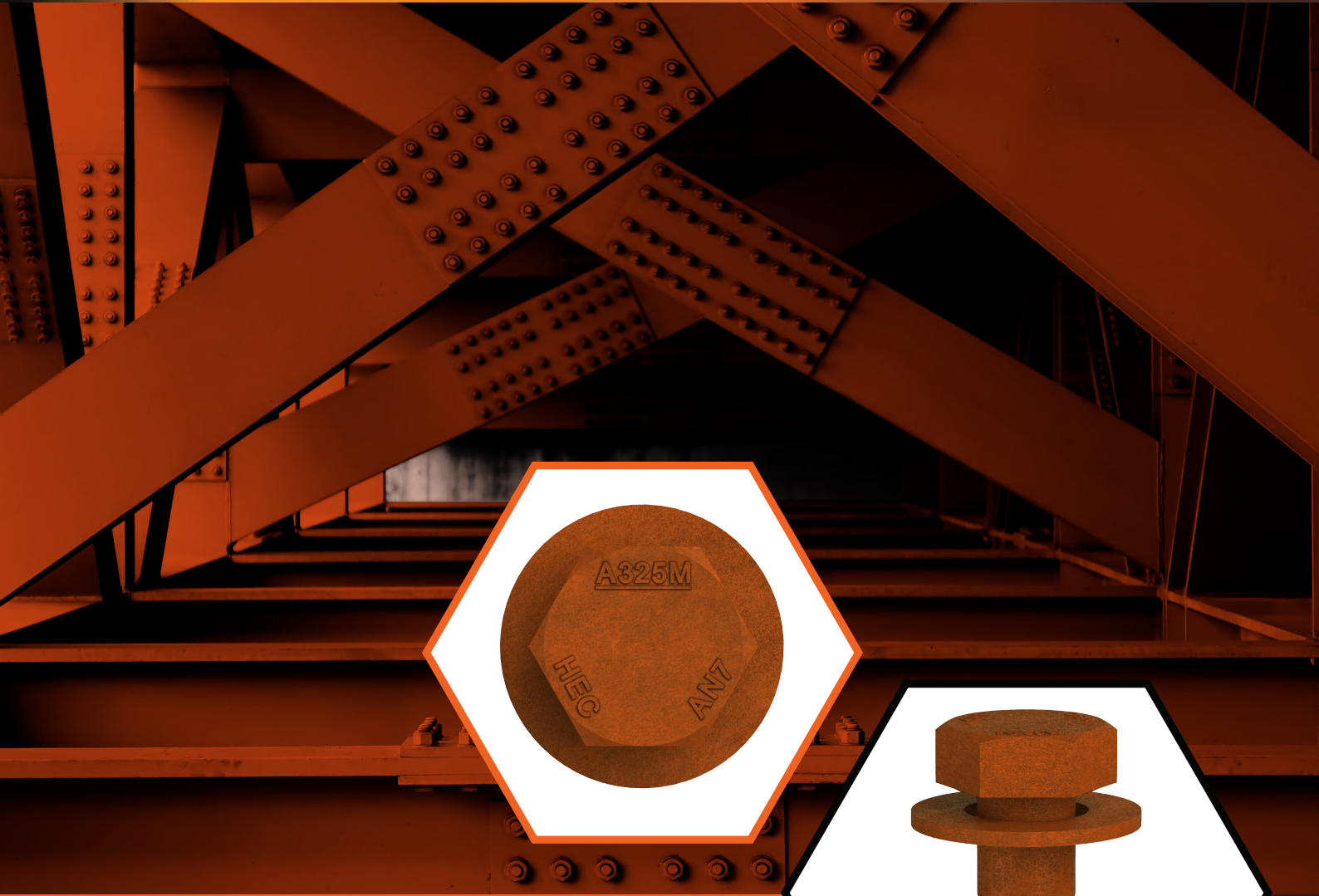




Weathering Steel

STRUCTURAL ASSEMBLIES



ASTM A325M Type 3 / Class 8.8

PRODUCT RELEASE

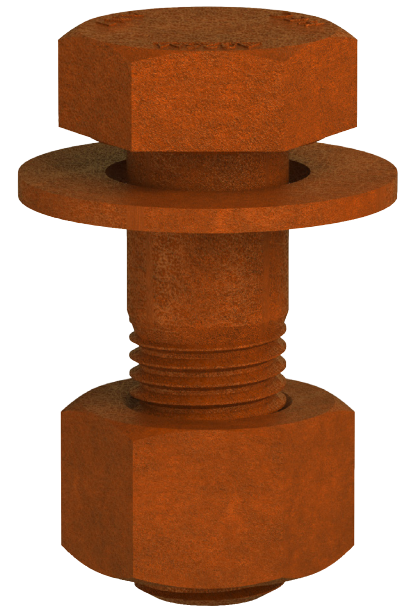




PRODUCT DATA

Weathering Steel Structural Assemblies

Weathering steel is an alloy steel with improved atmospheric corrosion resistance. **ASTM A325M** is the standard specified in Australia and New Zealand where structural bolts made from weathering steel [Type 3] are required. Bolts manufactured to this specification are suitable for use in steel structures under all tension conditions [S/TF/TB connections].



Applications	
Structural connections in weathering steel are included in:	
<ul style="list-style-type: none"> • Bridges • Facades • Stadiums • High Rise • Road and Rail Infrastructure 	

Material	 ASTM A325M Type 3 / Class 8.8
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Finish	 Weathering Steel
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Used in
Weathering Steel
structural applications

Suitable for use with
Redcor® composition A and B

Mechanical Properties

ASTM A325M 8.8

Bolt				Nut		Washer
Tensile Strength	Yield Strength	Proof Strength	Hardness	Proof Strength	Hardness	Hardness
MPa	MPa	MPa	Rockwell	MPa	Rockwell	Rockwell
830	660	600	C25 - C34	1075	B89 - C38	C38 - C45

Requirements for mechanical properties for ASTM A325M are identical to metric Property Class 8.8. This allows direct application to steel design standards, including AS 4100 and NZS 3404 and AS/NZS 5100.

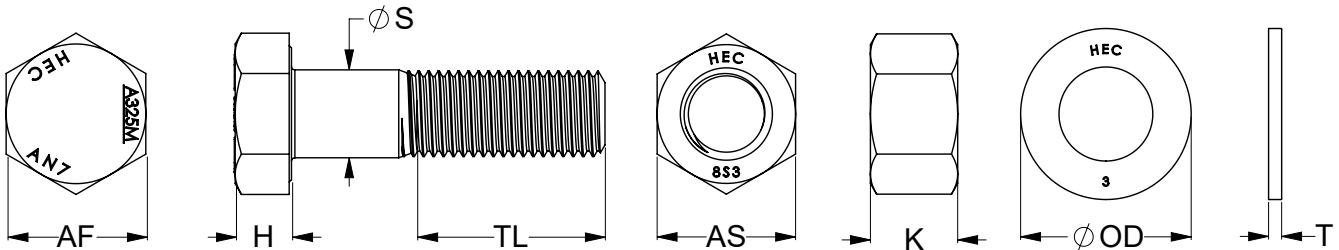
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Bolt Tension | Anti-Vibration | Product Reliability | Traceability



PRODUCT DATA

ASTM A325M Type 3 / Class 8.8 Weathering Steel Structural Assemblies Page 3 of 4



Thread Form	Bolt Dimensions				Nut Dimensions		Washer Dimensions	
	ASME B18.2.6M				ASTM A563M		ASTM F436M	
	Shank Diameter	Hex Across Flats	Head Height	Thread Length	Hex Across Flats	Thickness	Outside Diameter	Thickness
	ØS	AF	H	TL	AS	K	ØOD	T
	Nom	Max	Max	Nom	Max	Max	Max	Max
M24 x 3.00	24	41	15.90	41	41	24.2	50	4.6
M30 x 3.50	30	50	19.75	49	50	30.7	60	4.6
M36 x 4.0	36	60	23.55	56	60	36.6	72	4.6

* Ask us about specific bolt lengths for your project

Material Properties

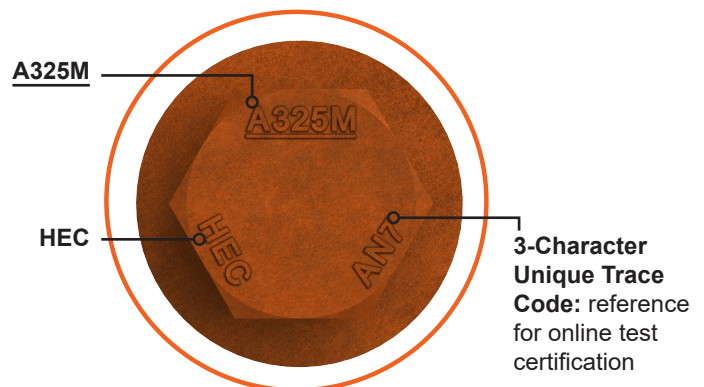
ASTM A325M Type 3 – Composition A

Chemical Composition, Wt %								
C	Mn	P	S	Si	B	Cu	Ni	Cr
0.33 - 0.40	0.90 - 1.20	0.035 max	0.040 max	0.15 - 0.30	-	0.25 - 0.45	0.25 - 0.45	0.45 - 0.65

Material properties for ASTM A325M Type 3 is comparable to its metric counterpart. Both are quench and tempered medium carbon steel. The addition of Copper (Cu), Nickel (Ni) and Chromium (Cr) alloys give the steel its weather-resistant properties.

Head Markings

Head Markings	
<u>A325M</u>	Identifies that the bolt is an 830MPa Structural Bolt with metric threads. The underline distinguishes the material as weathering steel.
3-Character Unique Trace Code	Test certificates can be found by searching this code on the Hobson website. Ensures full traceability even after installation.
HEC	Hobson Engineering Company manufacturer's mark that assures high-quality products



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Bolt Tension | Anti-Vibration | Product Reliability | Traceability

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PRODUCT DATA

ASTM A325M Type 3 / Class 8.8 Weathering Steel Structural Assemblies Page 4 of 4

Patina Colour Over Time

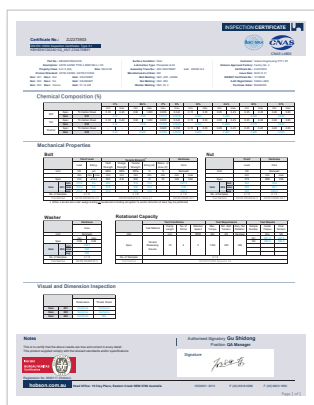


Patina forms and matures on the top layer when subjected to alternating wet and dry conditions.

Quality Assurance **Documentation** Online

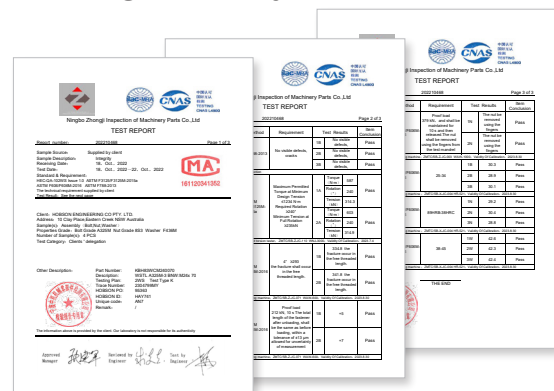
Test & ILAC/NATA Certificates

Trace Number	Description	Category	Part Number	Certificates	Email
AN7-2304799MY	ASTM A325M TYPE 3 BNW:M24 x 100	Structural	KBH83WCM240100	T N	



T Test Certificate

Sampling in accordance with **ASTM F1470**



N NATA/ILAC

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