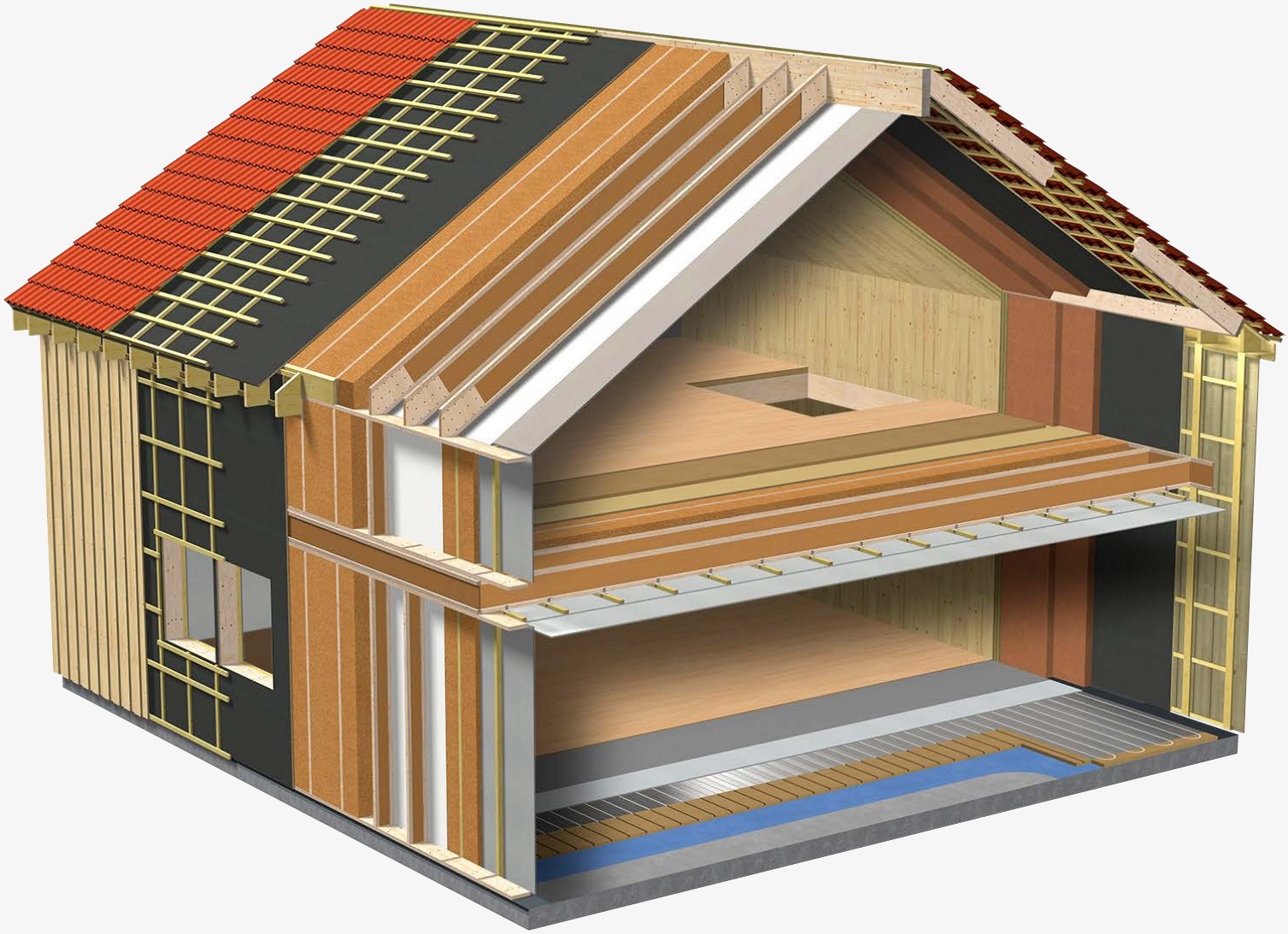
HUNTON



CONSTRUCTION OVERVIEW

This construction overview provides examples of how our building materials can be used in structures, with specified U-values, fire resistance and sound reduction.

V02 – 05/26

Exterior wall using CLT

SPECIFICATIONS			
	Type	**Description**	**Dimensions**
1	Wood	Cross-laminated timber (CLT)	100mm
2	Application	Hunton I-Beam	SJ45/200mm (7% timber fraction)
3	Insulation	Hunton Nativo Wood Fibre Insulation	200mm
5	Top/bottom plate/window framing	Hunton glulam beams	48x200mm
6	Wind barrier	Hunton Windproof	19mm[1]
PROPERTIES			
U-value[2]		0.165 W/m^{2}K (applies to both Nativo Boards and Nativo Blown-in).	

[1] *When using Nativo Wood Fibre Insulation Blown-in, square edge Windproof, minimum 19 or 25mm, must be used*
When using Nativo Board, all thicknesses of Windproof can be used
[2] *The assumptions used to calculate U-values are specified on the last page*

Exterior wall using I-Beams

SPECIFICATIONS			
	Type	**Description**	**Dimensions**
1	Interior cladding	Gyproc GN13 or Fermacell gypsum fibreboard	12.5mm
2	Vertical or horizontal service zone	C24 timber	48x48mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	50mm
4	Vapour control layer (VCL)	Hunton Intello Plus or Hunton SD10	
5	Stud	Hunton I-Beam	SJ45/200mm (7% timber fraction)
6	Insulation	Hunton Nativo Wood Fibre Insulation	200mm
7	Wind barrier	Hunton Windproof	19mm[1]
PROPERTIES			
U-value[2]		0.156 W/m²K (Nativo Board) 0.167 W/m²K (Nativo Blown-in)	
Fire resistance Tested according to DIN-EN 1365/DIN-EN 1363		REI 30 (interior fire load) REI 45 (exterior fire load)[3]	

[1] *When using Nativo Wood Fibre Insulation Blown-in, square edge Windproof, minimum 19 or 25mm, must be used*
When using Nativo Board, all thicknesses of Windproof can be used
[2] *The assumptions used to calculate U-values are specified on the last page*
[3] *Requires minimum 19mm facade cladding with fire rating class D – s2 d0*

Exterior wall with timber studs and 19mm Windproof

SPECIFICATIONS			
	Type	**Description**	**Dimensions**
1	Interior cladding	Standard plasterboard (Gyproc GN13)	12.5mm
2	Vertical or horizontal service zone	C24 timber	48x48mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	50mm
4	Vapour control layer (VCL)	Hunton Intello Plus or Hunton SD10	
5	Stud	C24 timber	48x198mm (12% timber fraction) 36x198mm (9% timber fraction)
6	Insulation	Hunton Nativo Wood Fibre Insulation	200mm
7	Wind barrier	Hunton Windproof	19mm[1]
PROPERTIES			
U-value[2]		12% timber fraction = 0.165 W/m²K (Nativo Board) 9% timber fraction = 0.160 W/m²K (Nativo Board) 12% timber fraction = 0.178 W/m²K (Nativo Blown-in) 9% timber fraction = 0.171 W/m²K (Nativo Blown-in)	
Airborne sound Rw (lab.)*		49 dB[4]	
Fire resistance Tested according to NS-EN 13501-2:2016		REI 45[3]/REI 90[3, 4] (interior fire load) REI45[5] (exterior fire load)	

[1] When using Nativo Wood Fibre Insulation Blown-in, square edge Windproof, minimum 19 or 25mm, must be used
When using Nativo Board, all thicknesses of Windproof can be used
[2] The assumptions used to calculate U-values are specified on the last page
[3] Requires timber with thickness of 48mm
[4] Requires 2 layers of plasterboard: 1 layer standard plasterboard (Gyproc GN13) + 1 layer fire resistant plasterboard (Gyproc GF15) facing interior space
[5] Requires minimum 19mm facade cladding with fire rating class D – s2 d0
** Conversion number for spectrum for extended frequency range $C_{50-5000}$ -1 dB*

Exterior wall with timber studs and 25mm Windproof

SPECIFICATIONS			
	Type	Description	Dimensions
1	Interior cladding	Standard plasterboard (Norgips type A)	12.5mm
2	Vertical or horizontal service zone	C24 timber	48x48mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	50mm
4	Vapour control layer (VCL)	Hunton Intello Plus or Hunton SD10	
5	Stud	C24 timber	48x198mm (12% timber fraction)
6	Insulation	Hunton Nativo Wood Fibre Insulation	200mm
7	Wind barrier	Hunton Windproof	25mm

PROPERTIES	
U-value[1]	12% timber fraction = 0.162 W/m²K (Nativo Board) 12% timber fraction = 0.174 W/m²K (Nativo Blown-in)
Airborne sound Rw (lab.)*	49 dB[2]
Fire resistance Tested according to NS-EN 13501-2:2016	REI 90[3] (exterior fire load)

1 The assumptions used to calculate U-values are specified on the last page
2 Requires 2 layers of plasterboard: 1 layer standard plasterboard (Gyproc GN13) + 1 layer fire resistant plasterboard (Gyproc GF15) facing interior space
3 Requires minimum 23mm facade cladding with fire rating class D – s2 d0

Acoustic partition with plasterboard

SPECIFICATIONS			
	Type	Description	Dimensions
1	Interior cladding	2 layers standard plasterboard (Gyproc GN13)	12.5+12.5mm
2	Stud	C24 timber	48x98mm C24 c/c 600mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	100mm
4	Space between partitions	Cavity	30mm
5	Stud	C24 timber	48x98mm C24 c/c 600mm
6	Insulation	Hunton Nativo Wood Fibre Insulation	100mm
7	Interior cladding	2 layers standard plasterboard (Gyproc GN13)	12.5+12.5mm

PROPERTIES	
Airborne sound Rw (lab.)*	64 dB
Fire classification Tested according to NS-EN 13501-2:2016	REI 45[1] (load-bearing)/EI 60 (fire cell limiting)

[1] Fire classification REI 45 has been tested at 15 kN/m (9 kN/m per stud at c/c 600mm)
** Conversion factor for spectrum for extended frequency range $C_{50\text{-}5000}$ -2 dB*

Acoustic partition with gypsum fibreboard

SPECIFICATIONS			
	Type	Description	Dimensions
1	Interior cladding	1 layer Fermacell gypsum fibreboard	12.5mm
2	Stud	C24 timber	48x98mm C24 c/c 600mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	100mm
4	Space between partitions	Cavity	30mm
5	Stud	C24 timber	48x98mm C24 c/c 600mm
6	Insulation	Hunton Nativo Wood Fibre Insulation	100mm
7	Interior cladding	1 layer Fermacell gypsum fibreboard	12.5mm
PROPERTIES			
Airborne sound Rw (lab.)*		64 dB	

** Conversion number for spectrum for extended frequency range $C_{50-5000}$ -3 dB*

Interior wall with plasterboard

SPECIFICATIONS			
	Type	Description	Dimensions
1	Interior cladding	1 layer standard plasterboard (Gyproc GN13)	12.5mm
2	Stud	C24 timber	48x98mm C24 c/c 600mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	100mm
7	Interior cladding	1 layer standard plasterboard (Gyproc GN13)	12.5mm

PROPERTIES	
Airborne sound Rw (lab.)*	40 dB (applies to both 70mm and 100mm Nativo Wood Fibre Insulation)

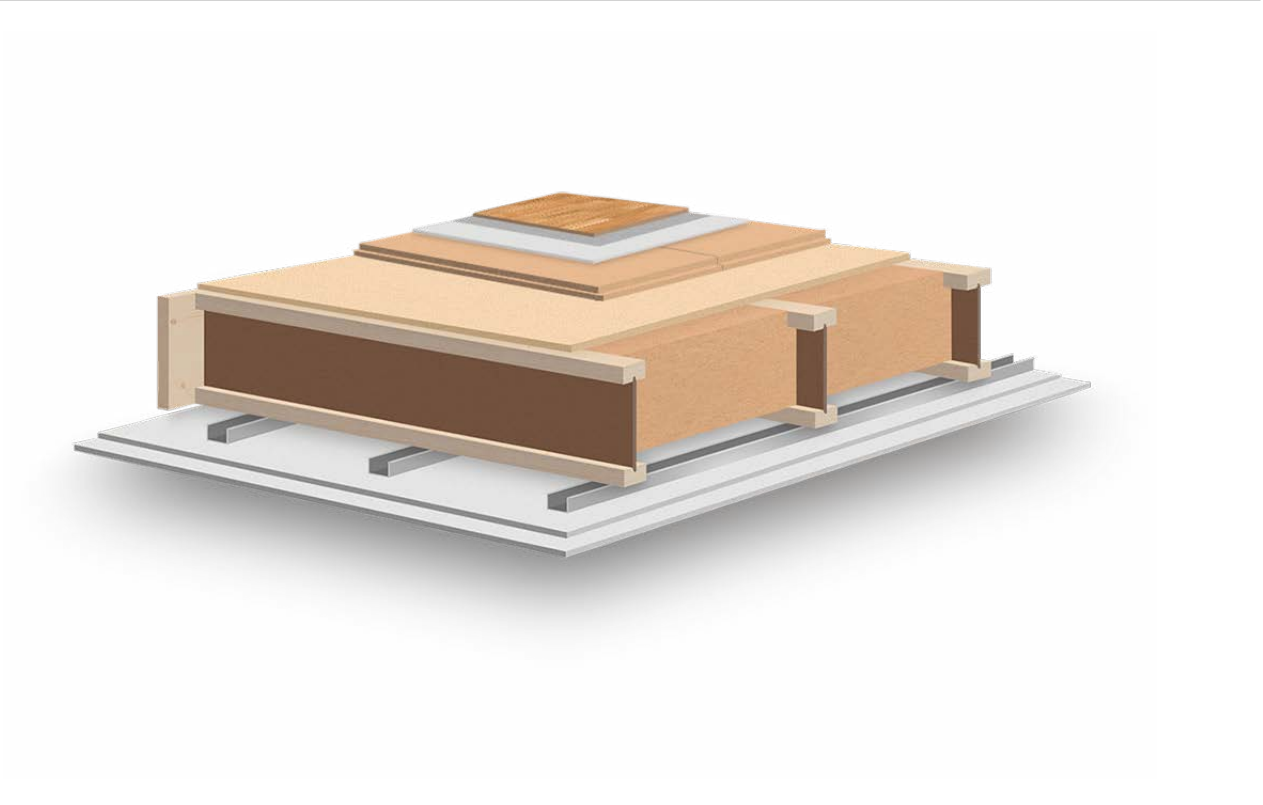
** Conversion number for spectrum for extended frequency range $C_{50-5000}$ -3 dB*

Interior wall with gypsum fibreboard

SPECIFICATIONS			
	Type	Description	Dimensions
1	Interior cladding	1 layer Fermacell gypsum fibreboard	12.5mm
2	Stud	C24 timber	48x98mm C24 c/c 600mm
3	Insulation	Hunton Nativo Wood Fibre Insulation	100mm
7	Interior cladding	1 layer Fermacell gypsum fibreboard	12.5mm
PROPERTIES			
Airborne sound Rw (lab.)*		46 dB (applies to both 70mm and 100mm Nativo Wood Fibre Insulation)	

** Conversion number for spectrum for extended frequency range $C_{50-5000}$ -2 dB*

Hunton floor™ with plasterboard in ceiling

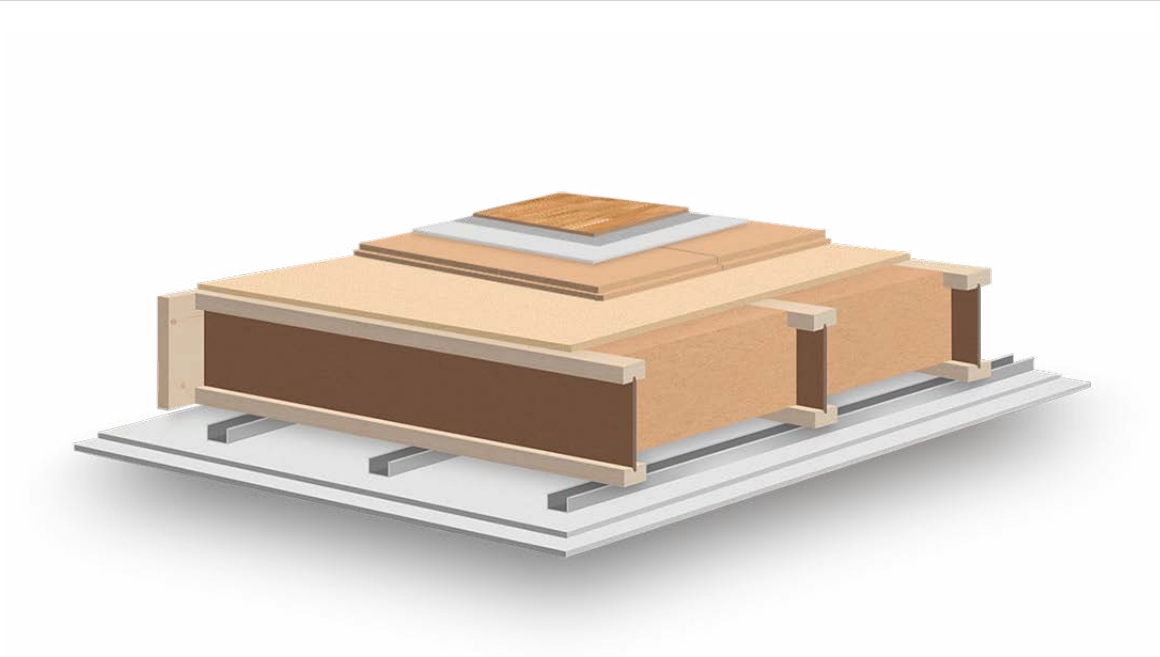


SPECIFICATIONS			
	Type	**Description**	**Dimensions**
1	Load bearing panel	Fermacell gypsum fibreboard	10mm
2	Sound absorption board	Hunton Silencio	36mm
3	Subfloor	Chipboard	22mm
4	Joist	Hunton I-Beam	SJ45/300mm c/c 600mm
5	Insulation	Hunton Nativo Wood Fibre Insulation[1]	Min. 200mm
6	Acoustic profile	Gyproc AP25	25mm
7	1 layer ceiling	Standard plasterboard (Gyproc GN13)	12,5mm
8	2 layer ceiling (facing room)	Fire resistant plasterboard (Gyproc GF15)	12,5mm

PROPERTIES	
Expected sound reduction values (field)	Airborne sound (R'_w) ≥ 56-57 dB Impact sound ($L'_{n,w}$) ≤ 51-53 dB
Fire resistance Tested according to NS-EN 13501-2:2016	REI 60 (one-sided fire load from underneath)

[1] *When using Hunton Nativo Wood Fibre Insulation Blown-in, a Hunton SD10 vapour control layer (VCL) must be installed between the joist and acoustic profile*

Hunton floor™ with gypsum fibreboard in ceiling

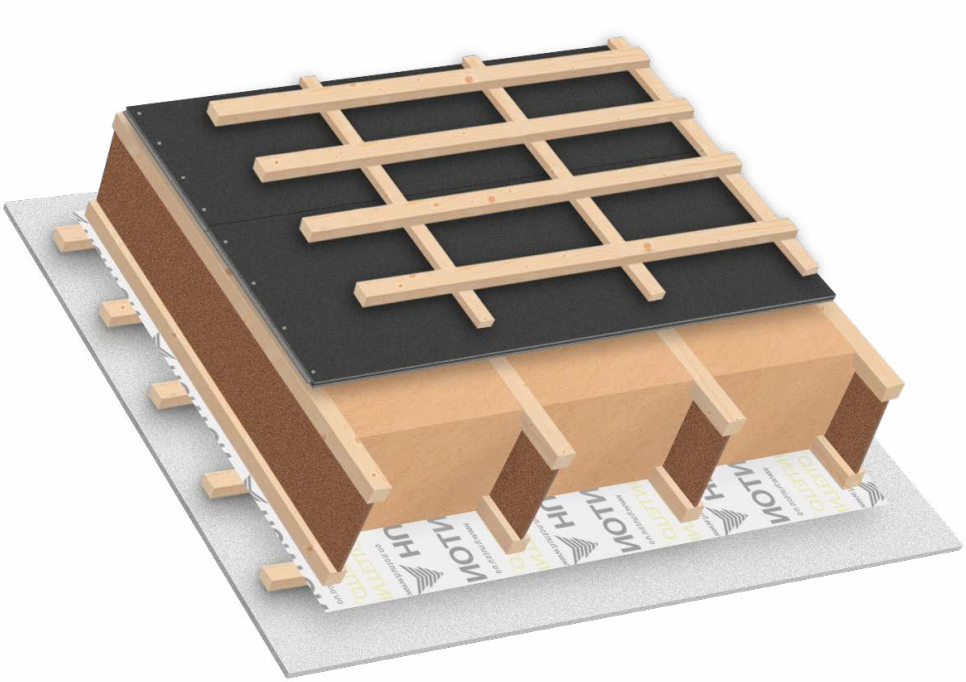


SPECIFICATIONS			
	Type	**Description**	**Dimensions**
1	Load bearing panel	Fermacell gypsum fibreboard	10mm
2	Sound absorption board	Hunton Silencio	36mm
3	Subfloor	Chipboard	22mm
4	Joist	Hunton I-Beam	SJ45/300mm c/c 600mm
5	Insulation	Hunton Nativo Wood Fibre Insulation[1]	Min. 200mm
6	Acoustic profile	Gyproc AP25	25mm
7	1 layer ceiling	Fermacell gypsum fibreboard	12.5mm
8	2 layer ceiling (facing room)	Fermacell gypsum fibreboard	12.5mm

PROPERTIES	
Expected sound reduction values (field)	Airborne sound (R'_w) ≥ 56-57 dB Impact sound ($L'_{n,w}$) ≤ 51-53 dB
Fire resistance Tested according to NS-EN 13501-2:2016	REI 45 (one-sided fire load from underneath)

[1] *When using Hunton Nativo Wood Fibre Insulation Blown-in, a Hunton SD10 vapour control layer must be installed between the joist and acoustic profile*

Hunton roof™ with plasterboard or gypsum fibreboard



SPECIFICATIONS			
	Type	**Description**	**Dimensions**
1	Sarket	Hunton Sarket	18mm
2	Rafter	Hunton I-Beam	SJ45/300mm c/c 600mm (4% timber fraction)
3	Insulation	Hunton Nativo Wood Fibre Insulation	300mm
4	Vapour control layer (VCL)	Hunton Intello Plus or Hunton SD10	
5	Service zone	C24 timber	48x48mm
6	Insulation	Hunton Nativo Wood Fibre Insulation	50mm
7	Interior ceiling	Fermacell gypsum fibreboard or plasterboard	12.5mm
PROPERTIES			
U-value[1]		0.110 W/m²K (Nativo Board) 0.116 W/m²K (Nativo Blown-in)	

[1] The assumptions used to calculate U-values are specified on the last page

Assumptions

V02-05/26 – Flisa Trykkeri AS

The U-values stated in this brochure were calculated on the basis of the assumptions and values specified below and calculations based on the standard, EN ISO 6946.

The stated difference in the U-value for structures insulated with Nativo Board and Nativo Blown-in is due to the difference in the filling rate of the interior lining (see point below).

Declared thermal conductivity λD (lambda)

timber fraction	0.120 W/mk
Nativo	0.038 W/mk
Windproof	0.050 W/mk
Plasterboard	0.210 W/mk

Thermal resistances

Interior (Rsi) 0.13 m²K/W (horizontal heat flow)
Interior (Rse) 0.04 m²K/W

Interior lining of exterior walls and roofs

Interior lining (48x48mm) is calculated as horizontal with c/c 0.6m.

When Nativo Board is used in exterior walls and for roofs, the calculations are based on an interior lining with 50mm of board insulation.

When Nativo In-blown is used in exterior walls and for roofs, all the insulation is installed on the cold side of a vapour control layer (VCL). This means that the interior lining will be partially insulated – see the illustration on the right. Therefore, the U-value will be higher than that for a similar structure insulated with Nativo Board.

Other assumptions

The timber fractions for exterior walls are based on a wall height of 2.4m, studs with c/c 0.6m and single top and bottom plates (total 2.45m studs per m²). Door and window framing, columns, strutting beams and similar, which can increase timber fractions, have not been taken into account.

Where manufacturer-specific plasterboard is specified, this is due to the product type used in fire and acoustic tests.

Illustration of exterior wall using Nativo Wood Fibre Insulation In-blown and partly insulated lining.

TEKNISK GODKJENNING TG 2190 SINTEF Certification
Hunton Sarket

TEKNISK GODKJENNING TG 20381 SINTEF Certification
Hunton I-Beam

TEKNISK GODKJENNING TG 20440 SINTEF Certification
Hunton Nativo Wood Fibre Insulation Board

TEKNISK GODKJENNING TG 2330 SINTEF Certification
Hunton Silencio sound absorption Board

TEKNISK GODKJENNING TG 2002 SINTEF Certification
Hunton Windproof

PRODUCT CERTIFICATE PS 3397 SINTEF Certification
Hunton Nativo Wood Fibre Insulation Blown-in

TEKNISK GODKJENNING TG 20441 SINTEF Certification
The Hunton wall