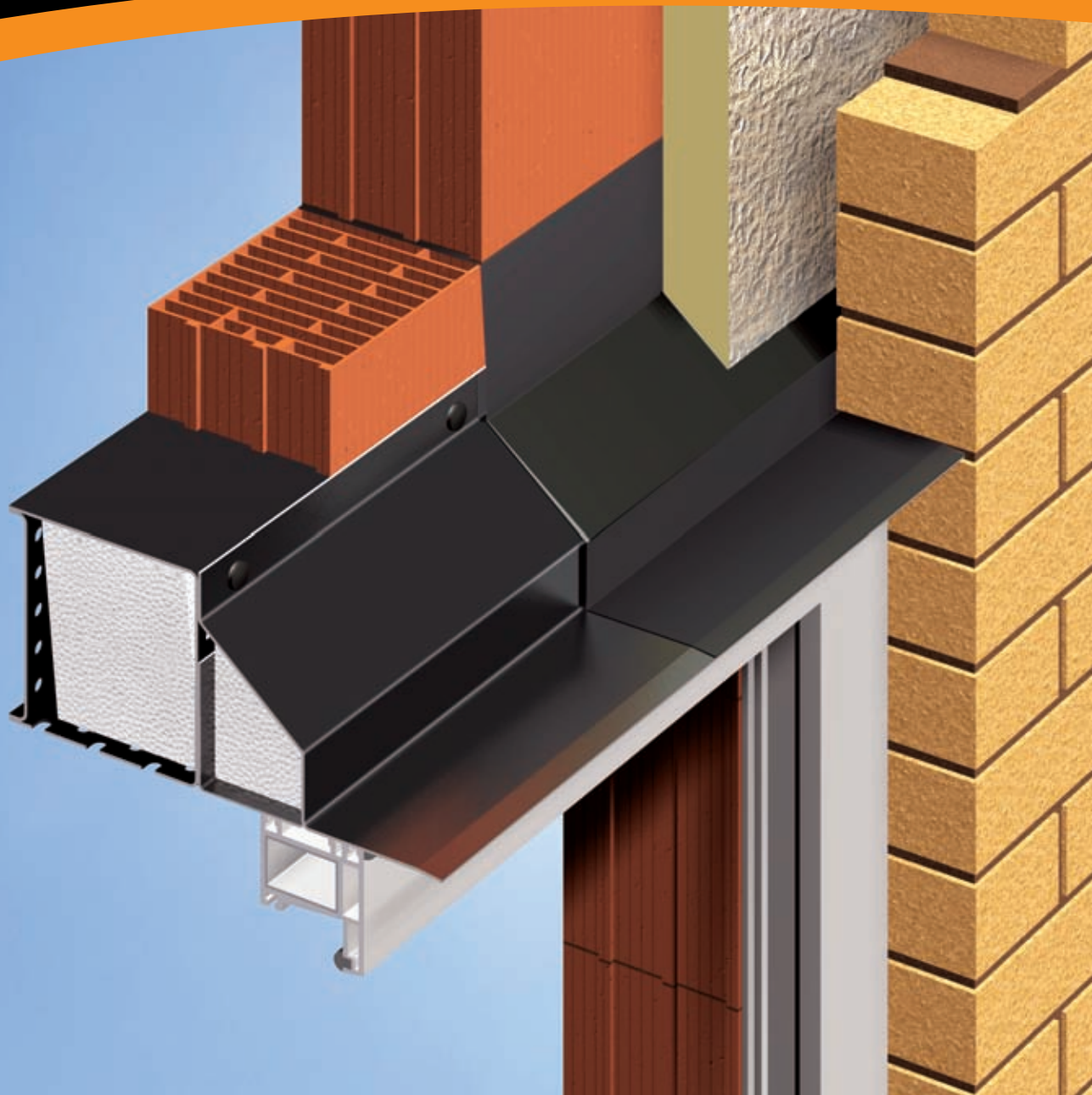


Uniclass L325:P4142		EPIC F631:X442	
CI/Sfb	(31.9)	Hh2	
July 2011			

## Catnic CTJ Lintel Range

Designed for the Porotherm<sup>®</sup> and other thin joint systems



# CATNIC - THE NAME TO BUILD A REPUTATION ON

Catnic has pioneered the steel lintel for more than four generations and designs, manufactures and supplies the construction industry with technically superior products.

## What is Thin Joint Construction?

Thin Joint Construction is a masonry wall construction technique that replaces conventional 10mm cement mortar with 1-3mm joints using a special adhesive mortar. This technique can significantly reduce build time and materials on site, whilst improving u-values.

Thin Joint construction is used extensively across Europe, and as UK building regulations are updated, the benefits of this efficient and highly effective system are evident. Furthermore, with new technical and environmental requirements impacting on UK construction methods, Thin Joint construction offers a perfect solution to those wishing to enhance the thermal performance and minimise CO<sub>2</sub> emission over the buildings lifetime.

## What are the benefits of Thin Joint?

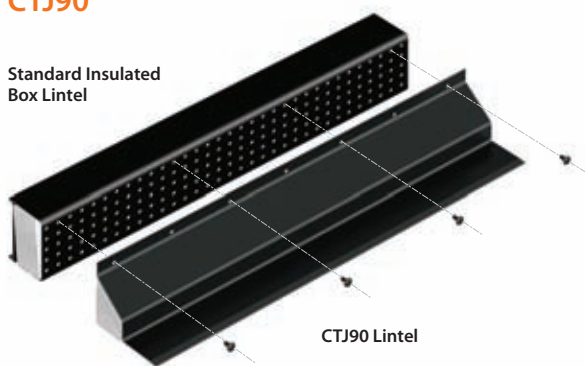
- **Reduced build time.** Within minutes the thin joint mortar is set and the next course can be laid. This permits continual laying and avoids settlement problems commonly associated with conventional mortar
- **Quick weatherproofing.** The speed of build and no need to match both inner and outer leaf build heights enables the inner leaf envelope to be completed faster allowing internal work to start sooner
- **Efficient build.** The Porotherm clay blocks in use are dimensionally accurate and inner leaf can be built ahead of the outer leaf thus avoiding mortar snots in cavities and poorly fitted cavity insulation
- **Flexible construction.** Thin Joint can be used on both external cavity walls and internal partition walls, as well as party wall construction.



# LINTELS FOR THIN JOINT CONSTRUCTION

Utilising almost 50 years experience in the design and manufacture of steel lintels, Catnic has designed two Thin Joint solutions for the UK construction industry.

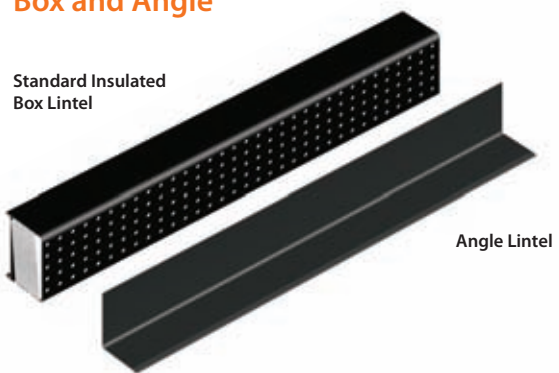
## CTJ90



The new CTJ90 Lintel is designed specifically for use with Wienerberger's Porotherm block system.

The new CTJ90 Lintel has been designed to suit the requirements of 102mm Outer Leaf with 90mm to 105mm cavity. Inner leaf support is achieved through a standard Catnic Box lintel and propping during construction is eliminated thanks to a unique plastic fixings connection. The CTJ90 closes the cavity and removes the need for an additional cavity closer.

## Box and Angle



Standard Catnic box and angle lintels designed for use with all thin joint masonry construction including the Wienerberger Porotherm system.

The Catnic Box and Angle Lintel system has been designed to accommodate the requirements of all thin joint wall construction. This standard product provides the following benefits:

- Suitable for all possible cavity widths
- Reduced Thermal bridging at window head
- Standard product

## Quality

Catnic is committed to quality control and is a BSI registered company with quality management systems in accordance with BS EN ISO 9001:2008.

## Independent Testing

Independent tests have been undertaken at a UKAS approved test laboratory to ensure full compliance with the requirements of BS EN 845-2: 2003.

## Environment & Sustainability

Catnic are committed to protecting the environment by minimising the impact of our operations and our products through the adoption of sustainable practices and through continuous improvement in environmental performance and control in accordance with ISO 14001.

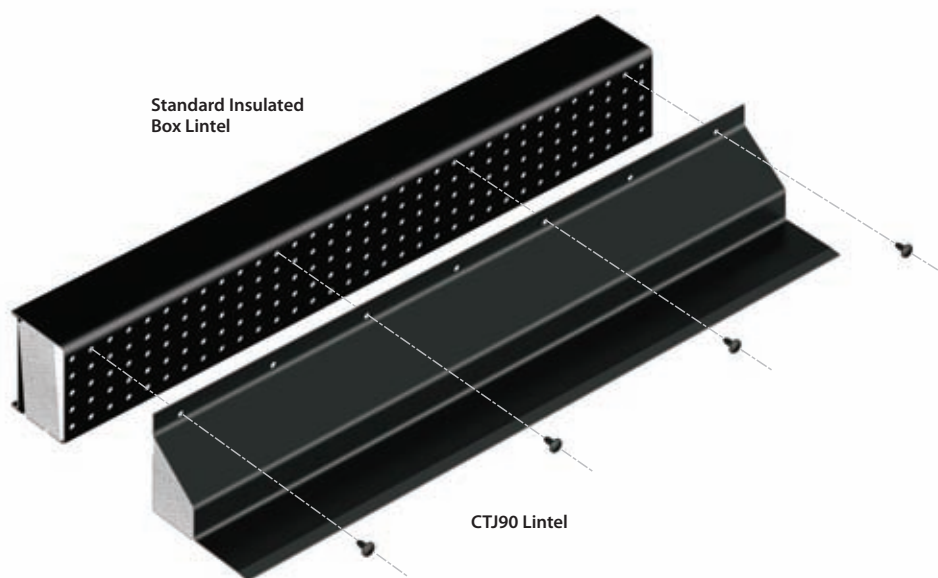
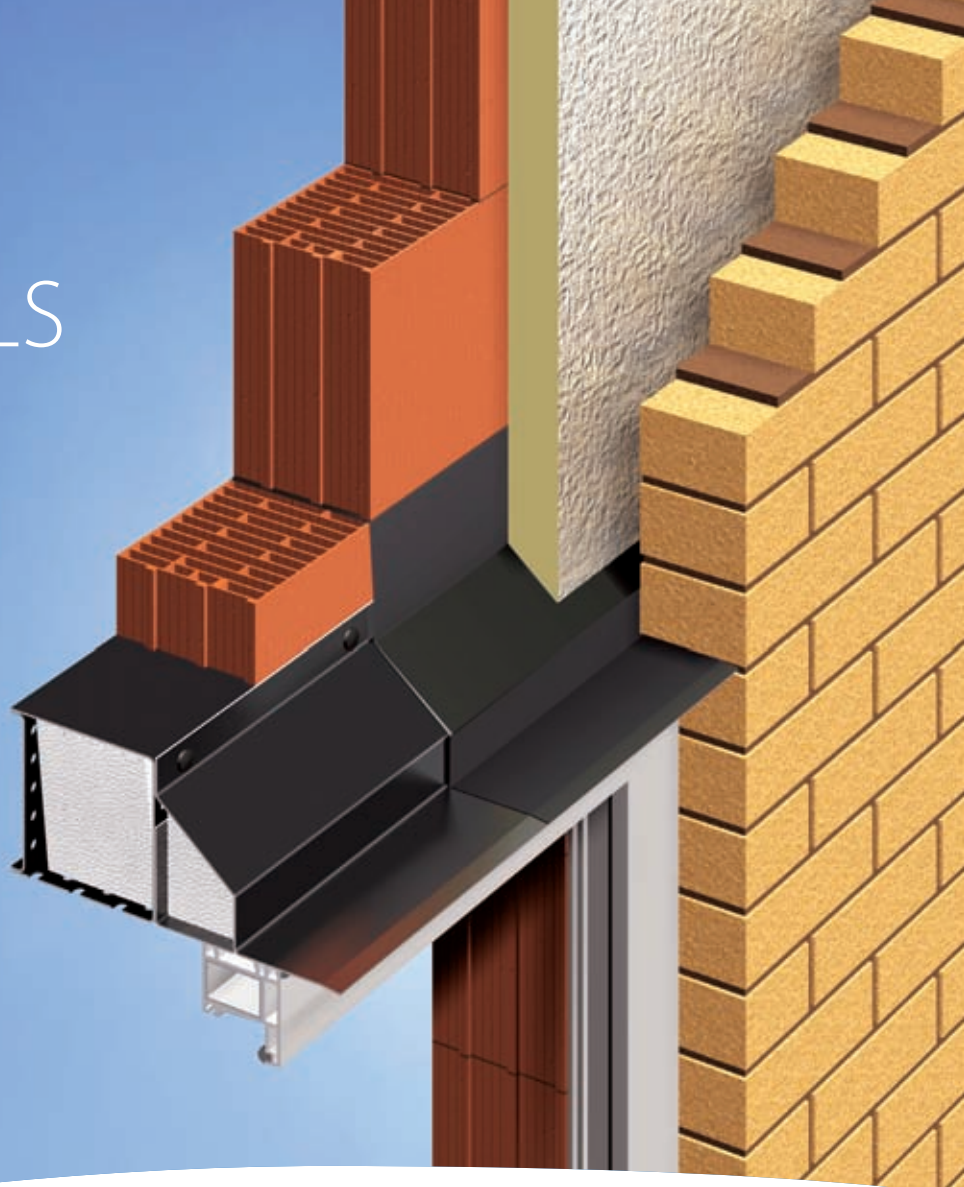


ISO 14001  
EMS 555046



# CTJ 90 LINTELS

## Thin Joint Lintel system



Standard lengths are available in increments of 150mm at lengths up to 3000mm, 300mm at lengths from 3000mm – 3600mm.

### Material

Hot dipped galvanised sheet steel coil to BS EN10346:2009 of grade DX51D and Z275 (min yield stress – 250N/mm<sup>2</sup>)

### Finish

Black Polyester powder coating 0.035 + 0.005mm thick.

### Installation

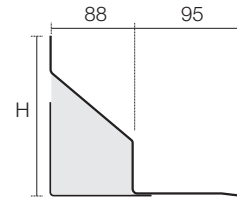
1. Lintels should be installed horizontally and bedded using traditional bricklaying mortar
2. Install the lintel central to the opening size and provide minimum end bearings of 150mm at both ends
3. Mortar should be applied to the vertical joints at both ends of the internal box lintel to assist air tightness of the building
4. Insert plastic connectors through the slot holes at the top of the outer leaf lintel, into the holes on the vertical face of the Catnic box lintel. This will obviate the need to prop the outer leaf lintel during construction. Insert plastic connectors at alternate ovals and at each end. A slight horizontal misalignment is possible but not detrimental.

# CTJ 90 LINTELS

- **102mm** outer leaf
- **90 - 105mm** cavity

## CTJ 90

Standard Lengths (mm)	750 - 1500	1650 - 2400	2550 - 3000	3300 & 3600
SWL* (kN)	5	7	7	9
Weight (kg/m)	6.8	7.9	7.7	9.1
Nominal Height 'H' (mm)	149	149	224	224

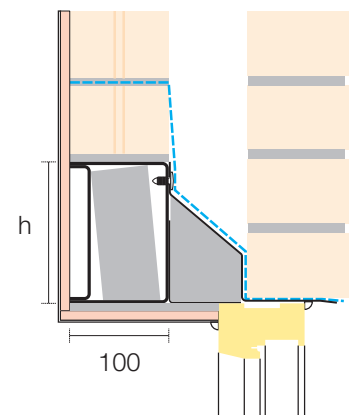


- **100mm** inner leaf

## CN5XA Insulated

Standard Lengths (mm)	750-1500	1650-2100	2250-2400	2550-3600
SWL* (kN)	29	25	20	29
Weight (kg/m)	7.6	7.6	7.6	12.4
Nominal Height 'H' (mm)	143	143	143	219

## CN6XB Insulated

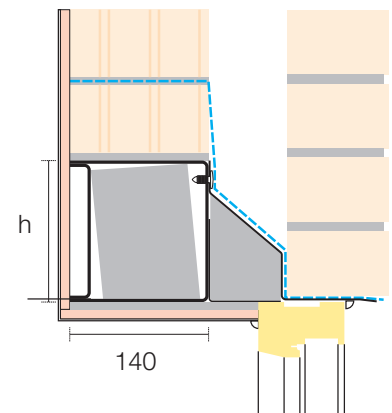


- **140 - 150mm** inner leaf

## CN56XA Insulated

Standard Lengths (mm)	1050-1500	1650-2400	2550-2700	2850-3300	3600
SWL* (kN)	29	20	54	47	39
Weight (kg/m)	9	9	18	18	18
Nominal Height 'H' (mm)	143	143	219	219	219

## CN66XC Insulated



Standard lengths are available in increments of 150mm. A heavy duty box lintel is also available on request.

\*The SWL (Safe Working Load) is based on the total UDL (uniformly distributed load) over maximum span using 150mm end bearings.

### Note:

1. This brochure should be read in conjunction with the technical requirements outlined in our Lintel Product Selector (April 2011)
2. For further information contact our Technical Services Department 02920 37900
3. Use Catnic box lintels only for inner leaf support and ensure that the nominal height of the box is the same or higher than the outer leaf CTJ style lintel to be used. This will ensure that the plastic connectors align with the holes in the box lintel.



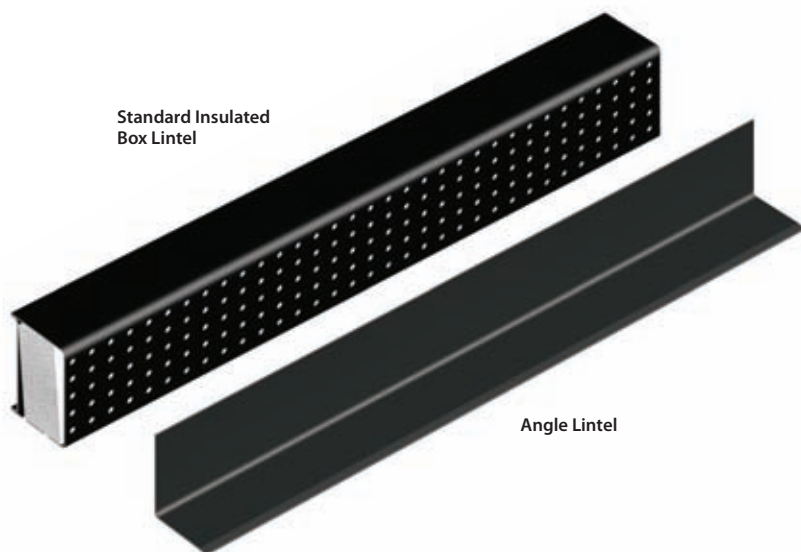
Where lintels are required to support greater loads than the figures published please contact our Technical Services Department on **029 2033 7900**.

# STANDARD ANGLE & BOX LINTELS

## Thin Joint Lintel system



Standard Insulated  
Box Lintel



Angle Lintel

Standard lengths are available in increments of 150mm at lengths up to 3000mm, 300mm at lengths from 3000mm – 3900mm.

### Material

Hot dipped galvanised sheet steel coil to BS EN10346:2009 of grade DX51D and Z275 (min yield stress – 250N/mm<sup>2</sup>).

### Finish

Black Polyester powder coating 0.0035 + 0.0005mm thick for Lintels, Angle Lintels up to 3000mm are Z600 Silver.

### Installation

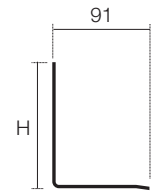
1. Lintels should be installed horizontally and bedded using traditional bricklaying mortar
2. Install the lintel central to the opening size and provide minimum end bearings of 150mm at both ends
3. Mortar should be applied to the vertical joints at both ends of the internal box lintel to assist air tightness of the building
4. ANG Lintels should be suitably propped and laterally restrained during construction to prevent rotation.

# STANDARD ANGLE & BOX LINTELS

## • 102mm outer leaf

### ANG

Standard Lengths (mm)	900 - 1200	1350 - 1500	1650 - 2100	2250 - 2400	2550 - 3000	3300 - 3600
SWL* (kN)	4	5	7	10	15	15
Weight (kg/m)	2.7	3.4	4.0	4.7	7.3	9.4
Nominal Height 'H' (mm)	88	131	167	215	215	215

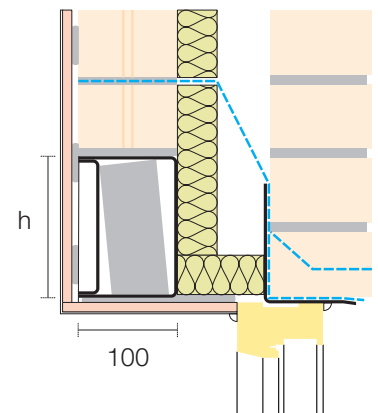


## • 100mm inner leaf

### CN5XA Insulated

Standard Lengths (mm)	750-1500	1650-2100	2250-2400	2550-3600
SWL* (kN)	29	25	20	29
Weight (kg/m)	7.6	7.6	7.6	12.4
Nominal Height 'H' (mm)	143	143	143	219

### CN6XB Insulated

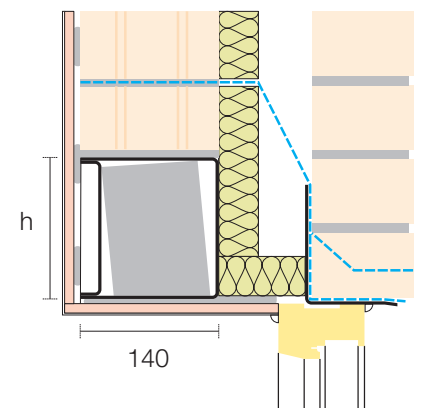


## • 140 - 150mm inner leaf

### CN56XA Insulated

Standard Lengths (mm)	1050-1500	1650-2400	2550-2700	2850-3300	3600
SWL* (kN)	29	20	54	47	39
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Nominal Height 'H' (mm)	143	143	219	219	219

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### Note:

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3. Use Catnic box lintels only for inner leaf support.



Where lintels are required to support greater loads than the figures published please contact our Technical Services Department on 029 2033 7900.

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English version



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