PRODUCT CERTIFICATE

Jiangsu Bosen Aluminium Doors and Windows

CERTIFICATE NO: CM20214-v1
Original issue date: 06 August 2021
Version date: 23 November 2022
Renewal date: 05 August 2024

1 CERTIFICATE HOLDER DETAILS

Jiangsu Bosen Doors and Windows Technology Co., Ltd.
No. 66, Chengxi Avenue, Jingjiang, Jiangsu, China
litao@bosendw.com
+86 18082350185
www.bosendw.com

New Zealand Distributor Details
Sky Window Construction Ltd
28 Sydney St Petone Wellington, New Zealand
tony@skywindows.co.nz
Mob: +64 211864256
www.skywindows.nz

2 PRODUCT CERTIFICATION BODY

SAI Global Certification Services Pty Limited
(ACN 108 716 669) Trading as "SAI Global"
Operating as "Intertek & Intertek SAI Global"
JAS-ANZ Accreditation No. Z1440295AS
650 Lorimer Street Port, Melbourne, VIC 3207
www.saiglobal.com

The complaints process for this certificate can be found here:
https://saiassurance.com.au/complaints-appeals/

3 DESCRIPTION OF BUILDING METHOD OR PRODUCT

Jiangsu Bosen Aluminium Doors & Windows are a range of double-glazed windows and doors made up of Aluminium alloy joinery with a thermal break. Products are an Aluminium Awning window, Aluminium Folding Door, Aluminium Hinged Door and Aluminium Sliding Door.

*Continuation of description can be found in item **11 – Supporting Information about Description**.*
*Matters that should be taken into account in the use or application of the building method or product can be found in item **6 – Conditions and Limitations of Use.***

4 INTENDED USE OF BUILDING METHOD OR PRODUCT

Aluminium doors and windows for external use in all buildings of classified uses (under Clause A1 of the NZBC) excluding ancillary buildings.

5 NEW ZEALAND BUILDING CODE PROVISIONS

Clause B1 Structure — B1.3.1; B1.3.2; B1.3.3 (a, h, j); B1.3.4

Clause B2 Durability — B2.3.1(b); B2.3.1(c) (for hardware)

Clause E2 External moisture – E2.3.2 (contributes to); E2.3.7

Clause F2 Hazardous building materials — F2.3.1; F2.3.2; F2.3.3 (a) or (b)

Clause G4 Ventilation — G4.3.1 (contributes to)

Clause G7 Natural Light — G7.3.1 (contributes to); G7.3.2 (contributes to)

Clause H1 Energy efficiency — H1.3.1 (contributes to); H1.3.2E (contributes to)

*How the building method or product complies or contributes can be found in item **9 – Basis for Certification.***
*Any qualifications on the extent of that compliance can be found in item **6 – Conditions and limitations of use.***

6 CONDITIONS AND LIMITATIONS OF USE

a) Jiangsu Bosen Aluminium Doors & Windows are certified for use in buildings:
- within the scope of Acceptable Solution E2/AS1 Third Edition Amendment 10 (5 November 2020) paragraphs 1.1, 1.1.1, & 1.2.1, and
- with claddings and details as described in Acceptable Solution, E2/AS1 Third Edition Amendment 10 (5 November 2020).
- located in:
  - Wind Zones (as defined in NZS3604:2011 Timber framed buildings) for each model:
    - 6063-T5 - Heat Insulation of 70 Series (Aluminium Awning Window) – up to and including Extra High.
    - 6063-T5 - Heat Insulation of 75 Series (Aluminium Folding Door) – up to and including Medium.
    - 6063-T5 - Heat Insulation of 120 Series (Aluminium Sliding Door) – Low.
    - 6063-T5 - Heat Insulation of 120 Series II (Aluminium Sliding Door) - up to and including Extra High.
    - 6063-T5 - BS-OA-D070D (Aluminium Hinged Door) - up to and including Extra High.
  - all Exposure Zones, except microclimates, as defined in NZS 3604:2011 Timber framed buildings.

b) The following models of Jiangsu Bosen Aluminium Doors & Windows are certified for use in the building envelope enclosing spaces where the temperature or humidity (or both) is modified:
- 6063-T5 - Heat Insulation of 70 Series (Aluminium Awning Window)
- 6063-T5 - BS-OA-D070D (Aluminium Hinged Door)
- 6063-T5 - Heat Insulation of 120 Series II (Aluminium Sliding Door)

c) Establishing compliance with the performance criteria in Building Code clauses H1.3.1(a) and H1.3.2E shall be in accordance with either of the following:
  a. the calculation method in Acceptable Solution H1/AS1 Fifth Edition Amendment 1, (4 August 2022) or the modelling method in H1/VM1 Fifth Edition Amendment 1, (4 August 2022), for all housing and buildings up to 300 m^2.
  b. the calculation method in H1/AS2 First Edition Amendment 1, (4 August 2022) , or the modelling method in H1/VM2 First Edition Amendment 1, (4 August 2022), for buildings greater than 300 m^2.

d) Establishing compliance with the performance criteria in Building Code clause G4.3.1 shall be in accordance with Acceptable Solution G4/AS1 Fourth Edition, (27 June 2019).

e) Establishing compliance with the performance criteria in Building Code clause G7.3.1 and G7.3.2 shall be in accordance with Acceptable Solution G7/AS1 Second Edition, (29 November 2021).

f) Jiangsu Bosen Aluminium Doors & Windows shall be installed in accordance with the Jiangsu Bosen Doors and Windows Guide to Window Installation, Ver 4 - 12 March 2021.

g) This product is not certified for use where there are fire rating requirements.

NOTE: Together, items 3,4,5 and 6 define scope of use

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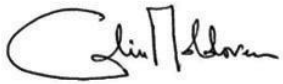
7 HEALTH AND SAFETY INFORMATION

Contact certificate holder or distributor to obtain information about material safety and handling.

8 SIGNATURES

Name and Signature of the Product Certification Body's (PCB) authorised representative
and, where different, the person assigned by the PCB to make the certification decision



Calin Moldovean
President, Business Assurance
SAI Global Assurance

9 BASIS FOR CERTIFICATION

- **B1 Structure** – by testing and comparison with provisions of Verification Method B1/VM1; Acceptable Solution E2/AS1; and referenced standard NZS 4211:2008 Specification for Performance of Windows.
- **B2 Durability** – by comparison with provisions of Verification Method B2/VM1.
- **E2 External Moisture** – by testing and comparison with provisions of Acceptable Solution & Verification Methods E2/AS1 and referenced standard NZS 4211:2008 Specification for Performance of Windows.
- **F2 Hazardous building materials** – by comparison with provisions of Verification Method F2/VM1 & Acceptable Solution F2/AS1.
- **G4 Ventilation** – by comparison with product specifications and Acceptable Solution G4/AS1.
- **G7 Natural Light** – by comparison with product specifications and Acceptable Solution G7/AS1.
- **H1 Energy Efficiency** – by testing and comparison with Acceptable Solutions H1/AS1 & H1/AS2 and Verification Methods H1/VM1 & H1/VM2.

10 SUPPORTING DOCUMENTATION FOR CERTIFICATION

Acceptable Solutions and Verification Methods for New Zealand Building Code:

- **Clause B1 Structure** – B1/VM1 Verification Method First Edition, Amendment 20 (29 November 2021); E2/AS1 Acceptable Solution Third Edition, Amendment 10 (5 November 2020); and referenced standard NZS 4211:2008 Specification for Performance of Windows.
- **Clause B2 Durability** – B2/VM1 Verification Method Second Edition, Amendment 12 (28 November 2019).
- **Clause E2 External Moisture** – E2/AS1 Acceptable Solution Third Edition, Amendment 10 (5 November 2020).
- **Clause F2 Hazardous building materials** – F2/VM1 Verification Method and F2/AS1 Acceptable Solution First Edition, Amendment 3 (1 January 2017).
- **Clause G4 Ventilation** – G4/AS1 Acceptable Solution Fourth Edition (27 June 2019).
- **Clause G7 Natural Light** – G7/AS1 Acceptable Solution Second Edition (29 November 2021).
- **Clause H1 Energy Efficiency** – H1/AS1 Acceptable Solution Fifth Edition Amendment 1, (4 August 2022); H1/AS2 Acceptable Solution First Edition Amendment 1, (4 August 2022); H1/VM1 Verification Method Fifth Edition Amendment 1, (4 August 2022); H1/VM2 Verification Method First Edition Amendment 1, (4 August 2022).

Test Reports

- **Intertek, Jiangsu Bosen Doors and Windows Technology Co. Ltd. (Aluminium Awning Window - Heat Insulation Of 70 Series) Test Report No. 200426006SHF-002-R2 (dated 04 November 2020)**
  The results demonstrated in this report are compliant with the applicable requirements of NZS 4211:2008 (Amdt 1-2014). This report established the window meets the requirements of the referenced standard NZS 4211: 2008 New Zealand Standard - Specification for performance of windows for EXTRA HIGH wind zone.

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- **Intertek, Jiangsu Bosen Doors and Windows Technology Co. Ltd. (Aluminium Folding Door - Heat Insulation Of 75 Series) Test Report No. 200426006SHF-006-R4 (dated 04 November 2020)**
  The results demonstrated in this report are compliant with the applicable requirements of NZS 4211:2008 (Amdt 1-2014). This report established the window meets the requirements of the referenced standard NZS 4211: 2008 New Zealand Standard - Specification for performance of windows for MEDIUM wind zone.
- **Intertek, Jiangsu Bosen Doors and Windows Technology Co. Ltd. (Aluminium Sliding Door - Heat Insulation Of 120 Series) Test Report No. 200426006SHF-004-R3 (dated 04 November 2020)**
  The results demonstrated in this report are compliant with the applicable requirements of NZS 4211:2008 (Amdt 1-2014). This report established the window meets the requirements of the referenced standard NZS 4211: 2008 New Zealand Standard - Specification for performance of windows for LOW wind zone.
- **Intertek, Jiangsu Bosen Doors and Windows Technology Co. Ltd. (Aluminium Sliding Door - Heat Insulation of 120 Series Ⅱ) Test Report No. 210729008SHF-001-R1 (10 February 2022)**
  The results demonstrated in this report are compliant with the applicable requirements of NZS 4211:2008 (Amdt 1-2014). This report established the window meets the requirements of the referenced standard NZS 4211: 2008 New Zealand Standard - Specification for performance of windows for EXTRA HIGH wind zone.
- **Intertek, Jiangsu Bosen Doors and Windows Technology Co. Ltd. (Aluminium Hinged Door - BS-OA-D070D) Test Report No. 210729008SHF-003-R2 (01 March 2022)**
  The results demonstrated in this report are compliant with the applicable requirements of NZS 4211:2008 (Amdt 1-2014). This report established the window meets the requirements of the referenced standard NZS 4211: 2008 New Zealand Standard - Specification for performance of windows for EXTRA HIGH wind zone.
- **Jiangsu Bosen Doors and Windows Technology Co. Ltd, Durability Declaration (dated 14 May 2021)**
  This declaration confirms that Jiangsu Bosen Windows & Doors are designed to be durable for more than 15 years for aluminium windows and doors and 5 years for hardware.
- **Jiangsu Bosen Doors and Windows Technology Co. Ltd, Declaration of Conformity (dated 24 May 2021 and 17 May 2022)**
  This declaration confirms that the product complies with the requirements for Hazardous Building Materials by way of design and materials.
- **SAI Global, StandardsMark Licence for Jiangsu Jiacheng Special Manufacturing Glass Co,. Ltd, Licence SMK40498 (dated 09 December 2021)**
  This certificate provides evidence that glass products listed in licence SMK40498 comply with AS/NZS 2208:1996 – Safety glazing materials in buildings.
- **SAI Global, StandardsMark Licence for Jiangsu Jiacheng Special Manufacturing Glass Co,. Ltd, Licence SMK40497 (dated 17 May 2019)**
  This certificate provides evidence that glass products listed in licence SMK40497 comply with AS/NZS 4666:2012 – Insulating glass units.
- **SAI Global, StandardsMark Licence for Shanghai SYP Engineering Glass Co. Ltd, Licence SMK1636 (dated 07 December 2021)**
  This certificate provides evidence that glass products listed in licence SMK1636 comply with AS/NZS 2208:1996 – Safety glazing materials in buildings.
- **SAI Global, StandardsMark Licence for Shanghai SYP Engineering Glass Co. Ltd, Licence SMK40521 (dated 28 December 2020)**
  This certificate provides evidence that glass products listed in licence SMK40521 comply with AS/NZS 4666:2012 – Insulating glass units.

SUPPORTING INFORMATION

11 SUPPORTING INFORMATION ABOUT DESCRIPTION

This certification covers only the following models and their respective maximum dimensions:

A. 6063-T5 - Heat Insulation of 70 Series (Aluminium Awning Window)
- Overall Dimensions: 1800mm(H) x 2200mm(W)
- Operable Sash Dimensions: 1716mm(H) x 839mm(W)

B. 6063-T5 - Heat Insulation of 75 Series (Aluminium Folding Door)
- Overall Dimensions: 2223mm(H) x 2608mm(W)
- Door Panel Dimensions: 2068mm(H) x 812.5mm(W)

C. 6063-T5 - Heat Insulation of 120 Series (Aluminium Sliding Door)
- Overall Dimensions: 2250mm(H) x 2300mm(W)
- Sliding Door Panel Dimensions: 2148mm(H) x 1136mm(W)
- Awning sash Dimensions: 940mm(H) x 1050mm(W)

D. 6063-T5 - Heat Insulation of 120 Series Ⅱ (Aluminium Sliding Door)
- Overall Dimensions: 2250mm(H) x 2300 mm(W)
- Sliding Door Panel Dimensions: 2128mm(H) x 1135.5mm(W)
- Fixed Panel Dimensions: 2128mm(H) x 1135.5mm(W)

E. 6063-T5 - BS-OA-D070D (Aluminium Hinged Door)
- Overall Dimensions: 2250mm(H) x 1850mm(W)
- Door Panel Dimensions: 2120mm(H) x 857.5mm(W)

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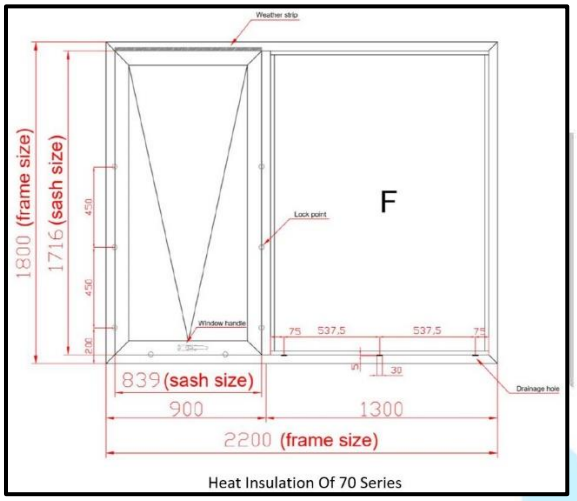
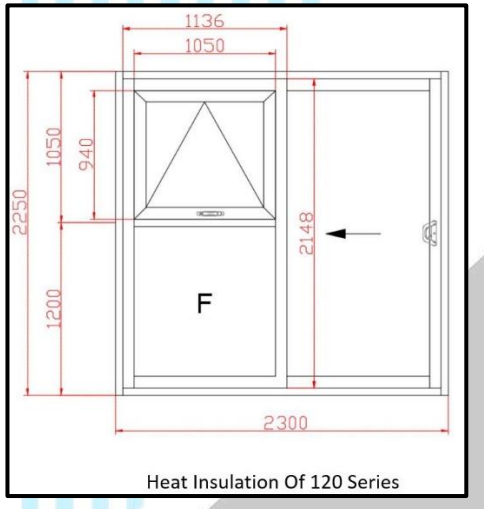
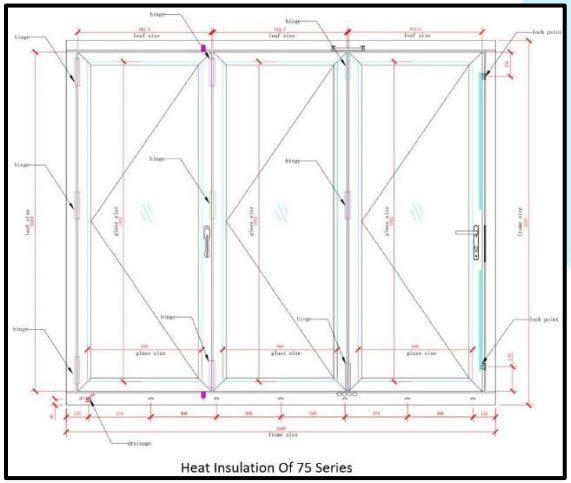
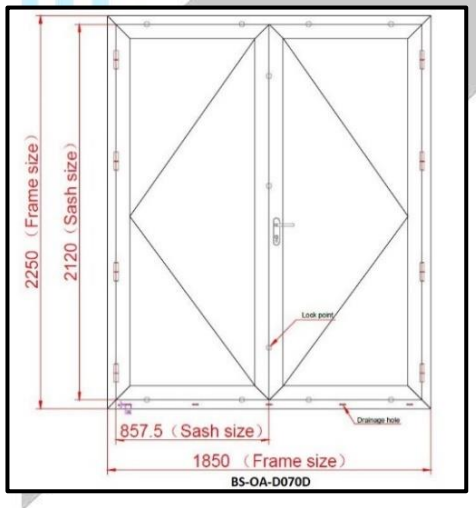


Heat Insulation Of 70 Series

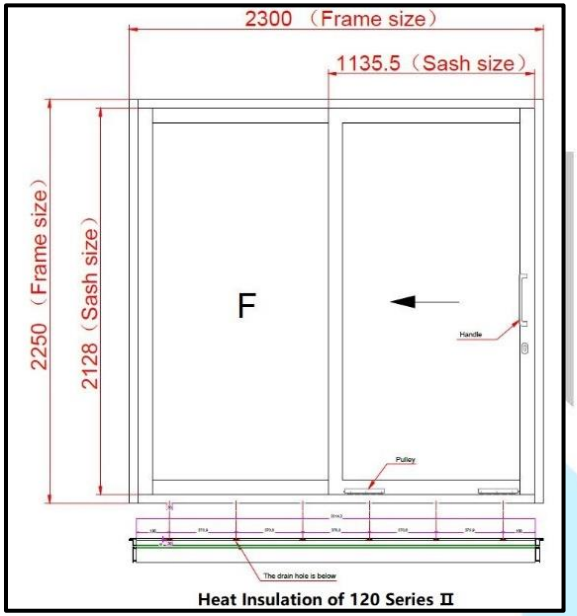


Heat Insulation Of 120 Series


Heat Insulation Of 75 Series



BS-OA-D070D



Heat Insulation of 120 Series Ⅱ

12 SUPPORTING INFORMATION ABOUT INTENDED USE

All supporting information about intended use are as stated above in item 4. *INTENDED USE OF BUILDING METHOD OR PRODUCT.*

13 SUPPORTING INFORMATION ABOUT CONDITIONS AND LIMITATIONS OF USE

- Consideration must be given to glazing rebates as inadequate drainage will affect the durability of insulating glass units and laminated glass.
- Glass selection and glazing shall be in accordance with NZS 4223.1:2008 and in locations subject to human impact must be in accordance with NZS 4223.3:2016.
- Where transparent glazing can be mistaken for a doorway or an unimpeded path of travel in all buildings of classified uses (excluding Housing), the presence of glazing shall be made apparent either by the provision of an opaque band across the full width of the glazed opening or by a motif or other decorative treatment in accordance with Clause 2.2 of NZS 4223.3:2016.