

Skived UHMW Polyethylene Film Automotive Weather Strip

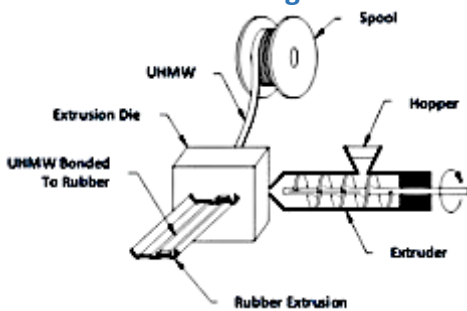


For automotive OEMs and tier suppliers, #402 (natural) and 405BNC (Black) UHMW-PE film are used in glass run channel weather strip.

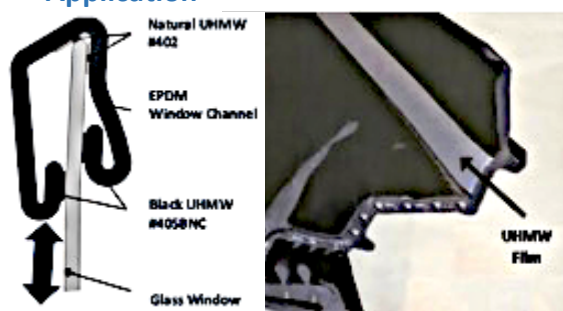
The UHMW-PE improves processing, performance, and durability over traditional flocking methods.

Proven in the field over many years by leading global automotive OEMs and weather strip manufacturers, the product has been installed across a wide range of vehicle platforms.

Manufacturing Process



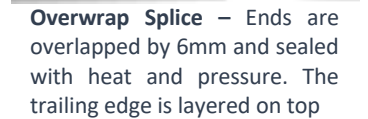
Application



Spooling Splice Options



Butt Splice – Aligned end to end and held together with tape on both top and bottom



Overwrap Splice – Ends are overlapped by 6mm and sealed with heat and pressure. The trailing edge is layered on top

UHMW-PE provides a stable, robust, yet low friction surface as part of the integrated EPDM window channel, and is layered onto the extrusion in-line during the manufacturing process.

TYPICAL TECHNICAL DATA

Part Number	#402	#405BNC	Test Method
Colour	Natural	Black	Visual
Tensile Strength (mPa)	41.3686	54	ASTM D 882
Elongation (%)	300	250	ASTM D 882
Dielectric Strength	1000	1000	ASTM D 149
Dielectric Constant @ 1MHz	2.0	-	ASTM D 150
Density g/cc	0.93	0.93	ASTM D 792
Dissipation Factor @ 1 KHz	0.0004	-	ASTM D 150
Melting Temperature (°C)	135	-	-
Deformation (%)	6 - 8	-	-
Heat Distortion Temperature (°C)	95	95	ISO R75 Method A
Water Absorption (%)	0.01	0.01	-
Specification	21 CFR 177.1520	-	FDA
Operating Temperature (°C)	-40 to +95		-

TABER ABRASION TEST DATA

Weight Loss (g) @ 1000 Grams	0.025	0.016	ASTM D 3489-17
Change (%)	0.57	0.37	ASTM D 3489-17

PRODUCT DIMENSION AVAILABILITY

Thicknesses (mm)	0.76 to 1.57	0.076 to 1.016	-
Maximum Width (mm)	6 to 1397		-
Maximum Roll, O.D. (mm)	356		-
Core Diameter (mm)	76.2		-

Features:

- Extreme abrasion resistance, greater than that of steel
- No water absorption
- Superior sound dampening
- Very low coefficient of friction
- Drop-in solution
- Permanent bond to EPDM profile without adhesive
- Green process

Benefits:

- Improved durability
- Quieter operation
- Reduced window motor size
- Reduced environmental impact
- Reduced CAPEX on new weather strip production lines
- Reduced warranty claims