Celotex
Lady Lane Industrial Estate
Hadleigh, Ipswich
Suffolk IP7 6BA
Tel: 01473 820850
Email: technical@celotex.co.uk

Project Information

Date	2 April 2020		
Client	Grahame White, OWLarchitecture.com 25 Crescent View Leeds LS17 7QF	Project	test test

Construction Type

Element : Suspended ground floor - Ground Floor - Suspended Timber

Ground Floor - Suspended Timber

Internal surface emissivity : High External surface emissivity : High

	Thickness (mm)	Thermal Conductivity (W/mK)	Thermal Resistance (m²K/W)	Pitch (º)	Bridge details Air gaps (Level, Delta U")
Inside surface	-	-	0.170		
Floor deck 18mm T+G Chipboard	-	-	0.126		
Celotex XR4000 between joists @ 400mm ctrs	200.0	-	9.091		11.750% Timber (200.0mm)
Void - ventilated	-	-	0.000		
Deck underside surface resistance			0.170		

Ground Floor Details

Floor type	: Suspended floor		
Calculation method	: EN ISO 13370:2007		
P/A	: 0.500	Characteristic dimension, B'	: 4.000
Thermal conductivity of ground:	: 1.500 W/mK	Width of walls, w:	: 0.300 m
Height of floor above ground, h:	: 0.225 m	U-value of sub-floor walls, Uw:	: 1.700 W/m²K
Average wind speed, V:	: 5.000 m/s	Wind shielding factor, fw:	: 0.050
Ventilation opening area, E:	: 0.0015 m²/m	Subfloor ground resistance, Rs	: 0.170 m²K/W
Resistance of insulation on ground, Rg	: 0.000 m²K/W	External surface resistance, Rse	: 0.170 m²K/W
Deck resistance	: 0.126m²K/W		
Description	: 18mm T+G Chipboard		
Edge insulation position	: None		

U-value = 0.13W/m²K

U-value, Combined Method : 0.134W/m²K (upper/lower limit 6.624 / 6.231m²K/W, dUf 0.0000, dUg 0.0000, dUp0.0000, dUr0.0000, dUrc1 0.0000, dUrc2 0.0000)

Correction factors

Air gaps, Delta Ug = 0.000W/m²K

(Based on the combined method for determining U-values of structures containing repeating thermal bridges)

Saint-Gobain Construction Products UK Limited trading as Celotex
Regsitered Office: Saint-Gobain House, Binley Bussiness Park, Coventry, CV3 2TT
Registered in England and Wales 734396

JPA Designer Version 6.04a1 027
Licensed to Celotex

© JPA Technical Literature Apr 2020

This calculation is made in good faith and based upon data supplied to us. Whilst we believe that the information contained herein is true and accurate, we specifically exclude any liability for errors and/or omissions arising therefrom. Details, practices and principles should be verified as to accuracy and suitability for the required purpose of use. The provision of this calculation is not to be construed as: (i) offering any advice on compliance with any Building Regulations in any capacity (be it insulation, fire, moisture, structure, sound, electrical safety, safety of combustion appliances); or (ii) an acknowledgement that we approve of any design or construction methods being proposed by the applicant.