

HISTORIC AND DESIGN REVIEW COMMISSION

November 06, 2019

HDRC CASE NO: 2019-642
ADDRESS: 120 E AGARITA AVE
LEGAL DESCRIPTION: NCB 1701 BLK 4 LOT 6
ZONING: R-4, H
CITY COUNCIL DIST.: 1
DISTRICT: Monte Vista Historic District
APPLICANT: Don McDonald/Don B McDonald Architect AIA.
OWNER: GILL RICHARD NEGLEY
TYPE OF WORK: Roof replacement
APPLICATION RECEIVED: October 18, 2019
60-DAY REVIEW: December 17, 2019
CASE MANAGER: Edward Hall
REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to replace the existing, asphalt shingle roof with a standing seam metal roof.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 2, Guidelines for Exterior Maintenance and Alterations

3. Materials: Roofs

A. MAINTENANCE (PRESERVATION)

i. Regular maintenance and cleaning—Avoid the build-up of accumulated dirt and retained moisture. This can lead to the growth of moss and other vegetation, which can lead to roof damage. Check roof surface for breaks or holes and flashing for open seams and repair as needed.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

i. Roof replacement—Consider roof replacement when more than 25-30 percent of the roof area is damaged or 25-30 percent of the roof tiles (slate, clay tile, or cement) or shingles are missing or damaged.

ii. Roof form—Preserve the original shape, line, pitch, and overhang of historic roofs when replacement is necessary.

iii. Roof features—Preserve and repair distinctive roof features such as cornices, parapets, dormers, open eaves with exposed rafters and decorative or plain rafter tails, flared eaves or decorative purlins, and brackets with shaped ends.

iv. Materials: sloped roofs—Replace roofing materials in-kind whenever possible when the roof must be replaced. Retain and re-use historic materials when large-scale replacement of roof materials other than asphalt shingles is required (e.g., slate or clay tiles). Salvaged materials should be re-used on roof forms that are most visible from the public right-of-way. Match new roofing materials to the original materials in terms of their scale, color, texture, profile, and style, or select materials consistent with the building style, when in-kind replacement is not possible.

v. Materials: flat roofs—Allow use of contemporary roofing materials on flat or gently sloping roofs not visible from the public right-of-way.

vi. Materials: metal roofs—Use metal roofs on structures that historically had a metal roof or where a metal roof is appropriate for the style or construction period. Refer to Checklist for Metal Roofs on page 10 for desired metal roof specifications when considering a new metal roof. New metal roofs that adhere to these guidelines can be approved administratively as long as documentation can be provided that shows that the home has historically had a metal roof.

vii. Roof vents—Maintain existing historic roof vents. When deteriorated beyond repair, replace roof vents in-kind or with one similar in design and material to those historically used when in-kind replacement is not possible.

FINDINGS:

- a. The historic structure at 129 E Agarita was constructed circa 1920 and is found on a 1924 Sanborn Map update. The structure was constructed in the Craftsman style, and features rubble stone columns and features various arts and crafts architectural elements. The structure currently features an asphalt shingle roof.
- b. ROOFING MATERIAL CHANGE – The applicant has proposed to replace the existing, asphalt shingle roof with a standing seam metal roof, featuring a galvalume finish. The Guidelines for Exterior Maintenance and Alterations 2.B.iv. notes that roofing materials should be replaced in-kind, and new roofing materials should match the original materials in terms of their scale, color, texture, profile and style, or materials that are consistent with the building style should be used when in-kind replacement is not possible. Staff finds that the installation of a standing seam metal roof is architecturally inappropriate for this Craftsman structure, and is inconsistent with the Guidelines. Staff finds that a shingle roof would be architecturally appropriate.

RECOMMENDATION:

Staff does not recommend approval based on findings a and b. Staff recommends the applicant install a shingle roof.

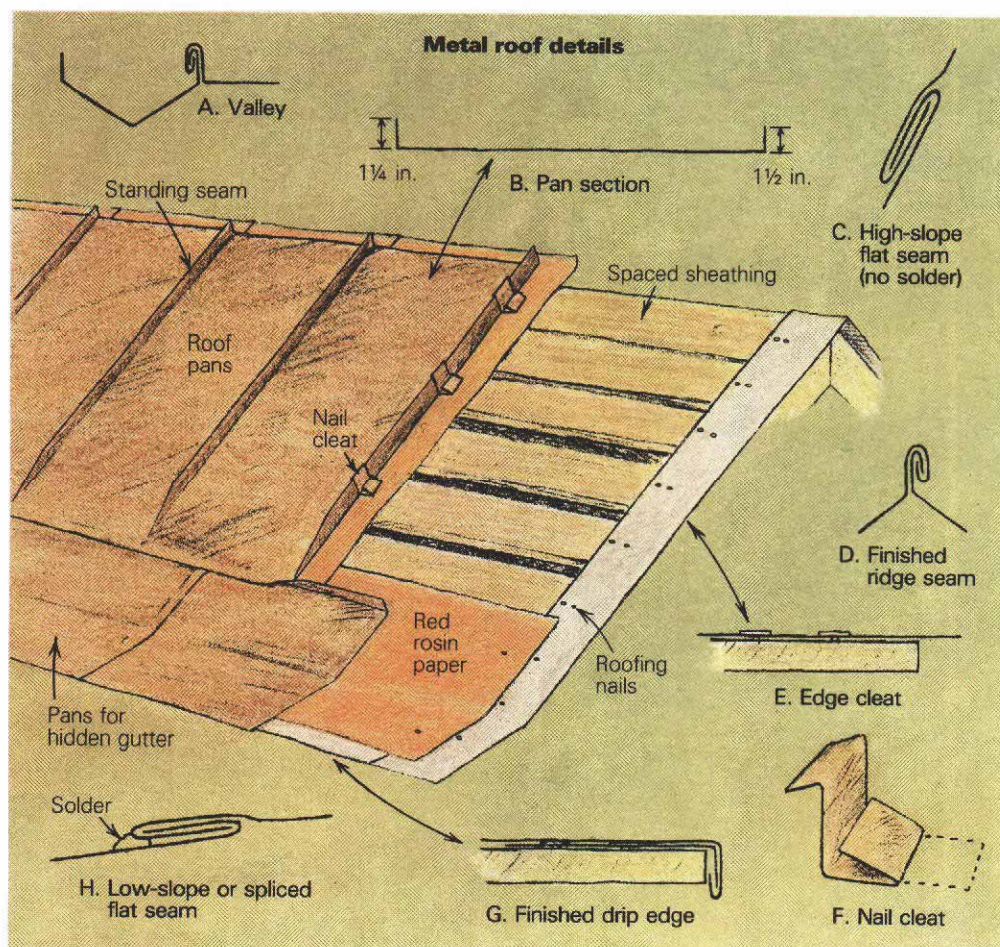


120 East Agarita Avenue









yond the edge of the roof by about 1 1/4 in. at the rake boards and about 2 in. at the eaves. The joints need only to be butted, not lapped.

Forming pans and nail cleats—On a simple gable roof, the pan length is determined by measuring the distance from the bottom of the eave edge cleat to the ridge, and adding 2 in. (1 in. for the ridge seam and 3/4 in. to overhang and crimp to the edge cleat). I usually measure this length (adding a 6-in. allowance for error) while the old roof is still on, and bend up the pans beforehand. Then I can just trim the excess once the pans are up. But on a hip roof this isn't possible. Instead, snap a chalkline eave to ridge every 17 1/4 in. across the deck (this approximates the pan width), and running into the hip. Measure up to the "highest" point of each pan to find the rough dimension for cutting it.

Roll out the metal on a firm, flat surface and cut it to the rough pan length with snips or shears. With the tongs set at 1 1/4 in., grasp one edge of the metal in the jaws and bend it up about 45°. Continue along the entire length of the strip, then go over the edge again to get the entire bend up to a full 90° (if you're using a sheet-metal brake, you can do this in one operation). Reset the stop screw on the tongs to 1 1/2 in. and repeat the process on the opposite edge (B in the drawing above). You'll probably find it helpful to put some weight in the center of the pan to keep it from sliding around as you bend it. The first pan to go up on a gabled roof is at the gable end, and it isn't bent in the U-shape that characterizes those to follow. Instead, one side is bent down 1/2 in. to lock onto

the edge cleat, while the other side gets bent up 1 1/4 in. for seaming to the subsequent pan.

To make the nail cleats, bend strips of roofing metal (F), then use the hand snips to cut 2-in. wide nail cleats from the strips. The sheet-metal brake works best here, but hand seamers or even locking pliers can be used. An average-sized roof may take a thousand or more cleats, so a tinner can always pass some time on a rainy day by filling up the cleat bucket.

Running a roof—Set the first pan over the rake edge cleat, with the upper end at least 1 1/4 in. past the ridge and the lower end overhanging the eave cleat by about 3/4 in. Reach over with the hand seamers and firmly crimp the pan to the cleat down its entire length. This will later be bent downward to form a drip edge. Cut a length of rosin paper and tuck it under the pan, overlapping some of the edge cleat with the paper. Slip nail cleats over the outboard edge of the pan about every 12 in., crimp them tightly to the pan, then nail the flanges to the roof deck with a pair of 1-in. long roofing nails. Bend the back edge of the cleat back over the nail heads to protect the underside of pans and discourage nails from pulling out. At the bottom of the pan, don't bother with nail cleats—nailing through the 24-ga. edge cleats can be brutal, and the final bottom crimp will secure the pan here anyway.

On the second pan, and all subsequent pans until you reach the opposite end of the roof, you'll get lots of practice in hammer work. Each pan is placed next to the previous one, with its 1 1/2-in. edge alongside the neighboring 1 1/4-in. edge, and with the same overhang at ridge and

eave. I clamp them together with locking pliers in several places, and then fasten nail cleats.

Use the seaming iron and hammer to turn the seam once along the entire length of each pan (photo p. 61). To cover the open roof as fast as possible, I double-roll the seam in only a couple of places to lock it in place. When I've laid all the pans on one side of the roof, I'll come back to put the second turn on all seams. After every two pans, I put down another length of rosin paper, lapping it only slightly over the previous length; a few roofing nails hold it in place.

"Losing" a seam is frustrating. While seaming, the top fold in the 1 1/2-in. edge can get flattened without the top of the 1 1/4-in. edge inside it. This usually results from sloppy bending techniques (like an undersized 1 1/4-in. edge or a very uneven roof deck), but will occasionally happen even to the best roofer. If it happens to you, just pry up the flattened metal with a hammer claw or screwdriver, then carefully reseat it.

If the roof deck is out of square, the ends of the pans will "sawtooth" as you work your way across the roof. To minimize this, I carefully align the pans with the roof edges when I start a side, but after that I don't pay much attention to it. Later on, when the bottom edge of the pan is crimped around the edge cleat, the edge of the roof will look quite straight. The important thing is to make sure you have at least 1 1/4 in. of metal for the ridge seam. The ridge will be a compound seam, which is difficult anyway—one that's too short is that much tougher. If the roof deck is severely out of square, cut the pans longer to compensate and just trim the excess down to 1 1/4 in. once the pan is in place. At the end of the roof, another edge pan locks over the edge cleat. Running pans for a hip roof works pretty much the same way, though each hip pan must be trimmed to the angle of the hip.

Ridge details—Once all the seams on one side of the roof have been double-rolled, I flatten about 6 in. of the seam at the top and bottom of each pan by just beating it down with the hammer, in preparation for the compound seams to come. On hip roofs, flatten the seams in a downslope direction to prevent flowing water from pocketing under them.

Once the pan seams have been flattened, I can begin to form the ridge seam. With the tongs, I grasp the extra 1 1/4 in. of pan that extends past the ridge and bend it backwards, so that it's in the same plane as the opposing side of the roof. Then, after running all the pans on the other side of the roof, this lip is stood up with the tongs and double rolled with the opposing side (D). The second roll on one of these compound seams is quite stiff, especially where pan seams come together, so I'm careful to lay out the second side of the roof so as not to allow pan seams to coincide with those on the previous side. On a roof framed with an irregular hip, some seams will coincide no matter what you do, and you'll really have to work to turn them down.

Splicing pans—What's the longest pan you can comfortably work? I've seen and even installed pans up to 24 ft. long, but at this length,