

Roofing Information

B-3

Shingle Application

While the general application procedures for all asphalt strip shingles are essentially the same, differences do exist in applying the first shingle in each course and, depending upon the number of cutouts in the strip, in fastening the shingles. Thus, it is necessary to study and follow the shingle manufacturer's application directions.

Before beginning to apply shingles, check that all chimneys are completed and all vent pipes, soil stacks and ventilators are in place. Also make provisions for the additional flashings that will be required as the shingle are applied such as those around chimneys and stack and at vertical wall abutments.

If a roof surface is broken by a dormer or valley, start applying the shingle from a rake and work toward the break. If the surface is unbroken, start at the rake that is most visible. If both rakes are equally visible, start at the center and work both ways. On hip roofs, start at the center and work both ways.

No matter where the application begins, apply the shingles across and diagonally up the roof. This will ensure that each shingle is nailed properly. Straight-up application or "racking" may result in less than the recommended number of nails being used because of the manner in which the shingles have to be applied. "Racking" requires that part of the shingle in some courses be placed under those already applied in the course above. Because of part of the shingle is hidden, it may be overlooked when the shingle is nailed. With a diagonal application up the roof, each shingle is completely visible until covered by the course above.

Starter Strip

The starter strip may be either a row of shingle trimmed to the shingle manufacturer's recommendations or a strip of mineral-surfaced roll roofing at least 7 inches wide. The starter strip protects the roof by filling in the spaces under the cutouts and joints of the first course of shingles. It should overhand the eaves and rake edges by 1/4 to 3/8 inches.

If self-sealing shingles are used for the starter strip, remove the tab portion of each shingle and position the remaining strip with the factory-applied adhesive up along the eaves. Trim at least 3 inches from the end of the first shingle in the starter strip. This will ensure that the cutouts of the first course of shingles are not placed over the starter strip joints. Nail starter strips parallel to the eaves along a line 3 to 4 inches above the eaves. Position the nails so that they will not be exposed under the cutouts in the first course. *See Figure 16.* If shingles without a self-sealing adhesive are used for the starter strip, remove the tab portion of each shingle and position the remaining strip above the eaves. Complete the procedure by following the instructions above.

If roll roofing is used for the starter strip, nail along a line 3 to 4 inches above the eaves. Space the nails 12 inches apart. If more than one piece of roll roofing must be used, lap the end joint 2 inches and cement it.

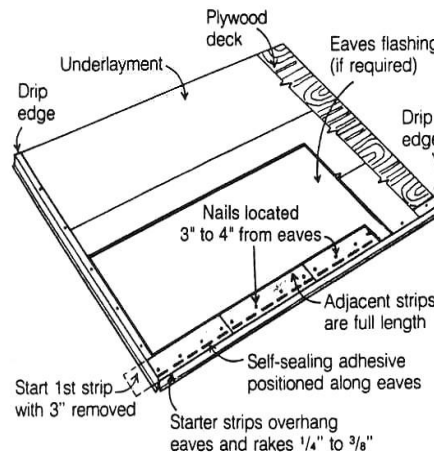


Figure 16: Application of starter strip

First & Succeeding Courses

The first course is most critical. Be sure it is laid perfectly straight, checking it regularly during application against a horizontal chalk line. A few vertical chalk lines aligned with the ends of shingles in the first course will ensure proper alignment of cutouts.

If applying free-tab shingles or if using roll roofing for the starter strip, bond

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the tabs of each shingle in the first course to the starter strip by placing a spot of asphalt plastic cement about the size of a quarter on the starter strip beneath each tab. Then press the tabs firmly into the cement. Avoid excessive use of cement as this may cause blistering.

The first course starts with a full shingle while succeeding courses start with portion removed according to the style of shingle being applied and the pattern designed. Do not discard the pieces cut from the first shingle in each course. If full tabs, they may be useful for finishing the opposite end of the course and for hip and ridge shingles.

To obtain the correct exposure for square-tab strip shingles, align the butts with the top of the cutouts in the course below. Install no-cutout shingles and those with variable butt lines according to the manufacturer's direction to obtain correct exposure.

Fastening

Proper fastening is essential to good roof performance. To ensure proper fastening during shingle application:

- Use the correct size and grade of fastener.
- Use zinc coated fasteners for corrosion protection.
- Use the recommended number of fasteners per shingle.
- Place the fasteners according to the shingle manufacturer's specifications.
- Align the shingles properly to avoid exposing fasteners in the course below.
- Drive the fasteners straight.
- Do not break the shingle surface with the fastener head.
- Do not drive fasteners into knot holes or cracks in the roof deck.
- Repair faulty fastening immediately.

If a fastener does not penetrate the deck properly, remove the fastener and repair the hole in the shingle with asphalt plastic cement or replace the entire shingle. Then place another fastener nearby.

Wind Protection

Upon sealing wind-resistant shingle provide additional protection for roofs in high wind areas. Several types of asphalt shingles offer this feature including those manufactured specifically for the purpose with either a factory-applied adhesive or integral locking tab. Regardless of the type of shingle used for wind protection, it should be manufactured to

with the current issue of Underwriters Laboratories Standard 997 for Wind Resistant Shingles.

The factory-applied adhesive on self-sealing shingles is activated by heat from the sun, forming a secure bond after only a few days of exposure during the spring, summer and fall. In winter, bonding can take longer depending upon the geographic location, roof slope and direction that the structure faces.

Free-tab shingle roofs may be given wind protection by cementing the tabs of each shingle to the course below. Place a spot of asphalt plastic cement the size of a quarter on the underlying shingle, lifting the tab of the overlying shingle just enough to apply the cement. Press the tab into the cement to secure it but do not squeeze the cement out beyond the edge of the tab. Be sure to cement every tab on the roof. Avoid excessive use of cement as this may cause blistering. See Figure 24.

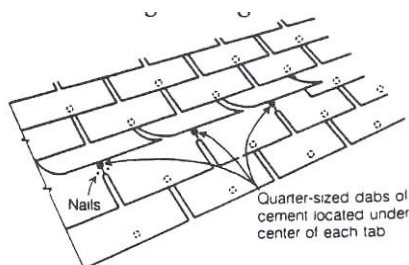


Figure 24: Application of cement under free-tab shingles for greater wind resistance

Permits

◆ Re-roofing permits must be obtained by the owner of the property, acting as the Roofing Contractor, or a bonded and registered contractor with the City of Abilene.

Fees

◆ Five (5) squares or less – No Charge.

◆ Over Five (5) squares - \$.35 per square plus \$10.00 with a minimum fee of \$50.00.

Inspections

◆ Permit applicants are required to call for a final inspection.

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