

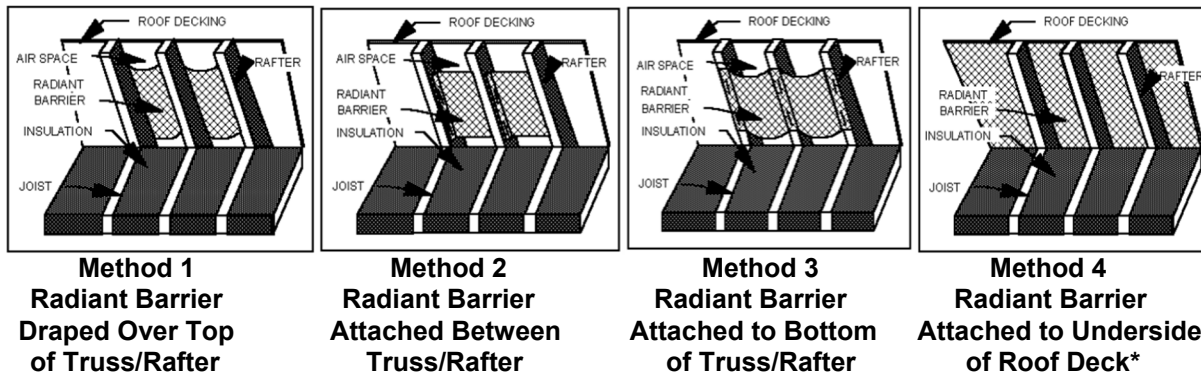
CALIFORNIA ENERGY CODE LOW RISE RESIDENTIAL COOL ROOF ALTERNATIVE REQUIREMENTS FOR RE-ROOFING WITH A RADIANT BARRIER

Important information you should know BEFORE obtaining a re-roof permit

One of the alternatives to the cool roof requirements, when re-roofing a residential structure, is installing a radiant barrier in the attic. The following clarifies the specific requirements of section 150.1(c)2.

- Radiant barrier must have an emittance of 0.05 or less.
- The radiant barrier shall be installed at the top chords of the roof truss/ rafters and shall be securely installed in a permanent manner with the shiny side facing down toward the interior of the building, using any of the following methods:
 - 1) Drape over the truss/rafter (the top chords) before roof sheathing is installed,
 - 2) Spanning between the truss/rafters (top chords) and secured (stapled) to each side.
 - 3) Secured (stapled) to the bottom surface of the truss/rafter (top chord). A minimum air space shall be maintained between the top surface of the radiant barrier and roof decking of not less than 1.5 inches at the center of the truss/rafter span.
 - 4) Attached [laminated] directly to the underside of the roof decking. The radiant barrier shall be laminated and perforated by the manufacturer to allow moisture/vapor transfer through the roof deck.

Please see diagrams below.



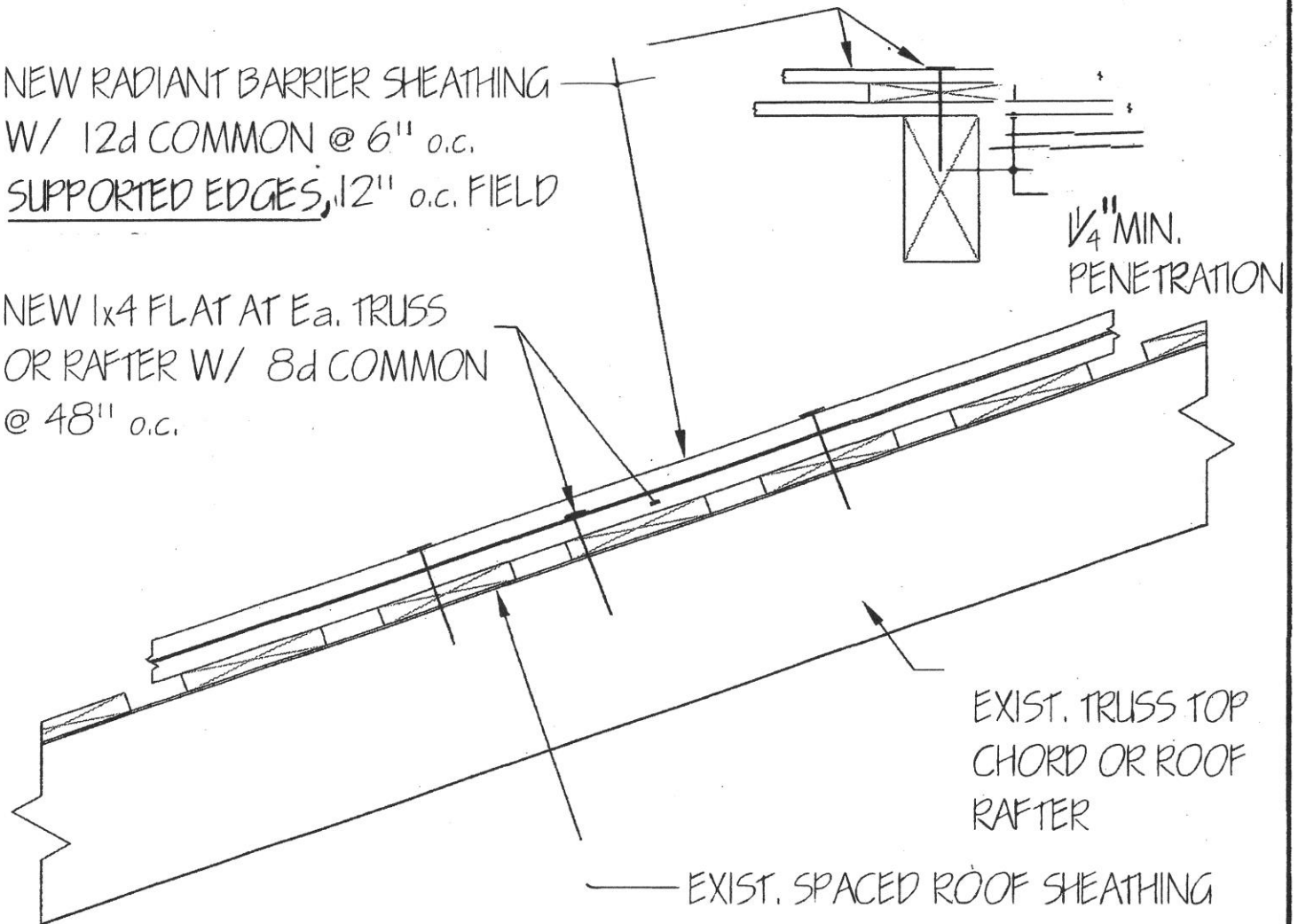
- Radiant barrier shall be installed to cover all gable end walls and other vertical surfaces in the attic.
- Provide a min. free ventilation area of not less than one square foot of vent area for each 300 square feet of attic floor area.
- Provide no less than 30 percent upper vents. (Ridge vents or gable vents are recommended to achieve the best performance. The material should be cut to allow for full airflow to the venting).

When a radiant barrier is installed as roof sheathing, it is not allowable to install the radiant barrier directly over skipped sheathing. The skipped sheathing must be removed or a 1x4 shall be installed over each truss/rafter to provide a 3/4" air space between the radiant barrier and the skipped sheathing.

Radiant Barrier Alternative Over Skip Sheathing

NEW RADIANT BARRIER SHEATHING
W/ 12d COMMON @ 6" o.c.
SUPPORTED EDGES, 12" o.c. FIELD

NEW 1x4 FLAT AT Ea. TRUSS
OR RAFTER W/ 8d COMMON
@ 48" o.c.



NOTES:

8d COMMON: 2 $\frac{1}{2}$ " x 0.131"

12d COMMON: 3 $\frac{1}{4}$ " x 0.148"

PROVIDE 1 x 4 FLAT AT Ea. TRUSS
OR RAFTER, HIP AND VALLEY.

SUPPORTED EDGES OCCUR AT Ea.
TRUSS OR RAFTER, HIP AND VALLEY.



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