DuPont™ Tyvek® Supro – Below pitch roof installation

NBS: P10 320 **Also: H20, H21, H30, H31, H60, H61, H62, H64, H65, H67, H92, K20, K21, M30**

For additional information on our product(s) and guidance on how to use them you may wish to refer to our step by step Installation Guide and videos. This and other useful information is on our web site:

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For help with a project please contact the DuPont Building Knowledge Centre. (Contact details can be found at the end of this Installation Sheet).

Type LR Underlay to EN 13859-1: shall be **Tyvek® Supro** as supplied by DuPont Performance Building Solutions, Bristol & Bath Science Park, Dirac Crescent, Emersons Green, Bristol. BS16 7FR.

Storage
Rolls of Tyvek® Supro should be stored palletised or on their sides on a smooth clean surface, under cover and protected from direct sunlight.

General
Care should be taken when handling the membrane to prevent tears and punctures occurring. Any that do occur should be repaired with Tyvek® Acrylic Tape (2060B).

Double felt method - Tyvek® Supro is installed in two layers with staggered laps between each layer.

Eaves:
Lay an appropriate UV resistant eaves sheet over the fascia board/rafter ends, extend into the gutter and fix into place with felt nails. Lay Tyvek® Supro parallel to the eaves overlapping the eaves sheet and taking the membrane to the outside edge of the fascia board or rafter ends. Bond the membrane to the eaves sheet with Tyvek® Double-sided Tape to form a weather-tight seal.

Overlay the first layer of Tyvek® Supro with a second 'half-width' and line up with the lower layer's bottom edge. When consecutive runs of membrane are installed a staggered lap pattern will be created. Continue laying Tyvek® Supro in two layers, so the entire roof area is 'double-felted.'

Fixing
Tyvek® Supro should be fixed with large headed felt nails which will self-seal the penetration. Fixings should be positioned at 300mm max centres to each rafter (or counter batten). Rafter spacing should be no more than 600mm centre to centre.

Laps
Maintain 150mm horizontal laps between each sheet. Any vertical laps should be minimum 300mm and positioned over rafters.

Unsupported underlay
Tyvek® Supro should be laid horizontally across the roof slope, with a nominal drape of 10mm and fixed with stainless-steel staples or preferably large headed felt nails which will self-seal the penetration. Fixings should be positioned at maximum 300mm centres to rafters (or counter battens). Laps should be sealed with Tyvek® Acrylic Tape (2060B) to comply with standards on wind uplift. Alternatively, where circumstances allow, a tiling batten may be positioned over the lap. Users should check the specific zonal wind uplift restrictions applicable to the site location, as well as the height and exposure parameters in accordance with the current version of BS5534 Annex A.

Supported underlay
Tyvek® Supro should be pulled over the support and secured with appropriately sized counter battens. Stainless-steel staples or large headed felt nails may be used to temporarily secure the membrane, which must be later covered by the counter battens. Depending on the site location and the associated exposure to driving rain it may be advisable to install a strip of Tyvek® Butyl Tape beneath the counter batten to help seal the fixing penetrations.

Ply/OSB sheathing - Ventilated
These vapour resistant board materials do not allow adequate vapour diffusion and therefore should not be installed in non-ventilated applications above insulation. Ventilation at eaves and ridge and a continuous 50mm cross ventilation path must be maintained beneath the sheathing in accordance with the current version of BS5250. Tyvek® Supro may be installed over plywood or OSB sheathing, where the insulation is to be installed above, ie. warm roofs.

Scottish Sarking: Non-ventilated
To maintain vapour permeability, timber boarding should be 150mm wide with 2mm gaps as per BBA certificate 08/4548 or NSAI certificate 04/0157. Two layers of Tyvek® Supro should be laid directly over the timber sarking, with staggered laps (as above) and secured with large headed felt nails (staples should not be used). The membrane should be laid horizontally with laps sealed as per the unsupported criteria above to comply with standards on wind uplift. Slates are fixed directly through into the boarding.

Ridge: Non-ventilated
A minimum of two layers of Tyvek® Supro should extend over the ridge and lap at least 150mm down each side so that a 300mm wide double layer is formed over the centre-line.

Ridge: Ventilated (for NHBC requirements)
Install Tyvek® Supro continuously over the ridge to provide protection during construction. Immediately prior to fitting the ridge tiles, cut the membrane away along the ridge line to maintain the ventilation path.

Hip
The top two layers of Tyvek® Supro underlay should be taken up to the hip from one side and folded back to form a drainage welt. The underlay from the opposing roof slope should extend across the hip and over the first underlay to form a triple layer of membrane over the hip rafter. Once the membrane is fixed into place it may be trimmed back, but a minimum lap of 300mm should be maintained.

Valley (for tiles, lead, GRP, etc.):
This process should result in three layers of membrane being installed, providing protection to the valley.

1. Lay a strip of Tyvek® Supro (minimum 600mm wide) vertically down the centre line of the valley.
2. Dress Tyvek® Supro from one roof pitch and extend across the valley to the opposing roof slope, covering entirely the first Tyvek® strip.
3. Repeat with the underlay from the remaining roof pitch, extending to the opposing roof slope.

With the double-felt method, the top two layers of Tyvek® Supro should be used in the process above. For each stage, fix the Tyvek® Supro underlay into place with large headed felt nails. During the process, care should be taken to ensure the membrane is formed to the valley shape as much as possible. This is to avoid penetrating the membrane with the valley lining or battens when later installed directly over.

Chimneys & roof windows:
Tyvek® Supro should be formed around chimneys & roof windows, turning the underlay up against the detail and terminating behind flashings (if present) to eliminate water ingress. Where appropriate, seal the underlay against the detail with Tyvek® Acrylic Tape (2060B).

Penetrations:
Window corners, soil vent pipes and cable penetrations can be effectively sealed with Tyvek® Acrylic Tape (2060B) or Tyvek® FlexWrap EZ.

Airtightness – sealing (optional)
Tyvek® Supro has been tested for 'Resistance to penetration of air' in accordance with EN 12114 achieving <0.25 $m^3/h.m^2$ at 50 Pa. With all laps and penetrations sealed with Tyvek® Acrylic Tape (2060B), Tyvek® Supro will contribute to the overall airtightness of the building. If preferred, fixing penetrations can be sealed by applying Tyvek® Butyl Tape to the substrate before the membrane is installed.

Compatibility: Where timber treatments are used care should be taken to ensure they are touch-dry before the installation of the Tyvek® Supro underlay. Retrospective spray applied micro emulsions can also pose significant risk to polymer-based materials such as Tyvek®. Masking the membrane against preservative treatments should be considered.

Temporary exposure period
Tyvek® Supro may be left exposed for a period not exceeding **4 months**, provided that the membrane is adequately secured in accordance with our recommendations. Site conditions and exposure to wind should be assessed to determine whether extra security measures for the membrane are required.

Fire regulations
Tyvek® Supro has Fire Classification E in accordance with EN 13501-1. Care should be taken to determine suitability of this membrane for the intended application, with specific regard to building height and proximity to boundary. Users/specifiers should refer to their regional regulatory guidance documents in case there are any requirements or variations that may restrict the use of this product.

Video installation link: https://www.dupont.co.uk/resource-center.html?BU=pbs&restype=video

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DuPont™ Tyvek® Supro – Below pitch roof installation notes

The 'double-felt' roof system using a Tyvek® underlay provides a solution for roof systems that are built below the minimum pitch for the tile or slate. This has become accepted practice for over 20 years by many local authorities throughout the UK where a building or design constraint existed.

Tyvek® Supro - installed in two layers with staggered laps has proven to be particularly useful for roofs that suffer from height restrictions such as with single storey lean-to extensions. It is quite common for these roofs to present a relatively small area and are therefore ideal for this method as they would be expected to discharge only a limited amount of rainfall. Whilst this method is very effective it's use is limited in main roofs, especially ones of two storey height. However, this method may be considered depending on the proposed pitch, location data and slate/tile selection.

Wherever possible, our standard pitched roof underlay Tyvek® Supro should be laid at a pitch suitable for the slate or tile that is being used. However, we will accept the 'double felt' method using the following rules as a general guide:

Tile/slate min pitch	Double felt allowance
12° - 19°	-3°
20° -29°	-4°
30° - 39°	-5°
40° +	please contact us

Following this system will ensure that the absolute minimum pitch allowed with two layers of Tyvek® Supro is 9° (for a tile which has a minimum pitch of 12°). A lower pitch may be acceptable for profiled metal clad industrial roofs or where a tile effect metal roof sheet is used eg. Metrotile, Britmet Tileform.

Rafter length should not exceed 9m for areas of normal exposure to driving rain and 6m for areas of high exposure.

Attention must be paid to details such as hips, valleys and large tilt fillets (eaves sprockets). These are considered 'weak points' in the system as they incorporate lower pitches than that of the main roof areas.
Consideration should also be given to details that penetrate the Tyvek® underlay such as soil vent pipes, chimneys & roof windows. The underlay should turn up against the detail and be sealed with Tyvek® Acrylic Tape (2060B) or correctly lapped to appropriate flashings. Any cuts and/or corners should be made good with Tyvek® Acrylic Tape (2060B) or Tyvek® FlexWrap EZ to prevent water ingress.

These factors all govern the risk of water penetration onto the roof underlay. **In all cases the underlay must be laid to a fall with no ponding of water on the underlay under any circumstances.**

This policy is not entirely rigid and approval may be given for pitches lower than those stipulated above, according to specific data associated with the proposed project. In these cases details such as roof area, height and location would need to be considered.

Our warranty for Tyvek® Supro is applicable to the double-felting method, provided it is installed in accordance with these guidelines.

For further advice on the use of Tyvek® membranes please contact BKC Technical: 0117 970 9454/55

Video installation link: https://www.dupont.co.uk/resource-center.html?BU=pbs&restype=video

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Tyvek® construction membranes are manufactured by DuPont under an ISO 9001: 2015 Quality Assurance System.

DuPont™ Tyvek® Supro - wall installation

NBS: H92 785, P10 320 **Also: H20, H21, H30, H31, M30**

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Breather Membrane to EN 13859-2 shall be **Tyvek® Supro** as supplied by DuPont Performance Building Solutions, Bristol & Bath Science Park, Dirac Crescent, Emersons Green, Bristol. BS16 7FR.

Storage
Rolls should be stored palletised on a smooth clean surface, under cover and protected from direct sunlight.

General
Care should be taken when handling the membrane to prevent tears and punctures occurring. Any that do occur should be repaired with Tyvek® Acrylic Tape (2060B).

Orientation
Unroll Tyvek® Supro horizontally over the face of the construction with the printed logo facing outwards. Ensure maximum coverage by extending 100mm min below the sheathing, CP board or lowest structural timber/steel member.

Free hanging condition
Tyvek® Supro may be fixed in a self-supporting condition, spanning between vertical or horizontal members. Maximum span should not exceed 1.2m in a protected environment, or 600mm if exposed to wind loading.

Initial fixing
Tyvek® Double sided (acrylic) Tape (50mm) may be used to provide an initial fix for Tyvek® Supro, but mechanical fixings (see below) must be made almost immediately after. Permanent security of the membrane may also be made with external insulation, battens or cladding brackets. Extra care should be taken where the membrane is exposed to high wind conditions.

Fixing – to timber studs/sheathing
Fix Tyvek® Supro with stainless steel staples or corrosion resistant nails. Fix membrane at 600mm centres horizontally, 300mm centres vertically and at 150mm centres at joints and openings.

Fixing - to masonry
Tyvek® Supro may be fixed to masonry with a suitable anchor fixing system or a masonry nail/screw and EPDM rubber washer. Fixings should be at maximum 500mm centres. Tyvek® Butyl Tape (double sided) may be used to fix the membrane in addition to the mechanical methods suggested above. Tyvek® Primer can be applied to chalky or porous masonry to seal the surface and improve adhesion before applying adhesive tape.

Fixing - to steelwork (SFS)
Initial (temporary) fixing of Tyvek® Supro may be made with continuous strips of Tyvek® Double Sided (acrylic) Tape. These should be supplemented with mechanical fixings through to the steel structure, where suitable drill-tip or self-tapping screws may be used. The screws must sit flush (not countersunk) and a rubber or EPDM washer should sit between the screw heads and the membrane to avoid water ingress. Screw fixings should be spaced vertically at 500mm centres on every stud (typically spaced at 600mm horizontal centres).

Fixing - Rainscreen Cladding Applications
Tyvek® Supro may be fixed to the external face of a cement bonded particle board, OSB or ply sheathing, using a combination of Tyvek® Double sided (acrylic) Tape and stainless-steel staples. Tyvek® Supro may also be secured by fixing through the sheathing to the underlying structure using suitable drill-tip or self-tapping screws. See Fixing - to steelwork (SFS) above.

In many cases, the retrospective fixing of timber battens or metal brackets (& insulation) will provide the principle security for the membrane. Care should be taken to ensure these components are fixed tightly over the membrane to avoid water ingress. If in doubt Tyvek® Butyl Tape may be used between the component and the membrane.

Fixing to insulation
Fix Tyvek® Supro to rigid insulation with a proprietary expanding insulation fixing anchor at maximum 500mm centres. Penetrations made by wall ties or cladding brackets must be made good with either Tyvek® Acrylic Tape (2060B) or Tyvek® FlexWrap EZ.

Laps
All horizontal laps should be 100mm min. Vertical laps should be 150mm min.

External corners
Dress Tyvek® Supro around external corners ensuring a return of 300mm min.

Window openings
Wrap Tyvek® Supro into window/door openings and seal to frame with Tyvek® Acrylic Tape (2060B) or Tyvek® Plastering Tape if render is later to be applied. Make good to corners using Tyvek® FlexWrap EZ.

Cavity barriers/trays/flashings
Dress Tyvek® Supro over cavity barrier/tray/flashing ensuring a minimum lap of 100mm.

Floor junctions
Dress Tyvek® Supro over intermediate floor zone ensuring a minimum lap of 100mm between sheets

Airtightness – sealing (optional)
Tyvek® Supro has been tested for 'Resistance to penetration of air' in accordance with EN 12114 and achieved <0.25 $m^3/h.m^2$ at 50 Pa. With all laps and penetrations sealed, Tyvek® Supro will contribute to the overall airtightness of the building.

Seal the laps in Tyvek® Supro with Tyvek® Acrylic Tape (2060B) or Tyvek® Double Sided (acrylic) Tape. Fixing penetrations can be sealed by applying Tyvek® Butyl Tape to the substrate before the membrane is installed. Complicated penetrations may be sealed using Tyvek® FlexWrap EZ.

Compatibility: Where timber treatments are used care should be taken to ensure they are touch-dry before the installation of the Tyvek® membrane. Retrospective spray applied micro emulsions can also pose significant risk to polymer-based materials such as Tyvek® Supro. Masking the membrane against such preservative treatments should be considered.

Temporary exposure period
Tyvek® Supro may be left exposed for a period not exceeding **4 months**, provided that the membrane is adequately secured in accordance with our recommendations. Site conditions and exposure to wind should be assessed to determine whether extra security measures for the membrane are required.

Fire regulations
Tyvek® Supro has Fire Classification E in accordance with EN 13501-1. Care should be taken to determine suitability of this membrane for the intended application, with specific regard to building height and proximity to boundary. Users/specifiers should refer to their regional regulatory guidance documents in case there are any requirements or variations that may restrict the use of this product.

Video installation link: https://www.dupont.co.uk/resource-center.html?BU=pbs&restype=video

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Tyvek® construction membranes are manufactured by DuPont under an ISO 9001: 2015 Quality Assurance System.

DuPont™ Tyvek® Supro pitched roof installation

NBS: P10 320 **Also: H20, H21, H30, H31, H60, H61, H62, H64, H65, H67, H92, K20, K21, M30**

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Type LR Underlay to EN 13859-1:2014 shall be **Tyvek® Supro** as supplied by DuPont Performance Building Solutions, Bristol & Bath Science Park, Dirac Crescent, Emersons Green, Bristol. BS16 7FR.

Storage
Rolls of Tyvek® Supro should be stored palletised or on their sides on a smooth clean surface, under cover and protected from direct sunlight.

General
Care should be taken when handling the membrane to prevent tears and punctures occurring. Any that do occur should be repaired with Tyvek® Acrylic Tape (2060B).

Eaves:
Lay an appropriate UV resistant eaves sheet over the fascia board/rafter ends, extend into the gutter and fix into place with felt nails. Lay Tyvek® Supro parallel to the eaves overlapping the eaves sheet and taking the membrane to the outside edge of the fascia board or rafter ends. Bond the membrane to the eaves sheet with Tyvek® Double-sided Tape to form a weather-tight seal.

Fixing
Tyvek® Supro should be fixed with stainless-steel staples or preferably large headed felt nails which will self-seal the penetration. Fixings should be positioned at 300mm max centres to each rafter (or counter batten). Rafter spacing should be no more than 600mm centre to centre.

Laps
Maintain 150mm horizontal laps between each sheet. Any vertical laps should be minimum 300mm and positioned over rafters.

Unsupported underlay
Tyvek® Supro should be laid horizontally across the roof slope, with a nominal drape of 10mm. Laps should be sealed with Tyvek® Acrylic Tape (2060B) to comply with standards on wind uplift. Alternatively, where circumstances allow, a tiling batten may be positioned over the lap. Users should check the specific zonal wind uplift restrictions applicable to the site location, as well as the height and exposure parameters in accordance with the current version of BS5534 Annex A.

Supported underlay
Tyvek® Supro should be pulled over the support and secured with appropriately sized counter battens. Stainless-steel staples or large headed felt nails may be used to temporarily secure the membrane, which ideally would be later covered by the counter battens.

Ply/OSB sheathing: Ventilated
These vapour resistant board materials do not allow adequate vapour diffusion and therefore should not be installed in non-ventilated applications above insulation. Ventilation at eaves and ridge and a continuous 50mm cross ventilation path must be maintained beneath the sheathing in accordance with the current version of BS5250. Tyvek® Supro may be installed over plywood or OSB sheathing, where the insulation is to be installed above, ie. warm roofs.

Scottish Sarking: Non-ventilated
To maintain vapour permeability, timber boarding should be 150mm wide with 2mm gaps as per BBA certificate 08/4548 or NSAI certificate 04/0157. Tyvek® Supro should be laid directly over the timber sarking and secured with large headed felt nails (staples should not be used). The membrane should be laid horizontally with laps sealed as per the unsupported criteria above to comply with standards on wind uplift. Slates are fixed directly through into the boarding.

Ridge: Non-ventilated
Tyvek® Supro should extend over the ridge and lap at least 150mm down each side so that a 300mm wide double layer is formed over the centre-line.

Ridge: Ventilated (for NHBC requirements)
Install Tyvek® Supro continuously over the ridge to provide protection during construction. Immediately prior to fitting the ridge tiles, cut the membrane away along the ridge line to maintain the ventilation path.

Hip
The Tyvek® Supro underlay should be taken up to the hip from one side and folded back to form a drainage welt. The underlay from the opposing roof slope should extend across the hip and over the first underlay to form a triple layer of membrane over the hip rafter. Once the membrane is fixed into place it may be trimmed back, but a minimum lap of 300mm should be maintained.

Valley (for tiles, lead, GRP, etc.):
This process should result in three layers of membrane being installed, providing protection to the valley.

1. Lay a strip of Tyvek® Supro (minimum 600mm wide) vertically down the centre line of the valley.
2. Dress Tyvek® Supro from one roof pitch and extend across the valley to the opposing roof slope, covering entirely the first Tyvek® strip.
3. Repeat with the underlay from the remaining roof pitch, extending to the opposing roof slope.

For each stage, fix the Tyvek® Supro underlay into place with large headed felt nails. During the process, care should be taken to ensure the membrane is formed to the valley shape as much as possible. This is to avoid penetrating the membrane with the valley lining or battens when later installed directly over.

Chimneys & roof windows:
Tyvek® Supro should be formed around chimneys & roof windows, turning the underlay up against the detail and terminating behind flashings (if present) to eliminate water ingress. Where appropriate, seal the underlay against the detail with Tyvek® Acrylic Tape (2060B).

Penetrations:
Window corners, soil vent pipes and cable penetrations can be effectively sealed with Tyvek® Acrylic Tape (2060B) or Tyvek® FlexWrap.

Airtightness – sealing (optional)
Tyvek® Supro has been tested for 'Resistance to penetration of air' in accordance with EN 12114 achieving <0.25 $m^3/h.m^2$ at 50 Pa. With all laps and penetrations sealed with Tyvek® Acrylic Tape (2060B), Tyvek® Supro will contribute to the overall airtightness of the building. If preferred, fixing penetrations can be sealed by applying Tyvek® Butyl Tape to the substrate before the membrane is installed.

Note: Care should be taken to ensure the membrane can adequately drain any wind-blown moisture beneath battens to the gutter. The underlay should either be draped a nominal 10mm or counter battens fixed over the membrane where laid fully-supported (Please see 'Supported' and 'Unsupported' notes above).

Compatibility: Where timber treatments are used care should be taken to ensure they are touch-dry before the installation of the Tyvek® Supro underlay. Retrospective spray applied micro emulsions can also pose significant risk to polymer-based materials such as Tyvek®. Masking the membrane against preservative treatments should be considered.

Temporary exposure period
Tyvek® Supro may be left exposed for a period not exceeding **4 months**, provided that the membrane is adequately secured in accordance with our recommendations. Site conditions and exposure to wind should be assessed to determine whether extra security measures for the membrane are required.

Fire regulations
Tyvek® Supro has Fire Classification E in accordance with EN 13501-1. Care should be taken to determine suitability of this membrane for the intended application, with specific regard to building height and proximity to boundary. Users/specifiers should refer to their regional regulatory guidance documents in case there are any requirements or variations that may restrict the use of this product.

Video installation link: https://www.dupont.co.uk/resource-center.html?BU=pbs&restype=video

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Tyvek® construction membranes are manufactured by DuPont under an ISO 9001: 2015 Quality Assurance System.

DuPont™ Tyvek® Supro Plus pitched roof installation

NBS: P10 320 **Also: H20, H21, H30, H31, H60, H61, H62, H64, H65, H67, H92, K20, K21, M30**

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Type LR Underlay to EN 13859-1: **Tyvek® Supro Plus** as supplied by DuPont Performance Building Solutions, Bristol & Bath Science Park, Dirac Crescent, Emersons Green, Bristol. BS16 7FR.

Storage
Rolls of Tyvek® Supro Plus should be stored palletised or on their sides on a smooth clean surface, under cover and protected from direct sunlight.

General
Care should be taken when handling the membrane to prevent tears and punctures occurring. Any that do occur should be repaired with Tyvek® Acrylic Tape (2060B).

Eaves:
Lay an appropriate UV resistant eaves sheet over the fascia board/rafter ends, extend into the gutter and fix into place with felt nails. Lay Tyvek® Supro Plus parallel to the eaves overlapping the eaves sheet and taking the membrane to the outside edge of the fascia board or rafter ends. Bond the membrane to the eaves sheet with Tyvek® Double-sided Tape to form a weather-tight seal.

Fixing
Tyvek® Supro Plus should be fixed with stainless-steel staples or preferably large headed felt nails which will self-seal the penetration. Fixings should be positioned at 300mm max centres to each rafter (or counter batten). Rafter spacing should be no more than 600mm centre to centre.

Sealing tape
Tyvek® Supro Plus is manufactured with an integral adhesive strip to allow the membrane to be sealed for air-tightness. The membrane has been tested for 'Resistance to penetration of air' in accordance with EN 12114 and achieved <0.25 $m^3/h.m^2$ at 50 Pa. With all laps and penetrations sealed, Tyvek® Supro Plus will contribute to the overall airtightness of the building. If preferred, fixing penetrations can be sealed by applying Tyvek® Butyl Tape to the substrate before the membrane is installed.

Laps
Maintain 150mm horizontal laps between each sheet and seal with the integral adhesive tape. Any vertical laps should be minimum 300mm and positioned over rafters. For airtightness, these may be sealed with Tyvek® Acrylic Tape (2060B).

Unsupported underlay
Tyvek® Supro Plus should be laid horizontally across the roof slope, with a nominal drape of 10mm. Horizontal laps should be sealed with the integral adhesive tape to comply with standards on wind uplift. Users should check the specific zonal wind uplift restrictions applicable to the site location, as well as the height and exposure parameters in accordance with the current version of BS5534 Annex A.

Supported underlay
Tyvek® Supro Plus should be pulled over the support and secured with appropriately sized counter battens. Stainless-steel staples or large headed felt nails may be used to temporarily secure the membrane, which ideally would be later covered by the counter battens.

Ply/OSB sheathing: Ventilated
These vapour resistant board materials do not allow adequate vapour diffusion and therefore should not be installed in non-ventilated applications above insulation. Ventilation at eaves and ridge and a continuous 50mm cross ventilation path must be maintained beneath the sheathing in accordance with the current version of BS5250.

Tyvek® Supro Plus may be installed over plywood or OSB sheathing, where the insulation is to be installed above, ie. warm roofs.

Scottish Sarking: Non-ventilated
To maintain vapour permeability, timber boarding should be 150mm wide with 2mm gaps as per BBA certificate 08/4548 or NSAI certificate 04/0157. Tyvek® Supro Plus should be laid directly over the timber sarking and secured with large headed felt nails (staples should not be used). The membrane should be laid horizontally with laps sealed as per the unsupported criteria above to comply with standards on wind uplift. Slates are fixed directly through into the boarding.

Ridge: Non-ventilated
Tyvek® Supro Plus should extend over the ridge and lap at least 150mm down each side so that a 300mm wide double layer is formed over the centre-line.

Ridge: Ventilated (for NHBC requirements)
Install Tyvek® Supro Plus continuously over the ridge to provide protection during construction. Immediately prior to fitting the ridge tiles, cut the membrane away along the ridge line to maintain the ventilation path.

Hip
Tyvek® Supro Plus should be taken up to the hip from one side and folded back to form a drainage welt. The underlay from the opposing roof slope should extend across the hip and over the first underlay to form a triple layer of membrane over the hip rafter. Once the membrane is fixed into place it may be trimmed back, but a minimum lap of 300mm should be maintained.

Valley (for tiles, lead, GRP, etc.)

This process should result in three layers of membrane being installed, providing protection to the valley.

1. Lay a strip of Tyvek® Supro (minimum 600mm wide) vertically down the centre line of the valley.
2. Dress Tyvek® Supro Plus from one roof pitch and extend across the valley to the opposing roof slope, covering entirely the first Tyvek® strip.
3. Repeat with the underlay from the remaining roof pitch, extending to the opposing roof slope.

For each stage, fix the Tyvek® Supro Plus underlay into place with large headed felt nails. During the process, care should be taken to ensure the membrane is formed to the valley shape as much as possible. This is to avoid penetrating the membrane with the valley lining or battens when later installed directly over.

Chimneys & roof windows

Tyvek® Supro Plus should be formed around chimneys & roof windows, turning the underlay up against the detail and terminating behind flashings (if present) to eliminate water ingress. Where appropriate, seal the underlay against the detail with Tyvek® Acrylic Tape (2060B).

Penetrations

Window corners, soil vent pipes and cable penetrations can be effectively sealed with Tyvek® Acrylic Tape (2060B) or Tyvek® FlexWrap.

Compatibility

Where timber treatments are used care should be taken to ensure they are touch-dry before the installation of the Tyvek® Supro Plus underlay. Retrospective spray applied micro emulsions can also pose significant risk to polymer-based materials such as Tyvek®. Masking the membrane against preservative treatments should be considered.

Temporary exposure period

Tyvek® Supro Plus may be left exposed for a period not exceeding **4 months**, provided that the membrane is adequately secured in accordance with our recommendations. Site conditions and exposure to wind should be assessed to determine whether extra security measures for the membrane are required.

Fire regulations

Tyvek® Supro Plus has Fire Classification E in accordance with EN 13501-1. Care should be taken to determine suitability of this membrane for the intended application, with specific regard to building height and proximity to boundary. Users/specifiers should refer to their regional regulatory guidance documents in case there are any requirements or variations that may restrict the use of this product.

Video installation link: https://www.dupont.co.uk/resource-center.html?BU=pbs&restype=video

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Tyvek® construction membranes are manufactured by DuPont under an ISO 9001: 2015 Quality Assurance System.