

STANDARD MODIFIED BITUMEN MEMBRANE
Product Data Sheet

"PIONEERED WITH PERFORMANCE IN MIND... ENGINEERED TO STAND THE TEST OF TIME."

**USP® TUFFCAP 190M APP** 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:
 100 lbs/roll (45 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
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.

## TEXAS MADE ... TEXAS TUFF

Green Standards Information: USP® TuffCap 190M APP 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.cial 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 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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