

Product Data Sheet

EverGuard® Freedom™ TPO HW

Title 24*
Compliant



Description

EverGuard® Freedom™ TPO HW is a self-adhered membrane with a heat weldable seam available in 45 mil and 60 mil thickness in 2 versatile colors: ENERGY STAR® qualified white and earth tone tan. Freedom™ membranes combine EverGuard's proven TPO technology with an added engineered adhesive preapplied to the bottom of the sheet for quick, hassle-free installation. Freedom™ HW membrane includes a traditional 3" heat weldable seam. Freedom™ membranes are especially suited for schools and hospitals, high-rises and limited access buildings, and coastal locations and areas subject to extreme wind conditions. Advantages include no open flames or hot asphalt on your roof and the factory-applied adhesive eliminates guesswork or uncertainty by the installer, resulting in uniform application.

Applicable Standards

UL Listed, FM Approved, Dade County Product Approval, Florida Building Code Approved, CRRC Listed, Title 24 Compliant, ENERGY STAR® Listed, ASTM D6878.

Physical Properties	ASTM Test Method	ASTM 6878 Minimum	EverGuard Typical Test Data for 045
1. Certain data is provided in MD (machine direction) x CMD (cross machine direction) format. 2. Data is based upon typical product performance, and is subject to normal manufacturing tolerance and variance			
Nominal Thickness	ASTM D-751	0.039" (min.)	0.045"
Breaking Strength	ASTM D-751 Grab Method	220 lbf/in.	290 lbf x 270 lbf
Factory Seam Strength	ASTM D-751	66 lbf	100 lbf (membrane failure)
Elongation at Break	ASTM D-751	15%	30%
Heat Aging	ASTM D-573	90% Retention of Breaking Strength and Elongation at Break	100%
Tear Strength	ASTM D-751 8" x 8" Sample	55 lbf	124 lbf x 140 lbf
Puncture Resistance	FTM 101C Method 2031	Not Established	290 lbs.
Cold Brittleness	ASTM D-2137	-40 C	-40 C
Permeance	ASTM E-96	Not Established	0.070 Perms
Dimensional Change	ASTM D-1204 @158 F, 6 hrs.	+/- 1%	0.4%
Water Absorption	ASTM D-471 @158 F, 1 week	+/- 3.0% max.	0.7%
Hydrostatic Resistance	ASTM D-751 Method D	Not Established	390 psi
Ozone Resistance	ASTM D-1149	No visible deterioration @ 7 x magnification	No visible deterioration @ 7 x magnification
Reflectivity (white)	ASTM C1549	N/A	0.76
Emissivity (white)	ASTM C1371	N/A	0.90

Product Data

Roll Size	Note: Product sizes, dimensions, and widths are nominal values and are subject to normal manufacturing/packaging tolerance and variation								
	Colors	Full Roll Size	Full Roll Weight			Half Roll Size	Half Roll Weight		
			45	60	80		45	60	80
White, Tan & Gray	10' x 50' 10' x 100'	150 301	190 365	230 450	5' x 50' 5' x 100'	74 148	101 192	120 230	
Storage	Note: Membrane rolls shipped horizontally on pallets.								
	Store on pallets in a clean, dry area at temperatures below 100°F; protect adhesive side from exposure to direct sunlight; and use care when handling the adhesive side of material. The adhesive is aggressive and will stick to skin.								
Safety Warning	Membrane rolls are heavy. Position and install by at least two people.								

* White Membrane Only