

## TEST CERTIFICATE No.: INZ46432-03

Client:	Fortress Fasteners
Order No.:	Daniel
Sample Description:	12kN Pile to bearer connection assembly as supplied
Identification:	Not supplied
Material Specification:	N/A
Tested in accordance with:	As per client instruction

**TEST:** One 140x45mm bearer was fixed by two nail plates, one on each side of 100x100mm pile. Three skew nails were also used to reinforce the connection. The assembly was prepared by the client.

Load was applied along and across the axis of the bearer while the pile is fixed.  
 Maximum breaking load of the connection was recorded.

**RESULT:**

Maximum breaking load along the bearer axis:	17.98 kN
Findings:	Timber split, nails pulled out
Maximum breaking load across the bearer axis:	20.12 kN
Findings:	Timber split, nails pulled out

**Note:** Load was applied on the bearer without disturbing the connection. The resultant load was on the centre of the bearer directly above the pile.



Assembly setup



Failure after loading

Acceptance Criteria: Report findings

Tested by: T. Qiu Date: 12-Mar-14

Checked by: N. Woods Date: 12-Mar-14

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## TEST CERTIFICATE No.: INZ46432-05

Client: Fortress Fasteners  
 Order No.: Daniel  
 Sample Description: 12kN Joist to bearer connection assembly as supplied  
 Identification: Not supplied  
 Material Specification: N/A  
 Tested in accordance with: As per client instruction

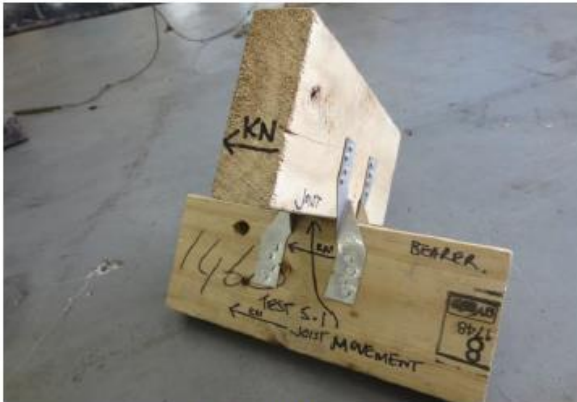
**TEST:** One 140x45mm bearer was fixed perpendicularly by four joist ties to the same size joist, one on each corner of the connection. Four skew nails were also used to reinforce the connection. The assembly was prepared by the client.

Load was applied along and across the axis of the joist while the bearer is fixed.  
 Maximum breaking load of the connection was recorded.

**RESULT:**

Maximum breaking load along the joist axis:	13.90 kN
Findings:	Timber split, nails pulled out
Maximum breaking load across the joist axis:	16.92 kN
Findings:	Timber split, nails pulled out

**Note:** Load was applied on the joist without disturbing the connection. The resultant load was on the centre of the joist directly above the bearer.



Assembly setup



Failure after loading

Acceptance Criteria: Report findings

Tested by: T. Qiu

Date: 12-Mar-14

Checked by: N. Woods

Date: 12-Mar-14

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