CARLISLE SYNTEC SYSTEMS

PVC Best Practices Cliff Notes (PVC Adhesives)

Low-VOC PVC Bonding Adhesive

General

- PVC & KEE HP bareback membrane (field & walls)
- PVC & KEE HP FleeceBACK® membrane (walls only)
- Store at room temperature
- Shelf life - 1 year

Application

- Prior to applying, stir until uniform in color (5 minutes recommended)
- Roller applied

Application Cont.

- Contact adhesive - (applied to membrane & substrate)
- Coverage rate (field & walls) - 60 ft² per gal finished surface (includes coverage on both surfaces)
- Flashed off - when there is little to no tack
- Open window after flash off - roughly 15 – 20 minutes depending on ambient temperature
- Immediately broom membrane after application

Caution

- If using mechanical dispenser to apply adhesive, backrolling is required
- Maintain product at least 60°F during application for ease of spreading
- For FleeceBACK membrane application on walls, reference Carlisle's 3-part FleeceBACK specification

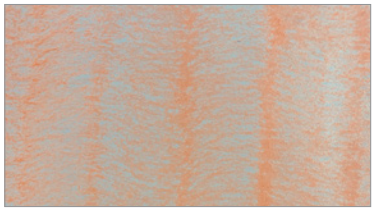
CAV-GRIP® PVC Adhesive CAV-GRIP hose and gun required (sold separately)

General

- PVC bareback membrane (field & walls)
- FleeceBACK membrane (walls only)
- **NOT for use on KEE HP bareback membrane**
- Store between 70° and 90°F
- Shelf life - 1 year

Application

- Spray applied
- Contact adhesive (applied to membrane & substrate)



Proper Field Coverage on Membrane

- Field: 2" – 3" overlapping spray pattern
- Walls: 50% overlapping spray pattern

Application Cont.

- Standard cylinder coverage rate - finished surface (includes coverage on both surfaces): Field 750 ft², walls 400 ft²
- Large cylinder coverage rate - finished surface (includes coverage on both surfaces): Field 1,500 ft², walls 800 ft²
- Flashed off - when there is little to no tack
- Open window after flash off - roughly 15 – 20 minutes depending on ambient temperature
- Immediately broom, then roll membrane with 150-lb weighted segmented roller after application

Caution

- When tank is depleted, clean gun and hose with PVC UN-TACK® prior to connecting to a new tank to help optimize spray
- Clean gun tip frequently
- Minimum ambient application temperature: 35°F
- Maintain product at least 70°F during application, not to exceed 110°F
- Tip: in colder temperatures, using Powerblankets will help to maintain the adhesive over 70°F (cold tanks will spray poorly)

HydroBond™ Water Based Bonding Adhesive

General

- PVC bareback membrane - field & walls
- FleeceBACK membrane - field & walls
- **NOT for use on KEE HP bareback membrane**
- Store at room temperature
- Shelf life - 1 year

Application

- Roller or spray applied
- Mix well before using

Spray application requires airless spray equipment. Roller application is also acceptable.

Application Cont.

- One-sided wet lay-in adhesive - Field/slopes not exceeding 2:12 (applied to substrate only)
- If used on vertical walls, reference product data sheet
- Coverage rate: 100 – 133 ft² depending on application & substrate type (reference product data sheet for specifics)
- Applying the adhesive 3' – 4' at a time ahead of the roll is recommended to prevent drying of the adhesive. Adhesive must not dry during the application process.
- Immediately broom membrane after application

Caution

- For use on roofs with slopes up to 2:12
- Apply when ambient temp is 40°F and rising
- Do not apply if temperature will drop below 32°F before adhesive completely dries (normally 72 hours, longer in cool or humid weather)

PVC Best Practices Cliff Notes (Welding and PVC Pressure-Sensitive Products)

Cleaning (Prior to Welding)

If membrane becomes dirty during installation, clean residue from weld area using Sure-Flex™ PVC and KEE HP Membrane Cleaner, or Low-VOC Membrane Cleaner with a splice wipe or clean natural fiber (cotton) rag.

- Use cleaner SPARSELY and allow weld area to dry prior to welding. Not allowing cleaner to dry can affect welds.
- DO NOT use excessive amounts of cleaner as this will prolong dry time.

Test Welds (Automatic Welder)

Automatic Welder
Perform a test weld (at a minimum) upon the start of work each morning and afternoon to ensure automatic welder is achieving good welds.

How to Perform a Test Weld

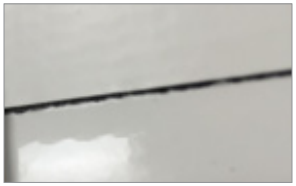
- Weld sacrificial piece of membrane with recommended automatic welder settings
- Caution: Ensure test weld is performed on same substrate that is to be welded over
- Cut and pull 1"-wide splice sample across seam (sample must be completely cool)

Good Weld
(Minimum 1.5" delamination from membrane scrim)

Bad Weld
(Adjust automatic welder settings until a good weld is achieved)

Caution: Ambient temperature, substrate, and other factors can affect the settings necessary for automatic welder to achieve good welds. Test welds help to ensure automatic welder is properly synced to the working environment.

Hand Welding



Bleed Out

- Properly welded PVC seams should produce "bleed-out", particularly when using a hand welder
- "Bleed-out" refers to the flow of the bottom ply outside the welded seam

Caution:
Do not overheat membrane when welding (yellowing or browning discoloration along seam indicates overheating)

Pressure-Sensitive Products on PVC

Pressure-Sensitive products for PVC are applicable on the following details:

- U-1G - Pressure-Sensitive PVC/KEE HP Cover Strip
- U-13G - PVC/KEE HP tie-in to existing single-ply roof membranes on concrete deck
- U-13H - PVC/KEE HP tie-in to existing single-ply roof membranes on metal deck
- U-18D - Scupper with PVC/KEE HP PS Cover Strip Flashing

Pressure-Sensitive Products on PVC (Primers)

Low-VOC Step 1 Activator
Stir product prior to use

***Step 2 Primer**
Stir product prior to use

Low-VOC Step 2 Primer
DO NOT stir product prior to use

- Store primers at room temperature
- Shelf life - 1 year for all primers shown above
- If primers fall below 60°F, restore to room temperature before use
- *Standard PVC Step 2 Primer for locations where low-VOC primers are not required

Typical Properties and Characteristics

Surface	Step 1 Activator Activator must be allowed to dry prior to application of step 2 primer	Step 2 Primer Install Pressure-Sensitive material after step 2 primer flashes off and while it is still tacky
PVC or KEE HP Membrane	✓ Required	✓ Required
Metal	✗ Not required	✓ Required
TPO or EPDM Membrane (For PVC or KEE HP Membrane Tie-ins to TPO or EPDM)	✗ DO NOT USE	Use Approved TPO or EPDM primer for corresponding membrane (Reference Carlisle Specifications for Approved product)

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