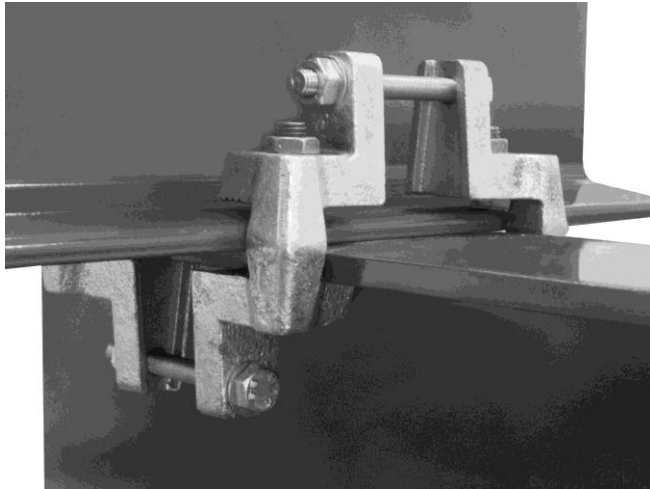


Girder Fix

A KEE SAFETY PRODUCT



Instructions for use :

Girder Fix 1 Ton Beam Clamp Assembly

Part code: GFIX1T

Manufacturer: Kee Safety International

Metric Website: www.beamclamp.com

US Website: www.inasolutions.com

Girder Fix is an off the shelf engineered clamping solution that provides a way to connect two steel sections together at 90 degrees without the need for on-site drilling or welding. The system is provided with four clamps to connect into each corner of where the steel sections cross over and all that is required to complete the connection are some linking fasteners to the correct specification. The specification and method to calculate the length is explained opposite under the heading "Linking Fasteners - Specification".

The Girder Fix system provides a guaranteed connection every time it is installed correctly without the need for on-site testing or relying on the skills of the installer. No removal of the protective coatings on the existing steel or holes are required to make each connection. Every connection is made using simple hand tools and semi-skilled labour.

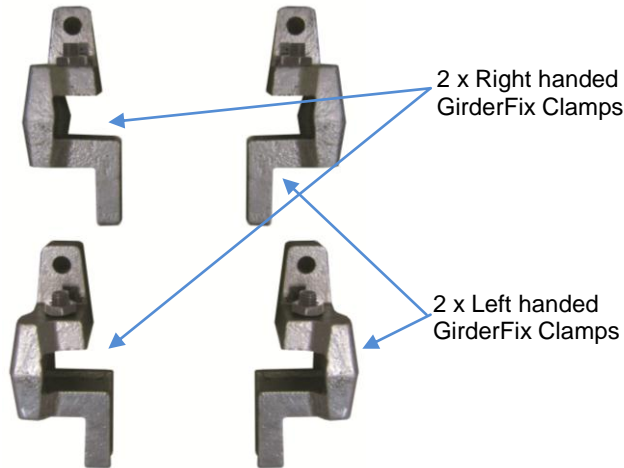


Safety instructions!

- Never exceed the maximum permissible loads. Before using the Girder Fix system it is essential to check that the steel it is connecting to can support the load.
- Use appropriate PPE for resistance against thermal heating of the materials
- Use Girder Fix only as described in these installation instructions.
- When using Girder Fix you should check the following parameters
 - The thickness of each steel section
The total of both sections should not exceed 24mm / (15/16")
 - The width of each steel section
(Minimum 80mm (3 - 1/8") / , Maximum 250mm (9 -13/16")
 - The angle cross over of the steel should always be 90 degrees
 - Tightening torque of clamping screw (20Nm - 15 lbs/ft)
 - Load (e.g. tensile load or frictional load or both) – See overleaf

Component Check

- Each Girder Fix system comes with the following 5 items, please check before installation that you have all of them.



1 x 6mm (1/4")
A/F Socket
Drive with 1/2"
square drive

Tools Check:

- The Girder Fix system only requires basic hand tools for installation as below:

Tools not supplied

- 1 x 19mm (3/4") Across Flats Spanner/Wrench
- 2 x 17mm (11/16") Across Flats Spanners/Wrench
- 1 x Torque wrench to achieve 20Nm (15 lb/ft)



Tools supplied

- 1 x 6mm (1/4) A/F Socket to achieve 20Nm (15 lb/ft)



LINKING FASTENERS - SPECIFICATION

The GirderFix **MUST NOT** be used without the correct specification of fasteners to join the four clamps in each corner together.

The bolts or setscrews should be M10 grade 8.8 or 3/8" SAE grade 5 as a minimum.

The length of the bolts required is determined by the width of the section being connected together in the direction that the bolt will be installed. When two sections of the same width are joined together all four bolt lengths will be the same, however, when the widths are different there will be two pairs of bolts of the same length.

Bolt Length 1

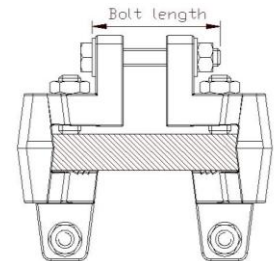
Length = Beam width 1 - 30mm / (1-1/8")

e.g. Beam width 1 = 100mm / (4")
Bolt length 1 = 70mm / (2-13/16")

Bolt Length 2

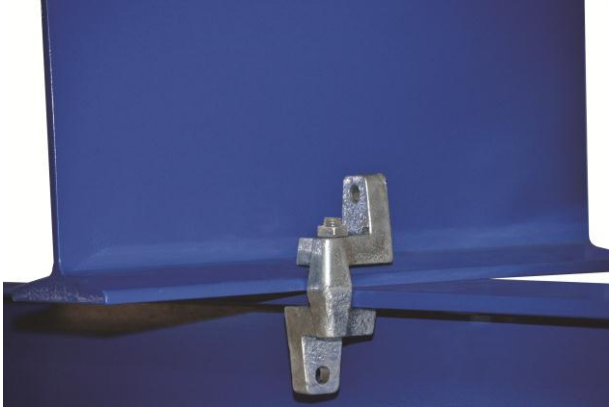
Length = Beam width 2 - 30mm / (1-1/8")

e.g. Beam width 2 = 120mm / (4-3/4")
Bolt length 2 = 90mm / (3-9/16")

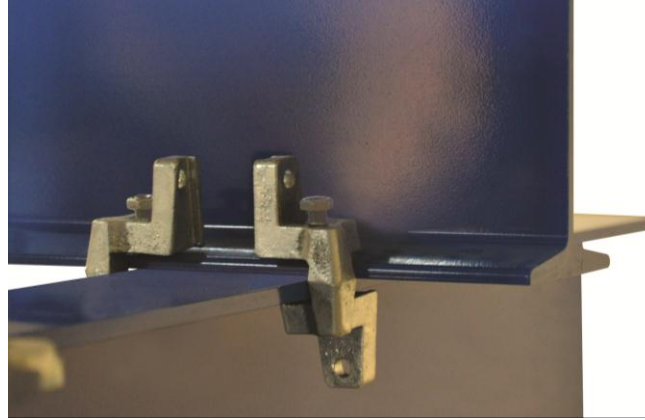


THIS PRODUCT MUST BE USED WITH LINKING FASTENERS THAT NEED TO BE PURCHASED SEPARATELY. PLEASE SEE SECTION TITLED LINKING FASTENERS - SPECIFICATION

Step 1
Install the first GirderFix Clamp into one corner by hand ensuring they are in contact in both directions.



Step 2
Repeat this for the other three corners ensuring the connecting holes for the bolts are facing each other and in line.



Step 3
Once the sections are in the desired position, tighten each clamping screw to the recommended torque of 20Nm (15 ft/lbs)



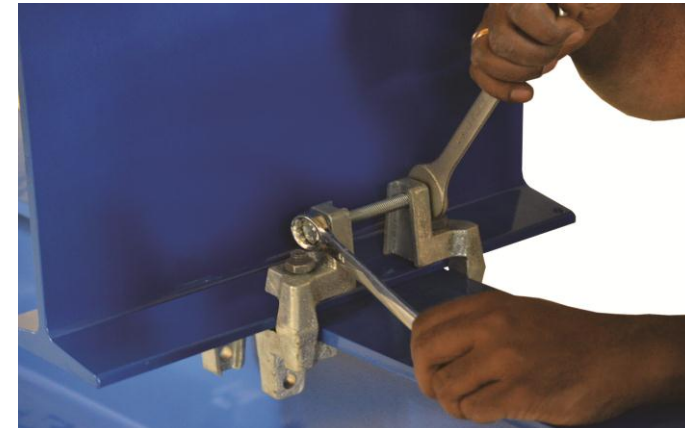
Step 4
Ensure the locknut is tightened to the top of Girder Fix Clamp using the method finger tight plus 1/4 turn.



Step 5
Connect the clamps together using fasteners that meet the specification in the section "Linking fasteners".



Step 6
Tighten the linking fasteners together using the method finger tight plus 1/2 turn as below.



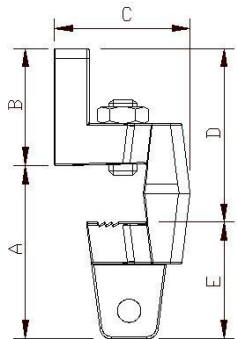
Technical Information Note: All of the Safe Working Loads (SWL) below include a 5 to 1 Factor of Safety (FOS)

Metric

Product	Dim A	Dim B	Dim C	Dim D	Dim E	Combined Flange thickness	Flange Width	Tightening Torque clamping screw (Nm)	Tensile load (4 bolts) (kN)	Frictional load (4 bolts) (kN)
Code	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			
GFIX1T	80	55	60	80	55	12 to 24	80 to 250	20	10	5.5

Standard Units

Product	Dim A	Dim B	Dim C	Dim D	Dim E	Combined Flange thickness	Flange Width	Tightening Torque for clamping screw (ft/lbs)	Tensile load (4 bolts) (lbs)	Frictional load (4 bolts) (lbs)
Code	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)			
GFIX1T	3 - 3/16	2 - 3/16	2 - 3/8	3 - 3/16	2 - 3/16	1/2 to 15/16	3 - 3/16 to 9 - 13/16	15	2248	1236



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