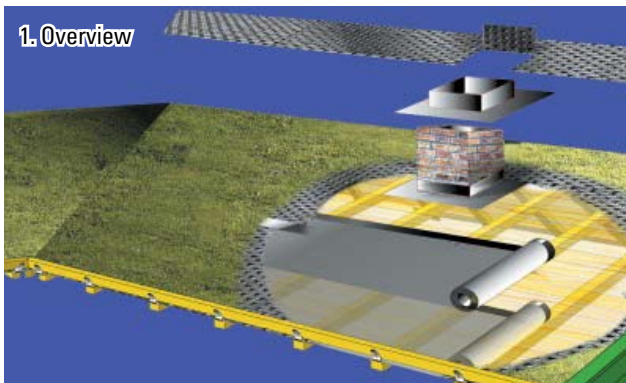


OLDROYD® Fixing Guide for Pitched Green Roofs

A step-by-step guide to assembling a green roof with a 10° - 40° pitch

Follow the steps detailed in this guide to create a complete pitched green roof...



1. Overview

Typically the studded Oldroyd Xv Green membrane is laid over a suitable exterior grade bitumen-based roofing felt. The turf or sedum layer is then laid directly onto the Oldroyd Xv Green membrane.



2. Key materials

Good quality proprietary bitumen-based roofing felt, Oldroyd Xv Green cavity drainage membrane, Oldroyd turf hooks, Oldroyd turf roof plugs and nails, Oldroyd sealing mastic, eaves drip tray, Oldroyd pipe and/or chimney collars (if necessary).



3. Preparing the roof - 1

The roof would typically be constructed from timber, with the top surface boarded. Ensure roof and structure are strong enough to take the saturated weight of soil and plants (check with supplier).



4. Preparing the roof - 2

Chamfered timber should be fixed along the perimeter upstands to ensure the roofing felt and membrane deflect water away from the edges.



5. Waterproofing - 1

The roof should be waterproofed with a good proprietary bitumen-based roofing felt, for example Icopal Super D or similar BBA approved exterior grade. Roll out lengthways starting at the bottom (eaves) of the roof.



6. Waterproofing - 2

Working up the roof, roll out the next roll of roofing felt and tack into position. With temperatures less than around 0°C, warm the overlapping adhesive with warm air. It is inadvisable to use a naked flame.



7. Waterproofing - 3

Ensure the roofing felt overlaps at the apex (ridge).



8. Waterproofing - 4

Apply a double layer of roofing felt over any joints, for example at the ends of the ridgeline.



9. Waterproofing - 5

Use Oldroyd sealing mastic to seal thoroughly around visible tacks and any joints.



10. Eaves drip trays

A neat and waterproof edge can be created by using an eaves drip tray. This is simply nailed into position under the waterproof roofing felt. Use Oldroyd sealing mastic to ensure that nail holes are sealed.



11. Roof penetrations

Roof penetrations, for example chimneys, should be considered separately. Use sections of the felt cut to size to form a neat seal. Chimneys can be sealed with the Oldroyd chimney collar. Again, use Oldroyd sealing mastic to complete the watertight seal.



12. Oldroyd Turf Hooks-1

Front edging boards hold the growing medium in place and prevent it from slipping. The edging boards are secured to the roof using special Oldroyd Turf Hooks to ensure drainage is not impeded.



13. Oldroyd Turf Hooks - 2

Turf hooks should be installed in line with the rafters, at spacings no greater than 500mm.



14. Oldroyd Turf Hooks-3

Seal around the fixing screws with Oldroyd sealing mastic.

15. Front edging board



The front edging board is fixed to the turf hooks using screws.

16. Front edging board - complete



The completed board runs along the full length of the roof

17. Oldroyd Xv Green - rolling-out



The Oldroyd Xv Green is rolled out over the roofing felt as shown.

18. Oldroyd Xv Green - ends



Ensure that the Oldroyd Xv Green runs up to cover the chamfer and inside edge of the perimeter upstand.

19. Oldroyd Xv Green - cut to fit



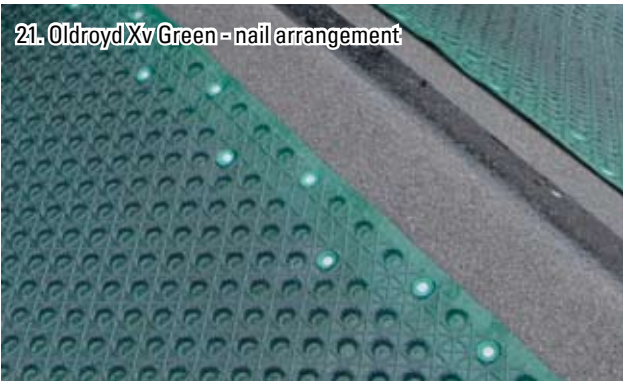
Cut and trim Oldroyd Xv Green at corners to ensure a good fit around perimeter details.

20. Oldroyd Xv Green - plugs and nails



Oldroyd Xv Green is secured in position using nails and special Oldroyd turf roof plugs. The nails make a tight fit through the plugs which are designed to fit exactly within the membrane stud.

21. Oldroyd Xv Green - nail arrangement



Fixings should be staggered with a minimum spacing of 400mm at pitches below 20°, and 200mm for over 20° pitch.

22. Oldroyd Xv Green - fixing edges



Secure the Oldroyd Xv Green membrane to the perimeter upstand with Oldroyd fixing plugs and nails.



23. Oldroyd Xv Green - the next layer

Continue up the roof, rolling out the next layer. There should be a minimum horizontal overlap of 300mm for under 20° pitch, and a minimum of 200mm for over 20° pitch.



24. Oldroyd Xv Green - keep it straight!

When working up the roof, ensure that the new layer remains parallel to the previous layer.



25. Oldroyd Xv Green - overlapping joints

Ensure that all joints overlap. Vertical overlap should be at least 500mm.



26. Oldroyd Xv Green - seal the joints

Apply Oldroyd sealing mastic at the edge of all horizontal and vertical overlaps to ensure a waterproof seal. Also use to seal all visible turf roof plugs and nails.



27. Oldroyd Xv Green - covering the ridge

The final roll should be applied centrally over the ridge of the roof. Ensure overlaps are greater than the minimum requirement for pitch of roof (see step 23).



28. Oldroyd Xv Green - finishing off

Cut small pieces of Oldroyd Xv Green membrane to cover any remaining odd-shaped areas, for example at the end of the ridgeline.



29. Oldroyd Xv Green - around chimneys etc.

And also around chimneys.



30. Guttering

Guttering should now be installed.

31. Ready for soil and plants



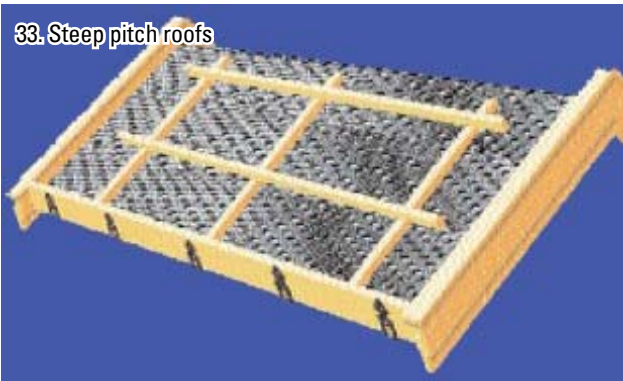
The construction, waterproofing and drainage is now ready for the installation of the soil and plants.

32. Capping strip



To stop water getting underneath the Oldroyd Xv Green membrane around the edge of the roof, a capping strip must be installed along the perimeter upstand.

33. Steep pitch roofs



On roofs with a pitch steeper than 20°, a free-standing timber framework must be constructed and rested against the front (eaves) edging board. This helps prevent soil slippage.

34. Soil



The roof soil is placed. A 300mm gravel border is recommended to provide ballast, prevent soil erosion at edges and act as a fire break.

35. Spreading



The soil should be spread evenly to a suitable depth for the plants. This will vary according to the chosen plant, check with your supplier.

36. Plants



Finally the plants are installed. In this case, turf is being used and it is rolled out lengthways along the roof.

37. Completed roof



Visit www.fixoldroyd.com for more information on the construction of turf and green roofs.

Oldroyd cavity drainage membranes are distributed in the UK by Safeguard Europe Ltd. Contact us for more information by telephone on 01403 210204 or email us at info@safeguardeurope.com.

www.safeguardeurope.com

Note: These steps are intended as a guide only, and before assembling a green roof we would advise contacting our technical department on 01403 210204.