



Brands for the offsite industry

Gable Restraint System Technical Guide

UP TO 5 STOREYS



**CONSTRUCTION
PRODUCTS**

Gable Restraint System

ITW Construction Products' Cullen brand of timber engineering connectors has been synonymous with innovation and quality for over forty years. In collaboration with national housebuilders, the Trussed Rafter Association and industry partners, ITW's technical experts have created an innovative system featuring the Cullen Gable Restraint Bracket for a complete solution to connect timber gables to masonry walls.

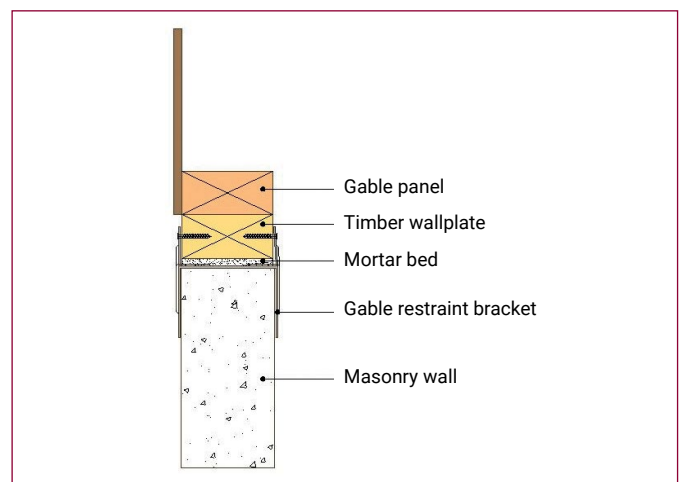
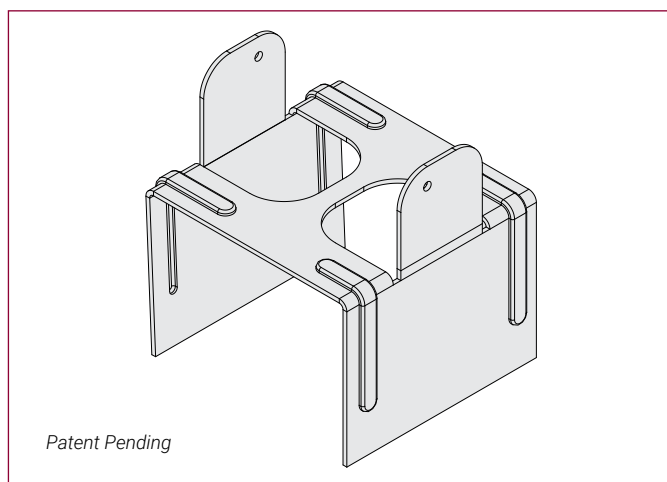
The details have been developed to safely transfer lateral wind load

on the masonry and timber gable ends into the braced roof diaphragm. This provides a verified connection between timber gable panels to masonry walls. The details give an option to have a continuous wall plate or a stepped wallplate with the gable wall plate being raised to suit the bottom chord depth of the truss. Either of the details meets the minimum requirement of Building Regulations 2010 approved document A, Scottish Building regulations domestic, NHBC Standards for houses

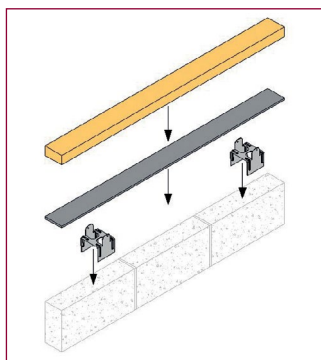
of five storeys or less in England and Wales and four storeys or less in Scotland. Both details are accepted by NHBC.

This NHBC accepted "whole system" solution incorporating the Cullen Gable Restraint Bracket and restraint straps including Paslode nail fixings with all centres, spacings and connections already calculated means that whenever our detail is followed the system is underwritten by ITW Construction Products.

Gable Restraint Bracket & Application

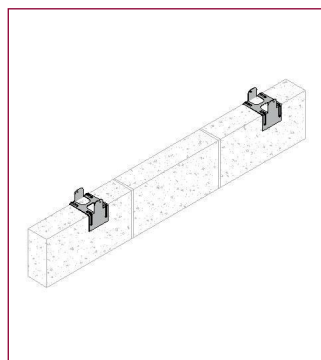


Gable Restraint Bracket Installation



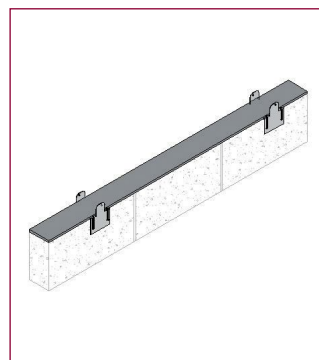
Components:

- Wallplate
- Mortar
- Gable Restraint Brackets
- Wall

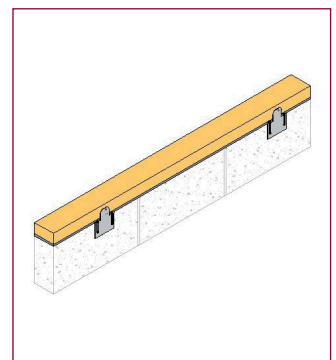


Gable restraint brackets placed on wall at 1200mm* maximum centres (no fixings required).

*for buildings up to 3 storey England & Wales and 2 storey Scotland



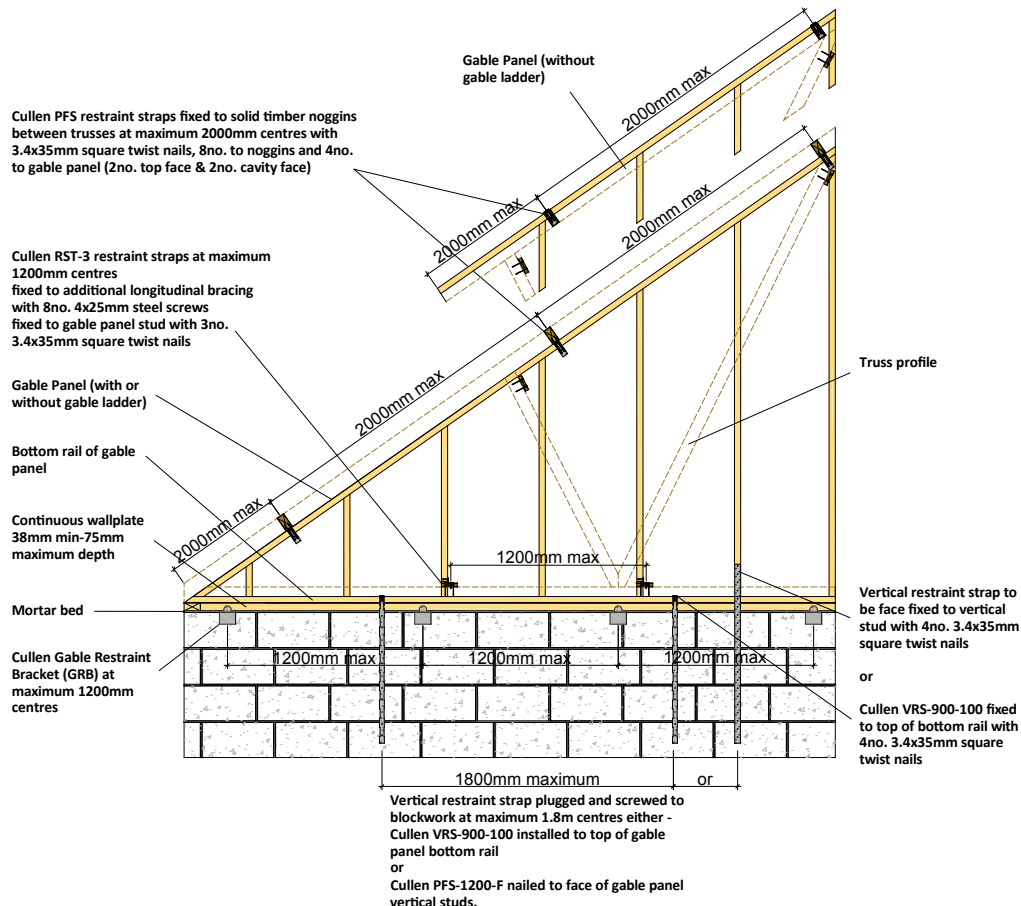
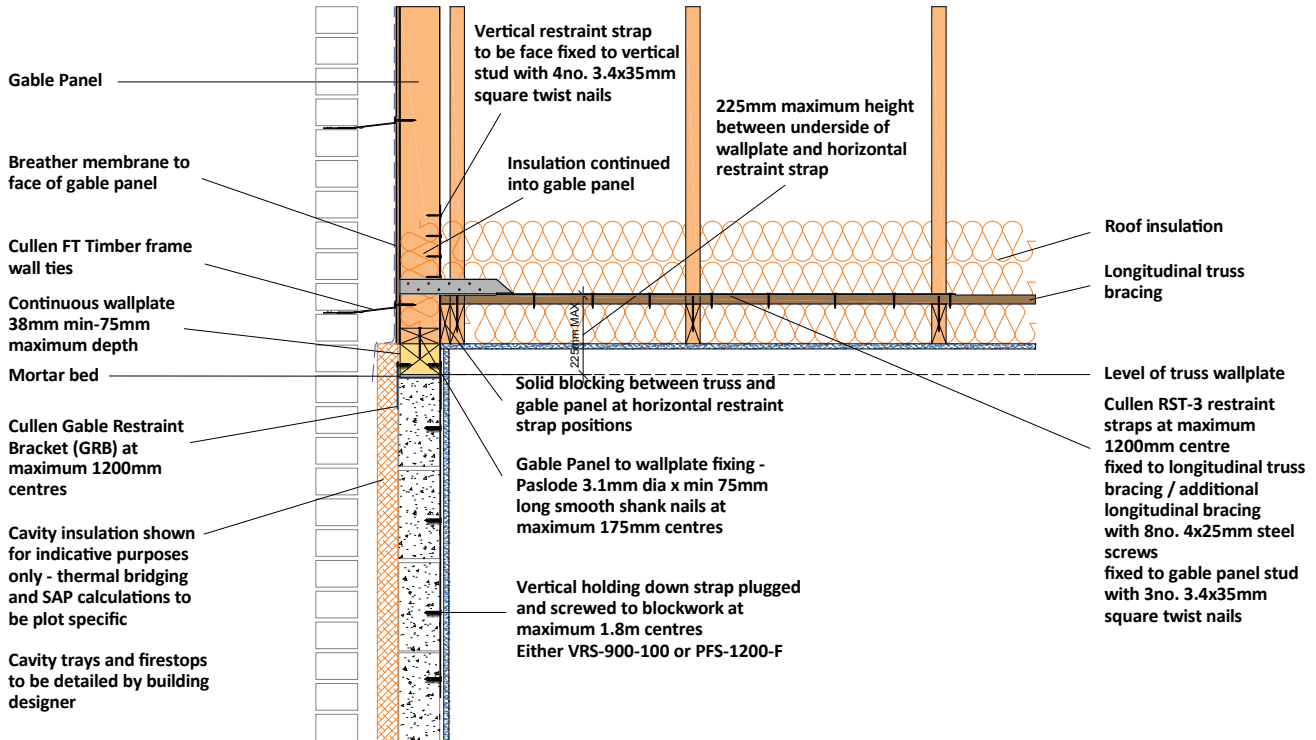
10mm maximum mortar bed on wall prior to wallplate being fixed.



38-75mm wallplate bedded on mortar and fixed to gable restraint brackets with 3.5x40mm wood screws (2 no. per bracket).

Class 1 Buildings / houses of single occupancy **three storeys** or less England & Wales and **two storeys** or less Scotland

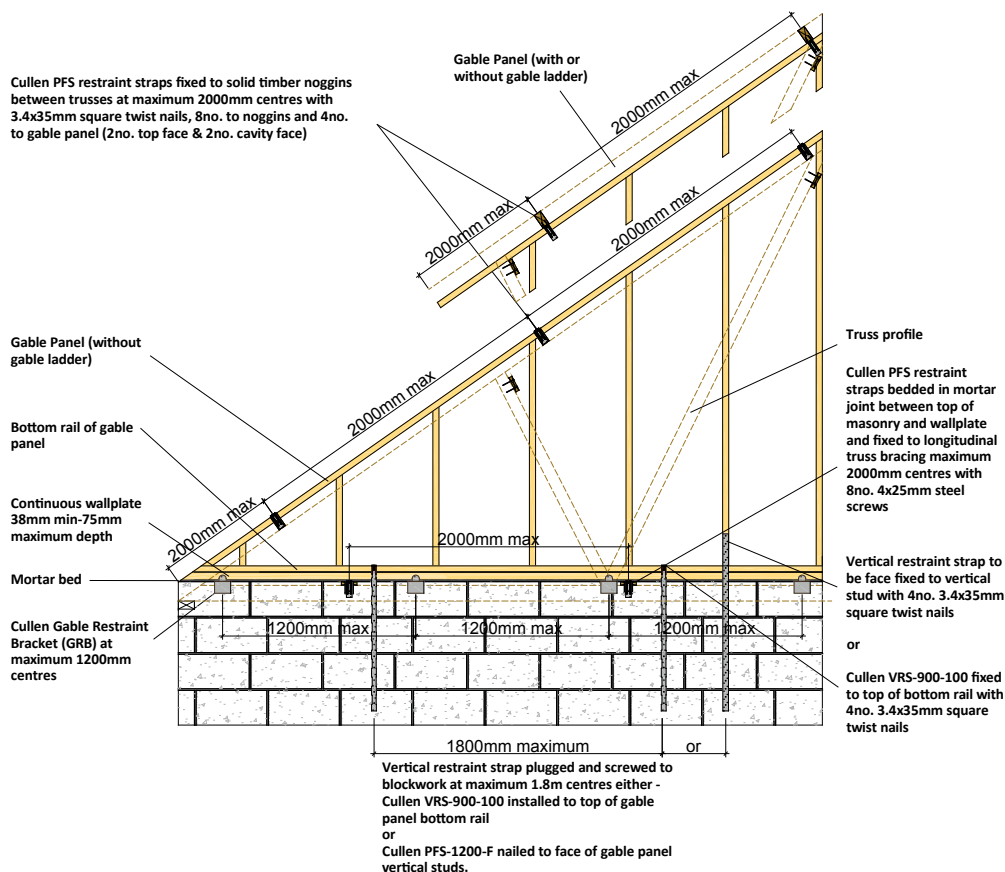
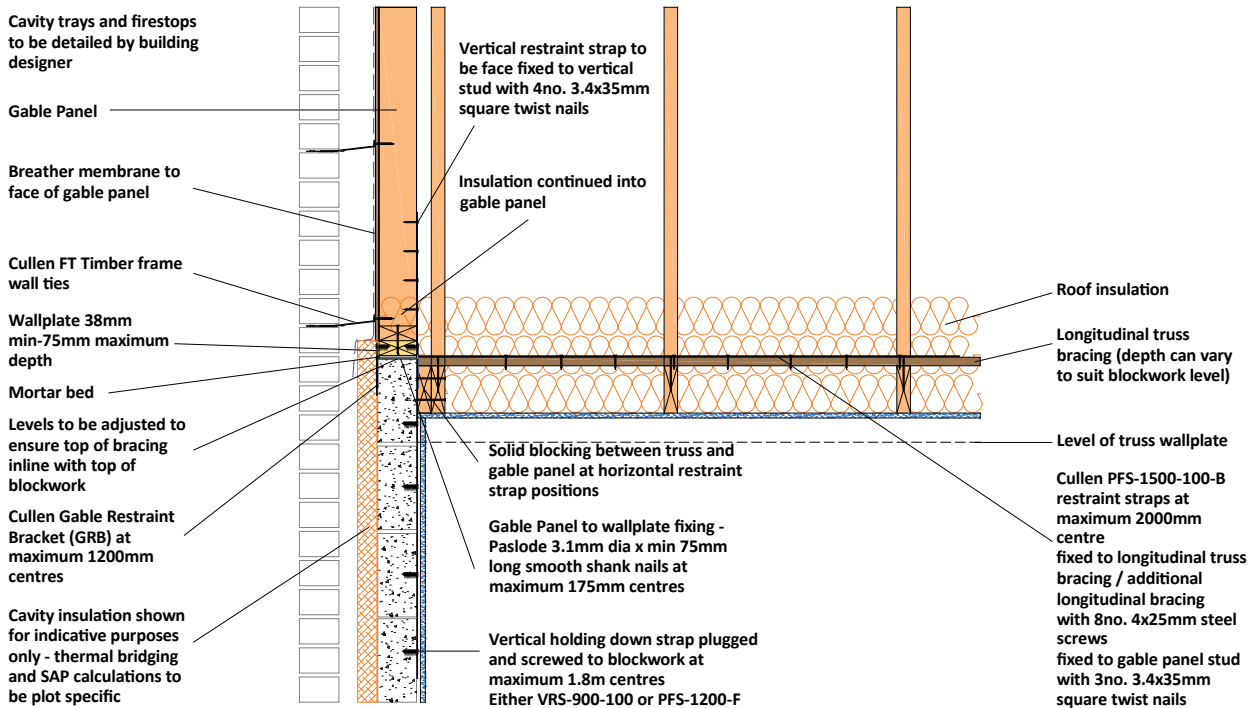
Timber Gable to Masonry fixing detail to cold roofs – continuous wallplate



Gable Restraint System

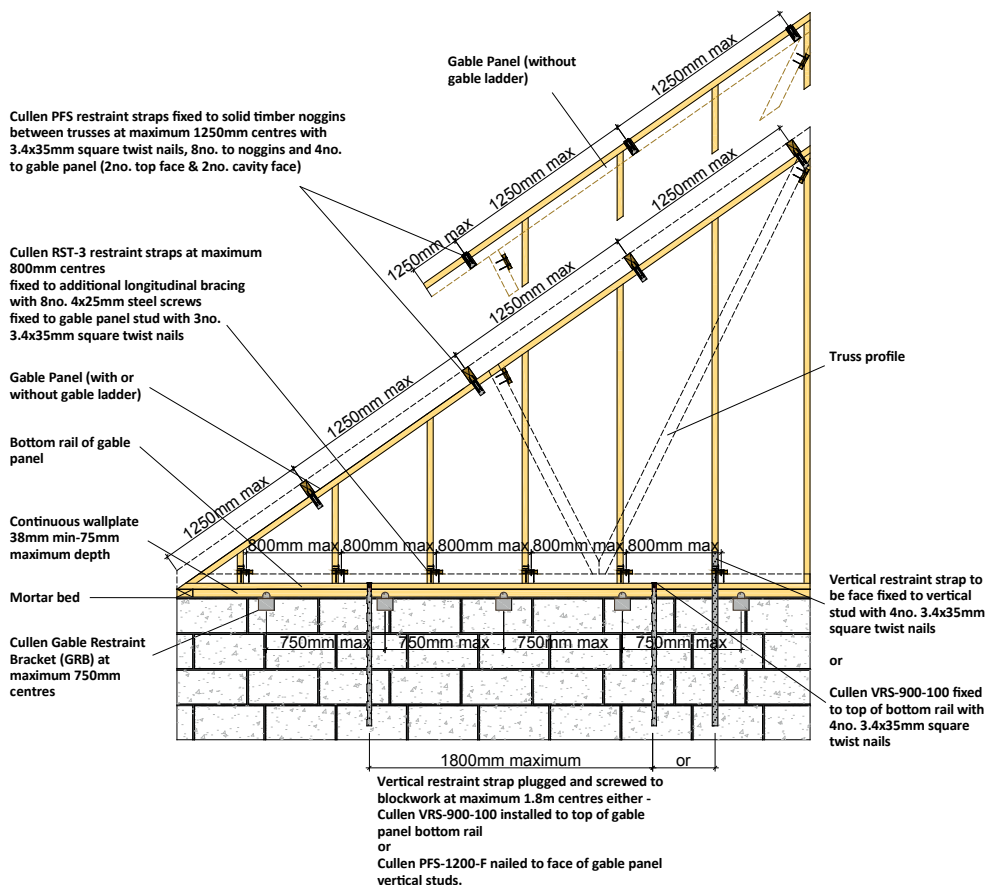
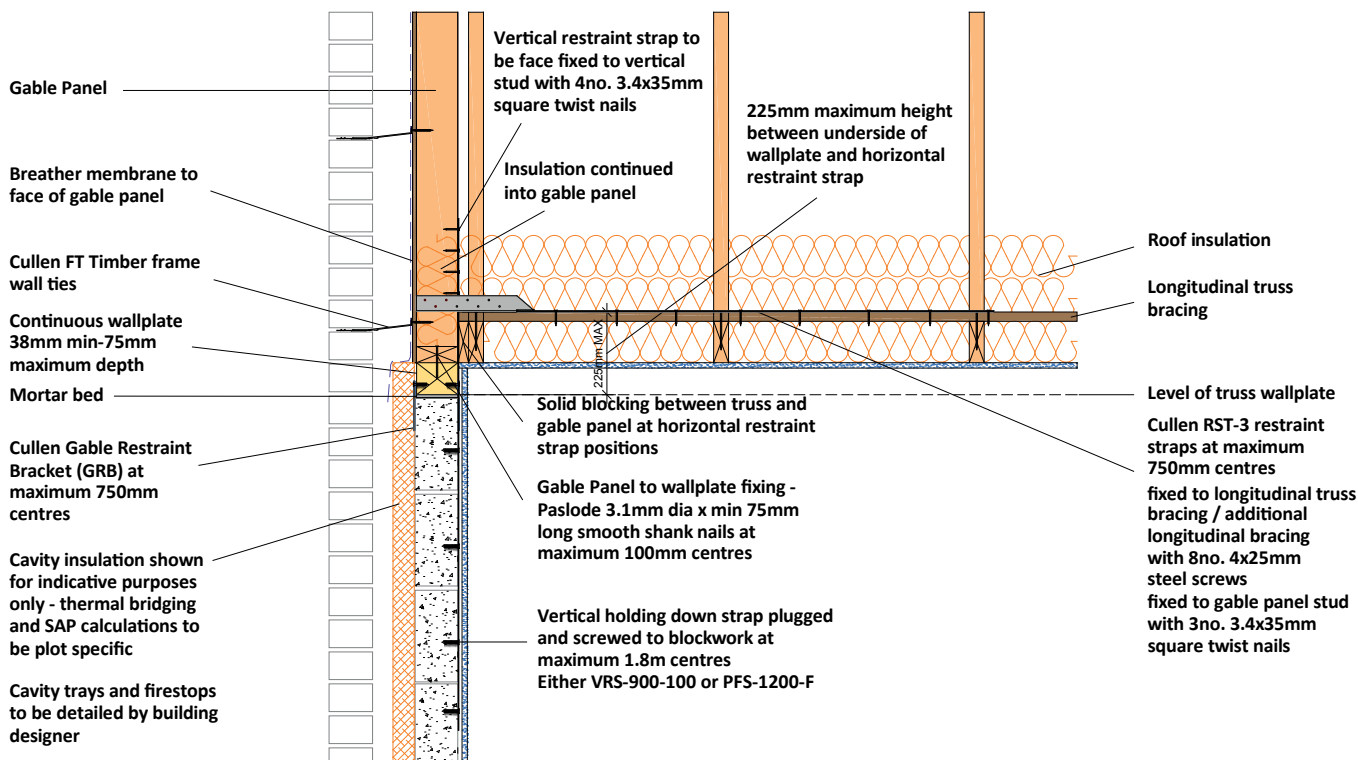
Class 1 Buildings / houses of single occupancy **three storeys** or less England & Wales and **two storeys** or less Scotland

Timber Gable to Masonry fixing detail to cold roofs – raised gable wallplate



Class 2a Buildings / houses of single occupancy **five storeys** or less England & Wales and **four storeys** or less Scotland

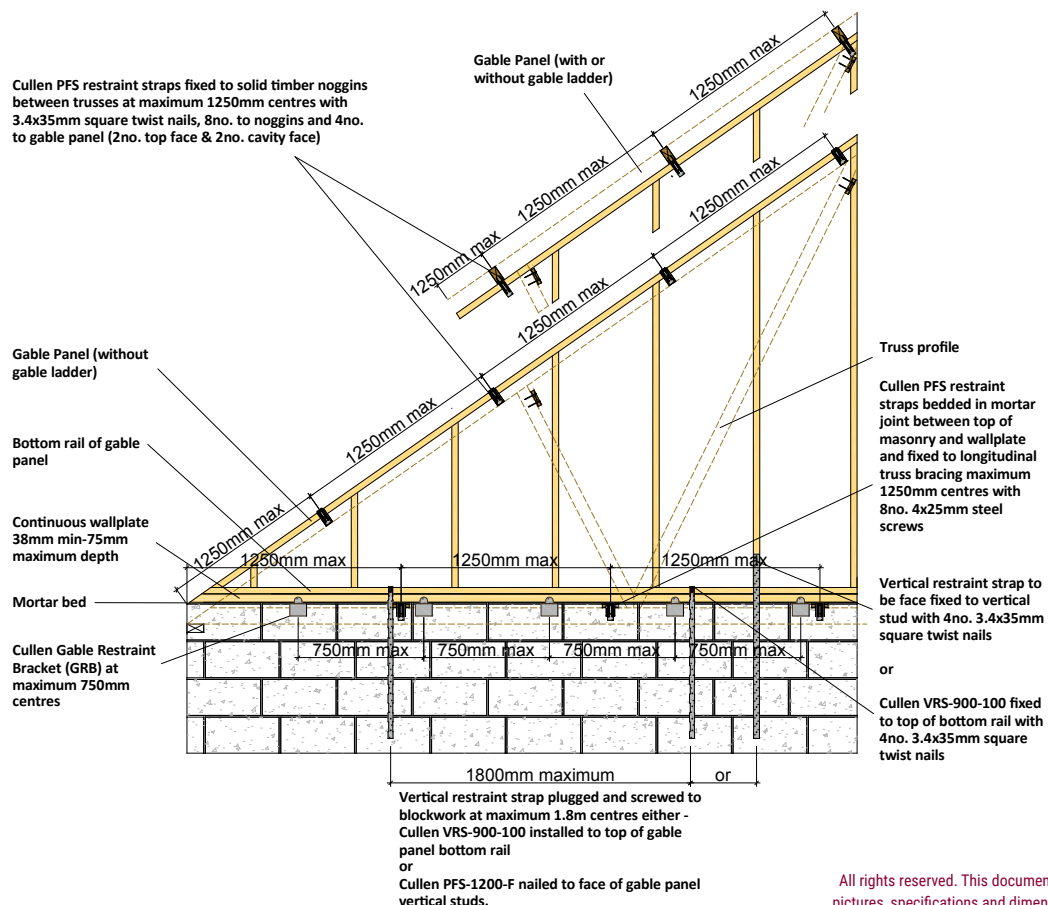
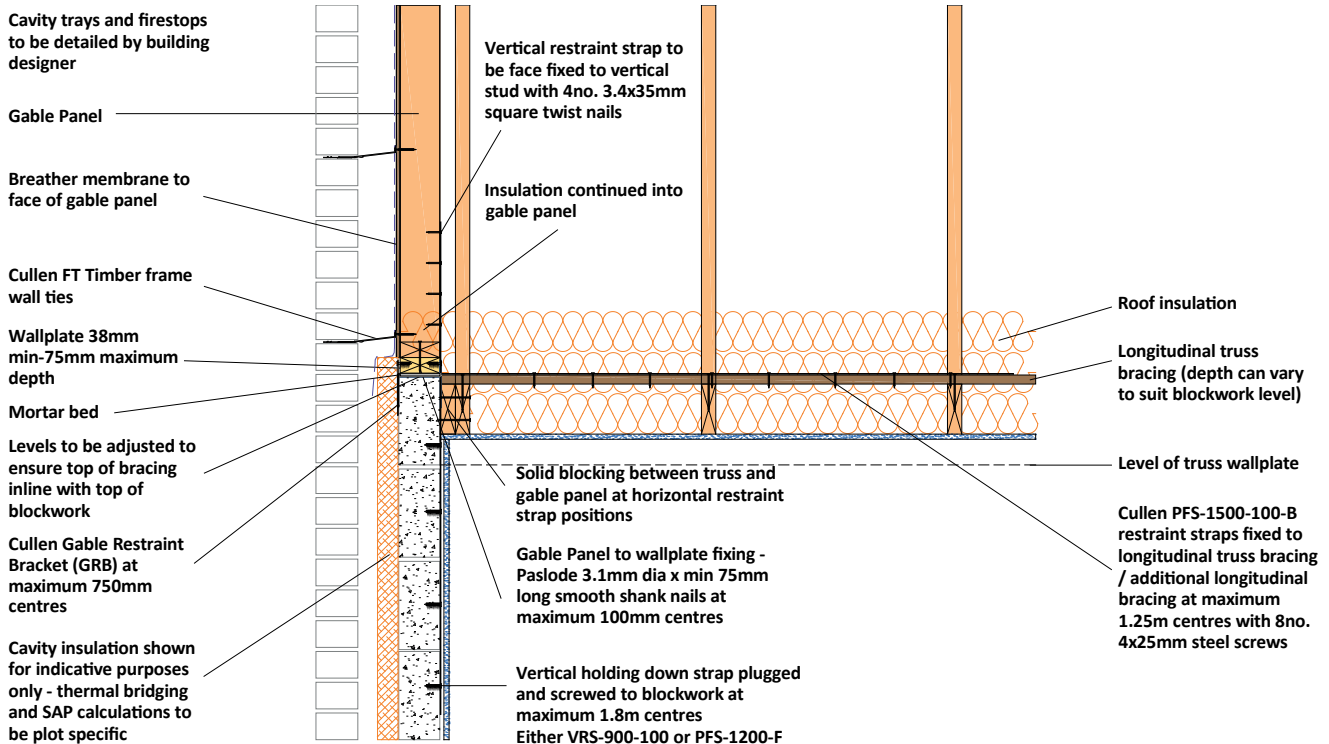
Timber Gable to Masonry fixing detail to cold roofs – continuous wallplate



Gable Restraint System

Class 2a Buildings / houses of single occupancy **five storeys** or less England & Wales and **four storeys** or less Scotland

Timber Gable to Masonry fixing detail to cold roofs – raised gable wallplate



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*Subject to change at discretion
of ITW Construction Products Offsite

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