Technical Bulletin

Tile Roof Underlayment (30# and 40#): Standards and Practices

ISSUED: OCTOBER 15, 2026

Overview of Tile Roof Underlayment

The underlayment installed beneath a tile roof is a key element of the overall roofing system. Its main function is to serve as a **weather barrier before tile installation,** and as a **secondary protective layer during severe weather conditions.** While a properly installed tile roof typically sheds water efficiently, maintaining the integrity of the underlayment is considered industry best practice, especially in situations involving wind-driven rain or damaged roof tiles.

Tile Underlayment Materials and Industry Standards

A range of materials and product combinations can be used for tile underlayment. However, minimum standards are set by building codes and industry guidelines. **In most regions, the standard requirement is a single layer of Type II asphalt-based roofing felt, manufactured according to ASTM D-226 Type II or ASTM D4869 Type IV. Commonly referred to as 30# or Type 30,** this material must hold the appropriate ASTM rating. Substituting utility grade materials that do not meet these criteria may result in inadequate performance when applied as a single layer.

Regional Requirements and Material Specifications

In certain areas, such as **South Florida,** regulations require at least one layer of asphalt-coated base sheet manufactured in compliance with **ASTM D-2626.** These felts, **known as 40# or 43#,** are typically surfaced with sand, powder, or mica to prevent self-adhesion during storage.

Installation Requirements

For single-layer installations, both types of felt generally require a minimum headlap of 2 inches and a minimum endlap of 6 inches. Increasing the headlap can improve resistance to wind-driven rain before the tiles are placed. It is crucial that felts are installed without punctures, tears, or cuts. Any damage discovered must be repaired before completing the tile installation. Slope may dictate whether a second layer of felt is required. Please reference the *Concrete And Clay Roof Tile Installation Manual Published by the TRI Alliance – March 2024 Uniform ES-ER-2015*.

Alternative Underlayment Materials

Modified bitumen may be used as an alternative underlayment. However, care should be taken to prevent scuffing or indentations in warm weather. Contact with stacked tiles can damage some modified sheets, which must be repaired before tile application.

Non-asphalt-based materials that meet relevant ASTM standards may also be acceptable for use as underlayment.

Sealed Underlayments and Ventilation

Sealed underlayments can be used with tile roofs; however, it is essential to provide adequate attic ventilation or conditioning to reduce condensation and potential roof system damage.

Material Classifications

30# Felt: This is Type II asphalt-saturated felt, commonly referred to as No. 30 asphalt felt. According to ASTM D-226, it is constructed with a mat weighing 10 lb. per 100 square feet and 15 lb. of asphalt saturant, resulting in a net mass of 26 lb. per 100 square feet for the saturated sheet.

40# Asphalt-Coated Base Sheet: The 40 lb. product is manufactured from a Type I base felt weighing 5.2 lb. per 100 square feet with 7.2 lb. of asphalt saturant, and coated with 3.5 lb. of asphalt on each side for a total asphalt content of 14.2 lb. per square. This sheet receives a mineral stabilizer and surface treatment, resulting in a net mass of 37 lb. per 100 square feet.

For more information, contact your local Eagle Account Representative by visiting eagleroofing.com.