

#### Quick Reference Installation Guide



### READ BEFORE YOU START

This guide supplies information on recommended installation practices for the pecter product line.

**DecTec** is a watertight walkable PVC membrane roof deck system.

For optimum results it is important to use all products in the system. Use of alternative products will render the Warranty null and void.

**DISCLAIMER:** The information and recommendations contained herein are offered as a service to our customers and are not intended to relieve the user from responsibility. The information and recommendations provided are believed by **DecTec**\* to be accurate at the time of preparations, or obtained by sources believed to be generally liable. **DecTec**\* makes no warranty concerning their accuracy and will not be liable for claims relating to any use regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.

#### **Quick Reference Product "Guide" Basics**

#### **DecTec membrane**

- 60 mil and 72 mil membrane

76" wide x 100', 600' cut to length



#### **WBA 100 Water Based Adhesive**

- High strength adhesive that offers excellent field workability.
- Application Temperature: Minimum 50° F / 10°C for a min. of 24 hours.

2.63 US gallons / 10 litres

Coverage: 300-390 sq. ft. per pail

when applied with recommended trowel



#### **SBA 100 Solvent Based Adhesive**

- High quality adhesive with amazing grab qualities on both flat and vertical surfaces.
- Application Temperature: Minimum 34°F / 1°C

5 US gallons / 18.9 litre

Coverage: 250-300 sq. ft. per pail

Double prime all substrates, see section 9b of this guide



#### DecPatch

- Fill plywood joints and imperfections in the substrate such as voids and knots.
- Application Temperature: 50°F 10 °F (10°C 38°C)

10 lb / 4.5 kg pail

Drying and working times will vary depending on temperature,

humidity, substrate porosity and job-site conditions.

Read pail label for parameters.



#### **DecClad Metal**

- Easiest and most efficient way to terminate membrane details.
- 24 gauge G90 galvanized PVC coated metal, color matched to our membranes.

All lengths are 8'.



#### DecFlash

- Prefabricated, color-matched flashings in 4" and 6" dimensions.
- Confident that your details are watertight

Boxes of 10 pieces per color. Use to "boot" wood columns, door sills and outside corners.



#### **DecCorners**

- Prefabricated, heat weldable flashing material

Boxes of 20 pieces, in white. One piece pre-formed PVC fits

Deck/Wall intersects as well as outside corners.



## **Contractors Check List**

#### For most current details visit www.dec-tec.com

$\bigcirc$	Check local building code requirements and standards.
$\bigcirc$	Confirm intended use for product.
$\bigcirc$	Use Code Compliant Standard wood frame construction.
$\bigcirc$	For best results ensure substructure is cross braced, joists
	are at 16" o.c. max, and framing is properly attached to
	the building.
$\bigcirc$	Follow all safety precautions. Use gloves, goggles and
	respiratory protection. Use extreme caution with power
	tools.
	Note: Inhalation of dust particles is potentially harmful
	to your health.
$\bigcirc$	Follow the instructions printed in this installation guide.
$\bigcirc$	Pressure treated joists not recommended, however if
	used, then use joist caps.
$\bigcirc$	Remove Doors and install DecTec* Flashing.
$\bigcirc$	Cover all decks with a protective surface after membrane
	is installed, prior to completion and/or occupancy.

#### **Tool List**

- \* Leister Triac Hand Welder
- \* 20mm nozzle
- \* Silicone Rubber Hand Roller (40mm wide)
- \* Vinyl Floor Roller, 8"
- \* V-Notch Trowel (1/16" x 1/16" V-Notch)
- 2" Portable Planer
- Chalk Line
- 4" Solvent Resistant Paint Brush
- 3" Putty Knife
- Angle Grinder or Edger (7")
- Grinder Backup Pad (7 5/8")
- 36 Grit Sanding Discs for Grinder
- 1" Wood Chisel
- Tin Snips
- Small Crowbar (12")
- 3/8" Reversible Drill (Keyless Chuck is best)
- 3/16" Masonary Drill Bit for Brick/Concrete
- 5/16" Socket Driver Bit for Drill
- Basic Drill Bit Set
- Safety Glasses and Ear Protection
- Broom or Leaf Blower
- Razor Utility Knife
- Wire Brush (used to clean the welder tip)
- Caulking Gun
- Level
- Square/Straightedge
- Shears (Heavy Scissors)
- Pencil or China Marker
- Cordless Drill
- Medium Nap Solvent Resistant Paint Roller
- Tape Measure
- \* Available from Skyline Building Systems Inc.

# Our Product and Ambient Temperature at Installation

#### Be Aware of:

- Dew Point (see "Cold Temp" tech bulletin on website).
- Moisture content in substrate.
- Temperature limitations of DecTec® Adhesives.
- \* RULE OF THUMB:
  - 1) if it's hot and dry, adhesives set very fast.
  - 2) if it's hot and humid, water based adhesives take much longer to set.
  - 3) if it's cool and dry, ensure you do not spread adhesives below temperature limitations.
  - 4) if it's cool and humid, adhesives may not work. Wait for better conditions!

#### Shoulder Season Installation Requirements

- Shoulder Season is October to March.
- Be aware of condensation on the sheet, inside the wrapped roll or on the substrate.
- Be aware of dew point temperatures.
- Be aware of temperatures for 24 hours before, during and following installation.
- Recommend using ONLY DecTec\* SBA 100 solvent based adhesive if temperatures and/or dew points are at or near installation parameters..

#### REFERENCE GUIDES

- DecTec\* Installation Video, view online, or phone toll free to 1 (866) 461-3914 for a free copy.
- HPO Building Envelope Best Practices Guide
- JLC Guides to Moisture Control
- NRCA www.ncra.org
- SPRI Flexible Membrane Roofing Guide: CD

For the most up to date information or details not covered in this installation guide please visit our website monthly at:

www.dec-tec.com

## The "Do Nots" of DecTec®

- 1. Do not install DecTec\* membrane over Non-approved substrates, (ie) pressure treated plywood luan, OSB, marine board, or AdvanTech\*, etc...).
- 2. Do not install DecTec\* over damp/wet substrate.
- 3. Do not apply adhesive to seams or any other area that requires heat welding.
- 4. Do not apply WBA 100 adhesive to the back of the membrane.
- 5. Do not force dry DecTec\* DecPatch or damp/wet substrates with propane torches.
- 6. Do not glue seams together, all seams MUST be heat welded.
- 7. Do not use adhesives above or below the manufacturers recommended temperature specifications, or beyond their shelf life.
- 8. Do not use adhesives, patches, caulks or any other accessory that is not approved for use in the DecTec\* System.
- 9. Do not allow any air to be trapped under the DecTec\* membrane. Be sure to roll out all air bubbles with the appropriate roller.
- 10. Do not allow DecTec\* membrane to come into contact with any incompatible materials, such as: bituminous based roofing and waterproofing products, oils, solvents, etc...
- 11. Do not install DecTec\* on any on-grade concrete slab application.
- 12. Do not install DecTec\* on substrates without minimum slope of 2%.
- \* AdvanTech is the registered trademark of Huber Engineered Woods.

## **Approved Substrates Sub Structures**

- Acceptable plywood specification: Min. 5/8" thick Tongue & Groove CDX, or Min. 3/4" thick Tongue & Groove APA, Exterior 1 Rated
- 1/2" DensDeck\* Prime installed on top of code compliant substrate.
- Concrete non primed

#### For more details visit www.dec-tec.com

NOTE: Skyline does not, and will not approve the use of ANY substrate not listed above. Use of any substrate other than those listed above will VOID any warranty expressed or implied.

Skyline acknowledges there may be other suitable substrates and is prepared to review and possibly test alternative substrates at its sole discretion.

\*DensDeck Prime is the registered trademark of G-P Gypsum Corp.

# Care and Maintenance for the DecTec Membrane

Periodically wash your deck (as required) using DecTec\* EnviroClean and a medium bristle brush OR if using a power washer, make sure ONLY a "fan" tip spray nozzle is used. This will prevent build up of dirt and debris which in turn will help prevent staining and mildew, as well as potentially slippery conditions.

**DecTec**\* **EnviroClean** is an environmentally friendly cleaner that will remove everyday dirt and grime from your deck surface. See our Care & Cleaning information at:

#### www.dec-tec.com/customersupport

For BBQ areas, DecTec\* recommends a mat be placed under and in front of the BBQ; this will help prevent hot grease burns in the deck.

It is recommended that you periodically move items such as flower pots and patio furniture on your deck to prevent dirt and grime build up.

## Now that you have read everything, let's get started...

## 1.Substrate/Structure Inspection

#### **Check for the following:**

- Substrate must be dry and damage free.
- Make sure all screws are counter sunk. NO nails are to be used.
- Plywood is to be a minimum 5/8" CDX or APA Exterior 1 rated.
- Substrate to have a minimum 2% slope, (1/4" per lineal ft.) pitched from the building towards outside edge of deck, for positive water shed (HINT: Golf Ball Test). If it is a second story deck, inspect from underneath to make sure there are crossing braces. If deck is NOT sloped, inform Owner/Builder/GC in writing that it is to be sloped before DecTec\* is installed.
- Check that joist spacing is as per local building code.
- If over living space, make sure there is proper ventilation.
- Substrate to be fastened to joists at a maximum of 8" oc, and must be adhered to joists with construction adhesive.





#### 2/3. Substrate Preparation

- Clean deck surface and remove all debris or sharp edges.
- Mix and apply DecPatch in the joints and in any imperfections in substrate.
- For plywood substrates, plane perimeter edge of deck 2" to accept drip edge.
- Allow DecPatch to cure as per product data sheet. Sand and/or grind smooth deck surface.
- Finally, blow or sweep off all debris making sure substrate is completely clean and ready to accept adhesive.

DO NOT INSTALL THE DECTEC SYSTEM ON ANY SUBSTRATE OTHER THAN THOSE THAT HAVE BEEN APPROVED.





## 4. Membrane Layout & Dry Fit Installation

- Measure from rim joist in 75". This will allow for a 1" overhang at rim joist. Snap a chalk line.
- Measure length of deck and add 8" for each end wall if applicable.
- Cut and dry fit membrane (check dye lot and for imperfections in the membrane). Roll membrane back half way, making sure that edge of membrane follows the chalk line. Ensure arrows on the back side of membrane are all going in the same direction.
- Cut membrane at outside corner on a 45° angle and allow to fall around corner. This will leave a "V" space at the corner. The wall should already be double primed with solvent based adhesive.





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## 5/6. **DecCorner/DecClad Installation**

- The following accessories are to be installed at initial deck prep and prior to membrane:
  - DecClad Drip Flashing
  - DecCorners



- Install DecCorner Flashings at Deck/Wall Intersects.
- Plane perimeter of plywood substrates 2" to accept DecClad Drip Flashing.
- Install DecClad Metal Flashings using ring nails staggered at 4" intervals.
- Leave 1/4" space between butt joints of metal flashing and weld coverstrip as per detail drawings.





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#### 7.DecDrain Installation

#### For more details see www.dec-tec.com

- Discuss with General Contractor/Plumbing Contractor prior to starting.
- Find low spot on the deck
- Allow enough clearance and make sure joists do not impede where drain is to go.
- Using a hole saw drill a 5" hole through substrate.
- Place drain in hole and centre.
- Trace around perimeter of drain and remove drain.
- Remove 1/8" layer of plywood inside circle using grinder and chisel. This will allow drain to seat flush to plywood.
- Note: Ensure there is proper blocking around drain for support.
- Apply generous continuous bead of construction adhesive to underside of flange and seat in hole. Fasten flange to substrate 2"o/c using appropriate fasteners.
- Remove grate and store.
- Apply membrane over drain and mark membrane over hole.
- Using a utility knife, cut out drain hole.
- Heat weld membrane to flange. Install drain grate to finish.





### 8. DecScupper Installation

- Locate the placement of the scupper.
- Mark and cut out a hole 3" in diameter on the vertical wall, for the outlet tube.
   Remember to drill through the vertical wall, on an angle to match the downward slope of the outlet tube of the scupper.
- Insert the DecScupper through the wall and, using a pencil, outline the scupper onto the plywood.
- Cut and remove 1 or 2 plys only of the plywood, (to a depth of 3/16"), in order to recess the flanges so they are flush, or just below the substrate surfaces for proper drainage.
- Apply a heavy continuous bead of caulk around the entire perimeter of the recessed area, approx. 2" in from the outside edge.
- Set the scupper into place making sure not to smear any caulk onto deck surface.
- Screw vertical and horizontal flanges down to the wall using a wood screw in each corner.
- Apply SBA 100 to the exposed DecScupper.
- Install membrane as per instructions, apply adhesive to the DecScupper as per standard adhesive directions, EXCEPT inside the marked area around the discharge tube. (This is where you will weld the membrane to ensure a watertight seal).
- Locate the discharge tube outlet and cut out the membrane hole to fit inside of the outlet tube.
- Place your welding tip in between the membrane and the scupper flange and fully weld membrane around the entire perimeter of the discharge tube ensuring a total watertight seal; using a 90° nozzle.
- Take a scrap piece of membrane 6" square, cut an "X" to fit over the outlet tube and slide over the tail of the outlet tube from the exterior side of the wall. Run a heavy continuous bead of caulk all the way around the outlet tube tight at the wall. Slide the membrane patch tight to the wall making full contact with the caulk and staple the membrane ashing onto the wall. Run another heavy continuous bead of caulk again around the perimeter of the outlet tube tight to the membrane.

## 9a.Installation Using DecTec® WBA 100 Water Based Adhesive

- DecTec WBA 100 Water Based Adhesive to be applied to approved substrate using a 1/16" x 3/32" V notched trowel.
- Stir glue thoroughly before applying.
- Apply adhesive in a sweeping motion making sure trowel is at a slight angle to surface.
- Wood grain should still be visible through the adhesive.

#### Notes:

- Check best before date, DO NOT use past expiry.
- DO NOT apply adhesive in seam areas.
- DO NOT apply WBA adhesive in temperatures outside of Manufacturer Specifications.
- DO NOT allow glue to freeze. If it freezes, discard as per local requirements.
- For all vertical details where siding or other cladding will terminate higher than 2" off the decks, use SBA 100 Solvent Based Adhesive.

Note: See Installation Video for more detailed instructions





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# 9b.Installation Using DecTec® SBA100 Solvent Based Adhesive

- DecTec® SBA 100 Solvent Based Adhesive to be applied to approved substrate using medium nap, solvent resistant paint roller. Coat the entire area to be covered with DecTec® (except DecClad, or any other areas to be welded).
- Stir glue thoroughly before applying.
- Double prime the substrate by first applying one coast and allowing to DRY completely (not tacky to the touch). Then apply second coat and allow it to DRY completely.
- Apply solvent based adhesive to back of membrane.
- Allow adhesive to become stringy and apply to substrate.

#### Notes:

- Check best before date, DO NOT use past expiry.
- DO NOT apply adhesive to any areas that will be welded together.
- DO NOT apply SBA100 solvent based adhesive in temperatures outside of Manufacturer Specifications.





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#### 10a. Roll Membrane into **Adhesive**

- Roll membrane into adhesive.
- "Butterfly" up other half of membrane and apply adhesive. Roll membrane into adhesive and roll out all bubbles out using vinyl roller.







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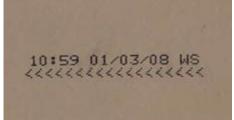
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## 10b. Multiple Piece Installation

(if required)

- Measure 2" back on installed membrane mark with pencil.
- Measure length and width. For width of membrane add 2" for overlap and 8" to go up the wall.
- Check membrane for dye lot and install membrane in same direction as first sheet. Check the back of the membrane for direction arrows.
- Roll membrane back half way and apply appropriate adhesive. Make sure membrane is flush to pencil marks.
- Roll other half of membrane back and apply appropriate adhesive. Roll membrane into adhesive making sure membrane lines up with pencil marks.
- Once membrane is adhered, roll out using vinyl roller, being sure to roll length wise and width wise. This will ensure adhesion and remove air bubbles.







## 11a. Membrane to Wall Application

- Once membrane is secured to substrate, adhere the membrane flashing up the wall (minimum 6").
- Crease at wall/deck intersect. This will provide a clean visual break between wall and deck.
- Fold membrane over and apply SBA Solvent based adhesive using solvent resistant brush. Note: Double prime substrate, see # 9b.
- Coat back of membrane and allow to become stringy to the touch.
- Once stringy, adhere membrane to wall and roll out all air bubbles and creases.
- If walls are exposed and paper and siding will not be installed right away, use 3" foil tape (or mechanically fasten) to seal it and avoid water intrusion.







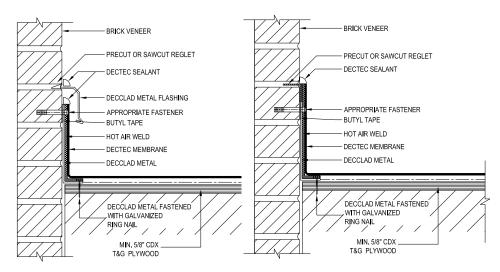


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### 11b. Membrane to Wall **Application**Brick, Stucco, or Block using

**DecClad Kick Metal** 

- Mechanically fasten kick metal to brick, stucco or block wall.
- Crease membrane at wall intersect.
- Heat weld membrane to kick metal.
- Cut off excess material.
- Apply a bead of Tremco 830 caulking along the top of the kick metal.



MEMBRANE WALL FLASHING FOR BRICK / STUCCO W/ SAWCUT REGLET

MEMBRANE WALL FLASHING FOR BRICK / STUCCO W/ SAWCUT REGLET W/O **COUNTER FLASH** 

\*See all detail drawings at www.dec-tec.com

## 12. Outside Corner Using Pre-Manufactured 6" DecFlash

- Apply SBA 100 Solvent Based Adhesive to back of corner making sure not to apply in areas that need to be welded. Allow to become stringy and apply to corner.
- Heat weld all flaps.







# 13/14. Door Sill & Post Wrap using DecTec Pre-Manufactured 6" DecFlash

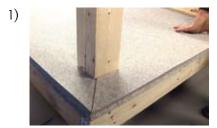
- Adhere field membrane to wall using SBA 100 Solvent Based Adhesive.
- Cut vertically at edge of sill and fold over.
- Adhere to sill plate using SBA 100 Solvent Based Adhesive.
- Cut 6" DecFlash in half. This will create a left and a right patch for the sill.
- Coat back of DecFlash with SBA 100 Solvent Based Adhesive (leave 1" for heat welding).
   Allow to become stringy and then install. Weld remainder to membrane and repeat on other side.







- Dry fit and trim 2 units to size leaving a 1" overlap on vertical for welding.
- Round off horizontal corners.
- Apply SBA 100 Solvent Based Adhesive in non-weld areas.
- Apply SBA 100 Solvent Based Adhesive to Post 6" from deck. Note: be careful not to get any on the field membrane.
- Install one side, then the other as per instructions above.
- Heat weld vertical and field membrane overlaps together.







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## 15.Inside Corner Detail (Pigs Ear)

This is where two walls meet to form an inside corner.

- Membrane is applied to the walls where excess material comes to corner. and forms a triangle.
- Get membrane as tight as possible to the corner
- Heat weld the inside of pigs ear shut, making sure it is sealed.
- Fold over and heat weld tight to wall.



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#### 16/17. Trim/Heat Welding

- Trim off excess material
- Weld all seams.
- Weld all terminations to DecClad.
- Weld all accessory flashings not yet completed.
- Upon completion of project check all welds, seams, and details using a rounded flat head screwdriver for any weak spots where water could possibly infiltrate the system. Re-weld all areas that are not 100% sealed.

#### \*See Installation Video or www.dec-tec.com for more detailed instructions.











#### 18. Final Inspection

- Make sure deck is clean and all excess material and waste is cleaned up. If the customer is available, walk them through the installation.
- Prior to demobilization from the site, the work shall be reviewed by the Owner's Representative and the Applicator. All defects noted and noncompliances with the Specification or recommendations of DecTec® shall be itemized in a punch list. These items must be corrected immediately by the Applicator to the satisfaction of the Owner's Representative prior to demobilization.
- Provide Warranty package to owner.

#### WARRANTY

#### **DecTec® Vinyl Membrane 10 Year Limited Warranty:**

To receive your complete Warranty package please visit us online at:

www.dec-tec.com

Or call us at: 1 (866) 461-3914

Fax: 1(866) 461-3915

\* Warranty period begins on installation date and must be registered within 90 days of this date to be valid.

**ADMINISTRATIVE OFFICE:** 4500 8A Street NE, Calgary AB T2E 4J7 Tel: (403) 277-0700 Fax: (403) 398-9910



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