

DECLARATION OF PERFORMANCE NO: 00517SB

1. Unique identification code of the product-type:

ZSB15048

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

Z + PROPERTY CLASS + SB + WEEK NUMBER AND LAST TWO DIGITS OF THE YEAR
(see head marking, etiquette or certificate)

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Assemblies for steel constructions according to EN 15048

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):



ul. Grunwaldzka 5, 34-300 Żywiec, Poland

5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):
not applicable

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:
EN 15048-1, Annex ZA, System 2+

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

Building Research Institute Certification Department, Warszawa, Nr 1488

(name and identification number of the notified body, if relevant)

performed **assessment and approval of the factory production control under system 2+**

(description of the third party tasks as set out in Annex V)

and issued:

EC Certificate of Factory Production Control 1488-CPR-162/Z

(certificate of constancy of performance, certificate of conformity of the factory production control, test/calculation reports – as relevant)

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
not applicable

9. Declared performance:

Notes to the table:

- Column 1 shall contain the list of essential characteristics as determined in the harmonized technical specifications for the intended use or uses indicated in point 3 above.
- For each essential characteristic listed in column 1 and in compliance with the requirements of Article 6, column 2 shall contain the declared performance, expressed by level or class, or in a description, related to the corresponding essential characteristics. The letters "NPD" (No Performance Determined) shall be indicated where no performance is declared.
- For each essential characteristic listed in column 1, column 3 shall contain:
 - dated reference of the corresponding harmonized standard and, where relevant, the reference number of the Specific or Appropriate Technical Documentation used;or
 - dated reference of the corresponding European Assessment Document where available and reference number of the European Technical Assessment used.

Essential characteristics	Performance		Harmonized technical specification	
Tolerances of the components (bolts)	ISO 4014 or ISO 4017 productclass A (d ≤ 24mm und 1 ≤ 10d) or B (d ≥ 24mm and 1 ≥ 10d) and productstandard acc. EN ISO 4759-1		EN 15048-1:2007 Tabele ZA.1	
Elongation (bolts) Tensile strength (bolts) Yield point (bolts) Proof stress (bolts) Strength in wedge test (bolts) Hardness (bolts) Impact test at -20°C (bolts)	Mechanical properties class 5.6			Mechanical properties class 8.8
	A _{5%} ≥ 20%			A _{5%} ≥ 12%
	R _m ≥ 500N/mm ²			R _m ≥ 830N/mm ²
	R _e ≥ 300N/mm ²			R _{p0.2} ≥ 660N/mm ²
	S _p of 280N/mm ²			S _p of 600N/mm ²
	R _m ≥ 500N/mm ²			R _m ≥ 830N/mm ²
	≥ 79HRB and ≤ 95HRB			≥ 23HRC and ≤ 34HRC
KV ₂ ≥ 27J		KV ₂ ≥ 27J		
Emissions of dangerous substances (bolts)	NPD			
Durability (bolts)	HDG			
Tolerances of the components (nuts)	According to the order ISO 4032 productclass A (d ≤ 16mm) or B (d ≥ 16mm) or ISO4034 productclass C. Productstandard acc. EN ISO 4759-2			
Proof stress (nuts) Hardness HV ₁₀ (nuts)	Mechanical properties class 5			Mechanical properties class 8
	S _p of 610 N/mm ² (M12 and M16) or 630N/mm ² (>M16) ≥ 130 and ≤ 302 (M12 and M16) or ≥ 146 and ≤ 302 (>M16)		S _p of 880 N/mm ² (M12 and M16) or 920N/mm ² (>M16) ≥ 200 and ≤ 302 (M12 and M16) or ≥ 233 and ≤ 353 (>M16)	
Emissions of dangerous substances (nuts)	NPD			
Durability (nuts)	HDG			
Tensile resistance of the assembly (assemblies)	F _{bl,max} ≥ F _{ub} = A _{s, nom} × R _{m, min} Pass with R _m ≥ 500MPa		F _{bl,max} ≥ F _{ub} = A _{s, nom} × R _{m, min} Pass with R _m ≥ 830MPa	
Durability (assemblies)	HDG			

Where pursuant to Article 37 or 38 the Specific Technical Documentation has been used, the requirements with which the product complies:
not applicable

10. **The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.**
This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

MA Włodzimierz Mrowiec
Quality Control Department Manager
(name and function)

(signature)

Żywiec, 14.01.2016
(place and date of issue)