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Terwa B.V. Kamerlingh Onneslaan 1-3 3401 MZ IJsselstein

Revision date

: 29-02-2016

Date

: 25-02-2016

Element report number: EAM017841-ALC-20R1

TEST REPORT

Customer reference

Project

: KIWA audit testing

Reference

: E. Hermus

Material connector

: 25CrMo4

Material inside thread

: 42CrMo4

Material reinforcing steel

: BST550

RECIEVED TEST SAMPLES

Specimen	
F17841-ALC-20-1 u/t 3	Three ALC couplers, marked: ALC 20 TW

DESCRIPTION TEST SAMPLES

1x Reference reinforcing steel ø 20 mm, Element mark F17841-20-REF

3x ALC-coupler, dimensions L= 260 mm, type ALC 20 TW 43073 593356 with reinforcing steel ø 20 mm, Element mark F17841-ALC-20-1 through F17841-ALC-20-3



A side

B side





DESTRUCTIVE TESTS

Test method: Conform TO NEN 6008/BRL 0504						[Test temperatuur ° C: ambient]				
Specimen no.	Dia- meter	Cross- section	ReH	Rm	Rm/ReH	Agt	Place of fracture		Rm Ratio	Slip
	[mm]		[MPa	[MPa]		[%]	iracture	[mm]	[%]	[mm]
F17841-REF	20	314	575	671	1.17	12.1	-	-	_	-
F17841-ALC-20-1	20	314	577	662	1.15	7.7	*3	-	98.7	0.04
F17841-ALC-20-2	20	314	585	639	1.09	5.6	*3	-	95.2	0.03
F17841-ALC-20-3	20	314	585	678	1.16	8.9	*3	-	101.0	0.03
Characteristic requirements										
acc. NEN 6008 for BST550 ≥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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