StrongSeal® DB

Roof Deck Protection

Premium Nail-Down Rubber Roofing Underlayment

DESCRIPTION

StrongSeal DB is a premium nail down rubber roofing underlayment membrane derived from recycled tire crumb rubber that delivers exceptional waterproofing performance over traditional asphalt based products. StrongSeal DB is a proven roofing underlayment membrane with a record of protecting roofs from moisture intrusion and wind-driven rain. StrongSeal DB is installed over the field of the roof deck prior to common exterior roofing materials such as asphalt shingles, slate, tile, shake and metal roof coverings. StrongSeal DB membrane can also be used on parapet walls behind the exterior insulation and finishing system (EIFS) or stucco architectural finish.

StrongSeal DB is not a self-adhering roofing underlayment therefore, it is not recommended for use at critical roof details or to protect the structural roof deck from water penetration from ice dams.

StrongSeal DB is a durable 30 mil (0.75 mm) thick rubber membrane waterproofing material that contains no asphalt. The membrane is supplied in lightweight rolls measuring 67-feet in length (20.4 m) and is available in two widths; 3-feet (914 mm) for a total membrane area of 201 square feet (18.7 sq m); and 18" (457 mm) for a total membrane area of 100.5 square feet (9.35 sq m). The product is significantly lighter than asphalt membranes making it easier to handle and apply.

StrongSeal DB is designed to deliver years of superior weatherproofing protection, as well as ecological relief to our environment. This recycled rubber underlayment provides exceptional resistance to inclement weather and can remain exposed for up to one (1) year.

■ FEATURES & BENEFITS

- **Premium Rubber Barrier, Not Asphalt:** The key to StrongSeal DB exceptional barrier performance is the thick rubber membrane that contains no asphalt. The rubber membrane can withstand prolonged exposure and is durable enough to handle heavy foot traffic.
- **High Temperature Resistance:** StrongSeal DB can withstand in service temperatures as high as 300°F (148°C) and will not flow or leech at elevated temperatures like some asphalt membranes.
- **Exposure:** StrongSeal DB can remain exposed for up to one (1) year in direct sunlight and inclement weather making it ideal for long dry-in conditions common with new construction, metal, tile, slate and shake roof designs.
- Low Temperature Application: The membrane remains flexible in cold weather and will roll out without cracking or shatter when fastened.
- **Non-Absorbent:** The membrane does not absorb moisture, avoiding buckling and wrinkling like conventional organic felt underlayments, thereby eliminating drying downtime.
- **Seals Around Fasteners:** StrongSeal DB passes ASTM D1970 nail sealability sealing around most fastener penetrations like a gasket, resisting leakage and moisture intrusion from wind-driven rain.
- **Recycled Material Content:** StrongSeal DB is made from an exceptionally high percentage of recycled material and is 100% recyclable making it a "green", earth-friendly product. Its high post-consumer recycled content makes it the perfect product to specify for LEED™ projects.
- Long Term Performance: The membrane will not crack, dry out or rot; maintaining its integrity for long lasting protection.
- Slip Resistant Surface: StrongSeal DB features a slip resistant surface for safe and easy installation.
- Easier & Less Costly Re-roofing: StrongSeal DB will not adhere to the underside of the exposed roof covering, making reroofing easier and less costly. The non-aggregate underlayment will not score the underside of metal roofing as a result of the constant expansion and contraction resulting in no underside rust or corrosion.
- Warranty: StrongSeal DB is backed by an industry leading 20-year limited material warranty.



StrongSeal® DB



INSTALLATION PROCEDURES

ROOF DECK PREPARATION

StrongSeal DB should only be installed directly to a clean, dry, continuous sloped structural roof deck. Suitable deck materials include plywood, OSB (oriented strand board), wood plank (no chamfered edges), metal, and concrete. Remove dust, dirt, loose nails, and other debris. Roof deck must be broom swept clean prior to installing membrane. Roof deck should have a minimum pitch of 3:12 without voids or unsupported areas. Remove all protrusions and sharp edges. Pound down all protruding nails. Repair damaged deck areas before installing the membrane. Re-roofing projects require the removal of old roofing materials.

TYPICAL APPLICATIONS

- Installs under all steep slope roof coverings asphalt shingles, metal, tile, slate, cedar shakes
- Installs under parapet walls behind the EIFS or stucco architectural finish
- Ideal for LEED[™] Projects

MEMBRANE INSTALLATION

Do not stretch membrane when installing.

Install StrongSeal DB to a properly prepared roof deck. Do not apply heat to the product for application in cold weather. Apply membrane directly to roof deck. Always begin installation at lowest point on the deck and work up the roof so membrane overlap seams shed moisture. Do not fold over the roof edge unless the edge is protected by drip edge or other flashing type material.

Cut the membrane into 10-15 ft. (3-5 m) lengths and loosely reroll cut section. Roll out membrane and allow the membrane to relax prior to application to the deck. Do not tack at one end of roll and stretch during installation like conventional felt products.

Fasten membrane securely to deck with button cap (washer head) fasteners in accordance with local building code for conventional #30 felt underlayment products. Do not use staples as they may not properly secure membrane to deck.

For single layer successive membrane courses, align and overlap the edge of the previously installed sheet a minimum 3" (75 mm) or 6" (150 mm) in high wind areas and repeat membrane installation instructions

OVERLAP G" (150mm) STANDARD
OR 12" (300mm) HIGH WINDS

PLASTIC CAP
ROOFING NAILS
(TYP)

STRONGSEAL DB

OVERLAP 3" (75mm) STANDARD
OR G" (150mm) HIGH WINDS

12" (300mm) O.C. STANDARD
12" (300mm) O.C. HIGH WINDS

Installation Guidelines

listed above staggering end laps a minimum 6" (150 mm) or 12" (300 mm) in high wind areas. For double layer successive membrane courses, align and overlap a minimum 18" (480 mm) over the preceding course, resulting in a 17" (430 mm) exposure. All laps should be installed to shed moisture. Consult local building codes for requirements.

For valley, hip, and ridge applications, start at the lowest point. Apply the membrane in valleys before the membrane is applied to the eaves. Center the sheet over the valley, hip, or ridge and fasten with button cap fasteners. If ridge venting is to be installed, cut out the membrane covering the ridge vent slot. Do not cut down the center and fold into the ridge vent slot.

If nailing the membrane to excessive slope or extreme hot or cold conditions, decrease the fastener spacing to 6" centers (150 mm) using button cap nails.

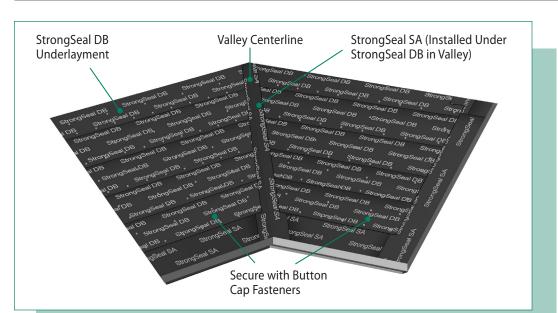
Full roof deck coverage may be applied with proper attic ventilation and roof drainage to minimize interior condensation. Consistent with good roofing practice, install the membrane such that all laps shed water. Always work from the low point to the high point of the roof. Apply the membrane in valleys 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.

StrongSeal DB membrane can be left exposed during construction as a temporary dry-in barrier for up to one (1) year.

When fastening shingles over the membrane, use smooth shank, electroplated galvanized nails to get the best seal. Hand nailing generally provides a better seal than power-activated nailing. Place metal drip edges over the membrane.

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INSTALLATION PROCEDURES



Typical Valley Installation

■ StrongSeal DB-18 SHAKE INTERLAYMENT INSTALLATION

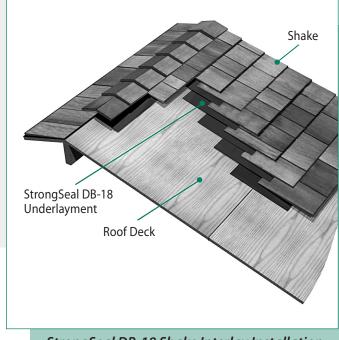
StrongSeal DB-18 interlayment between the shake courses is required whether the deck sheathing is spaced or solid. StrongSeal DB-18 interlayment acts as a barrier that prevents wind driven rain and snow from entering the attic cavity during extreme weather conditions by forcing water to the surface and increases the roofs insulating value.

Special care should be taken when installing StrongSeal DB-18 over spaced sheathing to ensure that an effective baffle is formed. StrongSeal DB-18 should be applied over the top of the portion of the shakes or slate and extend on to the spaced sheathing so the bottom edge is positioned at a distance above the butt equal to twice the weather exposure.

STORAGE

StrongSeal DB roofing underlayment rolls should be stored vertically on end, in a storage facility where the temperature is between 40°F and 100°F (4°C and 38°C). Use a protective covering over pallet while being temporarily stored on site.

Membrane must be kept at a minimum 40°F (4°C) for 24 hours prior to use. Do not double stack pallets.



StrongSeal DB-18 Shake Interlay Installation





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PRECAUTIONS AND LIMITATIONS

- Membrane is slippery when wet or covered with frost.
- Always wear fall protection equipment when working on a roof deck and follow good roofing practices.
- Do not leave permanently exposed to sunlight.
- Maximum recommended exposure is one (1) year.
- Membrane should not be folded over the roof edge unless protected by a gutter, drip edge, or other flashing material.
- Provide proper roof insulation and ventilation to reduce ice dams and minimize condensation.
- Do not install on chamfered edges of wood plank.
- Do not install fasteners through the membrane over unsupported areas of the structural deck or leave holes from removed fasteners.

Product Data			
	18" Wide Roll	36" Wide Roll	
Roll Thickness	30 mils (0.75 mm)	30 mils (0.75 mm)	
Roll Length	67 feet (20.4 M)	67 feet (20.4 M)	
Roll Width	18" (457 mm)	36" (914 mm)	
Roll Size	100.5 sq-ft (9.35 M ²)	201 sq-ft (18.7 M²)	
Rolls/Pallet	40	20	
Maximum Service Temp	300°F (148°C)	300°F (148°C)	

Performance Properties			
Property	Test Method	Typical Value	
Membrane Thickness	ASTM D5147	30 mils (0.75 mm)	
Tensile Strength	ASTM D2523	>25 lbF/in	
Elongation	ASTM D2523	>20%	
Permeance	ASTM E96	0.01 Perms	
Low Temperature Flexibility	ASTM D1970	Unaffected to -20°F	
Slip Resistance	ASTM D1970	Pass	





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