

Build it better with  
**BREMICK®**

# STRUCTURAL BOLT ASSEMBLIES

BUILDING PRODUCT  
INFORMATION  
SHEET

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## 1.1 Product class

### Class 1: Batch or mass-produced products <sup>1</sup>

## 1.2 Product name

Product Category - Bremick Structural Bolt Assemblies

## 1.3 Product description and its intended use

Hot-dipped galvanised Structural bolt assemblies including bolt, washer and nut, suitable for interior and exterior use subject to exposure conditions.

## 1.4 Product identifier (if applicable)

Refer to Appendix for unique product listing

## 1.5 Place manufactured (New Zealand or overseas)

Manufactured overseas to strict Bremick specifications.

## 1.6 Relevant Building Code clauses

|  |   |
|--|---|
| B1 Structure                             | Performance clauses B1.3.1, B1.3.2, B1.3.3 and B1.3.4 |
| B2 Durability                            | Performance clause B2.3.1 a)                          |
| C3 Fire Affecting Area Beyond the Source | Performance clause C3.7 a)                            |
| C6 Structural Stability                  | Performance clause C6.2                               |
| F2 Hazardous Building Materials          | Performance clause F2.3.1                             |

## 1.7 Statement of how the building product is expected to contribute to compliance

### **B1 Structure - B1.3.1, B1.3.2, B1.3.3 and B1.3.4**

- *Structural bolt assemblies contribute to the structural integrity of building elements. Compliance demonstrated through relevant bolt design standards and Specific Engineered Design to NZS 3404.*

#### Compliance Pathway

##### Buildings >10m in height

##### Specific Engineered Design, to:

- NZS 3404 Steel structures standard
  - Relevant bolt design standards:
  - AS 1110 ISO metric hexagon bolts and screws - Product grades A and B Bolts
  - AS 1111 ISO metric hexagon bolts and screws - Product grade C Bolts
  - AS/NZS 1252 High-strength steel fastener assemblies for structural engineering - Bolts, nuts and washers
  - AS 1559 Hot-dip galvanised steel bolts and associated nuts and washers for tower construction

### **B2 Durability**

- *B2.3.1 a) 50 years - where used to fix structural or difficult to replace elements*  
*Structural bolt assemblies hot-dipped galvanized to AS 1214 achieve 50 year durability, subject to exposure conditions.*

#### Compliance Pathway

##### Buildings >10m in height

##### Specific Engineered Design to:

- NZS 3404 Steel structures standard
  - AS/NZS 1252 High-strength steel fastener assemblies for structural engineering - Bolts, nuts and washers
  - AS 1559 Hot-dip galvanised steel bolts and associated nuts and washers for tower construction
    - AS 1214 Hot-dip galvanised coatings on threaded fasteners (ISO metric coarse thread series)
- SNZ TS 3404 Durability requirements for steel structures and components

### **C3 Fire Affecting Area Beyond the Source - C3.7 a)**

- *Structural bolt assemblies are manufactured from non-combustible materials, as defined in NZBC C/AS2.*

#### Compliance Pathway

##### NZBC C/AS2:

*External wall cladding systems for multi-level buildings with a building height  $\geq 25$  m*

5.8.4 The entire external wall cladding system shall be:

a) **Non-combustible** or limited combustible materials

Non-combustible is defined in NZBC C/AS2 as:

Material either -

a) composed entirely of glass, concrete, steel, brick/block, ceramic tile, or aluminium; or

b) classified as non-combustible when tested to AS 1530.1; or

c) classified as A1 in accordance with BS EN 13501-1.

### C6 Structural Stability - C6.2

- Structural bolt assemblies are manufactured from non-combustible materials, as defined in NZBC C/AS2.

Compliance Pathway

Buildings >10m in height

Specific Engineered Design to:

- NZS 3404 Steel structures standard

### F2 Hazardous Building Materials - F2.3.1

- Structural bolt assemblies are manufactured from non-toxic / safe to handle materials.

## 1.8 Limitations on the use of the building product

- Suitable for interior and exterior use subject to exposure conditions and material selection.

## 1.9 Design requirements that would support the appropriate use of the building product

- Buildings designed to NZS 3404 Steel Structures Standard and Specific Engineered Design.

## 1.10 Installation requirements

1. Insert bolt and washer component of the Structural Assembly through fixture hole
2. Place nut component of the Structural Assembly on the end of structural bolt and tighten with an appropriate sized spanner until sufficient clamping force is obtained or specified torque achieved. DO NOT OVER TIGHTEN

## 1.11 Maintenance requirements

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- In accordance with Bremick guidances.
- Periodically inspect the fastener for corrosion.

## 1.12 Building Act 2004 section 26 compliance

Is the building product/building product line subject to warning or ban under [section 26 of the Building Act 2004](#)?

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No

# STRUCTURAL BOLT ASSEMBLIES

Product codes

**BREMICK®**

| <b>K0 8.8 STRUCTURAL ASSEMBLIES</b> |
|-------------------------------------|
| K08MG120351                         |
| K08MG120401                         |
| K08MG120451                         |
| K08MG120501                         |
| K08MG120601                         |
| K08MG120801                         |
| K08MG160401                         |
| K08MG160451                         |
| K08MG160501                         |
| K08MG160551                         |
| K08MG160601                         |
| K08MG160651                         |
| K08MG160701                         |
| K08MG160751                         |
| K08MG160901                         |
| K08MG161001                         |
| K08MG161201                         |
| K08MG161301                         |
| K08MG200401                         |
| K08MG200451                         |
| K08MG200501                         |
| K08MG200551                         |
| K08MG200601                         |
| K08MG200651                         |
| K08MG200701                         |
| K08MG200751                         |
| K08MG200801                         |
| K08MG200851                         |
| K08MG200901                         |
| K08MG201001                         |
| K08MG201101                         |
| K08MG201201                         |
| K08MG201301                         |
| K08MG201501                         |
| K08MG201801                         |
| K08MG202001                         |

| K08MG202201                |
|----------------------------|
| K08MG203001                |
| K08MG240551                |
| K08MG240651                |
| K08MG240701                |
| K08MG240751                |
| K08MG240801                |
| K08MG240851                |
| K08MG240901                |
| K08MG241001                |
| K08MG241201                |
| K08MG241301                |
| K08MG241401                |
| K08MG242001                |
| K08MG242801                |
| K08MG243001                |
| K08MG301001                |
| K08MG301101                |
| K08MG301201                |
| K08MG301401                |
| K08MG301501                |
| K08MG301601                |
| K08MG361201                |
| K08MG361501                |
| <b>STRUCTURAL ASSEMBLY</b> |
| BSAMG120301                |
| BSAMG120351                |
| BSAMG120401                |
| BSAMG120451                |
| BSAMG120501                |
| BSAMG120601                |
| BSAMG120701                |
| BSAMG120801                |
| BSAMG120901                |
| BSAMG121001                |
| BSAMG121201                |
| BSAMG160401                |

|             |
|-------------|
| BSAMG160451 |
| BSAMG160501 |
| BSAMG160551 |
| BSAMG160601 |
| BSAMG160651 |
| BSAMG160701 |
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| BSAMG161101 |
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| BSAMG161801 |
| BSAMG162001 |
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| BSAMG200801 |
| BSAMG200851 |
| BSAMG200901 |
| BSAMG201001 |
| BSAMG201101 |
| BSAMG201201 |
| BSAMG201301 |
| BSAMG201401 |
| BSAMG201501 |
| BSAMG201601 |
| BSAMG201801 |
| BSAMG202001 |

|             |
|-------------|
| BSAMG202201 |
| BSAMG202401 |
| BSAMG202601 |
| BSAMG202801 |
| BSAMG203001 |
| BSAMG240501 |
| BSAMG240551 |
| BSAMG240601 |
| BSAMG240651 |
| BSAMG240701 |
| BSAMG240751 |
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| BSAMG241401 |
| BSAMG241501 |
| BSAMG241601 |
| BSAMG242201 |
| BSAMG242601 |
| BSAMG300751 |
| BSAMG300801 |
| BSAMG300851 |
| BSAMG300901 |
| BSAMG301001 |
| BSAMG301101 |
| BSAMG301201 |
| BSAMG301301 |
| BSAMG301401 |
| BSAMG301501 |
| BSAMG361001 |
| BSAMG361101 |
| BSAMG361201 |
| BSAMG361301 |

| <b>STRUCTURAL ISO<br/>NUT</b>    |
|----------------------------------|
| NSTMG1200N2                      |
| NSTMG1600N2                      |
| NSTMG2000N2                      |
| NSTMG2400N2                      |
| NSTMG3000N2                      |
| NSTMG3600N2                      |
| <b>STRUCTURAL ISO<br/>WASHER</b> |
| WSTMG1200W2                      |
| WSTMG1600W2                      |
| WSTMG2000W2                      |
| WSTMG2400W2                      |
| WSTMG3000W2                      |
| WSTMP2400W2                      |





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