STOMP OUT FLUTTER

Non-penetrating fastening system for thermoplastic roofing
Welcome to RhinoBond

RhinoBond Portable Bonding Unit
With the advance of wide membranes, flutter has become a greater concern to building owners and contractors alike. The RhinoBond System from OMG Roofing Products provides a non-penetrating fastening solution that more evenly distributes the wind load.

RhinoBond is an alternative insulation and membrane attachment system for TPO and PVC 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 material. The result is a Factory Mutual-approved system that does not create any point of entry for moisture, requires fewer fasteners, fewer seams and provides superior wind uplift performance.
REVOLUTIONARY TECHNOLOGY

RhinoBond is based on patented electromagnetic induction welding technology called SINCH®. Just activate the RhinoBond tool directly over the specially coated plate to bond the underside of the membrane to the plate. The heating process takes only five seconds once the RhinoBond tool is calibrated to accommodate the ambient temperature, membrane thickness and power source. A weighted magnetic RhinoBond heat sink placed on the welded plate for 45 seconds assures a strong bond.

THINK OUTSIDE THE SEAM

For years mechanically attached system installation was based on in-seam fastening patterns. With the RhinoBond system, you have to think differently.

Instead of estimating the number of insulation and seam fasteners, simply determine the number of RhinoBond fasteners required to achieve the desired rating, based on the wind uplift requirements. An FM 1-90 rating, for example, requires six fasteners per 4 x 8 insulation board, or 19 fasteners per square. There are no seam fasteners required with the RhinoBond system.

Since the fastening points are spread across the entire roof in a grid pattern, rather than being concentrated in the seams of the membrane, the uplift load is distributed more evenly. As a result, there is less point loading on each fastener, enabling the system to achieve higher wind ratings with fewer fasteners. All while providing improved rooftop performance and better aesthetics!

RHINOBOND PRODUCTIVITY

RhinoBond typically uses 25% to 50% fewer fasteners when compared to traditional in-seam fastening. An experienced operator can weld up to five plates per minute.

ELIMINATE HALF SHEETS

Most thermoplastic roof assemblies require extra fastening around the perimeter of the roof and at large penetrations where wind uplift forces can be the strongest. Typically, perimeter half-sheets are needed for these areas.

With RhinoBond technology, membrane width is no longer a factor. Instead, a tighter fastening pattern in these areas provides additional attachment points for full-width membrane, thus providing enhanced security with fewer seams.

FASTER DRY-IN

In some installations, membrane seams can be welded before all of the RhinoBond plates are bonded to the membrane. This enables the contractor to get a larger area of the building dry and to reassign skilled workers to complete other parts of the installation before welding the membrane to all of the plates.

A better alternative for metal retrofits.

RhinoBond is also an ideal option for metal roof retrofit applications. Because the system does not require in-seam fastening, the membrane seams do not have to be positioned exclusively over the purlins. This eliminates the need for specialty purlin-width sheets, simplifies the installation and reduces waste.
INSULATION COMPATIBILITY*

**Insulation Types and Thicknesses:** RhinoBond is compatible with mineral wool, polyisocyanurate, DensDeck® and Securock® as well as any insulation that will not melt by the induction welding process. Induction welding should not be used directly over extruded polystyrene, EPS or foil faced insulation boards. The recommended thickness of the cover board is ½-inch minimum over XPS and EPS and 1½-inches minimum over foil faced insulation.

**Metal Deck:** When using RhinoBond over a metal deck, a minimum of 1½-inches of insulation over the metal deck is required for proper tool operation.

*These recommendations address various technical operating requirements of the RhinoBond Induction Tool only, and are not provided in lieu of any applicable building code or roofing system manufacturer requirements or specifications.

TESTING

RhinoBond has achieved an FM 1-210 wind resistance rating. In static testing, the system resists over 500 lbs of force.

The RhinoBond welded membrane spreads the wind load evenly across the roof (above) as opposed to the traditional in-seam fastening method (below).

FASTENERS & PLATES

The RhinoBond system includes 3-inch round specially coated plates, sold in pails of 500. Plates are available for TPO and PVC membranes. RhinoBond plates can be installed with several OMG fasteners and meet FM 4470 criteria for corrosion resistance.

INDUCTION WELDING TOOL

The RhinoBond tool is lightweight, adjustable, and easy to use and handle. It operates on standard 110 volt and 220 volt power sources. A 5,000 watt generator in good condition with two 20A GFCI protected circuits will run two tools.

The RhinoBond System includes the Induction Welding Tool and six magnetic heat sinks, along with convenient carrying cases for both.

APPROVALS

The RhinoBond System is Factory Mutual approved.

RhinoBond tools are available exclusively through OMG Roofing Products’ network of roofing distributors. For more information, please call **800-633-3800** or scan the code with your enabled smartphone to see RhinoBond in action!