

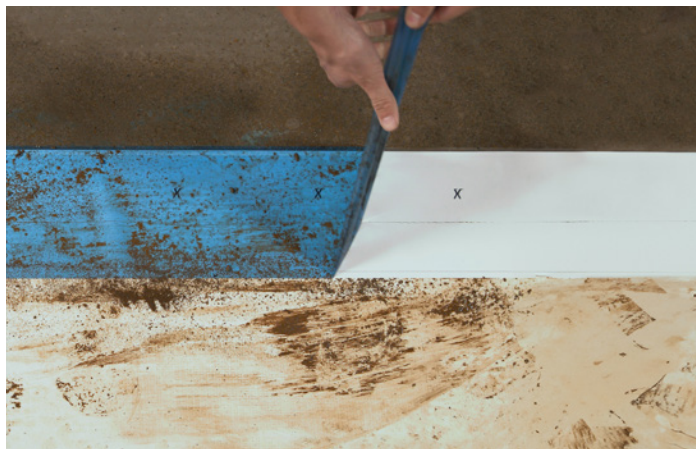
## Sure-Weld® TPO with SeamShield™

Carlisle SynTec Systems prides itself on a tradition of continuous innovation. With the introduction of Sure-Weld TPO membrane with SeamShield protective film, Carlisle continues to lead the commercial roofing industry through the development of world-class products.

Carlisle's patented SeamShield technology guards the seam area of the TPO membrane from adhesive and dirt accumulation during the installation process, eliminating the need to clean the seam prior to welding.

### PROTECTION

Carlisle's patented SeamShield technology is a factory-applied protective film applied to both the top and bottom lap area of TPO sheets, serving as a safeguard for the welded areas of the TPO sheet throughout the installation process. SeamShield is crucial in shielding the top and bottom ply seams from bonding adhesives and construction-generated dirt. This ensures a consistent factory-clean seam during the welding process.



### EASILY REMOVABLE

The Carlisle SeamShield protective film is designed for easy removal, leaving a residue-free surface that's ready for welding. The system incorporates a split 6-inch transparent blue film on the top ply, allowing for clear visibility of overlap lines and fastener marks during installation. A 3-inch gray film contrasts with the black bottom ply, improving installation accuracy. Additionally, the inclusion of a split top film accommodates both mechanically fastened and adhered installations, enhancing versatility and ease of use across different application methods.



### TIME, MATERIAL, AND LABOR SAVINGS

Carlisle's SeamShield film can be removed from a 100-foot membrane in under 4 minutes, revealing a factory-clean surface ready for welding. This innovative process reduces cleaning time by up to 70%, eliminating the need for weathered membrane cleaner and leading to material savings.

### Cleaning and Welding Seam Time

*(Times are based on 1 Person)*

Sure-Weld TPO membrane with SeamShield



Removing Film  
**4 Min.**

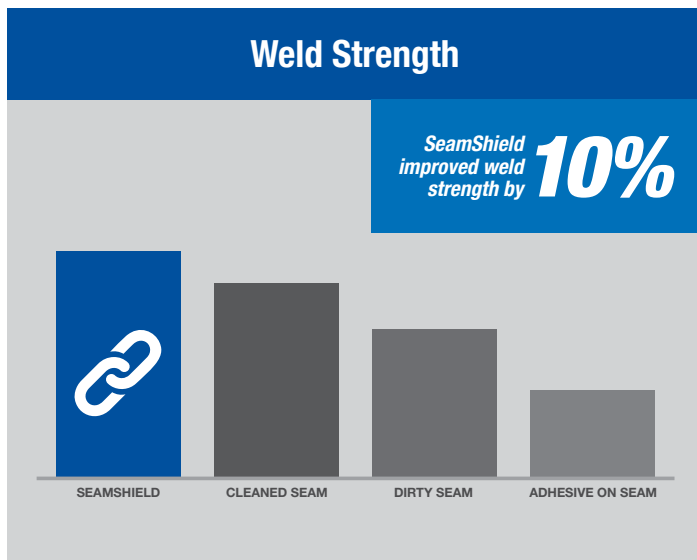
Sure-Weld TPO membrane without SeamShield



Cleaning Seam  
**15 Min.**

## INCREASED PERFORMANCE

An advantage of SeamShield is its ability to eliminate the need to clean the seam with Weathered Membrane Cleaner before welding, resulting in substantial material and labor savings. The factory-clean seam not only minimizes the occurrence of cold welds associated with dirty seams, but also enhances the weld strength of the seam by 10% when compared to a seam exposed to dirt. SeamShield is an innovative solution for maintaining cleanliness, efficiency, and strength in the TPO welding process.



## Features and Benefits

- » Protects the TPO seams from construction-generated dirt
  - Eliminates dedicated labor to protect the seam from dirt or adhesive overspray
- » Factory-cleaned seam
  - Eliminates variation in the cleaning process
  - Eliminates the need for Weathered Membrane Cleaner
  - Improves consistency of weld and weld strength
- » Labor Savings & Materials Savings
  - Elimination of Weathered Membrane Cleaner saves on material costs
  - SeamShield film can be removed in 4 minutes, reducing the seam cleaning time by 70%
- » Sure-Weld TPO with SeamShield is available on the following non-fleece products:
  - **10' x 100'**, White, Gray, Tan, 60-, 80-mil
  - **12' x 100'**, White, Gray, Tan, 60-, 80-mil
  - **16' x 100'**, White, Gray, Tan, 60-, 80-mil

## INSTALLATION INSTRUCTIONS

Sure-Weld TPO with SeamShield roofing systems are quick to install, as minimal labor and few components are required. The TPO membrane is secured to the substrate using a two-sided bonding adhesive, mechanical fasteners placed within the seam area or secured to induction welding plates using an induction welding tool. Adjoining membrane is overlapped and the seams are completed using an Automatic Heat Welder, making sheet welding fast, clean and consistent, while reducing strain on the roofing technician.

The SeamShield film is easily removed prior to welding, providing a seam area that is free of dirt and other contaminants eliminating the need for any additional cleaning. The contaminant-free membrane surface increases the consistency of the welds, resulting in a monolithic membrane with excellent long-term performance.

**Fully-Adhered** – After adhering the TPO membrane to a suitable substrate utilizing an appropriate bonding adhesive, the SeamShield film is removed from the top and bottom lap areas simultaneously prior to welding.

**Mechanically Fastened** – Place the TPO membrane over a suitable substrate and secure to the roof deck utilizing 2 ½" Piranha Plates and HP-X Fasteners. The fasteners and plates will be placed on the "X marks" in the overlapped membrane area and spaced so the membrane will withstand the design wind loads. Remove the outside section of the blue split SeamShield film as well as the top film, exposing a clean, weldable area.

**Induction-Welded** – Place the TPO membrane over a suitable substrate that has been secured using induction welding plates and mechanical fasteners spaced to withstand the design wind loads. After overlapping adjoining sheets, the SeamShield film is removed from the top and bottom lap areas simultaneously prior to welding.