

# Folded Angle

**Installation Guide** 

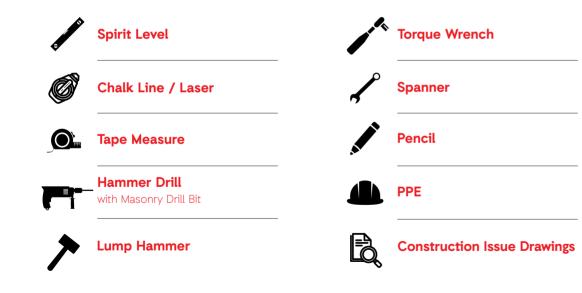


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# Folded Angle

# Installation tools and information required

Note: These installation instructions are relevant for all variations of Folded Angle systems including standard and inverted.



# Introduction

IG's Folded Angle comprises an angle support shelf, lock washers, shims and fixings. Systems are designed to suit applications where the cavity is small or where there is a requirement for the cavity to be closed at the support position. All systems are designed to suit project requirements.

Angle support shelves and lock washers are manufactured from either 304/304L Austenitic Stainless Steel (1.4301/1.4307) or 316/316L (1.4401/1.4404) on request. Thermal shims are manufactured from A1 firerated composite material and stainless steel shims of various thicknesses are available on request.

For any support required, contact our technical team support@igmss.co.uk

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# Folded Angle



While Folded Angle units are easy to handle, the components are produced from stainless steel plates and may have sharp edges. Care must be taken when handling units and suitable PPE should be worn at all times. When lifting or carrying a Folded Angle unit, you should undertake a personal risk assessment, paying attention to the size and weight of the product which is clearly detailed on each product label and pallet delivered.

Do not use or install damaged Folded Angle units.

# Storage

All factory-wrapped goods received must be stored on a level and cordoned off area so they are clearly visible. Care must be taken when opening the wrapping on the delivered product. All goods must be opened and inspected immediately after delivery. Any irregularities must be reported in writing to IG Masonry Support within 5 days of delivery.

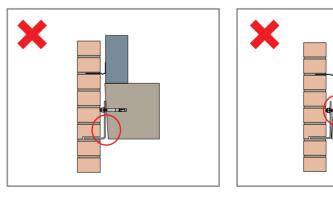
## Disposal

The Folded Angle system's stainless steel components are fully recyclable, minimising waste and reducing its carbon footprint at the end of its service life. Thermal Shims should be safely disposed of in landfill.

### **Pre-installation check**

Before installing Folded Angle, you must ensure the sub-structure is plumb.

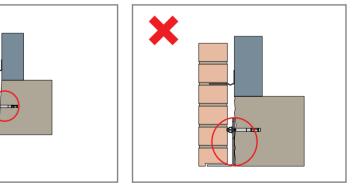
If the structure is not plumb, rectify the issue. If this is not possible, please consult our technical team for advice.



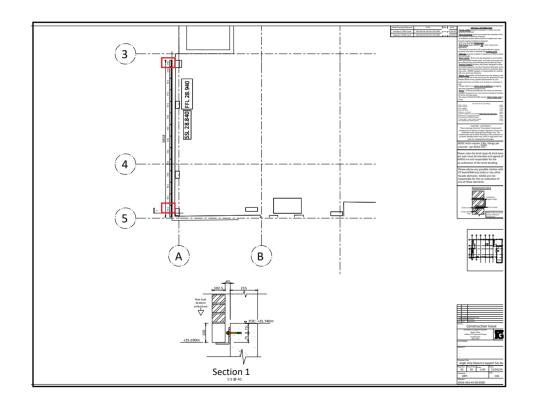
To achieve the design capacity of Folded Angle, units must be installed in accordance with these instructions.

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### Non-plumb structure examples



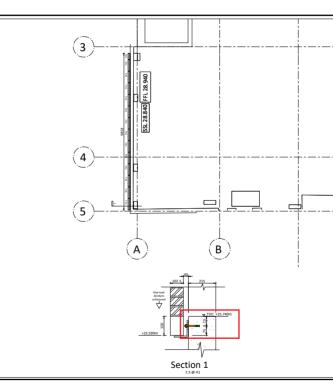
# Follow Construction Issue Drawings



Use the Construction Issue Drawings provided by IG Masonry Support to install each Folded Angle unit in the correct location.

Note: The reference number (example highlighted in this drawing) correlates to the same reference number shown on the printed label on each unit.

# **Mark fixing level**



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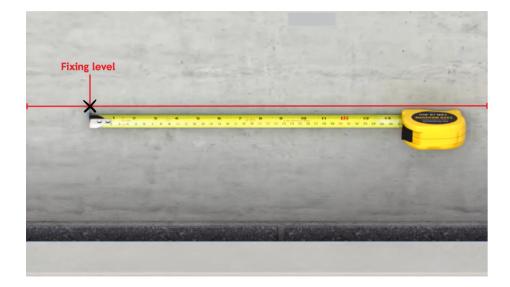
# Post-fix to concrete solution / fix to steel solution

Identify the fixing level on the Construction Issue Drawings and mark the level on the substructure using suitable equipment i.e. laser level, chalk line or pencil mark.

### **Cast-in Channel solution**

If there is Cast-in Channel installed, check that it is at the correct height, as per the Construction Issue Drawings.

# Mark fixing locations



### Post-fix to concrete solution / fix to steel solution

Select the appropriate unit using Construction Issue Drawings. Offer each unit up to the substructure at the fixing location level and mark the fixing point.

### **Cast-in Channel solution**

As long as the channel is installed in the correct location, no action is required at this step.

# Install fixings

### Post-fix to concrete solution / fix to steel solution

Drill the substructure in the locations marked using a suitable hammer drill for concrete and suitable drill bit for a steel structure.

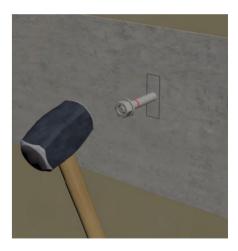
Note: Refer to Construction Issue Drawings for the drill hole diameter, depth and fixing type. Refer to the fixing box for further installation instructions.

### **Cast-in Channel solution**

Refer to the Construction Issue Drawings to determine fixing type. Insert the T-head fixing in the channel and rotate until it is in the locked position.

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# Offer up Shims and Folded Angle unit

# IG

### Post-fix to concrete solution / fix to steel solution / Cast-in Channel solution

Offer up the thermal shim and Folded Angle unit then locate the fixings within the serrated gap at the back of the shelf angle.

Note: Do not rest the angle on the compressible filler during installation. The gap of 2mm should be maintained at all times between the filler and the soffit of the shelf.

# Offer up further components



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### Post-fix to concrete solution / fix to steel solution / Cast-in Channel solution

Offer up the lock washer, washer and nut, and finger tighten.

(Use a spanner if required)

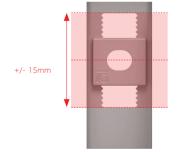
Ensure the back of Folded Angle is in full contact with the shim and structure.

- A Lock washer
- B Washer
- C Nut

Ensure Folded Angle unit is level using a spirit level.

### Vertical adjustment

The serrated area at the back of the Folded Angle allows up to 15mm of adjustment in either direction on the vertical plane via the lock washer.



### Shimming

To accommodate an increase in cavity width, shims can be inserted between the support structure and the Folded Angle unit. Only IG shims should be used.

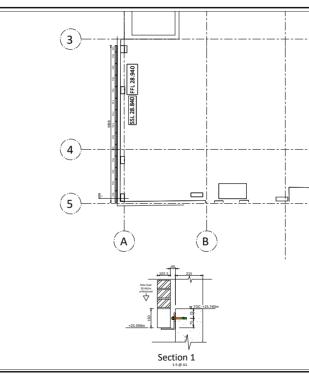
Please refer to Folded Angle Technical Data Sheet for further guidance on Shimming.

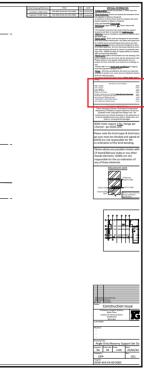


Steel Shim

Thermal Shim







Using a calibrated torque wrench, torque all the fixings using the correct torque settings detailed on the top right of the Construction Issue Drawings.

Spray the head of the fixing as you go along, confirming they have been tightened to required torque setting and installation of component is complete.

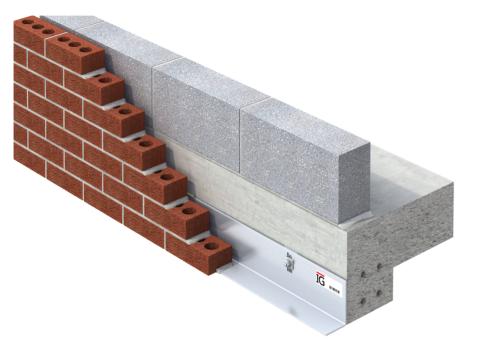
Once torqued, you must not re-torque.

Position compressible filler to underside of horizontal support shelf.

Maintain a 2.5mm space above the filler and install pistol bricks above masonry support unit.

Build a maximum of 1.5m of brickwork on the shelf until the mortar has cured (1-2 days dependent on weather conditions) before continuing with further brickwork.

This concludes the installation of Folded Angle. Continuation of higher-level brickwork can commence.



The IG Masonry Support technical team are on hand to provide support when installing Folded Angle. To receive support, please call +44 (0)1283 200 157 or email support@igmss.co.uk

### Additional installation materials



For additional installation materials, please visit **igmasonrysupport.com** or scan the QR code. Alternatively please refer to the supporting documentation supplied with this guide.

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