

**DECLARATION OF PERFORMANCE No. M33SB8.8/10HDG**  
(EU Declaration of Conformity)



2814

**UIC of the product type:** M33SB8.8/10HDG (Unique Identification Code)  
**Intended use:** General building and engineering structures including off-shore structures  
**Manufacturer:** **Andrews Fasteners Ltd**  
**Unit 8, Latchmore Park, Latchmore Rd, Leeds, West Yorkshire, LS12 6DN, United Kingdom**  
**System/s of AVCP:** System 2+  
**Harmonised standard:** BS EN 15048-1:2007  
**Notified Body/ies:** 2814 - Lloyd's Register Verification B.V.(Reg. no. 24247947)  
 K.P. Van Der Mandeleelen 41 A, 3062MB, Rotterdam, Netherlands  
**EC Certificate of Conformity No.** 2814/CPR/LRQ 4009220/A

Declared performance/s:

Essential characteristics	Performance	Harmonized technical specification	
<b>Bolt</b>			
Tolerances on dim., form and position	ISO 4017	BS EN 15048-1:2007	
Elongation after fracture	min. 12% (ISO 898-1)		
Minimum tensile strength	min. 830 MPa (ISO 898-1)		
Lower yield strength or Stress at 0.2% non-proportional	min. 660 MPa (ISO 898-1)		
Stress under proof load	min. 600 MPa (ISO 898-1)		
Strength under wedge loading	min. 576 kN (ISO 898-1)		
Hardness	req 255-335 HV, 250-331 HBW, 23-34 HRC (ISO 898-1)		
Impact strength	min. 27 J at -20 °C (ISO 898-1)		
Release of dangerous substances	Substances X: Less than 0.2 ppm		
Durability	pass (ISO 10684, 50um av min)		
<b>Nut</b>			
Tolerances on dimensions, form and position	ISO 4032		
Stress under proof load	min. 735,6 kN (ISO 898-2)		
Hardness	272-353 HV, 259-336 HB, 26-36 HRC (ISO 898-2)		
Release of dangerous substances	Substances X: Less than 0.2 ppm		
Durability	pass (ISO 10684, 50um av min)		
<b>Washer/s</b>			
Tolerances on dimensions, form and position	ISO 7091		
Hardness (washer)	min. 100 HV		
Release of dangerous substances	Substances X: Less than 0.2 ppm		
Durability	pass (ISO 10684, 50um av min)		
<b>Assembly</b>			
Tensile Resistance of the assembly	min. 576 kN (ISO 898-1)		
Durability	pass (ISO 10684, 50um av min)		

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) 305/2011 including changes commenced by Commission Delegated Regulation (EU) No 574/2014 and relevant requirements of the Harmonized Standard - Annex ZA under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:  
**Michael Carey**  
 Managing Director  
 At Leeds on 01/01/2021