# FLAT ROOFS | BUILT RIGHT

# **PRODUCT DETAILS**

Thickness Over Scrim: Optimized and tested on a continual basis with a state-of-the-art thickness gauge to verify that the thickness valued by our customers is incorporated into the sheet.

One of the Widest Melt Windows: Promotes better welds over a wider variety of speeds and temperatures, and leads to a softer, more flexible, and workable sheet.

Reinforced fabric scrim layer and top-ply thickness: Lends to durable physical properties including: Long-term weathering, UV resistance and heat-aging properties High breaking and tearing strength

**Optimized TPO formulation:** delivers high-performance ozone resistance, cool roof reflectivity and overall weather resistance.

**Colours:** Grey and White\* \*white is special order only

#### **INSTALLATION/APPLICATION**

Refer to Nuraply TPO application guides and detail drawings for instructions.

#### **ENERGY AND THE ENVIRONMENT**

Standard			Reflectivity	Emissivity
	White	Initial	0.77	0.87
CRRC®		3 Yr. Aged	0.70	0.86
	Gray	Initial	0.35	0.87
		3 Yr. Aged	0.34	0.90
CA Title 24	White	Pass	0.77	0.87
ENERGYSTAR®	White	Initial	0.77	0.87
Entertorion and		3 Yr. Aged	0.70	
	White	Initial	95	
LEED <sup>®</sup> (SRI)		3 Yr. Aged	85	
· · · ·	Gray	Initial	39	
		3 Yr. Aged	37	
Recycled Content	Post-consumer		0%	
	Post-industrial		5%	

## PACKAGING AND DIMENSIONS

Roll Widths	1.52 m	1.83 m	2.44 m	3.05 m	3.66 m
Roll Lengths	30.48 m				
Roll Coverage	46.45 m <sup>2</sup>	55.74 m <sup>2</sup>	74.32 m <sup>2</sup>	92.90 m <sup>2</sup>	111.5 m <sup>2</sup>
Rolls per Pallet	8				
Pallet Weight	627.8 kg	762.0 kg	997.9 kg	1251.9 kg	1469.6 kg
Pallets per Truck*	28-32	22-26	18-20	12-16	12-14





# **TECHNICAL DATA SHEET**



### **TESTED PHYSICAL PROPERTIES**

		ASTM	Standard for	NURAPLY TPO – 1.5mm		
Phy	sical Properties	Test Method	ASTM D 6878 (Min.)	MD*	XMD**	
Strength	Breaking Strength, min, N	D 751	976	1,828	1,726	
	Elongation at Break, min %	D 751	15	27	27	
Stre	Tearing Strength, min, N	D 751	200	409	792	
	Factory Seam Strength, min, N	D 751	290	498		
	Thickness, min, mm.	D 751	+/- 10% from Nominal	1.5 (Nominal)		
vity	Thickness Over Scrim, min, mm	D 7635	0.38	0.68		
Longevity	Water Absorption, max, %	D 471	3.0	0.11		
Lo	Brittleness Point, max, -5°C	D 2137	No Cracks	Pass		
	Ozone Resistance	D1149	No Cracks	Pass		
	Properties after Heat Aging @ 115°C	D 573	Pass/Fail	Pass		
	Breaking Strength, % (after aging)	D 751	90	>90	>90	
Heat Aged Performance	Elongation, % (after aging)	D 751	90	>90	>90	
at A	Tearing Strength, % (after aging)	D 751	60	>60	>60	
Per	Weight Change, max, % (after aging)	D 751	±1.0	0.19		
	Linear Dimensional Change, max, % (after 6 hrs @ 70°C)	D 1204	±1.0	<0.1		
Weather Performanc	Accelerated Weathering, min	G 151 & G 155	10,080 kj/m²•nm @ 340 nm (4,000 hrs @ 0.70 W)	>20,160 kj/m² (>8,000 hrs)		
Perfo	Cracking (@ 7x magnification)	G 155	No Cracks	Pass		

\*MD = Machine Direction

\*\*XMD = Cross-Machine Direction Note: All data represents tested values.

#### SUPPLEMENTAL TESTING

Physical Properties	ASTM Test Method	Standard for ASTM D 6878 (Min.)	NURAPLY TPO –1.5mm Result
Dynamic Puncture	D 5635	N/A	Pass @ 25 Joules
Static Puncture	D 5602	N/A	Pass @ 20 kg
Impact Resistance of Bituminous Roofing Systems	D 3746	N/A	Pass - minor indentations
Deflectores	C 1549	N/A	78%
Reflectance	E 903	N/A	80%
F	C 1371	N/A	0.87
Emittance	E 408	N/A	0.96
SRI	E 1980	N/A	95
Resistance of Synthetic Polymer Material to Fungi	G 21	N/A	0 rating
Puncture Resistance (FTMS 101C, Method 2031)	N/A	N/A	168 kg
Moisture Vapor Transmission	E 96	N/A	0 g/m² per 24 hours
Hydrostatic Resistance, Mullen	D 751	N/A	474 PSI (3268 kPa)
Standard Test Method for Air Permeance of Building Materials	E 2178	N/A	Pass @ <0.0005 L/(s·m²) (Pass @ <0.0001 CFM/ft²)

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