MR (Site Services) Limited

Technical Bulletin No2,(part1) Preparation prior to Welding of thin gauge standing seam roofing

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

SHARING OUR KNOWLEDGE

When welding was first introduced back in the early 1980's there was one standing seam system and 3 installers of that system. Early contracts were mostly government or military projects with reasonably straight forward flat roofs and simple weld details. More challenging architectural details have been introduced in the last few years, which requires a greater technical consideration.

Educating contractors to the needs of this specialist process was undertaken by delivery training road shows, with a focus the science of the welding process and the requirement of preparing the aluminium for welding .

PREPARING FOR WELDING

The preparation of the weld zone is crucial for a safe and successful watertight roofing detail. The weld zone is 300mm min and must be clean of rubbish, sand and concrete. All cutting of sheets must be done by a saw not a grinder, and all burrs removed.

Sheets within the weld zone must be fully supported by a non flammable, rigid, dense insulation. Duorock is normally used. For safety all flammable material must be removed or covered prior to the welding works commencing.

To ensure welding is possible, a maximum gap of 5mm between the aluminium sheets is permissible. The weld torch will follow the prepared line. So, if you want a straight weld, you produce a straight cut through the aluminium sheets.

Painted surfaces

In addition to the above, where painted/coated sheets are used, all paint must be removed, a minimum of 25mm either side of weld line, including the underside of the sheet. This should be done using a wire wheel/brush. The use of abrasive discs will reduce the thickness of the sheet and deposit inclusions into the sheet.

Paint removed from sheets prior to welding

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

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