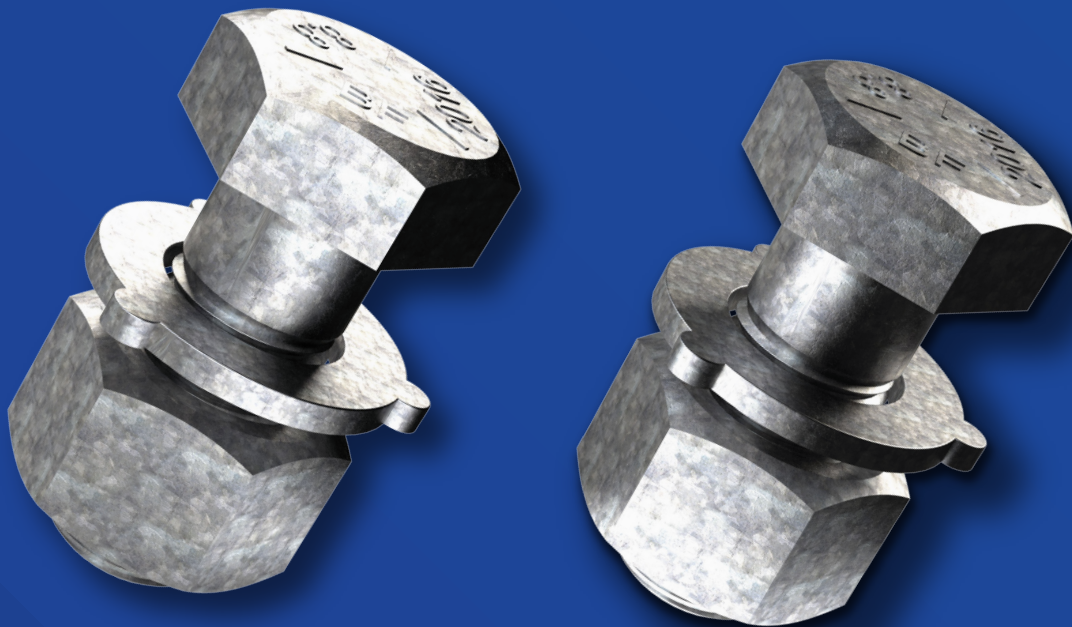


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**BREMICK®**

# 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	K08MG202201	BSAMG160451	BSAMG202201
K08MG120401	K08MG203001	BSAMG160501	BSAMG202401
K08MG120451	K08MG240551	BSAMG160551	BSAMG202601
K08MG120501	K08MG240651	BSAMG160601	BSAMG202801
K08MG120601	K08MG240701	BSAMG160651	BSAMG203001
K08MG120801	K08MG240751	BSAMG160701	BSAMG240501
K08MG160401	K08MG240801	BSAMG160751	BSAMG240551
K08MG160451	K08MG240851	BSAMG160801	BSAMG240601
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K08MG160751	K08MG241401	BSAMG161301	BSAMG240851
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K08MG161001	K08MG242801	BSAMG161501	BSAMG241001
K08MG161201	K08MG243001	BSAMG161601	BSAMG241101
K08MG161301	K08MG301001	BSAMG161801	BSAMG241201
K08MG200401	K08MG301101	BSAMG162001	BSAMG241401
K08MG200451	K08MG301201	BSAMG200401	BSAMG241501
K08MG200501	K08MG301401	BSAMG200451	BSAMG241601
K08MG200551	K08MG301501	BSAMG200501	BSAMG242201
K08MG200601	K08MG301601	BSAMG200551	BSAMG242601
K08MG200651	K08MG361201	BSAMG200601	BSAMG300751
K08MG200701	K08MG361501	BSAMG200651	BSAMG300801
K08MG200751	<b>STRUCTURAL ASSEMBLY</b>	BSAMG200701	BSAMG300851
K08MG200801	BSAMG120301	BSAMG200751	BSAMG300901
K08MG200851	BSAMG120351	BSAMG200801	BSAMG301001
K08MG200901	BSAMG120401	BSAMG200851	BSAMG301101
K08MG201001	BSAMG120451	BSAMG200901	BSAMG301201
K08MG201101	BSAMG120501	BSAMG201001	BSAMG301301
K08MG201201	BSAMG120601	BSAMG201101	BSAMG301401
K08MG201301	BSAMG120701	BSAMG201201	BSAMG301501
K08MG201501	BSAMG120801	BSAMG201301	BSAMG361001
K08MG201801	BSAMG120901	BSAMG201401	BSAMG361101
K08MG202001	BSAMG121001	BSAMG201501	BSAMG361201
	BSAMG121201	BSAMG201601	BSAMG361301
	BSAMG160401	BSAMG201801	
		BSAMG202001	

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



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