

## PVC-UE Cladding Systems - Installation Details



The following installation details have been written to comply with the CE marking requirements of BS EN 13245-2:2008 (Resistance to Fixings).

The installation details cover all the KestrelBCE Cellular Cladding Systems (6/7mm) in PVC-U white, PVC-U coloured and foil finishes

### General

The cladding systems are ideal for a wide variety of internal and external applications. The systems are offered complete with all trims, fixings and components to ensure a high quality, aesthetically appealing finish. Cladding 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 where future access could prove difficult or costly. The design features within the systems mean that cladding offers a visually appealing alternative to traditional materials, whether in domestic or commercial applications

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.

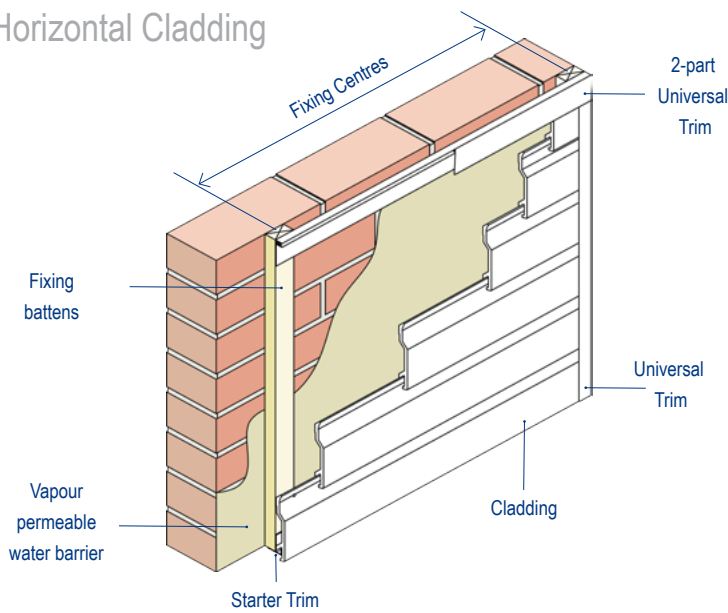
PVC-UE cladding installations are not air, water or water vapour tight. When used on timber stud walls the product must be backed by a breather membrane incorporated behind the cladding under the supporting battens.

The cladding planks are available in 6 and 7mm thickness and in a variety of finishes. Heat build-up in PVC-UE cladding planks, especially in dark colours must be taken into consideration during the installation process. Table A sets out the specific requirements for a given cladding plank / finish combination to allow a guaranteed performance in a Northern European climate .

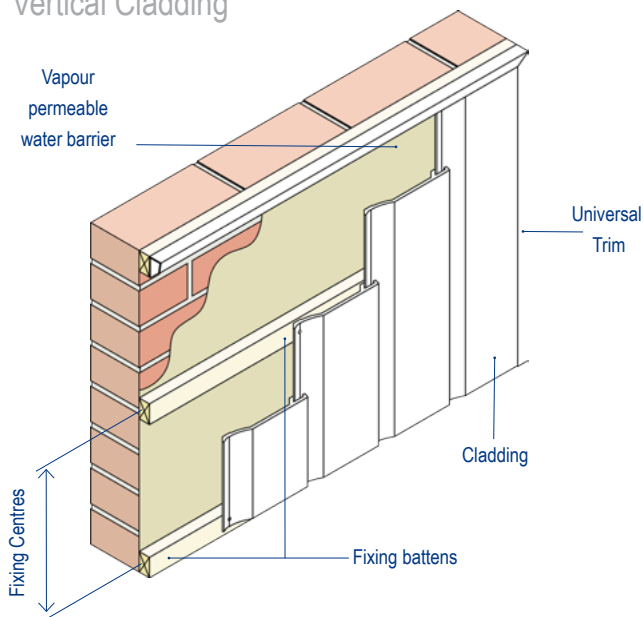
The cladding systems are suitable for horizontal, vertical and diagonal fixing, as a decorative and protective facing, over a timber stud or masonry wall. The cladding should be fixed to nominal 38mm wide preservative treated good quality timber battens of thickness and spacing shown in Table A.

Prior to installation all cladding planks, trims and joints must be kept away from direct sunlight and preferably stored indoors.

### Horizontal Cladding



### Vertical Cladding



## PVC-UE Cladding Systems - Installation Details

Table A

Finish	Coverage	Expansion Gap per plank end	Minimum Batten Thickness	Batten Cavity Ventilation Top and Bottom	Maximum fixing Centres	Slotted Fixing Points	Cladding Pin Head	Installation Temp Range
White PVC-U	≤ 150mm	5mm	19mm (25mm recommended)	5mm	600mm	No	Standard	5 to 25°C
	> 150mm				300mm			
Coloured PVC-U	≤ 150mm	8mm	25mm	5mm	600mm	No	Standard	
	> 150mm				300mm			
Foil Laminates	≤ 150mm	8mm	50mm	10mm	400mm	Yes	Large	

### Technical Considerations

#### Installation PVC-U White & PVC-U Coloured Cladding Finishes

Following the installation of the vapour permeable water barrier (where required) and battens, PVC-U fixing trims are secured around the periphery of the area to be clad using 20mm stainless steel annular ring shank nails, followed by the installation of the cladding planks.

Cladding planks are fixed using 30mm annular ring shank nails positioned in the groove which runs along the length of the cladding plank. (The position of the nail provides a hidden fix). Nailing takes place from the centre of each plank working outwards.

Subsequent planks are fitted over the proceeding 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 must 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 per plank end in line with the details shown in Table A.

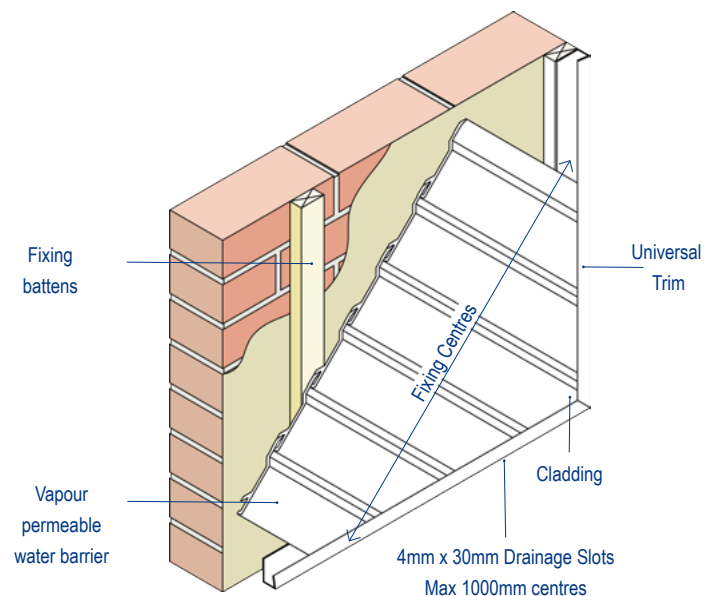
Planks are joined using PVC-U injection moulded single joints or with a continuous PVC-U extruded H-Trim. Where joints require adhesive, a low modulus neutral cure silicone should be used.

The cladding must be installed with at least the minimum batten thickness and batten cavity ventilation slots detailed in Table A. This vented cavity provides for control of heat build up and the release of any moisture that may have penetrated the installation.

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

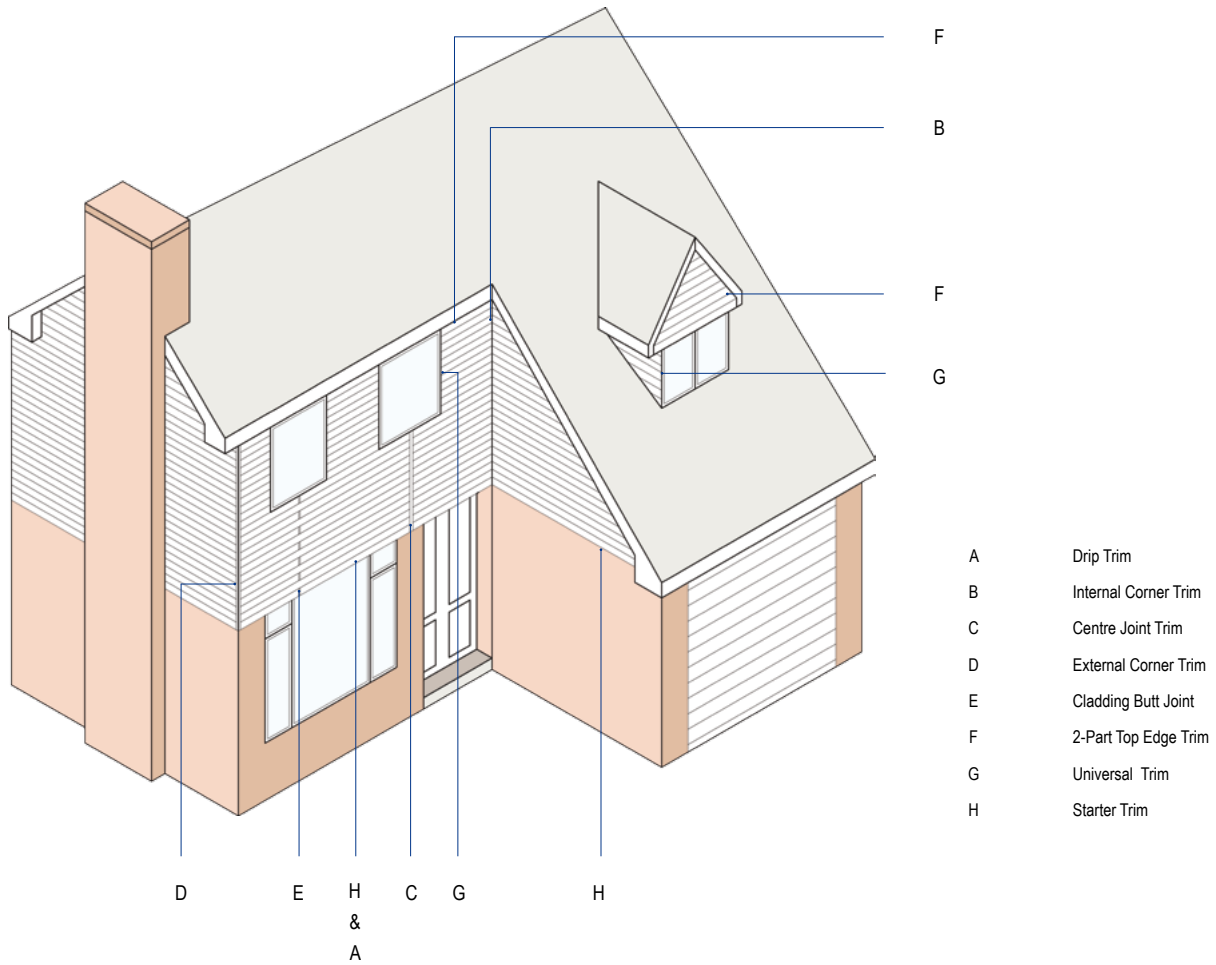
Details of cladding trim fixing details are shown in the following diagrams.

### Diagonal Fixing



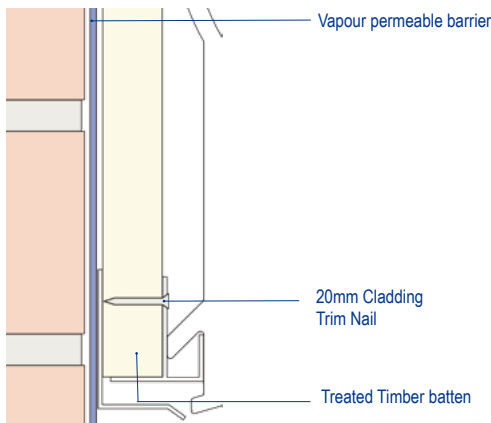
## PVC-UE Cladding Systems - Installation Details

### Trim Locations and Installation

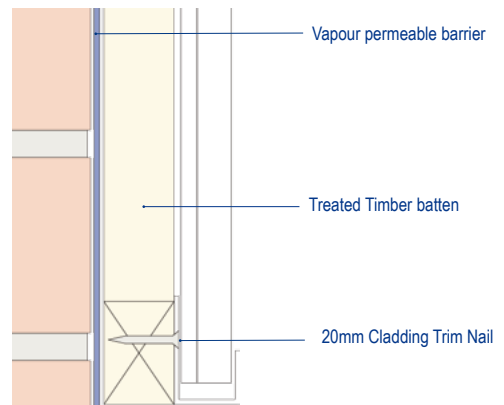


### Trim Installation

#### Starter and Drip Trim - Horizontal Installation



#### Starter Trim - Vertical Installation

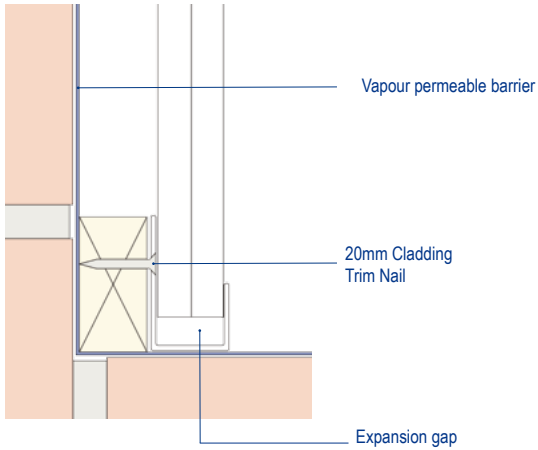


Nb. Universal channel must be pre-slotted to allow for drainage

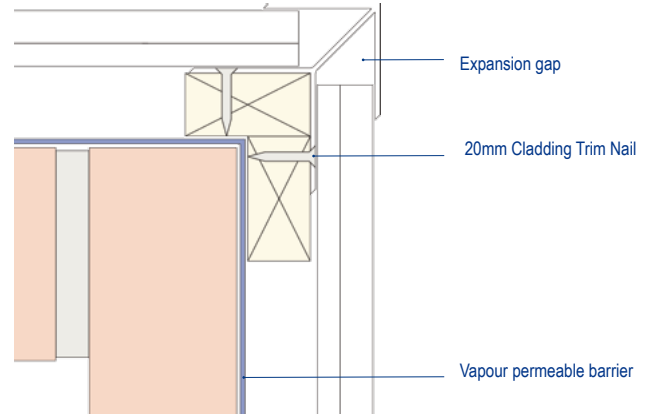
## PVC-UE Cladding Systems - Installation Details

### Trim Installation

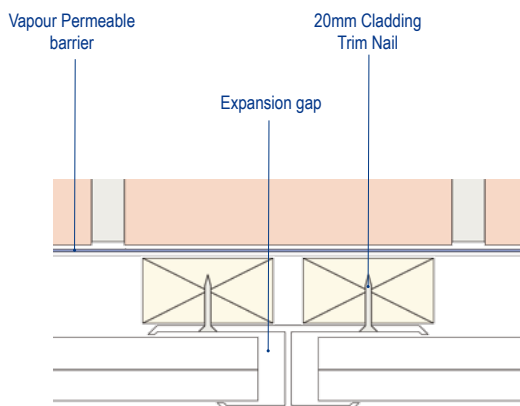
#### Universal Channel- General Edge Installation



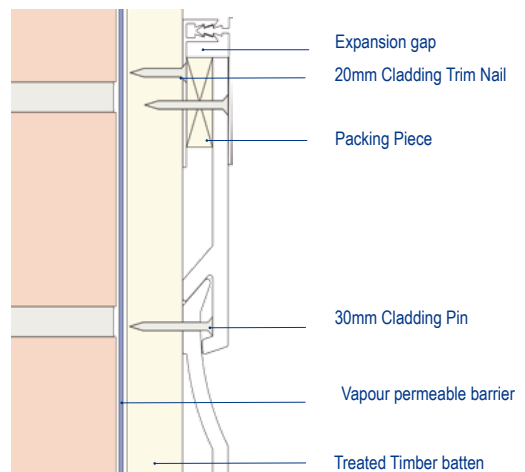
#### External Corner - Horizontal Installation



#### Centre Joint Trim Installation



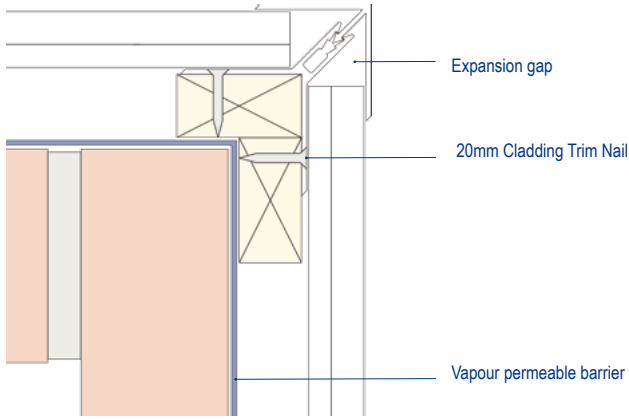
#### 2-Part Top Edge Trim - Horizontal Installation



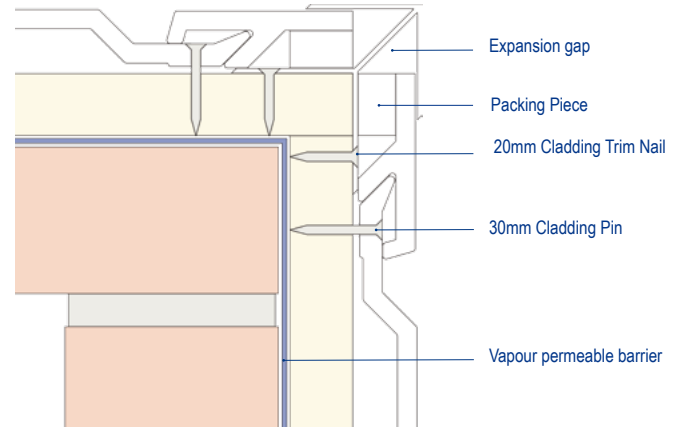
# CE marking - resistance to fixings I

## PVC-UE Cladding Systems - Installation Details

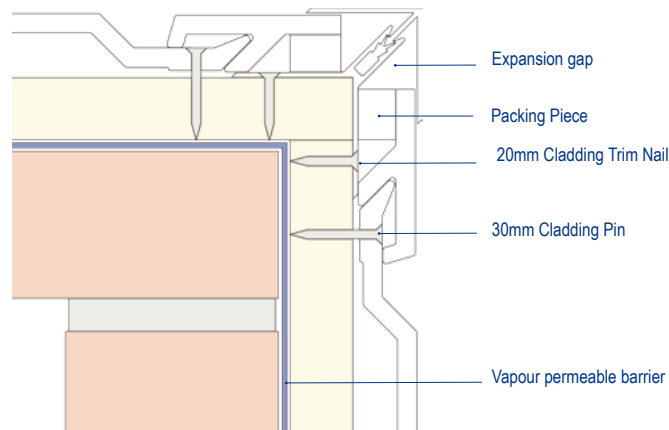
2-Part External Corner - Horizontal Installation



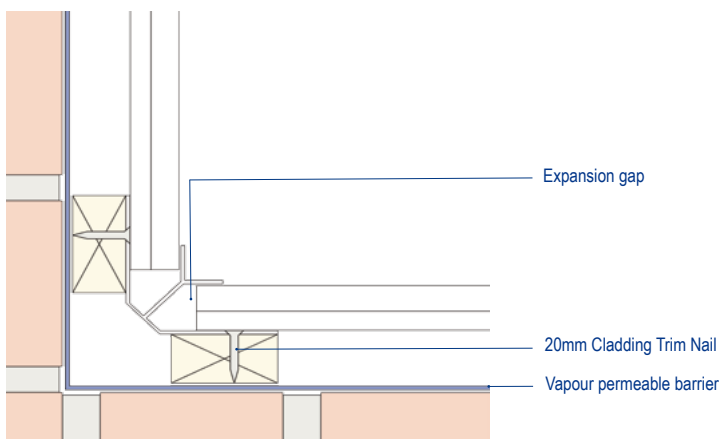
External Corner - Vertical Installation



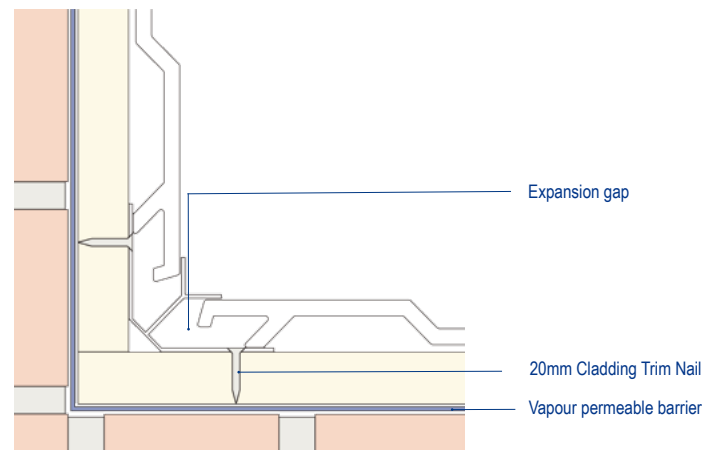
2-Part External Corner - Vertical Installation



Internal Corner - Horizontal Installation



Internal Corner - Vertical Installation



## PVC-UE Cladding Systems - Installation Details

### Technical Considerations Installation Foil Laminate Finish

Working with foiled cladding requires some modified procedures and installation processes to the of white and coloured cladding.

The cavity produced by the battens and the cavity ventilation slots are increased to counteract the effect of the dark colours with regard to heat build up, see Table A.

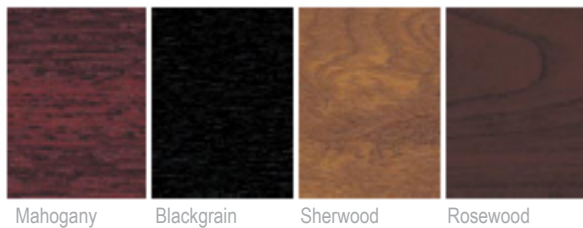
Vertical cladding installations require the use of counter battens to maintain cavity ventilation.

The maximum run of an un-cut cladding plank must not exceed 5m.

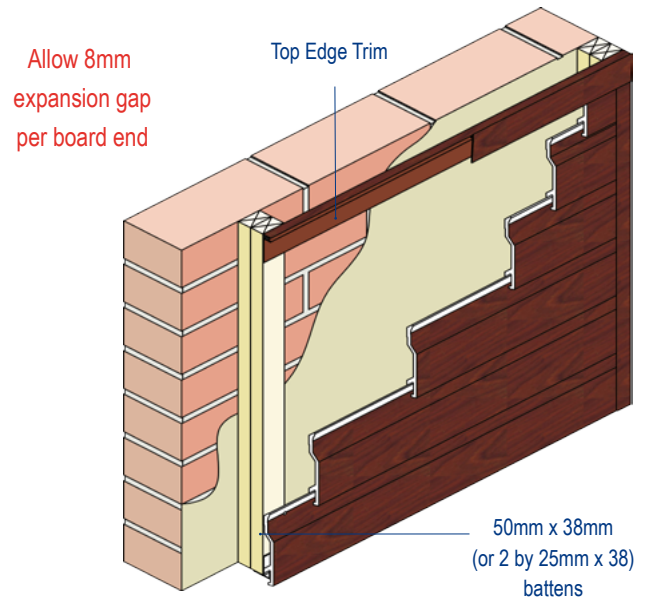
Cladding planks are fixed using large headed 30mm stainless steel annular ring shank cladding nails not exceeding the maximum fixing centres detailed in Table A. The central fixing point along a cladding plank is nailed through the groove which runs along the length of the cladding plank, all subsequent fixings are made through fabricated slots (3mm x 10mm) to allow free longitudinal movement of the cladding plank about the central fixed point.

Jointing of cladding planks can only be made using a continuous PVC-U extruded H-Trim.

Specific details of foil cladding installation are shown in the diagrams.



### Installation Detail - Horizontal Cladding



### Installation Detail Vertical Cladding (counter batten)

