

Product Data Sheet

USP® TYPE IV GLASS PLY SHEET

Product Description: USP® Type IV Glass Ply Sheet is manufactured with a tough fiberglass mat containing heat-cured resinous binders. The high strength glass mat is saturated with a high quality, non-filled asphaltic bitumen for a strong, durable yet uniformly porous sheet for ease of application. Designed for use in hot mop roofing applications as a basic ply sheet in specifications requiring ASTM D-2178 Type IV felt. Contact the U.S. Ply Technical Services for specific details.

Physical Properties (ASTM D2178):	Test Results
Tensile Strength (lbf/in), @ 77°F; 2 in/min (MD/XMD)	44/44 lbf/in

Product Name: USP® Type IV Glass Ply Sheet

Classification: Fiberglass BUR Roof Membrane; UL Type G1

Approvals: Meets ASTM D2178 Type IV. USP® Type IV Glass Ply Sheet is UL Classified with Underwriter's Laboratories (UL) R11662, is Factory Mutual (FM) Approved, and listed with Florida Building Code (FBC) FL-5305, FL-8077, FL-14405, Miami-Dade County approved, and Texas Department of Insurance (TDI) RC-123. Contact U.S. Ply, Inc. for specific/applicable codes.

Product Data: USP® Type IV Glass Ply Sheet (typical)

Roll Dimensions: 180' x 36"

Area of roll ft²: 5 squares (540 ft²).

Weight: 40 lbs/roll (18.14 kg/m²)

Rolls per pallet: 20 per pallet

Lap Lines: 2"; 8-1/2"; 11-1/4"; 17"

PLY SHEET APPLICATION: The ply sheet must be warmed to a temperature sufficient to allow expansion and relaxation of the asphaltic coating, prior to application, otherwise wrinkles may form. The applicator must evaluate weather conditions to determine maximum functional length and relaxation time to avoid wrinkling.

Asphalt Application: Install ply sheet, over an acceptable substrate, in a uniform mopping of hot asphalt applied at the rate of 25 lb/square (1.2 kg/m²).

Two-ply interply applications: Install starter strips of 18" (45.7 cm) and 36" (91.4 cm) widths and follow with a second full 36" (91.4 cm) width sheet with a maximum of 17" (43.2 cm) exposure, applied shingle style. Lap felts 19" (48.3 cm) with a 17" (43.2 cm) exposure and lap 4" (10.2 cm) on ends. Stagger adjacent end laps a minimum of 12" (30 cm). Install the felts in full and uniform mopping of hot asphalt applied at the rate of 25 lb/square (1.2 kg/m²) ± 20%.

Three ply interply applications: Install starter strips of 12" (30.5 cm), 24" (61.0 cm) and 36" (91.4 cm) widths and follow with a second full 36" (91.4 cm) width sheet with a maximum 11-1/3" (28.8 cm) exposure, applied shingle style. Lap sheets 24-2/3" (62.7 cm) with an 11-1/3" (28.8 cm) exposure and lap 4" (10.2 cm) at ends. Stagger adjacent end laps a minimum of 12" (30 cm). Install the felts in full and uniform mopping of hot asphalt applied at the rate of 25 lb/square (1.2 kg/m²) ± 20%.

Four-ply interply applications: Install starter strips of 9" (22.9 cm), 18" (45.7 cm), 27" (68.6 cm) and 36" (91.4 cm) widths and follow with a second full 36" (91.4 cm) width sheet with a maximum 8-1/2" (21.6 cm) exposure, applied shingle style. Lap sheets 24-2/3" (62.7 cm) with

an 8-1/2" (21.6 cm) exposure and lap 4" (10.2 cm) at ends. Stagger adjacent end laps a minimum of 12" (30 cm).

Interply sheets may be applied by a mechanical felt layer, or hand mopping with hot asphalt. Mechanical Felt Layer shall be multiple gate valve type that spreads hot asphalt on the roof surface just ahead of the plies. Equipment shall be clean, in good operating condition and shall hold sufficient asphalt (20 gal or 75.7 L, minimum) to lay an entire roll or ply sheet. Application of uniform layers of interply asphalt is vitally important. Avoid excessively heavy or irregular application of asphalt between ply sheets. Broom plies immediately to insure full contact and proper embedment. Dry laps are not acceptable. Apply asphalt so that a small bead of asphalt shows at the edge of the membrane. Do not allow heavy flows of asphalt to extend beyond the membrane edge. Heavy, irregular surface flows of asphalt will make proper application of cap membrane difficult. In the event a wrinkle or a "fishmouth" forms during the application of the membrane, do not "walk it down" as the memory of the sheet or felt may cause it to reappear. Fishmouths or wrinkles shall be sliced open and patched with hot asphalt and additional membranes. Avoid cutting into the plies below the fishmouth or wrinkle by angling the knife blade to the side. An equal number of plies shall be used to patch the number of cut out ply portions.

All values given are approximate and are subject to change without notice. There is no implied or express warranty given through these values or statements, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by "in-house" and independent "third party" evaluation for the purpose of classification and or approval. Acceptance, purchase and selection of these products are the sole responsibility of the buyer or buyer's representative. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY U.S. PLY, INC. EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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