FPS® WEATHERTIGHT® BUILDING UNDERLAY SYSTEM

INSTALLATION GUIDE

By Frame Protection System Limited

CodeMark
CMNZ70030

Complete the interior of the build before the exterior is cladded

ONE COMPREHENSIVE SYSTEM FOR ROOFS AND WALLS

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Contents:

Version Table:

Version No.	Purpose / Change	Author	Date
1.3	Final Version July 2024	Grant Murray	17 July 2024

Approved FPS® Weathertight®™ Products:

» Frame Protection is a Codemarked system. Please ensure you have all of the following ancillaries readily available before the install.

Euroband S 60mm Green

Used for taping:

» Vertical joins (see page 9)
» Rips & tears (see page 9)
» Head Flashings (see page 9)
» Penetration seals (see page 12)

Euroband S 120/180mm Green

Used for taping:

» The corners of window and door openings (see page 10)
» Head Flashings
» Weatherproofing around joinery (if required) (see page 13)

FPS® Spatula

Used to:

» Apply pressure to FPS® tapes to activate adhesive

Euroband D/S Butyl Black

Used for taping:

» Foundation tape (see page 8)

Euroband D/S Brown

Used for taping:

» Horizontal joins (eg. gable ends, multi-story units, N15/N35 overlap) (see page 9)

Stinger Caps & Staples / Screws

Used for:

» Caps & Staples to all exposed fixings on timber framing (see page 7)
» Caps & Screws to all exposed fixings on steel framing

Manual Stinger Gun

Used for:

» Fixing Caps & Staples to timber framing.(see page 7)

Pneumatic Stinger Gun

Used for:

» Fixing Caps & Staples to timber framing.(see page 7)

Automatic Stinger Gun

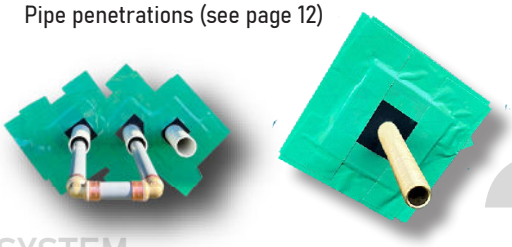
Used for:

» Fixing Caps & Staples to timber framing (see page 7)

Penetration Seals

Used for:

» Pipe penetrations (see page 12)



IMPORTANT INFORMATION FOR THE SITE FOREMAN, PROJECT MANAGERS, LICENCED BUILDING PRACTITIONERS & INSTALLERS.

For application and ease of use:

1. FPS® Weathertight® System can be applied to both roofs and/or walls as a weathertight system as referred to in the CodeMark Certificate No: CMNZ70030.

2. Providing the System is installed correctly, the FPS® Weathertight® System Wall Installation Checklist and a formal pre-lining moisture test is completed, work may proceed to completion internally before final claddings are fitted.

3. FPS® Weathertight® System membrane/underlay may be exposed to the weather elements for 90 days from installation date. Note: Once installation has commenced, completion must be in a timely manner. Wall cladding must be installed prior to the 90 day period expiring.

4. Products and components NOT approved by FPS® may not be used as part of the FPS® Weathertight® System.

5. FPS® Weathertight® System is designed to be installed directly onto timber and steel framing, SIP's, CLT panels, and RAB in both roof and wall applications.

6. FPS® Weathertight® System membrane/underlay may be installed onto wet frames, but allow product surfaces to dry before applying tapes.

7. All seams, overlaps, penetrations and repairs must be made wind and watertight using FPS® approved products and components.

8. FPS® Weathertight® System may be installed over RAB's, avoiding the need for extra taping etc.

9. If wall installation precedes roof cladding, care must be taken to ensure the wall membrane/underlay is securely fixed to prevent wind forces on the internal leeward side of the membrane/underlay.

10. FPS® Weathertight® System membrane/underlays are laid and fixed to the construction as tight or taut as possible, so that Insulation does not bulge the membrane/underlay into the roof or wall cavity.

11. In both walls and roofs, insulation may be fitted against the membrane/underlay.

12. Direct fixing of roofing and wall claddings onto the FPS® Weathertight® System membrane/underlay is not permitted.

13. All penetrations of the membrane/underlays, in both roof and wall situations, shall be flashed or sealed with the appropriate FPS® Weathertight® System products.

14. All window and door joinery units must be properly sealed or "flashed" with FPS® Weathertight® System components, unless specified by the joinery supplier if used as an interim cladding.

15. The Site or Project Manager, Foreman or LBP must take responsibility, from the time of delivery to completion of the installation, for the safe keeping, proper handling and installation of the FPS® Weathertight® System products and components.

16. The site Licensed Building Practitioner or Project Manager is responsible for completing the Installation and FPS® Checklist and ensure a formal Internal Moisture Test is undertaken (usually by a BCO) that complies with either.

(a) Table 4, NZS 3602:2017, or (b) Scion Table 1, NZS3602.2003 (for LVL timber) BEFORE any internal work can proceed.

Methodology for installing:

For N15, N35 and W35 Membrane/Underlay Fixing Details- FPS® Method©

» Ideally, the 1.5m wide membrane/ underlay requires 2 or more people to install, and the 2.75m wide membrane/underlay 3 or more people to install.

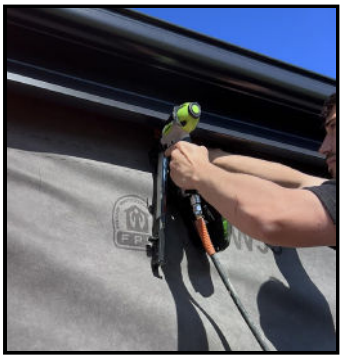
» Before laying out membrane/underlay, check and remove any protruding nails, wood splinters, sharp elements (metal strapping) from framing that could puncture or tear membrane/underlay.

» FPS® Weathertight® System membrane/underlay can be installed over wet frames.

» **Under E2/AS1 9.1.8.4, FPS® Weathertight® Building Underlay® is required to be installed with a nominal 20mm cavity batten unless a cavity is achieved by other means (brick cladding) . Direct fixed wall claddings is strictly prohibited with FPS® Weathertight®.**

STEP 1:
Determine the wall height (top to bottom plate) and add at least 35mm for the Euroband D/S Black tape overlap on the foundation.
If necessary, cut the membrane/ underlay to the length using a handsaw or fold excess membrane/ underlay up and under the soffit.

STEP 2:
Unroll the membrane/underlay with the top edge on the fixing line or the top of the top plate ensuring the branding is upright.



STEP 3:
Pull the top edge of membrane/ underlay tight/ taut and fix with bare staples (if covered by a soffit or overlap).
If the fixings will be exposed, use caps & staples along the top plate.

STEP 4:
After upper edge has been fixed, start from the middle of each wall section.

STEP 5:
Person 1 holds the bottom edge of the membrane/ underlay, pulling down to create a taut surface.

STEP 6:
Person 2 secures the membrane/ underlay to the studs with bare staples where a cavity batten **WILL** be fitted or with a cap and staple where cavity battens will **NOT** be fitted.

Methodology for installing:

For N15, N35 and W35 Membrane/Underlay - FIXING MEMBRANE/UNDERLAY - FPS® Method©

STEP 7:
Use caps and staples on dwangs and nogs where a solid cavity batten will **NOT** be fitted. **Refer to the Cavity Batten chart on page 7.**

STEP 8:
Lay membrane/ underlay across window and door openings and leave **"uncut"** until joinery units are about to be installed. Garage doorways should be covered with either a well supported membrane/ underlay offcut or plywood.

STEP 9:
At internal corners push membrane/ underlay well into the corner, applying fixings back from and on either side of corner to hold membrane/underlay in place.
Note - Do not "cut the corner."

STEP 10:
On every stud, secure the membrane / underlay, working across and down each stud. Move towards the end of each wall section, making sure the membrane/ underlay is kept taut.

STEP 11:
Once cavity battens are installed, ensure all exposed fixings are covered by a cap & staple. Any bare staples can be covered using the ES60 Green tape.

General Notes

- For brick or stone claddings, use the appropriate FPS® fixings dependant on wind zones and wind effect.
- If the joinery is delayed, apply 'smiley face' cuts to 'wrapped over' openings to avoid wind blow out.
- When using cavity battens, refer to the cavity batten chart on the following page to find where and when to use a cap, and/ or a bare staple.
- For light-weight steel framing, cap and self-taping screw fixings are required and available from Frame Protection System Limited.
- **The use of Stinger Caps and Nails is prohibited on the FPS system. Using nails will void the FPS warranty.**

Methodology for fixing:

Stinger Caps & Staples - FPS® Method©

STEP 1:
Determine wind zone and use the charts below to determane Caps & Staples spacings, and where and when to use a cap.

STEP 2:
Ensure the membrane/ underlay is fitted taut and wrinkle free.

STEP 3
The use of uncovered bare staples is prohibited. Ensure all fixings exposed to the weather is covered with a Cap and Staple or ES60 tape.

» Stinger Caps & Staple's ensure all fixings penetrating the membrane/ underlay are protected from water ingress. Any staple exposed to the weather needs a cap or to be covered with Euroband S 60mm Green Tape.

Wind Zone	Cavity Battens	Wooden Frame No Battens	Steel Frame No Battens	SIPs or Other Panels No Battens
Low	Nail or Screw	Cap & 9.5mm Staple 300mm	Cap & Screw 300mm	Cap & 9.5mm Staple 400mm Random
Medium	Nail or Screw	Cap & 9.5mm Staple 250mm	Cap & Screw 300mm	Cap & 9.5mm Staple 350mm Random
High	Nail or Screw	Cap & 9.5mm Staple 200mm	Cap & Screw 300mm	Cap & 9.5mm Staple 300mm Random
Very high	Nail or Screw	Cap & 9.5mm Staple 150mm	Cap & Screw 250mm	Cap & 9.5mm Staple 250mm Random
Extra high	Nail or Screw	Cap & 9.5mm Staple 100mm	Cap & Screw 250mm	Cap & 9.5mm Staple 200mm Random
Specific Design	Nail or Screw	Cap & 22mm Staple 150mm	Cap & Screw 200mm	Cap & 22mm Staple 300mm Random

Installing Cavity Battens

» Install cavity battens at the **earliest opportunity** to secure the membrane/ underlay and cover bare stapling.

» The build **WILL NOT** be weathertight until all bare staples are covered.

» **We recommend predrilling and screw fixing all cavity battens.**

Cavity	Fixing
Brick Veneer	Only Caps & Staples on Studs and Dwangs
Vertical Batten (Wooden)	Bare Staples Behind Vertical Cavity Batten / Caps & Staples on Dwangs
Vertical Batten (Plastic)	No Fixings Behind Vertical Cavity Batten / Caps & Staples on Dwangs
Verttical Batten (Polystyrene)	Only Caps & Staples on Studs and Dwangs
Horizontal Batten (Castellated Wooden)	No Fixings Behind Horizontal Cavity Batten / Caps & Staples on Studs
Horizontal Batten (Plastic)	No Fixings Behind Horizontal Cavity Batten / Caps & Staples on Studs

Insulation supports or bands only required if FPS underlay is not installed taut.

» **If the membrane/underlay is fitted taut, the use of insulation support (blueband) is NOT required. If the membrane can be depressed more 20mm from the inside, insulation support (blueband) will be required. .**

Methodology for installing:

Euroband D/S Butyl Black Tape (EDSB) - FPS® Method©

» EDSB tape is applied to the foundation to prevent uncontrolled air and moisture entering the construction behind the FPS underlay.

STEP 1:
Ensure foundation substrate is clean, dry, and free of anything that may damage the membrane.

STEP 2:
1. With conventional cladding, apply EDSB tape onto the foundation directly below the bottom plate.

2. With brick cladding, apply EDSB tape after the concrete "sealing compound" has dried.
3. Leave the backing paper on the EDSB tape until Step 3 is completed.

STEP 3:
When the FPS underlay is installed, remove the EDSB backing paper and adhere the underlay to the tape.

STEP 4:
Use the FPS® Spatula to ensure good adhesion of the FPS underlay to the foundation.

Suspended Flooring (Timber/SIPS):
Apply the EDSB tape to the bottom edge of the bottom plate or lowest stable edge of the SIP floor. Only apply EDSB to dry timber and OSB.

NOTE:

» If the concrete foundation is very rough or has severe indentations, apply 2 or more layers of EDSB to these imperfections.

» If the framing overhangs the foundation, allow for FPS underlay to hang lower below the bottom plate.

» Where an insulating product is to be installed to the exterior perimeter of the concrete foundation, after the installation of FPS underlay, fit the EDSB tape to the backside of the underlay leaving the backing paper on until the surface of the insulation product has been plastered/ painted. When dry, install the EDSB tape as per normal.

Euroband D/S Butyl Black at Window and Door Openings - FPS® Method©

» Follow the below steps for sealing membrane at the base of an exposed concrete opening.

STEP 1:
At openings, run the EDSB tape below the bottom plate on the outside, and continue towards the inside of the opening.

STEP 2:
Apply a section of 150mm EDSB tape vertically from the bottom EDSB tape up the outer edge of the wall stud.

STEP 3:
Cut FPS underlay to fit and fold excess to inside of stud and staple in place. Ensure good adhesion with the FPS® Spatula.

Methodology for installing:

Euroband D/S Brown Tape (EDS) - FPS® Method©

» EDS Brown prevents air and moisture entering horizontal overlaps. The minimum overlap is 60mm.

STEP 1:
Apply EDS tape as close as possible to folded edge. Leave backing paper on EDS tape for as long as possible before removing.

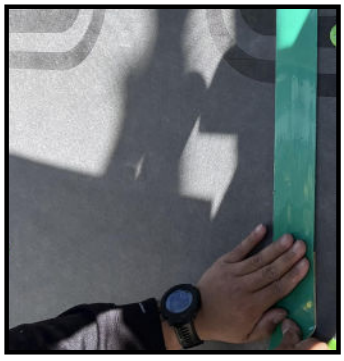
STEP 2:
Apply pressure with FPS® Spatula with backing paper still on tape to ensure the tape is properly adhered to the underlay before the backing is removed.

STEP 3:
Remove backing paper and apply pressure with FPS® Spatula.

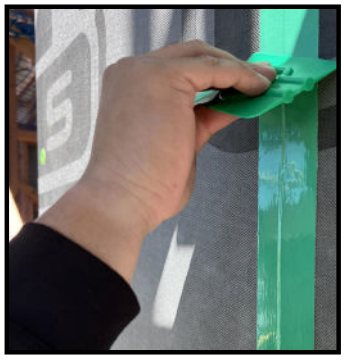
Methodology for installing:

Euroband S 60mm Tape (ES60) - FPS® Method©

» ES60 tape is used for sealing vertical joins, repairs to small tears, holes, covering bare/plain staples, and head flashings.



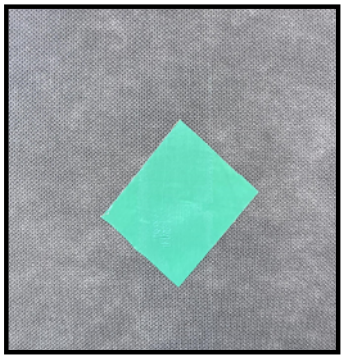
STEP 1:
Apply ES60 tape to seal vertical joins with a minimum 60mm overlap.



STEP 2:
Ensure ES60 tape is applied straight and flat to avoid creases and pressed in place.

STEP 3:
Avoid vertical joins closer than 400mm from corners, window and door openings.

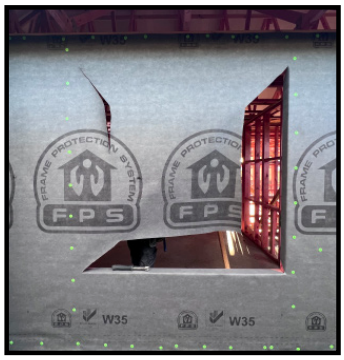
STEP 1:
Ensure all staples exposed to the weather are covered with a Cap or patched with the ES60 tape.



STEP 2:
Cut patches to fit over holes, and bare/ plain staples. Press tape to adhere onto underlay.

Methodology for installing Window and Door Openings:

Euroband S 120/180mm Tape (ES120/ES180)- FPS® Method©

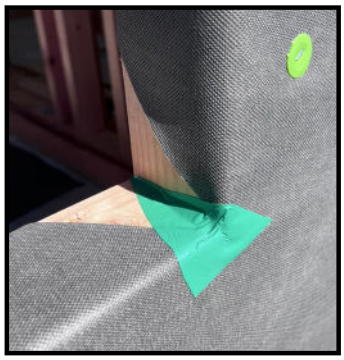


STEP 1:
Cut membrane diagonally from each corner to the centre.

STEP 2:
Fold the flaps of the membrane inside and plain staple to the internal side of the stud.

STEP 3:
Repeat on all four sides. Cut excess membrane flush with the studs inside.

STEP 4:
Cut 4 x 400mm lengths of ES120/180 tape for the window opening corners. Cut a 75mm length of ES120/180 tape, then cut on the diagonal, corner to corner to form two triangular pieces.

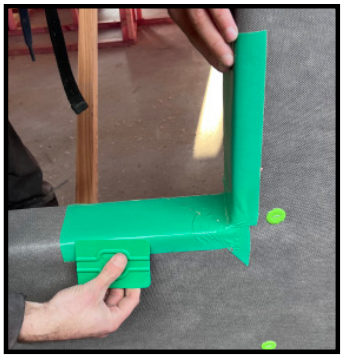


STEP 5:
Apply the widest end of the triangular section on the outer face of the opening onto the underlay, then pull the pointed end inwards and firmly press equally into the 90° corner of the frame.

STEP 6:
Fold 400mm section in half, pushing fold into corners and remove back half of the backing paper and align with inside edge of the opening.

STEP 7:
Remove the backing paper and pull around the face of the opening. Press tape from the corner up the stud and across the sill.

STEP 8:
Remove outer section of backing paper before pressing tape in place as per Step 7.

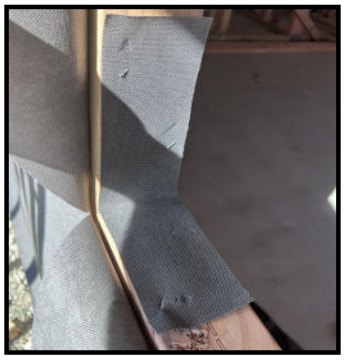


STEP 9:
Fold outer edge of tape, down onto underlay, firmly press in place. Repeat this process for all four corners.

Euroband S 120/180mm Tape over Wet Frames - FPS® Method©

» In a situation where the frames are too wet for the ES120/180 to stick, follow the below steps to ensure sufficient adhesion.

STEP 1:
Cut a 200mm length of underlay at the same width as frames.



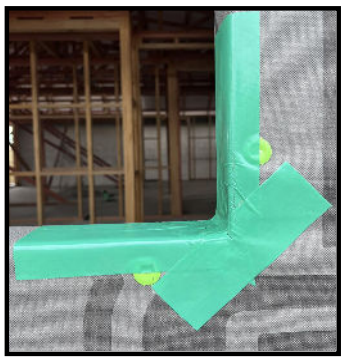
STEP 2:
Insert section into corner of frame with equal length up and across frame. Fix in place with staples.

STEP 3:
Fold main underlay flaps over "insert" and fix in place. Tape window as per Step 4-9 on page 10.

Euroband S 60mm Over Optional Butterfly Patch - FPS® Method©

» When the Euroband S 60 is not fitted correctly, apply a 150mm ES60 strip diagonally over top of the face of corner of the window or door opening. Use pressure with FPS® Spatula to ensure adhesion.

» **NOTE:** Fitting a butterfly is purely optional, and is **not** an alternative for an improperly fitted triangle section.



Kick-outs - FPS® Method©

» Kick-outs below window joinery are meant to provide a drip edge to divert water away from running down "standard" wall underlay. However, FPS® Weathertight® System membranes are Codemark certified as non-absorbent, watertight and airtight and will prevent water entering the building envelope.

The performance of the FPS® Weathertight® System therefore makes the installation of kick-outs **unnecessary**. Furthermore, by not installing window kick-outs, penetrations through the membranes are reduced and drainage and airflow in the cavity is not impeded.

However, if Kick-outs are specified on the plans, they MUST be fitted.

Methodology for installing:

FPS® Seals and ES60 Tape - FPS® Method©

» FPS® Seals must be fitted to all pipe, ducting, flue and cable penetrations in the FPS underlay.

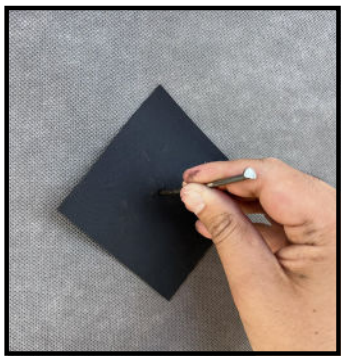
» Select the correct size FPS® Seal for each penetration – see Size Chart below.

» For each size FPS® Seal, follow the ES60 Tape cutting guide below.

STEP 1:
Install all FPS® Seals with a corner pointing up.

STEP 2:
Remove one side of the split backing paper from the ES60 Tape, place the exposed adhesive side onto the FPS® Seal, ensuring equal lengths of ES60 Tape extend beyond each end of the FPS® Seal.

STEP 3:
Remove the remaining section of backing paper and adhere to the FPS® underlay. Repeat for all other sides of the FPS® Seal, then firmly press tape with FPS® Spatula.



BLANK SEALS:
Pierce blank FPS® Seal with a sharp point for each cable to pass through. Follow Step 2 & 3 above to ensure the seal is fitted correctly to the underlay.

FPS® Penetration Seals - FPS® Method©

» For each size of seal, cut four (4) equal lengths of ES60 Tape as per the following:

Part Code	Fit Conduit (mm)	Size Range
FPS CS BS	100 x 100	No Hole
FPS CS 150	100 x 100	15 to 30 mm
FPS CS 285	100 x 100	28 to 40 mm
FPS CS 385	100 x 100	38 to 55 mm
FPS CSHE	125 x 125	Heat Pump Seal Each
FPS CSH3	125 x 125	Heat Pump Seal 3 Pack
FPS CS 48	150 x 150	48 to 75 mm
FPS CS 74	150 x 150	74 to 95 mm
FPS CS 95	200 x 200	95 to 120 mm
FPS CS 120	200 x 200	120 to 145 mm
FPS CS 145	250 x 250	145 to 165 mm
FPS CS 180	350 x 350	180 to 210 mm
FPS CS 220	350 x 350	230 x 255 mm

Methodology for installing:

Weatherproofing around Window and Door Joinery - FPS® Method©

» When the FPS® Weathertight® Building Underlay® System, has been installed as an interim cladding, and the window and door joinery has also been installed, the LPB/Project Manager must ensure the gap between the underlay and the joinery are made weathertight.

Options Include:

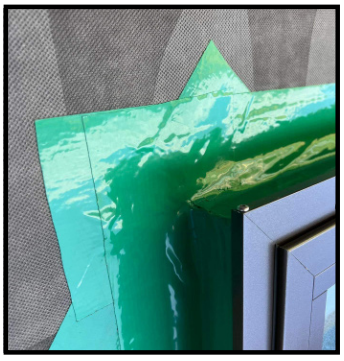
1. Install FPS Euroband S Tape over the gaps between the underlay and the joinery.
2. Install FPS Euroband S Tape over the gaps between the underlay and the joinery, then apply DPC if consented.
3. Follow joinery manufacturers weather sealing instructions.

For Window and/or Door Joinery installed outside the Wall-Line

STEP 1:
Determine the width of gap and select the correct width Euroband tape eg ES60 or ES120.

STEP 2:
Cut a length of ES60 (60mm) or ES120 (120mm) (depending on the tape you use) longer than the height of the joinery. Repeat process on both sides.

STEP 3:
Apply side tapes first, Fold tapes along the split backing line, remove the backing paper from one side only. The exposed adhesive section is then applied to the frame, beginning at the top (above the frame) progressively pressing the tape downwards on to the frame. Remove the backing paper from the other side of the tape and then apply to the FPS® underlay. Press tape firmly in place on both the frame and underlay. Repeat for other side of frame.
Use FPS® Spatula to apply pressure.



STEP 4:
Prepare and apply tape to the top of the joinery in the same manner as Step 3, ensuring the top tape overlaps the top of the side tapes on each side (this is not required if there is a head flashing installed).

STEP 5:
Remove the remaining backing from the top section and use an FPS® Spatula to apply pressure.

FPS Underlay - Non-System Method©

» When FPS Weathertight underlays are used as a standard wrap, and installed as per the building code (Non System Method), early close in cannot be achieved.

Methodology for installing:

SIP, Truss and Framed Roofing - FPS® Method©

» Using FPS® on roof and walls gives the whole structure a watertight, airtight and vapour open protective layer for at least 90 days UV protection before roof and wall claddings are fitted. When the FPS® Weathertight® Building Underlay® System is fitted appropriately to the roof and wall elements, internal work may proceed to completion before any wall or roof cladding is fitted.

» **Under E2/AS1, FPS® Weathertight® Building Underlay® is required to be installed with a minimum 10mm cavity batten / counter batten (VB10) on roofs. Direct fixed roof and wall claddings is strictly prohibited.**
Allowance for roof fixings must be taken into consideration to meet E2/AS1 8.4.8.1

» **Underlay Orientation** – The underlay may be installed horizontally or vertically for **SIP, CLT and Solid Panel Roofing (pitched or mono-pitched).**

» **Eaves, Soffits and Roof Edges –** To ensure all weather conditions are excluded from either entering the structure, SIP or Panel, they must be completely wrapped with the FPS® underlay, and to meet full weathertight provisions, the roof underlay must be connected to the wall underlay.

» **Internal Gutters –** When installing FPS to internal gutters, **bare staples is prohibited.** If the underlay needs to be fixed in place and will be exposed to the weather, the use of Caps & Staples are recommended.

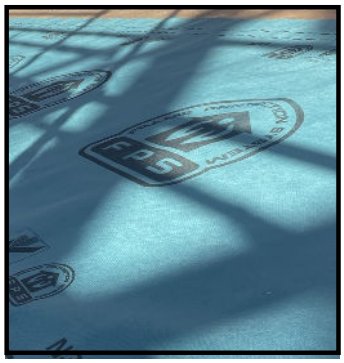
» **FPS® Seals** - Seals must be fitted to seal all pipe, ducting and flue penetrations that pass through the roof membrane/underlay.

» **Flat Roofs –** FPS® Underlay may be laid on truss roofs with a slope no less than 10°, while solid backed underlay can be laid on slopes no less than 5°. **In all situations**, extra care must be taken to ensure that overlaps, joins and battens are **very** securely fastened. Also ensure extra care is taken to find and tape over all accidental holes and tears.

STEP 1:
Prepare the underlay before ascending the roof. For each section of roof, measure and cut lengths of underlay to cover the width of the roof with enough excess to be folded over each side and under the eave or soffit.

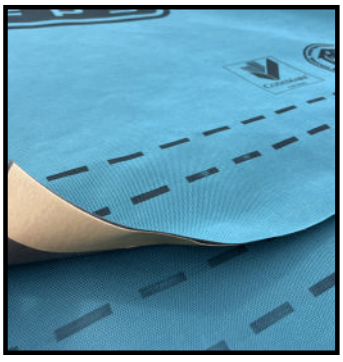
STEP 2:
Apart from the first length of underlay going along the gutter edge, apply EDS Brown tape to the underside of the full length of each underlay. Leave the backing paper on and with the FPS® Spatula press the tape to adhere on to the underlay.

STEP 3:
Start laying the underlay with the branding facing upright and running horrizontally, the first length of underlay at the bottom (gutter) edge of the roof. Leave sufficient underlay to be folded over the face and under the roof structure.



STEP 4:
From the left hand side, fix the underlay taut across the roof line on top of the trusses with plain staples within 60mm of the top edge of the underlay. Keep the underlay taut by pulling the underlay downwards as plain staples are applied down the slope of the truss.

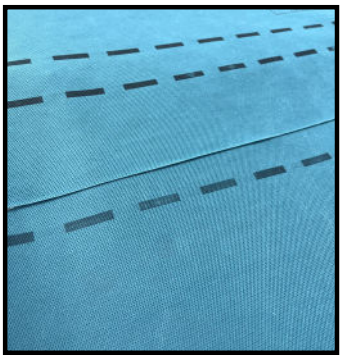
STEP 5:
Fix solid wooden cavity battens and purlins on this underlay layer. Length of cavity battens should be cut to allow minimum 60mm overlap of the next underlay layer at the top. **We recommend predrilling and screw fixing cavity battens.**
This completes the first run of underlay.



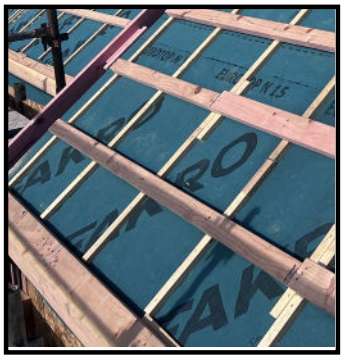
STEP 6:
Lay the next layer overlapping the previous by at least 60mm. Eurobond D/S tape applied in step 2 facing to first underlay layer. Ensure the underlay is taut and initially secured with staples where covered by cavity battens up the truss/rafter.

Methodology for installing:

SIP, Truss and Framed Roofing - FPS® Method©



STEP 7:
When the second layer is fixed in place, remove the backing paper from the EDS Brown tape and secure in place by pressing with the FPS® Spatula.



STEP 8:
Repeat **STEP 5**: Fix solid wooden cavity battens and purlins on the second underlay layer.**This completes the second run of underlay.** Repeat steps 6-8 as you move up the roof line.

STEP 9:
Roof Ridge, Hip or Apex – At the ridge of the roof, run at least 300mm of underlay over to each side of ridge line. Alternatively, fix a 500-600mm strip over the apex (ridge line) of the roof and overlap on to underlay on both sides of the roof. Use EDS Brown tape to seal underlay edges to the successive layers of underlay.

STEP 10:
Valleys – Cut a strip of underlay sufficient to span the width and length of the valley. Fix in place with plain staples, only where they will be covered by overlapping underlay (outer edges)

STEP 11:
Lay the underlay from each side of the valley to overlap the valley strip by a minimum of 60mm. Cut the overlapping underlay sections so that each layer presents a straight line along each side of the valley, which enables all the ends of the underlay to be taped with a single strip of EDS Brown tape.

STEP 12:
Where trusses and rafters form the roof structure, the underlay **must** be installed horizontally across the roof slope.

» **Use the following chart to determine the appropriate FPS Roof Underlay for your wind zone when used for early close-in.**

Wind Zone	Truss 400 Centres	Truss 600 Centres	Truss 900 Centres	Truss 1200 Centres	SIP's or CLT Solid Backing
Low	N15	N15	N15	N35	N15
Medium	N15	N15	N35	S65	N15
High	N15	N35	S65	-	N15
Very high	N15	S65	-	-	N35
Extra high	N35	S65	-	-	N35
Specific Design	S65	-	-	-	S65

Methodology for installing:

FPS Underlay - Non-System Method©

» If using FPS Underlays as a better performing roof membrane, and **NOT** as a weathertight system, read the general installation notes below to ensure FPS is fitted correctly.

» **Under E2/AS1, FPS® Weathertight® Building Underlay® is required to be installed with a minimum 10mm cavity batten / counter batten (VB10) on roofs. Direct fixed roof and wall claddings is strictly prohibited.**
Allowance for roof fixings must be taken into consideration to meet E2/AS1 8.4.8.1

General Installation Notes:

» Install FPS Roof Underlay with the printed side facing outwards and upright.

For **timber-framed** structures, secure FPS Roof underlay using staples at 300mm intervals.

For **steel- framed** structures, refer to the NZ Metal Roof and Wall Cladding Code of Practice for specific fastening requirements.

» FPS Roof Underlay may be installed both horizonally and vertically.

» Ensure a minimum lap of 150mm at horizontal joins and 300mm at vertical joins.

Ensure horizontal joins are lapped with the upper layer overtop of the successive underlay.

» Prevent FPS Roof Underlay from moving by fixing the membrane to the centre of each purlin.

Do not use FPS Roof Underlays on purlin distances greater than 1350mm when run horizontal or 1200mm when run vertically.

» Ensure FPS Roof Underlay is laid firmly and taut without creases.

» Once FPS Roof Underlay is fitted, install **adhesive backing VB10 or VB20 cavity battens** to the underlay.

Ensure the VB10 or VB20 cavity batten covers each fixing that was used to fasten the underlay to the purlin using the adhesive backing to seal the fixing penetration.

» Once installed, FPS Roof Underlay should not be left exposed to weather or UV for more than 90 days.

» If tape is required (as per the NZ Metal Roof and Wall Cladding Code of Practice), use the FPS Euroband S Tape range.

» FPS Roof Underlay may be unwound to its full length from the gutter to the ridge.

FPS highly recommends the use of a roof cladding ridge vent.

» The underlay **MUST NOT** go into the gutter. It is recommended the FPS Roof Underlay ends at the gutters edge and a flashing is installed under the underlay overlap and into the gutter. Use the EDS Brown Tape to seal the join. (Refer to roof detail QR Code below).

If the flashing and underlay overlap exceeds 150mm, no taping is required.

» Maintain a minimum distance of 50mm from FPS Roof Underlay for flue penetrations.

Refer to the NZ Metal Roof and Wall Cladding Code of Practice 10.11.5 and flue supplier instructions.

» When required, we recommend using FPS Conduit Seals when sealing any penetrations through FPS Roof Underlays.

» FPS Roof Underlay must be installed by, or under the guidance of, a licensed building practitioner.

» Internal linings and insulations **MUST NOT** be installed until exterior cladding is completed. If you require an early close-in system, refer to Frame Protection Systems' **FPS Installation Guide** for the install steps.

FPS Roof Details

» Scan the QR Code to find the FPS roof details for both the Weathertight method and the Non-System method.

Alternatively, visit **www.frameprotection.co.nz**