



A portfolio of performance products for low-slope roofing applications

Energy lives here™

Enhance your modified bitumen or TPO roofing membranes with Vistamaxx™ performance polymers or balance properties in your EPDM roofing membranes by using Vistalon™ EPDM high performance rubber.

New possibilities for modified bitumen roofing membranes

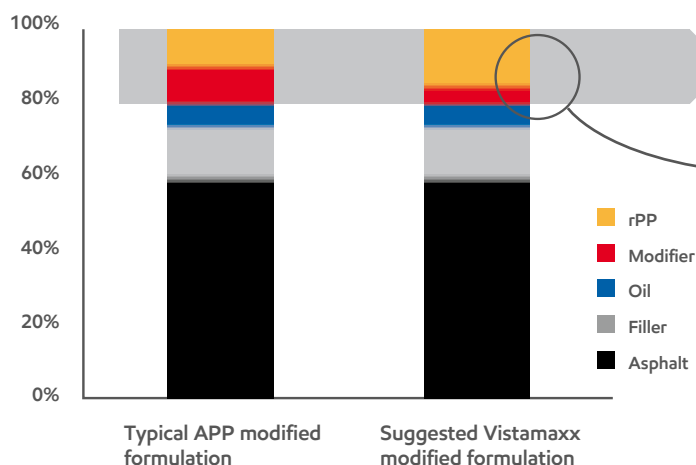
Vistamaxx polymers can be used as a modifier for bitumen compounds to optimize cost and to enhance performance of the final membrane. They can be advantaged alternatives to conventional modifiers like atactic polypropylene (APP) or styrene-butadiene (SBS) resins. Adding Vistamaxx polymers to your formulation can potentially deliver:

- Similar membrane flexibility at lower level of modifier or improved flexibility at same or higher modifier levels
- Optimize membrane toughness and hardness based on market needs
- Higher filler or recycled polymer loading
- Viscosity modification for easier compounding



The charts below illustrate the potential advantages of Vistamaxx™ performance polymers and the grade portfolio for modified bitumen-based roofing compounds.

Figure 1: Formulation comparison between APP and Vistamaxx modified bitumen roofing membranes



APP = atactic polypropylene rPP = recycled polypropylene

Figure 2: Detail of the modifier blend composition of APP and Vistamaxx modified bitumen roofing membranes

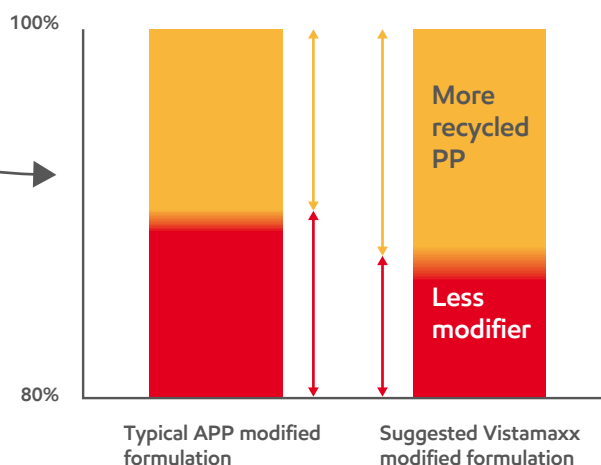
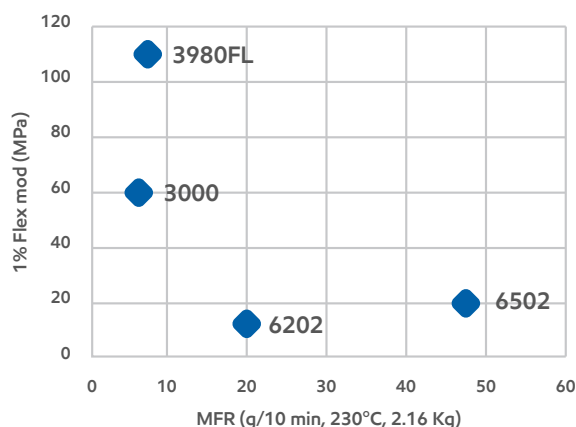


Table 1: Illustration how Vistamaxx polymers grade portfolio can tailor membrane properties

	Vistamaxx 3000	Vistamaxx 3980FL	Vistamaxx 6202	Vistamaxx 6502
Pen hardness	=	+	-	-
Foot step	=	+	-	-
Flexibility	=	-	++	+
Ring and ball	=	=	=	=
Viscosity reduction	=	=	+	++

Directional difference between Vistamaxx grades compared to Vistamax 3000

Figure 3: Illustration of Vistamaxx polymers grade portfolio for modified bitumen roofing membranes



Test methods: MFR based on ASTM D1238 and 1% Flex modulus on ASTM D790

Tailoring TPO membrane solutions for better flexibility and strength

Vistamaxx polymers can be used as advantaged polymer solution for TPO roofing membranes.

- Adding Vistamaxx polymers to the formulation enhances the flexibility of your membranes, making them easier to install.
- Vistamaxx polymers can also be used to tailor the tensile strength and elongation at break for more durable membranes.

Durable EPDM rubber roofing membranes

Based on years of experience ExxonMobil Chemical has developed Vistalon™ 9301 and 3702 EPDM rubber roofing grades balancing properties to ensure trouble-free mixing, extrusion and calendaring. Using Vistalon EPDM high performance rubber grades in your roofing applications can offer:

- Efficient mixing and filler acceptance
- Easy processing and good balance between tack and strength in uncured roofing sheet
- Excellent weathering resistance

To learn more, get in touch with our local experts: contactus-am@exxonmobil.com

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