



SARNAWELD - INDUCTION WELDING FASTENING

IN COOPERATION WITH
SFS intec

Sarnafil® 

SARNAWELD – INDUCTION WELDING FASTENING SYSTEM



The new Sarnaweld system is a revolutionary, induction welding fastening system for flat roofs. Sarnaweld offers totally secure and permanent method of fixing insulation material and membranes on flat roofs. The system, can be used for both Sarnafil PVC and FPO membranes. The special washers used to secure the insulation to the substrate are then welded to the membrane by inductive heating, creating a non-penetrating connection. Additional fasteners may be required but essentially the same fasteners used for the insulation are utilised for the membrane attachment. This makes the system very economic. The weld is achieved using the *isoweld™3000* induction welding tooling, developed by SFS intec. The tooling features a search and control function, automatic temperature variation control and mains current fluctuation compensation. The Sarnaweld system is straightforward and quick.



THE INDUCTION TOOL - CLOSE UP

The *isoweld™3000* induction machine was developed by SFS intec and has been extensively tested in laboratory and on real site conditions.

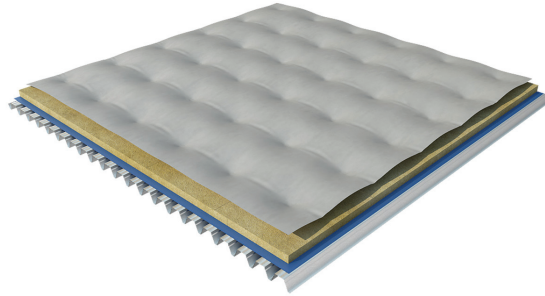
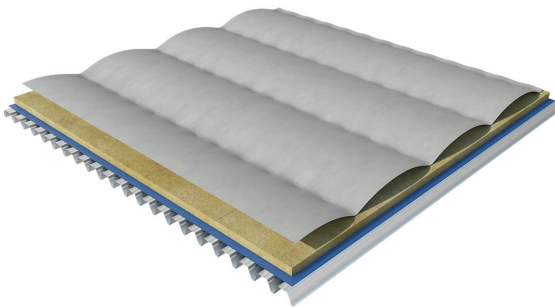
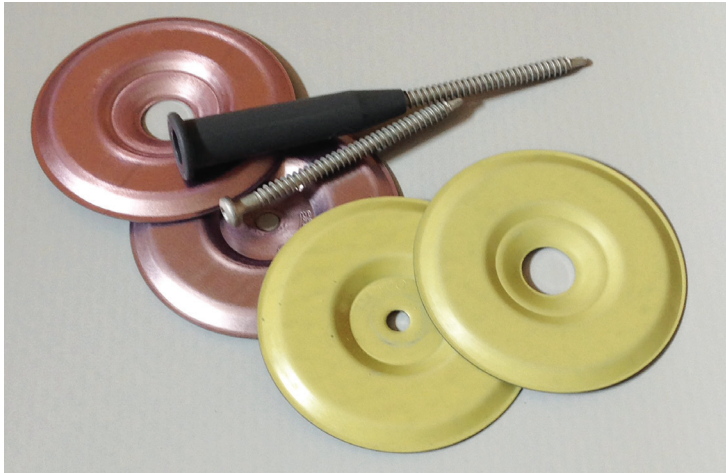
The *isoweld™3000* tooling machine comes complete with the following essential features:

- 1** Start button to activate the induction process
- 2** Height adjustable handle for ergonomic working
- 3** Simple to use and user friendly display, including a number counter of welded points achieved
- 4** Membrane compatible wheels allow for easy manoeuvrability
- 5** Inductor dummy for stabilisation and built-in temperature sensor allowing automatic adjustment of the welding parameters relative to external site temperature
- 6** Specially developed inductor with search and control function. This ensures that the inductor is located correctly over the plate prior to welding.
- 7** Inbuilt compensation for variation of power supply
- 8** Hand inductor for detailed work on upstands and narrow roof areas, e.g. around roof lights, openings, etc.

These features offer the user:

- Perfect welding quality
- Security
- User friendly operation

FEATURES AND BENEFITS



All these features guarantee you the perfect weld quality, safety and user friendly operation.

FEATURES AND BENEFITS

The Sarnaweld system has many benefits. The easy handling and use of the induction tool means minimal training is required. Furthermore, you can use it on different substrates, with or without thermally broken fasteners and in combination with the different Sarnafil PVC and FPO membrane technologies. Below is a list of the main benefits of the Sarnaweld system making it a convincing solution:

- Fixing the insulation and membrane in one process step (additional fasteners may be required)
- Quick and easy to use
- Reduced membrane overlaps
- Ergonomic, upright installation tooling with search and control function and height adjustment
- Additional hand inductor for tight spaces and vertical welds joints
- Up to a 20 year full system warranty

All these features guarantee you the perfect weld quality, safety and user friendly operation.

Extensive field tests as well as extensive research of the working processes on site have shown that the installer can save up to 20% of the total installed system cost when using the Sarnaweld induction welding system.

This is achieved through the reduced number of fasteners required together with a reduced membrane overlap required at the seam joints.

CASE STUDY



KERRY FOODS NEW GLOBAL TECHNOLOGY CENTRE, NAAS, IRELAND.

BACKGROUND:

Kerry Foods are a US company and one of the leading players in the worldwide food industry, specialising in food ingredients.

PROJECT REQUIREMENTS:

Sarnafil S327-18 EL RAL 9016 SR White, and G410 18-EL light grey in the plant room areas, were selected in conjunction with SarnaTherm PIR insulation. In addition, Sarnafil accessories were used including S-Vap 500, sarnatred walkway tiles and Sika supplied SFS intec isoweld™ induction welding system. A 20 year single point warranty including the fasteners and the weld to the washers, was also issued.

The white Sarnafil was chosen to comply with the LEED accreditation as it had the required SRI >78. This is also one of the first projects in Ireland to be fully designed in BIM. The Sarnafil BIM details were chosen by the architect as part of the design.

SOLUTION:

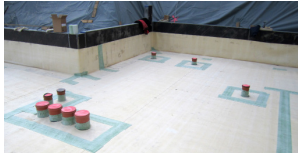
There were a number of different roof decks in the project including metal deck and concrete slab with screed. The roofing contractor used the Sarnaweld induction welding system for attachment of the membrane which reduced the need to pre-drill into the concrete roofs. Also the number of fixings would be less overall (membrane and insulation) than in a traditional lap fixed system.

PRODUCT: Sarnafil G410-18EL, Sarnafil S327 18-EL

SIZE: 8,000m²



SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:



WATERPROOFING



CONCRETE



REFURBISHMENT



MERCHANT



SEALING AND BONDING



FLOORING



ROOFING



INDUSTRY

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In the UK, we provide market-leading solutions for concrete, waterproofing, roofing, flooring, refurbishment, sealing & bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, and Leeds with 700 employees and a turnover of £190 million.

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