

Water Tight Technologies, LLC P.O. 899, Payson, AZ 85547 www.britenez.com

#### **DESCRIPTION**

BRITE-n-EZ™ TPO (thermoplastic polyolefin) Membrane systems have been engineered to provide premium performance at a very cost-effective price. Strong, flexible, and durable BRITE-n-EZ™ TPO Membrane is to be used in a fully adhered application. BRITE-n-EZ™ TPO Membrane meets or exceeds all of the requirements for ASTM D6878-03. Membrane is reinforced with a high quality polyester scrim for added strength and stability. Nominal thickness of the membrane is either .045 inch (45 mil) or .060 inch (60 mil) thick. White is the standard color available.

#### **MEMBRANE PHYSICAL PROPERTIES**

PROPERTY	TEST METHOD (ASTM)	ASTM Minimum	Typical Values for .045
Color			White
Weight-lbs/ft² (kg/m²) .045" (1.1mm) .060"	D-751		.256 lbs 322 lbs.
Nominal Thickness – inches (mm)	D-751	.039 (min.)	.045
Factory Seam Strength	D-751	66 lbf	100 lbf (membrane failure)
Breaking Strength	D-751 Grab Method	220 lbf.in.	290 lbf x 270 lbf
Elongation at Reinforcement Break- min %	D-751	15	30
Tear Strength –	D-751 8" x 8" Sample	55 lbf	124 lbf x 140 lbf
Puncture Resistance	FTM 101C Method 2031	Not Established	290 lbs.
Heat Aging	ASTM D-573	90% Retention of Breaking Strength and Elongation at Break	100%
Cold Brittleness	D-2137	-40C	-40C
Ozone Resistance –	D-1149	No visible deterioration @ 7 magnification	No visible deterioration @ 7 magnification
Hydrostatic Resistance	D-751 Method D	Not Established	390 psi
Water Absorption – Max mass %	D-471 @158F, 1 week	+/- 3.0% max.	0.7%
Water Vapor Permeance – Perm	E-96	Not established	.070 perms
Linear Dimensional Change – max %	D-1204 @ 158F, 6 hrs.	±1	0.4
Reflectivity: White (%)	C-1549	N/A	0.76
Emmissivity: White	C-1371	N/A	0.90

## **Product Data Sheet**

## BRITE-n-EZ™ TPO Membrane

.060" (60 mil) and .045" (45 mil)

#### **INSTALLATION (MEMBRANE)**

Substrates must be clean, dry and free of foreign materials such as grease, oil, debris and other materials which could inhibit adhesion. Be sure the substrate is approved for selected adhesive (Solvent Based or Water Based), per the BRITE-n-EZ<sup>TM</sup> Installation Manual.

#### FIRST SHEET:

- Unroll the BRITE-n-EZ™ Membrane over the substrate so that the sheet is at the lowest point of the roof, is wrinkle free and the side of the membrane with the "over-lap" markings is on the top side (high side of the sloped roof) of the sheet. The membrane should overhang the perimeter of the roof by at least 3" (inches).
- Chalk a line at least 3" up from the lower edge of the membrane that can be used as a guide on the roof perimeter and assure this first roll is installed parallel to the roof edge. Position the membrane over the substrate and allow to relax.
- It is a good idea to use duct tape to secure the
  membrane at the top side of the sheet to insure the
  membrane does not move and has the chalk line
  evenly aligned with the roof edge. Fold the lower half
  of the membrane back onto itself exposing the
  substrate.
- Apply either BRITE-n-EZ™ Solvent Based or Water Based Adhesive according to the directions for the particular product. Be sure and allow adequate time for the adhesives to "flash off" and be dry to a finger touch.
- Fluff air under the sheet and mate the membrane onto the substrate starting in the middle of the panel working out to both edges or sides to minimize wrinkling of the panel.
- 6. With a stiff broom, broom the fully adhered portion of the sheet to insure 100% adhesion with the substrate.
- Roll the adhered surface with a steel linoleum roller that is weighted to 50 pounds per sq inch.
- Remove the duct tape from the upper half of the membrane panel and fold back the remaining unglued portion of the sheet toward the roof's edge. Follow proper safety procedures to avoid a fall from the roof edge.
- Apply bonding adhesive to two feet of the unglued sheet and substrate, per adhesive directions, allow to dry to dry finger touch. Starting in the middle of the sheet, reach over and pull the sheet toward you so that the two surfaces make contact in the area of the first two feet.
- 10. Apply adhesive to the remainder of the sheet and substrate and when adhesive has dried, mate the remainder of the two surfaces. Broom and roll the entire sheet to unsure 100% contact.



# Water Tight Technologies, LLC P.O. 899, Payson, AZ 85547 www.britenez.com

#### **SUBSEQUENT SHEETS:**

- There should be a minimum of 3" overlap on previously installed sheets for subsequent sheets. It is useful to mark the previously adhered sheet with at water soluble roofing crayon 3" down from the top of this sheet. This will be used as the starting point for the bottom of subsequent sheets.
- Align the sheet on the substrate, assuring the sheet is parallel to aligned with the required 3" overlap on the prior sheet. Duct tape this sheet to the previously adhered sheet to assure the sheet does not move.
- Fold the upper half of the membrane back onto itself exposing the substrate.
- 4. Apply either BRITE-n-EZ™ Solvent Based or Water Based Adhesive according to the directions for the particular product. Be sure and allow adequate time for the adhesives to "flash off" and be dry to a finger touch.
- 5. Stand or kneel at the center of the bottom half of the sheet – making sure it is still properly aligned with the previously adhered sheet. Fluff air under the sheet with adhesive and slowly push the membrane onto the substrate. Work from the middle out to both edges or sides to minimize wrinkling of the panel.
- Broom and roll the membrane. Fold back the remaining unglued portion of the sheet. Mark the bottom side of the sheet 3" in from the edge as a guide for setting seam tape.
- With a BRITE-n-EZ° Scrub Pad, apply BRITE-n-EZ°
   Tape Primer from the edge of the seaming to the 3"
   mark using a back and forth motion. Let the primer dry.
- 8. Partially unroll a roll of BRITE-n-EZ° Seam Tape and set the tape on the back side of the panel being adhered with the backing paper aligned with the 3" mark on the back of the membrane. It is important that Seam Tape is exposed beyond the end of the membrane panel. With your hand, rub the tape to insure good contact with the membrane. Do not remove the seam tape backing paper at this time.
- Apply adhesive to the remainder of the sheet and substrate and when adhesive has dried, mate the remainder of the two surfaces. Take care not to get adhesive on the seaming area of the sheet previously installed.
- 10. Broom and roll the entire sheet to unsure 100% contact.

#### INSTALLATION - SEAMS:

 While the bonding adhesive is drying is step #9 above, apply BRITE-n-EZ° Tape Primer to the 3" overlap area on the sheet previously installed with a BRITE-n-EZ° Scrub Pad. Take care not to walk in the area just primed and be sure primer has dried.

## **Product Data Sheet**

### BRITE-n-EZ™ TPO Membrane

.060" (60 mil) and .045" (45 mil)

- With the membrane firmly attached, raise the edge of the membrane and pull the seam release paper from the seam tape. Always pull the release paper at a 45 degree angle while brushing the seam with your hand to insure even contact with seam lower sheet.
- With firm pressure, roll the seam area with a BRITE-n-EZ™ Hand Roller, traveling both lengthwise and then across the seam.

#### **Product Data:**

Available Sizes: 5' x 50' Roll

10' x 50' Roll 5' x 100' Roll 10' x 100' Roll

Carton Size: Sold by Individual Rolls

**Storage:** Store in original, opened packaging and away from sources of puncture and physical damage. Store rolls on their sides on pallets or shelving.

Assure that structural decking will support the loads incurred by the material stored on the roof. The deck load limitations should be specified by the project designer.

Shelf Life: Not Applicable

#### Precautionary Data:

To avoid sources of punctures and physical damage, take care when moving, transporting or handling.

All rough surfaces on the substrate which could damage the membrane shall be repaired as specified to offer a smooth substrate. All substrate surface voids greater the  $\frac{1}{4}$ " (6.35 mm) wide shall be properly filled with an acceptable material.

Waste products such as petroleum products, greases, animal fats, and oils (mineral and vegetable) should be isolated from the membrane. Membrane rolls are heavy. Position and install by at least two people.

Refer to Material Safety Data Sheet for additional information.