

Auditing Test Report

Test Report No.: SA13-4043/32

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 400 * 2000 mm
Jointing System: System C
Class: 200 - 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 400 ES - Class A

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Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result	
Pipes	Marking (visual Inspection)	-	✓	✓	✓	✓	✓	
	Crushing Strength	KN/m	120	115	115	≥ 96	✓	
	Internal Barrel Diameter "D1"	mm	400	400	402	≥ 390	✓	
	Length	mm	2010	2010	2015	2000 ^{+4%} _{-1%}	✓	
	Water Tightness	L/m ²	0.02	0.01	0.02	≤ 0.04	✓	
	Deviation from Straightness	mm	0.5	0.9	0.6	< 3.0	✓	
	Squareness of Ends	Socket	mm	3.2	3.2	3.6	< 8.0	✓
		Spigot	mm	3.5	3.1	3.6		
	Airtightness	mm	10	20	15	Drops ≤ 25	✓	
	Chemical Resistance	%	0.15	0.16	0.16	0.10-0.25%	✓	
	Water Absorption	%	4.7	5.1	5.1	≤ 6%	✓	
Joint Assembly	Joint Interchangeability (D4)	mm	515.8	515.7	515.8	515.5 ± 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	2.8	2.3	2.4	≤ 4	✓	

FUGRO - SUHAIMI LTD

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