint must be covered with a self adhesive tape to protect areas that are not to be welded.
- PVC membranes weld at temperatures greater than 400°C. Once the gun is up to temperature carry out a weld test on a piece of folded PVC membrane cut off the jointing roll. This is done by inserting the heat nozzle between the two surfaces and then slowly removing the nozzle while pressing the two surfaces together with the thumb and forefinger. When the nozzle has been completely removed try to prise the two surfaces apart. If this is not possible then the two pieces of membrane have been fused together successfully and you are ready to begin welding the joints.
- Cut a length of the Aquatite PVC jointing membrane long enough to cover the total joint. Spot-weld the Aquatite PVC membrane over the valley joint ensuring the centre of the membrane is over the centre of the joint. To do this, place the nozzle between the valley gutter and jointing

membrane and heat weld at approximately 200mm centres.

- The minimum heat weld required during any installation is 40mm per side of the joint and this is performed in two steps. The first step is to insert a 'back weld' which is a weld of between 10mm - 15mm placed at the rear of the lap. This is a vital part of the process as it ensures that when the final weld is performed, all the hot air is contained within the lap and does not escape. The second weld or 'secure weld' is carried out in a methodical, uniform manner using even pressure on the roller and steady speed of the nozzle. At any angle on the joint always start the welding procedure from this point and work away using a brass penny roller to ensure the weld is completed at the angle.

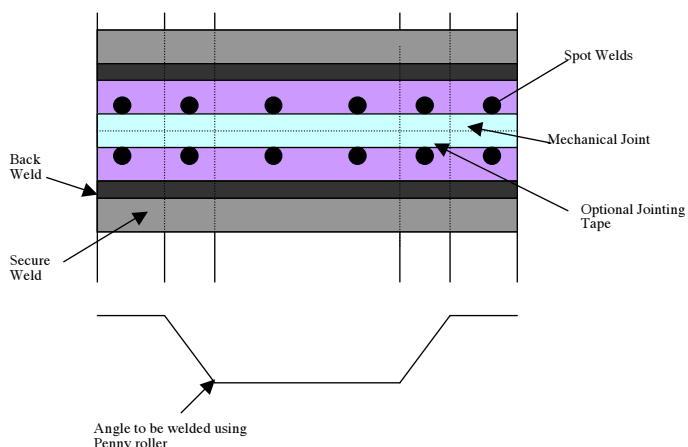


Illustration shows a cross-section of a valley gutter.