RhinoRoof® Granulated

The self-adhered layer in a roof deck protection system provides a waterproof barrier for vulnerable areas on a roof. Whether the building is faced with wind-driven rain or the potential for ice damming, having a waterproof barrier will help provide protection for a long-lasting roof.

RhinoRoof Granulated self-adhered underlayment provides that essential waterproof barrier as a second line of defense against water mitigation. RhinoRoof Granulated combined with a synthetic underlayment, such as RhinoRoof U20 creates an underlayment system to protect the roof deck from eave to peak.

RhinoRoof Granulated is formulated with the latest in asphalt technology that brings significant performance values:

- **Excellent Adhesion** – Tested at 40º F and 75º F adhesion to the deck exceeds ASTM D1970 standards*
- **Flexible Installation** – Even at cold temperatures
- **Lap adhesion** – Constructed with a taped selvage edge for 3 inches of edge lap protection
- **Walkable Surface** – Provides a slip-resistant surface with minimal loose granules for excellent traction and safe installation.
- **Easy to install** – Split backer sheet for easy application and positioning on the roof deck
- **Extended UV Exposure** – Can be left exposed up to 30 days

* ASTM D1970 adhesion standards are denoted for self-adhering materials only.
RhinoRoof Granulated is designed as a secondary water barrier for use on steep slope roofs (2:12 or greater) under; Asphalt Shingles, Composite Shingles, Slate, and Wood Shakes and Shingles

**STORAGE:**
1. RhinoRoof Granulated should be stored at room temperature, upright in the original cardboard packaging in a dry properly ventilated area. Keep product sheltered from the elements.
2. Only rolls destined for same-day use should be removed from their storage area.
3. For best results store in temperatures between 40°F (4.4°C) and 90°F (32°C). If room temperature storage is not available and product is at a temperature of 40°F (4.4°C) or less, move the product to a warm area prior to application. If product has been stored in temperatures above 90°F (32°C) it may become difficult to remove the release backing. If this situation should occur, move product into a shaded area until the product is cool. Once cooled, the release backing can be easily removed.

**DECK PREPARATION:**
1. Sweep the deck to remove dirt, debris, and any damaged or rotten wood must be replaced.
2. RhinoRoof Granulated must be applied directly to minimum 3/8 inch-thick plywood, 7/16 inch-thick OSB decking, or minimum 6 inch-wide deck boards (gaps no greater than 1/4 inch) on roofs with a slope of 2:12 or greater.
3. For re-roofing projects replace any water damaged sheathing and sweep roof deck thoroughly removing dust, dirt and loose nails. Do not install over old roof covering.

**APPLICATION:**
1. For best results RhinoRoof Granulated must be installed over a clean, smooth and dry roof deck.
2. For cold weather applications 40°F (4.4°C) or below, a primer should be used and the laps blind nailed (see note 5 under application). The primer should be solvent or water based and meet ASTM D41 for asphalt based self-adhering membranes.
3. For steep slope applications (3:12 or greater) or when installing at temperatures greater than 100°F (38°C) it is recommended to blind nail the selvage edge area as per note 5 below under application.
4. RhinoRoof Granulated is to be laid out horizontally (parallel) to the eaves with the printed side up, using 3 inch horizontal laps and 6 inch vertical laps with the lower edge of the RhinoRoof Granulated flush with the outside of the drip edge. The lower edge of the underlayment is the edge that does not have a film selvage edge. End laps should be offset a minimum of 6 feet on adjacent courses.
5. On slopes greater than 6:12 after installation of each piece, overlap the 3 inch film selvage edge and, if necessary, secure with nails installed in the selvage edge spaced 12 inches on center. Blind nail with 3/8 inch head roofing nails of 1 inch or longer in the 3 inch selvage edge area. Consult local building codes for fastener requirements.
6. Always work from the low point to the high point of the roof. Apply the membrane in valleys before the membrane is applied to the eaves.
7. Cut the membrane into 15 foot to 20 foot lengths. Peel back 1-2 feet of release liner, align the membrane, and continue to peel the release liner from the membrane. Hand press or walk on, then follow with a 40 lb. or heavier weighted roller to smooth and secure the membrane. Hand rolling over the selvage edge and directly above the selvage edge using a minimum 4 inch-wide, 10 lb. roller is recommended. If a roller is not available or not considered safe, walk on all laps, and as much of the field area as possible to push the adhesive into the pours of the roof deck and overlap.
8. RhinoRoof Granulated should be applied over the metal drip edge at the eaves unless otherwise specified by local codes. Along rakes, apply RhinoRoof Granulated underlayment first, and install drip edge over the underlayment. Do not fold RhinoRoof Granulated over the roof edge unless the edge is subsequently covered over by a drip edge or other flashing material.
9. In areas where ice damming can occur, install RhinoRoof Granulated from the eave up the roof to a point not less than 24 inches inside the exterior wall. Consult your local building code for specific requirements.
10. For valley applications, peel the release liner; center the sheet over the valley and hand press in place from the center of the valley outward.

**PRECAUTIONS:**
1. RhinoRoof Granulated is a moisture and vapor barrier and therefore must be installed above a properly ventilated space(s). Follow ALL building codes applicable to your geographical region and structure type.
2. Follow the recommendations of the roof covering manufacturer, Asphalt Roofing Manufacturer’s Association for asphalt shingles.
3. RhinoRoof Granulated is not designed for indefinite outdoor exposure. Final roofing should be installed within 30 days of underlayment installation.
4. Depending on roof pitch and surface conditions, loading cleats (battens) may be required to support roofing materials placed on the roof. Remember to seal the fastener holes that secured the cleats/battens after they have been removed.
5. Protect completed roof areas to avoid damage during roof installation and material transportation by installing protective boardwalks to enable passage of people, equipment and products.
6. Be careful not to load too much material on the roof deck in one area. Disburse the weight over structural supports where possible

**CAUTION - READ GOOD SAFETY PRACTICES BELOW**
As with any roofing product, always follow safe roofing codes & practices (OSHA) and always use and wear fall protection devices when working on roofs. Release liners are slippery and should be removed from work area immediately after application. Use caution when walking or standing on RhinoRoof Granulated as slip resistance may vary with surface conditions, weather, footwear and roof pitch. Failure to use proper safety gear and footwear can result in serious injury.

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### RhinoRoof Granulated Specifications*

<table>
<thead>
<tr>
<th>Test &amp; Standard</th>
<th>RhinoRoof Granulated Typical Value</th>
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<tbody>
<tr>
<td>Permeability ASTM E96</td>
<td>Granulated</td>
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<tr>
<td>Release Liner</td>
<td>Silicone treated poly split release</td>
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<tr>
<td>Weight Per Square</td>
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<tr>
<td>Nail Sealability ASTM D1970</td>
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<tr>
<td>Permeability ASTM E96</td>
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<tr>
<td>Tensile Strength ASTM D1970</td>
<td>&gt; MD 25 lbf (4.4kN/M) / CD 25 (4.4kN/M)</td>
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<tr>
<td>Low Temp Flexibility ASTM D1970</td>
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<tr>
<td>Tear Resistance ASTM D1970</td>
<td>&gt; MD 20 lbf (89N) / CD 20 (89N)</td>
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<tr>
<td>Adhesion to Plywood ASTM D1970</td>
<td>40°F (4.4°F) / 70°F (&gt;12 lb/ft²)</td>
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<td>Waterproofing Integrity After Low Temperature Flex ASTM D1970</td>
<td>Pass</td>
</tr>
<tr>
<td>Waterproofing Integrity of Lap ASTM D1970</td>
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*Product tested as manufactured. Test data is based on average taken over several production runs and should not be considered or interpreted as minimum or maximum values. Values are typical, data as manufactured and not limiting specifications. All values = 10%. See www.WinterWrap.com/RhinoRoof for complete coverage and restrictions.