

## TECHNICAL BULLETIN

**TO: FIRESTONE RED SHIELD CONTRACTORS  
FIRESTONE DISTRIBUTORS  
FIRESTONE SALES REPRESENTATIVES**

**JUNE 23, 2016**

**RE: NEW OPTIONS FOR INVISIWELD™ INDUCTION WELDING SYSTEM**

Firestone Building Products is excited to announce new options for the popular UltraPly™ TPO Invisiweld Induction Welding System called Invisiweld-S. The new Invisiweld-S option is now available for use with .045, .060 and .080 UltraPly TPO membranes, is FM Approved and is eligible for Firestone Red Shield system warranties up to 15 years (using .045 TPO); 20 years (using .060 and .080 TPO) and 25 or 30 years (using .080 TPO only).

The new InvisiWeld-S system consists of a specially coated, 3" round plate (**UltraPly TPO InvisiWeld-S Plate – Item # W56TPOPL0S**), that is used to both attach the insulation and the membrane, through induction welding using the *isoweld*® 3000 induction welding machine, available from SFS Intec, Inc. Firestone has decided to offer the Invisiweld-S system option due to the many features and benefits the system provides to our contractors for functionality and to provide an additional attachment option for installing the high performance UltraPly TPO InvisiWeld roofing system. Please visit [SFS Intec isoweld 3000](http://www.sfsintec.com/isoweld3000) for additional information, operation instructions, and guidelines on using the *isoweld* 3000 induction welding machine.

### **InvisiWeld-S System Benefits**

#### 1. Weld Accuracy and Integrity

- Automatic calibration process with template and pre-programmed settings, i.e. membrane type and thickness to ensure precise and accurate full plate welds.
- Full welds: Self calibration and plate "search & find" options ensures full plate weld and ease of locating the plates below the membrane.
- No accidental welds: if the plate is not within the calibrated weld zone, the isoweld machine will not allow welding (or partial welding) of the TPO membrane to the plate, ensuring a consistent, quality weld each time.
- Temperature compensation: Thermal probe continuously monitors the surface temperature of the TPO and auto-adjusts the weld settings as membrane surface temperature changes.
- "x2" welding feature: available for welding the plate below two layers of TPO, such as in a TPO lap area.



#### 2. Improved Crew Productivity

- Power Compensation minimizes surge and limits power interruption
- Quick calibration: Easy & error free one-time calibration, saves time conducting periodic destructive pull testing of the TPO/Plate welds to inspect the quality and integrity of the welds.
- Automatic "search & find" option minimizes time spent locating the plates below the membrane.
- Each tool comes equipped with 10 magnets.

#### 3. Expanded Rooftop Applications

- Hand held inductor option: Enables welding of membrane vertically into parapet walls (when conditions allow); curbs; internal gutters and in other tight spaces on the roof.
- Removable magnet handle: For vertical parapet wall applications & height restricted area usage
- No guess work for crew: Only two data inputs for calibration, membrane type & thickness.

4. Machine/user feedback

- Three way feedback to indicate positive weld indication (audible tone/color change of LED/increment of weld counter on LCD)
- Weld search function – “Search” tone scanning beep sequence during plate finding, followed by one beep for weld start once plate is found, followed by two beeps for weld completion.
- Stand up tool has wheels for ease of movement of the machine on the roof top.

5. Tool purchase or rental options available from SFS Intec, Inc.

- For more information, please contact your local Building Systems Advisor.

For a link to a YouTube video for the InvisiWeld-S and isoweld 3000 welding tool application, see <https://www.youtube.com/watch?v=cOHUYZK98PU> . For updated Technical Information Sheets (TIS), Details and Application Guides, please visit [www.firestonebpc.com](http://www.firestonebpc.com) or contact your Building Systems Advisor at 1-800-428-4511 and press 1 for additional information.

By offering the newest technology in induction welding, Firestone Building Products will continue to lead the commercial roofing industry, providing the best in class offerings to our contractors, proving once again that Nobody Covers You Better!

Sincerely,



Michael Sexton  
National Technical Manager, Single-Ply Systems