

# PROFAST

**SFS** intec

*isoweld*<sup>®</sup> – The revolutionary  
field fastening system from SFS intec



**New**

## The SFS intec field fastening system *isoweld*<sup>®</sup>

Mechanically fastened single ply roofs have been the established means of providing waterproofing for single ply flat roof construction for many decades. From the very start, SFS intec took the lead role in the development of mechanically fastened solutions and this innovative approach continues today with the new, revolutionary SFS intec *isoweld*<sup>®</sup> field fastening system. This offers a user-friendly, fast, efficient and approved system for the attachment of PVC and TPO single ply membrane systems.

### Conventional seam fastening

- Fastening at membrane joints
- Various membrane widths necessary
- Additional fastening required for the insulation
- Penetration of the membrane
- Extended membrane overlaps are required
- Covering of the roof is dependent on the fastening process
- Set numbers of fastening points

### Advantages of the *isoweld*<sup>®</sup> system over competitive field fastening induction welding systems:

- Search and control function which properly locates the plate underneath the membrane. This function ensures that the inductor fully covers the plate, therefore ensuring that 100% of the weldable surface area of the concealed plate is subjected to the weld cycle. This ensures maximum strength of the plate and membrane weld.
- Temperature and power compensation feature which automatically adjusts weld parameters with change in membrane temperature. The tool does not need to be adjusted for fluctuations of job site temperatures.
- Hand-held inductor for welding in tight spaces, near rooftop protrusions and on parapet walls.

### *isoweld*<sup>®</sup> field fastening

- Fastening independent of membrane joints
- Only one membrane width required for the whole project
- No insulation fasteners are required
- No membrane penetration
- Reduced membrane overlaps
- Covering of the roof is independent of the fastening process – and is therefore faster
- Fewer fastening points

The *isoweld*<sup>®</sup> field fastening system uses induction technology and offers a non-penetrating solution. Secure attachment is achieved through the welding of the membrane to a dedicated SFS intec stress plate.

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 *isoweld*<sup>®</sup> field fastening system. This is achieved through the reduced number of fasteners required together with less membrane overlap required at the seam joints.



# The induction tool close up

The key component of the *isoweld*<sup>®</sup> system is the *isoweld*<sup>®</sup>3000 induction tool which was developed in partnership with engineering induction specialists. The system has been extensively tested both in laboratory and site conditions. The *isoweld*<sup>®</sup>3000 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 maneuverability
- 5 Inductor dummy for stabilization 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 Built-in compensation for variation of power supply
- 8 Hand inductor for detailed work on parapet walls and narrow roof areas, e.g. around roof lights, openings, etc.

These features offer the user:

- Perfect welding quality
- Security
- User friendly operation

Would you like to see the extensive benefits of the newest SFS intec innovation for yourself? Contact us direct for a meeting with one of our specialists.

«The *isoweld*<sup>®</sup> system has many benefits: The easy handling and use of the induction tool is one of them. Furthermore, you can use it on different substrates, with or without sleeve and in combination with different membrane technologies. Additionally, we benefit from the high quality standard of all SFS intec systems and from the competent support and consulting offered. All in all, a convincing overall package.»

Reto Gränicher, Corporate System Engineer  
Mechanically Fastened Roofs, Sika Services AG







«I like the hand inductor very much. It allows me to do the detail work with the same system as the rest of the roof. It is definitely an additional benefit.»

Fred Horner, installation company Advanced Roofing

«After a 5 minutes training, everybody can work with the induction tool. The upright working position allows a fatigue-proof working. We like the *isoweld*<sup>®</sup> system.»

Installation company Höller Spenglerei GmbH

«We have tested the system on jobsites together with SFS intec and we like it very much. It needs a mind shift when installing the roof but brings a lot of benefits. Sika Austria will actively promote the system.»

Harald Scambor, Head of Applicationtechnique Roofing,  
Sika Oesterreich GmbH

«The search and control function is a great benefit. It indicates when the plate is correctly underneath the inductor to ensure that the weld is perfect.»

Keith Gere, Director of Engineering Services,  
Duro-Last Roofing Inc.



*isoweld*®

**Induction Welding System**

*Innovative induction welding system which welds adhesive coated plates to single ply membranes*

- 1-step calibration
- Hand-held inductor
- Constant monitoring of membrane surface temperature
- "x2" welding - two membrane thickness

- 3-way weld verification
- Plate-finding search function
- No "false positive" welds

**Application**

***isoweld*® System**

- PVC and TPO single ply membrane: 35-90 mils
- Polyiso insulation
- High density cover boards
- EPS insulation
- Foil faced insulation
- Mineral wool insulation
- Parapet wall welding



Contents included in shipping/storage case:

- 1 - *isoweld*® 3000 stand-up tool
- 1 - calibration template
- 5 - replacement protective pads for inductor
- 1 - instruction manual
- 1 - plunger cup

**Additional Components**

Hand-Held inductor

Installation Tool

Magnets and magnets in case (set of 6 or 12)

#15 Dekfast Fastener

TPO Plate (500/plastic pail)

PVC Plate (500/plastic pail)

Pad for EPS/XPS application

**Selection**

System Component	Material No. Sell	Material No. Rental
<i>isoweld</i> ® 3000	1543691	1351200
Hand inductor	1345222	1355217
Magnets (set of 6)	1550566	-
Magnets (set of 12)	1550564	-
Magnets (set of 10)	-	1355216
#15 Dekfast fastener	Length Dependent	N/A
TPO Plate (500/plastic pail)	1555269	N/A
PVC Plate (500/plastic pail)	1555270	N/A
Installation tool	1336394	N/A
Pad for EPS/XPS application	1351805	N/A

**Technical Data**

Dimensions & Weight

*isoweld*® 3000 - 43"H x 21"W x 16"D  
*isoweld*® 3000 - 37"L x 23"W x 24"D (in case)  
*isoweld*® 3000 - 42 lbs.; 80 lbs. (in case)  
 Magnets, set of 6 or 12 - 35"L x 24"W x 14"D (in case)  
 Magnet, single - 2.7 lbs.  
 Magnet, set of 6 - 40 lbs., set of 12 - 57 lbs. (in case)  
 Hand-held inductor cable length - 13'  
 Plates, 500 pc. plastic pail - 9-7/8" x 9-7/8" x 4-3/8"; 34 lbs

Electrical - minimum requirements\*:

Voltage: 110V (50-60 Hz) /230V  
 Current: 20 amp, GFI protection  
 Power: 5000 W generator, dedicated  
 12AWG/3 power extension cord  
 100' maximum length of power extension cord

\*Power cords of larger conductor size (10AWG/3) and shorter length are recommended for optimal performance.

**Approvals**



State of Florida: FL20311

12-1017.07

Recommended Application Limits:

Temperature: 23°F - 122°F  
 Slope: <10°