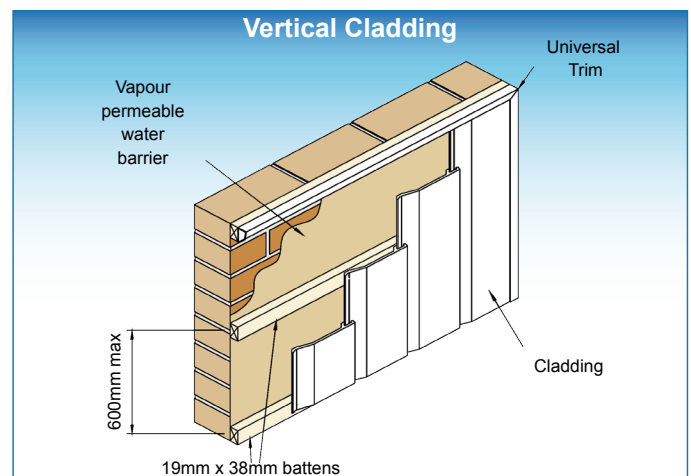
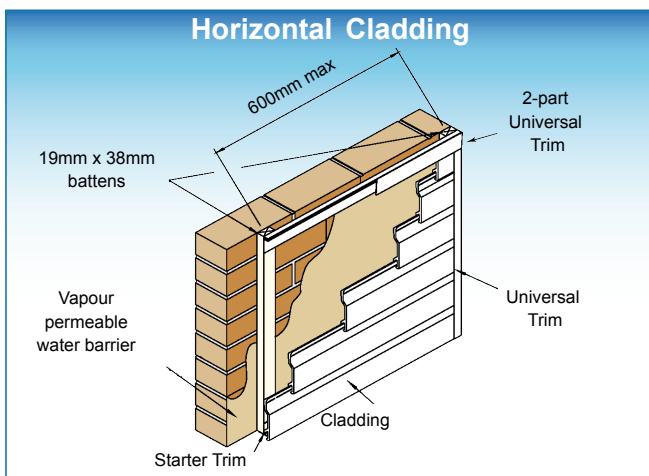


Cladding Installation Guide - White Only



Kestrel's K-Clad cladding systems are ideal for a wide variety of internal and external applications. The system is offered complete with all trims, fixings and components to ensure a high quality, aesthetically appealing finish.

K-Clad is an ideal means of covering large areas with a durable, low maintenance solution which will stay looking good for years. It never needs painting and is highly suitable for areas where future access could prove difficult or costly.



TECHNICAL CONSIDERATIONS - Installation

The Kestrel co-extruded cellular PVC-U cladding system is suitable for horizontal, vertical and diagonal fixing, as a decorative & protective external facing, over a timber stud or masonry wall

When used over a sheathed timber stud frame or over a masonry or block substrate, the cladding should be fixed to preservative treated, good quality timber battens (not less than 19mm by

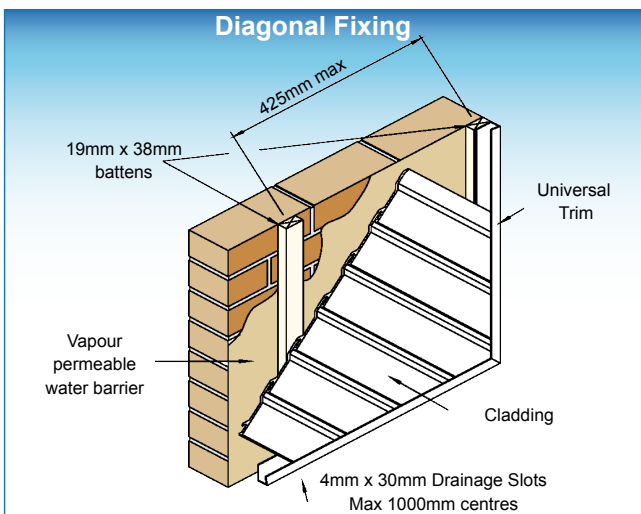
38mm) rigidly fixed to the substrate at 600mm centres or closer.

Installation takes place by fixing trims around the periphery of the area to be clad followed by installation of the cladding planks.

Planks are fixed using stainless steel annular ring shank nails positioned in the groove which runs along the length of the cladding plank. Nailing takes place from the centre of each plank working outwards.

Subsequent planks are fitted over the preceding planks ensuring that the tongue-and-groove joint is firmly closed so that the nail heads are concealed by the overlap. To avoid distortion in service, care should be taken not to install the cladding in extremes of temperature (i.e. below 5°C or above 25°C) and to allow adequate expansion gaps of 5mm per plank end for expansion.

The cladding must be installed to provide a minimum ventilated air space of 19mm between the cladding and the backing wall. This satisfies the NHBC requirement for a minimum 10mm wide ventilation cavity to be maintained between claddings and sheathing.

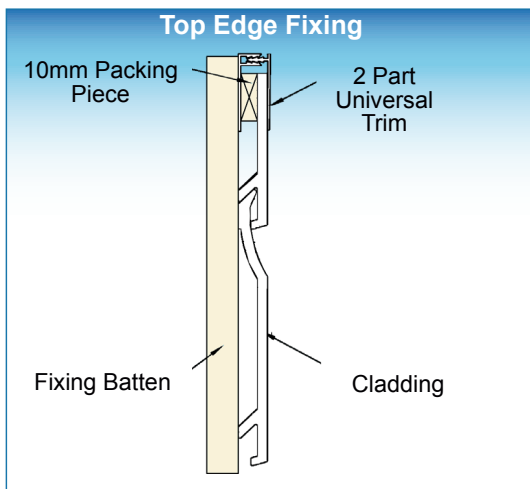


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Cladding Installation Guide

| Fixing nail | Open V (100mm) | Shiplap (150mm) |
|-------------|--|--|
| 30mm | All areas of UK (with basic wind speeds up to 56ms^{-1}) | Industrial/lowland areas of England, Wales and Northern Ireland (with basic wind speeds up to 46ms^{-1}) |
| 25mm | All areas of UK apart from most exposed northern areas of Scotland and Northern Ireland (with basic wind speeds up to 50ms^{-1}) | South East England (with basic wind speeds up to 40ms^{-1}) |

Horizontal battens used to support trims at the base of installations or at window heads, require 10mm diameter drainage holes at 1000mm centres.



When installed in accordance with Kestrel installation requirements onto battens at maximum 600mm centres, on buildings up to 10 metres in height, the cladding is suitable for use in geographical areas as shown in the table above.

When cladding is used in exposed locations (eg buildings above 10 metres in height, buildings on unprotected sites or in open countryside) it is recommended that batten spacing be reduced, particularly at the corners of the building, in order to increase the resistance to wind suction. The cladding is suitable for use above ground-floor level, and at ground-floor level in private areas where there is some incentive to exercise care.

It is not recommended for use at ground-floor level in public areas where it may be exposed to vandalism and general misuse.

Cellular PVC-U cladding is not air, water or water vapour tight. When used on timber stud walls the product must be backed by a breather membrane acting as a vapour-permeable water barrier*, incorporated behind the cladding under the supporting battens.

* This barrier must meet the requirements of BS4016: 1972 and have a vapour resistance less than 0.6 MNsg^{-1} when calculated from results carried out at 25°C and a relative humidity of 75%, in accordance with BS3177: 1959.

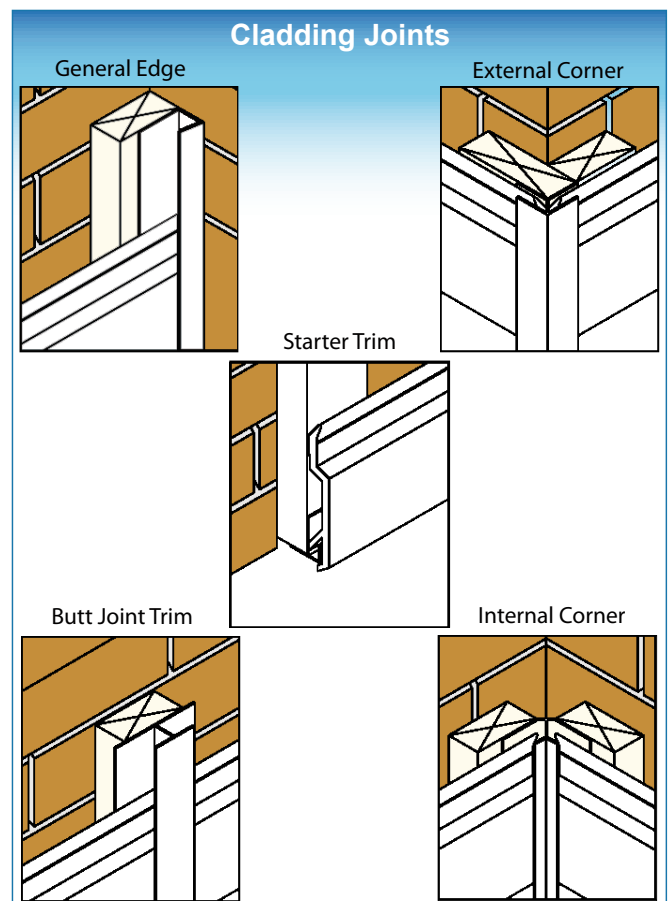
Where the product is used as a decorative facing attached to masonry walls, a water barrier is not necessary as the amount of water that will penetrate the cladding will be small and will not have an adverse effect on the wall.

Behaviour in relation to fire

When tested to BS476: Part 6: 1981 Kestrel PVC-U cladding material achieved a fire propagation index of 15.4 with sub indices and of 7.6, 6.4 and 1.4 respectively.

When tested in accordance with BS476: Part 7: 1987, the co-extruded material achieved a Class 1Y rating.

Although the surface spread of flame across the surface of the PVC is limited, the material does tend to char and may fall away when exposed to fire. Due consideration should always be given to any combustible material behind the cladding, which may become exposed in the event of a fire.



Cladding Installation Guide

Kestrel cellular PVC-U cladding is suitable for use as cladding on the external walls of buildings less than 20m in height (England & Wales) or 15 metres in height (Scotland) provided that the wall is 1 metre or more from the relevant boundary.

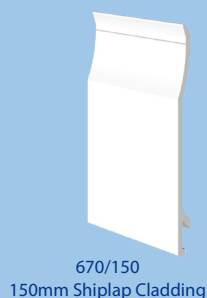
The product is suitable for use on the external walls of buildings in Northern Ireland less than 15 metres in height provided the wall is 1 metre or more from the relevant boundary, but excluding use on buildings of purpose group VII (assembly buildings) having more than one storey, at situations up to 7.5m above the finished surface of any adjoining roof or other part of the building to which persons have access.

The product is suitable for use as a cladding on the external walls of buildings 20 metres or more in height (England &

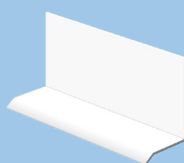
Wales) or 15 metres or more in height (Scotland) provided that the wall is 1 metre or more from the relevant boundary and the cladding does not extend higher than 20 metres (England & Wales) or 15 metres (Scotland).

The product is suitable for use on external walls of buildings in Northern Ireland which are 15 metres or more in height provided the wall is 1 metre or more from the relevant boundary and the cladding does not extend higher than 15 metres, but excluding use on buildings of purpose group VII (assembly buildings) having more than one storey, at situations up to 7.5 metres above the finished surface of any adjoining ground, or of any adjoining roof or other part of the building to which persons have access.

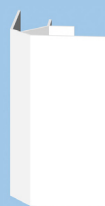
K-Clad Cladding System



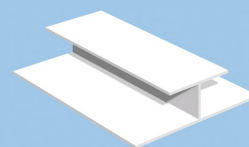
670/150
150mm Shiplap Cladding



674
Drip Trim



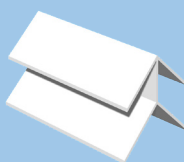
675
Internal Corner Trim



676
Cover Joint Trim



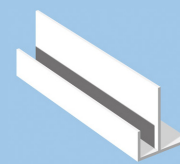
671/100
100mm Open V Joint Cladding



677
External Corner Trim



680
Two Part Corner Trim



683
Starter Trim with Batten Cover



682
Universal Channel



681
Two Part Universal Trim



678
150mm Shiplap Cover Joint

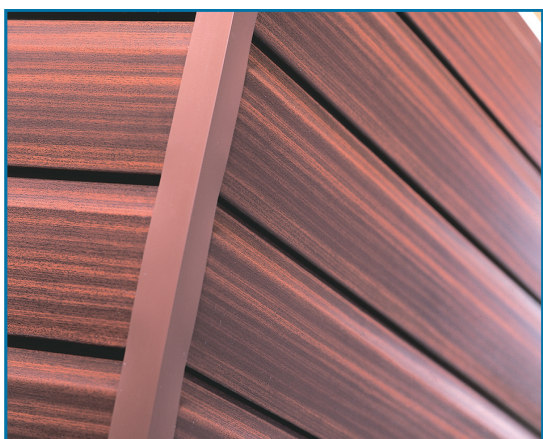


679
100mm Open V Joint Cover Joint



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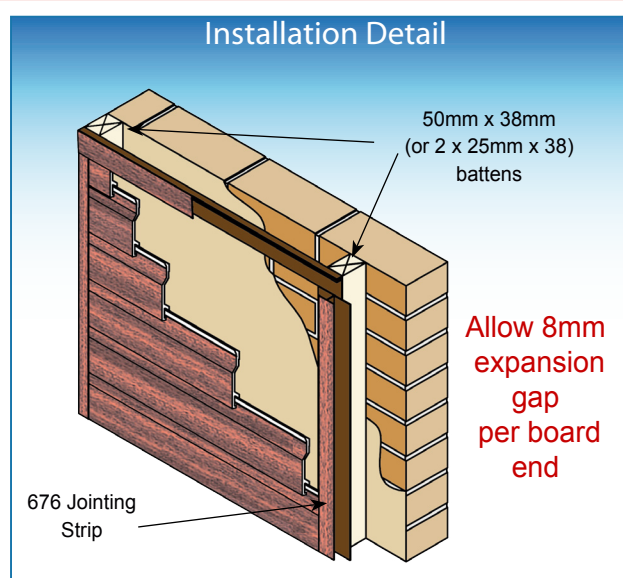
Cladding Installation Guide - Foiled



Working with Woodgrain cladding requires modified installations procedures.

The following fixing details **must** be followed when installing Woodgrain cladding products.

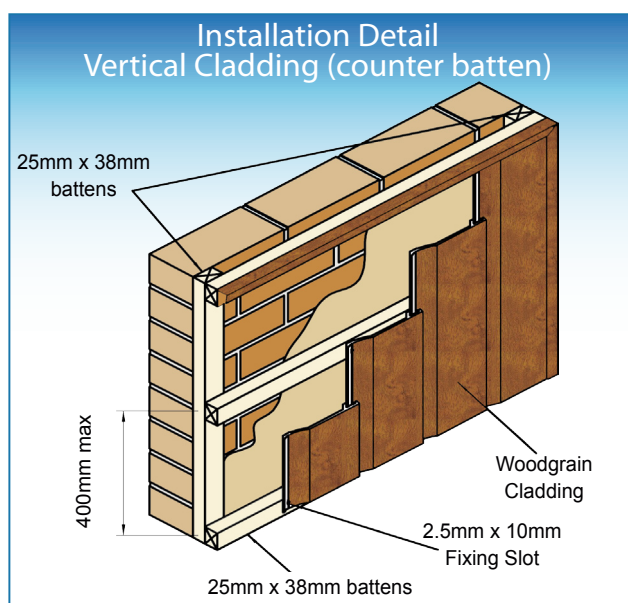
1. Allow a minimum of 50mm air space behind the back of all cladding installations.
2. Using the Universal Channel or Starter Trim with Batten Cover at both the top and base of each cladding face, allow a 10mm air gap at the top and bottom of each cladding unit in order to generate air flow behind the installation. When installing cladding vertically the use of counter battens is required.
3. Install 5m (max.) cut lengths and fix firmly at the centre of each cut length with Cladding pins as recommended for white profile. All subsequent fixings, at maximum 400mm centres from the central fixing point, to be pre-slotted with a 2.5mm x 10mm slot and fixed with a large headed nail as recommended for white profile ie stainless steel annular ringshank nails - 2mm shank diameter of 30mm length



4. Jointing of boards to be made with 676 cover joint trim , allowing an 8mm expansion gap at every plank end.
5. Installations to take place at ambient air temperature - between 5°C and 25°C.
6. All pre-installed products to be kept stored away from direct sunlight, preferably indoors, at all times.
7. All end finishing cover strips etc. should allow an 8mm expansion gap between the end of the cladding plank and the cover stop.

These precautions will allow airflow behind the cladding fascia which helps to reduce excessive heat build-up.

They also allow a free expansion and contraction of the profile along the profile length from a central fixed point. Expansion gaps at joints and finishing strips also allow for freedom of expansion.



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