

RhinoBond® Induction Welding System

RhinoBond is an alternative attachment system for Carlisle's Sure-Weld® TPO, Spectro-Weld™ TPO, Sure-Flex™ PVC or Sure-Flex KEE HP membranes. This all-in-one system uses the same fastener and plate to secure the membrane and the insulation to the deck without penetrating the roofing membrane. The result is a Factory Mutual-approved system that does not create any point of entry for moisture, requires fewer fasteners and provides superior wind uplift performance compared to standard mechanically attached TPO systems.

IMPROVED PRODUCTIVITY

By eliminating mechanical fastening in the seam, Carlisle's RhinoBond system decreases the number of screws and plates required for some assemblies by as much as 50%. This reduction results in minimized labor and material costs.

Spacing the RhinoBond plates in a grid-type pattern more evenly distributes the wind load and allows the use of full-width sheets across the entire roof area, eliminating the need for narrow perimeter sheets and reducing the number of seam welds.

The Carlisle RhinoBond system results in faster dry-in and allows the roofing applicator to tackle more square feet each day without the added concern of disrupting activities inside the building due to potential inclement weather.

IMPROVED PERFORMANCE

The evenly distributed securement provided by the RhinoBond system reduces wind flutter and noise as well as membrane fatigue compared to traditional mechanically attached assemblies. The plates are adhered to the underside of the membrane, creating a non-penetrating assembly.

The induction technology the patented RhinoBond tool has been in use since the 1990's and performs well under various weather conditions. The tool is effective even when the membrane is wet.

IDEAL FOR METAL RETROFIT APPLICATIONS

The Carlisle RhinoBond system is a great solution for metal retrofit applications. Unlike traditional assemblies, RhinoBond plates and fasteners are not required to be located in the seam area, eliminating the need for purlin-width sheets. This not only improves productivity but also reduces waste and increases profitability.

SYSTEM FEATURES AND BENEFITS INCLUDE:

- » Reduces fasteners, plates, and labor
- » No perimeter sheets required
- » Faster dry-in time
- » Non-penetrating system
- » Symmetrical wind load distribution





HOW IT WORKS

- 1** RhinoBond plates are positioned in a grid-type or in-line pattern on the substrate and secured with mechanical fasteners to the deck.
- 2** Carlisle's TPO or PVC membrane is laid into position and the seams are hot-air welded. No fasteners in the seams are required.
- 3** The RhinoBond induction welding tool is placed on the membrane surface directly above each of the RhinoBond plates. The tool activates the special coating, resulting in a bond between the plates and the membrane.
- 4** The weighted magnets are then placed over the plates to dissipate heat and ensure intimate contact between the bottom surface of the membrane and the hot-melt adhesive.

FASTENERS AND PLATES

The RhinoBond system uses 3-inch round specially coated plates, sold in pails of 500. RhinoBond plates meet FM 4470 criteria for corrosion resistance and can be installed with a variety of Carlisle fasteners.

INDUCTION WELDING TOOL

The RhinoBond tool is lightweight, with an adjustable and easy-to-use handle. It operates on standard 110-volt power sources and typically draws 1,300 watts. A 5,000-watt generator in good condition with two 20A GFCI protected circuits will run two tools.

