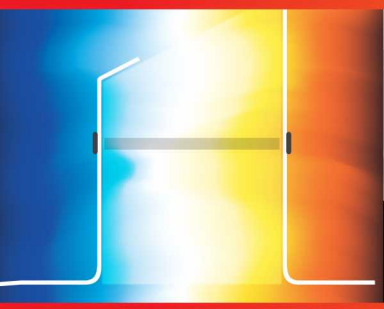
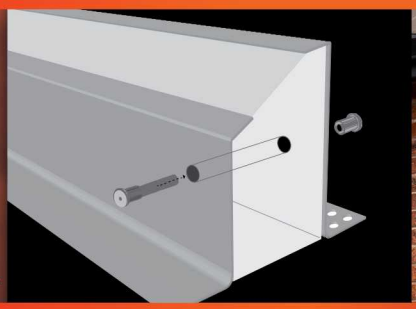
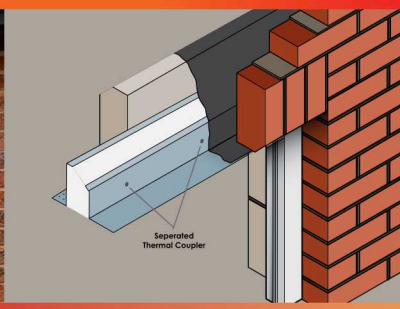
UKLINTELS.COM

Thermo +







IMPROVING THERMAL PERFORMANCE

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RIBA CPD PROVIDERS NETWORK

BMF Builders Merchants Federation

Thermo+

Manufactured by

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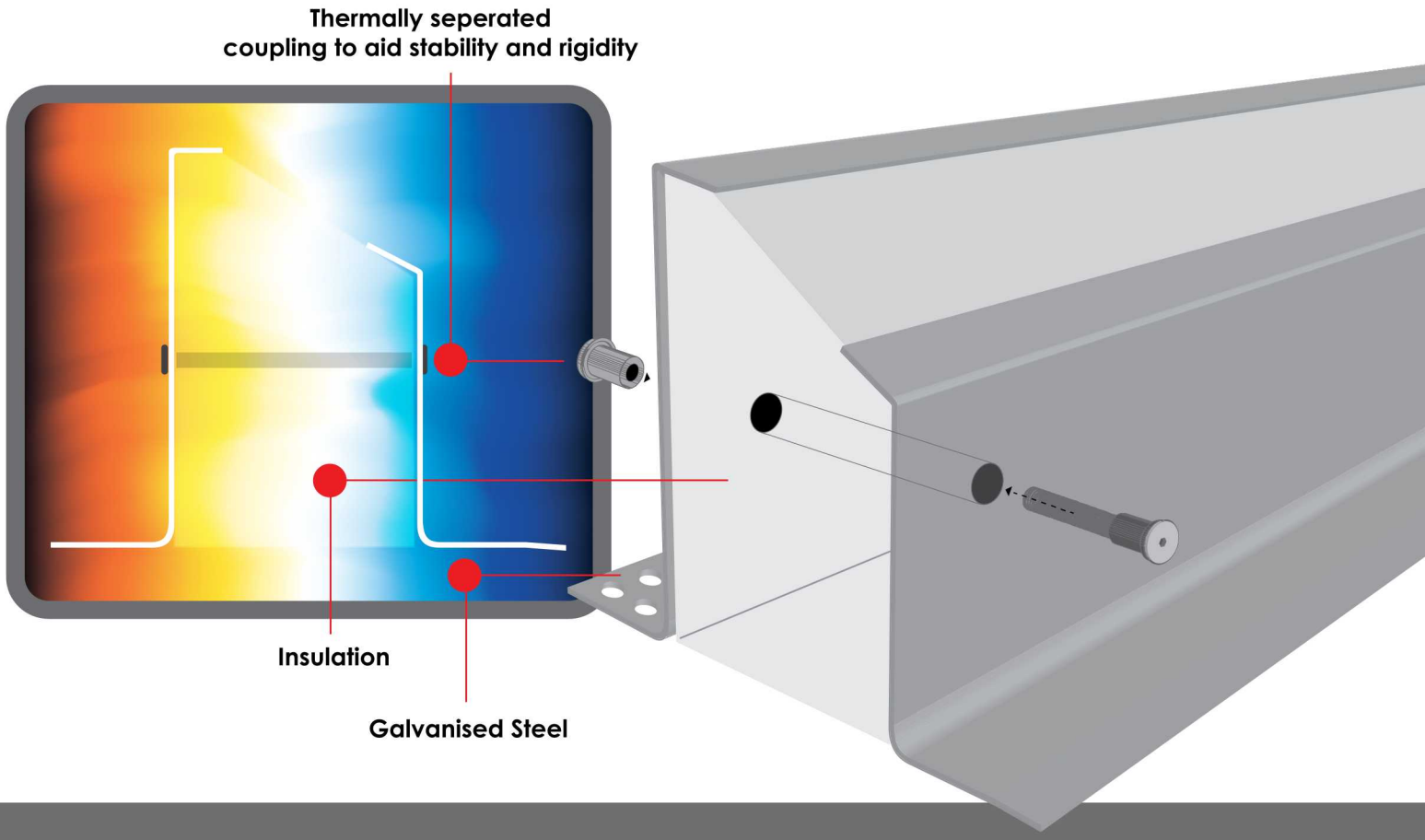
Up to 5 times more thermally efficient than a standard lintel

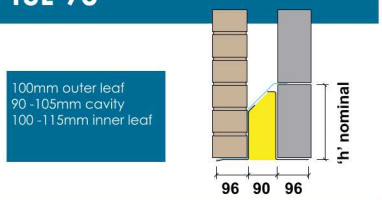


Improving the Thermal performance of walls is crucial for energy efficiency in buildings and addressing thermal bridges like Lintels, is a key aspect of this and will achieve better psi values.

- Thermally efficient lintels that offer a cost effective solution to lowering carbon emissions.
- Lintels without base plates, no clips or brackets: Eliminating the base plates altogether reduces the amount of material that conducts heat, further minimizing thermal bridging.
- Each of these methods aims to decrease the psi value, indicating a lower heat loss through the lintels, thereby improving the overall thermal performance of the wall and the building as a whole.
- We can also offer a two part lintel system that involves separate lintels for the inner and outer leaf of the wall, effectively creating a break in the thermal bridge between them. This design significantly reduces heat transfer compared to traditional lintels.

Psi values range from 0.029W/mK to 0.034W/mK, for a wall construction consisting of external brickwork, full-fill cavity insulation, 100mm blockwork, and 12.5mm plasterboard on 10mm dabs with air voids.

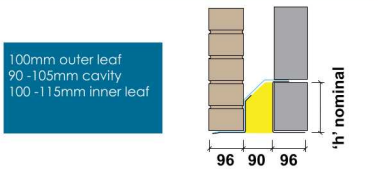
TSL 90



Not suitable to support precast concrete floors, attic trusses, heavy point loads.

STANDARD LENGTHS (mm) Lintels are available in increments of 150mm	600 1500	1650 1800	1950 2100	2250 2700	2850 3000	3150 4050	4200 4800
Nominal Height "h" (mm)	155	205	205	240	231	231	231
Weights (kg/m)	11.4	13.8	13.8	15.7	13.4	13.4	13.4
SWL 1:1/3:1 (kN)	23	25	22	25	37	26	22
Psi value (W/mK)	0.0318	0.0331	0.0331	0.0338	0.0280	0.0280	0.0280

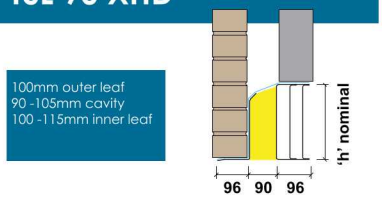
TSL 90 HD



Suitable to support precast concrete floors, attic trusses, heavy point loads.

STANDARD LENGTHS (mm) Lintels are available in increments of 150mm	600 1500	1650 1800	1950 2400				
Nominal Height "h" (mm)	156	156	231				
Weights (kg/m)	10.7	12.4	13.4				
SWL 5:1 (kN)	37	35	40				
Psi value (W/mK)	0.0304	0.0304	0.0280				

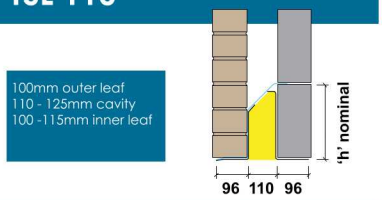
TSL 90 XHD



Suitable to support precast concrete floors, attic trusses, heavy point loads.

STANDARD LENGTHS (mm) Lintels are available in increments of 150mm	600 1500	1650 1800	1950 2700	2850 3600	3750 4800		
Nominal Height "h" (mm)	231	231	225	225	225		
Weights (kg/m)	13.4	13.4	23.5	27.5	27.5		
SWL 5:1 (kN)	65	55	60	55	40		
Psi value (W/mK)	0.0280	0.0280	0.0291	0.0294	0.0294		

TSL 110



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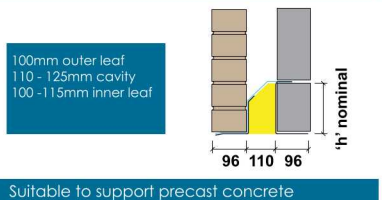
STANDARD LENGTHS (mm) Lintels are available in increments of 150mm	600 1500	1650 1800	1950 2100	2250 2700	2850 3000	3150 4050	4200 4800
Nominal Height "h" (mm)	155	205	205	240	231	231	231
Weights (kg/m)	11.4	13.8	13.8	15.7	13.4	13.4	13.4
SWL 1:1/3:1 (kN)	23	25	22	25	37	26	22
Psi value (W/mK)	0.0293	0.0302	0.0302	0.0306	0.0267	0.0267	0.0267

TSL 110 HD



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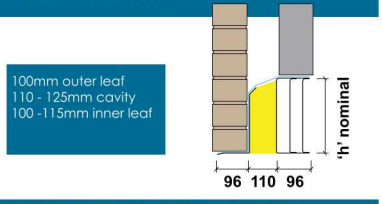
STANDARD LENGTHS (mm) Lintels are available in increments of 150mm	600 1500	1650 1800	1950 2400				
Nominal Height "h" (mm)	156	156	231				
Weights (kg/m)	10.7	12.4	13.4				
SWL 5:1 (kN)	37	35	40				
Psi value (W/mK)	0.0252	0.0252	0.0267				

TSL 110 XHD



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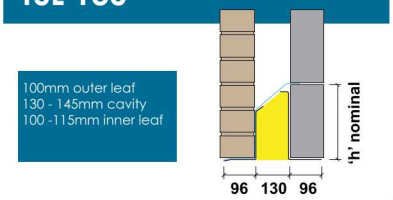
Nominal Height "h" (mm)	231	231	225	225	225		
Weights (kg/m)	13.4	13.4	23.5	27.5	27.5		
SWL 5:1 (kN)	65	55	60	55	40		
Psi value (W/mK)	0.0267	0.0267	0.0274	0.0277	0.0277		

Psi calculations generated on a typical wall construction.

THERMO + 90/110

TSL 130



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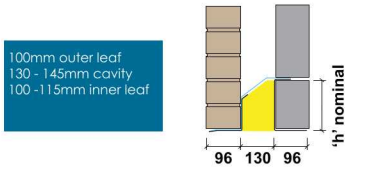
Nominal Height "h" (mm)	155	205	205	240	231	231	231
Weights (kg/m)	11.4	13.8	13.8	15.7	13.4	13.4	13.4
SWL 1:1/3:1 (kN)	23	25	22	25	37	26	22
Psi value (W/mK)	0.0284	0.0290	0.0290	0.0293	0.0263	0.0263	0.0263

TSL 130 HD



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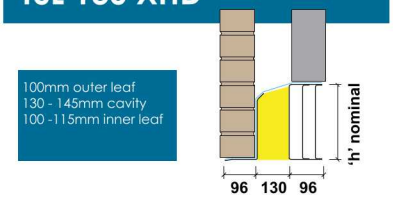
STANDARD LENGTHS (mm) Lintels are available in increments of 150mm	600 1500	1650 1800	1950 2400				
Nominal Height "h" (mm)	156	156	231				
Weights (kg/m)	10.7	12.4	13.4				
SWL 5:1 (kN)	37	35	40				
Psi value (W/mK)	0.0257	0.0257	0.0263				

TSL 130 XHD



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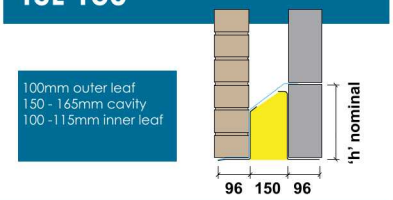
Nominal Height "h" (mm)	231	231	225	225	225		
Weights (kg/m)	13.4	13.4	23.5	27.5	27.5		
SWL 5:1 (kN)	65	55	60	55	40		
Psi value (W/mK)	0.0263	0.0263	0.0269	0.0270	0.0270		

TSL 150



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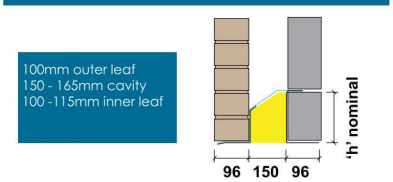
Nominal Height "h" (mm)	155	205	205	240	231	231	231
Weights (kg/m)	11.4	13.8	13.8	15.7	13.4	13.4	13.4
SWL 1:1/3:1 (kN)	23	25	22	25	37	26	22
Psi value (W/mK)	0.0286	0.0290	0.0290	0.0292	0.0270	0.0270	0.0270

TSL 150 HD



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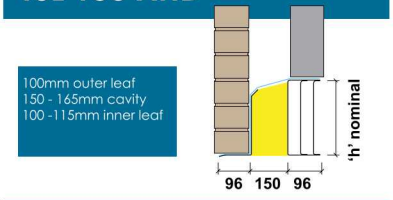
Nominal Height "h" (mm)	156	156	231				
Weights (kg/m)	10.7	12.4	13.4				
SWL 5:1 (kN)	37	35	40				
Psi value (W/mK)	0.0266	0.0266	0.0270				

TSL 150 XHD



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Nominal Height "h" (mm)	231	231	225	225	225		
Weights (kg/m)	13.4	13.4	23.5	27.5	27.5		
SWL 5:1 (kN)	65	55	60	55	40		
Psi value (W/mK)	0.0270	0.0270	0.0274	0.0276	0.0276		

Psi calculations generated on a typical wall construction.

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THERMAL LINTELS

THERMO + HANDLING GUIDE

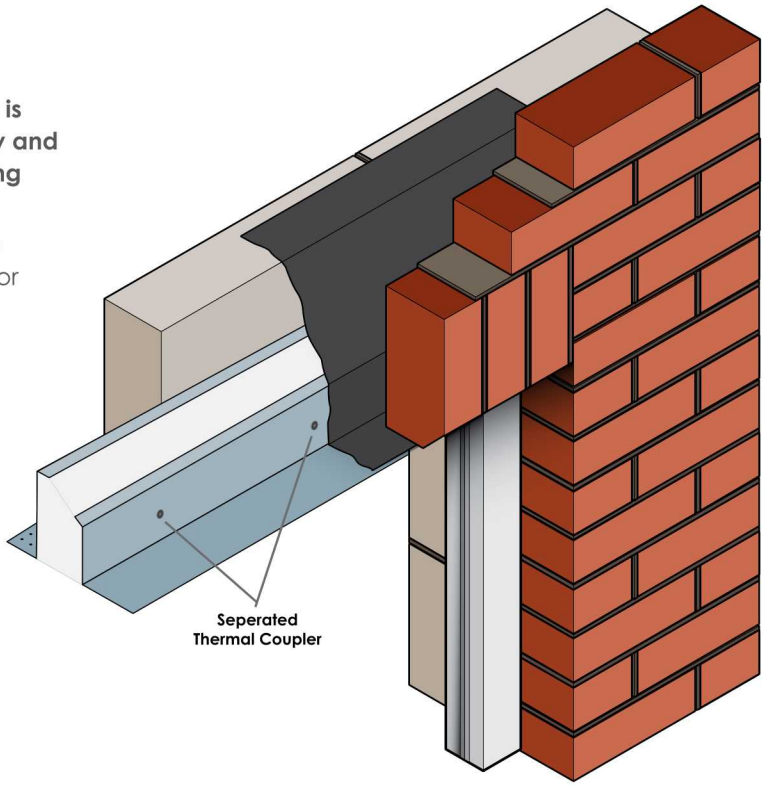
The Handling of thermal lintels correctly is crucial to ensure their structural integrity and performance. Here's a guide on handling thermal lintels:

- Inspection: Upon delivery, inspect the lintels for any damage. If any defects are found, do not use the lintel and contact the supplier.
- Storage: Store lintels flat, off the ground, and covered to protect them from the weather. Avoid stacking heavy materials on top of the lintels.
- Lifting: Use appropriate lifting equipment and methods. Always lift lintels with care to prevent bending or twisting.
- Installation: Follow the manufacturer's installation guide carefully. Ensure that the lintel is level and supported correctly before building in.
- Protection: Protect the lintel from excessive moisture during construction. Cover the ends of the lintel to prevent debris from entering the cavity.
- Thermal Performance: Be aware of the lintel's thermal performance, expressed in terms of Psi Values, which is the linear thermal transmittance. For detailed information on Psi values applicable to your wall construction, consult our technical team.
- Levelling: Use a spirit level to ensure that the lintel is perfectly horizontal. This is crucial for the proper distribution of structural loads.
- Curing: Allow the mortar to cure as per the guidelines. This usually takes about 24-48 hours, depending on weather conditions and the type of mortar used.
- Bricklaying: Proceed with symmetrical bricklaying on both sides of the lintel. This helps in maintaining balance and uniform load distribution.
- Damp Proof Course (DPC): Install a DPC above the lintel to prevent moisture from affecting the lintel and the masonry above it.
- Propping: Use propping to support the lintel until the mortar has fully cured and the masonry above has been completed.
- Insulation: Ensure that any cavity above the lintel is properly insulated to prevent thermal bridging and maintain the thermal performance of the lintel.
- Final Inspection: After installation, inspect the lintel and surrounding masonry to ensure everything is secure and correctly installed.

INSTALLATION NOTES

The Handling of thermal lintels correctly is crucial to ensure their structural integrity and performance. Here's a guide on handling thermal lintels:

- Preparation: Before starting, verify the specification of the lintel and check for any damage. Ensure you have the correct lintel type for your wall construction.
- Minimum End Bearing: Ensure that each end of the lintel has a proper minimum end bearing, typically around 150mm, but this can vary based on the manufacturer's specifications.
- Mortar Bedding: Lay the lintel on a bed of mortar to ensure even distribution of loads. This helps in distributing the weight evenly across the length of the lintel.



THERMAL HEAT GUIDE

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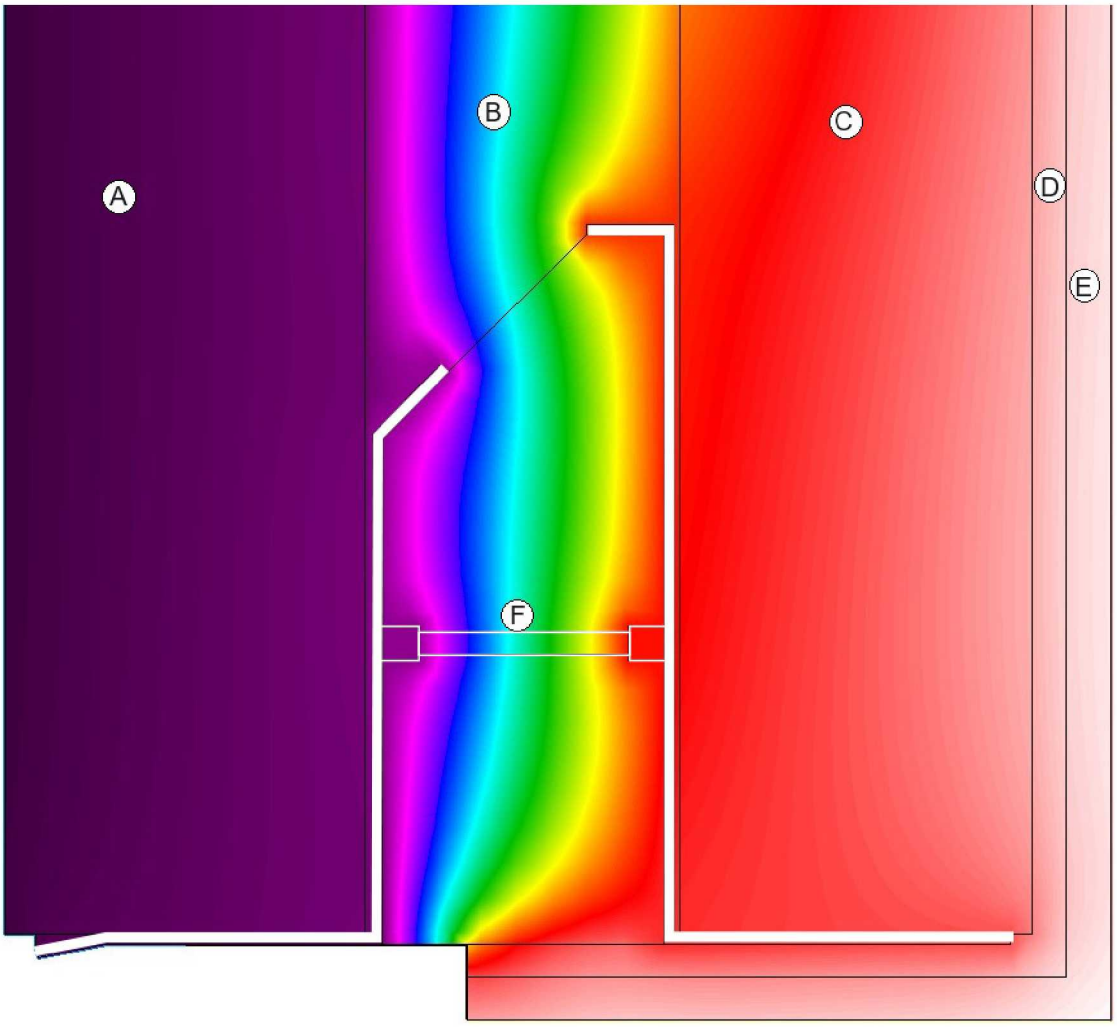
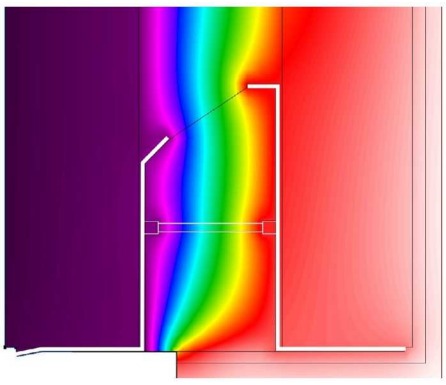
TSL90

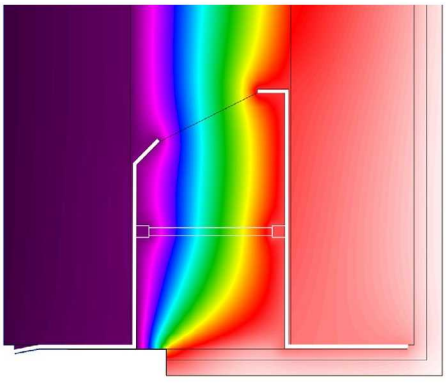
A: Brickwork | B: Cavity insulation | C: Blockwork | D: Air cavity and dabs
E: Plasterboard | F: Thermal coupler



TSL110



TSL130



TSL150