

DRAINAGE SOLUTIONS AND WATER TREATMENT / PLATON

INSTALLING PLATON AS A FOUNDATION WRAP



MATERIAL REQUIREMENTS



Platon Membrane

- One roll for every 19m (62') of foundation (allows for joint overlap)
- Membrane can be overlapped horizontally by 15cm (6") for deep foundations



Platon Moulding

- 198cm (72") lengths
- Typically 5 pieces per job
- 10 lengths per roll of Platon if using Plugs



Caulking

- Minimum 2 tubes per roll
- For concrete or wood foundations, use butyl rubber or asphalt-based roof cement
- For insulated concrete forms (ICF), use foam panel adhesive
- Do not use silicone, latex or polyurethane



Fastening Tool

- Use a nail gun for block and cured concrete
- For ICF and PWF, use a cordless drill/screwdriver



Platon Speedclips and/or Plugs

 65 Speedclips per roll of membrane, or 1 bag of Platon plugs per 3 rolls of membrane



Fasteners

- For concrete, use 32mm (1¼") concrete nails
- For ICF and PWF, use 41mm (1%") corrosion-resistant deck screws
- Speedclips 1 per clip
- Moulding 10 per piece



Prepare

Break off all ties and projections on the wall and clear stone and debris from the footing.

Seal tie rod holes with mastic. Insulated Concrete Form (ICF) walls do not need any surface preparation. Parge block walls.

Chalk a line at finished grade around the foundation.



STEP 2

Chalk And Caulk

Run a generous bead of caulking 25mm (1") below the chalk line.

- If using Speedclips, caulk between the smooth tab and the wall to prevent dirt from getting behind the membrane and clogging the air gap.
- When using Speedclips and Platon Moulding, caulking is not required.

STEP 3

Roll Out

Working from left to right, unroll the membrane along the foundation, dimples toward the wall, smooth tab at the top, following the chalk line. Keep the smooth tab tight to the wall and "tack" it up using Speedclips.

- Platon must wrap the foundation from a point directly touching the top of the footing up to finished grade or ground level.
- Where the finished grade slopes (for example, walkout basements), install tapered sections first.
- If the height of the roll permits, Platon can be creased sharply at the foundation/footing joint and brought out over the footing.
- Alternatively, excess membrane may be folded out and cut even with the footing edge.
- Standing the roll on the footing when unrolling Platon is easiest.

Joints

For vertical joints between rolls, overlap a minimum of 51cm (20"). Water in the joint will flow to the footing drain before it reaches the wall. Horizontal joints, if required, should be overlapped by 5 dimples, with the upper course over the lower one.





STEP 4

Fasten

Fasten with Speedclips 30cm (12") apart along the top of the membrane. The Speedclip dimples mesh with the top two rows of Platon dimples and the Speedclip offset presses the smooth tab tight to the wall. Nail (or screw on ICFs) through the small center hole between dimples.

Alternatively, fasten with Platon Plugs and nails in the second and third row of dimples, spaced 20cm to 30cm (8" to 12") apart. Secure the smooth tab with Platon Moulding strips along the top of the tab.

Heavy Clay Soil

- For rolls taller than 2.06m (6'9"), install a second row of Speedclips 61cm (24") apart, half-way up the wall. Backfill carefully in three or more lifts.
- When installing 3.05m (10') Platon, "tack" the roll 1.83m (6') up from the footer with Speedclips 61cm (24") apart, then use a ladder to fasten the top.
- Without Speedclips, clay soil requires additional plugs in the fifth row of dimples.



STEP 5

Platon Moulding

Moulding seals open air gap areas of Platon where dirt could enter and clog the air gap. Typically, these areas are the beginning and end points of installation. No caulking is required when used in conjuction with Speedclips because Platon Moulding provides a continuous seal along the top of the membrane.



STEP 6 - SPECIAL APPLICATIONS

Corners

Bend and crease the membrane to provide the best fit.

Windows

Cut Platon membrane flush with the side and 8cm (3") lower than the window opening. If using Speedclips, move the cutout piece down to seal the open horizontal cut, mesh the dimples and fasten with Speedclips. If using Platon Plugs, continue the nailing pattern below the window opening and seal the open horizontal cut with Platon Moulding.

Window Wells

The window well is installed over the membrane. Trim any exposed Platon inside the window well, along the sides, and caulk.

Sloped Grades

Note: Install Platon on the lowest elevation first, then the sloped grade, then the highter elevations. For a gradual slope, measure the grade change chalk line length, add 51cm (20") for joint overlap, and cut that length of Platon. Install with the smooth tab following the chalk line, fasten with Speedclips or Platon Plugs and Moulding, and trim along the edge of the footing.

Steep Change in Grade

Note: Install Platon on the lowest elevation first, then the sloped grade, then the highter elevations. Cut the membrane to match finished grade and seal the open edge with caulk and Platon Moulding.

Tall Walls

Overlap Platon horizontally when the distance from the footing to the 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. Install the full-height roll (with a smooth tab), overlapping the first strip by at least 15.2cm (6").

Jump Walls

For example, a 1.2m (4') frost wall joins a 2.4m (8') basement foundation.

Extend Platon 61cm (24") along the frost wall (shown right) and cut Platon horizontally so that it is 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 with Platon Moulding and caulk the gap at the frost wall and foundation wall junction.

Pipe Projections

The pipe must be sealed to the foundation with hydraulic cement before Platon is installed. Split Platon vertically from the pipe to either top or bottom. Cut it snug around the pipe. Caulk around the pipe and both sides of the split. Apply a 61cm (24") wide patch of Platon over the split and fasten with Speedclips or Platon Plugs.

Tear Repair

Caulk around the tear. Apply a 61cm (24") wide patch of Platon over the tear, meshing the dimples, and fasten with Speedclips or Platon Plugs.











Flood Boot

Apply a "peel and stick" or rubberized liquid waterproofing to cover the footing (or brick ledge) and wall to a point 30cm (12") higher than the anticipated water table. Follow product manufacturers instructions.

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

- · A high water table is encountered
- The footing drain is placed on top of the footing
- Floor slab is poured level with, rather than on top of, the footing
- On any horizontal below grade step in the foundation such as a buried brick ledge

Insulation

Platon and the air gap do not detract from the R value of the insulation.

- Extruded polystyrene (EPS) foam is installed over Platon
- Vertical insulation panels stand on the footing
- If installing Platon over foam, use Speedclips and concrete nails long enough to penetrate 2.5cm (1") into the concrete

Footing Drainage

A working footing drain is imperative with all foundation waterproofing systems. Follow the building codes in your area.

Backfilling

Clear stone must be placed over the footing drain and extended over the footing against the base of the Platon in accordance with local building codes. Backfill carefully—do not permit machinery, large rocks or frozen clumps to impact the Platon, and use 2 or 3 lifts of backfill. Compacting each lift will reduce excessive settling later.

Insulated Concrete Forms (ICFs)

Platon is easily installed over oxidised, wet or dirty block, it can bridge 6mm (1/4") gaps, and it is unrestricted by temperature or weather.

- Caulk must be foam compatible (i.e. foam panel adhesive)
- Instead of concrete nails, screw into ICF web or fastening point
- On a Speedclip, use the fastening hole that best lines up with ICF web
- To transition from grade to cladding, screw a galvanized metal lath into ICF web
- The metal lath covers exposed foam and extends 50mm (2") or more over Platon
- Parge lath with mortar mix typically used on foundations
- Dirt cannot get behind the Platon, so caulking is not required

Brick Ledges

Since these 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, and extending both up the wall behind the brick and over the top of the Platon.

Note: Follow "peel and stick" manufacturers instructions for surface preparation and temperature restrictions.







Permanent Underslab or Between-Slab Dampproofing

Install Platon membrane with the dimples down. Joints are sealed with butyl rubber "roof and gutter" caulk. "House-wrap" tape is used to hold joints together until the floor is poured. At walls, the edge of the Platon 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 before the floor is poured.
- Platon is tough enough to walk on without damage, however set up plank walkways if concrete transport takes place over the membrane.





FINISHED INSTALLATION OF PLATON FOUNDATION WRAP



INSTALLING SPEEDCLIPS EVERY 30CM (12")



BACKFILLING OVER THE FOOTING DRAIN



Armtec is a leading Canadian infrastructure and construction materials company combining creative engineered solutions, relevant advice, dedicated people, proven products and a national presence with a local focus on exceptional customer service.