

Auditing Test Report

Test Report No. 258816/37

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 C according to EN 295-1:2013

Size Description:

Nominal Size: DN 900 * 2000 mm

Jointing System: System C

Class: 95 - 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 900 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 | 110 | 119 | 119 | ≥ 95 | ✓ | |
| Internal Barrel Diameter "D1" | | mm | 904 | 905 | 900 | ≥ 878 | ✓ | |
| Length | | mm | 2010 | 2005 | 2010 | 2000 ^{+4%} _{-1%} | ✓ | |
| Water Tightness | | L/m ² | 0.02 | 0.03 | 0.03 | ≤ 0.04 | ✓ | |
| Deviation from Straightness | | mm | 0.5 | 0.6 | 0.3 | < 3.0 | ✓ | |
| Squareness of Ends | | Socket | mm | 10.5 | 10.4 | 9.5 | < 18.0 | ✓ |
| | | Spigot | mm | 10.4 | 10.5 | 9.5 | | |
| Airtightness | | mm | 22 | 20 | 20 | Drops ≤ 25 | ✓ | |
| Chemical Resistance | | % | 0.18 | 0.18 | 0.16 | 0.10-0.25% | ✓ | |
| Water Absorption | | % | 5.6 | 5.7 | 5.8 | ≤ 6 % | ✓ | |
| Joint Assembly | Joint Interchangeability (D4) | | mm | 1096.4 | 1096.3 | 1096.4 | 1096 ± 0.5 | ✓ |
| | Watertightness under Angular Deflection | | 0.5 bar | No leak, Deflection applied is 10 mm/m for 5 min. | | | No visible leakage | ✓ |
| | Watertightness under Shear | | 0.5 bar | No leak, Shear force applied is 22.5 KN for 15 min. | | | No visible leakage | ✓ |
| | Continuity of Invert | | mm | 6.1 | 6.3 | 6.2 | ≤ 9.0 | ✓ |

FUGRO - SUHAIMI LTD

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