

## CERTIFICATE OF CONSTANCY OF PERFORMANCE

20-CPR-124-(C-12/2011)

In compliance with Government decree no. 275/2013. (issued on 16th July) this certificate applies to the construction product

**Factory-made welded fabric manufactured by machine welding, produced by ArcelorMittal Zenica d.o.o., from weldable, ribbed, cold formed reinforcing steel wires in steel quality B500A (DIN 488-1:2009 and MSZ/T 339:2012.03) with  $R_{p0,2} = 500$  MPa proof strength calculated from nominal cross-section.**

with product performance and intended use shown in the annex as page 2/2 of this certificate and produced by

**ArcelorMittal Zenica d.o.o.**

Bulevar Kralja Tvrtka No. 17, BIH-72000 Zenica, Bosnia-Herzegovina

and produced in the manufacturing plant:

**ArcelorMittal Zenica d.o.o.**

Bulevar Kralja Tvrtka No. 17, BIH-72000 Zenica, Bosnia-Herzegovina

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in **National Technical Assessment no. A-17/2015 dated at 30.09.2015.** under system (1+) are applied and that

**the product fulfils all the prescribed requirements set out above.**

This certificate was first issued on 19.10.2015 and will remain valid as long as the test methods and/or factory production control requirements included in the National Technical Assessment, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

*This certificate consists of 2 pages!*

Issue: 2.

Dated at Szentendre, 21<sup>st</sup> November 2018



Molnár Ágnes  
Head of Certification Office  
Certification Office  
of ÉMI Non-profit Ltd.

## CERTIFICATE OF CONSTANCY OF PERFORMANCE

**20-CPR-124-(C-12/2011)**

### ANNEX

**Nominal diameters:**

Ø5 – Ø10 mm

**Intended use of the product:**

The steel welded fabrics may be used as reinforcement of concrete structures according to EN 10080:2005, in steel quality B500A (DIN 488-1:2009 and MSZ/T 339:2012.03).

The reinforcing steel welded fabrics can be taken into account with the parameters of welded fabrics made from BHB 55.50 (MSZ 982:1987) by performing diagnostic works on building designed in accordance with withdrawn standards series no. MSZ 15022:1986 and no. MSZ 15022:1986/1M:1992.

The reinforcing steel welded fabrics can be taken into account as product in ductility class A with  $R_{p0,2} = 500$  MPa declared proof strength calculated from nominal cross-section at design works and strength calculations, according to Annex C of standard no. EN 1992-1-1:2010 (EUROCODE 2).

Essential characteristics	Performance
Proof or yield strength ( $R_{p0,2}$ or $R_{eH}$ ) <sup>1)</sup>	≥ 500 MPa (characteristic) ≥ 485 MPa (individual)
Tensile strength ( $R_m$ )	≥ 550 MPa (characteristic) ≥ 534 MPa (individual)
Stress ratio, $R_m / R_{p0,2}$	≥ 1.05 (characteristic) ≥ 1.03 (individual)
Yield ratio, $R_{p0,2} / R_{p,nom}$	≤ 1.30 (individual)
Extension ( $A_{gt}$ )	≥ 2.5 % (characteristic) ≥ 2.25 % (individual)
Shear strength	≥ 0.3 $R_{p0,2}$ [MPa]
Tolerances from nominal cross-section	$d \leq 8$ mm: ± 6.0 $d > 8$ mm: ± 4.5
Bonding strength ( $f_R$ )	$d \leq 6$ mm: 0.035 $6$ mm < $d \leq 12$ mm: 0.040 $d > 12$ mm: 0.056
Weldability ( $C_{eq}$ or CEV):	$C_{eq} \leq 0.50$
Durability (cast analysis)	$C \leq 0.22$ ; $S \leq 0.050$ ; $P \leq 0.050$ ; $N_2 \leq 0.012$ ; $Cu \leq 0.80$
Size of welded fabrics: - wire diameter ratio - tolerance on width and length - pitch size (P) - tolerance on pitch size - overhang (u)	0,6 – 1,67 ± 25 mm; ± 0.5% (whichever is bigger) ≥ 50 mm ± 15 mm; ± 7.5% (whichever is bigger) ≥ 25 mm (nominal)
<sup>1)</sup> Upper yield strength ( $R_{eH}$ ), when real yield phenomena occurs, otherwise proof strength ( $R_{p0,2}$ )	

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