

Auditing Test Report

Test Report No.258816/19

Date: 21/07/2024

Client

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

Sampling Date: 17/07/2024

Test Date: 18/07/2024

Auditing Purpose:

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

Size Description:

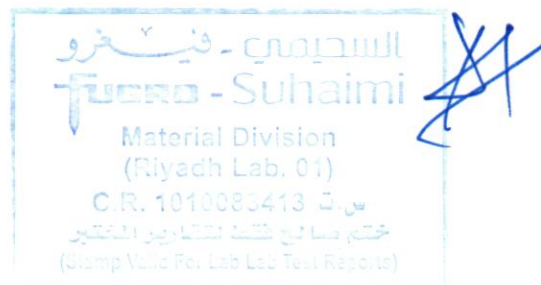
Nominal Size: DN 150 * 1000 mm
Jointing System: System F
Class: 34 KN/m - Class B

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"
WN ZP 295:2022	"Glazed vitrified clay pipes, fittings and their accessories for drains and sewers"
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 150 mm - Class B

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Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result	
Pipes	Marking (visual Inspection)	-	✓	✓	✓	✓	✓	
	Crushing Strength	KN/m	44	45	42	≥ 34	✓	
	Internal Barrel Diameter "D1"	mm	152	151	151	≥ 146	✓	
	Length	mm	1010	1010	1005	1000 ^{+4%} _{-1%}	✓	
	Water Tightness	L/m ²	0.01	0.02	0.02	≤ 0.04	✓	
	Deviation from Straightness	mm	2.4	2.2	2.9	< 4.5	✓	
	Squareness of Ends	Socket	mm	1.7	1.5	2.0	< 6.0	✓
		Spigot	mm	2.8	2.4	2.7		
	Airtightness	mm	0	5	0	Drops ≤ 25	✓	
	Chemical Resistance	%	0.19	0.17	0.18	0.10-0.25%	✓	
	Water Absorption	%	2.1	2.3	2.4	≤ 6 %	✓	
	Bending Moment Resistance	KNm	10.5	11.1	11.6	≥ 5.0	✓	
Joint Assembly	Joint Interchangeability (D3)	mm	186.9	186.5	187.2	186 ± 2.0	✓	
	Watertightness under Deflection	0.5 bar	No leak, for 5 minutes under Deflection of 100 mm/m			No visible leakage	✓	
	Watertightness under shear		No leak, for 15 minutes under shear load of 3.75 KN				✓	
	Watertightness of joint assembly	1.0 bar	No leak, for 15 minutes without shear or deflection				✓	
		2.4 bar					✓	
Continuity of Invert	mm	N/A			N/A		✓	



FUGRO - SUHAIMI LTD
Mohammad Afaq