

Grace Select

Self-adhered roofing underlayment for general roof leak protection

Grace Select self-adhered roofing underlayment helps protect sloped roofs from the effects of wind driven rain and ice dams. Grace Select is appropriate for use in all wind driven rain applications and for ice dams where code based standards of protection are sufficient.

Grace Select is a high performance, easy to apply, economical alternative to thick, granular surfaced underlayments. The membrane meets key performance requirements for self-adhered roofing underlayments used in severe climate areas, such as ICBO Standards. The membrane also has a UL Class A fire classification under fiberglass shingles and Class C under organic felt shingles.

Grace Select is part of the Grace family of roofing underlayments available only from Grace Construction Products.



Product Description

Grace Select is composed of two waterproofing materials – a rubberized asphalt adhesive, backed by a layer of high density cross laminated polyethylene.

The product is 0.64 mm (25 mil) thick making it lightweight and easy to handle and apply. The unique, advanced rubberized asphalt formulation allows the membrane to meet industry standards for fastener

sealability equivalent to products that are often significantly thicker and heavier.

The rubberized asphalt is backed by a paper release liner that protects its adhesive quality. The release liner is easily removed allowing the rubberized asphalt to be bonded to the roof deck.

The membrane comes in a 18.1 m² (195 ft²) roll, and measures 914 mm (36 in.) wide.

Features & Benefits

Easy to Handle and Apply: The membrane is easy to reposition, easy to install, bonds to the roof deck and forms high quality laps.

Grace RIPCORDERM: The Grace RIPCORDER is a nylon string that is embedded between the underlayment material and the release liner. The RIPCORDER gives the installer the option of either splitting the release sheet for easy positioning and installation, or removing the release sheet in one piece.

Self Sealing: The membrane meets key building code standards for nail sealability of self-adhered roofing underlayments.

Lightweight: The 195 ft² roll weighs only a fraction of what competitive materials weigh making transport and handling easier.

Slip Resistant Surface: The slip resistant surface maximizes traction for safety without compromising the water integrity of the laps.

Aesthetically Pleasing: The thin membrane meets code standards for fastener sealability but will not show through roof coverings.

Reroofable: Unlike some granular surfaced membranes, Grace Select will not adhere to the underside of the exposed roof covering making reroofing easier and less costly.

Grace Expertise: Grace is the recognized leader in self-adhered roofing underlayments, and is the manufacturer of Grace Ice & Water Shield®.

PRODUCT DATA

Roll Length	19.8 m (65 ft)
Roll Width	914 mm (36 in.)
Roll Size	18.1 m ² (195 ft ²)
Packaging	Corrugated Cartons
Roll Weight	14.5 kg (32 lbs)
Rolls per Pallet	25

Guidelines for Use

Grace Select can be used as a sloped roof underlayment to resist water penetration due to wind driven rain and ice dams. Grace Select is designed to meet code based minimum standards of performance in severe climates.

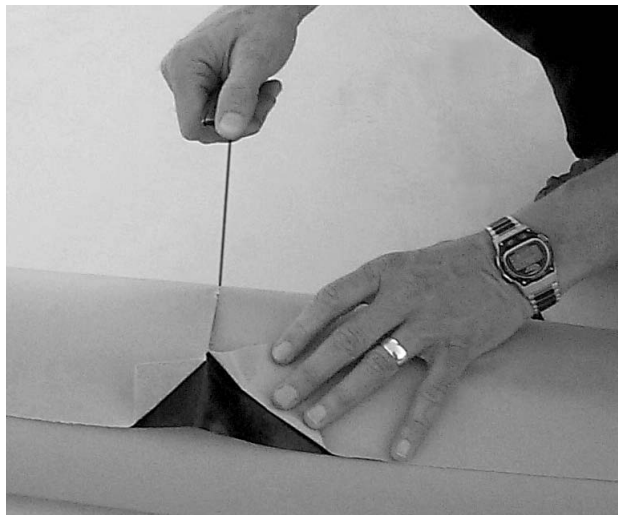
Wind Driven Rain

Sloped roofs protect structures by shedding rain water but they are not waterproof. Storm driven winds can cause sloped roof coverings to lift. Rain can be easily driven under the roof covering directly to the unprotected deck where it causes leaks and damage to the interior of the structure. Grace Select applied beneath the

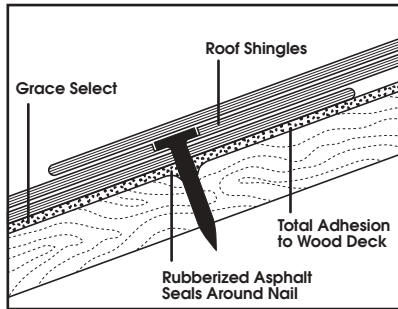
sloped roof covering prevents wind driven rain from entering the structure. For wind driven rain protection, full coverage with Grace Select is recommended. Since Grace Select is a vapor barrier, the roof construction must allow for proper ventilation in full roof coverage applications.

Ice Dams

For ice dam protection, Grace Select should be adhered at the edge of the roof deck along the eaves. The membrane should be applied to a point on the roof deck above the highest expected ice dam. Several variables influence the height of ice dams and the membrane coverage required. Local building codes



GRACE SELECT features the innovative Grace RIPCORDER that is embedded between the underlayment material and the release liner. When pulled, the cord splits the release liner into two separate pieces permitting easy positioning and installation.



Seals around nails or fasteners. Fully adheres to deck, resisting leaks from wind driven rain or water backup due to ice dams.

should be consulted for specific requirements. Many variables influence the height of ice dams including climate (particularly the annual snowfall), slope, overhang, valleys, how well the structure is insulated and ventilated, and exposure (sun vs. shade). In addition to placement along the eaves, Grace Select can be used to help prevent roof leaks in a handful of “danger zones” including valleys, rake edges, around chimneys, and skylights.

Installation Procedure

Surface Preparation

Install Grace Select directly on a clean, dry, continuous structural deck. Some suitable deck materials include plywood, wood composition, wood plank, metal, concrete, or gypsum sheathing. Remove dust, dirt, loose nails, and old roofing materials. Protrusions from the deck area must be removed.

Decks shall have no voids, damaged, or unsupported areas. Repair deck areas before installing the membrane.

Prime concrete, masonry surfaces and DensGlass Gold® with Perm-A-Barrier® WB Primer. Prime wood composition and gypsum sheathing with Perm-A-Barrier WB Primer if adhesion is found to be marginal (refer to Technical Letter 12). Apply Perm-A-Barrier WB Primer at a rate of 6-8 m²/L (250-350 ft²/gal). Priming is not required for other suitable surfaces provided that they are clean and dry.

Membrane Installation

Apply Grace Select only in fair weather when the air, roof deck, and membrane are at temperatures of 5°C (40°F) or higher. Apply roof covering material at temperatures of 5°C (40°F) or higher.

Cut the membrane into 3-5 m (10-15 ft) lengths and reroll loosely. Peel back 300-600 mm (1-2 ft) of release liner, align the membrane, and continue to peel the release liner from the membrane. Press the membrane in place with heavy hand pressure. Side laps must be a minimum of 90 mm (3.5 in.) and end laps a minimum of 150 mm

(6 in.). For valley and ridge application, peel the release liner, center the sheet over the valley or ridge, drape, and press it in place. Work from the center of the valley or ridge outward in each direction and start at the low point and work up the roof.

Alternatively, starting with a full roll of membrane, unroll a 1-2 m (3-6 ft) piece of membrane leaving the release liner in place. Align the membrane and roll in the intended direction of membrane application. Carefully cut the release liner on top of the roll in the cross direction being careful not to cut the membrane. Peel back about 150 mm (6 in.) of the release liner in the opposite direction of the intended membrane application exposing the black adhesive. Hold the release liner with one hand and pull the roll along the deck with the release liner, leaving the applied membrane behind. Use the other hand to apply pressure on the top of the roll. Stop frequently to press the membrane in place with heavy hand pressure. When finished with the roll go back to the beginning, reroll and pull the remaining release paper from the material, finishing the installation.

PERFORMANCE PROPERTIES

Property	Value	Test Method
Color	Gray-Black	
Thickness, Membrane	0.64 mm (25 mil)	ASTM D3767 Method A
Tensile Strength, Membrane	1720 kN/m ² (250 psi)	ASTM D412 (Die C Modified)
Elongation, Membrane	250%	ASTM D412 (Die C Modified)
Adhesion to Plywood	525 N/m (3.0 lbs/in. width)	ASTM D903
Permeance (Max)	2.9 ng/m ² s Pa (0.05 Perms)	ASTM E96
Material Weight Installed (Max)	0.7 kg/m ² (0.14 lb/ft ²)	ASTM D461

Consistent with good roofing practice, install the membrane such that all laps shed water. 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. Following placement along the eaves, continue application of the membrane up the roof. The membrane may be installed either vertically or horizontally.

Use smooth shank, electroplated galvanized nails for fastening shingles. Hand nailing generally provides a better seal than power-activated nailing. If nailing of the membrane is necessary on steep slopes during hot weather, backnail and cover the nails by overlapping with the next sheet.

Extend the membrane on the roof deck above the highest expected level of water back-up from ice dams and above the highest expected level of snow and ice on the wall sheathing on vertical side walls (dormers) and vertical front walls for ice dam protection. Consider a double layer of membrane in critical areas, such as along the eaves or in valleys, in climates where severe ice dams are anticipated. Apply the membrane to the entire roof deck for wind driven rain protection. Apply a new layer of Grace Select directly over the old Grace underlayment in retrofit applications following the standard membrane application procedure. Place metal drip edges or wood starter shingles over the membrane.

Precautions and Limitations

- Slippery when wet or covered by frost.
- Consistent with good roofing practice, always wear fall protection when working on a roof deck.
- Release liners are slippery. Remove from work area immediately after membrane application.
- Do not leave permanently exposed to sunlight. Maximum recommended exposure is 30 days.
- Do not fold over the roof edge unless the edge is protected by a drip edge, gutter, or other flashing material.
- Do not install on chamfered edges of wood plank.
- Do not install directly on old roof coverings. For more information, refer to Technical Letter 5.
- Provide proper roof insulation and ventilation to help reduce ice dams and to minimize condensation. Grace Select is an air and vapor barrier.
- Repair holes, fishmouths, tears, and damage with a round patch of membrane extending past the damaged area 150 mm (6 in.) in all directions. If fasteners are removed leaving holes in the membrane, it must be patched. The membrane may not self-seal open fastener penetrations.

- Do not install fasteners through the membrane over unsupported areas of the structural deck, such as over the joints between adjacent structural panels.
- Due to its slight asphaltic odor, do not apply where the membrane is exposed to interior living areas.
- Refer to product literature for more complete product information.
- Not recommended for roofing in high altitudes and alpine regions.
- Not compatible with EPDM; use Grace Ultra for tie-ins (refer to Technical Letter 5).
- Not compatible with polysulfides, flexible PVC, or high concentrations of resin (pitch). For more information, refer to Technical Letter 5.

Standard Compliance

Grace Select meets the following standards:

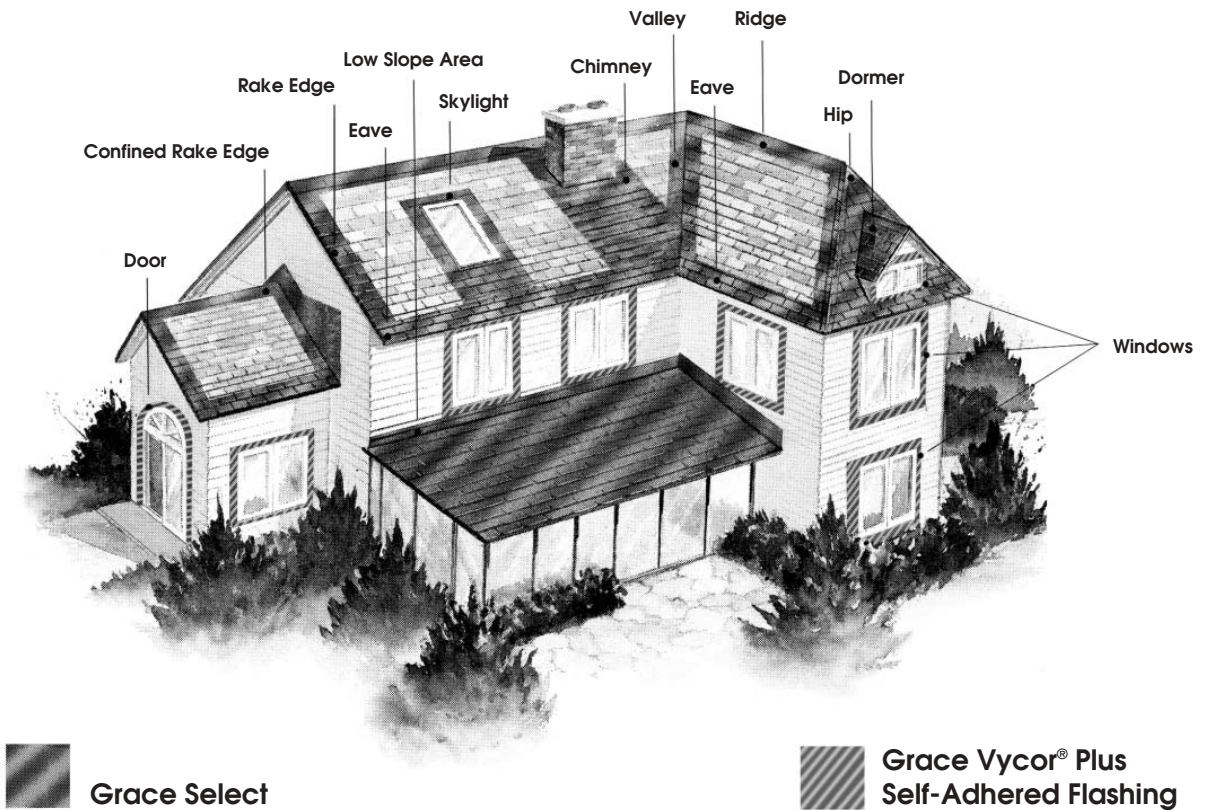
- International Conference of Building Officials (ICBO-ES) Report No. 3997
- Underwriters Laboratories, Inc. Class A fire classification under fiberglass shingles and Class C under organic felt shingles (per ASTM E108/UL 790).

Use Grace Select on all of these critical areas

You know the “danger zones” where most roof leaks happen. Protect those areas with Grace Select, and you create a self-sealing barrier that neither melting snow nor wind driven rain can penetrate through or travel beneath. It takes surprisingly little Grace Select to make danger zones safe. It adds very

little to the cost of a roofing job, but the benefits of using it are obvious . . . and important. That’s why it’s an easy sell.

The more danger zones a sloped roof has, the more sense it makes to use Grace Select. It neutralizes the danger zones in a way felts can’t.



GRACE UNDERLAYMENTS PRODUCT SELECTION MATRIX

Application Guidelines	Grace Ultra	Grace Ice & Water Shield®	Grace Select	Grace Basik®
Desert Southwest United States	●	⊗	⊗	○*
Under Copper, Zinc or Cor-Ten® In High Altitude Climates	●	⊗	⊗	⊗
Under Architectural Metal Roofs	●	●	○	⊗
Roofing In High Altitude/Alpine Region	●	●	⊗	⊗
Premium Protection From Severe Ice Dams	●	●	⊗	⊗
As A Vapor Barrier	●	●	●	○
As A Temporary Roof (see product specific appropriate exposure guidelines)	●	●	○	○

*For application on wood substrates only

● Best

○ Good

⊗ Not Recommended

For Technical Assistance call toll free at 866-333-3SBM (3726).



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