

MEMORANDUM

TO: All Development Services Customers

FROM: Beth Culver, AIA, CBO, PMP
Building Official, Assistant Director, Development Services Department

DATE: 05/27/2021

SUBJECT: Radiant Barrier Material Shortage

Summary:

The Covid-19 pandemic and Winter Storm Uri has impacted the construction industry in several ways. This has required adjustments in the construction process as well as our inspection processes. Recently, Development Services has been notified by homebuilders and customers about the material shortage of radiant barrier decking. Per 25-12-263 of the Land Development Code Section R402.6, a radiant barrier is a mandatory requirement for all new construction projects. Along with the exceptions listed below, Development Services will also allow alternative materials or options between the period of May 27th, 2021 and September 1st, 2021 for Non-Austin Energy Green Build Projects. On September 1st, Development Services will re-evaluate the radiant barrier shortage and determine if an extension is warranted.

Code Requirement:

A roof radiant barrier with an emittance of 0.05 or less as tested in accordance with ASTM C-1371 or ASTM E-408 is required. The radiant barrier shall be installed according to the manufacturer's instructions.

A roof radiant barrier is not required for:

1. Roofs covered with clay or concrete tile having a solar reflectance of 0.40 or greater.
2. Roofs covered with other materials having a solar reflectance of 0.50 or greater.
3. Residential buildings with sealed attics.
4. Residential buildings with mechanical equipment and all duct work located wholly within the conditioned space.
5. Existing construction where there is no modification to the roof framing structure

Alternatives:

1. Install [ASTM C1313 tested](#) radiant barrier foil. Product manufacturer's instructions will need to be uploaded to the permit for review.
2. Install ASTM 1321 tested interior radiation control coating also known as radiant barrier paint. Product manufacturer's instructions will need to be uploaded to the permit for review; empty paint buckets will need to be left on-site.
3. Install ceiling insulation equivalent to R-49 value. Austin Development Services Department's Request for Modification form needs to be completed and uploaded to the building permit when requesting frame inspection. Insulation report needs to be uploaded when requesting insulation inspection. City of Austin compliance reports from approved software, that include IC3 (version 2015 IECC AE) and Ekotrope, need to be uploaded when requesting the final inspection demonstrating equivalent performance.
4. Steep-sloped roofs covered with other materials than clay or concrete tile roofing having a solar reflectance of 0.20 or greater. Product manufacturer's data regarding the solar reflectance will need to be uploaded to the permit for review.
5. For an alternate material, design or method of construction, provide information indicating the equivalency of the alternative to the radiant barrier. The supporting documentation may be submitted by an Engineer, Architect, or Certified Home Energy Rater. Please submit information to Austin Energy Green Building at energycode@austinenergy.com for approval.
6. If the builder is providing an alternative or modification to the radiant barrier, the builder can no longer advertise the use of radiant barrier of the period of May 27th, 2021 to September 1st, 2021.