FIBOLITE Thermal Bridging Values

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

Certificate No: E1-FB-2018	**Issued : 11 February 2022**
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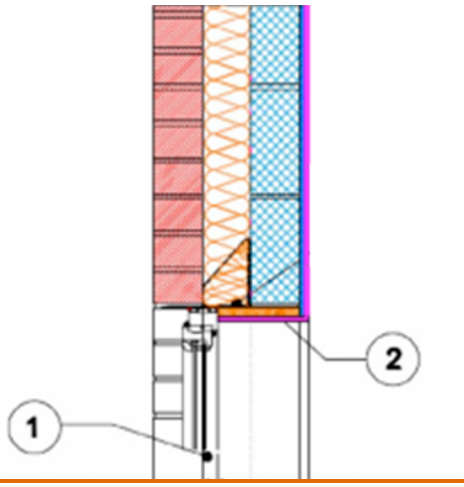
Steel lintel with perforated base plate (Table K1 Ref E1)
Calculated Ψ-value 0.263 – 0.289 W/mK

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 Fibolite (λ=0.24) inner leaf, plasterboard on dabs**	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.273**	0.895
150mm λ=0.032	**0.285**	0.882
50mm λ=0.022 (+ 50mm low e cavity)	**0.263**	0.895
100mm λ=0.022 (+ 50mm low e cavity)	**0.289**	0.882

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-FB-2018	**Issued : 11 February 2022**
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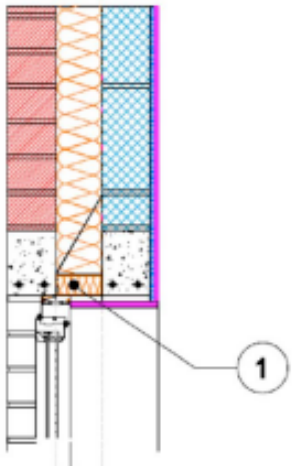
Independent Concrete lintel (Table K1 Ref E2)
Calculated ψ-value = 0.034 – 0.042 W/mK

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 Fibolite (λ=0.24) inner leaf, plasterboard on dabs	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.034**	0.898
150mm λ=0.032	**0.036**	0.893
50mm λ=0.022 (+ 50mm low e cavity)	**0.040**	0.890
100mm λ=0.022 (+ 50mm low e cavity)	**0.042**	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-FB-2018	**Issued : 11 February 2022**
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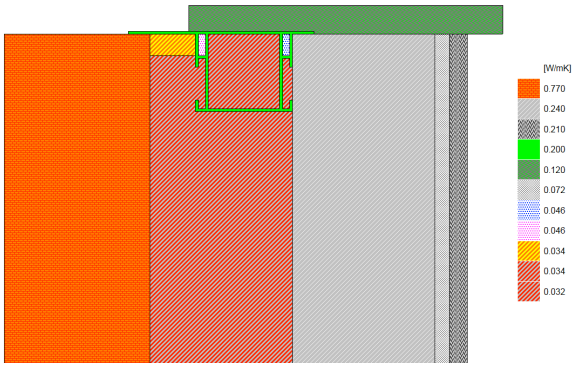
Sill (Table K1 Ref E3)
Calculated ψ-value = 0.022 – 0.034 W/mK

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 Fibolite (λ=0.24) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.022**	0.884
150mm λ=0.032	**0.026**	0.881
50mm λ=0.022 (+ 50mm low e cavity)	**0.025**	0.874
100mm λ=0.022 (+ 50mm low e cavity)	**0.034**	0.866

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Cavalok cavity closer*	**Plasmor Fibolite (λ=0.24) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.022**	0.882
150mm λ=0.032	**0.027**	0.877
50mm λ=0.022 (+ 50mm low e cavity)	**0.022**	0.878
100mm λ=0.022 (+ 50mm low e cavity)	**0.032**	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-FB-2018	**Issued : 11 February 2022**
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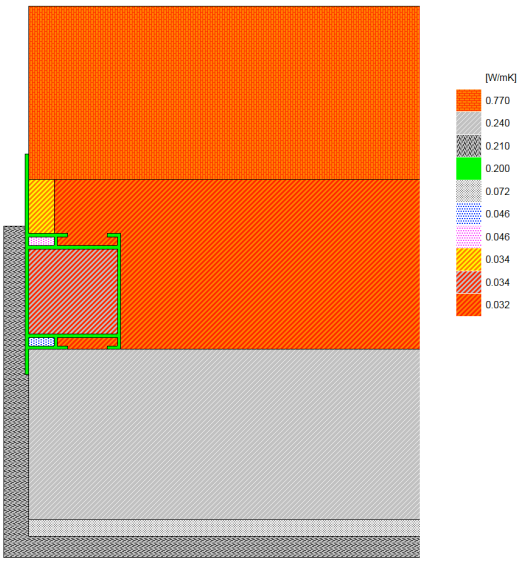
Jamb (Table K1 Ref E4)
Calculated Ψ-value = 0.024 – 0.039 W/mK

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 Fibolite (λ=0.24) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.024**	0.880
150mm λ=0.032	**0.031**	0.876
50mm λ=0.022 (+ 50mm low e cavity)	**0.030**	0.869
100mm λ=0.022 (+ 50mm low e cavity)	**0.039**	0.865

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Cavalok cavity closer*	**Plasmor Fibolite (λ=0.24) inner leaf, plasterboard on dabs**	
Cavity Insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.027**	0.876
150mm λ=0.032	**0.033**	0.871
50mm λ=0.022 (+ 50mm low e cavity)	**0.029**	0.871
100mm λ=0.022 (+ 50mm low e cavity)	**0.038**	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.

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

Certificate No: E5-FB-2018	**Issued : 11 February 2022**
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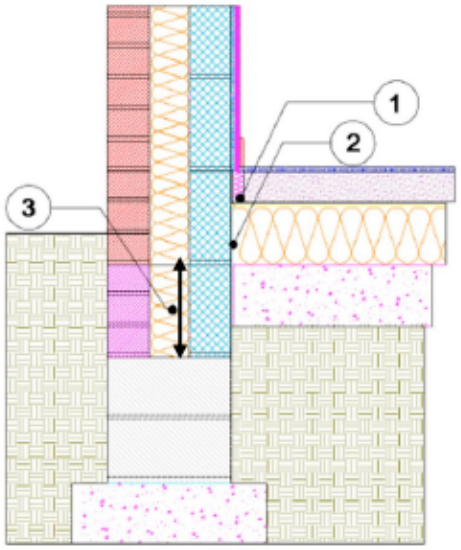
Solid concrete ground floor – insulation above slab (Table K1 Ref E5)
Calculated Ψ-value = 0.057 – 0.068 W/mK

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	**0.068**	0.850
150mm λ=0.032	**0.063**	0.929
50mm λ=0.022 (+ 50mm low e cavity)	**0.057**	0.842
100mm λ=0.022 (+ 50mm low e cavity)	**0.063**	0.930

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Cavity wall insulation	150mm Floor insulation (λ=0.022)	
	Ψ-value W/m·k	***f*-value**
100mm λ=0.032	**0.072**	0.920
150mm λ=0.032	**0.063**	0.929
50mm λ=0.022 (+ 50mm low e cavity)	**0.064**	0.917
100mm λ=0.022 (+ 50mm low e cavity)	**0.063**	0.930

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-FB-2018	**Issued : 11 February 2022**
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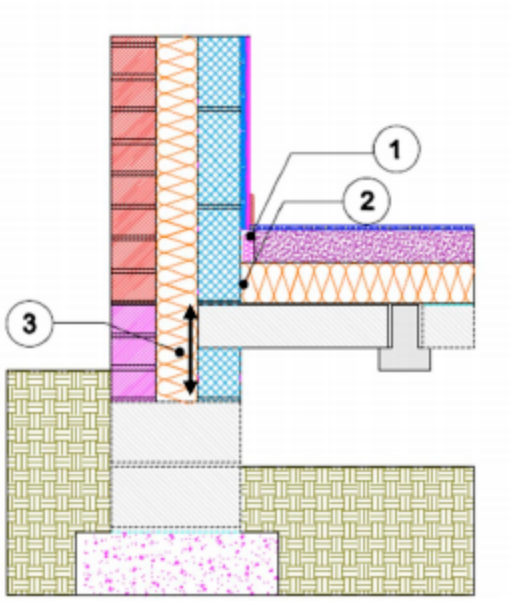
Suspended beam and block floor – insulation above (Table K1 Ref E5)
Calculated Ψ-value = 0.060 – 0.062 W/mK

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	**0.061**	0.926
150mm λ=0.032	**0.060**	0.932
50mm λ=0.022 (+ 50mm low e cavity)	**0.060**	0.924
100mm λ=0.022 (+ 50mm low e cavity)	**0.060**	0.933

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

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	**0.062**	0.931
150mm λ=0.032	**0.061**	0.937
50mm λ=0.022 (+ 50mm low e cavity)	**0.061**	0.928
100mm λ=0.022 (+ 50mm low e cavity)	**0.060**	0.938

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-FB-2018	**Issued : 11 February 2022**
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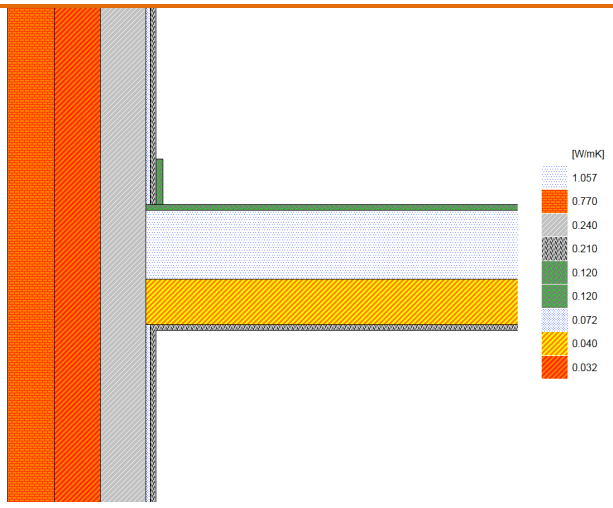
Intermediate floor within a dwelling (Table K1 Ref E6)
Calculated Ψ-value = -0.004 – 0.000 W/mK

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	**0.001**	0.965
150mm λ=0.032	**0.000**	0.975
50mm λ=0.022 (+ 50mm low e cavity)	**0.000**	0.961
100mm λ=0.022 (+ 50mm low e cavity)	**0.000**	0.976

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**	0.957
150mm λ=0.032	**-0.002**	0.969
50mm λ=0.022 (+ 50mm low e cavity)	**-0.004**	0.952
100mm λ=0.022 (+ 50mm low e cavity)	**-0.001**	0.970

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-FB-2018	**Issued : 11 February 2022**
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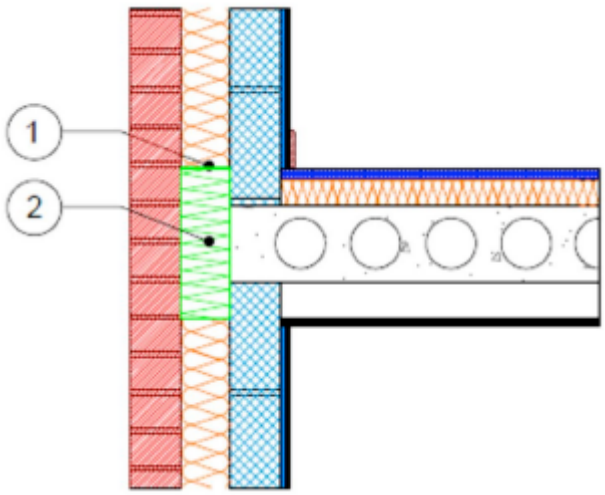
Party floor between dwellings (block of flats) – concrete (Table K1 Ref E7)
Calculated Ψ-value = -0.023 – 0.002 W/mK

Key Points

1.Carry wall insulation across floor abutment zone or up to proprietary fire stop if used

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	**-0.021**	0.963
150mm λ=0.032	**0.002**	0.974
50mm λ=0.022 (+ 50mm low e cavity)	**-0.023**	0.959
100mm λ=0.022 (+ 50mm low e cavity)	**-0.015**	0.975

**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-FB-2018	**Issued : 11 February 2022**
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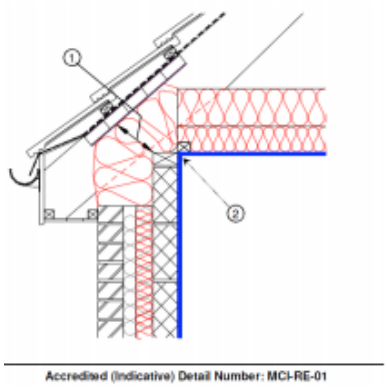
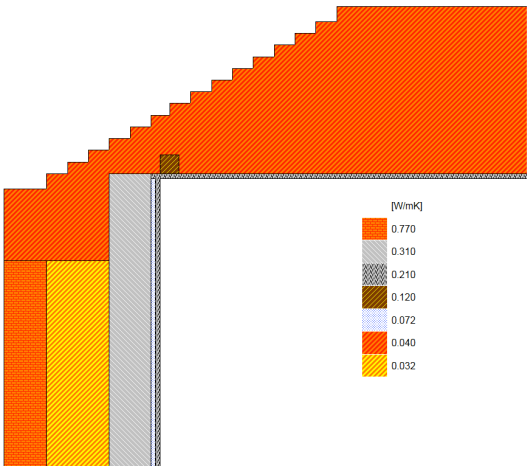
Eaves (insulation at ceiling level) (Table K1 Ref E10)
Calculated Ψ-value = 0.036 – 0.120 W/mK

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=0.044)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.039**	0.938
50mm λ=0.022 (+ 50mm low e cavity)	**0.037**	0.937

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400mm mineral wool insulation to ceiling (λ=0.040)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.106**	0.906
150mm λ=0.032	**0.116**	0.909
50mm λ=0.022 (+ 50mm low e cavity)	**0102**	0.905
100mm λ=0.022 (+ 50mm low e cavity)	**0.120**	0.908

450mm mineral wool insulation to ceiling (λ=0.040)		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.036**	0.942
50mm λ=0.022 (+ 50mm low e cavity)	**0.036**	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)

Certificate No: E11-FB-2018	**Issued : 11 February 2022**
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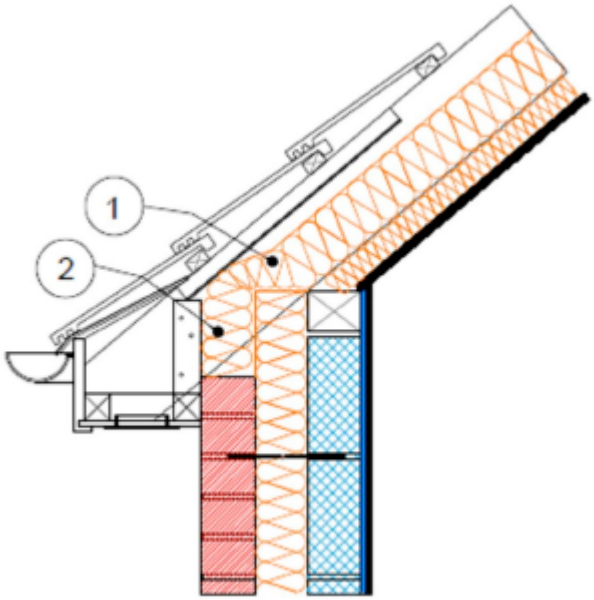
Eaves (insulation at rafter level) (Table K1 Ref E11)
Calculated Ψ-value = -0.005 – 0.007 W/mK

Key Points

1.Ensure continuity of insulation between the roof and external wall

2.Fully fill the void 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	**-0.003**	0.946
150mm λ=0.032	**0.005**	0.949
50mm λ=0.022 (+ 50mm low e cavity)	**-0.005**	0.945
100mm λ=0.022 (+ 50mm low e cavity)	**0.007**	0.949

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-FB-2018	**Issued : 11 February 2022**
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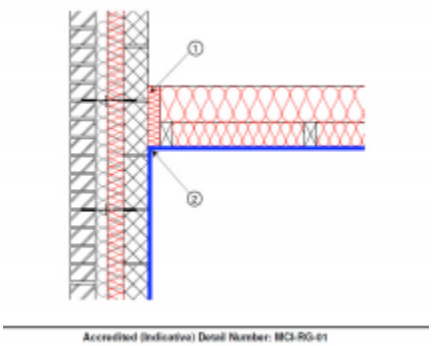
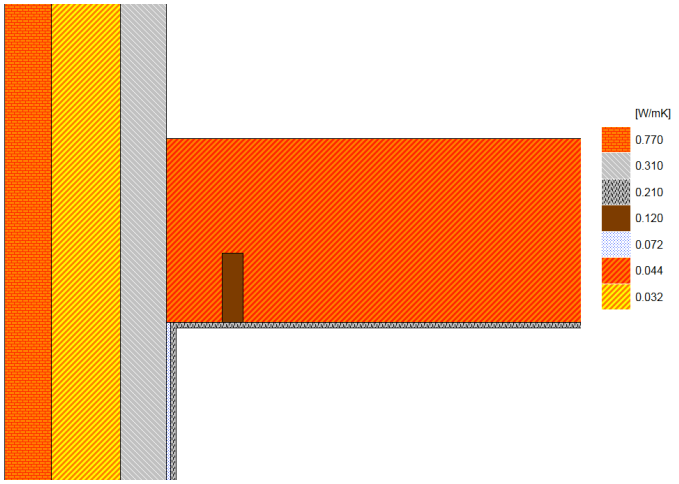
Gable (insulation at ceiling level) (Table K1 Ref E12)
Calculated Ψ-value = 0.065 – 0.074 W/mK

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	**0.072**	0.917
150mm λ=0.032	**0.067**	0.929
50mm λ=0.022 (+ 50mm low e cavity)	**0.074**	0.913
100mm λ=0.022 (+ 50mm low e cavity)	**0.065**	0.931

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

Certificate No: E13-FB-2018	**Issued : 11 February 2022**
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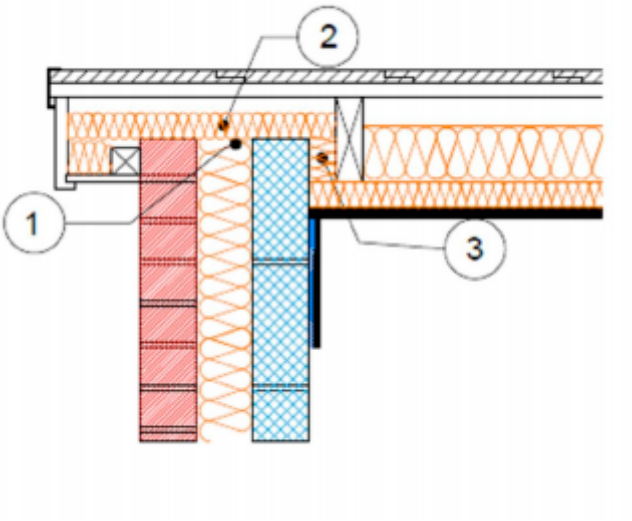
Gable (insulation at rafter level) (Table K1 Ref E13)
Calculated Ψ-value = 0.069 – 0.070 W/mK

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	**0.070**	0.917
150mm λ=0.032	**0.070**	0.925
50mm λ=0.022 (+ 50mm low e cavity)	**0.069**	0.914
100mm λ=0.022 (+ 50mm low e cavity)	**0.069**	0.927

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

Certificate No: E16-FB-2018	**Issued : 11 February 2022**
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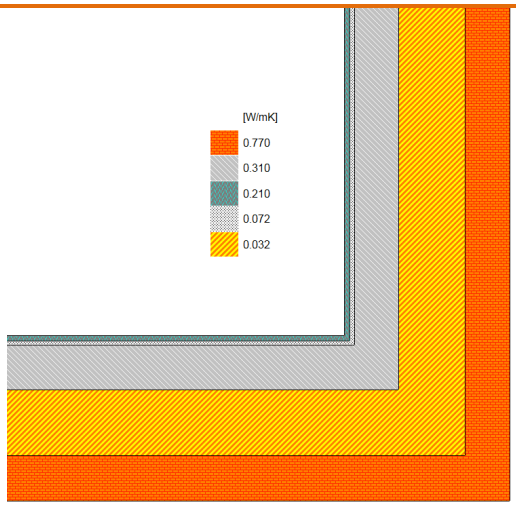
Normal corner (Table K1 Ref E16)
Calculated Ψ-value = 0.041 – 0.053 W/mK

Key Points

1. Ensure continuity of insulation at the corner



Calculated ψ-values and f-values

Plasmor Fibolite (λ=0.24) inner leaf, plasterboard on dabs		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**0.052**	0.912
150mm λ=0.032	**0.044**	0.932
50mm λ=0.022 (+ 50mm low e cavity)	**0.053**	0.906
100mm λ=0.022 (+ 50mm low e cavity)	**0.041**	0.937

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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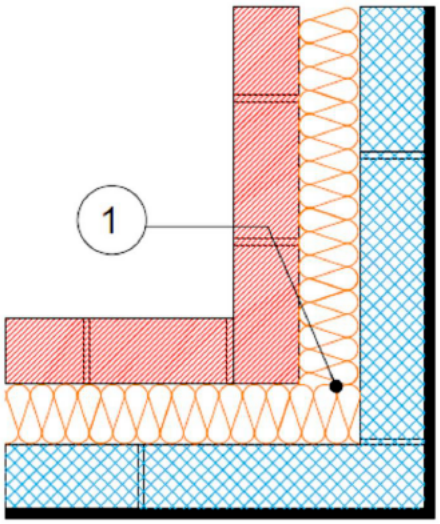
Corner (inverted) (Table K1 Ref E17)
Calculated Ψ-value = -0.107 to -0.076 W/mK

Key Points

1. Ensure continuity of insulation at the corner



Calculated ψ-values and f-values

Plasmor Fibolite (λ=0.24) inner leaf, plasterboard on dabs		
Cavity wall insulation	**Ψ-value W/m·k**	***f*-value**
100mm λ=0.032	**-0.102**	0.968
150mm λ=0.032	**-0.087**	0.977
50mm λ=0.022 (+ 50mm low e cavity)	**-0.107**	0.964
100mm λ=0.022 (+ 50mm low e cavity)	**-0.076**	0.978

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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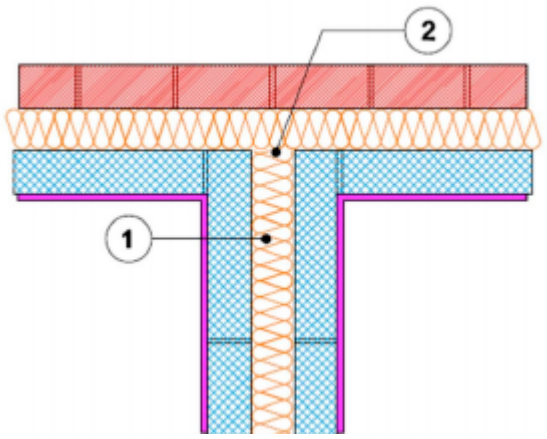
Party wall between dwellings (Table K1 Ref E18)
Calculated Ψ-value = 0.027 – 0.041 W/mK*

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 Fibolite (λ=0.24) inner leaf and party wall block		
Cavity wall insulation	**Ψ-value W/m·k***	***f*-value**
100mm λ=0.032	**0.037***	0.949
150mm λ=0.032	**0.028***	0.963
50mm λ=0.022 (+ 50mm low e cavity)	**0.041***	0.944
100mm λ=0.022 (+ 50mm low e cavity)	**0.027***	0.964

**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.

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

Certificate No: E20(A)-FB-2018	**Issued : 11 February 2022**
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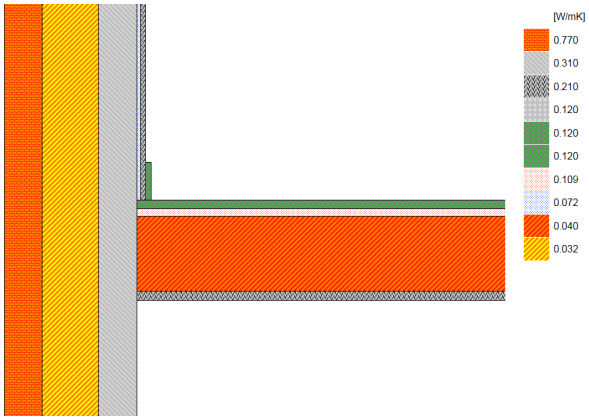
Exposed floor (timber) (Table K1 Ref E20)
Calculated Ψ-value = 0.051 – 0.097 W/mK

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	**0.067**	0.874
150mm λ=0.032	**0.068**	0.882
50mm λ=0.022 (+ 50mm low e cavity)	**0.051**	0.870
100mm λ=0.022 (+ 50mm low e cavity)	**0.067**	0.884

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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	**0.091**	0.848
150mm λ=0.032	**0.097**	0.852
50mm λ=0.022 (+ 50mm low e cavity)	**0.089**	0.846
100mm λ=0.022 (+ 50mm low e cavity)	**0.095**	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: E20(B)-FB-2018	**Issued : 11 February 2022**
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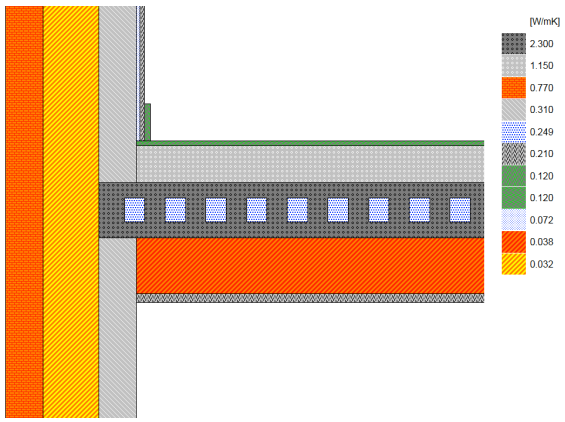
Exposed floor (concrete) (Table K1 Ref E20)
Calculated Ψ-value = 0.126 – 0.302 W/mK

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	**0.145**	0.897
150mm λ=0.032	**0.130**	0.907
50mm λ=0.022 (+ 50mm low e cavity)	**0.150**	0.893
100mm λ=0.022 (+ 50mm low e cavity)	**0.126**	0.908

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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	**0.296**	0.849
150mm λ=0.032	**0.302**	0.850
50mm λ=0.022 (+ 50mm low e cavity)	**0.298**	0.847
100mm λ=0.022 (+ 50mm low e cavity)	**0.301**	0.851

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

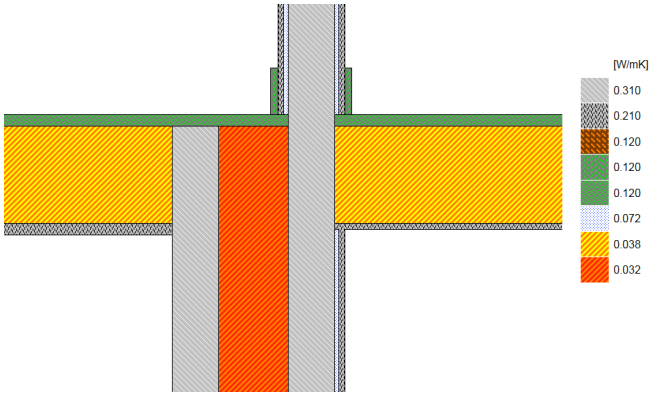
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E21(A)-FB-2018	**Issued : 11 February 2022**
Issued by Plasmor Ltd	

Exposed floor inverted (timber) (Table K1 Ref E21)
Calculated Ψ-value = 0.035 – 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	**0.047**	0.922
150mm λ=0.032	**0.037**	0.919
50mm λ=0.022 (+ 50mm low e cavity)	**0.047**	0.922
100mm λ=0.022 (+ 50mm low e cavity)	**0.035**	0.918

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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	**0.151**	0.837
150mm λ=0.032	**0.141**	0.835
50mm λ=0.022 (+ 50mm low e cavity)	**0.162**	0.842
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.

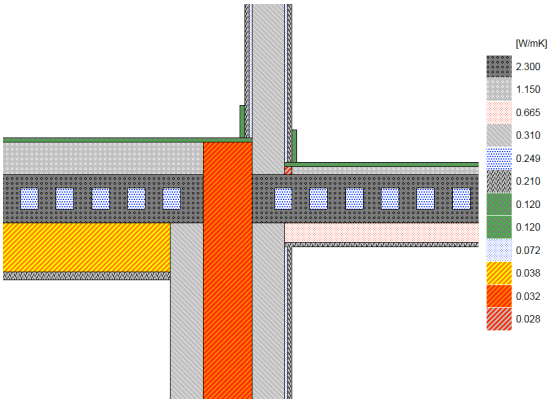
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E21(B)-FB-2018	**Issued : 11 February 2022**
Issued by Plasmor Ltd	

Exposed floor inverted (concrete) (Table K1 Ref E21)
Calculated Ψ-value = 0.028 – 0.158 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	**0.034**	0.948
150mm λ=0.032	**0.029**	0.946
50mm λ=0.022 (+ 50mm low e cavity)	**0.032**	0.948
100mm λ=0.022 (+ 50mm low e cavity)	**0.028**	0.946

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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	**0.158**	0.909
150mm λ=0.032	**0.151**	0.906
50mm λ=0.022 (+ 50mm low e cavity)	**0.155**	0.910
100mm λ=0.022 (+ 50mm low e cavity)	**0.151**	0.906

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

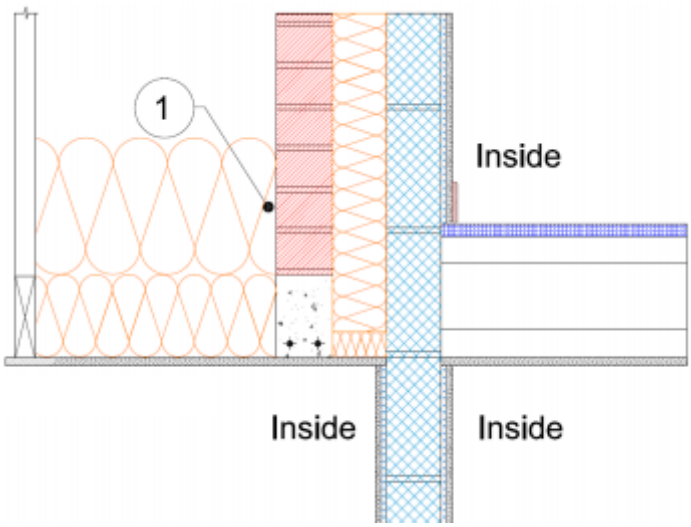
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E24(A)-FB-2018	**Issued : 11 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.

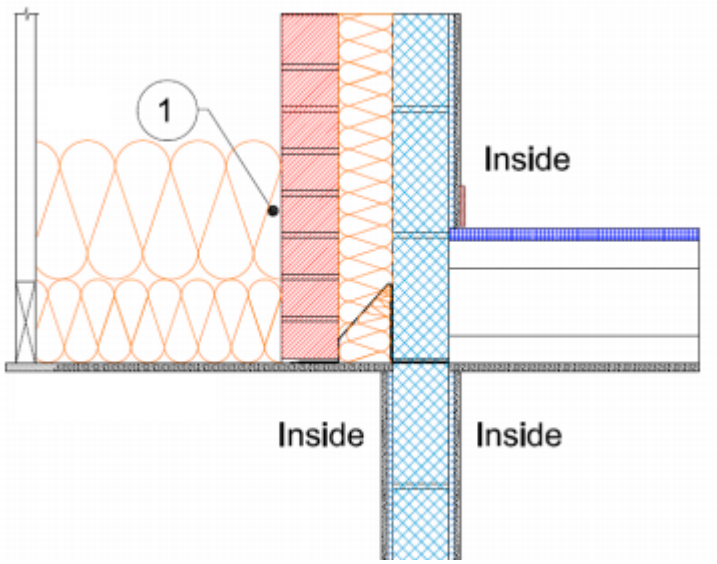
Linear Thermal Transmittance (Ψ) and Temperature Factor (*f*-value)

Certificate No: E24(B)-FB-2018	**Issued : 11 February 2022**
Issued by Plasmor Ltd	

Eaves (insulation at ceiling level - inverted) Folded steel lintel (Table K1 Ref E24)
Calculated Ψ-value = 0.206 – 0.251 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**	0.902
150mm λ=0.032	**0.244**	0.918
50mm λ=0.022 (+ 50mm low e cavity)	**0.211**	0.900
100mm λ=0.022 (+ 50mm low e cavity)	**0.251**	0.916

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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	**0.235**	0.925
150mm λ=0.032	**0.206**	0.921
50mm λ=0.022 (+ 50mm low e cavity)	**0.247**	0.925
100mm λ=0.022 (+ 50mm low e cavity)	**0.207**	0.918

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)-FB-2018	**Issued : 11 February 2022**
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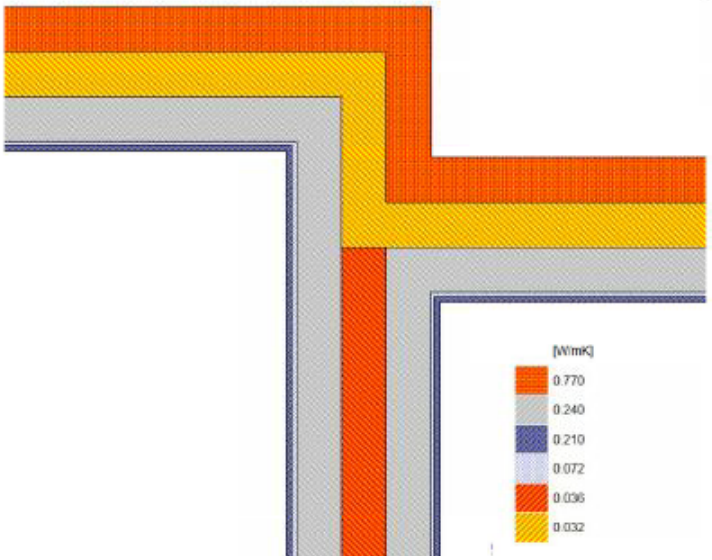
Party wall between dwellings (338mm stagger) (Table K1 Ref E25)
Calculated Ψ-value = 0.084 – 0.135 W/mK*

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 Fibolite (λ=0.24) inner leaf and party wall block	
	Ψ-value W/m·k*	***f*-value**
100mm λ=0.032	**0.120***	0.918
150mm λ=0.032	**0.085***	0.939
50mm λ=0.022 (+ 50mm low e cavity)	**0.135***	0.911
100mm λ=0.022 (+ 50mm low e cavity)	**0.084***	0.942

**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)-FB-2018	**Issued : 11 February 2022**
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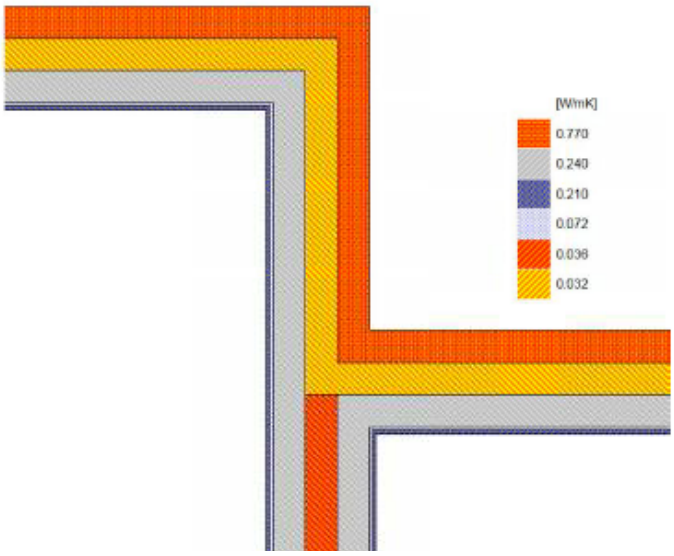
Party wall between dwellings (1013mm stagger) (Table K1 Ref E25)
Calculated Ψ-value = 0.089 – 0.132 W/mK*

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 Fibolite (λ=0.24) inner leaf and party wall block	
	Ψ-value W/m·k*	***f*-value**
100mm λ=0.032	**0.118***	0.912
150mm λ=0.032	**0.098***	0.932
50mm λ=0.022 (+ 50mm low e cavity)	**0.132***	0.906
100mm λ=0.022 (+ 50mm low e cavity)	**0.089***	0.937

**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-FB-2018	**Issued : 11 February 2022**
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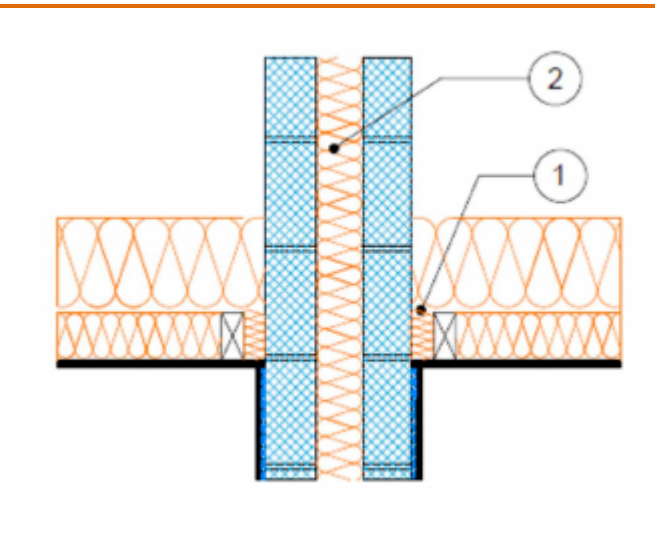
Roof (insulation at ceiling level) (Table K1 Ref P4)
Calculated Ψ-value = 0.078 W/mK*

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 Fibolite (λ=0.24) party wall block**	
	Ψ-value W/m·k*	***f*-value**
400mm mineral wool λ=0.040	**0.078***	0.949

**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-FB-2018	**Issued : 11 February 2022**
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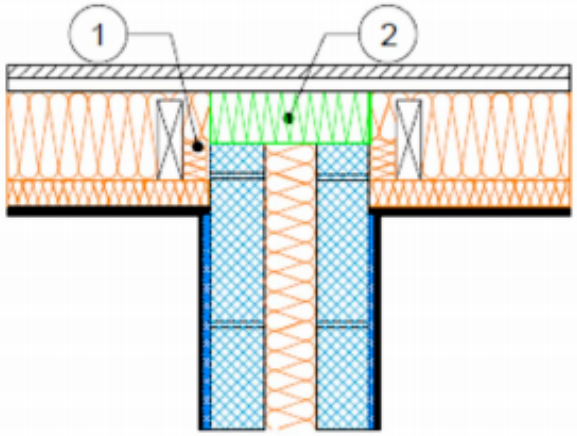
Roof (insulation at rafter level) (Table K1 Ref P5)
Calculated Ψ-value = 0.051 W/mK*

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 Fibolite (λ=0.24) 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	**0.051***	0.960

**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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