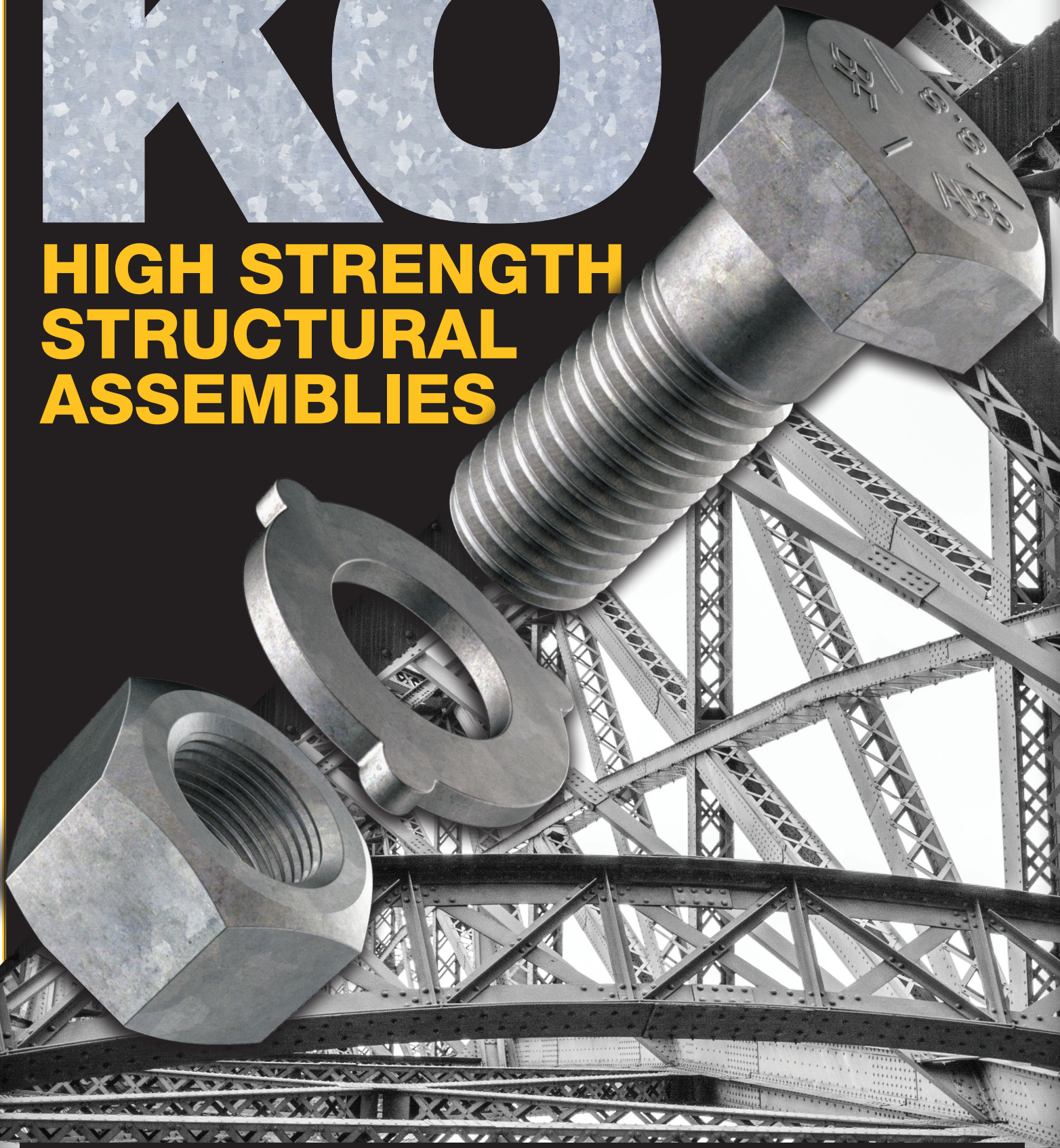


BREMICK®

KO

**HIGH STRENGTH
STRUCTURAL
ASSEMBLIES**



Bremick KO Structural Assemblies are compliant to the latest version of **AS/NZS 1252.1:2016** & **AS/NZS 1252.2:2016**.



K0 High Strength Structural Assemblies

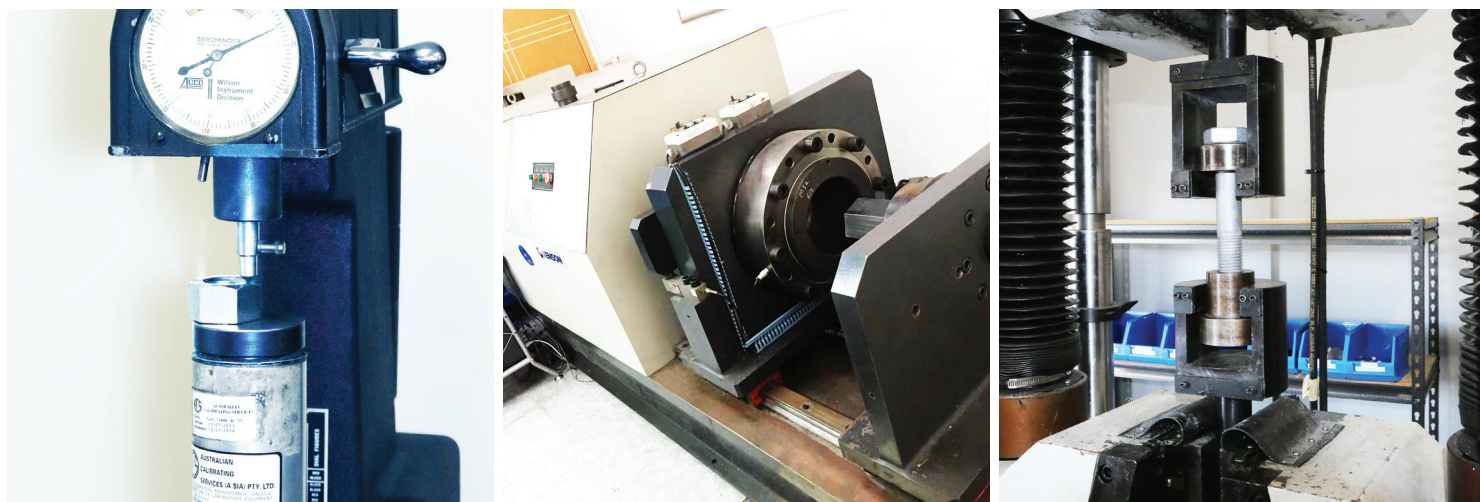
Bremick K0 High Strength Structural Assemblies are manufactured and tested in strict compliance to AS/NZS 1252.1:2016 & AS/NZS 1252.2:2016. Our NATA accredited laboratory & test facility gives you peace of mind that your structural bolted connections will continue to perform as designed into the future.

Features and Benefits

- **Superior certification**, we have designed and laid out our testing information to make it quicker and easier to find the information you are looking for. It also contains comprehensive NATA & ILAC confirmation testing reports combined with the original steel mill certificates.
- **Certification access via website**. No log in details are required allowing for customer and end user access, so that reports can be downloaded or viewed quickly and easily anytime.
- **Unique head number marking** allows traceability after the assembly is removed from the packaging. The head mark provides traceability for years after installation with links back to the original steel and manufacturing batch.
- **Broad range**, We continue to review and adapt our range to include more sizes that are stocked in our branch warehouses for same day/next day delivery. This includes a full range of nut only and washer only items that are manufactured to AS/NZS 1252.1:2016.



NATA Accredited Laboratory & Testing Facilities



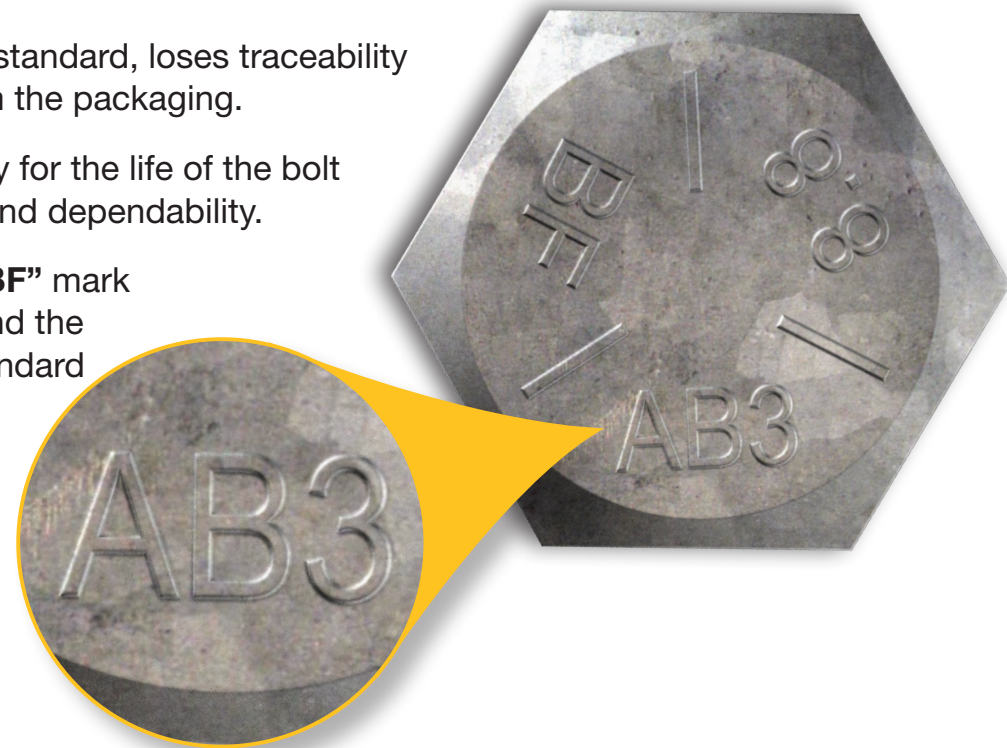
Unique Head Mark

Additional head marking includes a unique identifier which relates back to the original steel and batch manufacturing process. Having this unique mark on the head adds additional traceability, not required by the standard.

The current system as per the standard, loses traceability once the bolt is separated from the packaging.

This mark allows for traceability for the life of the bolt adding additional confidence and dependability.

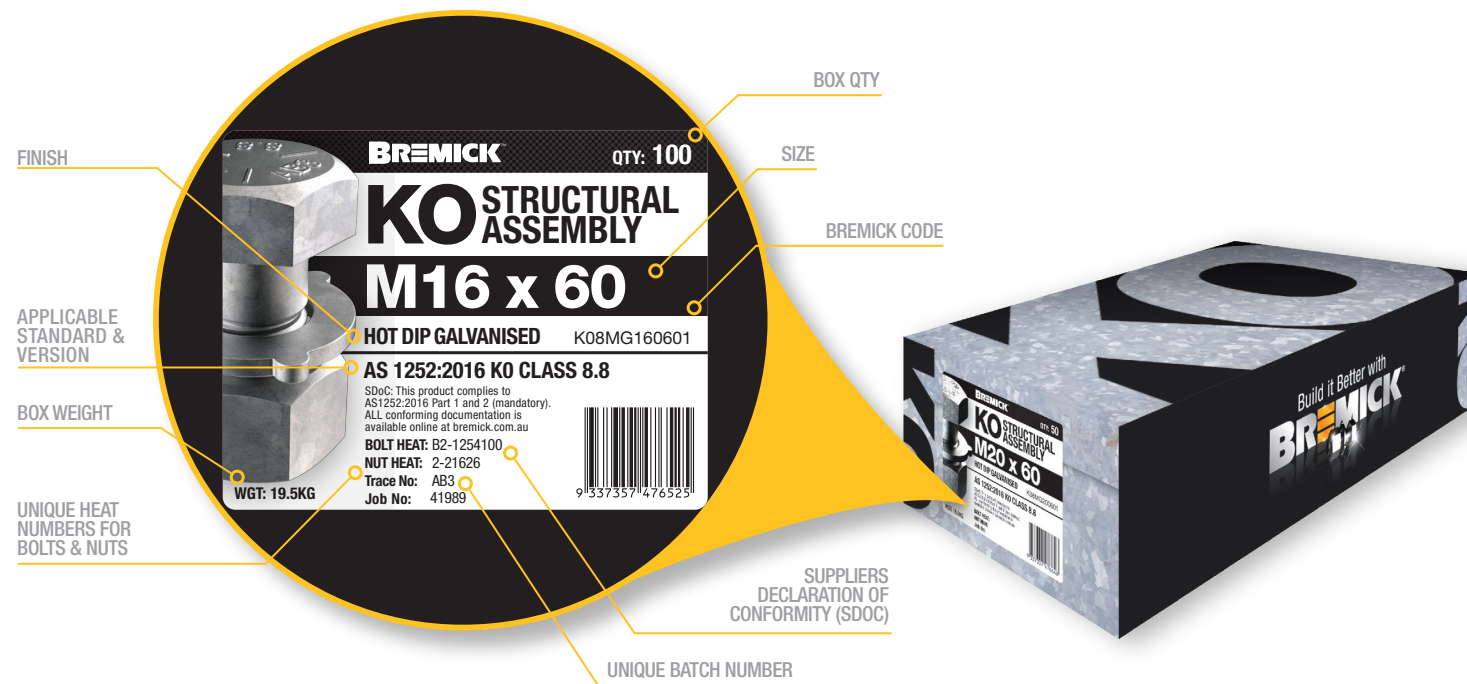
The bolt retains the Bremick **“BF”** mark and the property class **“8.8”** and the three radial lines as per the standard requirements, whilst including the new marking,



Bremick® K0 Structural is compliant to the latest version of AS/NZS 1252.1:2016 & AS/NZS 1252.2:2016.

Updated compulsory assembly testing and conformity requirements within the above standard ensures the product meets the highest quality standard for any steelwork construction.

Marking on the label indicates compliance with AS/NZS 1252.1:2016 and AS/NZS 1252.2:2016.





Visual, Dimensions, Coatings, Markings

TEST REPORT CHECK LIST

- ✓ Attestation of Product Conformity
- ✓ Certificate of Conformity of Factory Control (LRQA)
- ✓ Inspection Certificate 3.1
- ✓ Bolt Report
- ✓ Nut Report
- ✓ Washer Report
- ✓ Assembly Report
- ✓ Mill Certificates

Certification Access

Access your certification with a few mouse clicks

Customer log in is not required to access certification. All documentation is available on our public website. No need to waste time requesting information and waiting for a reply. With a few clicks on our website you can view, download or email the certification.

Simple search

- From the home page of the Bremick website click the certificates icon in the top righthand corner
- This will open the search page below



Or click this link to go directly to the search page
bremick.com.au/certificates/

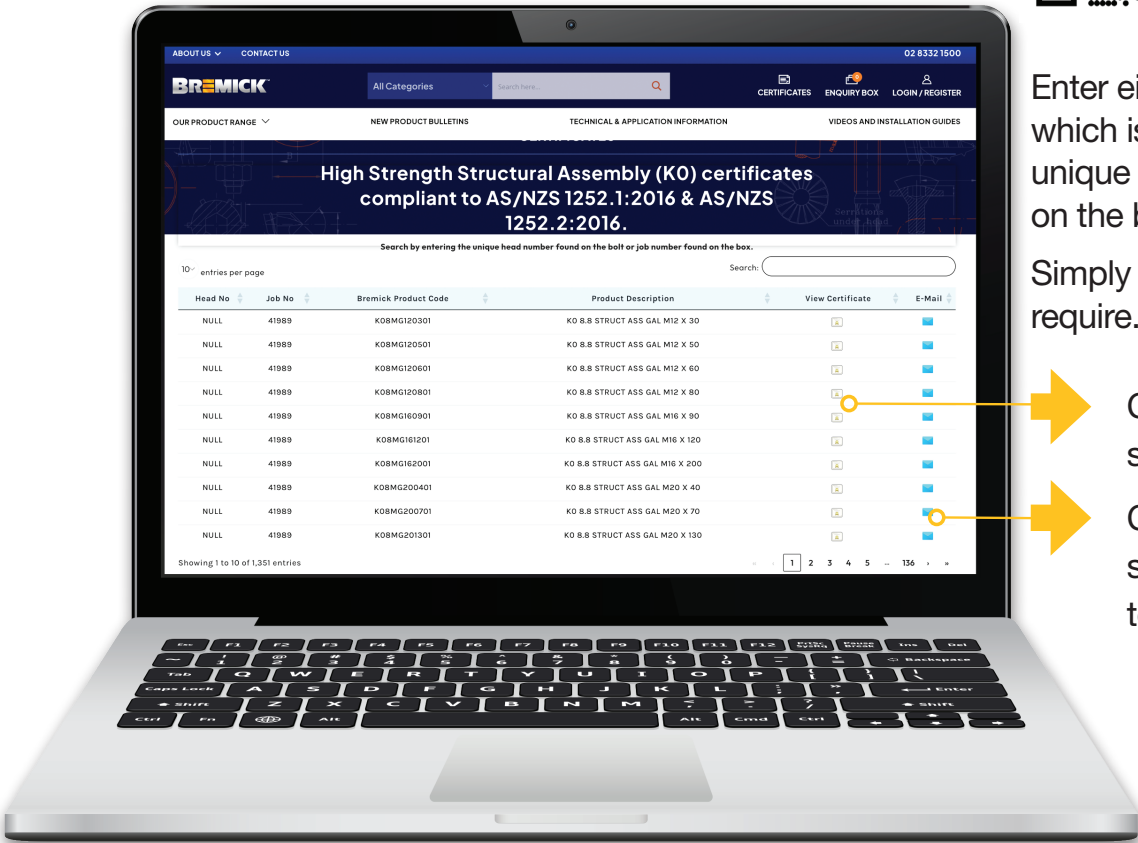


Enter either the Job number which is found on the box or the unique bolt head number found on the bolt head.

Simply choose the size you require.

Click  to view, save or print

Click  to email someone else a link to the certification



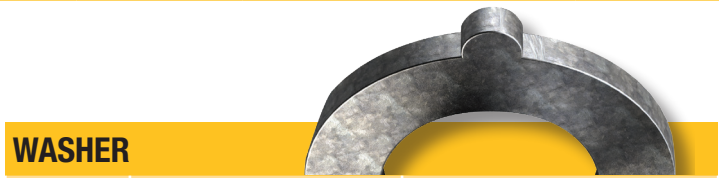
RANGE - STOCK LINES

Other sizes available as special order, minimum order quantities required

Diameter	M12	M16	M20	M24	M27	M30	M36	ADD TO CODE PREFIX
LENGTH (mm)	CODE PREFIX							CODE PREFIX
	K08MG12	K08MG16	K08MG20	K08MG24	K08MG27	K08MG30	K08MG36	
30	●							0301
35	●							0351
40	●	●	●					0401
45	●	●	●					0451
50	●	●	●	●				0501
55	●	●	●	●				0551
60	●	●	●	●				0601
65	●	●	●	●				0651
70	●	●	●	●				0701
75	●	●	●	●		●		0751
80	●	●	●	●	●	●		0801
85			●	●		●		0851
90	●	●	●	●		●		0901
95					●			0951
100	●	●	●	●		●	●	1001
110	●	●	●	●	●	●	●	1101
120	●	●	●	●	●	●	●	1201
130	●	●	●	●	●	●	●	1301
140		●	●	●	●	●	●	1401
150	●	●	●	●	●	●	●	1501
160		●	●	●		●	●	1601
170		●		●		●	●	1701
175					●			1751
180		●	●	●		●	●	1801
190		●				●		1901
200	●	●	●	●	●	●		2001
210			●					2101
220		●	●	●				2201
230				●				2301
240		●	●	●		●	●	2401
250		●	●	●	●			2501
260		●	●	●		●		2601
270		●						2801
280		●		●		●		2801
300			●	●	●	●		3001
320			●					3201
330				●				3301
350		●	●	●				3501
400			●	●				4001



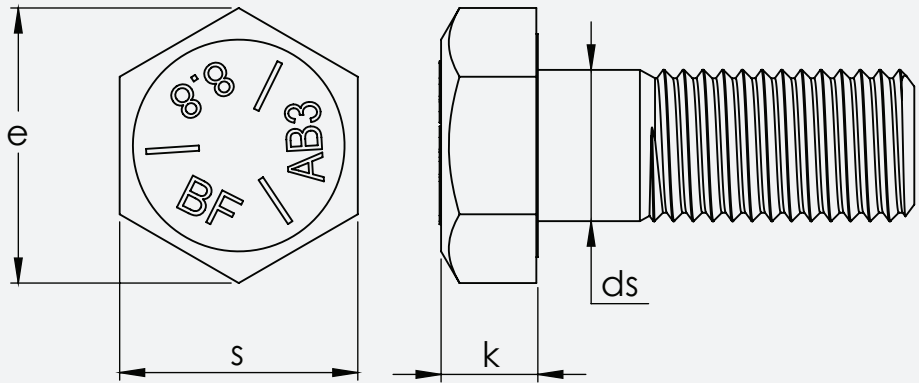
NUT		
Diameter	Code	Finish
M12	NSTMG12K082	Hot Dipped Galvanised
M16	NSTMG16K082	Hot Dipped Galvanised
M20	NSTMG20K082	Hot Dipped Galvanised
M24	NSTMG24K082	Hot Dipped Galvanised
M27	NSTMG27K082	Hot Dipped Galvanised
M30	NSTMG30K082	Hot Dipped Galvanised
M36	NSTMG36K082	Hot Dipped Galvanised



WASHER		
Diameter	Code	Finish
M12	WK0MG1200W2	Hot Dipped Galvanised
M16	WK0MG1600W2	Hot Dipped Galvanised
M20	WK0MG2000W2	Hot Dipped Galvanised
M24	WK0MG2400W2	Hot Dipped Galvanised
M27	WK0MG2700W2	Hot Dipped Galvanised
M30	WK0MG3000W2	Hot Dipped Galvanised
M36	WK0MG3600W2	Hot Dipped Galvanised

Dimensional Data – AS/NZS 1252.1:2016

BOLT



Bolt Marking

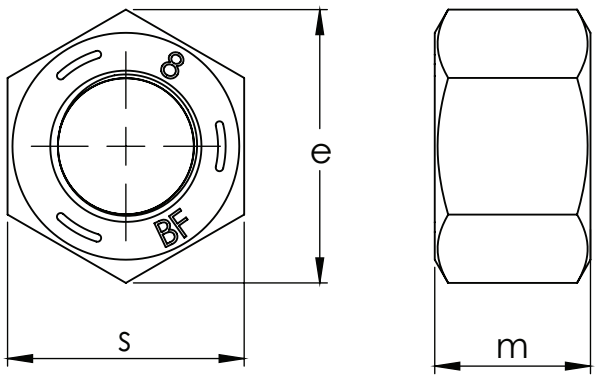


Bolt

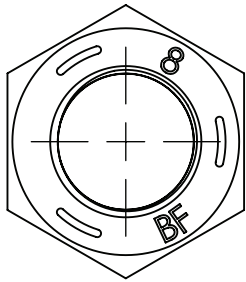
- Property class symbol
- Three radial lines
- Bremick trade mark
- Unique traceability code

NOMINAL SIZE	PITCH	SHANK DIAMETER (ds)		WIDTH ACROSS FLATS (s)		WIDTH ACROSS CORNERS (e)		HEIGHT OF HEAD (k)	
d	(mm)	Min	Max	Min	Max	Min	Max	Min	Max
M12	1.75	11.30	12.70	20.16	21.00	22.78	24.25	7.05	7.95
M16	2.00	15.30	16.70	26.16	27.00	29.56	31.20	9.25	10.75
M20	2.50	19.16	20.84	31.00	32.00	35.03	36.90	12.10	13.90
M24	3.00	23.16	24.84	40.00	41.00	45.20	47.30	14.10	15.90
M27	3.00	26.16	27.84	45.00	46.00	50.85	53.10	16.10	17.90
M30	3.50	29.16	30.84	49.00	50.00	55.37	57.70	17.65	19.75
M36	4.00	35.00	37.00	58.80	60.00	66.44	69.30	21.45	23.55

NUT



Nut Marking

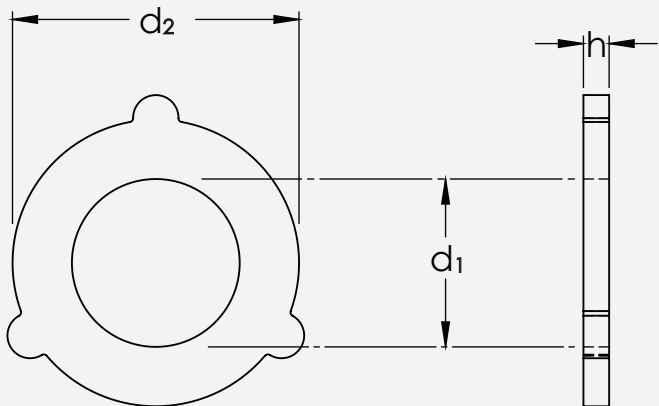


Nut

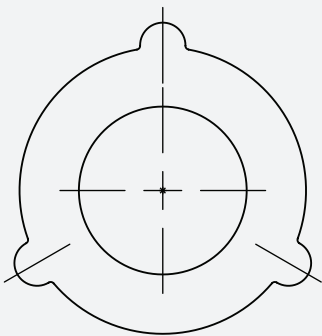
- Property class symbol
- Three circumferential lines
- Bremick trade mark

NOMINAL SIZE	PITCH	WIDTH ACROSS FLATS (s)		WIDTH ACROSS CORNERS (e)		HEIGHT OF NUT (m)	
d	(mm)	Min	Max	Min	Max	Min	Max
M12	1.75	20.16	21.00	22.78	24.25	12.00	13.10
M16	2.00	26.16	27.00	29.56	31.20	16.40	17.10
M20	2.50	31.00	32.00	35.03	36.90	20.00	21.30
M24	3.00	40.00	41.00	45.20	47.30	22.90	24.20
M27	3.00	45.00	46.00	50.85	53.10	26.30	27.30
M30	3.50	49.00	50.00	55.37	57.70	29.10	30.70
M36	4.00	58.80	60.00	66.44	69.30	35.00	36.60

WASHER



Washer Marking



Washer

- Three nibs

NOMINAL SIZE	INSIDE DIAMETER (d ₁)		OUTER DIAMETER (d ₂)		THICKNESS (h)	
d	Min	Max	Min	Max	Min	Max
M12	14.00	14.43	25.70	27.00	3.10	4.60
M16	18.00	18.43	32.40	34.00	3.10	4.60
M20	21.00	21.33	37.40	39.00	3.10	4.60
M24	26.00	26.52	48.40	50.00	3.40	4.60
M27	30.00	30.52	54.10	56.00	3.40	4.60
M30	33.00	33.62	58.10	60.00	3.40	4.60
M36	39.00	39.62	70.10	72.00	3.40	4.60

Thread Lengths – K0 Structural Bolts – AS1252.1:2016

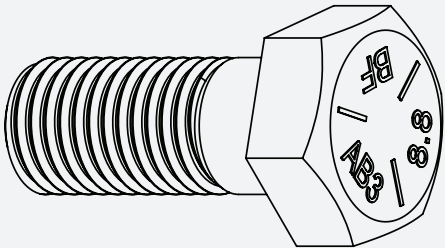
OVERALL LENGTH	THREAD LENGTH							
	Nom	M12	M16	M20	M24	M27	M30	M36
30	19							
35	24							
40	29	26	Full Thread					
45	30	31	27.5					
50	30	36	32.5	Full Thread				
55	30	38	37.5	34				
60	30	38	42.5	39				
65	30	38	46	44	42.5			
70	30	38	46	49	47.5	44.5		
75	30	38	46	54	52.5	49.5		
80	30	38	46	54	57.5	54.5		
85	30	38	46	54	60	59.5	55	
90	30	38	46	54	60	64.5	60	
95	30	38	46	54	60	66	65	
100	30	38	46	54	60	66	70	
110	30	38	46	54	60	66	78	
120	30	38	46	54	60	66	78	
130	36	44	52	60	66	72	84	
140	36	44	52	60	66	72	84	
150	36	44	52	60	66	72	84	
160	36	44	52	60	66	72	84	
170	36	44	52	60	66	72	84	
175	36	44	52	60	66	72	84	
180	36	44	52	60	66	72	84	
190	36	44	52	60	66	72	84	
200	36	44	52	60	66	72	84	
210		57	65	73	79	85	97	
220		57	65	73	79	85	97	
230		57	65	73	79	85	97	
240		57	65	73	79	85	97	
250		57	65	73	79	85	97	
260		57	65	73	79	85	97	
270		57	65	73	79	85	97	
280		57	65	73	79	85	97	
300		100	100	100	100	100	100	
320		100	100	100	100	100	100	
330		100	100	100	100	100	100	
350		100	100	100	100	100	100	
400		150	150	150	150	150	150	

NOTE: Bolts above the solid line have shorter thread lengths than the normal calculation

Bolts

BOLT - AS4291.1				
SIZE	PITCH	STRESS AREA	CLASS 8.8	
			ULTIMATE TENSILE LOAD	PROOF LOAD
			N Min	N Min
mm	mm	mm²		
M12	1.75	84.30	70,000	50,700
M16	2.00	157.00	130,000	94,500
M20	2.50	245.00	203,000	147,000
M24	3.00	353.00	293,000	212,000
M27	3.00	459.00	381,000	275,000
M30	3.50	561.00	466,000	337,000
M36	4.00	817.00	678,000	490,000

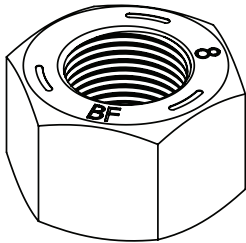
HARDNESS ROCKWELL HRC			
≤ M16		>M16	
Min	Max	Min	Max
22	32	23	34



Nuts

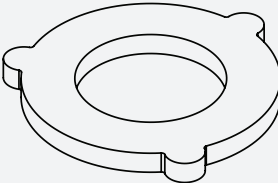
NUT - AS4291.2			
SIZE	TENSILE STRESS AREA OF THREADED TEST MANDREL	PROOF LOAD (kN)	
		HOT DIPPED GALVANISED	OTHER FINISH
mm	mm²		
M12	84.30	98.20	90.6
M16	157.00	182.90	168.9
M20	245.00	285.40	263.4
M24	353.00	411.20	379.5
M27	459.00	534.70	493.4
M30	561.00	653.60	603.1
M36	817.00	951.80	878.3

HARDNESS ROCKWELL HRC	
Min	Max
24	36



Washers

WASHER - AS/NZS 1252.1	
HARDNESS ROCKWELL HRC	
Min	Max
33	41

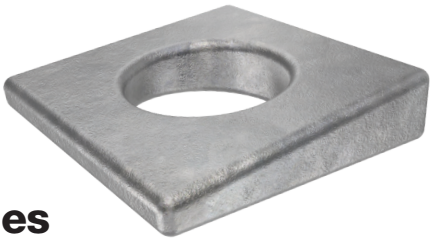


NOTE: Coating is removed before testing

SQUARE TAPER WASHERS

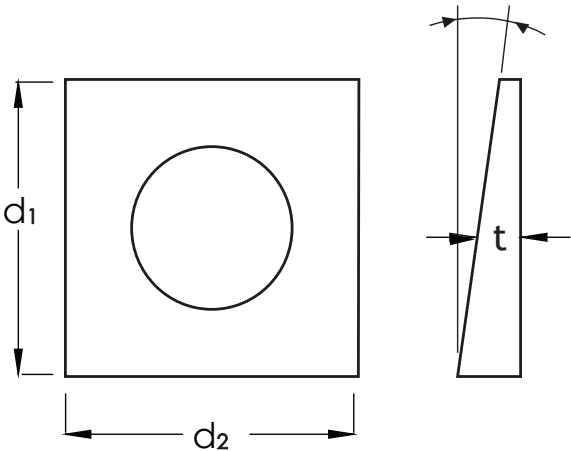
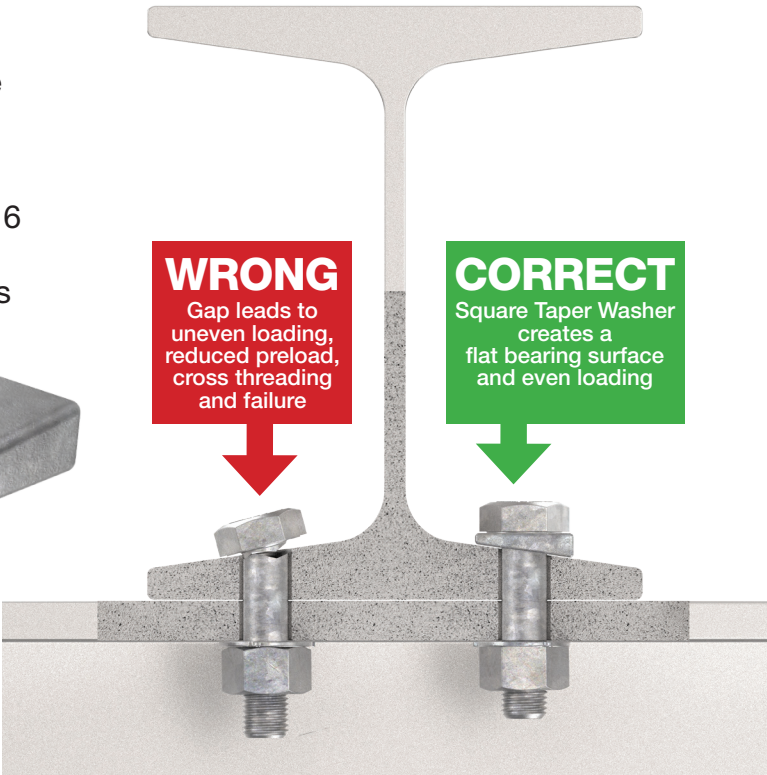
Square Taper washers, are used in applications where an angled surface exists. Taper washers provide a flat bearing surface to ensure load stability.

Manufactured in accordance with AS/NZS 1252.1:2016 & tested in accordance with AS/NZS 1252.2:2016. They are suitable for use with KO structural assemblies



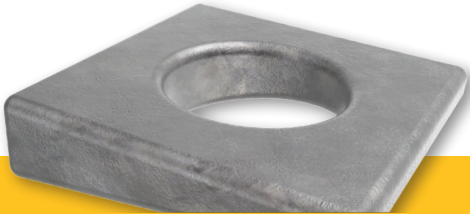
Mechanical Properties

SQUARE WASHER - AS/NZS 1252.1	
HARDNESS ROCKWELL HRC	
Min	Max
33	41



Dimensional Data – AS/NZS 1252.1:2016

NOMINAL SIZE	INSIDE DIAMETER (d ₁)		WIDTH ACROSS FLATS (d ₂)	MEAN THICKNESS (t)
d	Min	Max	Nominal	8° Taper
M12	13	13.43	25.4	6.35
M16	18	18.43	31.75	6.35
M20	22	22.52	38.1	6.35
M24	26	26.52	44.45	6.35



SQUARE WASHER		
Diameter	Code	Finish
M12	WTWMG1200W2	Hot Dipped Galvanised
M16	WTWMG1600W2	Hot Dipped Galvanised
M20	WTWMG2000W2	Hot Dipped Galvanised
M24	WTWMG2400W2	Hot Dipped Galvanised

CONTACT US – bremick.com.au – bremick.co.nz

Australia (Sydney)
E sales@bremick.com.au
P +61 2 8332 1500

New Zealand (Auckland)
E nthnzsales@bremick.co.nz
P 9525 2244

New Zealand (Christchurch)
E sthnzsales@bremick.co.nz
P 3365 8998