

Auditing Test Report

Test Report No.:SA13-4034/34

Date: 26/01/2023

Client

Saudi Vitrified Clay Pipe Co.

P.O. Box 6415

Riyadh 11442

Kingdom of Saudi Arabia

Sampling Date: 22/01/2023

Test Date: 23/01/2023

Auditing Purpose:

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

Size Description:

Nominal Size: DN 500 * 2000 mm

Jointing System: System C

Class: 120

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 500 SS

Test Report No.:SA13-4043/34

| Test Type | | Unit | Sample 1 | Sample 2 | Sample 3 | Req. | Result | |
|------------------|---|------------------|---|----------|----------|------------------------------------|--------|---|
| Pipes | Marking (visual Inspection) | - | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | Crushing Strength | KN/m | 82 | 85 | 77 | ≥ 65 | ✓ | |
| | Internal Barrel Diameter "D1" | mm | 502 | 502 | 505 | ≥ 487 | ✓ | |
| | Length | mm | 2005 | 2005 | 2010 | 2000 ^{+4%} _{-1%} | ✓ | |
| | Water Tightness | L/m ² | 0.02 | 0.03 | 0.03 | ≤ 0.04 | ✓ | |
| | Deviation from Straightness | mm | 0.4 | 0.6 | 0.4 | < 3.0 | ✓ | |
| | Squareness of Ends | Socket | mm | 4.1 | 4.3 | 3.6 | < 10.0 | ✓ |
| | | Spigot | mm | 3.5 | 4.2 | 4.5 | | |
| | Airtightness | mm | 15 | 18 | 20 | Drops ≤ 25 | ✓ | |
| | Chemical Resistance | % | 0.13 | 0.12 | 0.11 | 0.10-0.25% | ✓ | |
| Water Absorption | % | 4.2 | 4.1 | 3.9 | ≤ 6 % | ✓ | | |
| Joint Assembly | Joint Interchangeability (D4) | mm | 605.3 | 605.3 | 605.4 | 605 ± 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 12.5 KN for 15 min. | | | No visible leakage | ✓ | |
| | Continuity of Invert | mm | 3.4 | 3.4 | 3.6 | ≤ 5.0 | ✓ | |

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