

TRI-BUILT[®] Organic #90 Mineral Surface

(ASTM D-249)

A. Description:

This specification covers asphalt roofing in sheet form, composed of asphalt-saturated organic felt coated on both sides with asphalt and surfaced on the weather side with mineral granules, except for any selvage.

B. Materials and Manufacture:

1. In the process of manufacture, a single thickness of dry felt shall be impregnated with a hot asphaltic saturant, then coated on both sides with a hot asphaltic coating, and finally surfaced on the weather side with mineral granules, except for any selvage. The reverse side shall be covered with a suitable material to prevent sticking in the roll.
2. The granule surfacing shall be omitted on any selvage, and the asphalt coating may be omitted on the weather side of the selvage. If the selvage is coated, it shall be covered with a material to prevent sticking in the roll that will not interfere with the bonding of the lap cement.
3. The felt shall be produced primarily from organic fibers. The surface of the felt shall be uniform and relatively smooth. Upon splitting or tearing on the bias, the felt shall appear reasonably free of lumps or underbeated stock and particles of foreign substances.
4. The asphaltic coating may be compounded with a fine mineral stabilizer substantially insoluble in water.

C. Physical Requirements:

1. The finished material shall neither crack at ambient temperatures above 10 degrees C (50 degrees F) nor be so sticky at temperatures below 60 degrees C (140 degrees F) as to cause tearing or other material damage upon being unrolled.
2. Pliability—At least eight strips out of ten from the granule surfaced portion of the sheet shall not crack when tested in accordance with Methods D-228, Section 16.
3. Loss and Behavior on Heating—There shall be no more than 1.5% volatile Loss, and the granular surfacing shall not slide more than 2mm (1/16 in.) when tested in accordance with Methods D228, Section 17.
4. Material with a 102-mm (4-in.) with selvage shall meet the lap strength requirements with Type II cement specified in Specification D-3019.

D. Dimensions, Mass and Permissible Variations:

1. Width—The material shall be put up in rolls and shall be 914-mm (36 in.) + .07% wide.
2. Selvage—The material may be offered without a selvage, with a 51-mm (2 in.) selvage, or with a 102-mm (4 in.) selvage.
3. Area—The standard 914-mm (36 in.) wide roll shall contain 10.0 m² (108 ft²) = 1% of sheet if there is no selvage or if there is a 51-mm (2 in.) selvage. The standard width roll shall contain 10.6 m² (114 ft²) = 1% of sheet if there is a 102-mm (4 in.) selvage. For other width, the average area of the rolls shall not deviate more than 1.0% from the stated areas.

E. Workmanship, Finish, and Appearance:

1. The felt shall be thoroughly and uniformly saturated and shall show no unsaturated spots at any point upon cutting 50-mm (2-in.) wide strips at random across the entire sheet and splitting them open to their full length.
2. The surface of the weather side shall be uniform in finish and texture. Excluding end selvage, the mineral granules shall be uniformly distributed over the entire surface in a smooth layer and shall be firmly embedded in the asphalt coating.
3. The line of demarcation between the granule-surfaced portion of the weather side and any selvage shall be straight and parallel to the edges of the sheet. If the selvage is coated, the application of material to prevent sticking in the roll shall be uniform.
4. The asphalt coating and material applied to the reverse side to prevent sticking shall be uniform over the entire area of the sheet.
5. The finished material shall be free of visible defects such as holes, ragged or untrue edges, breaks, cracks, tears, protuberances, and indentions.