Carlisle's 16' Sure-Weld® TPO Mechanically Fastened Membrane

A mechanically fastened 16' Sure-Weld TPO system is unique and differs from traditional mechanically fastened installations. Due to the width of the sheet, a single row of plates and fasteners in the seam area is insufficient to distribute the wind load. To overcome this challenge, an additional row of plates and fasteners must be added midway between the mechanically attached plates and fasteners. Rather than pierce the sheet with fasteners — which would necessitate the addition of a welded cover strip, negating the advantage of fewer seams in wider sheets — an alternative is to utilize induction-welded plates and fasteners. This method provides the necessary strength to the installation while preserving the seam reduction benefits of using 16-foot sheets.

LABOR REDUCTION

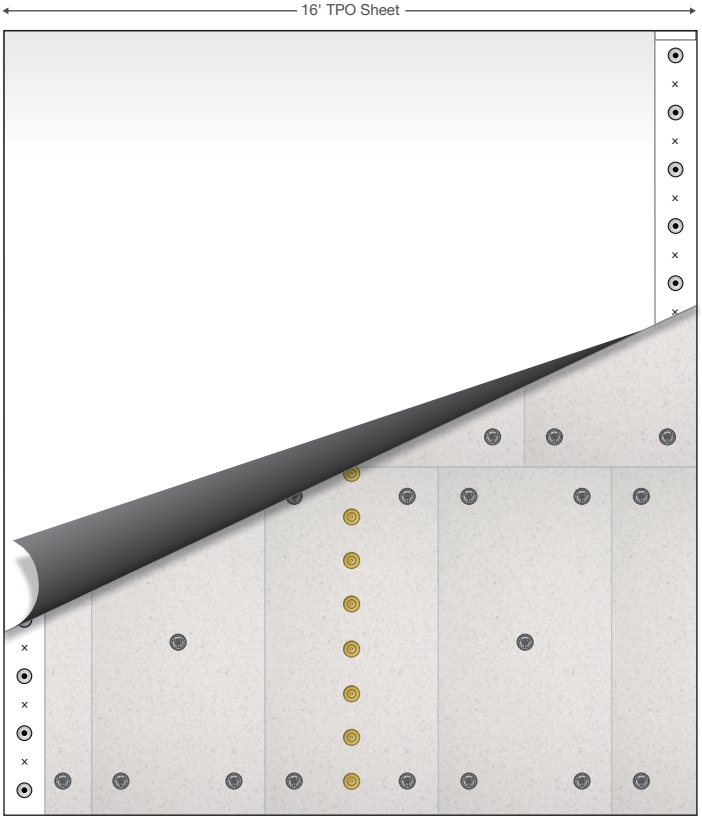
The use of 16' sheets leads to a 40% reduction in welding seams compared to 10' sheets, which also reduces the number of T-joint patches to install and seams to inspect. Reducing the number of rolls that need to be kicked out and positioned can also save numerous man hours over the course of a project.

SIMPLE INSTALLATION

Take advantage of the installation speed of 16' TPO without purchasing expensive new equipment. With a single induction welding machine, one crew member can secure the plates while others focus on positioning, fastening, and welding.

FASTER PRODUCTION

Mechanically fastened installations allow more roof to be covered per day, leading to a larger dried-in area. Plus, the efficiency gains in loading, positioning, seaming, and inspecting work can shave days off the overall project timeline.



Ratings available with both 6" and 12" mechanically fastened patterns. Induction-welded plates should be centered between the mechanically attached plates and fasteners. Insulation layouts, perimeter sheet requirements, and other details vary by project. For additional information please consult Carlisle's Specifications and Details.

FM Wind Uplift Ratings

Sheet Width	Thicknesses	Plate Spacing (Seam and Induction Welded Plates)	Uplift Rating
16'	45-, 60-, 80-mil	12" o.c.	1 – 60
16'	45-, 60-, 80-mil	6" o.c.	1 – 120

800-479-6832 | P.O. Box 7000 | Carlisle, PA 17013 | Fax: 717-245-7053 | **www.carlislesyntec.com**