

Auditing Test Report

Test Report No.258816/33

Date: 21/07/2024

Client

Saudi Vitriified 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 Vitriified Clay Pipes jointed by system C according to EN 295-1:2013

Size Description:

Nominal Size: DN 500 * 2000 mm

Jointing System: System C

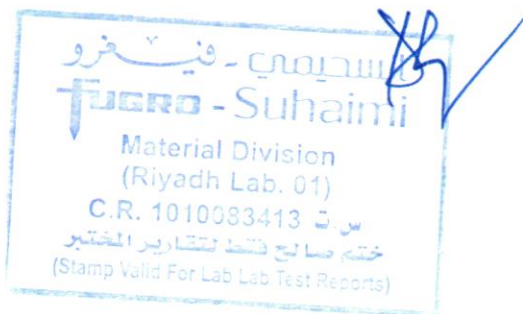
Class: 160 - Class A

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 | "Vitriified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings & joints" |
| GSO EN 295-1:2008 | "Vitriified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings & joints" |
| EN 295-2:2013 | "Vitriified clay pipe systems for drains and sewers - Part 2: Evaluation of conformity and sampling" |
| EN 295-3:2012 | "Vitriified clay pipe systems for drains and sewers - Part 3: Test Methods" |



Test Results of DN 500 ES - Class A

Test Report No. 258816/33

| Test Type | | Unit | Sample 1 | Sample 2 | Sample 3 | Req. | Result | |
|----------------|---|------------------|---|----------|----------|------------------------------------|--------|---|
| Pipes | Marking (visual Inspection) | - | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | Crushing Strength | KN/m | 95 | 99 | 110 | ≥ 80 | ✓ | |
| | Internal Barrel Diameter "D1" | mm | 505 | 501 | 502 | ≥ 487 | ✓ | |
| | Length | mm | 2010 | 2005 | 2010 | 2000 ^{+4%} _{-1%} | ✓ | |
| | Water Tightness | L/m ² | 0.03 | 0.02 | 0.02 | ≤ 0.04 | ✓ | |
| | Deviation from Straightness | mm | 0.5 | 0.3 | 0.3 | < 3.0 | ✓ | |
| | Squareness of Ends | Socket | mm | 4.2 | 4.4 | 4.5 | < 10.0 | ✓ |
| | | Spigot | mm | 4.3 | 4.5 | 4.7 | | |
| | Airtightness | mm | 20 | 20 | 22 | Drops ≤ 25 | ✓ | |
| | Chemical Resistance | % | 0.19 | 0.19 | 0.17 | 0.10-0.25% | ✓ | |
| | Water Absorption | % | 4.9 | 4.7 | 4.7 | ≤ 6 % | ✓ | |
| Joint Assembly | Joint Interchangeability (D4) | mm | 637.4 | 637.3 | 637.4 | 637 ± 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 | 4.1 | 4.3 | 4.2 | ≤ 5.0 | ✓ | |

FUGRO - SUHAIMI LTD

Mohammad Afaq

