



Plastic Sheeting Comparison

		*IFRC, UNHCR, UNICEF, ICRC, MSF, and OXFAM	USAID/OFDA	IOM
Basic Specification	Sheet Size	4m x 6m	N/A	4 m x 5m
	Roll Size	4m x 60m	4m x 60 m	N/A
	Weight g/m ²	180g/m ² ± 30g under I SO 3801	240g/m ²	180g/m ² ± 3%
	Material	Woven high-density polyethylene (HDPE) black fibers fabric + laminated on both sides with white low density polyethylene (LDPE) coating.	Woven high-density polyethylene (HDPE) Nominal 12 by 10 or 10 by 8 PPI woven black HDPE scrim	Woven high-density polyethylene (HDPE)
	Color	LDPE Coating white sun reflective on both sides of the sheet. Grey coating on the outside of the bands. Inner black fibers to ensure opacity. White Coating color definition: L.a.b Coordinates under I SO 105J01 Minimum L : 82 "a" value between -1.7 and +1.5 and "b" value between -4.5 and 0	Beige one side white one side. LDPE Coating 2.0 mil average each side (47 grams per square meter per side)	White
	Reinforcement Bands or Eyelets	6 horizontal bands of 7.5cm width made of woven black HDPE fibers fabric and coated with grey LDPE on the outside.	N/A	Aluminum Eyelets

	Eyelets Spacing	N/A	N/A	100 cm ± 5 cm on sheet edges
Technical Specifications	Tensile Strength	Minimum 500N and 15% to 25% elongation in warp and weft in plain sheet under ISO 1421-1.	732 N warp and weft in plain sheet under ASTM D751	Not available
	Tear Strength	Minimum 100N under I SO 4674-1 2003, strip of 200x200mm, in plain sheet	Minimum 90 percent of the tensile strength under ASTM D751	Not available
	Welding	Only one welding allowed, in the middle of the sheet, lengthwise. The tarpaulin tensile strength crossways at the place of the welding under ISO 1421-1 must be: Minimum 50% of the original value of the actual product, AND not less than 400N.	Only one welding allowed, in the middle of the roll. The welding shall be heat sealed, smooth and fully adhered throughout their length and shall be free of puckers and air pouches. Welding shall be 2.54cm to 3.81cm wide and separable by hand strength in the peel-back direction along the length of the Welding.	Not available
	UV Resistance	The tarpaulin tensile strength under I SO 1421-1 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak) must be: Minimum 80% of the original value of the actual product, AND not less than 475N. To be tested in the plain sheet.	Minimum 80% of the original value of the actual product after 2,000 hours (ASTM G53)	UV Stabilized
	Temperature Resistance	From 20 to 80 degrees Celsius	Not available	Not available

	Flammability	Flash point above 200 degrees Celsius	Not available	Not available
Other Specifications	Logo	Customer logo on request	USAID Logo on two (2) sides and two (2) ends 100% in size in color per USAID branding instructions. Optionally, the logo and information may be applied by stick-on label prior to carton waxing.	IOM Logo on two (2) sides
	Other Printing	Continuous indelible printing in white color of the manufacturer name, the month and year of production (Letters of 2.5cm high +/-10%). Length indicator marks every meter. Customer logo on request.	One roll end shall contain the following data: 1) WOVEN PLASTIC TARPAULIN MATERIAL 2) FROM THE AMERICAN PEOPLE 3) 60 m x 4 m 4) Contractor's Name: Awardee Corporate Name 5) Contract Number 6) Date of Production 7) Lot Number (or other unique number) A one-meter bar will be printed on the side of the box to assist in measuring the material. .	

The table values were adapted from Joseph Ashmore Compilation in 2006. Data for IFRC and USAID was updated in August 2012

*As early as October 2012 UNHCR, UNICEF, ICRC, MSF, and OXFAM will be using the same plastic sheeting used by the IFRC