

## Auditing Test Report

Test Report No.:SA13-4043/25

Date: 26/01/2023

### Client

Saudi Vitrified Clay Pipe Co.

P.O. Box 6415

Riyadh 11442

Kingdom of Saudi Arabia

Sampling Date: 22/01/2023

Test Date: 23/01/2023

### Auditing Purpose:

Testing of Vitrified Clay Pipes jointed by system C according to EN 295-1:2013

### Size Description:

Nominal Size: DN 200 ES \* 2000 mm

Jointing System: System C

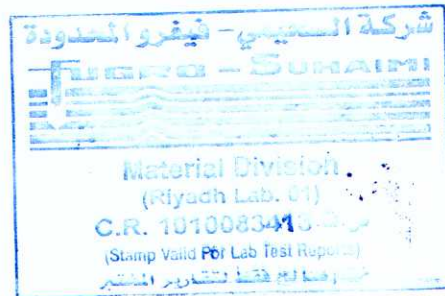
Class: 240

### Description of Sampling

Samples were collected randomly from the stock at the client's manufacturing works in Riyadh (Kingdom of Saudi Arabia) by the agent of the Suhaimi - Fugro

### Underlying specification /description of the tests

EN 295-1:2013	"Vitrified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings & joints"
GSO EN 295-1:2008	"Vitrified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings & joints"
EN 295-2:2013	"Vitrified clay pipe systems for drains and sewers - Part 2: Evaluation of conformity and sampling"
EN 295-3:2012	"Vitrified clay pipe systems for drains and sewers - Part 3: Test Methods"



## Test Results of DN 200 ES

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Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result	
Pipes	Marking (visual Inspection)	-	✓	✓	✓	✓	✓	
	Crushing Strength	KN/m	71	73	69	≥ 60	✓	
	Internal Barrel Diameter "D1"	mm	205	200	203	≥ 195	✓	
	Length	mm	2005	2010	2010	2000 <sup>+4%</sup> <sub>-1%</sub>	✓	
	Water Tightness	L/m <sup>2</sup>	0.02	0.014	0.02	≤ 0.04	✓	
	Deviation from Straightness	mm	2.5	2.7	2.8	< 4.0	✓	
	Squareness of Ends	Socket	mm	2.7	2.8	2.9	< 6.0	✓
		Spigot	mm	1.9	2.4	2.3		
	Airtightness	mm	5	10	10	Drops ≤ 25	✓	
	Chemical Resistance	%	0.16	0.16	0.14	0.10-0.25%	✓	
	Water Absorption	%	3.2	3.1	2.9	≤ 6 %	✓	
	Bending Moment Resistance	KNm	20.4	24.3	22.3	≥ 9.9	✓	
Joint Assembly	Joint Interchangeability (D4)	mm	275.3	275.4	275.4	275 ± 0.5	✓	
	Watertightness under Angular Deflection	0.5 bar	No leak, Deflection applied is 80 mm/m for 5 min.			No visible leakage	✓	
	Watertightness under Shear	0.5 bar	No leak, Shear force applied is 5.0 KN for 15 min.			No visible leakage	✓	
	Continuity of Invert	mm	2.5	2.6	2.6	≤ 4	✓	

*Inam Syed*

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