

Auditing Test Report

Test Report No.: SA13-4043/25

Date: 10/01/2024

Client

Saudi Vitrified Clay Pipe Co.
P.O. Box 6415
Riyadh 11442
Kingdom of Saudi Arabia

Sampling Date: 06/01/2024

Test Date: 07/01/2024

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 - Class A

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 - Class A

Test Report No.: SA13-4043/25

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 ^{+4%} _{-1%}	✓	
	Water Tightness	L/m ²	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	✓	

FUGRO - SUHAIMI LTD

Mohammad Afaq

