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Terwa B.V.

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Revision date

: 29-02-2016

Date

: 25-02-2016

Element report number: EAM017841-ALC-25R1

Customer reference : -

# **TEST REPORT**

Project

: KIWA audit testing

Reference

: E. Hermus

Material connector

: 25CrMo4

Material inside thread

: 42CrMo4

Material reinforcing steel

: BST550

## **RECIEVED TEST SAMPLES**

Specimen	
F17841-ALC-25-1 u/t 3	Three ALC couplers, marked: ALC 25 TW

## **DESCRIPTION TEST SAMPLES**

1x Reference reinforcing steel ø 25 mm, Element mark F17841-25-REF

3x ALC-coupler, dimensions L= 390 mm, type ALC 25 TW 43075 592599 with reinforcing steel ø 25 mm, Element mark F17841-ALC-25-1 through F17841-ALC-25-3



A side

B side





### **DESTRUCTIVE TESTS**

Test method: Conform TO NEN 6008/BRL 0504							[Test temperatuur ° C: ambient]				
Specimen no.	Dia-	Cross-	ReH	Rm	Rm/ReH	Agt	Place of		Rm Ratio	Slip	
	meter	section					fracture		*7		
	[mm]	[mm²]	[MPa	[MPa]		[%]		[mm]	[%]	[mm]	
F17841-REF	25	491	613	701	1.14	11.6	-	-	-	-	
F17841-ALC-25-1	25	491	612	689	1.13	5.6	*3	-	98.3	0.05	
F17841-ALC-25-2	25	491	611	699	1.14	7.1	*3	-	99.7	0.05	
F17841-ALC-25-3	25	491	611	703	1.15	9.4	*1	150	100.3	0.04	
Characteristic requirements											
acc. NEN 6008 for BST550 ≥50			≥500		≥1.08	≥5.0					
Requirements according BRL-0504								≥25	≥90	≤0.10	

#### **CONCLUSIONS/REMARKS**

The coupler is tested in delivered condition.

The connection is torqued up by Terwa

- \*1 The reinforcing steel is broken at A side.
- \*2 The reinforcing steel is broken at B side.
- \*3 The reinforcing steel is slipped out the ALC coupler at A side.
- \*4 The reinforcing steel is slipped out the ALC coupler at B side.
- \*5 The coupler thread sheared off.
- \*6 Distance between place of fracture and beginning of the coupler.
- \*7 Tensile strength percentage between the reinforcing steel connection and the reference reinforcing steel.
- \*8 Not determined.
- \*9 The reinforcing steel is broken in the coupler at A side.
- \*10 The reinforcing steel is broken in the coupler at B side.

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element<sup>\*</sup>

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