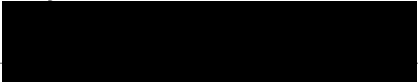


Site: Dalton Avenue, Manchester, M14 7NR

I can confirm that to the best of my knowledge that the following constructions details were followed, and all junctions have incorporated the notes relating to each of the following details.

E2	0.020 W/mK	Catnic calculation
E3	0.030 W/mK	Superglass Calc
E4	0.026 W/mK	Superglass Calc
E5	0.0933 W/mK	BEWI Calc
E6	0.002 W/mK	RCD
E7	0.037 W/mK	RCD
E10	0.097 W/mK	Superglass Calc
E11	0.016 W/mK	Superglass Calc
E12	0.097 W/mK	RCD
E13	0.061 W/mK	RCD
E16	0.051 W/mK	RCD
E17	-0.091 W/mK	RCD
E18	0.058 W/mK	Superglass Calc
E25	0.031 W/mK	RCD
P1	0.108 W/mK	RCD
P2 and P3	0 W/mK	Default
P4	0.101 W/mK	RCD
P5	0.046 W/mK	RCD

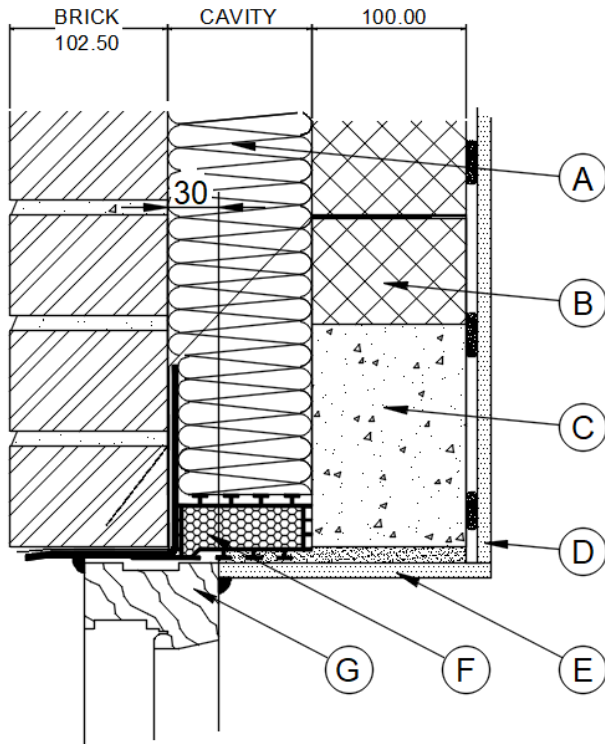
Name: Ian Stanyer

Signature: 

Date: 16th March 2026

Catnic Lintel Psi values (05/03/2025)

Separate Lintels (ANG and Concrete) Full Fill cavity Wall Construction



Materials	Thickness (mm)	λ Value (W/m.K)
Brick		0.77
(A) Insulation	150	0.032
(B) Blockwork	100	0.41
(C) HI SPEC R6 Naylor Concrete Lintel	100	1.52
(D) Plasterboard on Dabs + Air Space	12.5	0.19
(E) Plasterboard + Adhesive	15.0	0.09
(F) Thermabate		0.034
(G) Window frame	~	~
Lintel Steel	~	52

Comment: Continuous band of adhesive to soffit area

Cavity (mm)	Psi value (W/m.K)	F factor
150	0.019	0.941

To limit the risk of surface condensation or mould growth the temperature factor for a detail used in the external wall of a dwelling must be greater than 0.75. The above details all have temperatures factors greater than 0.9.

All calculations have been carried out following the conventions set out in BR 497 (both lintels length 1200mm).

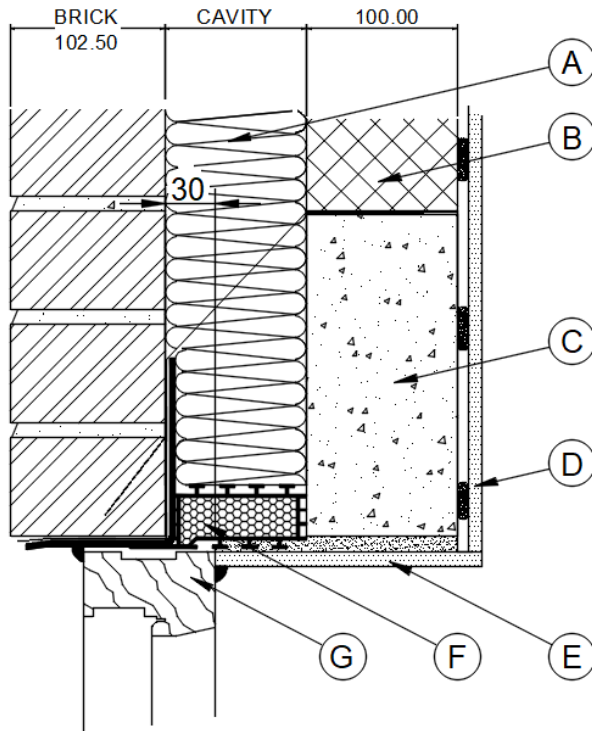
Catnic

Pontypandy Industrial Estate Caerphilly CF83 3GL United Kingdom
T +44 (0)29 2033 7900 F +44 (0)29 2088 2820 www.catnic.com

Tata Steel UK Limited Registered in England 2280000. Registered Office: Tata Steel 30 Millbank London SW1P 4WY

Catnic Lintel Psi values (05/03/2025)

Separate Lintels (ANG and Concrete) Full Fill cavity Wall Construction



Materials	Thickness (mm)	λ Value (W/m.K)
Brick		0.77
(A) Insulation	150	0.032
(B) Blockwork	100	0.41
(C) HI SPEC R9 Naylor Concrete Lintel	100	1.52
(D) Plasterboard on Dabs + Air Space	12.5	0.19
(E) Plasterboard + Adhesive	15.0	0.09
(F) Thermabate		0.034
(G) Window frame	~	~
Lintel Steel	~	52

Comment: Continuous band of adhesive to soffit area

Cavity (mm)	Psi value (W/m.K)	F factor
150	0.019	0.941

To limit the risk of surface condensation or mould growth the temperature factor for a detail used in the external wall of a dwelling must be greater than 0.75. The above details all have temperatures factors greater than 0.9.

All calculations have been carried out following the conventions set out in BR 497 (both lintels length 1200mm).

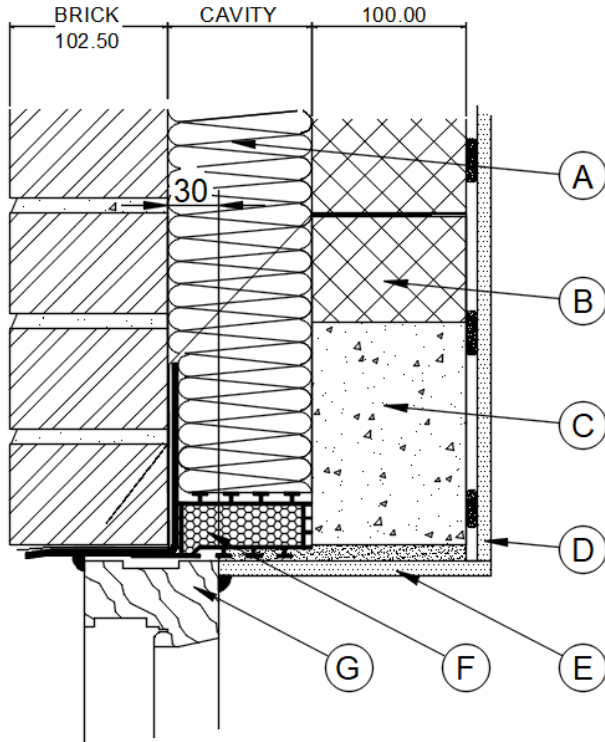
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Catnic Lintel Psi values (21/03/2025)

Separate Lintels (ANG and Concrete) Full Fill cavity Wall Construction



Sound Control Clips+Air Space

Materials	Thickness (mm)	λ Value (W/m.K)
Brick		0.77
(A) Insulation	150	0.032
(B) Blockwork	100	0.41
(C) HI SPEC R6 Naylor Concrete Lintel	100	1.52
(D) Plasterboard on GeenieClips+Air Space	12.5	0.19
(E) Plasterboard + Adhesive	42.0	0.2333
(F) Thermabate	12.5	0.19
(G) Window frame	15.0	0.09
Lintel Steel	~	~
Comment: Continuous band of adhesive to soffit area		

Cavity (mm)	Psi value (W/m.K)	F factor
150	0.019	0.941

To limit the risk of surface condensation or mould growth the temperature factor for a detail used in the external wall of a dwelling must be greater than 0.75. The above details all have temperatures factors greater than 0.9.

All calculations have been carried out following the conventions set out in BR 497 (both lintels length 1200mm).

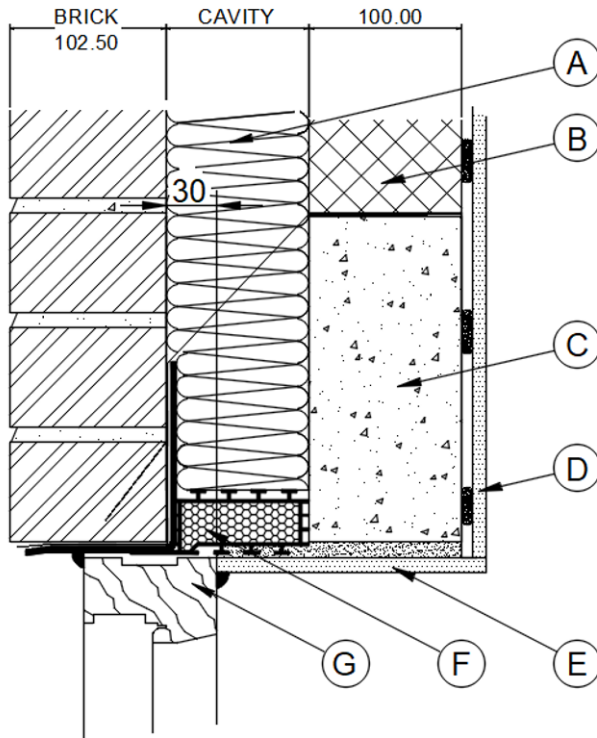
Catnic

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Tata Steel UK Limited Registered in England 2280000. Registered Office: Tata Steel 30 Millbank London SW1P 4WY

Catnic Lintel Psi values (21/03/2025)

Separate Lintels (ANG and Concrete) Full Fill cavity Wall Construction



Materials	Thickness (mm)	λ Value (W/m.K)
Brick		0.77
(A) Insulation	150	0.032
(B) Blockwork	100	0.41
(C) HI SPEC R9 Naylor Concrete Lintel	100	1.52
(D) Plasterboard on GeenieClips+Air Space	12.5 42.0	0.19 0.2333
(E) Plasterboard + Adhesive	12.5 15.0	0.19 0.09
(F) Thermabate		0.034
(G) Window frame	~	~
Lintel Steel	~	52

Comment: Continuous band of adhesive to soffit area

Cavity (mm)	Psi value (W/m.K)	F factor
150	0.020	0.941

To limit the risk of surface condensation or mould growth the temperature factor for a detail used in the external wall of a dwelling must be greater than 0.75. The above details all have temperatures factors greater than 0.9.

All calculations have been carried out following the conventions set out in BR 497 (both lintels length 1200mm).

Catnic

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Tata Steel UK Limited Registered in England 2280000. Registered Office: Tata Steel 30 Millbank London SW1P 4WY

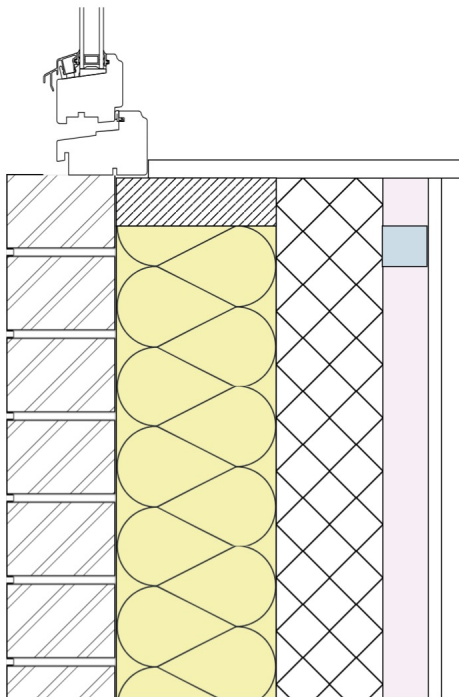
PSI ψ Calculation Report

Junction Name:

E03 - Window Sill - BC140325-4

Project Name:

Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.030
W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.221 m	0.183 W/(m ² K)	F _e (1.00)

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	0 C	0.04	0.032 m	-0.1477 W/m
R2	20 C	0.17	0.294 m	1.0452 W/m
R3	20 C	0.13	0.018 m	0.0042 W/m
R4	20 C	0.1	0.016 m	0.0064 W/m
R5	20 C	0.13	1.212 m	4.0054 W/m
R6	0 C	0.04	1.212 m	-4.7028 W/m

Materials List

Description	Thickness (m)	Lambda
Standard cavity (Air Void)	0.042	(R) 0.18
Brick outer leaf	0.103	0.77
Superglass Superwall 32 Cavity Batt	0.150	0.032
Medium Dense Blocks	0.100	0.441
Standard Plasterboard	0.013	0.19

Calculation of the thermal conductivity L2D

Conductance L2D : 0.253
 Psi-value : 0.030 W/(mK)
 fRsi-value : 0.866

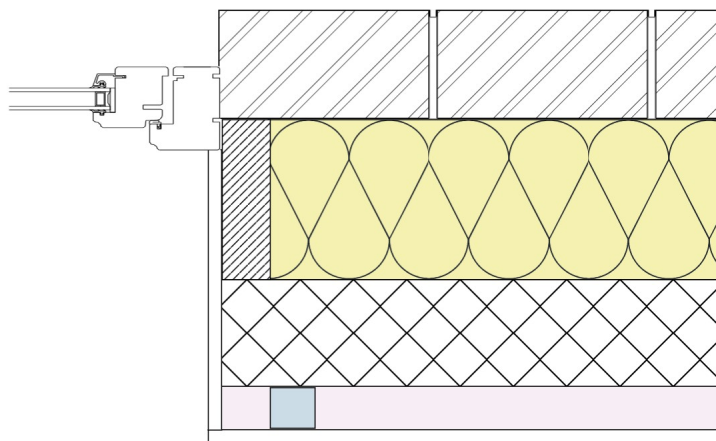
PSI ψ Calculation Report

Junction Name:

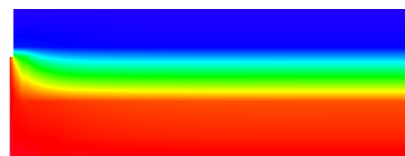
E04 - Window Jamb -BC140325-2

Project Name:

Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.026
W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.221 m	0.183 W/(m²K)	F _e (1.00)

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	0 C	0.04	1.23 m	-4.7222 W/m
R2	20 C	0.13	1.24 m	4.2462 W/m
R3	0 C	0.04	0.052 m	-0.2699 W/m
R4	20 C	0.13	0.278 m	0.7459 W/m

Materials List

Description	Thickness (m)	Lambda
Standard cavity (Air Void)	0.042	(R) 0.18
Brick outer leaf	0.103	0.77
Superglass Superwall 32 Cavity Batt	0.150	0.032
Medium Dense Blocks	0.100	0.441
Standard Plasterboard	0.013	0.19

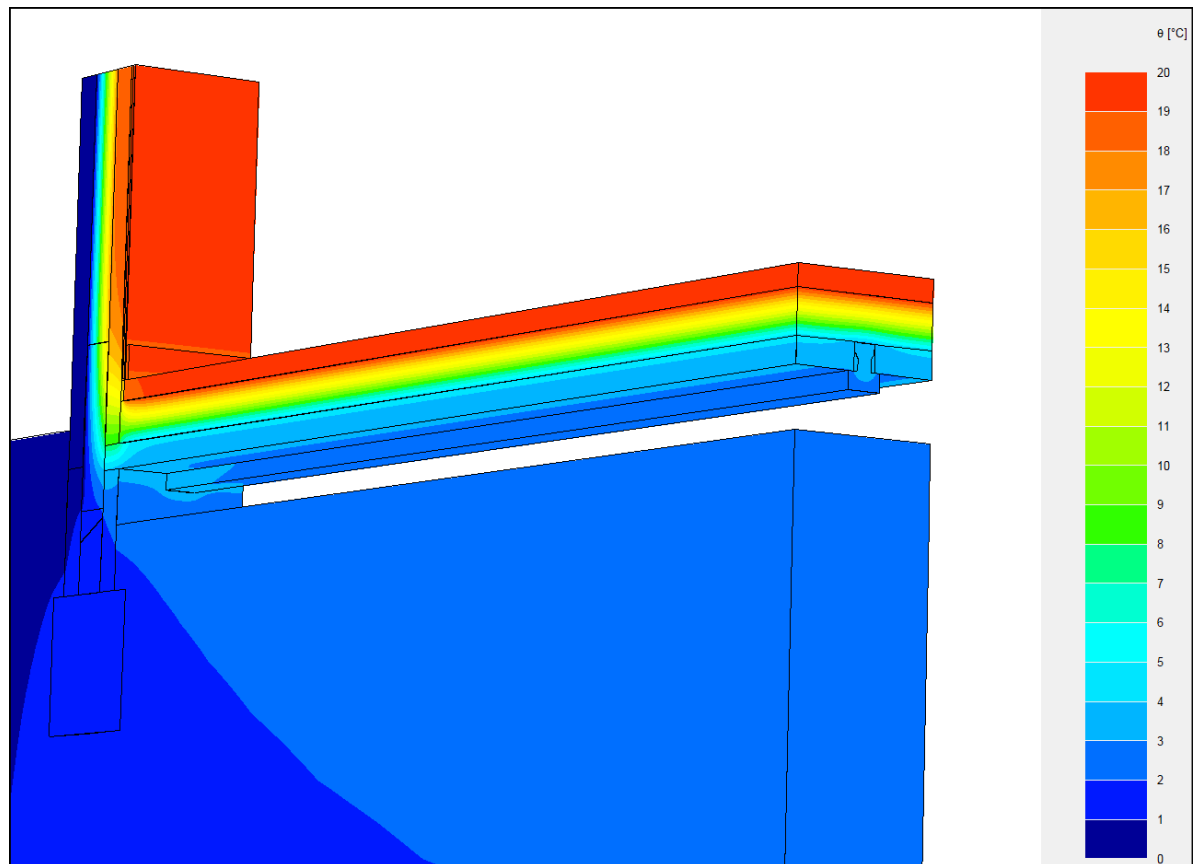
Calculation of the thermal conductivity L2D

Conductance L2D : 0.250
 Psi-value : 0.026 W/(mK)
 fRsi-value : 0.938

Location:

Description of construction:

E5-Dalton Avenue-GF LB.docx



In accordance with:
 BS-EN ISO 10211
 BS-EN ISO 14683
 BS-EN ISO 13370
 BS-EN ISO 10456
 BR-497

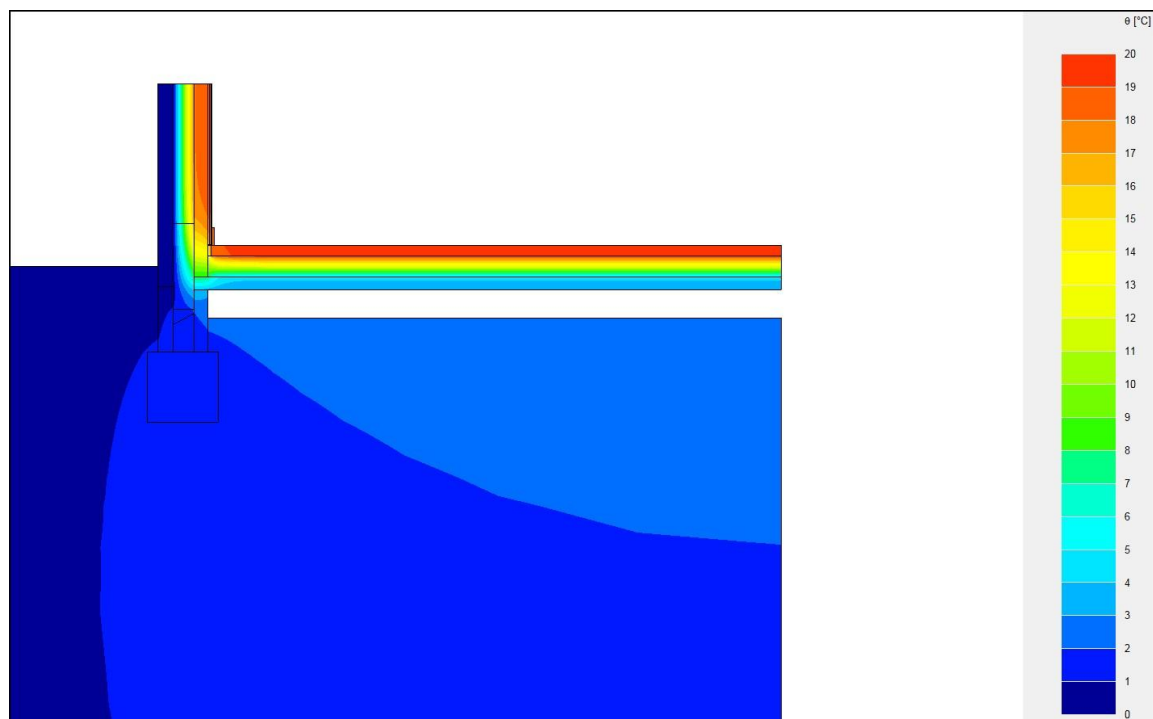
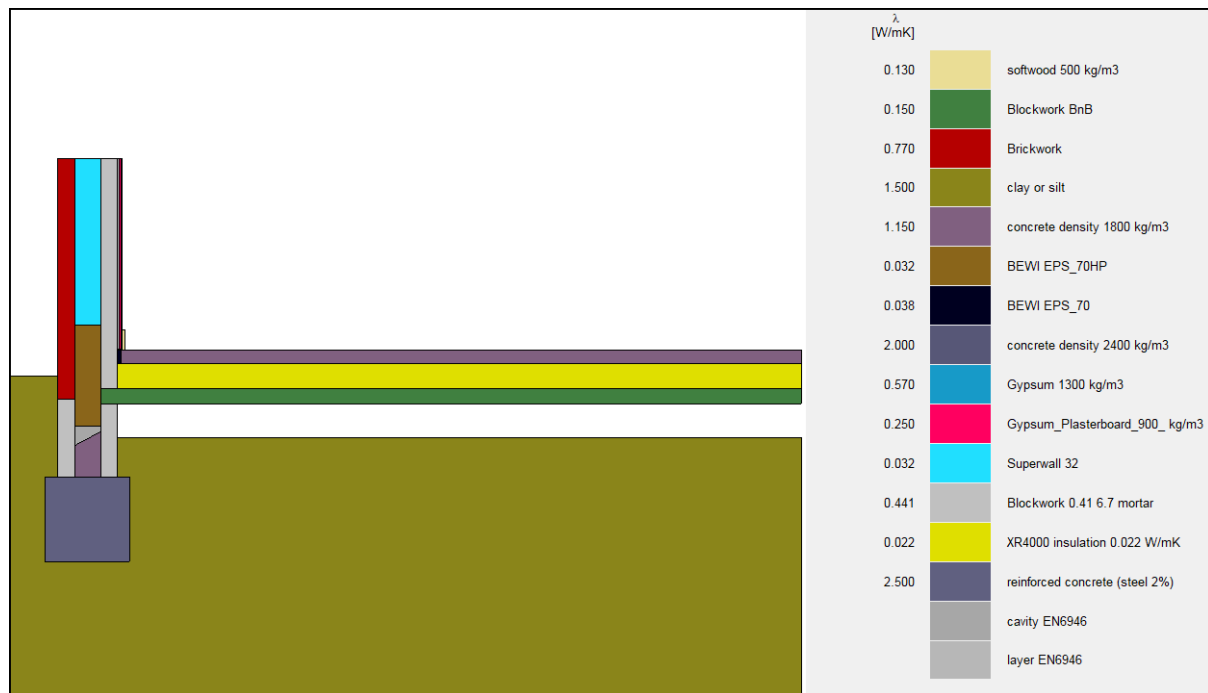
Linear transmittance
 $\Psi = 0.0933 \text{ W/mK}$

Temperature factor
 $f_{rsi} = 0.93$

Calculated by:
MAJ

Date: 21/03/2025

- Model



-Calculations

$\Phi_{\text{mod total}}$	=	7.8375	W						
w	=	0.52	m						
Φ_{mod}	=	15.0721	W/m						
T_u	=	2.66							
Φ_{el1}	=	0.1847		1.134		20	=	4.1890	W/m
		μ		l		$^{\circ}\text{K}$			
Φ_{el2}	=	0.13		4		17.34	=	9.0168	W/m
Ψ	=	$(\Phi_{\text{Mod}} - \Phi_{\text{el1}} - \Phi_{\text{el2}}) / 20 =$				0.0933	W/mK		

T_i	=	20
T_e	=	0
T_{si}	=	18.5572
f_{Rsi}	=	0.93

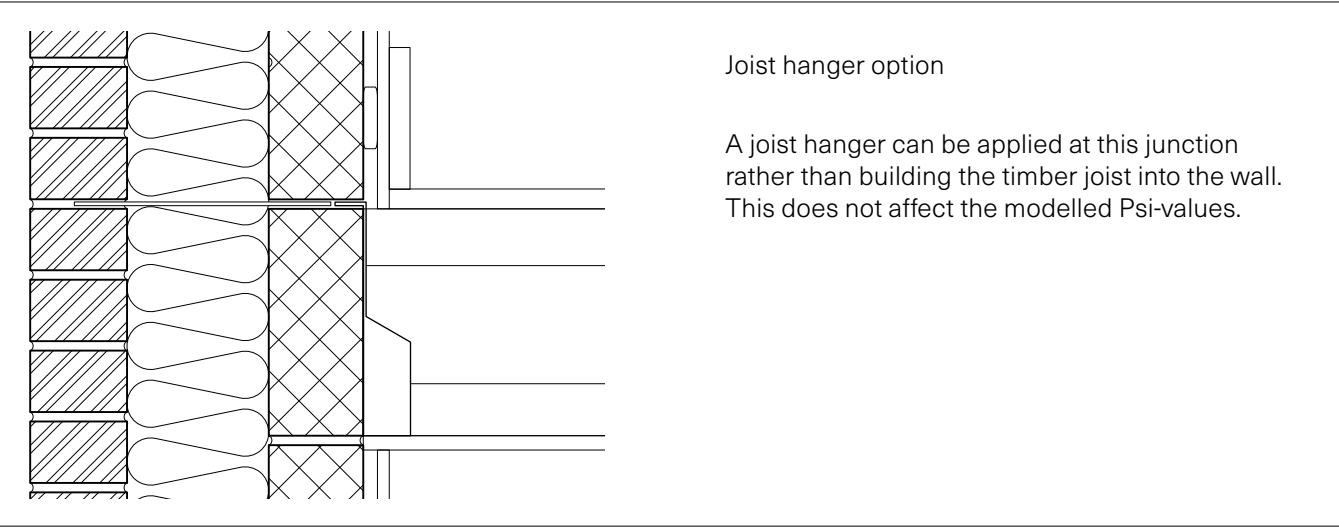
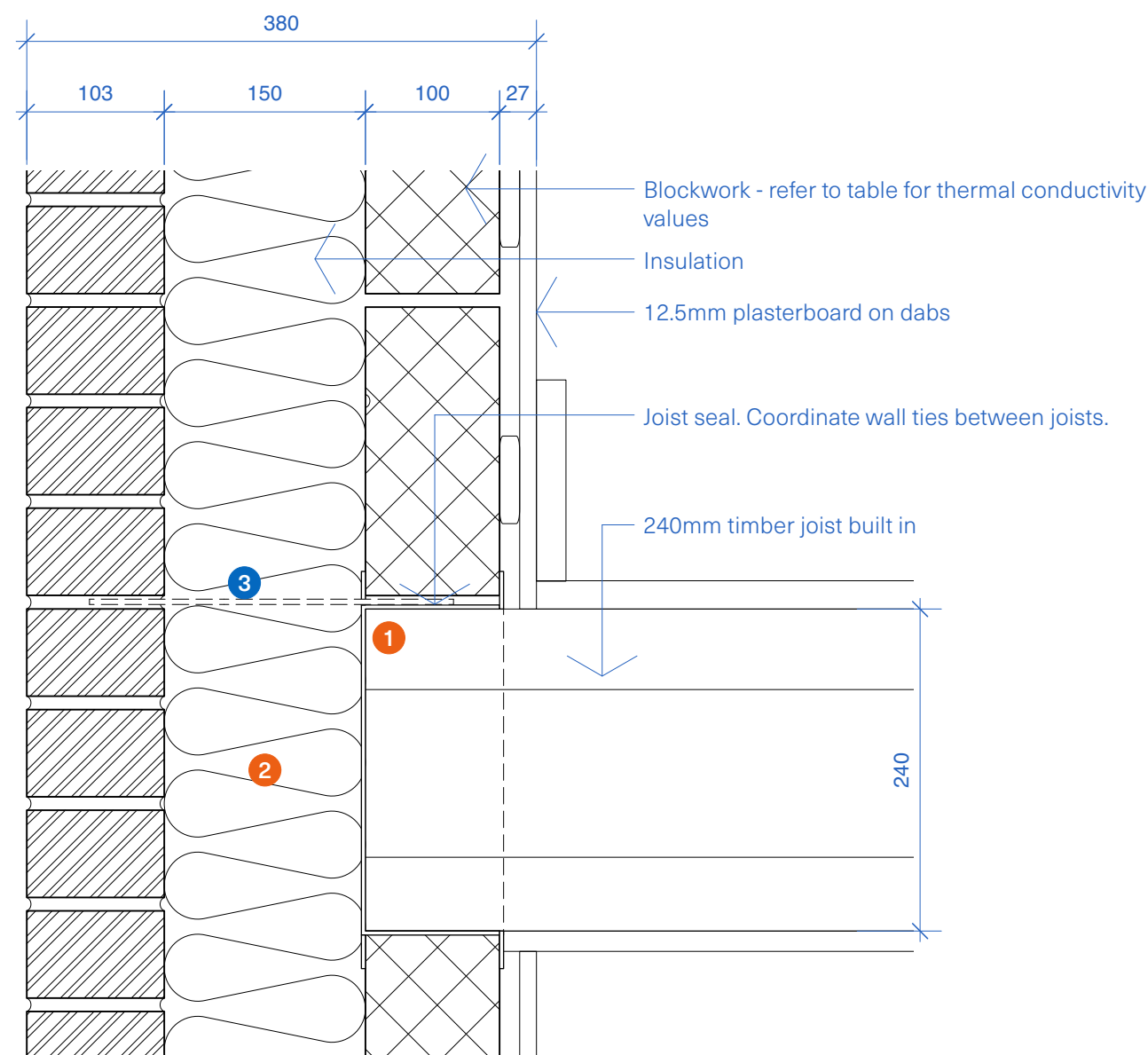
- Underfloor temp, T_u

Suspended floor underfloor temperature calculated in accordance with Annex E of EN ISO 13370 : 2007 @ $p/A=0.50\text{m/m}^2$

Clay or silt λ	1.5	W/mK
Ground ins. - R_g	0	$\text{m}^2\text{K/W}$
Wall thickness - w	0.300	m
Supporting wall - U_w	0.1778	$\text{W}/(\text{m}^2\text{K})$
Floor slab - U_f	0.13	$\text{W}/(\text{m}^2\text{K})$
Height above ground - h	0.150	m
f_w	0.05	
Vent area -e	0.0015	m^2/m
Air speed - v	5.0	m/s
Area, A	2	m^2
Perimeter, P	1	m
P/A ratio	0.50	m/m^2
Underfloor temp, T_u	2.66	$^{\circ}\text{C}$

BEWI is constantly seeking ways to improve its products and service. Whilst every effort is made to ensure the accuracy of the above calculation, please note that conventions, specifications, design and production of products is subject to change. The calculation provided is a recommendation only and BEWI does not give any warranty or representation whatsoever in connection with or assume liability for the accuracy, timeliness or completeness of the thermal transmittance calculation. The calculation is based on information provided by the client and BEWI accepts no liability for errors or omissions in the input data or errors resulting from any inaccuracy of input data. In no event shall BEWI be liable for any losses or damages arising out of or in connection with the use of the calculation.

Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

		Internal leaf block thermal conductivity (W/mK)					
Insulation thermal conductivity (W/mK)		0.11	0.15	0.19	0.28	0.6	1.33
	0.032	0.000	0.001	0.001	0.001	0.002	0.002
	0.034	0.001	0.001	0.001	0.001	0.002	0.003
	0.037	0.001	0.001	0.001	0.002	0.002	0.002

f-values: 0.972 - 0.985 (values above 0.75 indicate low risk of condensation and mould)

Ψ (Psi) value Thermal Compliance Notes

- 1 Joist seal to the end of the timber joist, built into the internal leaf blockwork. Airtightness seal.
- 2 Insulation to be continuous across floor abutment zone.

Construction Notes

- 3 Wall tie: No greater than 450mm vertical spacing.

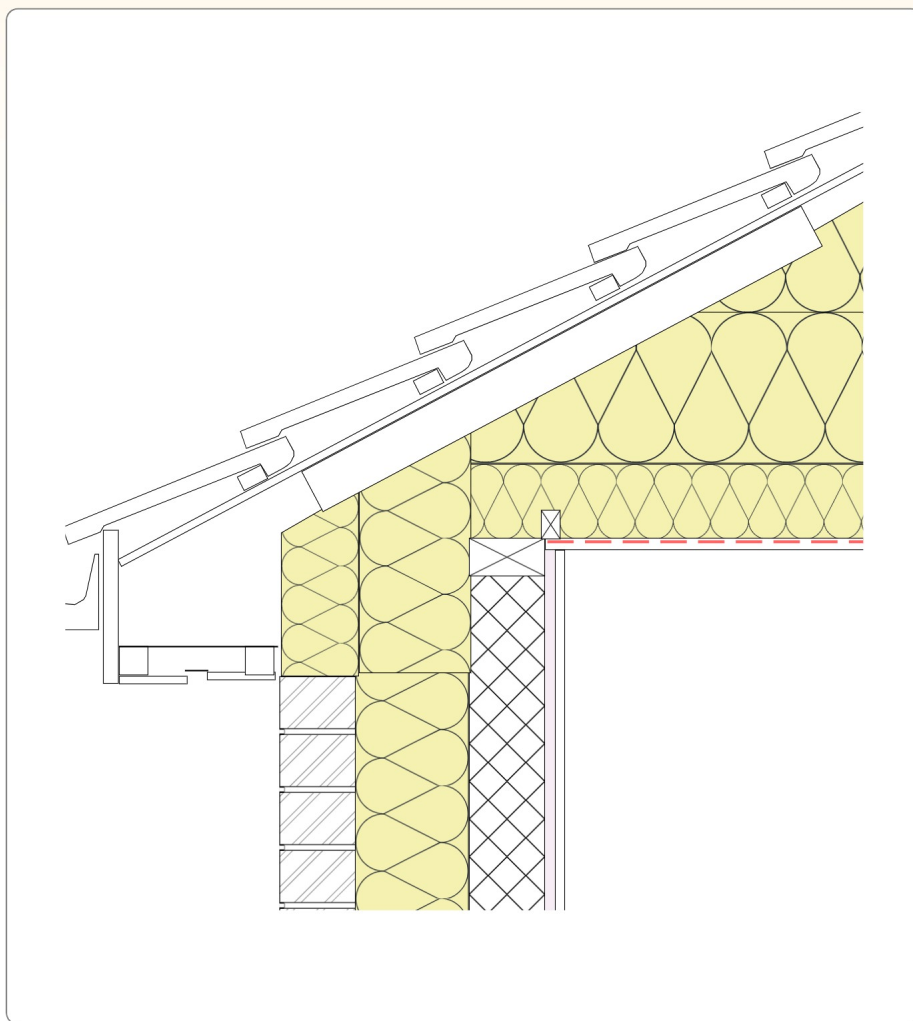
General Notes

You can alternatively build this detail with a joist hanger rather than building the timber joist into the blockwork.

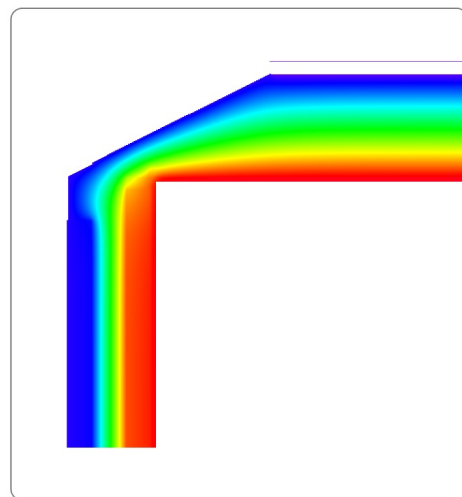
Maintain clear separation of components to prevent congestion within the cavity and mortar joints.

PSI ψ Calculation Report

Junction Name: E10 - Eaves (insulation at ceiling level) - BC280325-1
Project Name: Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.097
W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.545 m	0.086 W/(m ² K)	F _e (1.00)
U2	U value 2	1.140 m	0.183 W/(m ² K)	F _e (1.00)

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	0 C	0.1	0.464 m	-0.4677 W/m
R2	0 C	0.04	1.59 m	-4.7957 W/m
R3	0 C	0.1	1.6742 m	10.157 W/m
R4	20 C	0.1	1.545 m	3.8787 W/m
R5	20 C	0.13	1.145 m	4.8939 W/m
R6	0 C	0.04	0.1898 m	-0.2321 W/m

Materials List

Description	Thickness (m)	Lambda
Brick outer leaf	0.103	0.77
Superglass Multi-Roll 44	0.200, 0.200, 0.100, 0.103, 0.148	0.044
Standard Plasterboard	0.015, 0.013	0.19
Superglass Superwall 32 Cavity Batt	0.150	0.032
Medium Dense Blocks	0.100	0.441
Plaster Dabs	0.015	0.088

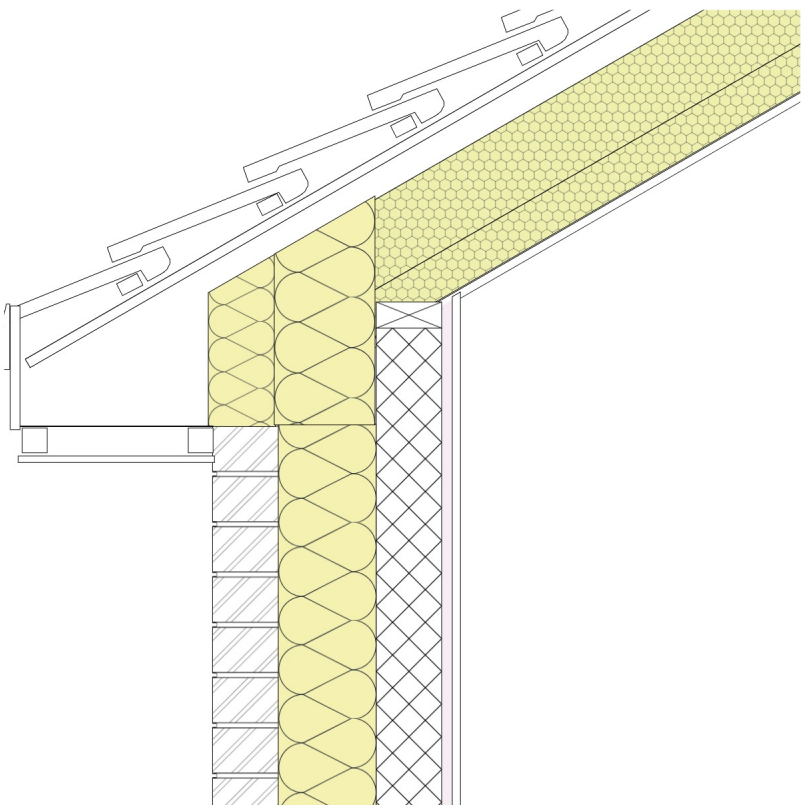
Calculation of the thermal conductivity L2D

Conductance L2D : 0.439
 Psi-value : 0.097 W/(mK)
 fRsi-value : 0.928

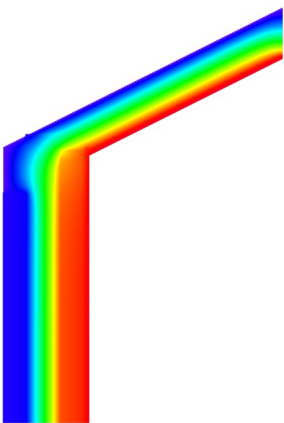
PSI ψ Calculation Report

Junction Name: E-11 Pitched Roof: Ventilated Batten Void (warm roof) - Eaves - BC160625-1

Project Name: Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.017
W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.140 m	0.183 W/(m²K)	F_e (1.00)
U2	U value 2	1.000 m	0.101 W/(m²K)	F_e (1.00)

This calculation is based upon data provided by the user and whilst the information contained herein is to the best of our knowledge true and accurate, we specifically exclude any liability for errors or omissions arising therefrom. Details, practices, and principles should be verified as to accuracy and suitability for the required purpose of use.

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	0 C	0.1	1.238 m	4.7344 W/m
R2	20 C	0.13	1.1926 m	4.83 W/m
R3	20 C	0.1	0.86 m	1.716 W/m
R4	0 C	0.04	1.027 m	-3.6834 W/m
R5	0 C	0.04	0.104 m	-0.8023 W/m

Materials List

Description	Thickness (m)	Lambda
Brick outer leaf	0.103	0.77
Rigid Insulation PU	0.120, 0.063	0.019
Standard Plasterboard	0.013, 0.013	0.19
Superglass Multi-Roll 44	0.103, 0.154	0.044
Superglass Superwall 32 Cavity Batt	0.150	0.032
Medium Dense Blocks	0.100	0.441
Plaster Dabs	0.015	0.088

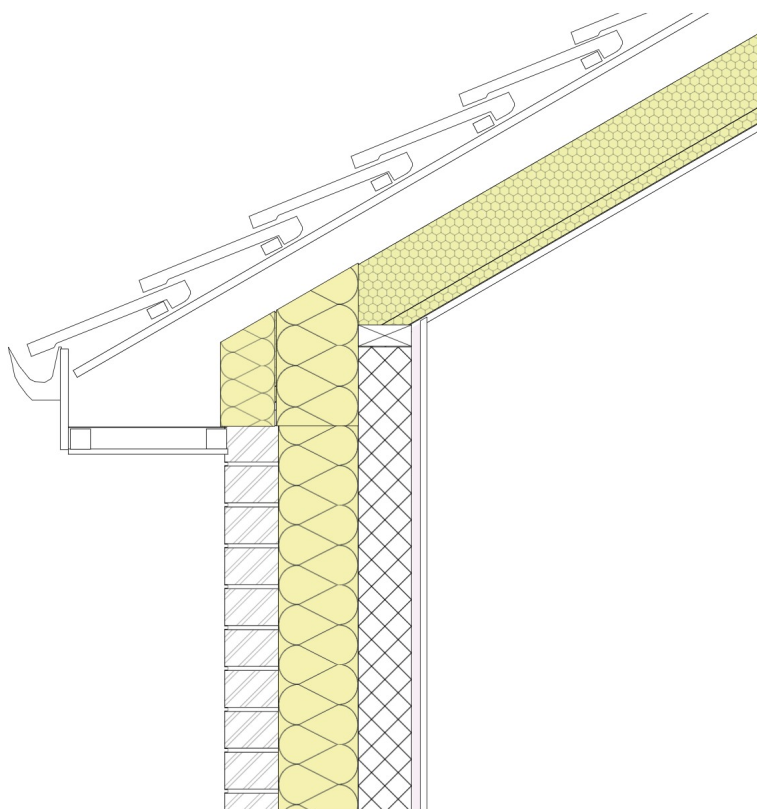
Calculation of the thermal conductivity L2D

Conductance L2D : 0.327
 Psi-value : 0.017 W/(mK)
 fRsi-value : 0.960

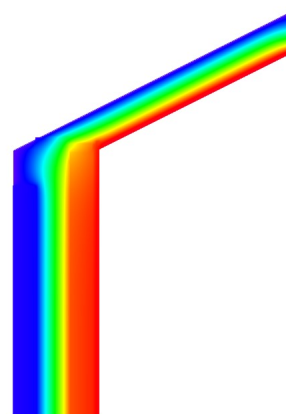
PSI ψ Calculation Report

Junction Name: E-11 Pitched Roof: Ventilated Batten Void (warm roof) - Eaves - BC280325-2

Project Name: Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.016
W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.140 m	0.183 W/(m ² K)	F _e (1.00)
U2	U value 2	1.000 m	0.127 W/(m ² K)	F _e (1.00)

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	0.00 C	0.04		1.000 W/m
R2	0.00 C	0.04		2.000 W/m
R3	20.00 C	0.13	1.00 m	3.000 W/m
R4	20.00 C	0.13	1.00 m	4.000 W/m
R5	0.00 C	0.04		- W/m
R6	20.00 C	0.13	1.00 m	- W/m
R7	0.00 C	0.04		- W/m
R8	0.00 C	0.04		- W/m
R9	0.00 C	0.04		- W/m

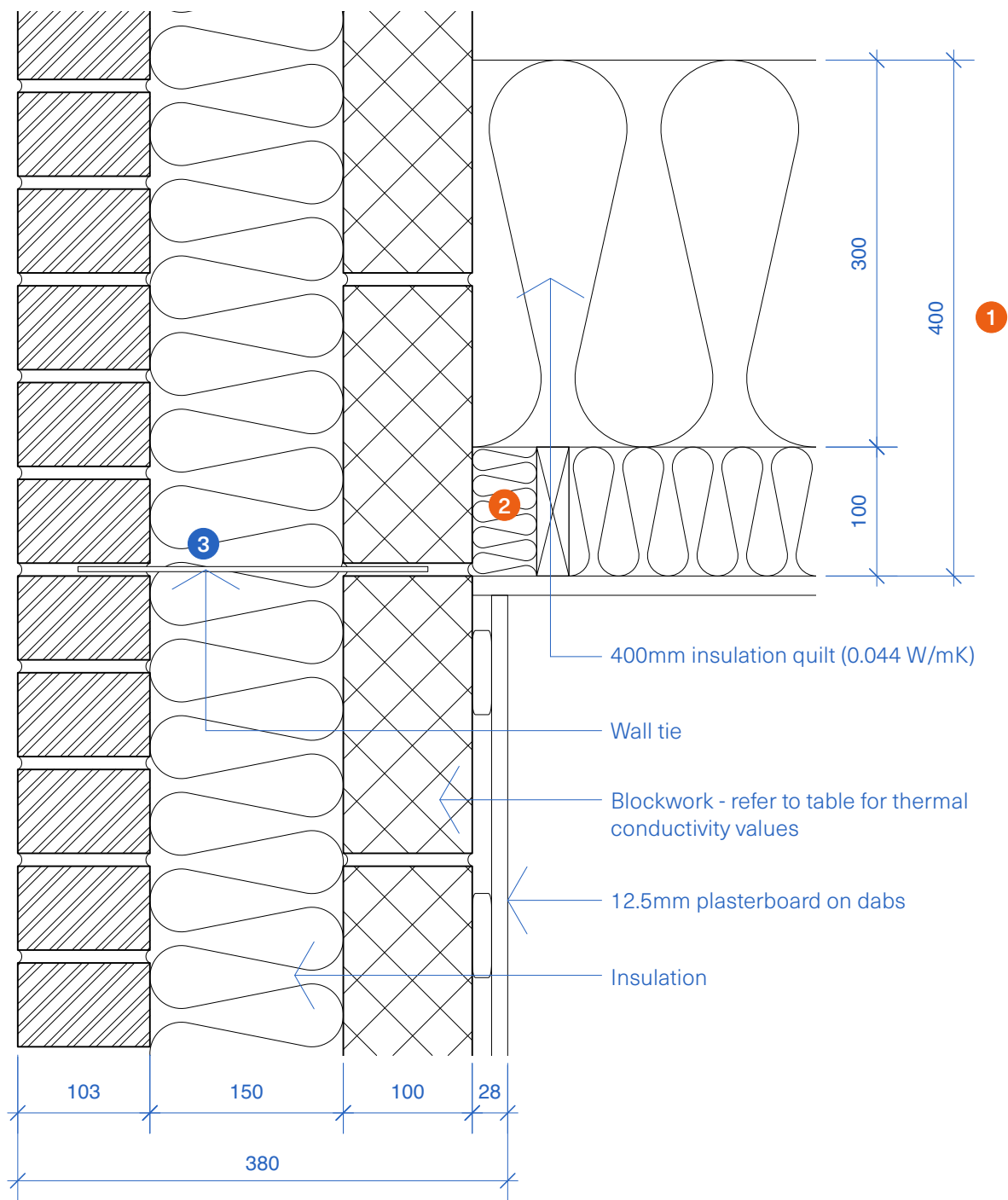
Materials List

Description	Thickness (m)	Lambda
Brick outer leaf	0.103	0.77
Rigid Insulation PU	0.120, 0.025	0.019
Standard Plasterboard	0.013, 0.013	0.19
Superglass Multi-Roll 44	0.103, 0.154	0.044
Superglass Superwall 32 Cavity Batt	0.150	0.032
Medium Dense Blocks	0.100	0.441
Plaster Dabs	0.015	0.088

Calculation of the thermal conductivity L2D

Conductance L2D : 0.352 W/(mK)
 Psi-value : 0.016 W/(mK)
 fRsi-value : 0.955

Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

Insulation thermal conductivity (W/mK)	Internal leaf block thermal conductivity (W/mK)					
	0.11	0.15	0.19	0.28	0.6	1.33
0.032	0.029	0.037	0.043	0.056	0.097	0.175
0.034	0.030	0.037	0.044	0.057	0.098	0.174
0.037	0.031	0.038	0.044	0.057	0.099	0.174

f-values: 0.878 - 0.949 (values above 0.75 indicate low risk of condensation and mould)

Ψ (Psi) value Thermal Compliance Notes

- 1 400mm insulation quilt (0.044 W/mK).
- 2 Fill the space between the wall and joist with insulation.

Construction Notes

- 3 Wall tie: 225mm maximum distance from opening. No greater than 450mm spacing.

General Notes

When the cavity is fully filled with insulation additional cavity closing is not required at the head of the wall. This meets the provisions of Diagram 5.3 ADBv1.

Construction Detail

Calculated Ψ (Psi) value for use in SAP Calculation

Insulation thermal conductivity (W/mK)	Internal leaf block thermal conductivity (W/mK)					
	0.11	0.15	0.19	0.28	0.6	1.33
0.032	0.034	0.039	0.043	0.050	0.061	0.070
0.034	0.034	0.039	0.044	0.050	0.062	0.071
0.037	0.034	0.040	0.044	0.051	0.062	0.072

f-values: 0.921 - 0.941 (values above 0.75 indicate low risk of condensation and mould)

Ψ (Psi) value Thermal Compliance Notes

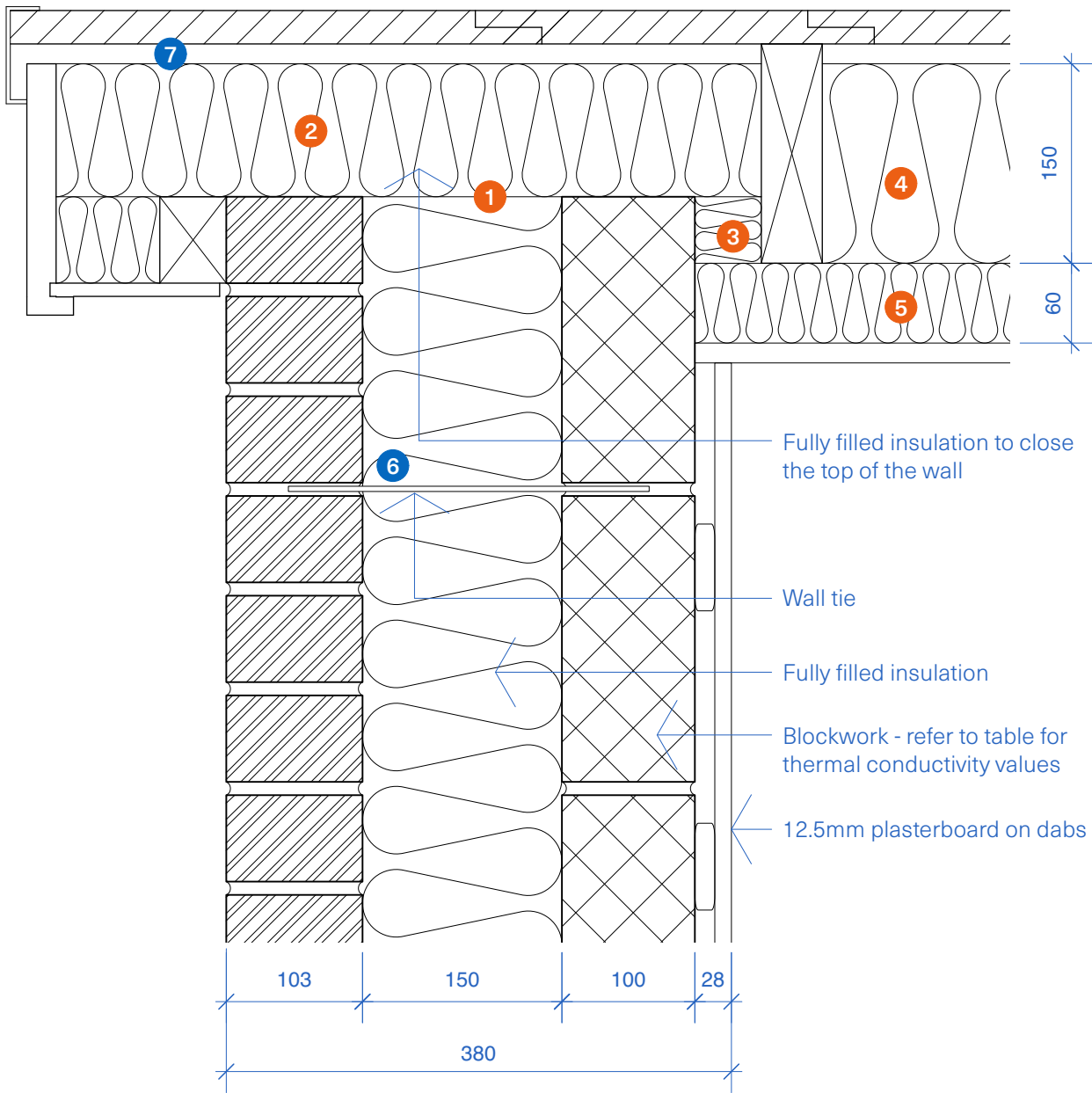
- 1
- Continue cavity insulation up to the wall head.
- 2
- Minimum 100mm insulation $\lambda \leq 0.044 \text{ W/mK}$ to void above the wall.
- 3
- Pack insulation between the final rafter and the wall.
- 4
- 150mm insulation (0.022 W/mK) between rafters.
- 5
- 60mm (0.022 W/mK) beneath rafters.

Construction Notes

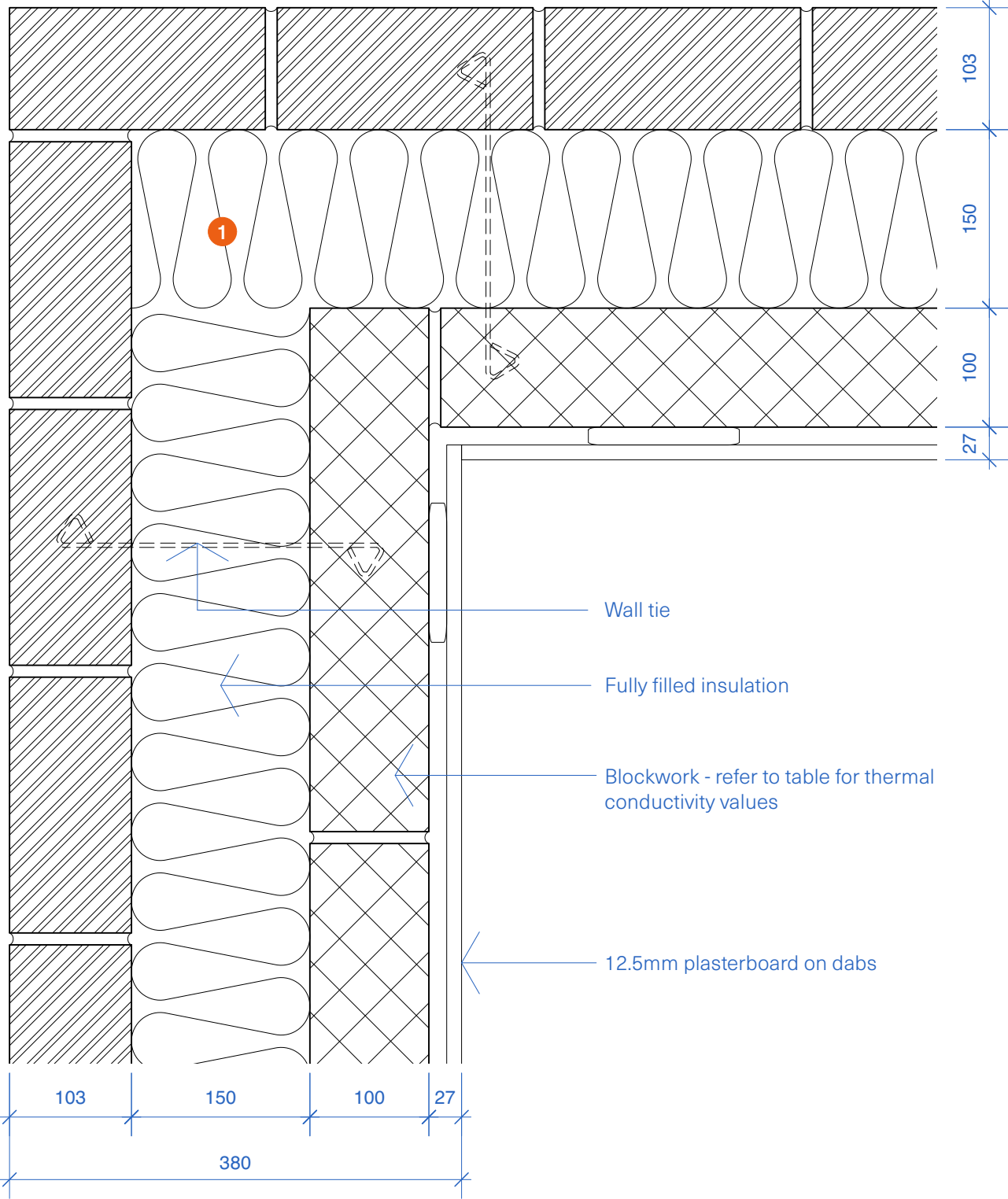
- 6
- Wall tie: 225mm maximum distance from opening. No greater than 450mm spacing.
- 7
- Maintain air gap for ventilation.

General Notes

When the cavity is fully filled with insulation additional cavity closing is not required at the head of the wall. This meets the provisions of Diagram 5.3 ADBv1.



Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

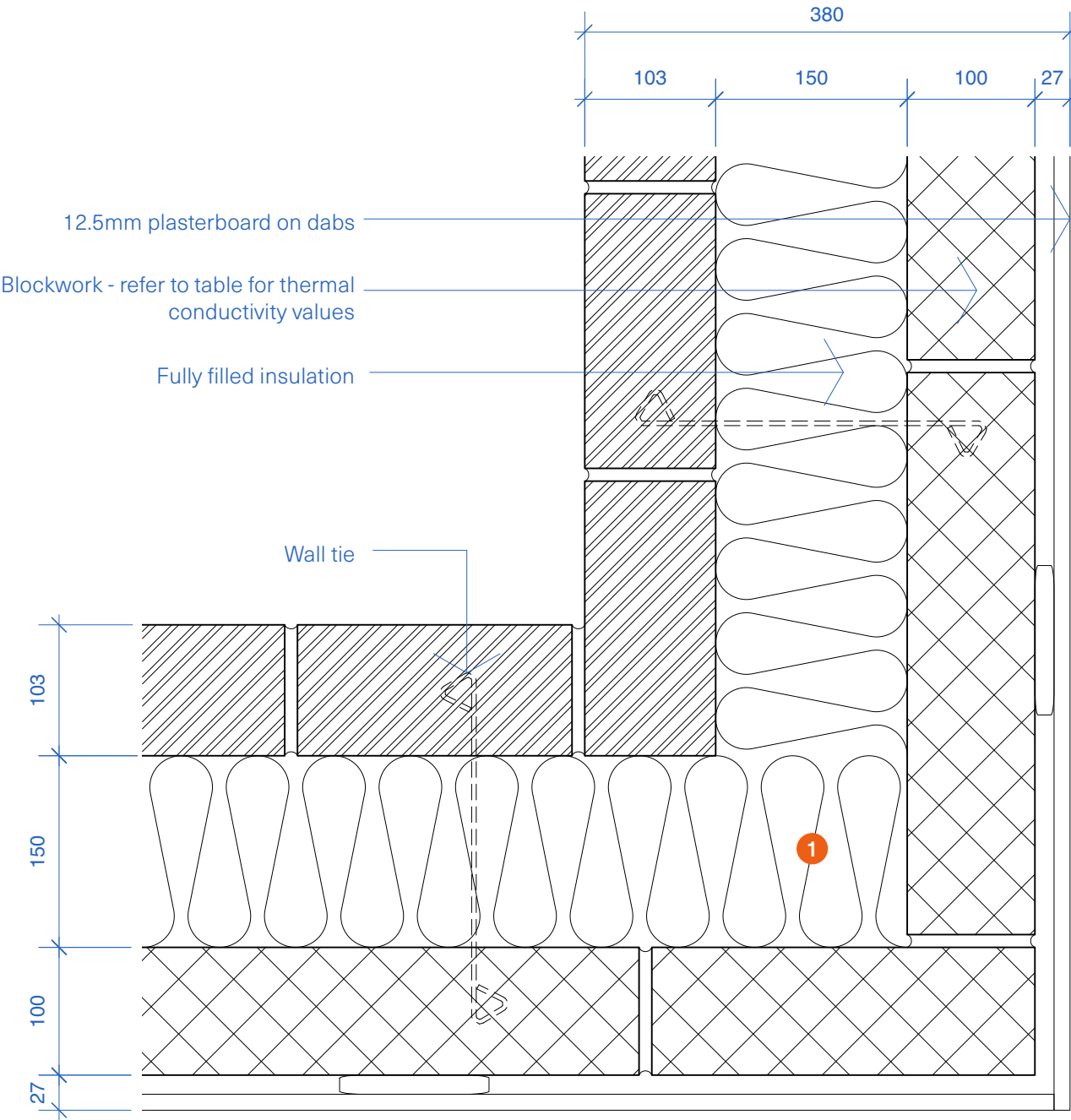
Insulation thermal conductivity (W/mK)	Internal leaf block thermal conductivity (W/mK)					
	0.11	0.15	0.19	0.28	0.6	1.33
0.032	0.037	0.040	0.042	0.046	0.051	0.054
0.034	0.037	0.041	0.044	0.047	0.054	0.057
0.037	0.039	0.043	0.046	0.051	0.057	0.061

f-values: 0.924 - 0.966 (values above 0.75 indicate low risk of condensation and mould)

Ψ (Psi) value Thermal Compliance Notes

- 1 Ensure continuity of insulation at the corner.

Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

Insulation thermal conductivity (W/mK)	Internal leaf block thermal conductivity (W/mK)					
	0.11	0.15	0.19	0.28	0.6	1.33
0.032	-0.079	-0.082	-0.085	-0.088	-0.091	-0.093
0.034	-0.083	-0.086	-0.089	-0.094	-0.097	-0.098
0.037	-0.087	-0.092	-0.096	-0.099	-0.105	-0.107

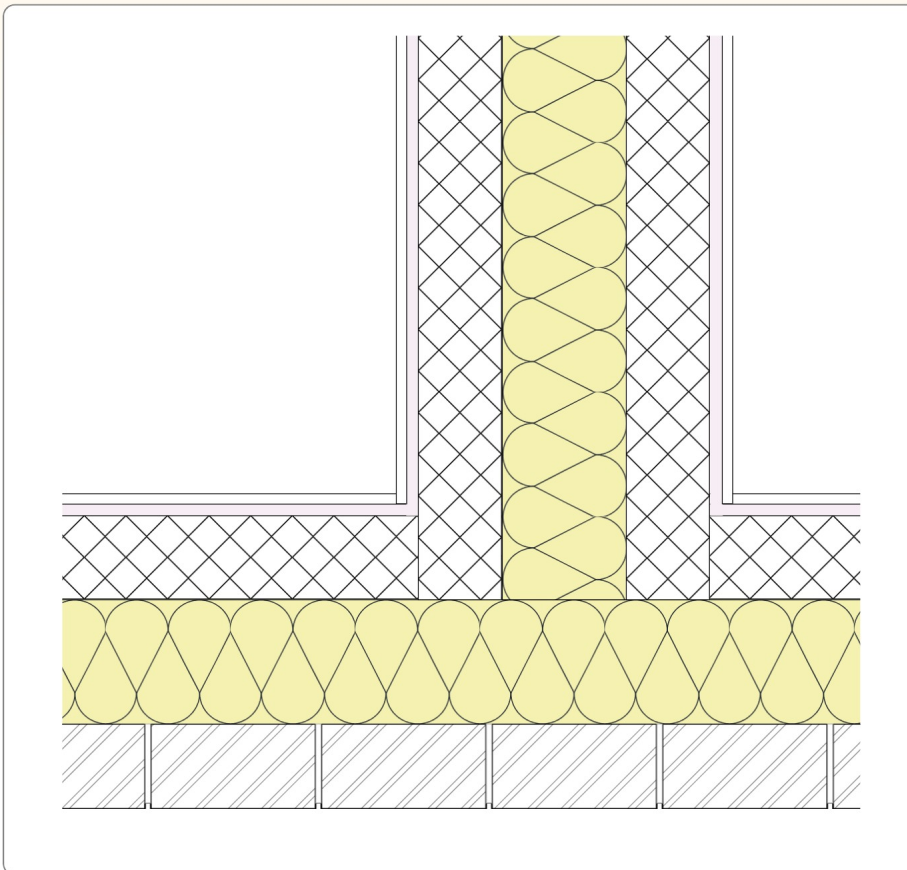
f-values: 0.972 - 0.986 (values above 0.75 indicate low risk of condensation and mould)

Ψ (Psi) value Thermal Compliance Notes

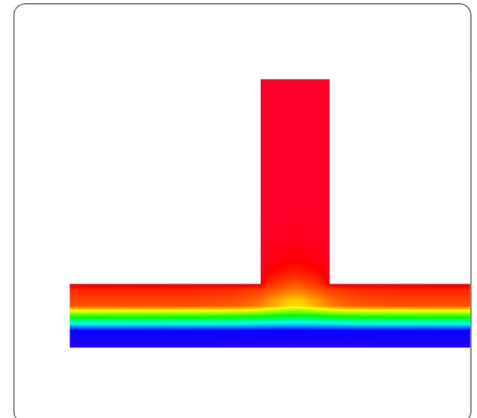
- 1 Ensure continuity of insulation at the corner.

PSI ψ Calculation Report

Junction Name: E18 - Party wall between dwellings - BC190325-1
Project Name: Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.065
W/mK
Per dwelling:
0.0325 W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.140 m	0.183 W/(m²K)	F _e (1.00)
U2	U value 2	1.140 m	0.183 W/(m²K)	F _e (1.00)

Client requested cavity fire barriers be removed from calculation

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	20 C	0.13	1.252 m	0.3981 W/m
R2	20 C	0.13	1.248 m	0.3824 W/m
R3	20 C	0.13	1.164 m	4.4454 W/m
R4	20 C	0.13	1.164 m	4.4279 W/m
R5	0 C	0.04	2.744 m	-9.6998 W/m

Materials List

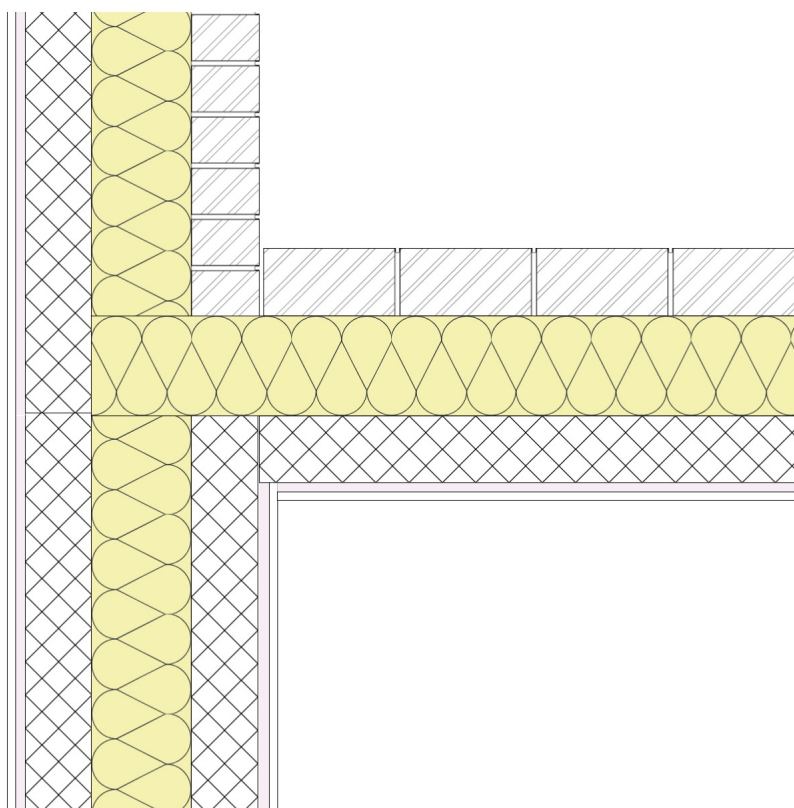
Description	Thickness (m)	Lambda
Brick outer leaf	0.103	0.77
Concrete block (lightweight high strength)	0.100	0.161
Standard Plasterboard	0.013, 0.013, 0.013	0.19
Plaster Dabs	0.015, 0.015, 0.015	0.088
Medium Dense Blocks	0.100	0.441
Superglass Superwall 32 Cavity Batt	0.150	0.032
Lightweight Aircrete Blocks	0.100	0.161
Superglass Party Wall Roll	0.150	0.036

Calculation of the thermal conductivity L2D

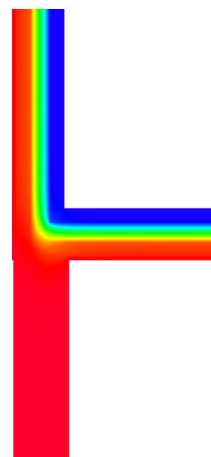
Conductance L2D : 0.483 W/(mK)
 Psi-value : 0.065 W/(mK)
 fRsi-value : 0.960

PSI ψ Calculation Report

Junction Name: E-25 Staggered party wall between dwellings - BC080425-1
Project Name: Ian Stanyer - Denton Construction - Dalton Avenue



Psi ψ :
0.044
W/mK



Nr.	Description	Length	Value	Correction factor
U1	U value 1	1.500 m	0.183 W/(m²K)	F _e (1.00)
U2	U value 2	1.140 m	0.183 W/(m²K)	F _e (1.00)

Client requested cavity fire barriers be removed from calculation

This calculation is based upon data provided by the user and whilst the information contained herein is to the best of our knowledge true and accurate, we specifically exclude any liability for errors or omissions arising therefrom. Details, practices, and principles should be verified as to accuracy and suitability for the required purpose of use.

Boundary conditions and Flow of heat

Nr.	Temp	Rsi/Rse	Length	Flow of heat
R1	0 C	0.04	1.5 m	-5.8654 W/m
R2	0 C	0.04	1.164 m	-4.6824 W/m
R3	20 C	0.1	1.136 m	4.1883 W/m
R4	20 C	0.13	1.5 m	0.2782 W/m
R5	20 C	0.13	1.888 m	6.0114 W/m
R6	20 C	0.13	1.5 m	0.0863 W/m
R7	20 C	0.13	0.008 m	0.0034 W/m

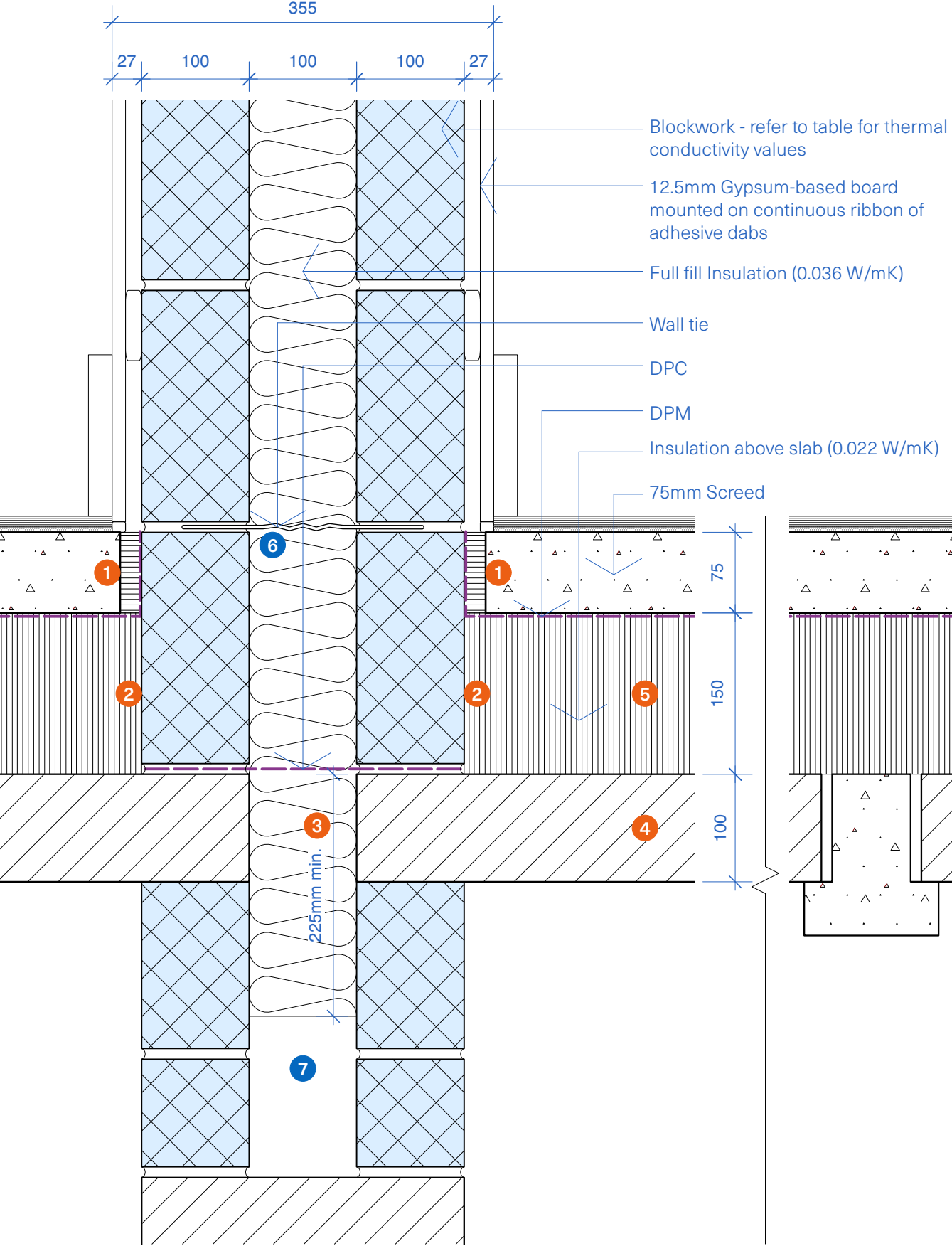
Materials List

Description	Thickness (m)	Lambda
Plasterboard	0.013, 0.013	0.19
Brick outer leaf	0.103, 0.103	0.77
Superglass Superwall 32 Cavity Batt	0.150, 0.150	0.032
Medium Dense Blocks	0.100, 0.100	0.441
Plaster Dabs	0.015, 0.015, 0.015, 0.015	0.088
Lightweight Aircrete Blocks	0.100, 0.100	0.161
Superglass Party Wall Roll	0.150	0.036
Standard Plasterboard	0.013	0.19

Calculation of the thermal conductivity L2D

Conductance L2D : 0.528 W/(mK)
 Psi-value : 0.044 W/(mK)
 fRsi-value : 0.973

Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

Separating Wall Block Conductivity: W/mK				
Floor Insulation Thermal Conductivity (W/mK)	0.15	0.19	0.6	1.33
0.022	0.043	0.051	0.108	0.172

f-values: 0.912 - 0.953 (values above 0.75 indicate low risk of condensation and mould)
The above Psi-values are applicable per dwelling on either side of the party wall.

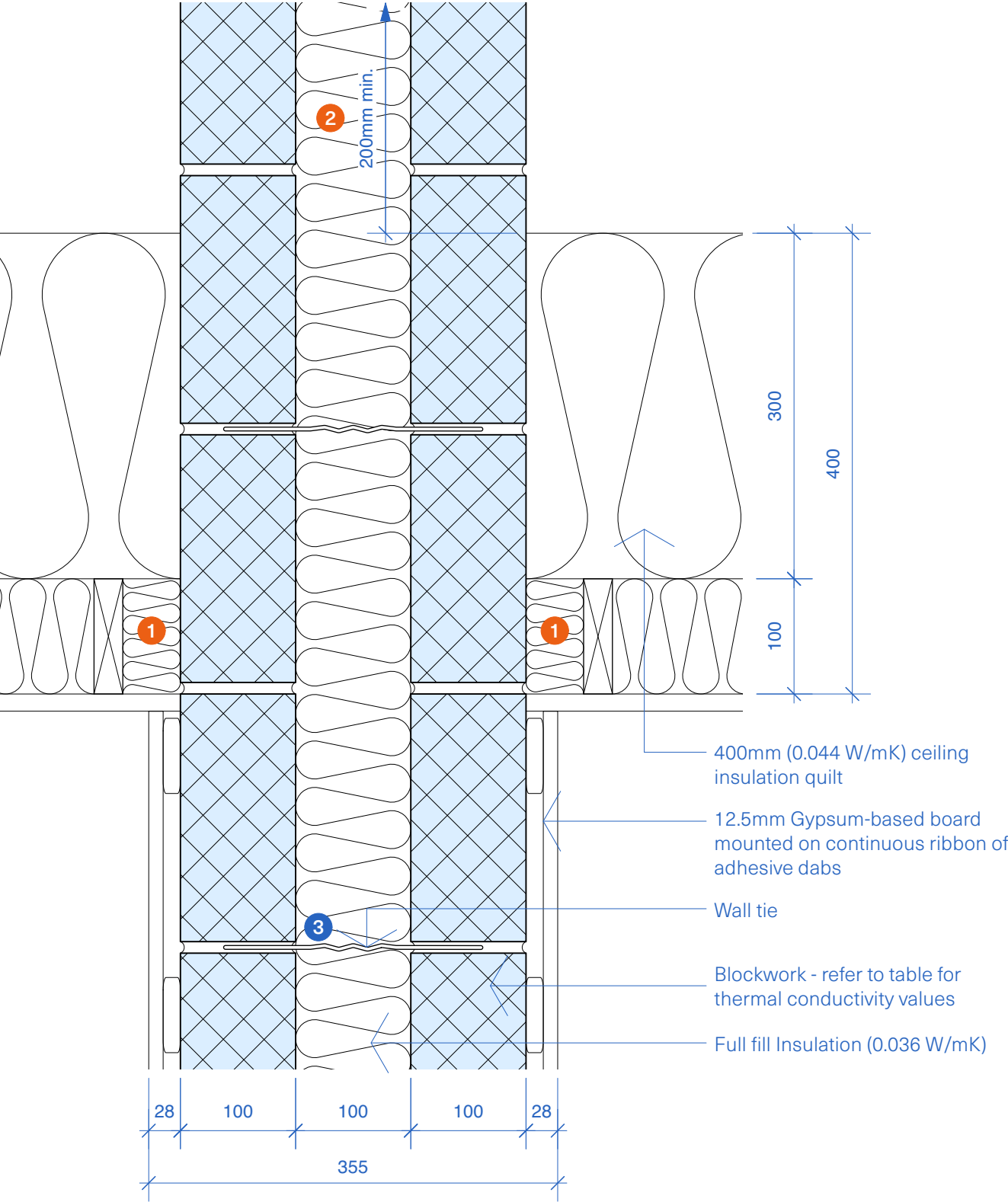
Ψ (Psi) value Thermal Compliance Notes

- 1 Minimum 20mm perimeter insulation with $\lambda \leq 0.022 \text{ W/mK}$.
- 2 Ensure the floor insulation is tightly butted against the separating wall.
- 3 Continue full fill cavity insulation at least 225mm below the top of the beams. Insulation below DPC to provide thermal resistance equal to or better than main wall insulation.
- 4 150mm Beam and Aggregate block infill.
- 5 150mm insulation (0.022 W/mK) above slab.

Construction Notes

- 6 Type A (part E) wall ties at no more than 2.5 ties/m² (900 x 450mm spacing). Wall ties: no greater than 900mm horizontal spacing.
- 7 Continue the cavity at least 225mm below the underside of the beams.

Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

Separating Wall Block Conductivity: W/mK				
Roof Insulation Thermal Conductivity (W/mK)	0.15	0.19	0.6	1.33
0.044	0.033	0.040	0.101	0.190

f-values: 0.890 - 0.957 (values above 0.75 indicate low risk of condensation and mould)
The above Psi-values are applicable per dwelling on either side of the party wall.

Ψ (Psi) value Thermal Compliance Notes

- 1 Fill the space between the separating wall and last joist with insulation.
- 2 Ensure that the cavity insulation extends at least 200mm above the top of the loft insulation.

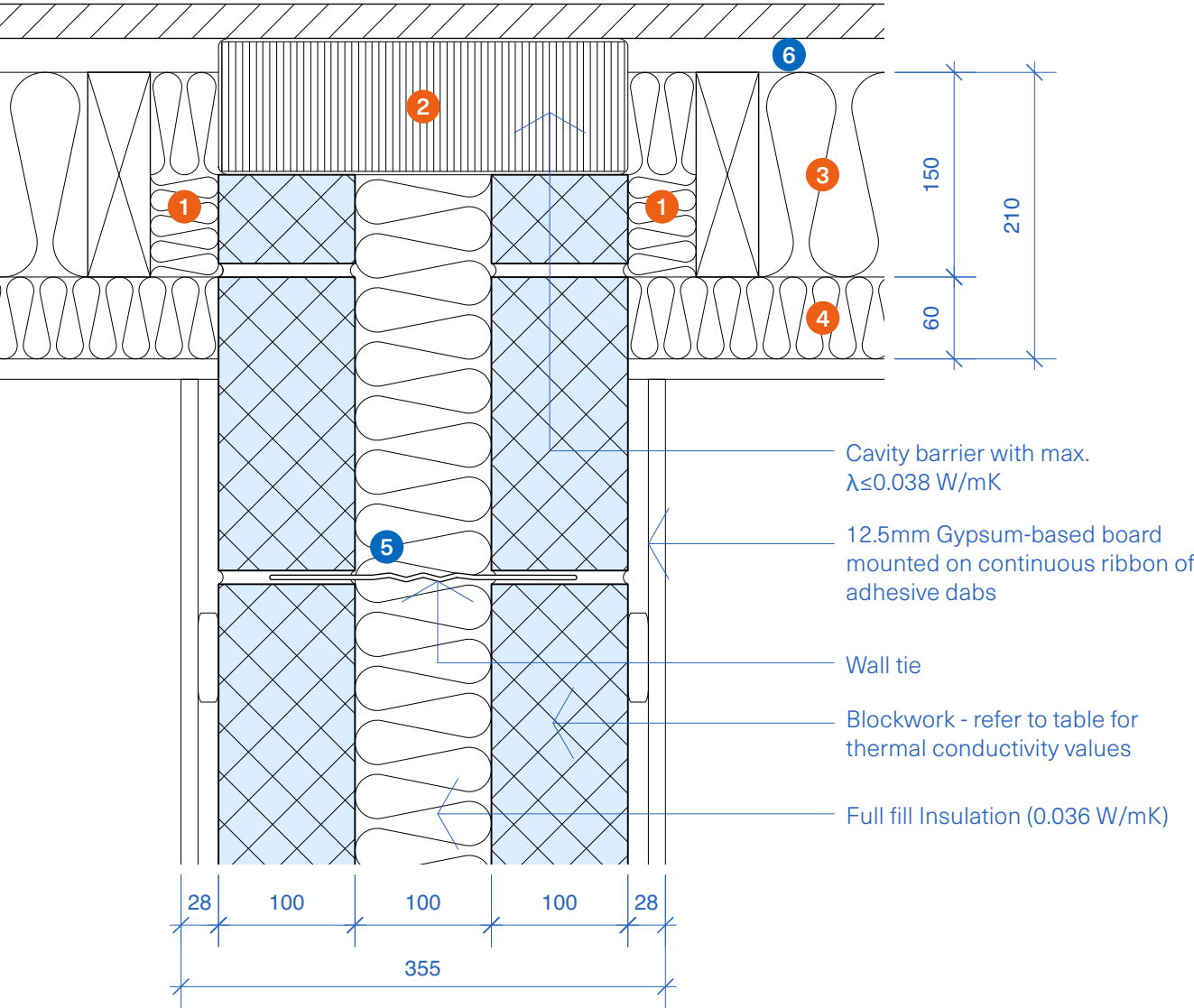
Construction Notes

- 3 Type A (part E) wall ties at no more than 2.5 ties/m2 (900 x 450mm spacing).
Wall ties: no greater than 900mm horizontal spacing.

General Notes

The cavity must be fire-stopped (same resistance as the compartment wall) at the top of the wall to the underside of the roof for the provisions of Diagram 8.1 ADBv1 to apply.

Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

Separating Wall Block Conductivity: W/mK				
Roof Insulation between rafters Thermal Conductivity (W/mK)	0.15	0.19	0.6	1.33
0.022	0.036	0.038	0.046	0.050

f-values: 0.955 - 0.972 (values above 0.75 indicate low risk of condensation and mould)
The above Psi-values are applicable per dwelling on either side of the party wall.

Ψ (Psi) value Thermal Compliance Notes

- 1 Fill the space between the separating wall and last rafter with insulation.
- 2 Cavity barrier with maximum $\lambda \leq 0.038 \text{ W/mK}$.
The cavity must be fire-stopped (same resistance as the compartment wall) at the top of the wall to the underside of the roof for the provisions of Diagram 8.1 ADBv1 to apply.
- 3 150mm insulation (0.022 W/mK) between rafters.
- 4 60mm insulation (0.022 W/mK) beneath rafters.

Construction Notes

- 5 Type A (part E) wall ties at no more than 2.5 ties/m² (900 x 450mm spacing).
Wall ties: no greater than 900mm horizontal spacing.
- 6 Maintain air gap for ventilation.