CI/SfB | | (31.9) | Hh2

Hi-therm™ LINTELS

The low cost solution for reduced **carbon emissions**

iglintels.com

IG

Hi-therm™ LINTELS

Hi-therm™
LINTELS

Hi-therm is the **only** one piece lintel which achieves the Appendix R value for steel lintels in Part L 2013

*Referen[illegible]s used within SAP in connection with establi[illegible]he FER and TFEE.

CONTENTS

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 13/5020

Award winning innovation

" This innovation thoroughly impressed the judging panel as an example of a problem being identified, a solution being developed and its success being firmly evident."

Will Botting
Construction News Awards

PRODUCT OF THE YEAR
HOUSEBUILDER AWARDS

COMMERCIAL INNOVATION OF THE YEAR
CONSTRUCTION NEWS AWARDS
2014

BEST BUILDING FABRIC
HOUSEBUILDER PRODUCT AWARDS
2013 & 2014

BEST ECO PRODUCT
BUILD IT AWARDS
2013

What the **experts say**

"We have utilised Hi-therm on a number of developments in a drive to improve our energy performance and limit thermal bridging.

Hi-therm is a cost effective solution that has the added benefit of utilising existing site practices; it enables trades to continue working in line with our current processes which in turn aids consistency in design and performance."

Paul Jenkins
UK Housing Portfolio Director
Taylor Wimpey

"When the government unveiled its changes to Part L 2013 building regulations Barratts analysed a range of sustainable solutions in order to comply with the mandatory minimum fabric performance standard (Target Fabric Energy Efficiency, TFEE).

The Hi-therm lintel has proved to offer a cost effective option as part of a suite of specification upgrades."

Michael Finn
Group Design & Technical Director
Barratt Homes

"The Hi-therm Lintel with its low Psi Value assists in achieving a fabric first approach to meet compliance and, when specified, can significantly help to meet the ever increasing building regulation/FEEs targets"

AES Southern Ltd
Sustainability Consultants

"Very expensive rigid insulation had been specified for a project and I had tried to find an alternative to using it. The assessor was amazed that a lintel with such a low Psi value was available to use, it made an immediate impact to our wall make up and meant we could down spec the insulation to a much more sensibly priced product."

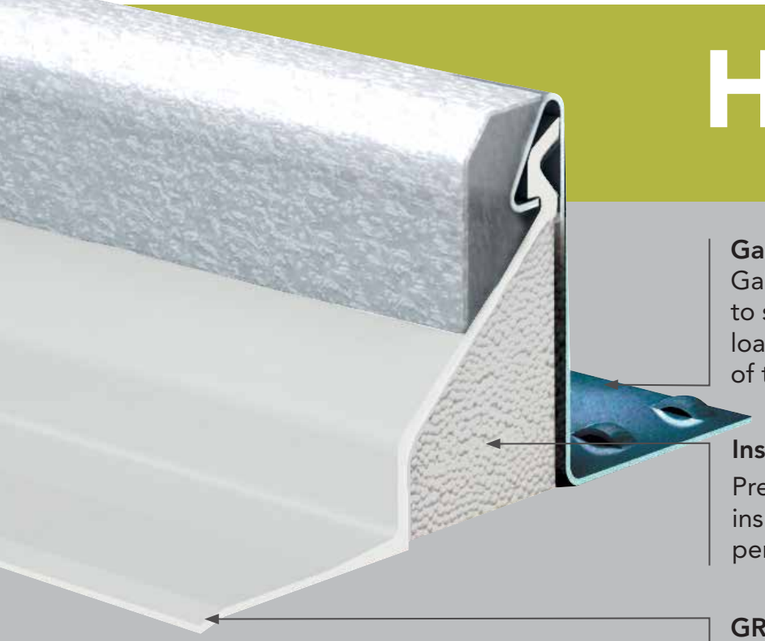
Adam Eaton
Purchasing Manager
Thakeham Homes Ltd

Hi-therm™
LINTELS

Thermally efficient

0.05
Psi value (Ψ)

5 times more thermally efficient than a standard steel lintel.



Hi-therm™ LINTELS

Galvanised Steel
Galvanised steel is used to support the heavier load on the internal leaf of the cavity wall.

Insulation
Prefitted expanded polystyrene insulation enhances the thermal performance of the lintel.

GRP
GRP has a low thermal conductivity therefore when used to support the outer leaf in a cavity wall construction, thermal bridging is significantly minimised.

NO **DPC*** REQUIRED

* Up to areas classified as very severe by NHBC

Part L answered

The Part L Challenge

Part L 2013 introduces the FEES standard with the requirement that new homes should comply with a mandatory minimum fabric performance standard (Target Fabric Energy Efficiency, TFEE) in addition to the original carbon emissions standard (Target CO_2 Emission Rate, TER).

The new regulations put emphasis on heat loss due to thermal bridging at junctions which impacts on both the dwelling CO_2 emission rate (DER) and fabric energy efficiency rate (DFEE) of the dwelling which is calculated within SAP.

What is a Psi value?

The thermal performance of a lintel is expressed in terms of a Psi value (ψ) i.e. Linear Thermal Transmittance, which is calculated using specialist thermal modelling software.

Y-values account for the heat loss through non-repeating thermal bridges (i.e. lintels, cills, jambs etc) within SAP. Y-values are calculated by measuring the linear length of the thermal bridge and multiplying by the respective Psi value, hence the importance of low Psi values. Using a low Psi value significantly improves the Y-value, which in turn has a positive impact on the overall SAP calculation.

Why Hi-therm?

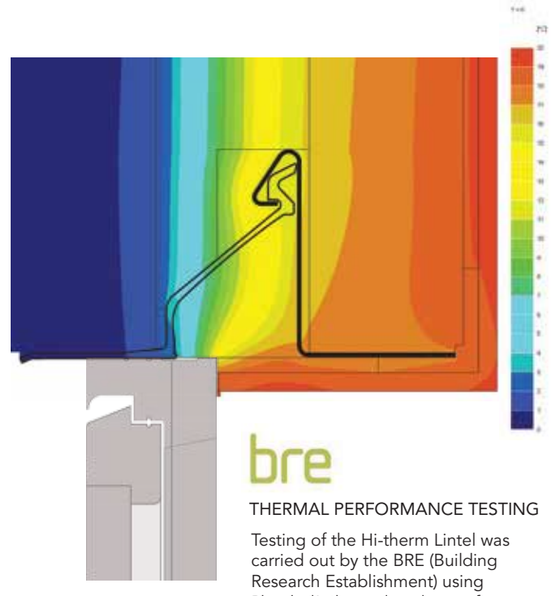
Lintels over doors and windows account for a significant amount of a buildings non-repeating thermal bridging and thereby associated heat loss. The use of Hi-therm can reduce a dwelling's thermal bridging by up to 1/3 offering an enhanced fabric first solution to housebuilder's assisting them with compliance to Part L.

Hi-therm is the **only** one piece lintel which achieves the Appendix R value for steel lintels in Part L 2013

Psi Comparison Value Chart

Hi-therm is the only one piece lintel which achieves the Appendix R value for steel lintels in Part L 2013. This table shows how Hi-therm outperforms all other lintel types.

LINTEL TYPE COMPARISON	VALUES
Part L Appendix R value, Table K1	0.05 W/m·K
Hi-therm Lintel	**0.05 W/m·K**
Standard Steel Lintel	0.23 W/m·K
Non Plated Steel Lintel	0.3 W/m·K
Plated Steel Lintel (default)	0.5 W/m·K



bre

THERMAL PERFORMANCE TESTING

Testing of the Hi-therm Lintel was carried out by the BRE (Building Research Establishment) using Physibel's thermal analysis software TRISCO which complies with BS EN ISO 10211-1. The modelling follows the requirements of the BRE conventions document BR497.

Key benefits

The Hi-therm lintel is unsurpassed in terms of thermal efficiency, buildability and technical support.

Thermal Efficiency

Hi-therm is the only one piece lintel which achieves the Appendix R value for steel lintels in Part L 2013.

Up to 5 times more thermally efficient than a steel cavity wall lintel.

Buildability

Better Buildability - offers the simplicity of a one piece lintel solution which achieves these significant advantages through traditional building practices, unlike a two part lintel solution.

Maintenance free - no maintenance required unlike other sustainable technologies.

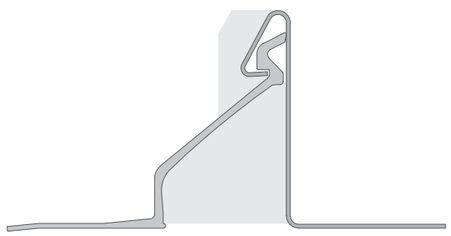
No DPC required up to areas classified as very severe by NHBC.

Cost Effective

Low cost alternative to stainless steel - NHBC approved for use in coastal areas.

A low cost route to improved Fabric Energy Efficiency.

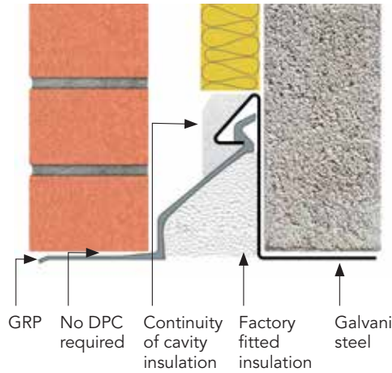
A low cost sustainable solution to CO_2 reduction within SAP.



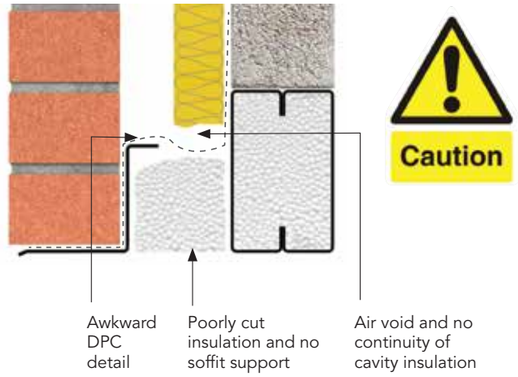
Better buildability

Split lintels - in some cases split lintels may be offered as a means of enhancing thermal performance however they are in no way comparable in terms of efficiency or buildability to the Hi-therm sustainability lintel.

Good Detailing ✓



Poor Site Detailing ✗

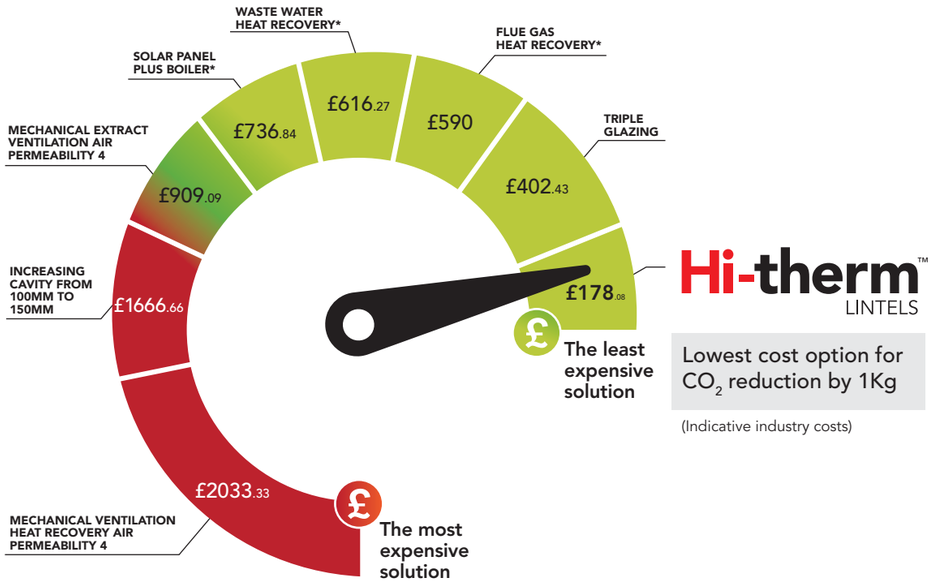


Hi-therm™	Split Lintels
No DPC required * *Except in areas classified as very severe by NHBC	An additional DPC is required on all installations and requires skilled positioning **££**
Hi-therm closes the cavity	A cavity closer must be supplied and fitted **££**
The single component design simplifies installation	Requires two separate lintels with double the handling and installation labour **££**
The one piece design assists stability between the internal and external leaves and creates stability during the build process	Individual lintels will require propping and additional wall ties will be required to overcome the lack of inherent stability in a split lintel solution **££**
Top insulation integrates well with cavity wall insulation for optimum performance	Creates a difficult to insulate cavity requiring a complex solution to achieve continuous insulation **££**
Hi-therm™ gives cost certainty with no additional costs	**££ = Additional Costs**

Cost comparison

Comparison of the different solutions to reduce carbon emissions.

This case study is based on an actual semi detached 75m², 3 bedroom house design and the figures were produced by an independent energy assessor using SAP 2009 software.

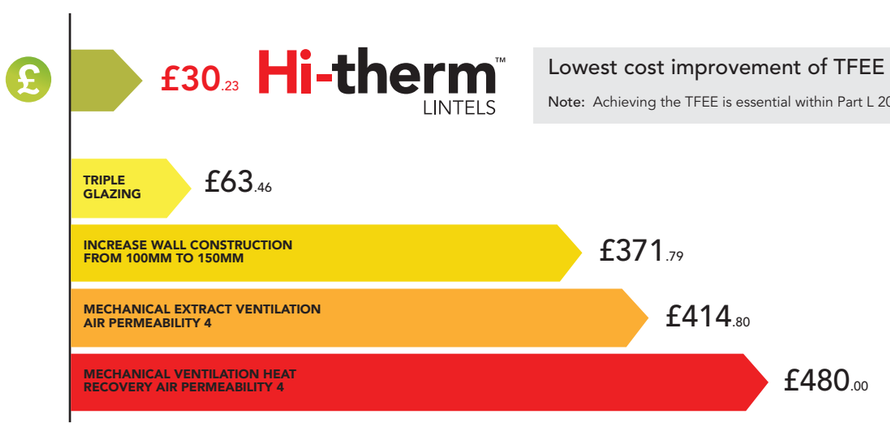


Hi-therm™ LINTELS

Lowest cost option for CO_2 reduction by 1Kg

(Indicative industry costs)

Cost comparison to Improve Fabric Energy Efficiency by 1kWh/m²/year



Lowest cost improvement of TFEE

Note: Achieving the TFEE is essential within Part L 2013

Housebuilder Testimonials

Barratt Homes

Hi-therm significantly reduced thermal bridging on all house types helping to meet Part L 2013. (see page 19)

Gospel Oaks

Hi-therm saved more than £200 per plot by enabling the use of a reduced cavity width. (See page 20)

Coxon's Mews

Hi-therm saved thousands of pounds by removing the need for PV panels. (see page 20)

Martello Park

Hi-therm delivered considerable savings by negating the need to specify stainless steel lintels as Hi-therm is NHBC approved for coastal use. (See page 22)

Saxon Place

Hi-therm saved more than £300 per plot by reducing the required level of insulation. (See page 22)

East Riding

Hi-therm provided an easily installed Part L solution in comparison to a complex split lintel option. (See page 23)

Hi-therm™ specification

Specification Clause:
Hi Therm sustainability lintel with GRP outer leaf to suit cavity widths from 90mm-165mm.

Material performance:
Features: Patented GRP and galvanised steel hybrid design. Galvanized steel is used to support the heavier load on the inner leaf of the cavity wall. Profiled CFC free insulation ensures the continuity of insulation.

Fire performance:
Hi-therm lintels have been subjected to a fire test in accordance with BS EN 1363-1 1999, at Exova Warrington Fire and achieved a one hour fire performance.

Thermal performance:
Hi-therm is the only one piece lintel with a psi value of 0.05, five times more thermally efficient than a standard steel lintel. Our in-house experts use the latest 'Physibel Trisco' thermal analysis software to calculate Psi values and advise clients on the optimum lintel solution for compliance with the required building regulations.

BBA Certification:
Hi-therm has BBA certification having undergone rigorous structural testing to BS EN 845 part 2.

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 13/5020

Loading guide tables

Standard Load

HT/S 100	For cavity widths 90-105mm				
Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	226	226	226
Thickness	2.5	2.9	2.9	2.9	3.2
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S1	S1	S2	S2	S2

HT/S 110	For cavity widths 110-125mm				
Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	230	230	230
Thickness	2.5	2.5	2.5	2.5	2.9
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S3	S3	S4	S4	S4

HT/S 130	For cavity widths 130-145mm				
Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	230	230	230
Thickness	2.5	2.9	2.5	2.5	2.9
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S3	S3	S4	S4	S4

HT/S 150	For cavity widths 150-165mm				
Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	230	230	230
Thickness	2.5	2.9	2.5	2.5	2.9
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S3	S3	S4	S4	S4

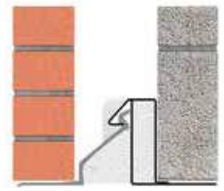
DAMP PROOFING Not required on Hi-therm lintels up to severe exposure.

Section Profiles

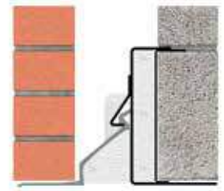
S1

S2

S3



S4



NOTE The exact lintel profile may vary dependent on lintel length and loading.

Loading guide tables

Heavy Duty Load

HT/HD 100	For cavity widths 90-105mm			
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	226	226	215
Thickness	2.9	2.9	3.2	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S1	S2	S2	S5

HT/HD 110	For cavity widths 110-125mm			
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	230	230	230
Thickness	2.9	2.5	2.5	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S3	S4	S4	S4

HT/HD 130	For cavity widths 130-145mm			
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	230	230	230
Thickness	2.9	2.5	2.5	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S3	S4	S4	S4

HT/HD 150	For cavity widths 150-165mm			
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	230	230	230
Thickness	2.9	2.5	2.5	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S3	S4	S4	S4

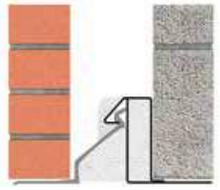
DAMP PROOFING Not required on Hi-therm lintels up to severe exposure.

Section Profiles

S1

S2

S3



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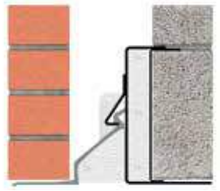


S5

NOTE The exact lintel profile may vary dependent on lintel length and loading.

Extra Heavy Duty Load

HT/XHD 100	For cavity widths 90-105mm		
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000
Height 'h'	226	226	215
Thickness	2.9	3.2	2.9
Total UDL kN 19:1	48	48	48
Profile Type	S2	S2	S5

HT/XHD 110	For cavity widths 110-125mm		
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000
Height 'h'	230	230	230
Thickness	2.5	2.9	3.2
Total UDL kN 19:1	48	48	48
Profile Type	S4	S4	S4

HT/XHD 130	For cavity widths 130-145mm		
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000
Height 'h'	230	230	230
Thickness	2.5	2.9	3.2
Total UDL kN 19:1	48	48	48
Profile Type	S4	S4	S4

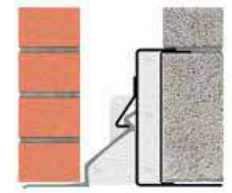
HT/XHD 150	For cavity widths 150-165mm		
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000
Height 'h'	230	230	230
Thickness	2.5	2.9	3.2
Total UDL kN 19:1	48	48	48
Profile Type	S4	S4	S4

DAMP PROOFING Not required on Hi-therm lintels up to severe exposure.

Section Profiles

S2

S4



S5

NOTE The exact lintel profile may vary dependent on lintel length and loading.

Loading guide tables

WIDE INNER LEAF
Standard Load

HT/S 100 WIL For cavity widths 90-105mm

Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	226	226	226
Thickness	2.5	2.9	2.9	2.9	3.2
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S1	S1	S2	S2	S2

HT/S 110 WIL For cavity widths 110-125mm

Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	230	230	230
Thickness	2.5	2.5	2.5	2.5	2.9
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S3	S3	S4	S4	S4

HT/S 130 WIL For cavity widths 130-145mm

Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	230	230	230
Thickness	2.5	2.9	2.5	2.5	2.9
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S3	S3	S4	S4	S4

HT/S 150 WIL For cavity widths 150-165mm

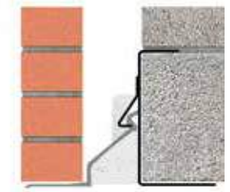
Manufactured length 150mm increments	600-1500	1650-2100	2250-2700	2850-3000	3150-3600
Height 'h'	144	144	230	230	230
Thickness	2.5	2.9	2.5	2.5	2.9
Total UDL kN 3:1	20	21	27	27	27
Total UDL kN 19:1	17	17	20	20	20
Profile Type	S3	S3	S4	S4	S4

DAMP PROOFING Not required on Hi-therm lintels up to severe exposure.

Section Profiles

S1

S2



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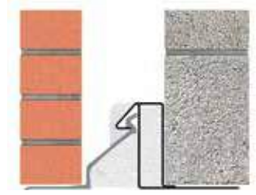


S4

NOTE The exact lintel profile may vary dependent on lintel length and loading.

WIDE INNER LEAF
Heavy Duty Load

HT/HD 100 WIL For cavity widths 90-105mm

Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	226	226	215
Thickness	2.9	2.9	3.2	2.5
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S1	S2	S2	S5

HT/HD 110 WIL For cavity widths 110-125mm

Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	230	230	230
Thickness	2.9	2.5	2.5	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S3	S4	S4	S4

HT/HD 130 WIL For cavity widths 130-145mm

Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	230	230	230
Thickness	2.9	2.5	2.5	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S3	S4	S4	S4

HT/HD 150 WIL For cavity widths 150-165mm

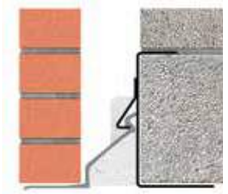
Manufactured length 150mm increments	600-1500	1650-2400	2550-3000	3150-3600
Height 'h'	144	230	230	230
Thickness	2.9	2.5	2.5	2.9
Total UDL kN 3:1	30	35	35	35
Total UDL kN 19:1	22	35	35	32
Profile Type	S3	S4	S4	S4

DAMP PROOFING Not required on Hi-therm lintels up to severe exposure.

Section Profiles

S1

S2



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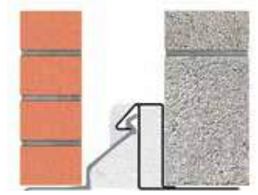

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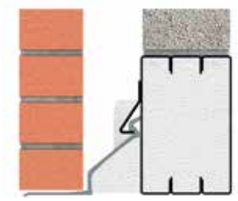

NOTE The exact lintel profile may vary dependent on lintel length and loading.

Hi-therm™ CASE STUDIES

The following pages detail projects which highlight the benefits of specifying Hi-therm lintels.

Hi-therm™ CASE STUDY

New Barratt Homes

Sites throughout the UK.

Specifying Hi-therm significantly reduced thermal bridging on all house types.

"When the government unveiled its changes to Part L 2013 building regulations Barratts analysed a range of sustainable solutions in order to comply with the mandatory minimum fabric performance standard (Target Fabric Energy Efficiency, TFEE).

The Hi-therm lintel was proved to offer a cost effective option as part of a suite of specification upgrades."

Michael Finn
Group Design & Technical Director
Barratt Homes

BARRATT HOMES

Project Details

- Barratts are required to meet the increased performance demands on plots which must comply with part L 2013.

Hi-therm Solution

- Full technical support and site-specific Psi value calculations provided.
- Hi-therm significantly reduces the thermal bridging through window & door head junctions to achieve class leading values.
- Hi-therm lintels are single piece and fitted in the same method as a standard steel lintel, so require no special arrangements on-site.

Oakgrove Village

Milton Keynes, Buckinghamshire.

Specifying Hi-therm significantly reduced thermal bridging on all house types.

"We specified Hi-therm lintels on our Oakgrove development in Milton Keynes where we are required to meet Level 4 of the CfSH.

Crest Nicholson traditionally take the approach of achieving the carbon and energy saving required on a development through a fabric first approach and the Hi-therm lintel contributes to this approach by significantly reducing the thermal bridging through the window and door head junction, making it a cost effective option on this Code 4 site."

Darren Dancey
Group Technical & Quality Director,
Crest Nicholson

Project Details

- Crest Nicholson were required to build all house types on their Oakgrove Village development to meet Level 4 of the Code for Sustainable Housing .

Hi-therm Solution

- Full technical support and site-specific Psi value calculations provided.
- Hi-therm significantly reduced the thermal bridging through all window & door head junctions across all house types in the development.
- Hi-therm lintels are fitted in the same method as a standard steel lintel, so had no impact on the construction sequencing.

Hi-therm CASE STUDY

Gospel Oak

Tipton, West Midlands.

Hi-therm saved more than £200 per plot and dramatically improved the fabric performance without any specialist build techniques.

"As an experienced builder of eco-friendly homes, we were very impressed with the innovation of the Hi-therm lintel's fabric first approach. With the new Part L 2013 regulations tightening we are always looking for cost effective solutions to improving the building's overall thermal performance.

No other single lintel product has enabled us to reduce thermal bridging as much as Hi-therm. This fabric first approach has enabled us meet the new regulations without the need for costly renewable technology or wider cavities."

Richard Southgate
Project Co-ordinator/Owner
Wrekin Eco Homes

Project Details

- Wrekin Homes purchased the site to develop Eco Homes in Tipton, West Midlands.
- Wrekin sought out the latest fabric first solutions.

Hi-therm Solution

- The use of **Hi-therm saved more than £200 per plot** by enabling the use of a 100mm cavity instead of a 125mm width.
- **Hi-therm dramatically improved the fabric performance without any additional or specialist build techniques.**
- Hi-therm does not require any of the maintenance associated with many other sustainable technologies.

Coxon's Mews

Ashby-De-La-Zouch, Leicestershire.

The use of Hi-therm saved £1000's by negating the use of costly alternatives.

"When split lintels were specified for this project I looked for an alternative product to avoid the increased handling and site work they would involve.

Ashby Energy, our energy assessor, introduced the Hi-therm lintel which significantly lowered the amount of thermal bridging, helping us to meet level 4 in the code for sustainable homes with the simple installation of single piece lintels."

Frank Sandkey
Buyer
Lychgate Homes

Project Details

- The planning approval for 4 retail units and 7 duplex apartments required Level 4 Code for sustainable homes performance.
- Design options included either 125mm Cavity or the use of PV panels to meet Level 4 energy/CO_2 targets.

Hi-therm Solution

- By using Hi-therm as a fabric first solution, thermal bridging was significantly reduced enabling the energy target to be met without the use of wider cavities or PV units.
- **The use of Hi-therm saved £1000's by negating the use of the costly alternatives.**
- Hi-therm was simple to install, avoiding the complexity of split lintels.
- No ongoing maintenance required.

Hi-therm CASE STUDY

Berewood

Waterlooville, Hampshire.

The use of Hi-therm saved £1,000's by negating the use of costly alternatives.

"The Waterlooville site was required to meet Level 4 of the code for sustainable homes. We wanted to achieve compliance and deliver the energy savings with a cost effective fabric first approach rather than the use of complex and expensive renewable technologies. Having discussed this with our energy assessor and our lintel supplier we decided to specify the Hi-therm lintel.

This choice delivered reduced thermal bridging at the head junctions and openings allowing us to meet our carbon targets. We particularly valued the fact that no changes to our construction practices on-site were required."

Phil Jackson
Group R&D Manager
Bloor Homes

Project Details

- The Berewood development includes a full range of property types from 1 to 5 bedrooms and Hi-therm was specified on each home within the 168 acre site.

Hi-therm Solution

- The use of Hi-therm was a significant contributor to the achievement of Level 4, Code for sustainable homes.
- Full technical support provided to develop a suitable specification for the site.
- Hi-therm does not require any special installation techniques.

St. Inns

Moira, Co. Armagh.

The use of Hi-therm contributed savings of more than £1000 per plot on other technology.

"Using the Hi-therm lintel helped us to achieve a pass rating keeping the air test above 5, therefore removing the need for mechanical whole house ventilation/heat recovery, or alternatively other renewable energy products such as PV.

Whilst the Hi-therm was not the only resolution, it is a combination of various products and u-values etc. which achieve the pass; Hi-therm helped to achieve the pass in this instance."

Chris Carroll
Quantity Surveyor
Lagan Homes

Project Details

- St. Inns development at Moira, Co. Down, includes detached and semi-detached 3 and 4 bedroom house types and Hi-therm was specified on each home.

Hi-therm Solution

- Full technical support and site-specific Psi value calculations provided.
- Hi-therm's performance contributed to the saving of upwards of £1000 per plot on other sustainable technology.
- Hi-therm does not require any ongoing maintenance, unlike many alternative sustainability solutions.

Hi-therm CASE STUDY

Martello Park

Felixstowe, Suffolk.

Coastal regions require enhanced specification and the corrosion proof Hi-therm lintel was ideal.

"The Felixstowe seafront site had to be built to the enhanced standards required to withstand coastal conditions. This traditionally includes the use of stainless steel lintels to prevent corrosion.

However we specified the innovative new Hi-therm lintel with its corrosion proof GRP outer leaf which is NHBC approved for use in coastal areas.

We liked the way that Hi-therm builds like a normal steel lintel but also delivers considerable improvements in SAP, delivering an overall cost effective specification."

Phil Jackson
Group R&D Manager
Bloor Homes

Project Details

- This popular seafront location contains a range of house types.
- Coastal locations require the use of NHBC approved corrosion resistant lintels.

Hi-therm Solution

- The use of Hi-therm was a more efficient solution than stainless steel lintels and was NHBC compliant.
- Hi-therm also dramatically improved the fabric energy performance compared to the use of stainless steel lintels.
- Hi-therm does not require any special installation techniques.

Saxon Place

Penwortham, Lancashire.

£ SAVINGS

The use of Hi-therm sustainability lintel saved over £300 per plot on wall insulation.

"At Rowland we aim to build a better home for our house buyers which will lower their energy costs and minimise maintenance. That's why we were so impressed by what the Hi-therm lintel offered us in terms of thermal performance while at the same time being extremely cost effective to build."

Scott Warley
Senior Buyer
Rowland Homes

Project Details

- This is a quality development of 61, 3 and 4 bedroom houses in a scheme, designed and landscaped to create a mature, established feel.
- Rowland are committed to building environmentally efficient homes using the latest sustainable technologies.

Hi-therm Solution

- By utilizing Hi-therm's thermal performance and enhanced psi value, Rowland was able to re-assess the overall fabric specification.
- The use of Hi-therm saved over £300 per plot by enabling the wall insulation cost to be reduced from 0.32w/m/h to 0.36w/m/h.
- Hi-therm was specified on all house types within the development, providing £1,000's of savings overall.

New Jelson Homes

Sites throughout the UK.

£ SAVINGS

The use of Hi-therm saved up to £400 per plot on PV panels.

Hi-therm Solution

When introduced to Hi-therm, Jelson's energy assessors discovered they could considerably enhance the energy performance of the houses by adopting the use of Hi-therm in all their house types.

The increase in performance was so substantial that it enabled the assessors to still meet the building codes while removing one to two PV panels per plot at a saving of £350 - £400 per panel.

As a result of these cost efficiencies, Jelson now include Hi-therm sustainability lintels in the specification of all new builds going forward.

Project Details

- To meet the required codes and building regulations for their standard house type, Jelson Homes had adopted a specification requiring a 100mm cavity and the use of PV panels to enhance their energy performance.

Additional Issues

- Unlike other sustainability technologies, Hi-therm lintel does not require any ongoing maintenance throughout the life of the building.

New Developments

East Riding PHASE 4 Housing.

Solved site issues and helped them meet thermal bridging requirements.

"Within the Building Design department of East Riding of Yorkshire Council we are constantly looking at products which will enhance the quality and performance of our buildings. We were specifying a split lintel solution with 150mm wide cavities for our affordable housing developments to help lower thermal bridging and meet building regulations.

However, the split lintel option was causing installation issues on site with the insulation and DPC detail around the split lintels and therefore were looking for a solution to ease the installation and maintain the thermal insulation continuity. We were introduced to the Hi-therm Lintel which our technical team and Energy Assessor recognised would offer benefits over split lintels from a technical and building construction perspective. As a result, we have now specified the Hi-therm Lintel for our next phase of affordable homes."

Mark Thomas
Senior Architect,
ERI&F Building Design

BETTER BY DESIGN

IG

STEEL LINTELS

Standard Lintels

IG produce a wide range of standard galvanised steel lintels. All IG standard lintels satisfy the thermal performance requirements of all UK building regulations.

Special Lintels

IG offer a complete custom design service to ensure your project has the best lintel for the job. Our technical expertise is renowned for delivering solutions with total efficiency.

Masonry Support & Windposts

IG continues to set the standard for masonry support and windpost systems for a range of building frame configurations. Our signature Titan system provides optimum performance and design flexibility.

Stainless Steel

IG's full range of lintels is also available in stainless steel, providing the same high quality and performance features as our standard galvanised lintels.

Brick Slip Feature Lintels

IG Brick Slip Feature Lintels are a one piece prefabricated unit, manufactured bespoke to order, achieving even the most challenging architectural designs.

Cavity Trays

The IG Cavity Tray presents a lightweight, simple to install and long-lasting solution to preventing damp from penetrating below the roof line.

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