DECLARATION OF PERFORMANCE

(No. CMProHex001)

Name of Manufacturer: OSC, The Forge, Wheelers Lane, Linton, Kent ME17 4BN.

Product Type/Name : CarpentersMate ProHex Screws

Intended Use: For joining structural timber members in service

classes 1 or 2 as defined in EN1995-1-1:2004.

System of AVCP: 3

Harmonised Technical Spec'n: EN14592:2008 + A1:2012

Initial type testing undertaken at TRADA Technology Ltd, Stocking Lane, Hughenden Valley, High Wycombe, Buckinghamshire HP14 4ND (Notified Body No.1224).

Essential characteristics	Performance	Harmonised technical specification
Geometry:		
Lengths	1 = 88mm, 141mm, 188mm, 238mm	
Thread length	$l_g = 45 \text{mm}$	
Outer thread diameter	d = 6.3mm	
Inner thread diameter	$d_i = 4.3$ mm	
Effective (design) diameter	$d_{ef} = 4.7 \text{mm}$	
Head diameter	$d_{\rm h} = 11.6 {\rm mm}$	
Material:	Carbon steel wire grade 1022 to ASTM A510	
Mechanical strength and stiffness:		
Characteristic yield moment	$M_{y,k} = 16,470 \text{ Nmm}$	EN14592:2008
Characteristic withdrawal parameter		+ A1:2012
Side grain - C16 timber	$f_{ax,k} = 15.6 \text{ N/mm}^2 (\rho_k = 310 \text{kg/m}^3)$	
(End grain - C16 timber)	$ \begin{cases} f_{ax,k} = 15.6 \text{ N/mm}^2 & (\rho_k = 310 \text{kg/m}^3) \\ \{f_{ax,k} = 12.6 \text{ N/mm}^2 & (\rho_k = 310 \text{kg/m}^3) \} \end{cases} $	
Characteristic head pull-through parameter (in C16 timber)	$f_{head,k} = 21.5 \text{ N/mm}^2 (\rho_k = 310 \text{kg/m}^3)$	
Characteristic tensile capacity	$f_{tens,k} = 17.5 \text{ kN}$	
Characteristic torsional resistance		
(in C16 timber)	$R_{tor,k} = 6,450 \text{ Nmm}$	
Characteristic torsional capacity	$f_{tor,k} = 18,000 \text{ Nmm}$	
Characteristic torsional ratio	2.78	
Durability:	Dacromet® coating equivalent to Z275 hot	
	dip zinc coating	
	(Service Class 2 acc. to EN1995-1-1)	

The performance of the product identified is in conformity with the declared performance in the table above. This declaration of performance is issued under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer: