



MR (Site Services) Limited

Technical Bulletin No1, General  
Aluminium Site Welding to thin gauge  
standing seam roofing



Contact the  
team for more  
information on  
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## ABOUT M.R.SITE SERVICES

The welding of thin gauge aluminium roof materials was pioneered by Melvyn Rowberry in the early 1980s - and this early work has resulted in one of the major success stories of modern British Construction

### THE THEORY OF SITE WELDING

The welding process, now used as an industry standard, is T.I.G. (Tungsten Inert Gas) a non consumable electrode held in an insulated gun or holder, which is surrounded by an Argon Gas Shield, and directs the weld current to the area of roof sheet to be melted at approx. 690 deg C.

This creates the weld pool into which the skilled and highly trained operative (coded to relevant international standards) inserts aluminium filler wire leaving a fully formed weatherproof joint.

**On site** - Generally, the welding plant consisting of power source (welding machine) generator, Argon gas cables, leads and hand tools, remain in the site vehicle adjacent to the building. The welder then uses the weld torch remotely at roof level. A standard set up would generally reach up to 100 lm from vehicle to roof/work area. Standard equipment at roof level

includes all PPE, a fire extinguisher and a work board.

**Weather conditions** - Apart from extreme weather, deep snow, frost and ice, the welding process is resilient to the British weather. However, the reinstatement of coated surfaces requires a temperature of 10deg C above freezing, plus dry conditions to achieve a satisfactory adhesion and finish.

**Work area Preparation** - All sheet cutting must be completed using saws, not grinders. All weld zones are required to be fully supported by Duorock, and any flammable materials covered or removed.



### Design Assistance

We can contribute the benefits of our considerable experience at the design stage of a contract and the early involvement of our design department is advisable.

Our systems allows for flexible applications through design and site adaptation's allowing for unexpected penetrations.

The above is just a very brief introduction to this process, For full information please contact the team On 01905 755055 or [welding@mrsiteservices.co.uk](mailto:welding@mrsiteservices.co.uk)