



# Declaration of Performance (DoP)

No. CT04 – EN 15048 PC 10.9



0045

We **Cooper & Turner**  
of **Sheffield Road** **Canklow Meadows Ind Est**  
**Sheffield** **Rotherham**  
**England** **England**  
**S9 1RS** **S60 2XL**

declare that our PC10.9 Non-preload structural bolting assemblies produced in accordance with EN 15048-1 with the Intended use in Structural metallic works fulfil the requirements of EN 15048-1 and will be in be in conformity with the declared performance stated in the table below.

A Factory Production Control certificate for bolting assemblies in accordance with EN 15048-1:2007 Appendix ZA system 2+; certificate no: 0045-CPR-0877 - has been issued to Cooper & Turner by notified body:-

TÜV Nord Systems GmbH & Co. KG – 0045

Declared Performance		
Essential Characteristics	Performance	Harmonised Technical Standard
Tolerance on dimensions, form and position (bolts)	ISO4014, ISO4016, ISO4017, ISO4018 Product grade A or B Pass	EN 15048-1:2007
Percentage Elongation after fracture (bolts)	EN ISO 898-1 A% ≥ 9	
Minimum tensile strength (bolt) Stress at 0.2% non-proportional elongation (bolts) Stress under proof load (bolts) Strength under wedge (bolts) Hardness (bolts) Impact strength (bolts)	EN ISO 898-1 R <sub>m</sub> ≥ 1040 MPa R <sub>p0.2</sub> ≥ 940 MPa  Sp of 830 MPa R <sub>m</sub> ≥ 1040 MPa ≥ 320 HV and ≤ 380 HV ≥ 27 J at -20°C	
Tolerance on dimensions, form and position (nuts)	ISO4032, ISO4033 Product grade A or B Pass	
Stress under proof load (nuts) Hardness (nuts)	EN ISO 898-2 Pass Pass	
Tolerance on dimensions, form and position (washers) Hardness (washers)	ISO7091 Product grade C Pass EN15048-1 ≥ 100 HV Pass	
Tensile resistance (assemblies)	F <sub>bi max</sub> ≥ f <sub>ub</sub>	

This declaration of performance (DOP) is issued under the sole responsibility of Cooper and Turner, and the CE mark is permitted to be affixed at the two locations stated above.

Signed:   
Name: **David Briggs**

Position: **Quality Manager**  
Date: **26<sup>th</sup> November 2015**