

## Auditing Test Report

Test Report No.:SA13-4043/31

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 400 \* 2000 mm  
Jointing System: System C  
Class: 120

### 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 400 SS

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	Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result
	Pipes	Marking (visual Inspection)		-	✓	✓	✓	✓
Crushing Strength		KN/m	73	75	77	≥ 64	✓	
Internal Barrel Diameter "D1"		mm	399	399	400	≥ 390	✓	
Length		mm	2010	2015	2010	2000 <sup>+4%</sup> <sub>-1%</sub>	✓	
Water Tightness		L/m <sup>2</sup>	0	0.02	0.02	≤ 0.04	✓	
Deviation from Straightness		mm	0.5	0.3	0.5	< 3.0	✓	
Squareness of Ends		Socket	mm	3.1	4.7	4.2	< 8.0	✓
		Spigot	mm	3.2	4.2	3.8		
Airtightness		mm	10	10	5	Drops ≤ 25	✓	
Chemical Resistance		%	0.15	0.12	0.16	0.10-0.25%	✓	
Water Absorption		%	3.6	4.0	3.7	≤ 6%	✓	
Joint Assembly	Joint Interchangeability (D4)		mm	483.7	483.9	483.8	483.5 ± 0.5	✓
	Watertightness under Angular Deflection		0.5 bar	No leak, Deflection applied is 30 mm/m for 5 min.			No visible leakage	✓
	Watertightness under Shear		0.5 bar	No leak, Shear force applied is 10.0 KN for 15 min.			No visible leakage	✓
	Continuity of Invert		mm	2.3	2.4	2.2	≤ 4	✓

*Inam Syed*

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