

CertainTeed
platon[®]

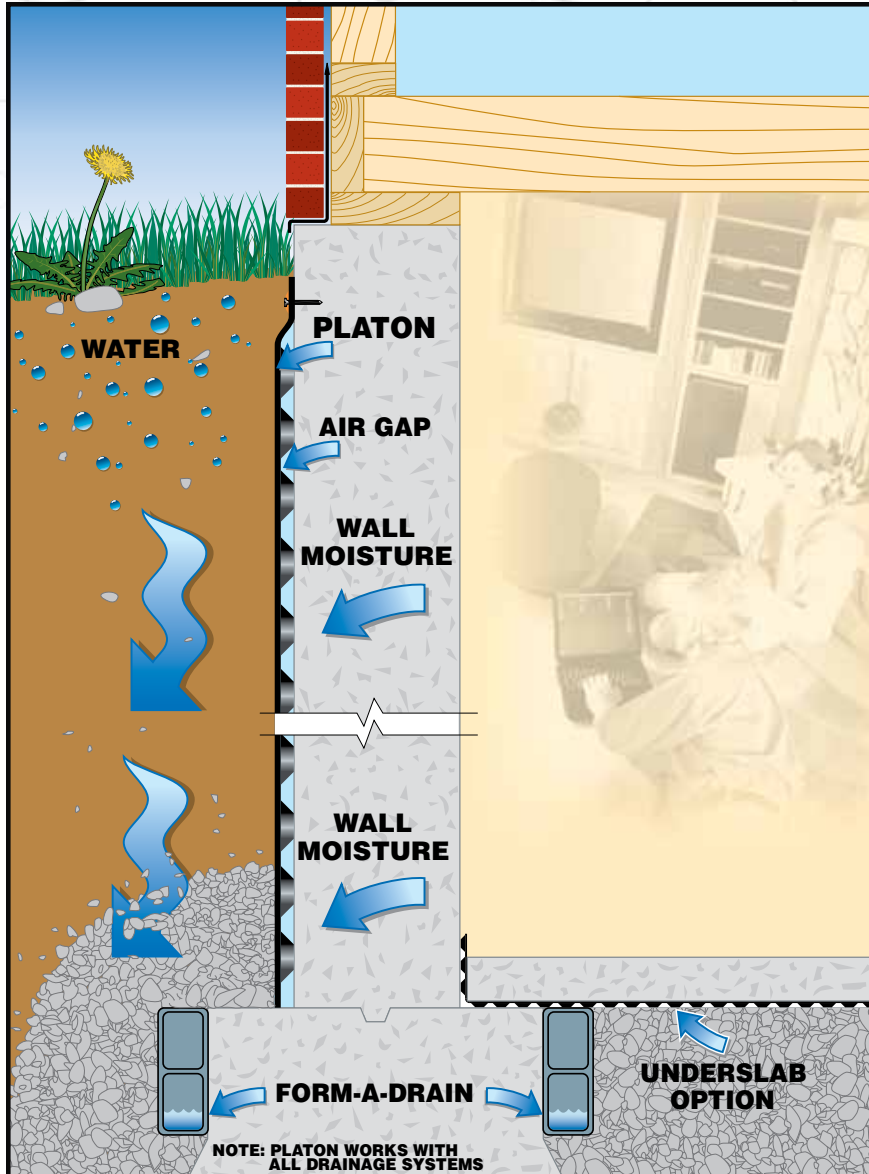
KEEP IT DRY.

Air Gap Waterproofing Membrane



Installation Guide

CertainTeed
SAINT-GOBAIN



Introduction

Platon is a uniquely dimpled, 24-mil high density polyethylene membrane, performance proven since 1991 to prevent basement leakage problems.

Platon features:

- Double leakage protection
(Holds wet soil away from the wall and provides drainage)
- Allows the wall to dry
- Easily bridges 1/4" cracks
- Keeps working even if the wall cracks or shifts
- Works on any type of foundation, old or new, regardless of wall condition
- Installs in any kind of weather
- Double Dimple design provides a smooth, low drag, soil side surface.
- Easily installed with concrete nails (use screws on ICF foundations)
- No other wall treatment is required
- Excellent protection board for other types of waterproofing *(Triple leakage protection)*
- 30 Year Manufacturers Limited Product Leakage Warranty *(Foundation use)*

Environmentally Responsible:

- High recycled content (92%)
- Chemically Inert – No by-products contaminate soil or air
- All manufacturing waste is recycled

It is imperative, as with all waterproofing systems, that foundation drainage, like Form-A-Drain® or traditional drain tile is in place and functioning properly to ensure that water and moisture drained by Platon can be removed.

PLATON FOUNDATION PROTECTOR – DON'T BUILD WITHOUT IT

Material Requirements

Platon Membrane – One roll for every 62 lineal feet of foundation (*allows for joint overlap*)

Roll Height = Finished grade to top of footing (*If wall height exceeds available roll height overlap 2 sections by 6"*)

Platon Speedclips – 65 per roll of membrane OR

Platon Speedstrips – 16 per roll of membrane

Notes:

Speedclips secure the membrane and press the smooth tab tight to the wall - caulking required.

Speedstrips secure the membrane and provide a continuous seal along the top of the membrane – no caulking required.

Platon Molding – 6'6" lengths - Typically 5 strips per job (*Molding seals open edges of the membrane*)

Molding can also be used to provide a continuous seal along the top of the membrane when using Speedclips – eliminates need for caulking - 10 strips per roll of membrane.

Caulking

(Not required with Speedclip/Molding or Speedstrip installations)

Minimum 2 tubes per roll

For concrete foundations, use asphalt based roof mastic or butyl rubber caulking (silicone, latex or polyurethane caulks do not stick to polyethylene)

For ICF's use foam panel adhesive

Fasteners

For concrete, use 1-1/4" concrete nails. (*For production work consider a gas-activated concrete nailer*)

For ICF foundations, use 1-5/8" drywall or corrosion resistant deck screws

(For production work consider a collated screw gun)

Notes:

Green concrete can be hand nailed

Block and cured concrete is power nailed

Use screws for ICF foundations



Speedclips



Platon Molding



Speedstrips

Installation



Foundation Preparation

- Break off form ties and sharp points
- Clear stone and debris from footing
- Patch round tie rod holes (no need to patch flat form tie breaks used with most aluminum wall forming systems)
- Parge or dampproof the lowest course of block foundations
- Determine finished grade and mark with a chalk line
- When using Speedclips, caulking is used between the smooth tab and wall to prevent dirt from getting behind the membrane and clogging the air gap. Either run a bead of caulk 1" below the chalk line before installing the Platon OR, after Platon is installed, caulk along the top of the Platon to seal any open gaps.
- When using Speedstrips or Speedclips and Platon Molding, caulking is not required.



NOTE: Overlap vertical joints by 20" (if water enters the seam it will flow to the footing before it reaches the wall)

Begin Installation

- Unroll Platon, working from left to right, dimples toward the wall. Smooth tab at the top follows the chalk line. Where full height attached garage foundation meets house, extend Platon 12" onto garage foundation. (Also see Jump Walls - Page 7)
- Nail one Speedclip to act as a pivot, unroll a 10' length of Platon, pull the smooth tab tight, tack with another Speedclip and continue until the foundation is wrapped.
- Fold and crease Platon at corners to get the best fit

Notes

- *Platon membrane must extend from finished grade (chalk line) to the top of the footing. Platon can be sawn to height while rolled up.*
- *Standing the roll on the footing when unrolling Platon is easiest.*
- *Excess membrane (if any) may be folded out and cut even with the footing edge. Crease the Platon sharply at the footing/wall corner and lay flat on the footing to prevent pull-down.*
- *Where finished grade slopes (e.g. walkout basements) install tapered sections first.*

Continue installation

After the Platon is "tacked up"

- Secure with Speedclips 12" OC (8" between clips).
Speedclips mesh the top 2 rows of dimples and the offset presses the smooth tab to the wall.

OR



Install Speedstrips

- Speedstrips mesh the top row and a half of dimples and press the smooth tab to the wall.
- Nail through the small holes in the "Fastening Area" beginning at the middle of the Speedstrip and working toward each end.
- There will be a 1/4" gap between Speedstrips.
- On ICF's, screw through the "Fastening Area" into the ICF webs (fastening points marked by the ICF manufacturer) 6" or 8" centers.



Heavy Clay Soil

(Roll heights greater than 6'9")

- Install a second row of Speedclips 24" OC half way up the wall.
- Backfill carefully in 3 or more lifts

Tip - When installing 10' Platon "tack" the roll 6' up from the footer using Speedclips 24" OC, then use a ladder to reach and finish the top with Speedclips or Speedstrips





- If using Speedclips, use the cut out piece to seal the lower edge (mesh the dimples – secure with Speedclips)

Windows

- Cut Platon membrane flush with the sides and 3" lower than the bottom of the opening
- If using Speedstrips, mesh and fasten a Speedstrip to seal the lower cut opening



Window Wells

- Platon is sandwiched between the window-well and the foundation. Trim exposed Platon inside the window-well along the sides



Platon Molding

- L shaped strip 6'6" long
- Used to seal open air-gap areas of Platon where dirt could enter and clog the air gap (e.g. *Beginning and end points of installation*)

Also used to provide a continuous seal along the top of the membrane when using Speedclips – no caulking required

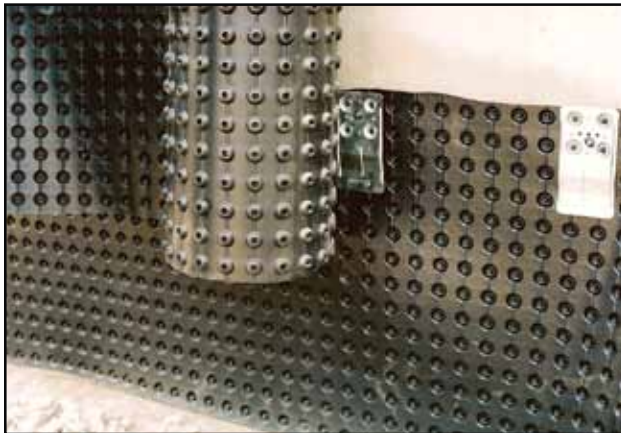


Gradual Change in Grade

- Measure grade change chalk line length, add 20" for joint overlap and cut that length of Platon membrane
- Follow the chalk line with the smooth tab and fasten with Speedclips or Speedstrips
- Cut surplus membrane at the wall/footing junction
- Surplus membrane without a smooth tab can be used if the top gap is sealed with Speedstrips or Speedclips and molding. The factory cut edge should follow the grade chalk line so Speedstrips will mesh



- Use Speedstrips – nail both the fastening area and the top edge of the Speedstrip using a “W” pattern – enough dimples will engage to hold the Platon in place



Step Change in Grade

- Cut membrane to proposed finished grade
- Fasten with Speedclips and use molding to seal the cut edge

OR



Tall Walls

- Platon is overlapped horizontally when the distance from the footing to finished grade exceeds the roll height
- Cut a section of Platon into predetermined widths (trim off the smooth tab) and install along the bottom using Speedclips
- The full height roll (with a smooth tab) is then installed to overlap the strip by at least 6"
- Alternatively, the full height roll can be installed first using Speedclips (trim off the smooth tab). Then install the strip - Speedclips and molding or Speedstrips must be used to cover the air gap along the top of the strip

Jump Walls

E.g., a 4' frost wall joins an 8' basement foundation

- Extend Platon 24" along the frost wall as shown
- Cut Platon horizontally, flush with the bottom of the frost wall
- Secure the top section to the frost wall and the lower section to the basement wall
- Repeat the procedure on the other side of the frost wall, overlapping the Platon below the frost wall
- Cap vertical open gaps on the frost wall with Platon Molding
- Caulk gap at the frost wall/foundation wall junction



Pipe Projections

(Pipe must be sealed to foundation with hydraulic cement)

- Split Platon membrane vertically from the pipe to either top or bottom
- Cut Platon snug around the pipe
- Apply a 24" wide patch over the split
- Mesh the dimples – Speedclip the top, tape sides, caulk Platon at pipe



Tear Repair

- Caulk around the tear
- Cut a piece of Platon 12" larger than the tear to be repaired
- Place over the tear, meshing the dimples, Speedclip top, tape edges



Flood Boot

A flood boot must be installed prior to installing Platon membrane if:

1. A high water table is encountered
 2. Footing drain is unable to take away water drained by Platon
 3. Footing drain is placed on top of the footing
 4. Floor slab is poured level with, rather than on top of the footing
 5. Foundation is concrete block (parge or dampproof the 1st course of block to prevent "wicking")
- Flood Boot may be a "peel and stick" membrane or rubberised asphalt waterproofing covering the footing and wall to a point one foot higher than the anticipated water table

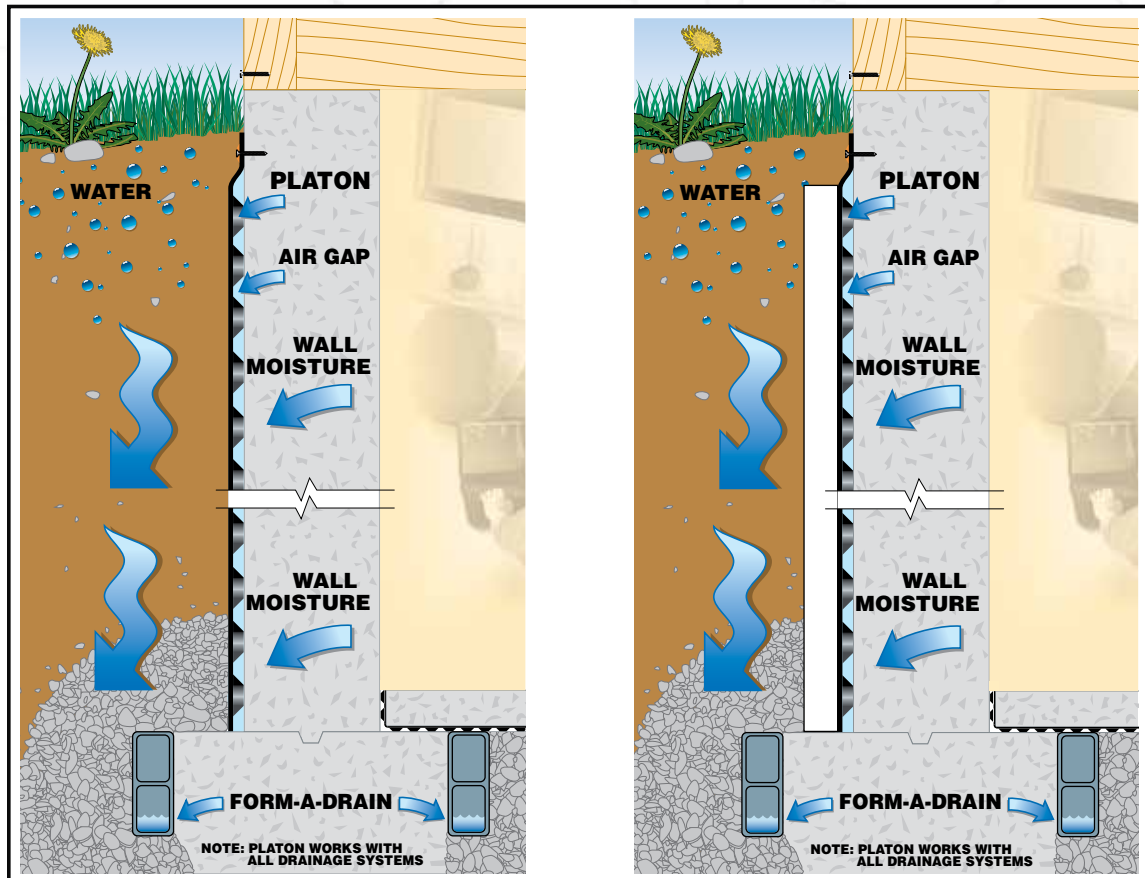
Follow product manufacturers instructions

Insulation

- Best practice - EPS foam is typically installed OVER Platon
- Use vertical insulation panels - stand on the footing
- Platon and the air gap do not detract from the R value of the insulation.

If installing Platon over foam, use Speedstrips and concrete nails long enough to penetrate 1" into the concrete

Note: Platon can be installed directly over concrete walls with conventional means where the ThermaEZE™ or T-Roc™ insulation system is used on interior walls.



Footing Drainage

- A working footing drain, like Form-A-Drain or traditional drain tile, is imperative with all foundation waterproofing systems
- Follow local building codes in your area

Backfilling

- Clean stone must be placed over the footing drain and up the wall as per local building code
- Do not permit machinery, large rocks or frozen clumps to impact the Platon
- Backfill carefully using 2 or 3 lifts of backfill
- Compacting each lift will reduce excessive settling later

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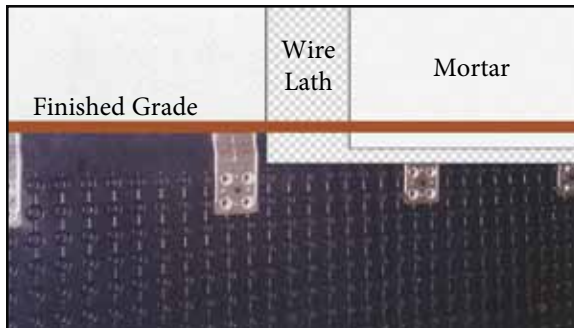
Platon is IDEAL on Insulated Concrete Forms

- Performance proven since 1994 with zero Platon related leaks reported
- “Stand alone” system
- Easily installed over oxidised, wet or dirty block
- Bridges 1/4" gaps
- No temperature or weather restrictions

Follow instructions for concrete foundations

- Caulk must be foam compatible e.g. *foam panel adhesive*
- Screw into the ICF web or fastening point instead of using concrete nails
- Speedclips - use the fastening hole that best lines up with the ICF web
- Speedstrips can be screwed into each web anywhere in the “Fastening Area”

(Tip - A collated screw gun speeds installation)



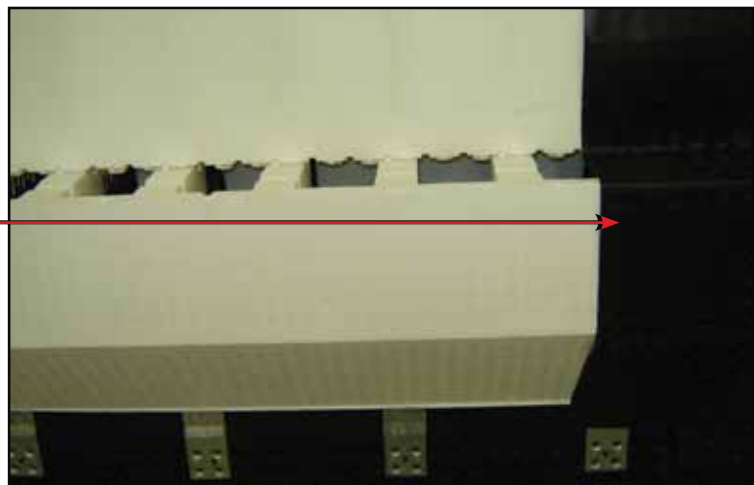
To transition from Platon to exposed foam:

- Apply galvanized metal lath - screw into the ICF webs
- Lath covers exposed foam and extends 2" or more over the Platon
- Parge lath with mortar mix typically used on foundations
Dirt can not get behind the Platon so caulk is not required

Brick ledges on ICF foundations usually protrude from the foundation.

- Fasten Platon to the vertical wall below the brick ledge protrusion
- Apply a “peel and stick” waterproofing membrane to cover the protrusion and horizontal brick ledge, extending both up the wall behind the brick and over the top of the Platon

Follow “peel and stick” manufacturers instructions for surface preparation and temperature restrictions



It is nearly impossible to find a leak in an ICF foundation without destroying the foam - do it right the first time with Platon

PLATON SUBFLOOR SYSTEM

Lifts the floor off damp, cold concrete and allows the concrete to breathe

SEAMLESS HDPE barrier protects floor coverings from slab moisture for a floor that is comfortable, healthy, warm and dry.

Its like having an "above grade" floor !



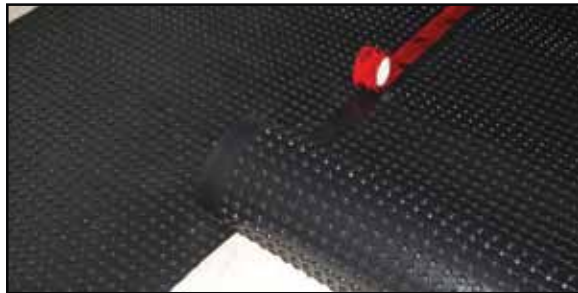
Step 1

- Remove existing floor coverings
- Level low areas if required
- Clear organic debris



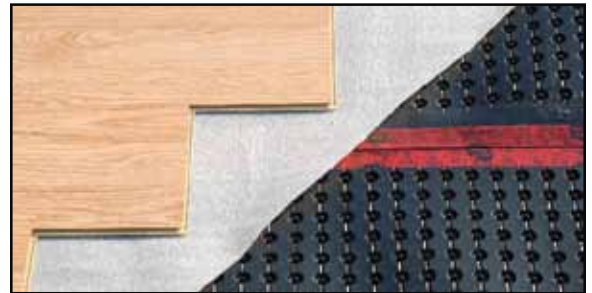
Step 2

- Unroll first strip of Platon DIMPLES DOWN
- Cut to length
- Cut off smooth tab



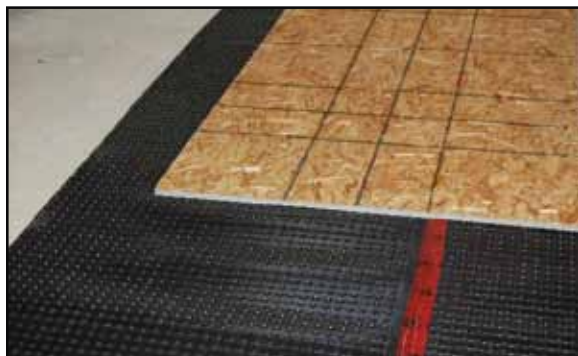
Step 3

- Install second strip of Platon
- Smooth tab overlaps 2 rows of dimples on adjacent strip.
- Tape seam with "housewrap" tape



Step 4 - A

- Laminate underpad and flooring is installed directly over Platon
 - Outperforms "dampproof" underpad
- Follow Laminate manufacturers instructions*



Step 4 - B

- Other floor coverings require a "load spreading sheet" or subfloor (Minimum 7/16" OSB)
- Fit and lay the subfloor panels on the Platon
- Fasten to the concrete around room perimeter
- Also fasten where there is vertical movement



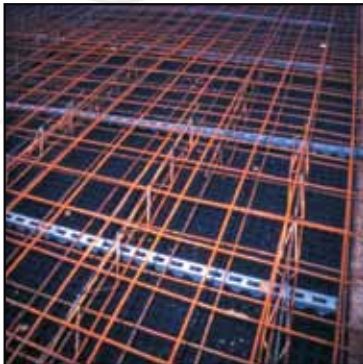
Notes

- Fasten with concrete screws or masonry nails
- Non load bearing walls may be framed on the subfloor
- Install your choice of floor covering following manufacturers "above grade" instructions

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Permanent Underslab Dampproofing



Platon, a tough, dimpled, 24 mil High-Density Polyethylene membrane, is impervious to both moisture and the high alkaline environment presented by concrete. With Platon as the dampproofing membrane, ground moisture is sealed off, giving total protection against damp damage and complete freedom of choice in floor coverings.

Commonly used builders polyethylene is easily damaged during concrete placement and has relatively low water vapor resistance. In the high alkaline environment created by concrete and moisture, non-stabilized builders' polyethylene becomes brittle and soon ceases to perform as dampproofing

Installation

Platon membrane is installed with the dimples down

Joints are sealed with butyl rubber "Roof and Gutter" caulk. Housewrap tape can be used to hold joints together until the floor is poured

At walls, the edge of Platon membrane can be turned up so it is higher than the proposed floor thickness. It can be trimmed flush with the floor later if desired



Reinforcing mesh and concrete are placed over the Platon membrane using standard placement procedures

For radiantly heated floors, EPS foam is placed OVER the Platon membrane before the floor is poured

The membrane is tough enough to walk on without puncturing it, but plank walkways should be used if transporting concrete over the membrane

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