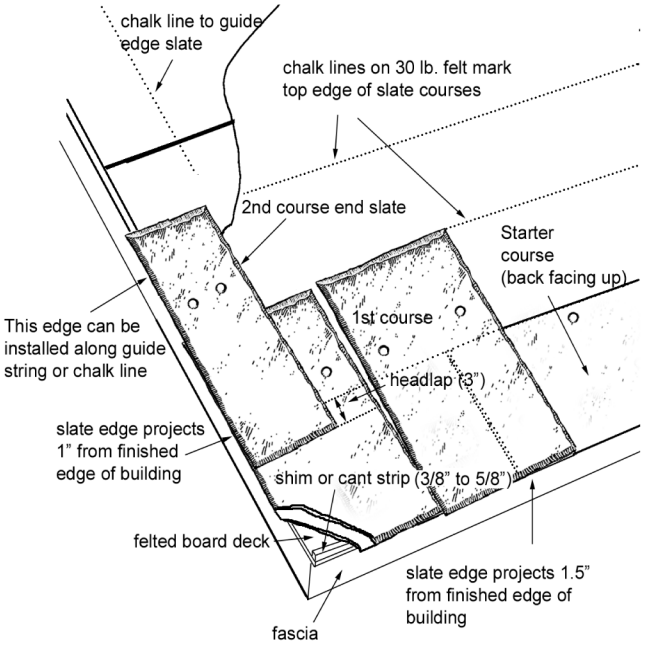

WHEN STARTING TO SLATE A ROOF—
10 QUICK-REFERENCE STEPS

1) Make sure that the fascia is completely installed before slating the roof and that the ends of the sheathing boards are firmly nailed.

2) Felt over the solid board decking (avoid plywood) with minimum 30 lb. roofing felt, lapped at least three inches at the top. Felt paper is optional, but recommended.

3) Nail or screw a wooden cant strip at the bottom edge of the lowest sheathing board — it should be 3/8" to 5/8" thick (standard slates only), and at least an inch wide (eight foot lengths are convenient). Cedar or redwood is ideal (cedar shim shingles will work), but the same lumber as the roof decking will do fine (not plywood). Cant strip will be thicker when installing thicker slates.

4) Chalk a horizontal line on the felt paper for the top edge of the starter slates, measuring the width of the slate up the bottom edge of the finished roof, deducting 1½ inches for the slate overhang. Then chalk a line for the first full row of slates, now measuring up the roof the length of the slate and deducting 1½ inches for the overhang. Lay starter slates sideways, back side out.

5) Now measure up the remainder of the roof equal distances equivalent to the *exposure* of the slate, and chalk lines accordingly. But first, make sure your second full row of slates will overlap the starter row by a minimum of three inches based on your measurements — if not, drop that second row down to where you need it to be, *then* chalk the rest of the roof with the exposure measurement. If laying the roof for a 4" headlap, adjust your chalk lines accordingly. If slating in an ice-dam-prone area, lay the bottom three feet of the roof with a 4" headlap and the remainder with a 3" headlap (assuming adequate slope — slate roofs should be too steep to walk on for greatest longevity).

Exposure is determined by subtracting the headlap from the total length of the slate, then dividing the remainder in half. For example, a 20" slate with a 3" headlap will have an 8.5" exposure (20 - 3 = 17, divided in half = 8.5"). Although 3" headlap is standard, 4" headlap is required for lower slope slate roofs and for ice-dam-prone sections of a roof.

6) Do not routinely bed the starter slates or any slates in roof cement or caulk. Adhesives make it very difficult to repair the roof in the future. Instead, a pair of 1½" copper or stainless steel nails per slate is a good rule of thumb which will ensure the secure attachment of all standard-thickness slates to the roof. Don't nail the slates *too* tightly; let them hang snugly on the roof. Do make sure the nail heads are set into the slate however, as nails that stick up will eventually wear a hole in the overlying slate and cause a leak.

7) Tap a couple of temporary nails into the side of the fascia on the gable end, one at the top and one at the bottom, and run a string up the edge of the roof positioned one inch out from the fascia. Use the string as a guide to align the outside edge of the slates as you nail them into place. Remove the string when you're done. Alternatively, chalk a vertical line on the felt up the edge of the roof, as illustrated above, as a guide for the end slates.

8) The butted sides of the slates on the first row must be staggered at least 3" laterally from the butted ends of the starter slates. All slates should have a minimum 3" lateral overlap in relation to the row of slates above or below.

9) You can work the first half dozen rows from a ground ladder or ground scaffold, then nail roof jacks and planks along the bottom of the roof and work up from there. Use more jacks and planks as needed. Leave a slate out periodically in order to have a place to nail the roof jack. The missing slates can be installed later with a stainless steel slate hook. See illustration this chapter.

10) Remember that all rules have exceptions in specific circumstances. Have fun! [Check jenkinsslate.com for instructional videos about slate installation.]

WHAT NOT TO DO WHEN INSTALLING A SLATE ROOF

1. Do not use laminated wood roof decking — use solid lumber.
2. Do not use insufficient headlap — use three inches of headlap — more on lower slopes or ice dam prone areas. Use a minimum of 3" of lateral spacing (sidelaps).
3. Do not routinely walk on the slates or sit on them carelessly during installation — if possible, work from the side or from hook ladders or on planks. Walking on slate roofs during installation is one of the most common causes of breakage and subsequent failure with new slate roofs.
4. Do not use "electrogalvanized" nails for slate — use copper or stainless steel nails on new installations and hot dipped galvanized nails, or better, on recycled roofs. When doing restoration work, use nails similar to those already existing on the roof.
5. Do not rely on the underlayment to permanently waterproof the roof — you will puncture it profusely when you install the slate. A properly installed slate roof will not leak, underlayment or no underlayment.
6. Do not use aluminum drip edges — they're made for asphalt shingle roofs. These are not the same as copper or stainless steel aprons installed at the eaves of roofs to eliminate ice damming.
7. Do not use ventilated ridges unless they're specifically designed for slate roofs — if possible, ventilate through gable ends or through individual roof vents.
8. Never install slates with felt paper overlapping each course. Install the felt *under* the slate.
9. Do not select a slate based only on how it looks when new. Choose a good quality rock that has a history of successful use as a roofing material.
10. When ordering roof slates, make sure standard thickness (3/16" to 1/4") slates have nail holes that are punched rather than drilled, or if drilled, also counter-sunk. The nail head must be able to sit down into a counter-sunk depression in order to avoid rubbing on the overlying slate and working a hole in it. This is not such an issue with 1/2 inch or thicker slates.