

## **USP® APP 160M**

USP® APP 160M is a tough mineral surfaced, APP (Atactic Polypropylene) torch applied membrane. Manufactured with a non-woven polyester mat, that is saturated and coated with high quality, non-blown asphaltic bitumen and APP resins for a durable, heat resistant, flexible and easily maintainable membrane. It is designed for use as a cap membrane in modified bitumen and hybrid built-up roof systems.



**Product Name:** USP® APP 160M **Classification:** Meets ASTM D 6222 Type I, Grade

G. APP Modified Bitumen

**Application Method:** Applied using torch welding techniques.

**Thickness:** 4.1 mm (160 mils) **Weight:** 105 lbs/roll (48 kg/m²) **Roll Dimensions:** 39 3/8" x 32' 9" (1m x 10m).

Each roll is approximately 1 square applied.

Physical Properties (ASTM D5147):	Test Results	ASTM D6222 Minimum Standard
Tamaila Characath (III.66a) OoF (MD/MD)	40E/44E ILE/:	
Tensile Strength (lbf/in), 0°F (MD/XMD)	135/115 lbf/in	60 lbf/in
Tensile Strength (lbf/in), 73°F (MD/XMD)	114/85 lbf/in	50 lbf/in
Elongation (% @ Max Load), 0°F, (MD/XMD)	52/56%	10%
Elongation (% @ Max Load), 73°F (MD/XMD)	47/47%	23%
Elongation (% @ 5% Max Load), 73°F (MD/XMD)	52/53%	30%
Tear Strength (lbf), (MD/XMD), 73°F, minimum	134/122 lbf	70 lbf
Low Temperature Flexibility, (°F), maximum	32°F (0°C)	32°F
Dimensional Stability, %, maximum	<0.5%	1%
High Temperature Stability, (°F)	230°F (110°C)	230°F
Water Absorption, %, maximum	pass	<3.2%
Moisture Content, %, maximum	pass	<1%
Granule Embedment, g, maximum	<1.5 g	<2.0 g

**Approvals:** UL Classified with Underwriter's Laboratories (UL), is Factory Mutual (FM) Approved, and listed with Florida Building Code (FBC) FL-14405, Texas Department of Insurance (TDI) RC-123, and is Miami-Dade County Approved. Contact U.S. Ply, Inc. for specific/applicable codes.

**Application:** See most current edition of USP® APP 160 Application Specification Manual for best guidelines for installing this product. Set and align rolls before application with at least 3" (7.6 cm) side laps and 6" (15.3 cm) end laps. Adjacent end laps shall be staggered 18" (45.7 cm). Stagger laps between the base ply and APP membrane. Apply sufficient heat, with a torch, to the back of the sheet to melt the asphalt to a semi-liquid state, while heating the base at the same time. A minimum of 3/8" (10 mm) compound flow-out must be obtained at all seam areas. Do not exceed a maximum 1" (25 mm) compound flow-out. Roll sheet into place, applying pressure with foot or roller on all laps immediately after rolling in. Apply extra pressure to avoid creating open channels, where three or more membranes are lapped. Base Flashing: APP 160 roof systems must be flashed according to USP® APP 160 Flashing Details. Surfacing: USP® APP 160M is intended to be used as a cap ply.

**Green Standards Information:** USP® APP 160M contains approximately 2.7% of recycled materials by product weight. Materials are comprised of post-consumer recycled materials. The post-consumer recycled materials are derived from recycled post-consumer plastics which averts disposal in landfills or commercial dumps.

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 to 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.



CORPORATE HEADQUARTERS: P.O. BOX 1182, BRIDGEPORT, TEXAS 76426

PHONE: (817)413-0103 FAX: (817)413-8221

WWW.USPLY.COM