MPA NRW.
Materialprüfungsamt Nordrhein-Westfalen
PRÜFEN ▪ ÜBERWACHEN ▪ ZERTIFIZIEREN

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Test report No. 220011380-15e

Client

NAYLOR DRAINAGE Ltd.
Clough Green Cawthorne,
Barnsley

GB-South Yorkshire S75 4AD

Date of order: February 27, 2015
Receipt of samples: July 02, 2015
Date of testing: July 02, 2015

Order

Determination of water tightness at 5.0 bar of clay pipes

Samples

Denlok jacking pipes:
DN 200 x 996 - FN 80 - 700
DN 250 x 996 - FN 100 - 1630
DN 300 x 996 - FN 120 - 1875
DN 400 x 996 - FN 160 - 3150
DN 600 x 996 - FN 120 - 4520

Description of the tests/underlying specifications

DIN EN 295-1 „Vitrified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings and joints", May 2013

DIN EN 295-2 „Vitrified clay pipe systems for drains and sewers - Part 2: Evaluation of conformity and sampling", May 2013

DIN EN 295-3 „Vitrified clay pipe systems for drains and sewers - Part 3: Test methods", March 2012

DIN EN 295-7 „Vitrified clay pipe systems for drains and sewers - Part 7 Requirements for pipes and joints for pipe jacking, May 2013

DIN CERTCO Certification scheme ZP WN 295 - Glazed vitrified clay pipes and fittings for drains and sewers DIN EN 295, Part 1 through 7, issue September 2013

The results of the tests refer exclusively to the samples named above.

This report consists of 3 pages.

1 sampling

The manufacture of vitrified clay pipes was carried out in the factory Green Clough, Cawthorne Barnsley. Here were performed the sampling and tests.

2 Results of the tests

2.1 Contents of the tubes

The pipes sounded clear and properly when struck. They had no errors that could affect their function.

2.1.1 Marking

	(impressed)	(stamped)
DN 200		
DIN EN-Marking:	BS EN 295-7	BS EN 295-7
Manufacturer's identification:	NAYLOR - DENLOK	NAYLOR DENLOK NC
Date of manufacturing:	04.06.14 - 04.06.14	--
Nominal size:	DN 200	DN 200
Dimensional jointing system:	FN 80 - 700	FN 80 - 700
Identification symbol of the third party certification body:	CE	--
DN 250		
DIN EN-Marking:	BS EN 295-7	BS EN 295-7
Manufacturer's identification:	NAYLOR - DENLOK	NAYLOR DENLOK NC
Date of manufacturing:	01.05.15 - 01.05.15	--
Nominal size:	DN 250	DN 250
Dimensional jointing system:	FN 100 - 1630	FN 100 - 1630
Identification symbol of the third party certification body:	CE	--
DN 300		
DIN EN-Marking:	BS EN 295-7	BS EN 295-7
Manufacturer's identification:	NAYLOR - DENLOK	NAYLOR DENLOK NC
Date of manufacturing:	16.01.15 - 19.01.15	--
Nominal size:	DN 300	DN 300
Dimensional jointing system:	FN 120 - 1875	FN 120 - 1875
Identification symbol of the third party certification body:	CE	--
DN 400		
DIN EN-Marking:	BS EN 295-7	BS EN 295-7
Manufacturer's identification:	NAYLOR - DENLOK	NAYLOR DENLOK NS
Date of manufacturing:	23.02.15 - 23.05.15	--
Nominal size:	DN 400	DN 400
Dimensional jointing system:	FN 160 - 3150	FN 160 - 3150
Identification symbol of the third party certification body:	CE	--

DN 600

DIN EN-Marking:	BS EN 295-7	BS EN 295-7
Manufacturer's identification:	NAYLOR - DENLOK	NAYLOR DENLOK NS
Date of manufacturing:	04.12.14 - 05.12.14	--
Nominal size:	DN 600	DN 600
Dimensional jointing system:	FN 120 - 4520	FN 120 - 4520
Identification symbol of the third party certification body:	CE	--

2.3 Tests in the laboratory of the MPA NRW in Dortmund

2.3.1 Water tightness of the pipe joint at elevated pressure of 5.0 bar in accordance*) with ZP WN 295, clause 4.11

Test carried out according to DIN EN 295-7, clause 5.3.2 on two jointed pipes (without shear load and without deflection) at a test pressure of 5.0 bar for a period of 15 minutes time.

Nominal size	ZP WN 295, clause 4.11	Test pressure [bar]	Test time [min.]	Comments	Requirement fulfilled
DN 200 DN 250 DN 300 DN 400 DN 600	2 pipes with connection	5.0 bar	15	dry	yes

*) 5.0 bar instead of 2.4 bar

3 Assessment

Concerning the tested characteristics, the tested vitrified clay pipes meet the requirements of **DIN EN 295-7** and the requirements of the DIN CERTCO certification scheme **ZP WN 295** - Glazed vitrified clay pipes and fittings for drains and sewers DIN EN 295, Part 1 through 7.

Dortmund, 20.08.2015
By order

Materialprüfungsamt MPA NRW 2 Nordrhein-Westfalen

Dipl.-Ing. Tayyar Uysal
Executive officer