

Certification Body:



Bureau Veritas Australia Pty Ltd

11/500 Collins Street
Melbourne VIC, 3000
Ph: 1800 855 190
www.bureauveritas.com.au

Certificate number: CM70055 Rev4

THIS TO CERTIFY THAT

MiTek Engineered Building Products

Type and/or use of product:

MiTek Engineered Building Products are designed and manufactured for use in connecting timber to timber, timber to concrete, timber to steel, steel to steel and provide structural support to timber and light steel construction.

Description of product:

MiTek Engineered Building Products are a range of building products and associated fasteners applicable for structural timber connections and bracing. The products are manufactured from hot dip Galvanised (HDG) steel coil, zinc coated rolled steel sections, stainless steel coil and include zinc coated bolts, Ruspert coated screws, and galvanised and stainless-steel nails.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

NCC 2022

Certificate Holder:

MiTek

MiTek Australia Limited

46 Monash Drive Dandenong South VIC, 3175 Ph: 03 8795 8888 www.MiTek.com.au

Gund-

Volume One	Volume 7	Two

Performance Requirement(s) B1P1 (1), limited to Structural reliability H1P1 (1), limited to Structural stability and resistance

(2) (a),(b),(c),(j) and (k) (2) (a),(b),(c),(j) and (k)

Deemed-to-Satisfy Provision(s): N/A N/A

State or territory variation(s): N/A N/A

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Sam Guindi – Product Certification Manager

Bureau Veritas Australia Pty Ltd

Harley lances

Harley Parkes – Unrestricted Building Certifier

McKenzie Group Consulting

Date of issue: 23 December 2021 Revalidated: 05 April 2024

Date of expiry: 27 February 2026







Limitations and conditions:

- 1. MiTek Engineered Building Products shall only be used for the purpose for which each are designed and manufactured.
- 2. The size and number of the nails and screw fixings specified by the manufacturer shall be followed as per product data sheets as available on https://www.mitek.com.au/products/building-products/ or EasyCAT MiTek App.
- 3. Selection of connector and fastener material, and installation shall be in accordance with the manufacturer's instructions as outlined on https://www.mitek.com.au/products/building-products/ or EasyCAT MiTek App.

Building classification/s:

Volume 1 – Class 2 to Class 9 buildings Volume 2 – Class 1 and Class 10 buildings

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the certificate holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

Disclaimer: The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate.



APPENDIX A - PRODUCT TECHNICAL DATA

A1 Type and intended use of product

Refer to page 1 for intended use of product.

A2 Description of product

Refer to page 1 for description of product. The full list of connectors covered under this certificate is as follows;

1.	BlockFast	13.	JoistHanger	25.	StudLok
2.	Boomerang Connector	14.	JoistStrap	26.	StudStrap
3.	BraceWall Bracket	15.	MaxiBrace	27.	Trip-L-Grip
4.	Concealed Purlin Cleat	16.	MiniBrace	28.	TrussGrip
5.	Concrete FixingCleat	17.	MultiGrip	29.	TylokPlate
6.	ConnectorPlate	18.	NailonPlate	30.	Uniledger
7.	CreeperConnector	19.	PlateTie	31.	Universal Girder Bracket
8.	CycloneTie	20.	SpeedBrace	32.	Universal Trip-L-Grip
9.	FastFit Girder Bracket	21.	SplitHanger	33.	WallStrap
10.	Hip Girder Bracket	22.	StrapNail	34.	ZClip
11.	I-BeamHanger	23.	Structural BracingStrap and Tensioner	35.	TrussLok
12.	InternalWall Bracket	24.	Structural TieDown Strap		

A3 Product specification

The product specification for each of the products listed above are available from https://www.mitek.com.au/products/building-products/

A4 Manufacturer and manufacturing plant(s)

46 Monash Drive, Dandenong South, VIC 3175, Australia

40 Neales Road, East Tamaki, Auckland 2013, New Zealand

A5 Installation requirements

MiTek Engineered Building Products shall be installed in accordance with the MiTek Structural fixings installation manuals, available from https://www.mitek.com.au/products/building-products/

A6 Other relevant technical data

1. MiTek Australia Ltd. Engineered Building Products Technical Compliance Statement

This document provides technical information regarding the structural and durability performance of the MiTek Engineered Building Products.



APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

Structural assessment:

Certificate number: CM70055 Rev4

A2G2(2)(a)/A5G3(1)(d) – A report from an accredited testing facility (BlueScope Steel Limited),

A2G2(2)(a)/A5G3(1)(e) – A report from a professional engineer or suitably qualified person (Varun Bharti and Tung Pham, MiTek Australia & James Cook University).

A2G2(2)(a)/A5G3(1)(f) - Another form of documentary evidence, such as but not limited to a Product Technical Statement

B2 Reports

- 1. Tung Pham Corporate Engineer Manager MiTek Australia, StudLok Test Report, reference no: 150405, 5th August 2016.

 This report shows results to testing of the StudLok screws to determine the limit state design wind uplift capacities for tie-down wall plates to stud.
- 2. Bluescope Steel Test Certificate No: 23847WPD/17, 8th May 2017.

 This test report shows a chemical analysis to AS/NZS 1397 and tensile testing to AS1391 for ZINCFORM® G300 Mill Edge Z275, sample provided by MiTek Australia Ltd.
- 3. Bluescope Steel Test Certificate No: 03758WPD/17, 20th January 2017.

This test report shows a chemical analysis to AS/NZS 1397 and tensile testing to AS1391 for ZINCFORM® G300 (R) Z275, sample provided by MiTek Australia Ltd.

- 4. Cyclone Testing Station James Cook University Test report No: TS1030, 30th November 2015.
 - This test report shows the uplift strength of the BlockFast Truss Strap for Truss Strap to Bond Beam Connections to AS/NZS 1170.0
- 5. Varun Bharti Technology Development Manager APAC Connector Plate CP60100-G300), dated 25/09/2023.
 - This report provided design capacity calculation of CP60100 for JD4 and JD5 group timber and confirms that the product is fit for the purpose for to connect/ splice wall frame at top plates, floor joists/ bearers and any two pieces of timber over a support.
- 6. Varun Bharti Technology Development Manager APAC Internal Wall Bracket (IWB), dated 25/09/2023.
 - This report confirms that MiTek IWB is 'fit-for-purpose' to connect Non-Loadbearing Internal Walls in Residential Timber Framed Construction to Nail Plated Timber Roof Trusses with a min. clearance of 10mm from underside of bottom chord or ceiling batten (whichever is applicable), as per requirements of AS 4440: Clause 2.2.2 and AS 1684: Clause 6.2.5.2.
- 7. Varun Bharti Technology Development Manager APAC Maxi Brace & Mini Brace G300 Z 275, dated 25/09/2023.
 - This report confirms that MiTek Maxi Brace & Mini Brace G300 Z 275 are 'fit-for-purpose' to design and manufacture structural wall bracing as per recommendations of AS 1684.2 and AS 1684.3 in Table 8.18 (c) and Table 8.18 (a) respectively AND recommendations in AS 1684.4 in Table 8.3 (A) and Table 8.3 (C).
- 8. Varun Bharti Technology Development Manager APAC Strap Nail G300 Z 275, dated 25/09/2023.
 - This report confirms that MiTek Strap Nail [SN50100, SN75100] is 'fit-for-purpose' to connect/ splice wall frame at top plates to establish continuity for purpose of transfer of axial-tensile forces as per requirements of AS 1684 Clause 9.2.8.
- 9. Varun Bharti Technology Development Manager APAC TD2230 Structural TieDown Strap 30mm x 0.8mm: G300 Z 275, dated 2nd Oct 2023.
 - This report confirms that MiTek Structural TieDown Strap TD2230 is 'fit-for-purpose' in all applications as are recommended for G.I. strap 30mm x 0.8mm by AS 1684. Connection and installation as per recommendations in AS 1684.
- 10. Varun Bharti Technology Development Manager APAC ZC353 Z Clip, dated 25/09/2023.



This report confirms that MiTek Z Clip [ZC353] is 'fit-for-purpose' to connect floor joists/ trusses to internal bracing walls as per recommendations of AS 1684 – Table 8.22 (b) and Clause J.5 in Appendix 'J'.

- 11. Tung Pham Corporate Engineer Manager Screw Fixed Joist Hanger, Report No.150012, dated 14/11/2023.
 - This report provides characteristic capacities for a range of joist hanger sizes as per AS 1649-2011 Category "D" procedure using MiTek MSA1430 screw fixing. The report confirms that the recommended limit state design capacity for a given joist hanger size and joint group shall be the minimum of (i) connector capacity as per AS1720.1.
- 12. Varun Bharti Technology Development Manager APAC Concrete Fixing Cleat CF1 Report, Report No.150401, dated 26/09/2023.

 This report confirms achievement of the prototype test requirements of Concrete Fixing Cleat CF1 for JD4 design capacity per AS 1720.1.
- 13. Tung Pham Corporate Engineer Manager Concealed Purlin Cleats CPC40 and CPC80 Report, Report No. 150368-GAL1 Rev1, 10/12/2020.

 This report provides the results of the design wind uplift capacities for the Concealed Purlin Cleats for housing application and joint group JD4 as per Category D Type T testing to AS 1649. The test results confirms that the tested values are greater than the published values, therefore the test results verify the load data in the data sheet.
- 14. Varun Bharti Technology Development Manager APAC Hip Girder Bracket Report, Report No.150374, dated 28/09/2023.

 This report confirms achievement of the prototype test requirements of Hip Girder Bracket for JD4 design capacity per AS 1720.1.
- 15. Tung Pham Corporate Engineer Manager I-Beam Hanger Report, Report No.150139, dated 25/09/2023.
 - This report confirms that all face fixed I-beam hangers connected using 8 and 10 / 3.75φ x 35 mm reinforced MiTek® nails passed the required Design and Equivalent Test Loads based on AS1720.1 nail capacities.
 - This report also confirms that all top fixed I-beam hangers connected using 6 / 3.75φ x 35 mm reinforced MiTek® nails in the top fix arrangement, passed the required Design and Equivalent Test Loads based on the capacity of 8 / 3.75φ x 35 nails in AS1720.1 for the JD5, JD4 and JD3 joint groups.
- 16. Tung Pham Corporate Engineer Manager Joist Strap with Nail and Screw Fixings Report, Report No.150020, dated 18/09/2023.
 - This report provides the result of testing to AS 1649, to obtain the design capacities of Joist Strap with Nail and Screw Fixings and confirmed that the design capacities of the Joist Straps with the combined nail and screws fixings for joint groups JD5 and JD6 are as per current published values.
- 17. Tung Pham Corporate Engineer Manager SpeedBrace Report, Report No.150006, dated 07/02/2023.
 - This report confirms tensile testing was conducted on the MiTek SpeedBrace to reconfirm its tensile capacity against AS 4440 [1] specified value of 8.4kN minimum.
- 18. Tung Pham Corporate Engineer Manager SplitHanger Report, Report No.150223, dated 25/09/2023.
 - This report provides the characteristic capacities of SplitHanger calculated in accordance with AS 1649 Category D.
 - It also provides the design capacities calculated for joint groups JD4.

Certificate number: CM70055 Rev4

- The test results verify the current published design capacities of the SplitHangers SPH180 and SPH220. However, it has been found that the design capacities of the SplitHanger SPH140 are lower than the current published values. Therefore, it recommends updating the data sheet to the changes in the values.
- 19. Tung Pham Corporate Engineer Manager Structural Bracing Strap Report, Report No.150049, dated 14/01/2022.
 - This report reconfirms that the capacities of the Structural Bracing Straps against the listed values on EasyCAT. The design capacities of the straps were determined from prototype testing in accordance with AS 4600 Cold-formed steel structures.
- 20. Varun Bharti Technology Development Manager APAC Tensioner Test Report, Report No.150137-1, dated 06/10/2023.
 - This report reconfirms that the new engaged nut tensioner has an equivalent performance with the existing tensioner. The new wing nut tensioner is approximately 25% less rigid than the others, but it still performs satisfactorily.
- 21. Tung Pham Corporate Engineer Manager StudStrap Report, Report No.150129, dated 26/09/2023.



This report provides the characteristic capacities of SplitHanger calculated in accordance with AS 1649 Category C.

It also provides the limit state design capacities.

The test results verify the achievement of 6.1kN for joint group JD5 or higher design capacity as per current published value in the product data sheet.

- 22. Tung Pham Corporate Engineer Manager Tylok Plate Report, Report No.150040 (ME230904), dated 02/10/2023.
 - This report covers the testing of MiTek Tylok Plate to the requirements of Category C parallel and perpendicular type AS1649 test configuration and confirms the published design capacities.
- 23. Varun Bharti Technology Development Manager APAC Compliance of MiTek Universal Girder Bracket, dated 01/11/2023.
 - This report reconfirms that MiTek Universal Girder Bracket [GBM, GBH, GBB] is 'fit-for-purpose' to transfer roof loads from secondary/ standard trusses to bottom chords of Primary/ Girder Trusses as per requirements of NCC 2022: B1P1 and as 1720.5: B1.2.
- 24. Tung Pham Corporate Engineer Manager TrussGrip Report, Report No.150021 (ME231003), dated 27/10/2023.
 - This report covers the testing of MiTek TrussGrip to confirm the published design capacities.
 - The test samples were fabricated from different lengths of timbers adopting AS 1649 [1] Category D Type H test configuration. The report confirmed that the design capacities of the TrussGrip for joint groups JD5 in Table 1 are as per current published values.
- 25. Tung Pham Corporate Engineer Manager WallStrap Report, Report No.150192, dated 03/02/2023.
 - This report reconfirms the capacities of the MiTek Wall Strap against the listed capacities on EasyCat V2.2.8. 10 samples of WallStrap (WSLH) were tested which yielded a design capacity of 3.4kN compared to the published value of 3.2kN (6.25% difference). Typical failure modes involved nail withdrawal and steel failure.
- 26. MiTek Australia Boomerang Connector (BC200) Ref No: 150051, 28/04/2008 (Reconfirmed 22/06/2023)

This report shows the limit state design capacity of the Boomerang Connector laterally loaded to AS 1720.1 (2010).

- 27. MiTek Australia Brace Wall Bracket (BWB35) Ref No: 150318, 05/11/2007 (Reconfirmed 22/06/2023).
 - This report shows the limit state design capacity of the BraceWall Bracket loaded to AS 1720.1 (2010).
- 28. MiTek Australia Creeper Connector (CC200) Ref No: 150051, 29/11/2007 (Reconfirmed 22/06/2023).

This report shows the limit state design capacity of this connector laterally loaded to AS 1720.1 (2010).

- 29. MiTek Australia CT600 Ref No: 150008, 29/03/2012 (Reconfirmed 22/06/2023).
 - This report shows the limit state design capacity of CT600 wrap around fixing loaded to AS 1720.1 (2010).
- 30. MiTek Australia MK4 Girder Bracket (GB440) Ref No: 150002, 22/08/2011 (Reconfirmed 22/06/2023).

This report shows the limit state design capacity of this connector laterally loaded to AS 1720.1 (2010).

- 31. MiTek Australia NP Nailon Plate Test report No: 150332 001, 18/01/2010 (Reconfirmed 22/06/2023).
 - This report shows the limit state design capacity of MiTek Nailon Plate laterally loaded to AS 1720.1 (2010) & AS 1649 (2001).
- 32. MiTek Australia UniLedger with VERTICAL FIXING METHOD Test Report, Report No.150313 (ME230501), dated 29/05/2023.
 - This report provides the characteristic capacities of UniLedger for vertical fixing method tested in accordance with AS 1649 Category D.
 - It also provides the limit state design capacities.

Certificate number: CM70055 Rev4

The design capacities of the vertically fixed UniLedger determined from tests for JD4 are better than the current published values below. Therefore, there will be no change required for the data.



33. MiTek Australia - PlateTie Ref No: 150016, 03/03/2009.

This report shows the limit state design capacity of MiTek Plate Tie to AS 1649 (2001).

34. MiTek Australia – Trip-L-Grip, Universal Trip-L-Grip & Multi Grip (TGL, TGU & TGM) Ref No: 150009, 17/12/2012.

This report shows the limit state design capacity of Trip-L-Grip, Universal Trip-L-Grip & Multi Grip to AS 1720.1 (2010).

35. MiTek Australia, Technical Certification TrussLok TL150, Issue No. 02/21 Rev D, 21 July 2021

This certification determines that the TrussLok screw has been designed to meet requirements of AS/NZS 1170.2-2002, AS1720.1-2010 and AS1684-2010 and is certified and signed by registered professional engineer Tung Pham.