

PW-100/60™ Waterproofing System

### **TECHNICAL DATA**

Properties	Test Method	Test Results
Color		Black
Thickness		60 mil
Tensile Strength (fabric)	ASTM D412	Adhesive 250 psi
		Film 500 psi
Elongation (adhesive only)	ASTM D412	300% minimum
Permeance	ASTM E96	0.013 perm min
	Method B	
Low Temperature Flexibility	ASTM D1970	Unaffected @ -42°F (-41°C)
Crack Cycling (100 cycles)	ASTM C836	Unaffected @ -25°F (-32°C)
Peel Strength	ASTM D903-49	4.5 lbs/inch
Lap Adhesion	<b>ASTM D1876</b>	150 psi
	modified	
Puncture Resistance	ASTM E154	50lbs
Exposure to Fungi (16wks)	GSA-PBS	Unaffected
	07115	
Water Absorption	ASTM D1228	0.1%
Pliability	ASTM D146	Unaffected @ -25°F (-32°C)
Hydrostatic Head		200 psi

### **PACKAGING**

Roll Width: 36" Roll Length: 67'

## **Description**

**PW-100/60** consists of a 60 mil thick SBS modified rubberized asphalt which is laminated on a heavy high density polyethylene film on the outer face with a siliconized, release sheet on the adhesive side

#### **Features**

- 30 day exposure rating (contact a Protecto Wrap representative for extended exposures)
- Fully adhered system
- Seals around properly installed fasteners
- Forms a positive air/vapor barrier

#### Uses

**PW-100/60** Sheet Membrane Waterproofing System is designed for use as a waterproofing system on concrete, masonry, metal and wood structures as positive protection against water, salts and certain acids and alkalis. Areas of application include foundation walls, ICF foundations and walls, tunnels, between the structural slab and wearing course on plaza decks, parking decks, balconies, terraces, equipment rooms, kitchens, bath rooms, janitorial areas, laboratories, mechanical rooms, in shower pans and on spandrel beams.

#### Limitations

Not recommended to be exposed for more than 30 days, consult a Protecto Wrap Company technical representative for assistance.

Not recommended as a pond or tank liner except for "between slab" applications.

Not recommended in high temperature applications to exceed 240

Not recommended for use over sealants/coatings containing coal tar. In the event of existing bitumen modified materials, consult your Protecto Wrap Representative.

#### Shelf Life

PW-100/60 maintains optimum initial adhesion to substrates when used within one year from the date of

### Storage

**PW-100/60** should be stored in the original, unopened container at ambient temperatures between 40-90°F (5-32°C). Storage area should remain dry and out of direct sunlight. Do not remove materials from original containers until ready for use. Do not double stack pallets. Do not store rolls on end. For cold weather applications, store Protecto Wrap materials in a heated air space at 50°F or above for at least two days prior to application. Only take out the amount of material that can be applied within two hours. Store materials away from flames or sparks

### **Preparation**

All surfaces shall have a smooth steel troweled finish and shall be clean, free of sharp protrusions, loose aggregate, dust, voids or spalled areas. Broom finish shall not be used. Repair all areas as needed before applying Protecto Wrap primer. Remove all forms as soon as possible to prevent moisture entrapment. Uneven form lines must be ground flush to the wall or deck. Fill holes or voids with non-shrink grout.

Concrete surfaces shall have a minimum cure time of 7 days and shall be clean and dry. Do not apply **PW-100/60** over frozen substrates. Use form release agents which will not transfer to the concrete or block walls. Concrete curing compounds must be a resin-base containing no oil, wax or pigment. Outside corners should be as smooth as possible by rounding or chamfering and free of sharp protrusions.

Masonry wall shall have joints struck flush in order to provide a smooth surface. On rough or porous surfaces, use a well adhered mortar parget coat to provide a clean smooth surface.

Metal surfaces are to be clean and free of paint, oil, coatings, rust or any other contaminants. Wire brush and/or solvent wipe all metal to ensure a clean surface.

**Expansion Joints and Cracks:** Pre-strip all slab and wall cracks over 1/16" in width and all construction and control joints with a 12" wide strip of pre-cut **PW-100/60** membrane. Joints less than ¼" with movement less than 25% use a 12" wide strip of **PW-100/60** to cover the opening. All joints ¼" and larger or having movement greater than 25% must be treated as a standard expansion joint. For expansion joints follow an approved sealant manufacturer's recommendation for design and sealant application. Sealant must be fully cured according to sealant manufacturers instructions and should be compatible with PW-100/60. Place a 12" strip of **PW-100/60** face down over the expansion joint area to create a slip plane over the joint. Cover the entire deck with the standard width **PW100/60** applying the material from the low point of the slope to the high point in a shingling effect.

<u>Protrusions and Drains:</u> Areas around pipe, conduit or any protrusions through the membrane should be treated with a 6" wide strip of JS500 detail tape. JS500 detail tape should be forced and formed to fit tightly to the protrusion and the deck or wall. At the drain opening apply a light coat of primer and allow to fully dry. Cover drain at least 6" past all perimeters with JS500 detail tape. Remove release film and make an X cut and form into the drain, making sure the membrane has 100% contact to the primed metal drain surface. Double ply with a full sheet of **PW-100/60** over the JS500 detail tape, cut and form around or into the protrusion or drain. This should be followed with a troweled bead of JS-160H mastic at any drain, conduit or protrusion where cutting or forming of the membrane is required.

<u>Corners:</u> Use of cant strips or fillets and JS500 detail tape are recommended for all inside horizontal corners. Wood or fiber cant strips are not recommended. 1" fillet may be formed with non-shrink grout, polyurethane sealant, epoxy mortar or latex modified cement mortar. Do not use JS160H Mastic as a fillet. After application of primer and JS500 detail tape, terminate membrane a minimum of 3" beyond the detail tape.

All outside corners shall be double covered to a minimum of 6" each side of the axis of the corners. This can be accomplished by applying a 12" wide strip of **PW-100/60** membrane, then covering with a full width sheet. All terminations and overlaps within 12" of corners shall receive a troweled layer of JS160H mastic.

Apply a troweled bead of JS160H mastic to the overlap at all vertical/horizontal transitions on all inside corners. Mastic should be troweled 3" up and 3" out from the transition on the seam to a maximum 60 mil wet film thickness.

<u>Priming:</u> Primer shall be applied to all surfaces prior to application of PW-100/60. Primed surface shall be free of runs, puddles or excessive primer. Primer has a satisfactory cure when it will not transfer to the finger when touched. Primed areas not covered within 8 hours must be re-primed. Refer to: Technical Letter Primer Selection for more information.

# **Applications**

Application of Horizontal Surfaces: Apply PW-100/60 from low to high point, so laps will shed water. Side laps shall be a minimum 2 ½", end laps shall be a minimum 6" and staggered. Snap a chalk line for a starting point. Pull 2+ feet of release paper and place adhesive side of membrane against chalk line. As the roll is dispensed, simultaneously roll the release paper and maintain alignment along the chalk line. Apply pressure with broom, squeegee or roller to entire membrane surface to obtain maximum contact with the primed surface and eliminate wrinkles, fishmouths and entrapped air. Apply a troweled bead of JS160H mastic at all terminations at the end of each work day. All "T" joints, end laps and detail cuts should receive a troweled bead of JS160H mastic the same day of application.

Application on Vertical Surfaces: After detail work around penetrations and protrusions with JS500 detail tape is accomplished install PW-100/60 in lengths of 8' or less. Side laps shall be a minimum 2 ½". On walls above 8' in height, apply in 8' sections, starting at the lowest point with the higher section overlapping the lower section a minimum 6". Roll or squeegee the entire membrane surface to obtain maximum surface contact with the primed surface and eliminate wrinkles, fishmouths and entrapped air. Roll or squeegee downward in the center of the membrane working outward to the edges. Special emphasis should be placed on the top 10" edge of the membrane and on all overlaps.

<u>Application on Block Walls:</u> For block wall waterproofing use a heavy coat of primer and allow primer to fully cure. Apply a second coat of primer to the top 10" of the block wall. When the second coat of primer has fully cured apply **PW-100/60**. Roll firmly to gain maximum surface contact. Special emphasis should be placed on pressure rolling the top 10" of the membrane and along all overlap seams.

<u>Terminations:</u> If the membrane must terminate on a vertical surface, use of a reglet or counter flashing is recommended. Roll termination edges firmly with a hand roller or equal. Apply JS160H mastic to all terminating edges.

**PW-100/60** shall be installed on the base of the foundation wall, over the edge of the footing a minimum of 3". Apply JS160H mastic to all vertical and horizontal terminations.

Note: Failure to use adequate pressure at terminating edges could result in a poor seal and potential leak. The use of mastic is not a substitute for a good seal.

<u>Repairs:</u> Carefully inspect applied membrane before covering to ensure the membrane is free of large blisters, fishmouths, voids due to misalignment at seams or damaged areas and repair as needed. If repair is required, clean area and lightly prime. Cut **PW-100/60** repair patch to cover the damaged area and extending onto adhered membrane at least 6" on all sides. Firmly press/roll repair section to ensure a good seal. Apply JS160H mastic to terminating edges of patch.

<u>Protection:</u> PW-100/60 must be protected from damage by future operations and other trades. The applicator shall install suitable protection course material applicable to jobsite conditions, to protect the membrane.

Install protection course on vertical walls immediately after installation of the PW-100/60 Sheet Membrane. Install protection course on horizontal application immediately following flood test. If flood test is delayed, install a temporary covering to protect the finished membrane from damage by other trades.

<u>Flood Test:</u> Mastic must cure at least 24 hours prior to flood testing and 48 hours prior to flood testing on all planter boxes. Perform flood test with a minimum of 2" and a maximum of 4" of water for 24 hours. Drains should be plugged and barriers placed to contain the water. All leaks shall be identified and repaired prior to covering the membrane. In the event of a leak, and after repairs are made, Protecto Wrap Company requires the area to be re-tested and pass the flood test before final covering is applied.

\* Additional methods and details can be found at www.protectowrap.com or call 800-759-9727

## Clean Up

Dispose of waste in accordance to local requirements. Control worksite so that boxes and release liner do not present a hazard.

Packaging materials and release liner can be recycled

## **Caution**

PW 100/60 should not come into contact with solvent based products, polysulfide's, plasticized PVC roofing materials or high concentrations of resins (pitch).

### **Limited Warranty**

This product is covered by the Protecto Wrap Standard 10 year Limited Warranty

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