



**Strojirenský zkušební ústav, s.p.**  
**(Engineering Test Institute, Public Enterprise)**  
Product certification body  
**Hudcova 424/56b, 621 00 Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20115-18**

Manufacturer  
and Manufacturing plant: YUYAO ALFIRSTE HARDWARE CO. LTD.  
Rulin Rd 315#, Yaobei Industrial Zone,  
Langxia Street, Yuyao, Zhejiang, China

Product,  
Type/Model/Specification: Wood screw  $\varnothing$  4.0 mm  
- countersunk head  
- partial thread  
- Torx recess  
- material: carbon steel C10B21  
- coating type 1: zinc plated (3 to 5)  $\mu\text{m}$

Assessment of the performance  
of construction product: see Annex 1 (page 3 of certificate)

Basis of Certificate issuance: Report on assessment of the performance of construction product  
1015-CPR-30-11272/1 of 2018-03-14

Harmonized standard: EN 14592:2008+A1:2012, Tab. ZA.1

Strojirenský zkušební ústav, s.p., (Engineering Test Institute, Public Enterprise) hereby confirms that it has carried out an assessment of the performance in accordance with point 1.4.(b) System 3 Annex V of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), and has determined the performance of essential characteristics of the construction product.

Product certification scheme applied: ČSN EN ISO/IEC 17067:2014, scheme type 1a.

This Certificate is not a substitute for relevant document issued by Notified Body.

Brno, 2018-03-15



  
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Ing. Pavel Štícha  
Director for Certification

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## Assessment of the performance of construction product

Product	Characteristic yield moment $M_{y,k}$ [Nmm]	Characteristic withdrawal parameter $f_{ax,k}$ [N/mm <sup>2</sup> ]		Characteristic head pull-through parameter $f_{head,k}$ [N/mm <sup>2</sup> ]	Characteristic tensile capacity $f_{tens,k}$ [kN]	Characteristic torsional ratio
		perpendicular to the grain	Parallel to the grain			
-	-			-	-	-
Wood screw ø 4.0 mm	3 529	19,29	14,22	26,04	5,67	3,78
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-	350		350	-	450
Durability (i.e. corrosion protection)	zinc plated (3 to 5) $\mu\text{m}$ (Service Class 1 acc. to EN 1995-1-1)					







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# CERTIFICATE

Number: **E-30-20116-18**

Manufacturer  
and Manufacturing plant:

YUYAO ALFIRSTE HARDWARE CO. LTD.  
Rulin Rd 315#, Yaobei Industrial Zone,  
Langxia Street, Yuyao, Zhejiang, China

Product,  
Type/Model/Specification:

Wood screws  $\varnothing$  5.0 mm  
- countersunk or hex head  
- full or partial thread  
- Torx recess  
- material: carbon steel C10B21  
- coating type 1: zinc plated (3 to 5)  $\mu$ m

Assessment of the performance  
of construction product:

see Annex 1 (page 3 of certificate)

Basis of Certificate issuance:

Report on assessment of the performance of construction product  
1015-CPR-30-11272/2 of 2018-03-14

Harmonized standard:

EN 14592:2008+A1:2012, Tab. ZA.1


Strojirenský zkušební ústav, s.p., (Engineering Test Institute, Public Enterprise) hereby confirms that it has carried out an assessment of the performance in accordance with point 1.4.(b) System 3 Annex V of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), and has determined the performance of essential characteristics of the construction product.

Product certification scheme applied: ČSN EN ISO/IEC 17067:2014, scheme type 1a.

This Certificate is not a substitute for relevant document issued by Notified Body.

Brno, 2018-03-15



  
Ing. Pavel Štícha  
Director for Certification

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## Assessment of the performance of construction product

Product	Characteristic yield moment $M_{y,k}$ [Nmm]	Characteristic withdrawal parameter $f_{ax,k}$ [N/mm <sup>2</sup> ]		Characteristic head pull-through parameter $f_{head,k}$ [N/mm <sup>2</sup> ]	Characteristic tensile capacity $f_{tens,k}$ [kN]	Characteristic torsional ratio
		perpendicular to the grain	parallel to the grain			
-	-			-	-	-
Wood screws ø 5.0 mm	8 061	17,83 <sup>CSK</sup> 17,82 <sup>hex</sup>	14,00 <sup>CSK</sup> 13,38 <sup>hex</sup>	22,95 <sup>CSK</sup> 31,82 <sup>hex</sup>	8,81	2,98 <sup>CSK</sup> 3,86 <sup>hex</sup>
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-	350		350	-	450
Durability (i.e. corrosion protection)	zinc plated (3 to 5) $\mu\text{m}$ (Service Class 1 and 2 acc. to EN 1995-1-1)					







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# CERTIFICATE

Number: **E-30-20117-18**

Manufacturer  
and Manufacturing plant: YUYAO ALFIRSTE HARDWARE CO. LTD.  
Rulin Rd 315#, Yaobei Industrial Zone,  
Langxia Street, Yuyao, Zhejiang, China

Product,  
Type/Model/Specification: Wood screws  $\varnothing$  6.0 mm  
- countersunk or wafer head  
- partial thread  
- Torx recess  
- material: carbon steel C10B21  
- coating type 1: zinc plated (3 to 5)  $\mu$ m

Assessment of the performance  
of construction product: see Annex 1 (page 3 of certificate)

Basis of Certificate issuance: Report on assessment of the performance of construction product  
1015-CPR-30-11272/3 of 2018-03-14

Harmonized standard: EN 14592:2008+A1:2012, Tab. ZA.1

Strojirenský zkušební ústav, s.p., (Engineering Test Institute, Public Enterprise) hereby confirms that it has carried out an assessment of the performance in accordance with point 1.4.(b) System 3 Annex V of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), and has determined the performance of essential characteristics of the construction product.

Product certification scheme applied: ČSN EN ISO/IEC 17067:2014, scheme type 1a.

This Certificate is not a substitute for relevant document issued by Notified Body.

Brno, 2018-03-15



  
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Ing. Pavel Šticha  
Director for Certification







## Assessment of the performance of construction product

Product	Characteristic yield moment $M_{y,k}$ [Nmm]		Characteristic withdrawal parameter $f_{ax,k}$ [N/mm <sup>2</sup> ]		Characteristic head pull-through parameter $f_{head,k}$ [N/mm <sup>2</sup> ]	Characteristic tensile capacity $f_{tens,k}$ [kN]	Characteristic torsional ratio
	thread section	smooth section	perpendicular to the grain	parallel to the grain	-	-	-
Wood screws ø 6.0 mm	12 849	19 022	16,89	13,17	21,25 <sup>CSK</sup> 24,79 <sup>wafer</sup>	10,36	4,49
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-		350		350	-	450
Durability (i.e. corrosion protection)	zinc plated (3 to 5) $\mu\text{m}$ (Service Class 1 and 2 acc. to EN 1995-1-1)						







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# CERTIFICATE

Number: **E-30-20193-18**

Manufacturer  
and Manufacturing plant: YUYAO ALFIRSTE HARDWARE CO. LTD.  
Rulin Rd 315#, Yaobei Industrial Zone,  
Langxia Street, Yuyao, Zhejiang, China

Product,  
Type/Model/Specification: Wood screws  $\varnothing$  8.0 mm  
- wafer or countersunk head  
- partial thread  
- Torx recess  
- material: carbon steel C10B21  
- coating type 1: zinc plated (3 to 5)  $\mu\text{m}$  + waxed

Assessment of the performance  
of construction product: see Annex 1 (page 3 of certificate)

Basis of Certificate issuance: Report on assessment of the performance of construction product  
1015-CPR-30-11319/3 of 2018-04-24

Harmonized standard: EN 14592:2008+A1:2012, Tab. ZA.1


Strojírenský zkušební ústav, s.p., (Engineering Test Institute, Public Enterprise) hereby confirms that it has carried out an assessment of the performance in accordance with point 1.4.(b) System 3 Annex V of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), and has determined the performance of essential characteristics of the construction product.

Product certification scheme applied: ČSN EN ISO/IEC 17067:2014, scheme type 1a.

This Certificate is not a substitute for relevant document issued by Notified Body.

Brno, 2018-04-25



  
Ing. Pavel Štícha  
Director for Certification







Certificate E-30-20193-18 Annex 1

Assessment of the performance of construction product

Product	Characteristic yield moment $M_{y,k}$ [Nmm]		Characteristic withdrawal parameter $f_{ax,k}$ [N/mm <sup>2</sup> ]		Characteristic head pull-through parameter $f_{head,k}$ [N/mm <sup>2</sup> ]	Characteristic tensile capacity $f_{tens,k}$ [kN]	Characteristic torsional ratio
	thread section	smooth section	perpendicular to the grain	parallel to the grain	-	-	-
Wood screws $\varnothing$ 8.0 mm	35 954	55 665	15,32	11,48	22,04 <sup>water</sup> 22,22 <sup>csk</sup>	24,96	5,74
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-	-	350		350	-	450
Durability (i.e. corrosion protection)	zinc plated (3 to 5) $\mu$ m + waxed (Service Class 1 and 2 acc. to EN 1995-1-1)						







**Strojirenský zkušební ústav, s.p.**  
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Product certification body  
Hudcova 424/56b, 621 00 Brno, Czech Republic

# CERTIFICATE

Number: **CPR-J-02762-19**

Manufacturer  
and Manufacturing plant: YUYAO ALFIRSTE HARDWARE CO., LTD.  
Huiqiao Rd #1121, Langxia Street  
315400 YUYAO, China

Product,  
Type/Model/Specification: Wood construction screws  $\varnothing$  10,0 mm  
- type of head: countersunk, wafer  
- torx recess  
- partial thread  
- material: steel C10B21  
- waxed  
- coating type 1: zinc plated, (3 to 5)  $\mu$ m

Assessment of the performance  
of construction product: see Annex 1 (page 3 of certificate)

Basis of Certificate issuance: Report on assessment of the performance of construction product  
1015-CPR-30-14565/JZ of 2019-10-28

Harmonized standard: EN 14592:2008+A1:2012, Tab. ZA.1

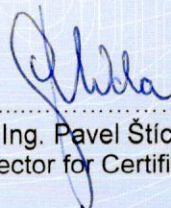
Strojirenský zkušební ústav, s.p., (Engineering Test Institute, Public Enterprise) hereby confirms that it has carried out an assessment of the performance in accordance with point 1.4.(b) System 3 Annex V of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), and has determined the performance of essential characteristics of the construction product.

Product certification scheme applied: ČSN EN ISO/IEC 17067:2014, scheme type 1a.

This Certificate is not a substitute for relevant document issued by Notified Body.

Brno, 2019-10-29



  
Ing. Pavel Štícha  
Director for Certification

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## Assessment of the performance of construction product

Product	Characteristic yield moment $M_{y,k}$ [Nmm]		Characteristic withdrawal parameter $f_{ax,k}$ [N/mm <sup>2</sup> ]		Characteristic head pull-through parameter $f_{head,k}$ [N/mm <sup>2</sup> ]	Characteristic tensile capacity $f_{tens,k}$ [kN]	Characteristic torsional ratio
	thread section	smooth section	perpendicular to the grain	parallel to the grain	-	-	-
Wood construction screws $\varnothing$ 10,0 mm	39 212	66 722	13,68	10,08	22,61 <sup>csk</sup> 26,08 <sup>wafer</sup>	32,89	4,76
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-	-	350		350	-	450
Durability (i.e. corrosion protection)	zinc plated, (3 to 5) $\mu$ m (Service Class 1 and 2 acc. to EN 1995-1-1)						

