

TECHNICAL DATA		
Properties	Test Method	Test Results
Color		Black
Thickness		60 mil
Tensile Strength	ASTM D412	1300 psi
(reinforcement sheet)		
Tensile Strength	ASTM D412	600 psi minimum
Elongation (adhesive)	ASTM D412	500%
Permeance	ASTM E96 method B	0.003 max
Puncture Resistance	ASTM E154	100lbs
Pliability	ASTM D146	Passes
Pliability @ -55°F (°C)	ASTM D146-78A	Passes
Water Absorption	ASTM D1228	0.23
Resistance to Hydrostatic		150 psi
Head (Feet of Water)		
Exposure to fungi in soil for 16 weeks	GSA-PBS 07115	Unaffected

# PACKAGING

Premium Building Products That Protect

> Roll Width: 6", 9", 12", 18", 30", 36", 60" Roll Length: 50'

### Description

Jiffy Seal 140/60 is a cold applied, self-adhering waterproofing membrane composed of a non-woven fabric reinforcement coated on both sides with a rubberized asphalt adhesive to provide an excellent bond to the primed substrate and to itself at overlap areas.

#### **Features**

- 30 Day exposure rating
- Fully adhered waterproofing system
- Internally reinforced
- Seals around properly installed fasteners
- Can be installed Horizontally or Vertically
- Can be covered or backfilled immediately
- Molecular bonding of overlap seams forms Jiffy Seal 140/60 into a monolithic membrane
- Inert, inorganic, will never rot, decay or be effected by bacteria/fungus
- Zip Strip on edges allows for easy alignment and accurate overlaps
- Release film on the exterior can be removed to expose adhesive, eliminating the need for fasteners when using a drainage system or protection boards.
- Excellent adhesion to wood, concrete and steel.

# <u>Uses</u>

Used as a complete below grade and deck waterproofing system.

# **APPLICATIONS:**

Foundations – concrete, wood and block Underground parking structures Retaining walls Protection against high water tables Building into hill sides Earth and berms against walls Around landscaping Earth sheltered houses Shoring – lagging (consult Protecto Wrap Company for details) Buried telephone, gas & electric vaults, Conduits and manholes Water treatment plants

Split Slabs – plaza decks Parking Decks – under asphalt or concrete Balconies – under Indoor-outdoor carpeting, astroturf Beneath wooden decks Under Pavers and Tiles Hardwood floors as a vapor barrier Roof Patch – built up roofs Parapets – copings Beneath stucco – recessed windows and exterior balcony railings Shower pans – under mortar with tile set Tilt-ups – covering joints Reflective cracking – highways

# **Limitations**

Not designed for use as a finished traffic system Not intended for use on rough surfaces – must be placed over a well adhered parget/mortar coat Not intended for use over wet surfaces – minimum 7 day cure time is required on all concrete prior to application of the membrane \* see Surface Preparation Not intended for use when in contact with Hydro-Carbon contaminated soils

#### Shelf Life

Jiffy Seal 140/60 maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

#### **Storage**

Jiffy Seal 140/60 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 (the explanation I got was the weight of the material will cause it to slump on the roll and cause it to bond to the end of the container)

#### **Preparation**

Surface shall be clean, dry and free of any foreign materials. Note: see "Technical Letter Surface Preparation" for more information.

#### **Concrete and Masonry:**

All concrete surfaces shall have a smooth steel troweled finish or better and shall be clean, free of sharp protrusions, loose aggregate, dust, voids or spalled areas. <u>Broom finish shall not be used.</u> Repair all areas as needed before applying Protecto Wrap primer. Remove all forms as soon as possible so as to prevent moisture entrapment. Uneven form lines must be ground flush to the wall. All tie holes must be filled. Concrete surfaces shall have a minimum cure time of 7 days and shall be clean and dry. Allow concrete to dry completely following precipitation. On horizontal surfaces a mat moisture test should be completed before application. Do not apply Jiffy Seal 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. If Jiffy Seal membranes are to be applied to a concrete or wood surface where other curing compounds or wood treatment are to be used, please contact Protecto Wrap Company for recommendations. If additives have been placed in the concrete that could slow the dissipation of moisture, contact Protecto Wrap Company before installation of Jiffy Seal.

Masonry walls shall not have struck joints. Make sure all masonry joints on block and brick walls are struck flush in order to provide a smooth surface. On rough or porous surfaces, use a well adhered parget/mortar coat to provide a smooth surface.

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

### **CORNERS**:

Use of Cant strips or fillets and Jiffy Seal 500 Detail Tape are recommended for all inside horizontal corners. Cant strips of epoxy mortar, latex modified cement mortar or urethane sealants should be used on all inside horizontal corners (these products should be fully cured prior to application of the membrane). Do not use JS 160H Mastic or JS 160WB Mastic as a filler/cant strip. Wood or fiber cant strips are not recommended.

After application of primer and Jiffy Seal 500 Detail Tape, terminate membrane a minimum of 3" beyond the Jiffy Seal 500 Detail Tape. All outside corners shall be double covered to a minimum of (6) six inches on each side of the axis of the corners. This can be accomplished by applying a 12" wide strip of membrane, then covering with a full width sheet, or by over-lapping the full width a minimum of 6" from the axis on both sides of the corner. Outside corners should be as smooth as possible by rounding or chamfering the edge and shall be free of sharp protrusions. All terminations and overlaps within 12" of corners shall receive a troweled layer of JS 160H Mastic or JS 160WB Mastic.

For inside corners at the vertical to horizontal transitions; apply a troweled bead of JS 160H Mastic or JS 160WB Mastic to the overlap. Mastic should be troweled 3" up and 3" out from the transition on the seam.

Note: JS160-H Mastic should be troweled to achieve a maximum 60 mil wet film thickness.

### **PROTRUSIONS and DRAINS:**

At the drain opening, apply a light coat of primer and allow to fully cure.

Cover drain at least 6" past all perimeters with Jiffy Seal 500 Detail Tape. Remove release film, make an "X" cut and form the Jiffy Seal 500 Detail Tape into the drain, making sure the membrane has 100% contact to the primed metal drain surface.

Double ply with a full sheet of Jiffy Seal 140/60 over the Jiffy Seal 500 Detail Tape, cut and form around and into the drain. This should be followed with a troweled bead of JS 160H Mastic or JS 160WB Mastic around the terminating edges.

Areas around pipe, conduit or any protrusions through the membrane should be taped with a 6" piece of Jiffy Seal 500 Detail Tape. Jiffy Seal 500 Detail Tape should be forced and formed to fit tightly to the protrusion and the deck. This should be followed with a troweled bead of JS 160H Mastic or JS 160WB Mastic around the terminating edges.

Note: Special care should be taken in placing a troweled bead of JS 160H Mastic or JS 160WB Mastic at any drain, conduit or protrusion where cutting or forming of the membrane is required.

Note: JS 160H Mastic or JS 160WB Mastic and Protecto Wrap primers are specially formulated for use with Jiffy Seal membranes and substitutes are specifically not recommended.

#### **EXPANSION JOINTS AND CRACKS:**

Joints/Cracks less than 1/4" with movement less than 25% use a 12" strip of Jiffy Seal 140/60 to cover the opening. Place a 12" strip of Jiffy Seal 140/60 face down over the expansion area leaving the release film in place so as to create a slip plane over the joint.

All joints 1/4" and larger or having movement 25% + must be treated as a standard expansion joint. For expansion joints follow a sealant manufacturer's installation instructions and recommendations for joint design and use of appropriate sealing materials in the joint. Place a 12" strip of Jiffy Seal 140/60 face down over the expansion area leaving the release film in place so as to create a slip plane over the joint.

Note: Protecto Wrap Company recommends the expansion joint sealant be fully cured and compatible with Jiffy Seal 140/60. Refer to Technical Letter Chemical Compatibility

Note: If surface cannot be cleaned to a like new surface or below 40°F, primer should be used prior to the application of the membrane. Refer to: Technical Letter Primer Selection for more info.( Primer is

recommended for all Jiffy Seal 140/60 applications to achieve optimum adhesion and ensure a waterproof application.

# **Application**

### VERTICAL APPLICATION:

After application and curing of primer, run a strip of Jiffy Seal 500 Detail Tape centered along the footing joint (Jiffy Seal 500 Detail Tape is unreinforced and may be formed well into the footing corner reaching 3" to 6" up the vertical wall and 3" to 6" onto the footing, conforming to any irregularities in the surface).

Remove release film from the Jiffy Seal 500 Detail Tape and apply Jiffy Seal 140/60 from the top edge of the wall downward so that the tack side is to the primed surface. This can be accomplished by pulling the Jiffy Seal off of the roll to the desired height on the wall or to the height that is going to be readily backfilled. Set the top edge of the sheet firmly onto the primed surface. Roll or squeegee downward in the center of the material working outward to the edges.

Note: Jiffy Seal must be rolled or squeegeed over the entire membrane surface to gain maximum surface contact to the primed wall. Special emphasis should be placed on the top 10" edge of the membrane and on all overlaps of the membrane.

Bring Jiffy Seal 140/60 down the wall and onto the footing. Terminate the membrane over and past the edge of the footing a minimum of 3". As application proceeds, remove the "Zip Strip" from the preceding sheet of Jiffy Seal. Move the roll over and align the overlap. Again pull membrane off the roll to the desired height and set top edge of the material followed by the rolling or squeegee step. Roll each sheet thoroughly with particular emphasis on the overlap area.

JS 160H Mastic or JS 160WB Mastic shall be applied to the top edge of the applied membrane extending at least (1) one inch onto the wall and (1) one inch on the membrane. Make sure release film is removed prior to application of JS 160H Mastic or JS 160WB Mastic. This is also required when the membrane extends down off the vertical portion of the wall and onto the footing or at any other termination of the membrane.

Remove release film the same day of application from the entire membrane and apply suitable drainage board or protection board.

Note: At the end of the working day, or when application is interrupted by change in construction scheduling, all edges of the membrane at terminations should have a troweled bead of JS 160H Mastic or JS 160WB Mastic applied.

# **VERTICAL APPLICATION – 2-LAYER SYSTEM**

Apply first layer according the guidelines outlined above. When applying a 2-Layer System, remove release liner from the first sheet and immediately affix the second layer. Care should be taken to ensure the second layer is fully adhered to the first with no air pockets between the layers. The second layer must be rolled or squeegeed as it is being applied, paying particular attention to the top edge of the membrane and the overlap areas. The overlaps should be installed so they are offset a minimum 12" from the first course. Begin installation at the top of the wall and work down the wall, terminating the membrane over and past the edge of the footing a minimum 3". Prior to placing succeeding sheets or rolls, the "Zip Strip" should be removed to expose the overlap seam. Apply each succeeding sheet in the same manner, overlapping the side laps a minimum of 2 inches. When an overlap happens to align onto the release film of succeeding roll, immediately strip film from under seam and roll overlap firmly. Pressure rolling the overlaps is essential to the development of a complete and permanent monolithic system

JS 160H Mastic or JS 160WB Mastic should be applied to the top edge of the membrane extending a minimum 1" onto the wall and 1" onto the membrane and troweled flat. JS 160H Mastic or JS 160WB Mastic should be applied to all exposed edges and troweled flat to a minimum 60 mil thick coating. JS

160H Mastic or JS 160WB Mastic shall be applied as work proceeds or at the end of each work day. The release liner must be removed in these areas to provide adequate access to apply the JS 160H Mastic or JS 160WB Mastic.

Remove release liner and apply suitable drainage board or protection board and backfill immediately

Mechanical fasteners and/or Termination bars are recommended for all 2-Layer Systems and should be applied immediately after the installation of the drainage board or protection board.

### DRAINAGE BOARDS and FOOTING DRAINS:

Waterstops, footing drains and most drainage boards are compatible and may be used in conjunction with Jiffy Seal waterproofing membranes. Consult Protecto Wrap Company for compatible drainage systems.

A good drainage design at or near the footings along with a drainage mat will assist in having a waterproof system.

#### **BLOCK WALLS:**

Masonry walls shall not have struck joints. Make sure all masonry joints on block and brick walls are struck flush in order to provide a smooth surface. On rough or porous surfaces, use a well adhered parget/mortar coat to provide a smooth surface.

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 ten (10) inches of the block wall. Once the second coat of primer is tacky but not wet, application of the Jiffy Seal 140/60 can begin. <u>Roll firmly to gain maximum surface contact.</u> <u>Special emphasis should be placed on pressure rolling the top 10" of the membrane along with all seams.</u> Remove release film immediately after application of membrane on all block wall construction. Place protection course and backfill immediately after installation of Jiffy Seal 140/60.

**Note:** If membrane is not going to be backfilled immediately after application, mechanical fasteners should be attached to the top of the membrane and covered with a light coat of JS 160H Mastic or JS 160WB Mastic.

#### HORIZONTAL APPLICATION:

After application and curing of primer, apply Jiffy Seal 140 /60 from the low point to the high point across the fall lines so that the laps shed water on horizontal surfaces. Lay the membrane tack side down on the primed surface. Slightly pull the membrane tight and broom or squeegee the material as it comes into contact with the substrate. Smoothing the membrane out with a broom or roller during application, will help to avoid wrinkles, entrapped air, fish mouths and help to obtain maximum contact with the primed surface.

Loose laying the membrane is not recommended.

Prior to placing succeeding sheets or rolls, the "Zip Strip" should be removed to expose the overlap seam. Apply each succeeding sheet in the same manner, overlapping the side laps a minimum of 2 inches. When an overlap happens to align onto the release film of succeeding roll, immediately strip film from under seam and roll overlap firmly. Pressure rolling the overlaps is essential to the development of a complete and permanent monolithic system.

Remove release liner and place suitable drainage board or protection board immediately after application of the membrane.

If the membrane is to be exposed for any prolonged amount of time, broadcast a light coat of mortar dust, talc or place protection board over the membrane the same day of application to reduce the natural outgassing vapor effect of the deck.

Note: Outgassing may be intensified in decks that have been recently subjected to rain, high humidity or other forms of moisture. Consult Protecto Wrap Company for recommendations if these conditions exist.

At the end of each working day, or when application is interrupted by change in construction scheduling or adverse weather, all edges of the membrane at terminations should have a troweled bead of JS 160H Mastic or JS 160WB Mastic applied. All T-joints, end laps and detail cuts should receive a troweled bead of JS 160H Mastic or JS 160WB Mastic the same day of application.

When covering Jiffy Seal 140/60 with an asphaltic concrete mix, the maximum aggregate size for Jiffy Seal 140/60 should not exceed 3/8". Asphaltic application temperature should range between 275 degrees to 300 degrees F. maximum.

# HORIZONTAL APPLICATION - 2-LAYER SYSTEM

Follow the application guidelines for the single layer system as detailed above. When applying a 2-Layer System, remove the release liner from the existing sheet and immediately affix the second layer. The second layer should be installed so the overlaps are offset a minimum 12" from the first course. Care should be taken to ensure the second layer is fully adhered to the first with no air pockets between the layers. The second layer must be rolled or squeegeed as it is being applied, paying particular attention to overlap edges. Prior to placing succeeding sheets or rolls, the "Zip Strip" should be removed to expose the overlap seam. Apply each succeeding sheet in the same manner, overlapping the side laps a minimum of 2 inches. When an overlap happens to align onto the release film of succeeding roll, immediately strip film from under seam and roll overlap firmly. Pressure rolling the overlaps is essential to the development of a complete and permanent monolithic system.

Remove release film and place drainage board or suitable protection board immediately after application of the membrane.

If the membrane is to be exposed for any prolonged amount of time, broadcast a light coat of mortar dust, talc or place protection board over the membrane the same day of application to reduce the natural outgassing vapor effect of the deck.

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### WOOD DECKS:

Use exterior grade plywood on all decks having need of waterproofing protection. Decking should be fastened with ring shank nails. The surface shall be clean, free of sharp protrusions, splintering and warping. Wood must be flush. Butt joints need to be tight. Do not cover open grooves between decking.

After application and curing of primer, apply Jiffy Seal 140/60 in a shingle fashion from the low point to the high point. Apply Jiffy Seal 140/60 a minimum of 4" up the vertical wall and sealed with a troweled bead of JS 160H Mastic or JS 160WB Mastic.

A 3/4" Cant strip is required at the wall base prior to the application of Jiffy Seal140/60. Refer to "Corners" section.

Note: If design does not allow for a cant, consult Protecto Wrap Company for detail recommendations.

# TILE and PAVERS:

Jiffy Seal 140/60 is ideal for use as waterproofing under tile, pavers, shower pans and counter tops with both thin and thick tile sets. Apply Jiffy Seal 140/60 according to the recommendations for Horizontal Applications. Remove release film and apply a troweled layer of mortar to the top of the membrane being careful not to damage the membrane with the trowel. Do not use a V-notched trowel. Follow with the tile set.

Make careful inspection of the applied membrane before covering to make sure the membrane is free of large blisters, fish mouths or any damaged area and repair as needed.

### **REPAIRS:**

If membrane is damaged and requires repairing; clean the area and lightly prime with primer a minimum 6" beyond the area damaged. Cut Jiffy Seal membrane patch so as to cover the area a minimum of 6" in all directions, apply patch to area that was primed and press on the patch and roll firmly. A troweled bead

of JS 160H Mastic or JS 160WB Mastic shall be applied on all edges of the patch and in conjunction with any repair.

# FLOOD TESTING:

JS 160H Mastic or JS 160WB Mastic must cure at least 24 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 located and repaired (see "Repairs") prior to covering the membrane. Re-flood test membrane once repaired.

# WARRANTY CAN NOT BE ENFORCED WITHOUT DOCUMENTATION OF LEAK FREE FLOOD TESTING SUBMITTED TO PROTECTO WRAP COMPANY WITHIN 30 DAYS AFTER TESTING. THE APPLICATOR AND GENERAL CONTRACTOR MUST SIGN THE SUCCESSFUL FLOOD TESTING DOCUMENT.

### **PROTECTION OF MEMBRANE:**

Jiffy Seal waterproofing systems are not designed for long term exposure to sunlight and shall be protected by a suitable weather resistant system.

In order to prevent damage to the membrane, drainage boards or suitable protection board should be applied and backfilling done as soon as possible. After removing the separator sheet place the protection board onto membrane. For vertical application, place protection board the same day of application.

Protect non-traffic horizontal surface areas with 90 lb. felt. Moderate to heavy traffic areas should be protected with 1/8" asphalt hardboard. Vertical walls should be protected with rigid polystyrene foam or asphalt hardboard.

Protection board must be suitable to withstand backfill or topping course. If other trades are allowed on or near membrane, the Contractor should make them aware of the waterproofing. They should take care in working around the installation of membrane and report any consequential damages to the Contractor for repair.

\* 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**

Jiffy Seal 140/60 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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