



**Strojirenský zkušební ústav, s.p., Brno, Česká republika**  
**Engineering Test Institute, Public Enterprise, Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20451-12**

Producer: **CHAN LIANG ENTERPRISE CO., LTD.**  
No. 323, Shun Ann Rd., Hou Hsiange Village, Lu-Chu District  
Kaohsiung City, Taiwan

Product,  
Type/Model/Specification: **Chipboard screws**  
-  $\varnothing$  3,0 mm  
- flat head, 6-lobe  
- flat doubled (reinforced) head, 6-lobe  
- pozi or Phillips recess  
- material: steel SAE 1022  
- surface protection: galvanic zinc plated  
- length: (18 to 80) mm

Product identification and  
findings of the initial-type  
testing of the product: **see Annex 1 (page 2)**


Base of certificate issuance: **Final Report on Initial Type-Testing of the product**  
**30-9776/1 of 2012-11-27**

Harmonized standard: **EN 14592:2008, Tab. ZA.1**

Strojirenský zkušební ústav, s.p., Engineering Test Institute, Public Enterprise, confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order 190/2002 Coll. § 5 art. 1 let. b). Final Report containing initial type-testing findings and data on product identification.

Brno, 2012-11-28



  
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**Ing. Pavel Šticha**  
Director for Certification

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**Strojirenský zkušební ústav, s. p., Hudcova 56b, 621 00 Brno, Česká republika**  
Engineering Test Institute, public enterprise, Hudcova 56b, 621 00 Brno, Czech Republic

**www.szutest.cz**





Certificate E-30-20451-12, Annex 1

Product identification and findings of the initial-type testing of the 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
		loading across the fibre	loading along the fibre	flat head	double flat head		
	-					-	-
Chipboard screws ø 3,0 mm	1 824	15,66	11,67	27,88	28,62	3,35	3,92
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-	415		390		-	450
Durability (corrosion protection)	galvanic zinc plated (Service Class 1 acc. to EN 1995-1-1)						

Intended use: in load bearing structural timber products.







**Strojirenský zkušební ústav, s.p., Brno, Česká republika**  
**Engineering Test Institute, Public Enterprise, Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20452-12**

Producer: **CHAN LIANG ENTERPRISE CO., LTD.**  
No. 323, Shun Ann Rd., Hou Hsiange Village, Lu-Chu District  
Kaohsiung City, Taiwan

Product,  
Type/Model/Specification: **Chipboard screws**  
-  $\varnothing$  3,5 mm  
- flat head, 6-lobe  
- flat doubled (reinforced) head, 6-lobe  
- pozi or Phillips recess  
- material: steel SAE 1022  
- surface protection: galvanic zinc plated  
- length: (21 to 100) mm

Product identification and  
findings of the initial-type  
testing of the product: **see Annex 1 (page 2)**

Base of certificate issuance: **Final Report on Initial Type-Testing of the product**  
**30-9776/2 of 2012-11-27**

Harmonized standard: **EN 14592:2008, Tab. ZA.1**

Strojirenský zkušební ústav, s.p., Engineering Test Institute, Public Enterprise, confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order 190/2002 Coll. § 5 art. 1 let. b). Final Report containing initial type-testing findings and data on product identification.

Brno, 2012-11-28



  
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Certificate E-30-20452-12, Annex 1

Product identification and findings of the initial-type testing of the 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
		loading across the fibre	loading along the fibre	flat head	double flat head		
	-					-	-
Chipboard screws ø 3,5 mm	2 569	18,54	13,83	22,79	23,13	4,32	4,41
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-	415		380		-	450
Durability (corrosion protection)	galvanic zinc plated (Service Class 1 acc. to EN 1995-1-1)						

Intended use: in load bearing structural timber products.







**Strojirenský zkušební ústav, s.p., Brno, Česká republika**  
**Engineering Test Institute, Public Enterprise, Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20453-12**

Producer: **CHAN LIANG ENTERPRISE CO., LTD.**  
No. 323, Shun Ann Rd., Hou Hsiange Village, Lu-Chu District  
Kaohsiung City, Taiwan

Product,  
Type/Model/Specification: **Chipboard screws**  
- ø 4,0 mm  
- flat head, 6-lobe  
- flat doubled (reinforced) head, 6-lobe  
- pozi or Phillips recess  
- material: steel SAE 1022  
- surface protection: galvanic zinc plated  
- length: (24 to 120) mm

Product identification and  
findings of the initial-type  
testing of the product: see Annex 1 (page 2)

Base of certificate issuance: **Final Report on Initial Type-Testing of the product**  
30-9776/3 of 2012-11-27

Harmonized standard: **EN 14592:2008, Tab. ZA.1**

Strojirenský zkušební ústav, s.p., Engineering Test Institute, Public Enterprise, confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order 190/2002 Coll. § 5 art. 1 let. b). Final Report containing initial type-testing findings and data on product identification.

Brno, 2012-11-28



  
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Certificate E-30-20453-12, Annex 1

Product identification and findings of the initial-type testing of the 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	loading across the fibre	loading along the fibre	flat head	double flat head		
Chipboard screws ø 4,0 mm	4 120	5 009	19,57	14,51	23,95	23,65	5,38	3,52
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-		405		425		-	450
Durability (corrosion protection)	galvanic zinc plated (Service Class 1 acc. to EN 1995-1-1)							

Intended use: in load bearing structural timber products.







**Strojirenský zkušební ústav, s.p., Brno, Česká republika**  
**Engineering Test Institute, Public Enterprise, Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20454-12**

Producer: CHAN LIANG ENTERPRISE CO., LTD.  
No. 323, Shun Ann Rd., Hou Hsiange Village, Lu-Chu District  
Kaohsiung City, Taiwan

Product,  
Type/Model/Specification: Chipboard screws  
- ø 4,5 mm  
- flat head, 6-lobe  
- flat doubled (reinforced) head, 6-lobe  
- pozi or Phillips recess  
- material: steel SAE 1022  
- surface protection: galvanic zinc plated  
- length: (27 to 120) mm

Product identification and  
findings of the initial-type  
testing of the product: see Annex 1 (page 2)

Base of certificate issuance: Final Report on Initial Type-Testing of the product  
30-9776/4 of 2012-11-27

Harmonized standard: EN 14592:2008, Tab. ZA.1

Strojirenský zkušební ústav, s.p., Engineering Test Institute, Public Enterprise, confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order 190/2002 Coll. § 5 art. 1 let. b). Final Report containing initial type-testing findings and data on product identification.

Brno, 2012-11-28



  
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Certificate No. E-30-20454-12.docx; Page 1 / Total pages 2





Certificate E-30-20454-12, Annex 1

Product identification and findings of the initial-type testing of the 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	loading across the fibre	loading along the fibre	flat head	double flat head		
Chipboard screws ø 4,5 mm	5 150	8 247	21,06	15,41	27,26	24,10	6,28	2,96
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-		405		545		-	450
Durability (corrosion protection)	galvanic zinc plated (Service Class 1 acc. to EN 1995-1-1)							

Intended use: in load bearing structural timber products.







**Strojirenský zkušební ústav, s.p., Brno, Česká republika**  
**Engineering Test Institute, Public Enterprise, Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20455-12**

Producer: CHAN LIANG ENTERPRISE CO., LTD.  
No. 323, Shun Ann Rd., Hou Hsiange Village, Lu-Chu District  
Kaohsiung City, Taiwan

Product,  
Type/Model/Specification: Chipboard screws  
- ø 5,0 mm  
- flat head, 6-lobe  
- flat doubled (reinforced) head, 6-lobe  
- pozi or Phillips recess  
- material: steel SAE 1022  
- surface protection: galvanic zinc plated  
- length: (30 to 140) mm

Product identification and  
findings of the initial-type  
testing of the product: see Annex 1 (page 2)

Base of certificate issuance: Final Report on Initial Type-Testing of the product  
30-9776/5 of 2012-11-27

Harmonized standard: EN 14592:2008, Tab. ZA.1

Strojirenský zkušební ústav, s.p., Engineering Test Institute, Public Enterprise, confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order 190/2002 Coll. § 5 art. 1 let. b). Final Report containing initial type-testing findings and data on product identification.



Brno, 2012-11-28

  
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Certificate E-30-20455-12, Annex 1

Product identification and findings of the initial-type testing of the 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	loading across the fibre	loading along the fibre	flat head	double flat head		
Chipboard screws ø 5,0 mm	7 096	9 418	19,08	13,94	20,39	19,87	7,90	2,44
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-		405		375		-	450
Durability (corrosion protection)	galvanic zinc plated (Service Class 1 acc. to EN 1995-1-1)							

Intended use: in load bearing structural timber products.







**Strojirenský zkušební ústav, s.p., Brno, Česká republika**  
**Engineering Test Institute, Public Enterprise, Brno, Czech Republic**

# CERTIFICATE

Number: **E-30-20456-12**

Producer: **CHAN LIANG ENTERPRISE CO., LTD.**  
No. 323, Shun Ann Rd., Hou Hsiange Village, Lu-Chu District  
Kaohsiung City, Taiwan

Product,  
Type/Model/Specification: **Chipboard screws**  
- ø 6,0 mm  
- flat head, 6-lobe  
- flat doubled (reinforced) head, 6-lobe  
- pozi or Phillips recess  
- material: steel SAE 1022  
- surface protection: galvanic zinc plated  
- length: (36 to 260) mm

Product identification and  
findings of the initial-type  
testing of the product: **see Annex 1 (page 2)**

Base of certificate issuance: **Final Report on Initial Type-Testing of the product**  
**30-9776/6 of 2012-11-27**

Harmonized standard: **EN 14592:2008, Tab. ZA.1**

Strojirenský zkušební ústav, s.p., Engineering Test Institute, Public Enterprise, confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order 190/2002 Coll. § 5 art. 1 let. b). Final Report containing initial type-testing findings and data on product identification.

Brno, 2012-11-28



  
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Certificate E-30-20456-12, Annex 1

Product identification and findings of the initial-type testing of the 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	loading across the fibre	loading along the fibre	flat head	double flat head	-	-
Chipboard screws ø 6,0 mm	11841	15190	18,43	14,38	27,06	26,36	11,37	2,46
Characteristic density of wood $\rho_k$ [kg/m <sup>3</sup> ]	-		405		485		-	450
Durability (corrosion protection)	galvanic zinc plated (Service Class 1 acc. to EN 1995-1-1)							

Intended use: in load bearing structural timber products.

