INSULATION FOR WALLS, ROOFS & CEILINGS

HControl Hybrid

REFLECTIVE INSULATING VAPOUR CONTROL LAYER

CE

EN 13984 Flexible Sheets for Waterproofing bmtrada

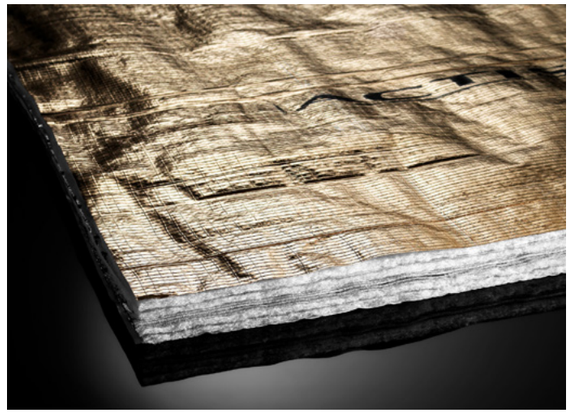
NFRC LEADING ROOFING EXCELLENCE

eurofins

STRUCTURAL TIMBER ASSOCIATION Member

ACTIS

HCONTROL HYBRID is a thin multifoil insulation product with a built-in vapour control function and an unrivalled thermal performance. For use on the warm side, behind the internal finish in roofs, walls and ceilings.



HCONTROL HYBRID provides dual performance within a single product: a vapour control layer and insulation, allowing a reduction in the number of installation steps whilst reducing the thickness of the main insulation to achieve the same required U-Value. It can be used in conjunction with any type of insulation.

THERMAL RESISTANCE

R Value = 3.20 m^2K/W*

* with 2 air voids of 20mm.

FLEXIBLE

AIRTIGHT

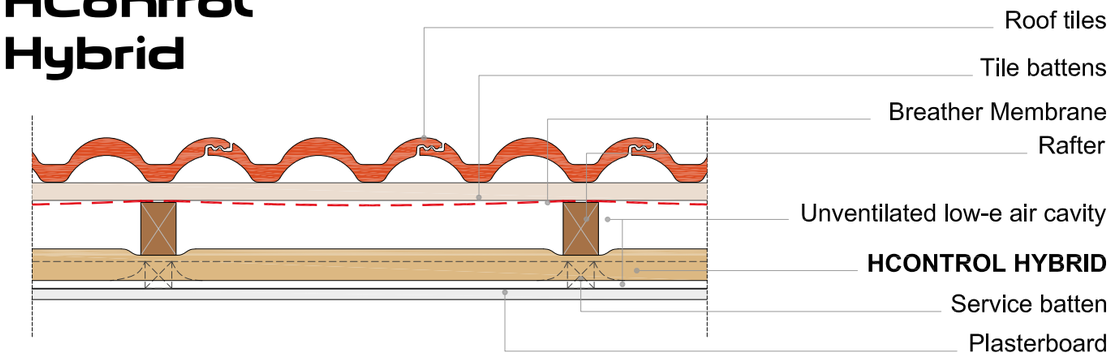
REFLECTIVE

VAPOUR BARRIER

LIGHTWEIGHT TO CARRY AND STORE

TIMBER PITCHED ROOF

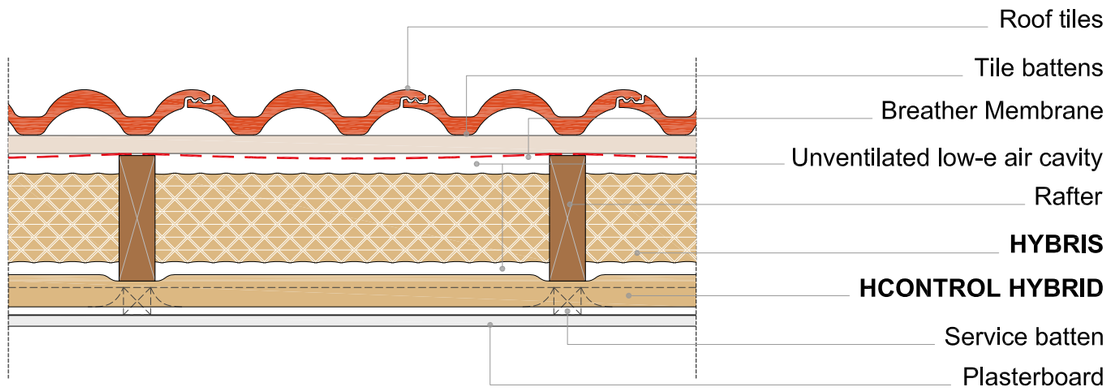
HControl Hybrid



HControl Hybrid as a substitute for Vapour Control Layer in timber pitched roof.

TIMBER PITCHED ROOF

HControl Hybrid + Hybris



HControl Hybrid as a substitute for Vapour Control Layer and Hybris in between rafters in timber pitched roof.

Centers	Rafter size (mm)	HControl Hybrid	Hybris thickness (mm)	Service batten	Reference:
U - Value = 0.16 W/m²K					
600	175	yes	125	38 x 38	PF274
400	175	yes	140	38 x 38	PF282
U - Value = 0.15 W/m²K					
600	175	yes	140	38 x 38	PF275
400	200	yes	155	38 x 38	TE4161

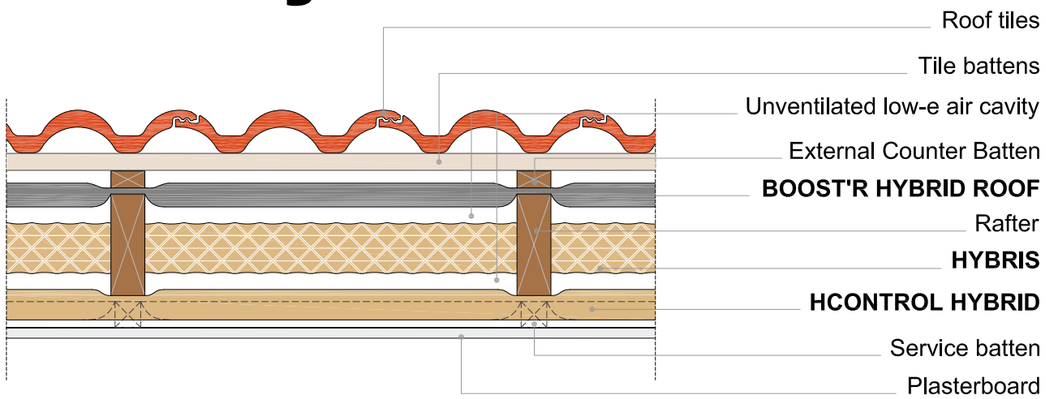
Table 01: HControl Hybrid Solutions with Hybris in between rafters in timber pitched roof.

Fire safety precautions and limitations of use apply to ACTIS products. Please refer to product installation guidelines, fire safety information document and Building Regulation and industry guidance. England, Wales and Scotland are now each responsible for their own Building Regulations

FOR MORE SOLUTIONS, PLEASE CONTACT THE ACTIS TEAM ON 01249 462 888 OR VISIT OUR U-VALUE SIMULATOR

TIMBER PITCHED ROOF

HControl Hybrid + Hybris + Boost'R Hybrid Roof



HControl Hybrid as a substitute for Vapour Control Layer, Hybris in between rafters and Boost'R Hybrid Roof as a substitute for Roof Underlay in timber pitched roof.

Centers	Rafter size (mm)	HControl Hybrid	Hybris thickness (mm)	Boost'R Hybrid Roof	External counter batten	Service batten	Reference:
U - Value = 0.16 W/m²K							
600	150	yes	75	yes	25 x 25	38 x 38	PF271
400	150	yes	90	yes	25 x 25	38 x 38	PF281
U - Value = 0.15 W/m²K							
600	150	yes	90	yes	25 x 25	38 x 38	PF200
400	175	yes	105	yes	25 x 25	38 x 38	TE4207

Table 02: HControl Hybrid Solutions with Hybris in between stud and Boost'R Hybrid Roof as a substitute for Roof Underlay in timber pitched roof.

Centers	Rafter size (mm)	HControl Hybrid	Hybris thickness (mm)	Boost'R Hybrid Roof	Counter batten	Service batten	Reference:
U - Value = 0.11 W/m²K (notional)							
600	250	yes	185	yes	25 x 25	38 x 38	PF273
U - Value = 0.24 W/m²K (threshold=0.35)							
400	100	yes	50	-	-	38 x 38	TE4156

Table 03: Additional HControl Hybrid Solutions achieving Notional and Threshold U-values in timber pitched roof.

Building regulations

Building Regulations require thermal elements within a building envelope to meet certain U-values. The target U-value depends on type of element, use of building and whether it is a new or an existing construction.

England, Wales and Scotland are now each responsible for their own Building Regulations and target U-values can therefore differ throughout the UK. If required this information can be confirmed with your local Building Control.

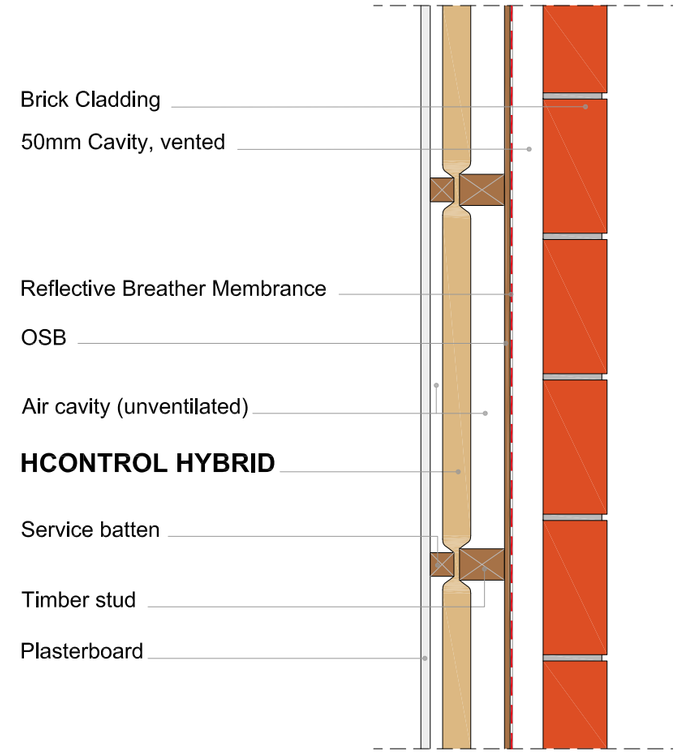
TIMBER FRAME WALL

HControl Hybrid

HControl Hybrid as a substitute for Vapour Control Layer in timber frame wall with brick outerleaf.

Stud	HControl Hybrid	Reference:
U - Value = 0.26 W/m²K		
72 x 47	yes	PF203

Table 04: HControl Hybrid Solution as a substitute for Vapour Control Layer in timber frame wall with brick outerleaf. U-value calculated with reflective breather membrance with an air cavity value of 0.77 m2K/W.

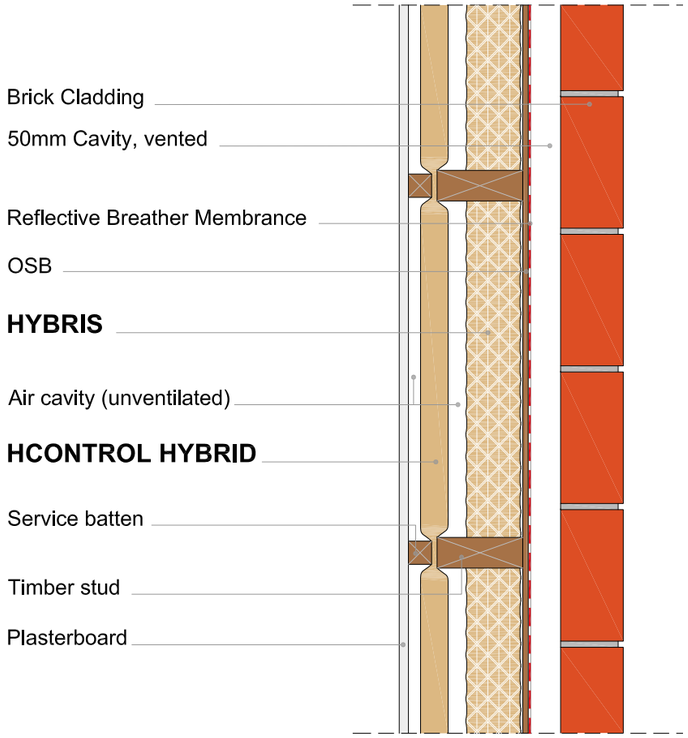


FULL INSTALLATION GUIDELINES ARE AVAILABLE ON OUR WEBSITE

TIMBER FRAME WALL

HControl Hybrid + Hybris

HControl Hybrid as a substitute for Vapour Control Layer and Hybris in between stud in timber frame wall with brick outerleaf.



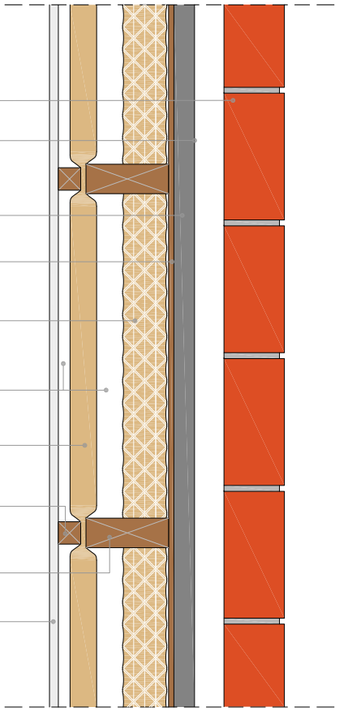
Stud	HControl Hybrid	Hybris thickness (mm)	Service batten	Reference:
U - Value = 0.2 W/m²K				
89 x 38	yes	50	38 x 38	PF207
U - Value = 0.18 W/m²K				
114 x 38	yes	75	38 x 38	PF211
U - Value = 0.17 W/m²K				
140 x 38	yes	90	38 x 38	PF212
U - Value = 0.16 W/m²K				
140 x 38	yes	105	38 x 38	PF214

Table 05: HControl Hybrid Solutions with Hybris in between stud in timber frame wall with brick outerleaf. U-value calculated with reflective breather membrane with an air cavity value of 0.77 m2K/W.

TIMBER FRAME WALL

HControl Hybrid + Hybris + Boost'R Hybrid Roof

HControl Hybrid as a substitute for Vapour Control Layer, Hybris in between stud and Boost'R Hybrid as a substitute for Breather Membrane in timber frame wall with brick outerleaf.



Stud	HControl Hybrid	Hybris thickness (mm)	Boost'R Hybrid Roof	Service batten	Reference:
U - Value = 0.17 W/m²K					
89 x 38	yes	50	yes	38 x 38	TE4328
U - Value = 0.15 W/m²K					
140 x 38	yes	75	yes	38 x 38	TE4330
U - Value = 0.14 W/m²K					
140 x 38	yes	90	yes	38 x 38	PF201

Table 06: HControl Hybrid Solutions with Hybris in between stud and Boost'R Hybrid as a substitute for Breather Membrane in timber frame wall with brick outerleaf.

FULL INSTALLATION GUIDELINES ARE AVAILABLE ON OUR WEBSITE

TECHNICAL SPECIFICATION

PROPERTY	TEST METHOD	DECLARED VALUE
Thickness	EN 823	45mm +/- 5mm
Weight/m^2	EN 1849-2	880 g/m^2
Length	EN 1848-2	6.25m
Width		1.6m
DECLARED THERMAL PERFORMANCE (INNER/OUTER SIDE)		
R-Value of HCONTROL HYBRID + 2 air cavities after ageing	EN 16012	Horizontal Heat Flow 3.20 m^2 K/W Upward Vertical Heat Flow 2.80 m^2 K/W
Core R-Value		1.90 m^2K/W
Declared Emissivity (inner/outer side) after ageing		0.06
TENSILE STRENGTH		
Longitudinal direction	EN 12311-1 & EN 13859-1 Annex C	>300 N/50mm
Transversal direction		>200 N/50mm
Elongation (Longitudinal)		>20%
Elongation (Transversal)		>5%
RESISTANCE TO TEARING, NAIL SHANK		
Longitudinal direction	EN 12310-1 & EN 13859-1 Annex B	>150 N
Transversal direction		>150 N
JOINT STRENGTH	EN 12317 - 2	>50 N/50mm
WATER VAPOUR TRANSMISSION		
Permeability (W)	EN 1931 set C	7.51 10-13 Kg/m2.s.Pa
Vapour Resistance (Z)		⩾1000 MNs/g
Diffusion eq.air layer thickness (Sd)		⩾200m
WATERTIGHTNESS	EN 1928 Method A	Watertight (W1) to 2 kPa
AIR PERMEABILITY	EN 12114	Airtight
DURABILITY AFTER AGEING	EN 13984	Test sucessful
REACTION TO FIRE	NPD (No Performance Determined)	

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