السحيمي - فيغرو
FUGRO - Suhaimi

Auditing Test Report

Test Report No. 258816/20

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 * 1500 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

السحيمي - فيغرو
FUGRO - Suhaimi
Material Division
(Riyadh Lab. 01)
C.R. 1010083413
(Stamp Valid For Lab Lab Test Reports)

Test Results of DN 150 mm - Class B

Test Report No. 258816/20

	Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result
Pipes	Marking (visual Inspection)		-	✓	✓	✓	✓	✓
	Crushing Strength		KN/m	43	47	49	≥ 34	✓
	Internal Barrel Diameter "D1"		mm	153	150	151	*≥ 146*	✓
	Length		mm	1510	1502	1505	*1500 $^{+4\%}_{-1\%}$*	✓
	Water Tightness		L/m^2	0.03	0.01	0.02	*≤ 0.04*	✓
	Deviation from Straightness		mm	2.4	3.2	2.5	*< 4.5*	✓
	Squareness of Ends	Socket	mm	1.7	1.7	2.0	*< 6.0*	✓
		Spigot	mm	1.8	1.8	1.9		
	Airtightness		mm	5	0	10	*Drops ≤ 25*	✓
	Chemical Resistance		%	0.20	0.19	0.17	*0.10-0.25%*	✓
	Water Absorption		%	2.2	2.5	2.1	*≤ 6 %*	✓
	Bending Moment Resistance		KNm	10.7	11.4	10.8	*≥ 5.0*	✓
Joint Assembly	Joint Interchangeability (D3)		mm	186.4	186.5	186.5	*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

السحيمي - فيغرو
FUGRO - Suhaimi
Material Division
(Riyadh Lab. 01)
C.R. 1010063413
(Stamp Valid For Lab Use Test Reports)