



MasterBarTM

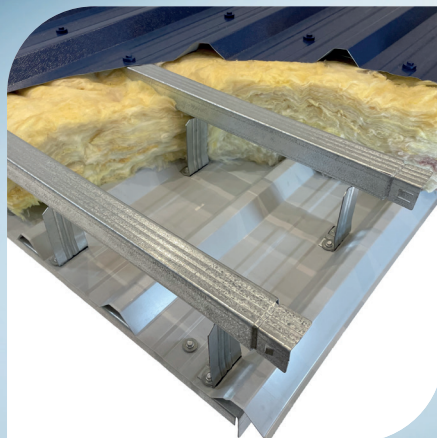
Roof & Wall Spacer System



We are a family
run UK business with
over 50 years experience
in the industry.



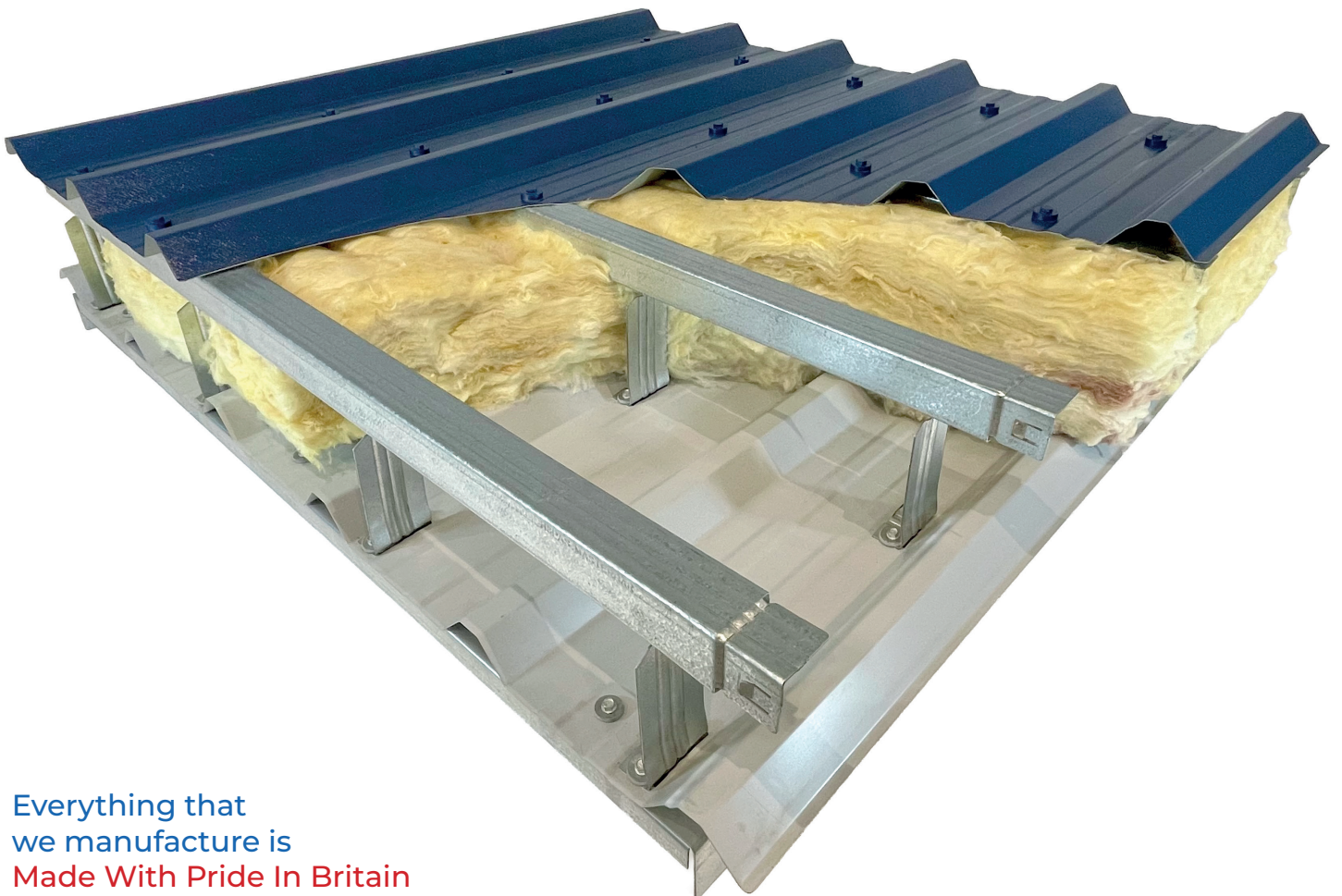
AGRICULTURAL • INDUSTRIAL • COMMERCIAL • RESIDENTIAL • LEISURE





Whether you're creating a built up, twin-skin system, or an over-roof refurbishment, your building envelope is only as good as the components that hold it together.

The simple and easy-to-install MasterBar Roof & Wall Spacer System brings strength, stability, and reliability to your building envelope, at market-leading price points that you will find hard to beat.



Everything that
we manufacture is
Made With Pride In Britain



The MasterBar Roof & Wall Spacer System has been engineered to provide a superior solution for the creation of built-up, twin skin systems and over-roof refurbishments.

FEATURES:

- Simple and easy twist-and-lock assembly
- MasterBar is manufactured from 1.3mm thick, high tensile, galvanised steel and available in lengths of 1, 2, 3 and 6 metres
- Brackets are manufactured from 1.6mm thick high tensile, galvanised steel and available in heights from 100mm to 280mm
- All components have been successfully tested by Lucideon in accordance with EAD 200012-00-0401:2015
- Suitable for both horizontal and vertical cladding applications

BENEFITS:

- Faster overall installation time due to rapid component assembly
- Superior structural integrity and proven load bearing capability
- Ability to tackle uneven roof pitches safely and securely
- Higher customer confidence thanks to independent testing to European industry recognised standards
- Highly cost-effective solution due to market leading price points and reduced installation time
- **Made With Pride in Britain by a family run UK business**



We can provide you with everything you could possibly need in order to complete your built-up, twin skin system or over-roof refurbishment.

We manufacture and supply:

- A comprehensive range of box profile and corrugated profile roof and wall panels in a variety of colours and finishes.
- Crimp curved concave and convex box profile panels and smooth curved corrugated panels.
- Custom made roof flashings, gutters and accessories.
- Bespoke pressed profiled panels.
- Unique fabrications, fascias, trims and fixings.
- Additional top hat components available upon request.
- Purlins and sections including Zed section purlins, Cee sections, Flat Faced and Recessed Eaves beams and associated accessories.
- Insulated composite panels, rooflights and insulation.

HORNSEY STEEL PANELS AND SECTIONS LTD

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MATERIAL & SPECIFICATIONS

The MasterBar and bracket components are manufactured from light-gauge, pre-hot-dipped galvanized steel in accordance with BS EN 10346:2015, BS EN 1993-1-3 and BS EN 1090-1:2009+A1:2011 (up to exc 2), featuring a Z275 coating and achieving a minimum yield strength of 450N/mm². These corrosion-resistant steel components are cold-roll-formed utilizing advanced multi-section roll forming technology and have a superior strength-to-weight ratio.

Our MasterBar Roof & Wall Spacer System has been designed and manufactured to comply with the appropriate performance standards, including British Standards and Eurocodes, and are marked with the appropriate UKCA and CE certifications.

We manufacture MasterBar using 1.3mm gauge steel in four different lengths 1m, 2m, 3m and 6m (upon request).

The bracket component is manufactured using 1.6mm gauge steel in a range of bracket heights from 100mm to 280mm in 10mm increments.

THERMAL PERFORMANCE

The figures shown are based upon the use of Superglass Cladding Mat 40, compressed typically by around 10%.

These figures are for guidance only and have been calculated based upon the use of a standard twin skin bar and bracket system configuration.

For specific fire and thermal requirements, please consult an independent specialist.

Roofs - Typical U-Values (W/m²K) Achievable Using Cladding Mat 40

Bracket Height (mm)	Insulation Thickness (mm)	U Value
250	280	0.18
230	260	0.20
210	240	0.22
180	200	0.25
160	180	0.28
140	160	0.33
120	140	0.38

Walls - Typical U-Values (W/m²K) Achievable Using Cladding Mat 40

Bracket Height (mm)	Insulation Thickness (mm)	U Value
250	280	0.18
230	260	0.20
210	240	0.21
180	200	0.25
160	180	0.26
140	160	0.32
120	140	0.37



Our MasterBar Roof & Wall Spacer System is manufactured in Worcestershire by MasterClad Systems Ltd, which is a division of Hornsey Steel Panels and Profiles Ltd.

The MasterBar Roof & Wall Spacer System along with our entire range of roofing and cladding products can also be purchased and collected from our MasterClad Systems Ltd depot in Worcestershire.

Visit our trade counter at
Unit 7 & 8, Little Lightwood Farm,
Lightwood Lane, Cotheridge,
Worcester WR6 5LT

Open Monday to Friday 9am to 5pm

Call: 01905 674343

Email: info@masterclad.co.uk

Visit: masterclad.co.uk



MasterBar has
been fully tested to
European industry
standards for extra
peace of mind

QUICK AND EASY ASSEMBLY



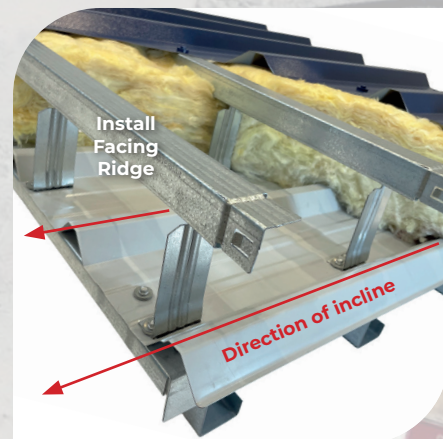
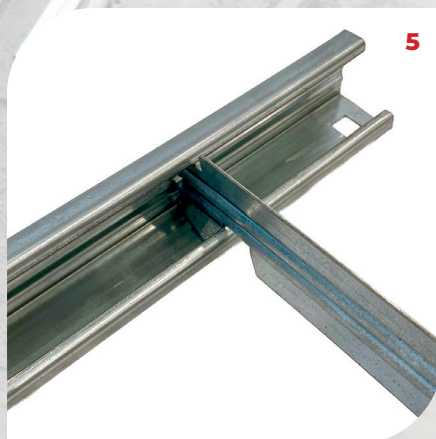
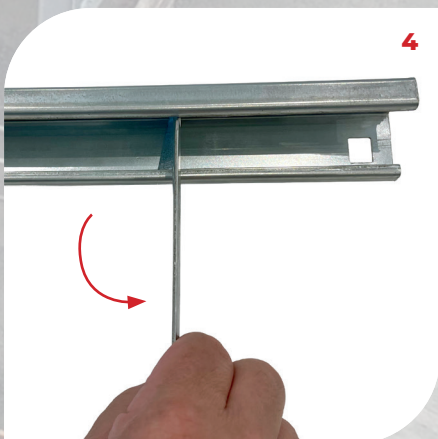
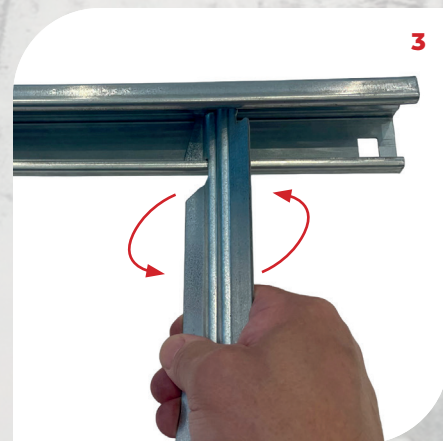
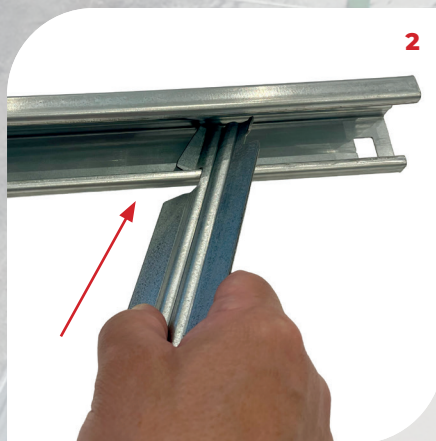
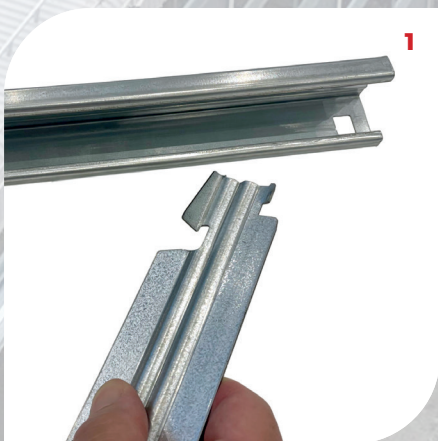
Our MasterBar Roof & Wall Spacer System has been specifically designed to be rapidly installed, using a really simple and secure twist-and-lock method - saving you both time and money.

BASIC INSTALLATION PROCEDURE

The first stage is to ensure that the liner sheets have been securely fitted in place to the Zed purlins or Cee sections and sealed correctly. If you are carrying out an over-roof refurbishment, then the old existing top sheet will be your liner - make sure that any repairs have been carried out prior to installing the MasterBar Roof & Wall Spacer System.

Using the twist-and-lock method shown below, locate the first bracket within 100mm of the end of the bar, subsequent brackets should then be located within the bar at around 1 metre intervals, to suit the profile of the liner. At the end of the first bar, locate a bracket within the last 100mm, position the bar and bracket assembly on the roof - ensuring that the 40mm leg of the bar is facing up the pitch of the roof towards the ridge. Fix the assembly in place through the pre-drilled holes in the foot of each bracket, into the liner and purlin below with self-drilling fasteners.

Introduce the female end of the next bar to the male end of the previous bar and push-fit until it clicks securely into place. Once again, locate a bracket within the first 100mm of the bar and continue the process until you reach the end of your run of bars.





MasterBar™

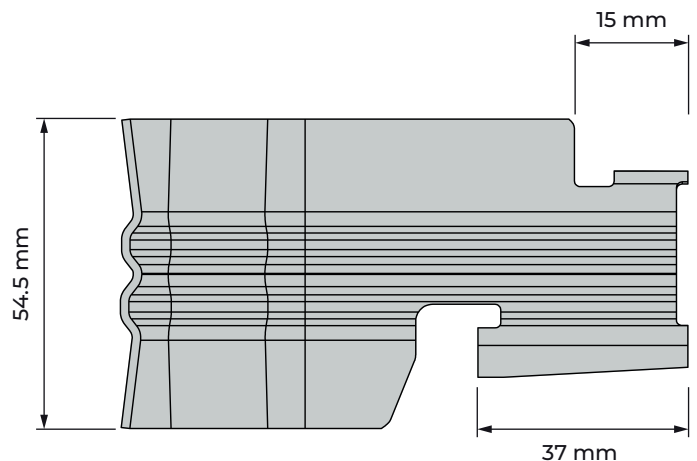
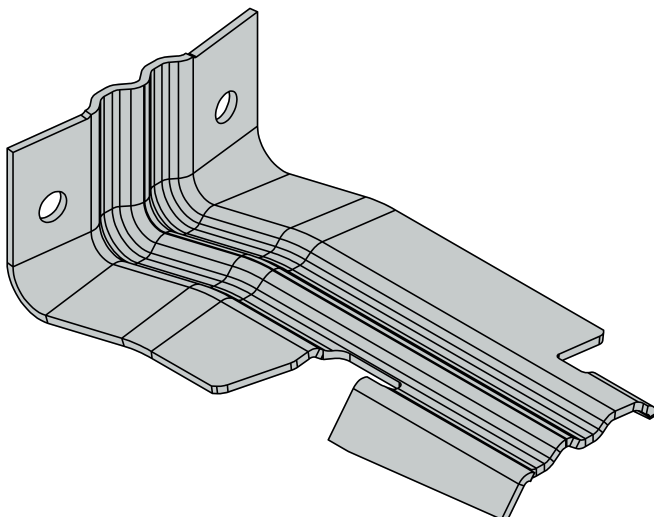
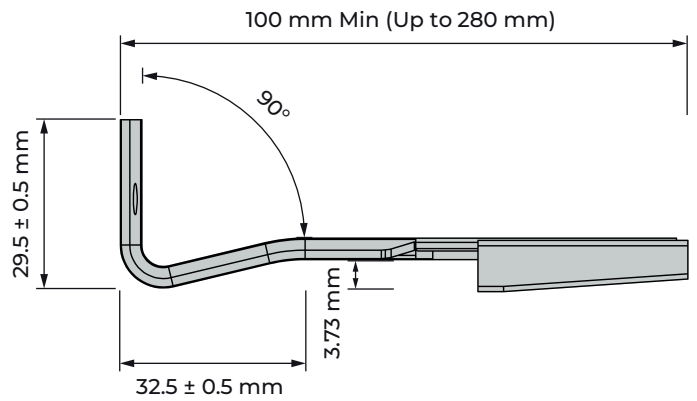
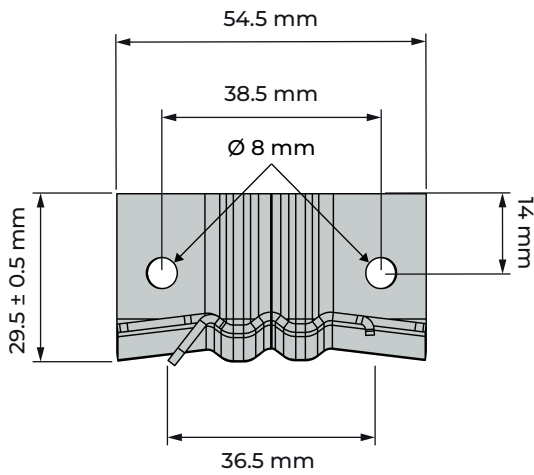
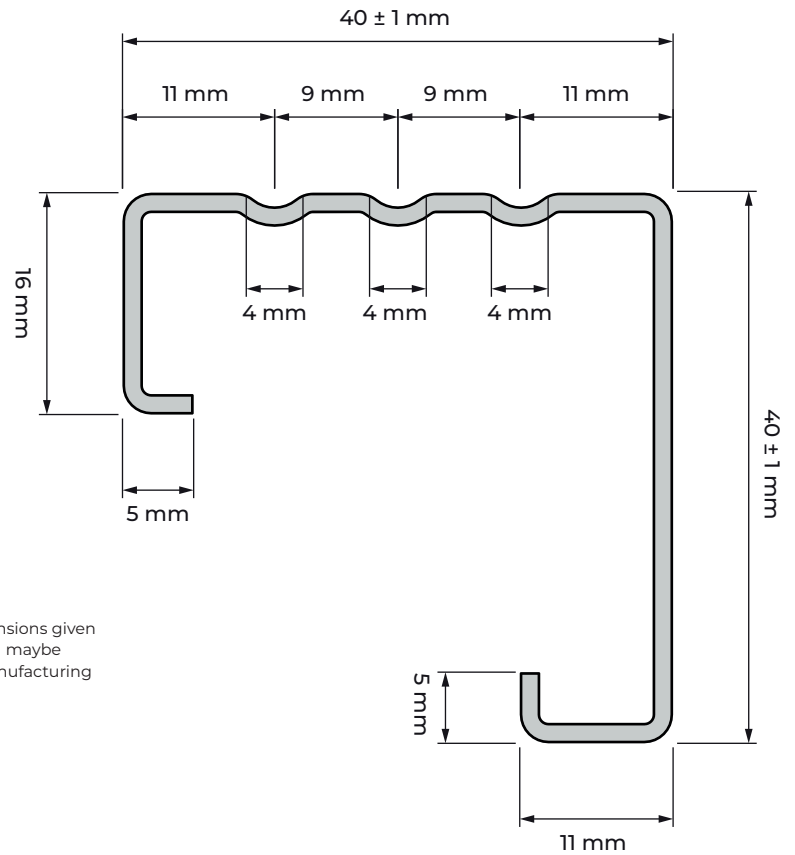
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All illustrations and dimensions given are for guidance only and maybe subject to a standard manufacturing tolerance of +/- 1mm.



RIGOROUSLY TESTED

SUMMARY OF THE INDEPENDENT TEST RESULTS CARRIED OUT
BY LUCIDEON IN ACCORDANCE WITH EAD 200012-00-0401:2015

Height of bracket supplied 240mm • Gauge 1.6mm



Annex A • In-Plane Sway Stability

Test Preparation

Two brackets were slotted into the bar (one at each end) 100 mm from the edge. The base of the brackets were then screwed into a top hat, which was clamped onto the floor to stop any movement that could have affected the results. One end of the bar had a 450 g weight attached to it and the other had a transducer to measure the deflection.

Annex A • In-Plane Sway Stability

Test Method

A load of 1.2 kN was pumped vertically onto the centre of the steel block gradually at the rate of 150 ± 50 N/s on top of the bar and held for 3 minutes. If the load held then the bar and brackets had passed. The load was then raised and taken to failure. The test was repeated twice more.

Annex A	Target Load to Hold (kN)	Load Held (Y/N)	Maximum Load (kN)
1	1.2	Y	2.137
2	1.2	Y	2.211
3	1.2	Y	2.381

Annex B • Detachment of Bar to Bracket Connection

Test Preparation

A single bracket was screwed into the top hat. The bar was cut down into 300 mm lengths and slotted onto the bracket, which sat directly in the middle between a small cage and allowed for the bar to be pulled upward.

Annex B • Detachment of Bar to Bracket Connection

Test Method

A load was taken up to 3 kN at the rate of 150 ± 50 N/s and held for 3 minutes. If the bar and bracket held and the bracket hadn't been ripped out, then the test was completed and it had passed. The test was then repeated twice more.

Annex B	Target Load to Hold (kN)	Load Held (Y/N)
1	3	Y
2	3	Y
3	3	Y

Annex C • Vertical Compression of the Bracket

Test Preparation

A single bracket was screwed into the top hat with the 300 mm bar slotted onto it. The bracket sat in the middle of the bar.

Annex C • Vertical Compression of the Bracket

Test Method

The ram applied a load of 1.2 kN at the rate of 150 ± 50 N/s. The bar and bracket must be able to withstand this to be deemed as a pass. Once the test was complete, two more must be carried out to avoid anomalies.

Annex C	Target Load to Hold (kN)	Load Held (Y/N)	Deflection at Target Load (mm)	Maximum Load (kN)
1	1.2	Y	10.55	3.154
2	1.2	Y	9.20	3.750
3	1.2	Y	9.38	2.730

Annex D • Resistance of the Bar to Bending

Test Preparation

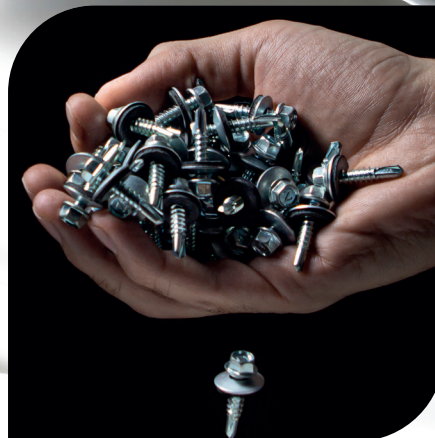
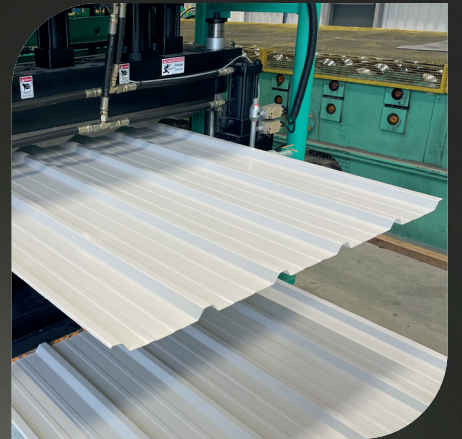
Two brackets were slotted onto the bar (one at each end) 100 mm from the edge and each bracket was screwed into the top hat underneath the ram. On top of the bar, there was a 100 mm steel block where the ram would apply its load.

Annex D • Resistance of the Bar to Bending

Test Method

A 1.2 kN load was applied to the centre of the bar with a 100 mm steel block and held for three minutes. If it was able to hold the load then the test will have been completed and the samples had passed. This test was then repeated twice more resulting in a total of three tests.

Annex D	Target Load to Hold (kN)	Load Held (Y/N)	Deflection at Target Load (mm)
1	1.2	Y	2.56
2	1.2	Y	3.35
3	1.2	Y	2.95



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are within the built
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