

CLASSIFICATION of Thermal performance ratings

The λ for **Chanvribat® + Tradical® Thermo** material blends have been tested in **COFRAC-certified** laboratories

INSULATING WALL and INSULATING LINING

applied between wall and shuttering



1 Chanvribat® +
2 Tradical® PF70



1 Chanvribat® +
2 Tradical® THERMO

INSULATING WALL LINING

applied by trowelling



1 Chanvribat® +
3 Tradical® PF70



1 Chanvribat® +
3 Tradical® THERMO

CHARACTERISTICS		
Concrete mixed at	220 kg/m ³	180 kg/m ³
Mass density	320 kg/m ³	280 kg/m ³
Thermal conductivity	$\lambda = 0.085$ W/m.k	$\lambda = 0.076$ W/m.k
Compression strength (at 90 days)	0.9 MPa	0.7 MPa

THERMAL PERFORMANCE RATINGS		
15-cm-thick wall	R = 1.8	R = 2.0
20-cm-thick wall	R = 2.4	R = 2.6
25-cm-thick wall	R = 2.9	R = 3.3
30-cm-thick wall	R = 3.5	R = 4.0
35-cm-thick wall	R = 4.1	R = 4.6
40-cm-thick wall	R = 4.7	R = 5.3

R in (m².K/W)

CHARACTERISTICS		
Concrete mixed at	330 kg/m ³	270 kg/m ³
Mass density	430 kg/m ³	370 kg/m ³
Thermal conductivity	$\lambda = 0.107$ W/m.k	$\lambda = 0.092$ W/m.k

THERMAL PERFORMANCE RATINGS		
10-cm-thick lining	R = 0.9	R = 1.09
15-cm-thick lining	R = 1.4	R = 1.63
20-cm-thick lining	R = 1.9	R = 2.17
25-cm-thick lining	R = 2.3	R = 2.72

R in (m².K/W)

INSULATING SCREED



1 Chanvribat® +
2.5 Tradical® PF70



1 Chanvribat® +
2.5 Tradical® THERMO

CHARACTERISTICS		
Concrete mixed at	275 kg/m ³	225 kg/m ³
Mass density	375 kg/m ³	325 kg/m ³
Thermal conductivity	$\lambda = 0.096$ W/m.k	$\lambda = 0.084$ W/m.k
Compression strength (at 90 days)	1.1 MPa	0.55 MPa

THERMAL PERFORMANCE RATINGS		
10-cm-thick screed	R = 1.0	R = 1.2
15-cm-thick screed	R = 1.6	R = 1.8
20-cm-thick screed	R = 2.1	R = 2.4
25-cm-thick screed	R = 2.6	R = 3.0

R in (m².K/W)

INSULATING ROOF and UNUSED ROOF SPACE



1 Chanvribat® +
1 Tradical® PF70



1 Chanvribat® +
1 Tradical® THERMO

CHARACTERISTICS		
Concrete mixed at	110 kg/m ³	90 kg/m ³
Mass density	210 kg/m ³	190 kg/m ³
Thermal conductivity	$\lambda = 0.06$ W/m.k	$\lambda = 0.056$ W/m.k

THERMAL PERFORMANCE RATINGS		
20-cm-thick insulation	R = 3.3	R = 3.6
25-cm-thick insulation	R = 4.1	R = 4.5
30-cm-thick insulation	R = 5	R = 5.4
35-cm-thick insulation	R = 5.8	R = 6.3

R in (m².K/W)

Certification

Hemp/Lime blends Tradical® Thermo + Chanvribat® and Tradical® Bâtir + Chanvribat® have been measured for thermal performance in COFRAC-certified laboratories:

Insulating walls and insulating linings
CODEM test dated 05/06/2014
Test report: AF0314AC-004/
ref. ECO414AC-002A

Gygrothermal renders
CODEM test dated 18/08/2016
Test report: RE0816BL-001/
ref. ER16-042-11

Insulating roofs and unused roof space
CODEM test dated 05/06/2014
Test report: AF0314AC-004/
ref. ECO414AC-001A

HYGROTHERMAL RENDER



1 Chanvribat® +
5.5 Tradical® PF 80 M



1 Chanvribat® +
4 Tradical® BÂTIR

CHARACTERISTICS		
Concrete mixed at	825 kg/m ³	400 kg/m ³
Mass density	925 kg/m ³	500 kg/m ³
Thermal conductivity	$\lambda = 0.17$ W/m.k	$\lambda = 0.14$ W/m.k

THERMAL PERFORMANCE RATINGS		
3-cm-thick render	R = 0.17	R = 0.21
5-cm-thick render	R = 0.29	R = 0.36
8-cm-thick render	R = 0.47	R = 0.57

R in (m².K/W)

SPECIFIC TECHNICAL ASPECTS

Protecting insulating walls

Half-timbering and embedded framing

EXTERIOR

Coat the structure once the wall has dried.

Drying time:

About 1 week for 2 cm, depending on the weather conditions.

Apply a traditional base coat, brown coat and Tradical® air lime finish in accordance with the French Professional Rules and the French Building Code (DTU 26.1).

Protecting insulating walls

Half-timbering, embedded framing and lining walls

INTERIOR

Once the lining has dried evenly (drying time – about 1 week for 2 cm) and depending on the evenness of the surface, apply either of the following:

- A traditional lime render consisting of Tradical® PF 80 + 90 to 100 l of sand
- A mechanically projected lime render consisting of Tradical® PF 80 M + 50 to 70 l of 0/2 sand, i.e. 500 kg/m³
- A hemp render consisting of Tradical® PF 80 M + Chanvribat® (mix proportions p. 42)
- A Tradical® Décor render

Conduit and pipe work

You must install all conduit and pipe work prior to using the Tradical® Hempcrete. These networks must be covered with at least 2 cm of Tradical® Hempcrete.

[In all cases, refer to the corresponding technical data sheets].