STRANLITE Thermal Bridging Values

Plasmor
CONCRETE PRODUCTS

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E1-SL-2018	**Issued : 15 February 2022**
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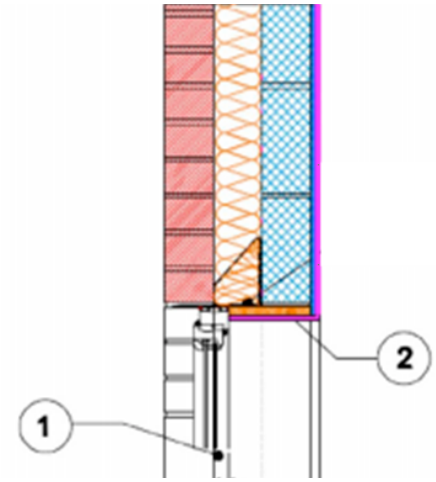
Steel lintel with perforated base plate (Table K1 Ref E1)
Calculated Ψ-value 0.305 – 0.326 W/mK

Key Points

1. Minimum frame overlap to be 30mm
2. Install insulation to soffit – 25mm λ=0.022



Calculated ψ-values and f-values

Cavity Insulation	**Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs**	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.316**	0.884
150mm λ=0.032	**0.321**	0.886
50mm λ=0.022 (+ 50mm low e cavity)	**0.305**	0.883
100mm λ=0.022 (+ 50mm low e cavity)	**0.326**	0.886

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E2-SL-2018	**Issued : 11 February 2022**
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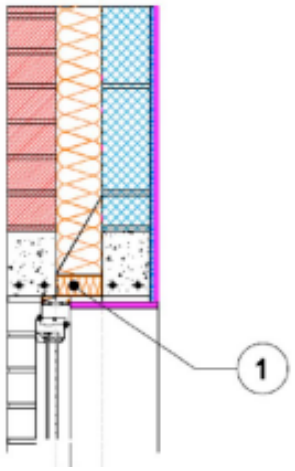
Independent Concrete lintel (Table K1 Ref E2)
Calculated Ψ-value = 0.031 – 0.041 W/mK

Key Points

1. Close cavity with insulated cavity closer λ=0.034
2. Minimum frame overlap to be 30mm



Calculated ψ-values and f-values

Cavity Insulation	Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.031**	0.898
150mm λ=0.032	**0.034**	0.893
50mm λ=0.022 (+ 50mm low e cavity)	**0.036**	0.890
100mm λ=0.022 (+ 50mm low e cavity)	**0.041**	0.886

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E3-SL-2018	**Issued : 11 February 2022**
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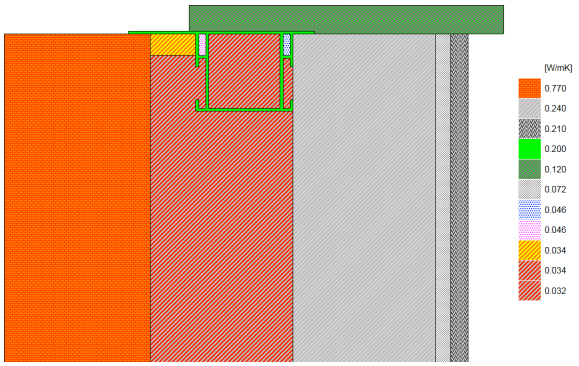
Sill (Table K1 Ref E3)
Calculated Ψ-value = 0.021 – 0.033 W/mK

Key Points

1. Install a proprietary cavity closer (see options below)
2. Minimum frame overlap to be 30mm



Calculated ψ-values and f-values

Thermabate cavity closer*	**Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.021**	0.885
150mm λ=0.032	**0.026**	0.881
50mm λ=0.022 (+ 50mm low e cavity)	**0.024**	0.875
100mm λ=0.022 (+ 50mm low e cavity)	**0.033**	0.867

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Cavalok cavity closer*	**Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.021**	0.883
150mm λ=0.032	**0.026**	0.877
50mm λ=0.022 (+ 50mm low e cavity)	**0.021**	0.879
100mm λ=0.022 (+ 50mm low e cavity)	**0.031**	0.873

**Following manufacturer's installation guidelines for cavity closer*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E4-SL-2018	**Issued : 11 February 2022**
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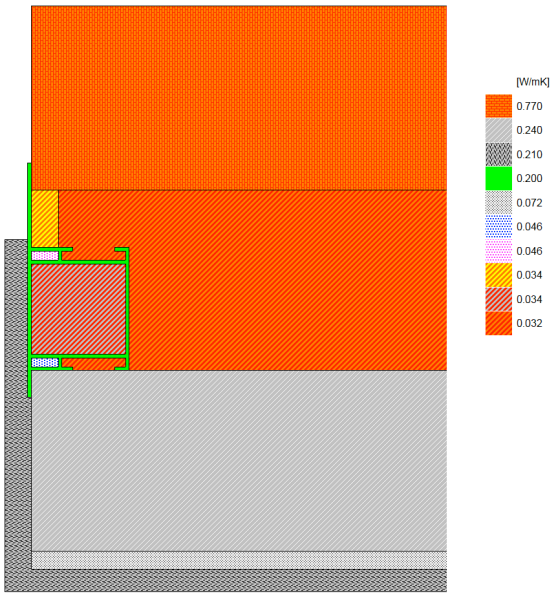
Jamb (Table K1 Ref E4)
Calculated Ψ-value = 0.024 – 0.038 W/mK

Key Points

1. Install a proprietary cavity closer (see options below)
2. Minimum frame overlap to be 30mm



Calculated ψ-values and f-values

Thermabate cavity closer*	**Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.024**	0.881
150mm λ=0.032	**0.030**	0.876
50mm λ=0.022 (+ 50mm low e cavity)	**0.029**	0.870
100mm λ=0.022 (+ 50mm low e cavity)	**0.038**	0.866

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Cavalok cavity closer*	**Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.026**	0.876
150mm λ=0.032	**0.032**	0.871
50mm λ=0.022 (+ 50mm low e cavity)	**0.028**	0.872
100mm λ=0.022 (+ 50mm low e cavity)	**0.037**	0.867

**Following manufacturer's installation guidelines for cavity closer*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E5-SL-2018	**Issued : 11 February 2022**
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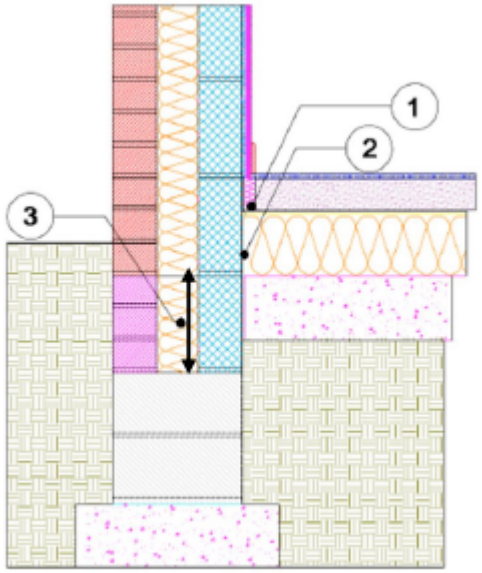
Solid concrete ground floor – insulation above slab (Table K1 Ref E5)
Calculated Ψ-value = 0.086 – 0.090 W/mK

Key Points

1. Install perimeter edge insulation λ=0.022
2. Ensure the floor insulation abuts the external wall
3. Continue the cavity wall insulation a minimum of 125mm below the top of the slab



Calculated ψ-values and f-values

Cavity wall insulation	**100mm Floor insulation (λ=0.022)**	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.090**	0.916
150mm λ=0.032	**0.087**	0.921
50mm λ=0.022 (+ 50mm low e cavity)	**0.089**	0.913
100mm λ=0.022 (+ 50mm low e cavity)	**0.086**	0.922

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Cavity wall insulation	**150mm Floor insulation (λ=0.022)**	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.090**	0.916
150mm λ=0.032	**0.087**	0.921
50mm λ=0.022 (+ 50mm low e cavity)	**0.089**	0.913
100mm λ=0.022 (+ 50mm low e cavity)	**0.086**	0.922

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E5-SL-2018	**Issued : 11 February 2022**
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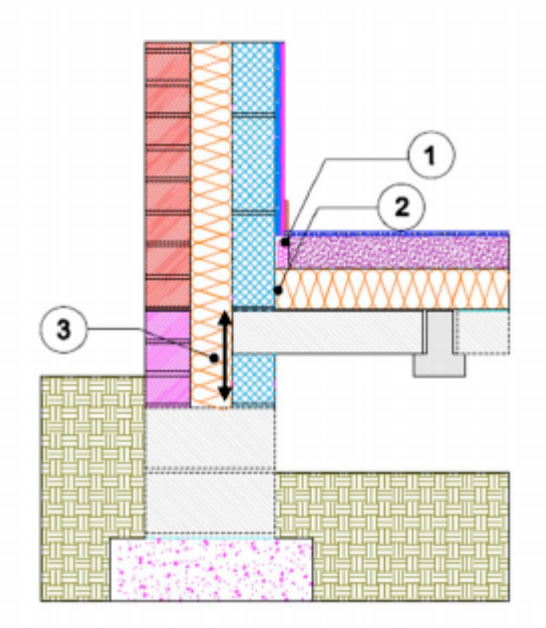
Suspended beam and block floor – insulation above (Table K1 Ref E5)
Calculated Ψ-value = 0.076 – 0.082 W/mK

Key Points

1. Install perimeter edge insulation λ=0.022
2. Ensure the floor insulation abuts the external wall
3. Continue the cavity wall insulation a minimum of 225mm below the top of the floor block



Calculated ψ-values and f-values

100mm Floor insulation (λ=0.022) Beams perpendicular to external wall (worst case)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.081**	0.920
150mm λ=0.032	**0.081**	0.926
50mm λ=0.022 (+ 50mm low e cavity)	**0.080**	0.918
100mm λ=0.022 (+ 50mm low e cavity)	**0.080**	0.927

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The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Calculated ψ-values and f-values

150mm Floor insulation (λ=0.022) Beams perpendicular to external wall (worst case)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.076**	0.925
150mm λ=0.032	**0.082**	0.931
50mm λ=0.022 (+ 50mm low e cavity)	**0.082**	0.922
100mm λ=0.022 (+ 50mm low e cavity)	**0.081**	0.932

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E6-SL-2018	**Issued : 11 February 2022**
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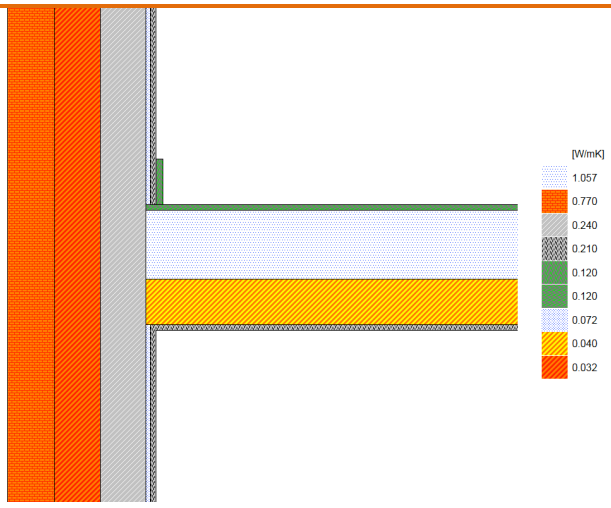
Intermediate floor within a dwelling (Table K1 Ref E6)
Calculated Ψ-value = -0.005 – 0.000 W/mK

Key Points

1.Continue wall insulation across floor abutment zone



Calculated ψ-values and f-values

Timber floor joists – no insulation between		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.000**	0.963
150mm λ=0.032	**0.000**	0.974
50mm λ=0.022 (+ 50mm low e cavity)	**0.000**	0.959
100mm λ=0.022 (+ 50mm low e cavity)	**-0.001**	0.975

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Calculated ψ-values and f-values

Timber floor joists – 100mm acoustic mineral wool between (λ=0.040)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**-0.003**	0.955
150mm λ=0.032	**-0.002**	0.968
50mm λ=0.022 (+ 50mm low e cavity)	**-0.005**	0.949
100mm λ=0.022 (+ 50mm low e cavity)	**-0.002**	0.969

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E7-SL-2018	**Issued : 11 February 2022**
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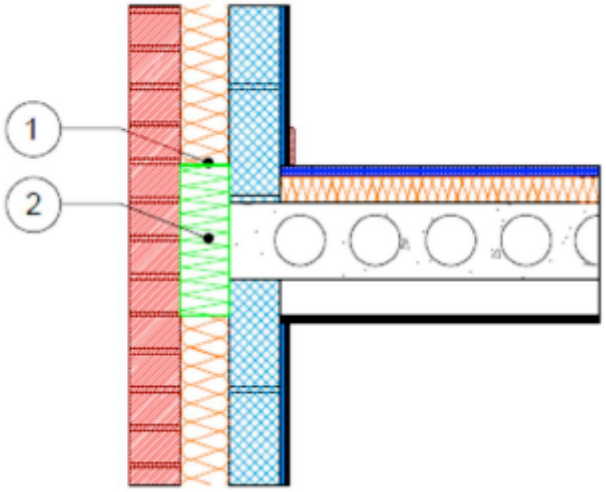
Party floor between dwellings (block of flats) – concrete (Table K1 Ref E7)
Calculated Ψ-value = -0.024 – 0.001 W/mK

Key Points

1.Carry wall insulation across floor abutment zone or installed proprietary fire stop

2. Proprietary fire stop to be same thermal conductivity as wall insulation



Calculated ψ-values and f-values

Hollowcore plank separating floor		
Cavity wall insulation	**Ψ-value W/m·k***	***f*-value**
100mm λ=0.032	**-0.024**	0.961
150mm λ=0.032	**-0.018**	0.972
50mm λ=0.022 (+ 50mm low e cavity)	**-0.026**	0.956
100mm λ=0.022 (+ 50mm low e cavity)	**0.001**	0.974

**Psi value is applied to both sides of the party floor*
The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E10-SL-2018	**Issued : 15 February 2022**
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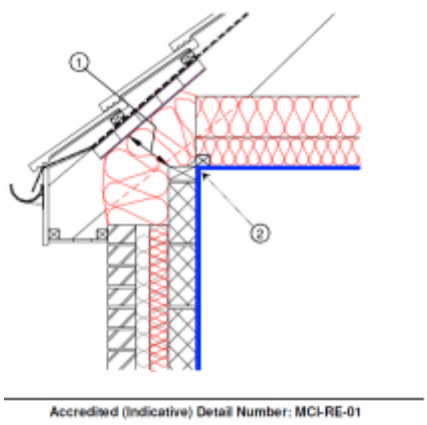
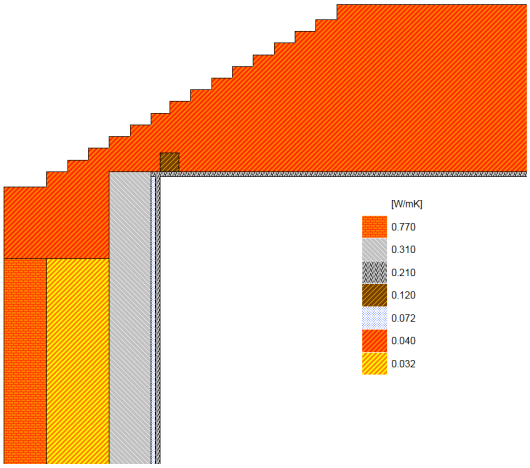
Eaves (insulation at ceiling level) (Table K1 Ref E10)
Calculated Ψ-value = 0.111 – 0.126 W/mK

Key Points

1.Ensure continuity of the insulation between the wall plate and eaves, fully fill void with insulation





Calculated ψ-values and f-values

400mm mineral wool insulation to ceiling (λ=0.040)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.111**	0.907
150mm λ=0.032	**0.114**	0.910
50mm λ=0.022 (+ 50mm low e cavity)	**0107**	0.906
100mm λ=0.022 (+ 50mm low e cavity)	**0.126**	0.909

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E12-SL-2018	**Issued : 15 February 2022**
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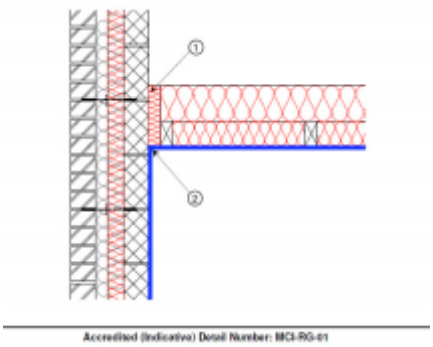
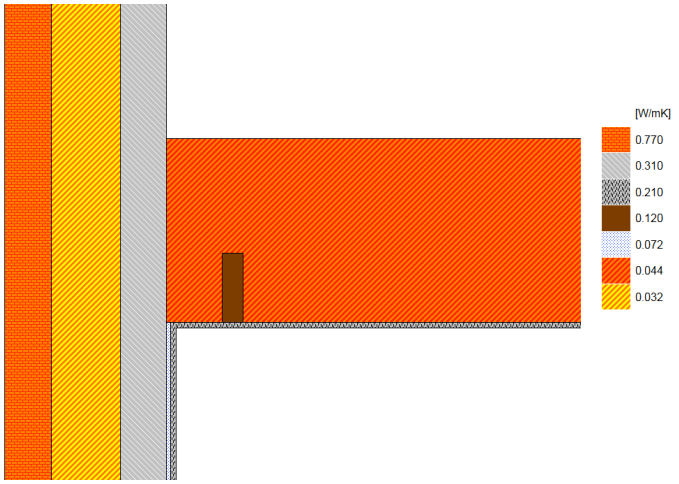
Gable (insulation at ceiling level) (Table K1 Ref E12)
Calculated Ψ-value = 0.082 – 0.091 W/mK

Key Points

1.Pack insulation between the last truss/joist and the external wall

2.Continue cavity wall insulation to the top of the gable wall





Calculated ψ-values and f-values

400mm mineral wool insulation to plane ceiling (λ=0.040)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.090**	0.908
150mm λ=0.032	**0.084**	0.921
50mm λ=0.022 (+ 50mm low e cavity)	**0.091**	0.903
100mm λ=0.022 (+ 50mm low e cavity)	**0.082**	0.923

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E13-SL-2018	**Issued : 15 February 2022**
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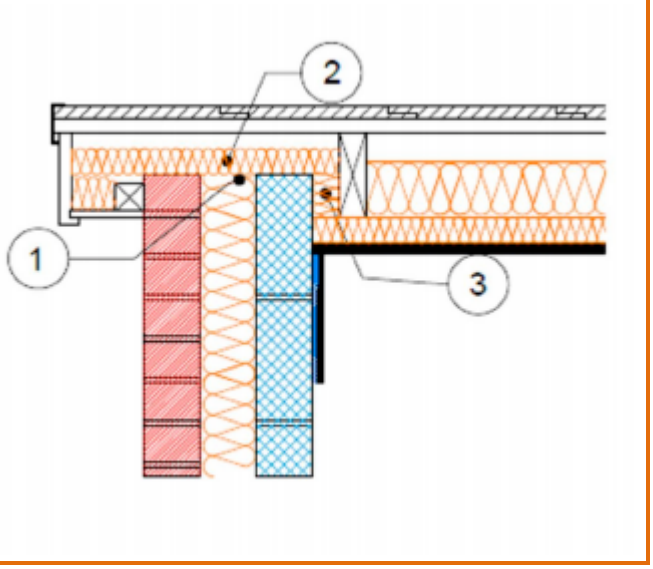
Gable (insulation at rafter level) (Table K1 Ref E13)
Calculated Ψ-value = 0.076 – 0.078 W/mK

Key Points

1. Pack insulation between the final rafter and the external wall

2. Continue cavity wall insulation to the top of the gable wall

3. Fill the void above the wall head with insulation



Calculated ψ-values and f-values

100mm insulation (λ=0.022) between the rafters and 50mm insulation (λ=0.022) below the rafters		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.078**	0.917
150mm λ=0.032	**0.078**	0.926
50mm λ=0.022 (+ 50mm low e cavity)	**0.077**	0.913
100mm λ=0.022 (+ 50mm low e cavity)	**0.076**	0.928

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

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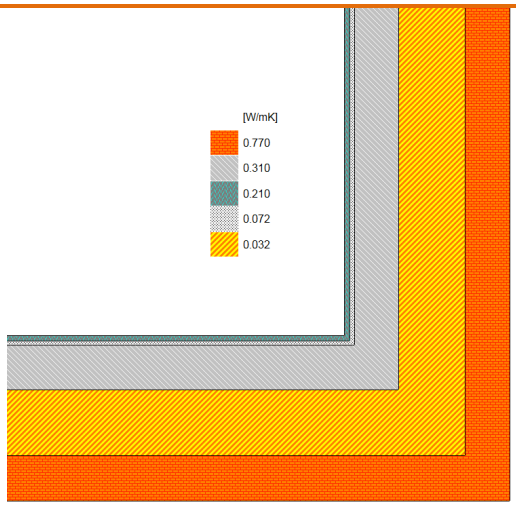
Normal corner (Table K1 Ref E16)
Calculated Ψ-value = 0.044 – 0.060 W/mK

Key Points

1. Ensure continuity of insulation at the corner



Calculated ψ-values and f-values

Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.059**	0.915
150mm λ=0.032	**0.049**	0.940
50mm λ=0.022 (+ 50mm low e cavity)	**0.060**	0.907
100mm λ=0.022 (+ 50mm low e cavity)	**0.044**	0.940

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

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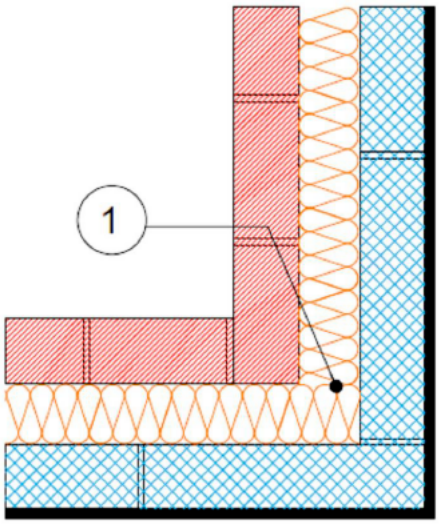
Corner (inverted) (Table K1 Ref E17)
Calculated Ψ-value = -0.113 to -0.080 W/mK

Key Points

1. Ensure continuity of insulation at the corner



Calculated ψ-values and f-values

Plasmor Stranlite (λ=0.41) inner leaf, plasterboard on dabs		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**-0.108**	0.966
150mm λ=0.032	**-0.091**	0.976
50mm λ=0.022 (+ 50mm low e cavity)	**-0.113**	0.962
100mm λ=0.022 (+ 50mm low e cavity)	**-0.080**	0.977

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

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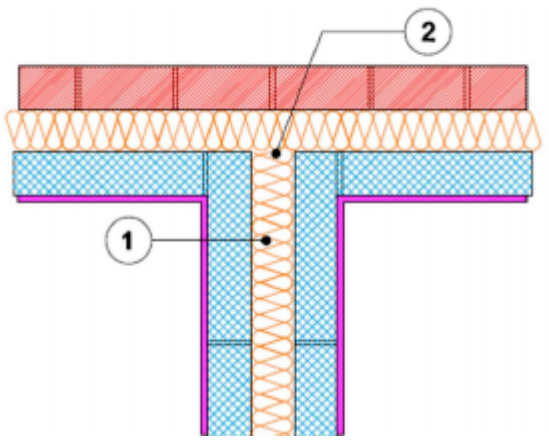
Party wall between dwellings (Table K1 Ref E18)
Calculated Ψ-value = 0.028 – 0.044 W/mK*

Key Points
1.Fully fill party wall with 100mm acoustic mineral wool insulation (k=0.036)

2.Ensure continuity of insulation across the external wall/party wall abutment



Calculated ψ-values and f-values

Plasmor Stranlite (λ=0.41) inner leaf and party wall block		
Cavity wall insulation	**Ψ-value W/m·k***	***f*-value**
100mm λ=0.032	**0.040***	0.952
150mm λ=0.032	**0.029***	0.965
50mm λ=0.022 (+ 50mm low e cavity)	**0.044***	0.946
100mm λ=0.022 (+ 50mm low e cavity)	**0.028***	0.967

**The value of ψ is applied to each dwelling*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Note: Plasmor Stranlite block with 100mm cavity party wall does appear in Robust Details

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

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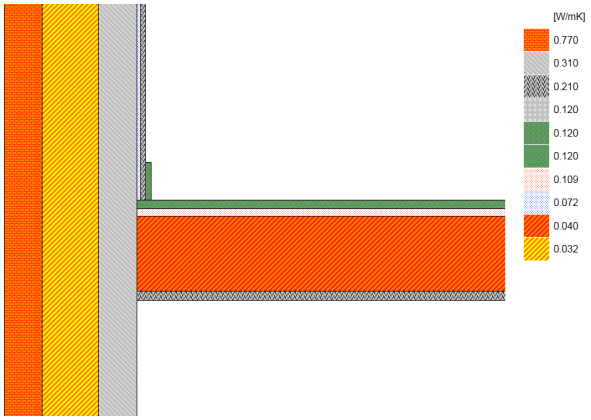
Exposed floor (timber) (Table K1 Ref E20)
Calculated Ψ-value = 0.094 – 0.130 W/mK

Key Points

1. Ensure floor insulation tightly abuts the party wall



Calculated ψ-values and f-values

Garage below (inner leaf is blockwork below the floor, cavity wall insulation continues to ground floor)	**Floor insulation 200mm (λ=0.040) between timber joists**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.096**	0.860
150mm λ=0.032	**0.098**	0.868
50mm λ=0.022 (+ 50mm low e cavity)	**0.094**	0.857
100mm λ=0.022 (+ 50mm low e cavity)	**0.098**	0.870

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Vehicle access below (inner leaf is brickwork below the floor, cavity wall insulation stops at floor level)	**Floor insulation 200mm (λ=0.040) between timber joists**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.122**	0.836
150mm λ=0.032	**0.130**	0.840
50mm λ=0.022 (+ 50mm low e cavity)	**0.119**	0.834
100mm λ=0.022 (+ 50mm low e cavity)	**0.130**	0.841

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E20(B)-SL-2018	**Issued : 15 February 2022**
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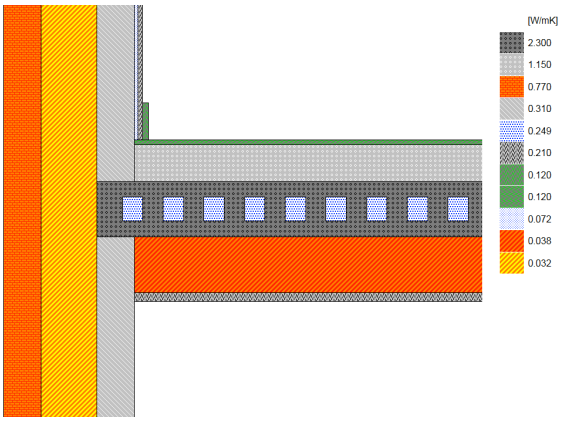
Exposed floor (concrete) (Table K1 Ref E20)
Calculated Ψ-value = 0.166 – 0.319 W/mK

Key Points

1. Continue wall insulation across the floor abutment zone and down to ground level



Calculated ψ-values and f-values

Garage below (inner leaf is blockwork below the floor, cavity wall insulation continues to ground level)	**Floor insulation 150mm (λ=0.038) below the hollowcore plank**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.182**	0.884
150mm λ=0.032	**0.169**	0.894
50mm λ=0.022 (+ 50mm low e cavity)	**0.187**	0.880
100mm λ=0.022 (+ 50mm low e cavity)	**0.166**	0.895

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Drive-through (below exposed floor wall is two leaves of brickwork, insulation stops at floor level)	**Floor insulation 150mm (λ=0.038) below the hollowcore plank**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.302**	0.850
150mm λ=0.032	**0.310**	0.852
50mm λ=0.022 (+ 50mm low e cavity)	**0.319**	0.842
100mm λ=0.022 (+ 50mm low e cavity)	**0.309**	0.853

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

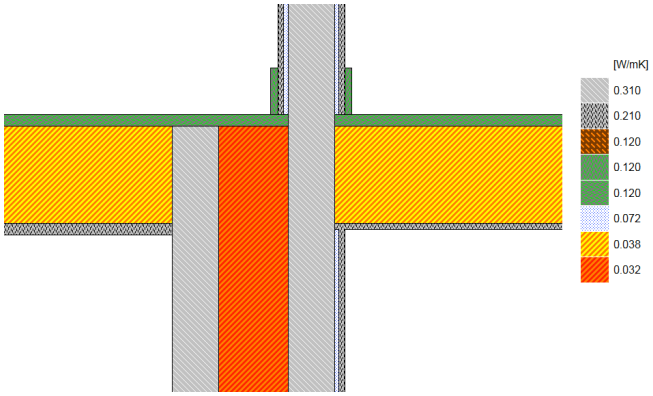
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E21(A)-SL-2018	**Issued : 23 February 2022**
Issued by Plasmor Ltd	

Exposed floor inverted (timber) (Table K1 Ref E21)
Calculated Ψ-value = 0.070 – 0.162 W/mK

Key Points

1. Continue wall insulation across the floor abutment zone



Calculated ψ-values and f-values

Garage below (inner leaf is blockwork below the floor, cavity wall insulation continues to ground level)	**Floor insulation 200mm (λ=0.040) between timber joists**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.084**	0.887
150mm λ=0.032	**0.073**	0.884
50mm λ=0.022 (+ 50mm low e cavity)	**0.083**	0.888
100mm λ=0.022 (+ 50mm low e cavity)	**0.070**	0.883

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Drive-through (below exposed floor wall is two leaves of brickwork, insulation stops at floor level)	**Floor insulation 200mm (λ=0.040) between timber joists**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.152**	0.838
150mm λ=0.032	**0.141**	0.835
50mm λ=0.022 (+ 50mm low e cavity)	**0.162**	0.843
100mm λ=0.022 (+ 50mm low e cavity)	**0.150**	0.838

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

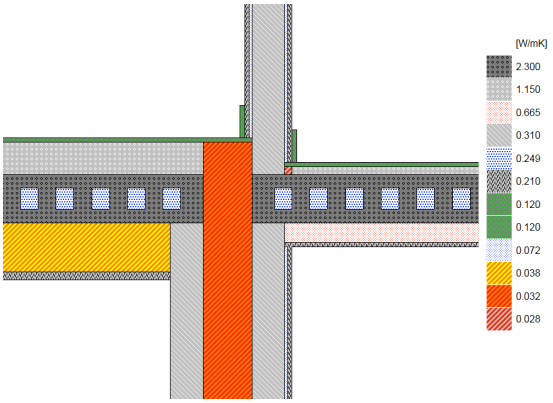
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E21(B)-SL-2018	**Issued : 15 February 2022**
Issued by Plasmor Ltd	

Exposed floor inverted (concrete) (Table K1 Ref E21)
Calculated Ψ-value = 0.074 – 0.157 W/mK

Key Points

1. Continue wall insulation across the floor abutment zone



Calculated ψ-values and f-values

Garage below (inner leaf is blockwork below the floor, cavity wall insulation continues to ground level)	**Floor insulation 150mm (λ=0.038) below the hollowcore plank**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.080**	0.933
150mm λ=0.032	**0.075**	0.931
50mm λ=0.022 (+ 50mm low e cavity)	**0.077**	0.934
100mm λ=0.022 (+ 50mm low e cavity)	**0.074**	0.931

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Drive-through (below exposed floor wall is two leaves of brickwork, insulation stops at floor level)	**Floor insulation 150mm (λ=0.038) below the hollowcore plank**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.157**	0.909
150mm λ=0.032	**0.151**	0.907
50mm λ=0.022 (+ 50mm low e cavity)	**0.154**	0.910
100mm λ=0.022 (+ 50mm low e cavity)	**0.150**	0.906

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

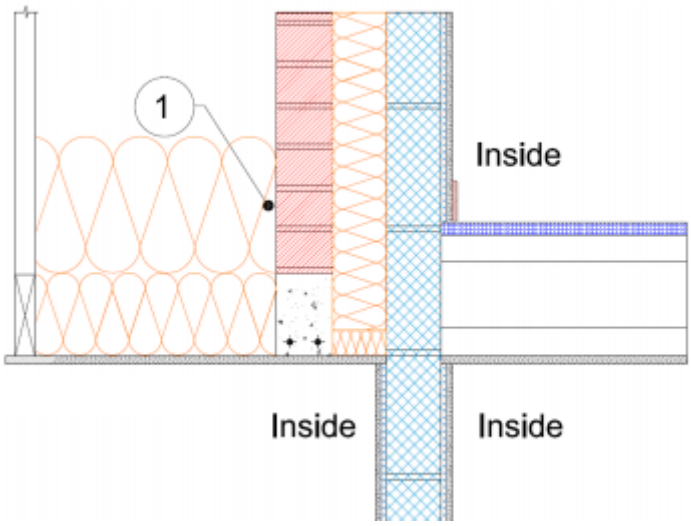
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E24(A)-FB-2018	**Issued : 15 February 2022**
Issued by Plasmor Ltd	

Eaves (insulation at ceiling level - inverted) Concrete lintel (Table K1 Ref E24)
Calculated Ψ-value = -0.027 – 0.177 W/mK

Key Points

1.Ensure roof insulation tightly abuts the cavity wall



Calculated ψ-values and f-values

Bay window	**300mm mineral wool insulation to ceiling (λ=0.040)**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.167**	0.891
150mm λ=0.032	**0.172**	0.887
50mm λ=0.022 (+ 50mm low e cavity)	**0.169**	0.891
100mm λ=0.022 (+ 50mm low e cavity)	**0.177**	0.885

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Extension	**450mm mineral wool insulation to ceiling (λ=0.040)**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**-0.010**	0.937
150mm λ=0.032	**0.079**	0.946
50mm λ=0.022 (+ 50mm low e cavity)	**-0.027**	0.936
100mm λ=0.022 (+ 50mm low e cavity)	**0.091**	0.944

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

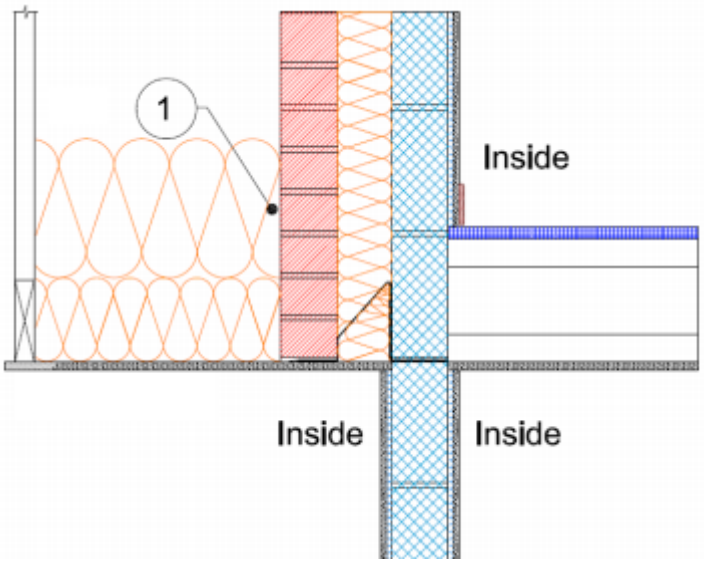
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E24(B)-SL-2018	**Issued : 15 February 2022**
Issued by Plasmor Ltd	

Eaves (insulation at ceiling level - inverted) Folded steel lintel (Table K1 Ref E24)
Calculated Ψ-value = 0.186 – 0.255 W/mK

Key Points

1.Ensure roof insulation tightly abuts the cavity wall



Calculated ψ-values and f-values

Bay window	**300mm mineral wool insulation to ceiling (λ=0.040)**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.209**	0.906
150mm λ=0.032	**0.247**	0.920
50mm λ=0.022 (+ 50mm low e cavity)	**0.212**	0.904
100mm λ=0.022 (+ 50mm low e cavity)	**0.254**	0.918

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Extension	**450mm mineral wool insulation to ceiling (λ=0.040)**	
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.239**	0.925
150mm λ=0.032	**0.209**	0.921
50mm λ=0.022 (+ 50mm low e cavity)	**0.255**	0.925
100mm λ=0.022 (+ 50mm low e cavity)	**0.186**	0.919

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E25(A)-SL-2018	**Issued : 15 February 2022**
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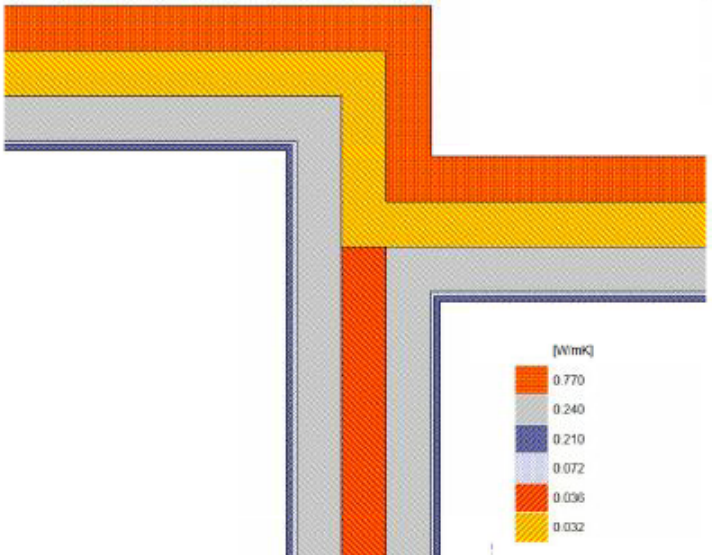
Party wall between dwellings (338mm stagger) (Table K1 Ref E25)
Calculated Ψ-value = 0.089 – 0.146 W/mK*

Key Points

1.Fully fill party wall with acoustic mineral wool insulation (k=0.036)

2.Ensure continuity of insulation throughout the junction



Calculated ψ-values and f-values

Cavity wall insulation	Plasmor Stranlite (λ=0.41) inner leaf and party wall block	
	Ψ-value W/m·k*	***f*-value**
100mm λ=0.032	**0.130***	0.922
150mm λ=0.032	**0.090***	0.943
50mm λ=0.022 (+ 50mm low e cavity)	**0.146***	0.915
100mm λ=0.022 (+ 50mm low e cavity)	**0.089***	0.946

**Half of Psi value is applied to each dwelling.*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E25(B)-SL-2018	**Issued : 15 February 2022**
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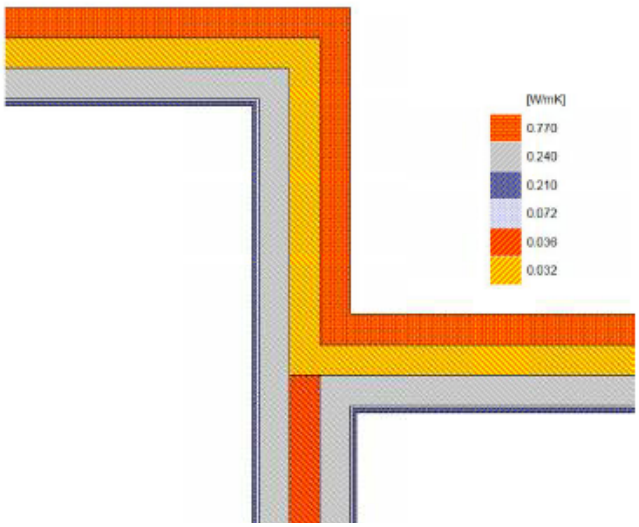
Party wall between dwellings (1013mm stagger) (Table K1 Ref E25)
Calculated Ψ-value = 0.093 – 0.143 W/mK*

Key Points
1.Fully fill party wall with acoustic mineral wool insulation (k=0.036)

2.Ensure continuity of insulation throughout the junction



Calculated ψ-values and f-values

Cavity wall insulation	Plasmor Stranlite (λ=0.41) inner leaf and party wall block	
	Ψ-value W/m·k*	***f*-value**
100mm λ=0.032	**0.127***	0.915
150mm λ=0.032	**0.103***	0.935
50mm λ=0.022 (+ 50mm low e cavity)	**0.143***	0.907
100mm λ=0.022 (+ 50mm low e cavity)	**0.093***	0.940

**Half of Psi value is applied to each dwelling*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: P4-SL-2018	**Issued : 15 February 2022**
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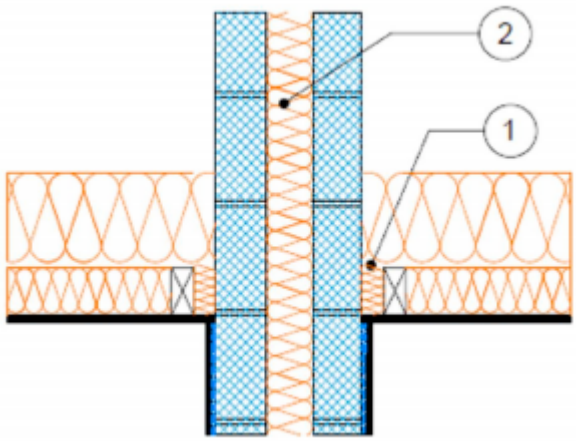
Roof (insulation at ceiling level) (Table K1 Ref P4)
Calculated Ψ-value = 0.128 W/mK*

Key Points

1.Fill the space between the last joist and the party wall with insulation

2.Continue party wall insulation (k=0.036) 200mm above the top of the roof insulation



Calculated ψ-values and f-values

Roof insulation	**Plasmor Stranlite (λ=0.41) party wall block**	
	Ψ-value W/m·k*	***f*-value**
400mm mineral wool λ=0.040	**0.128***	0.935

**Half of the Psi value applies to each dwelling*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: P5-SL-2018	**Issued : 15 February 2022**
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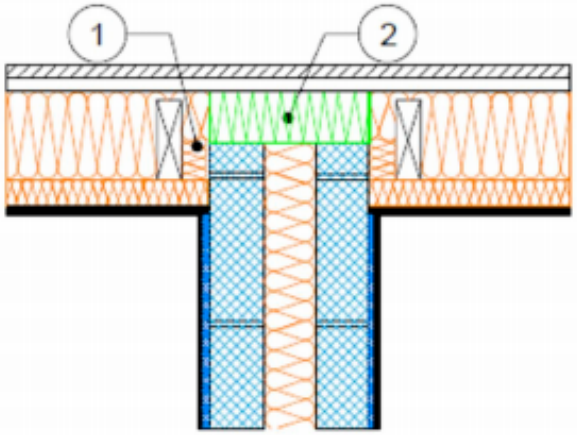
Roof (insulation at rafter level) (Table K1 Ref P5)
Calculated Ψ-value = 0.057 W/mK*

Key Points

1.Fill the space between the last rafter and the party wall with insulation

2.Install wall head insulation λ=0.022



Calculated ψ-values and f-values

Roof insulation	**Plasmor Stranlite (λ=0.41) party wall block**	
	Ψ-value W/m·k*	***f*-value**
100mm rigid insulation between rafters λ=0.022, 50mm rigid insulation below the rafters λ=0.022 and plasterboard finish	**0.057***	0.963

**For junctions shared by 2 or more dwellings, divide the Psi value by the number of dwellings involved and apply the proportion to each*

The f-value should be above 0.75 to minimise the risk of mould growth in dwellings.

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