## **DECLARATION OF PERFORMANCE**

(No. CMFlathead001)

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

**Product Type/Name :** CarpentersMate Flat head 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 = 50mm, 75mm, 100mm, 125mm, 150mm,	
	175mm, 200mm, 250mm	
Thread length	$l_g = 55 \text{mm} (45 \text{mm for } 50 \text{mm long screw})$	
Outer thread diameter	d = 6.5 mm	
Inner thread diameter	$d_i = 4.5 mm$	
Effective (design) diameter	$d_{ef} = 4.9 \text{mm}$	
Head diameter	$d_h = 15.7 mm$	
Material:	Carbon steel wire grade 1022 to ASTM A510	
Mechanical strength and stiffness:		EN14592:2008
Characteristic yield moment	$M_{y,k} = 14,950 \text{ Nmm}$	+ A1:2012
Characteristic withdrawal parameter		
Side grain - C16 timber	$f_{ax,k} = 17.4 \text{ N/mm}^2  (\rho_k = 310 \text{kg/m}^3)$	
(End grain - C16 timber)	$\{f_{ax,k} = 9.4 \text{ N/mm}^2 \ (\rho_k = 310 \text{kg/m}^3)\}$	
Characteristic head pull-through		
parameter in C16 timber	$f_{head,k} = 22.0 \text{ N/mm}^2 \ (\rho_k = 310 \text{kg/m}^3)$	
in 15mm softwood plywood	$f_{head,k} = 17.0 \text{ N/mm}^2 \ (\rho_k = 400 \text{kg/m}^3)$	
in 11mm OSB/3	$f_{head,k} = 7.7 \text{ N/mm}^2$	
Characteristic tensile capacity	$f_{tens,k} = 15.1 \text{ kN}$	
Characteristic torsional resistance		
in C16 timber	$R_{tor,k} = 8,550 \text{ Nmm}$	
Characteristic torsional capacity	$f_{tor,k} = 17,050 \text{ Nmm}$	
Characteristic torsional ratio	1.99	
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 values 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: