

Auditing Test Report

Test Report No.: SA13-4043/18

Date: 10/01/2024

Client

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

Sampling Date: 06/01/2024

Test Date: 07/01/2024

Auditing Purpose:

Testing of Vitrified Clay Fittings according to EN 295-1:2013

Size Description:

Nominal Size: T- Junctions (DN 100mm up to and including DN 700 ES)
Jointing System: System F & C

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"
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 T-junctions

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| T-Junction Type | Internal Diameter (mm) | | Length (Req. : Nominal length ^{+4%} _{-1%}) | | Branch Angle | | Water Tightness (L/m ²) | | Air Tightness (mm) | | Joint Interchangeability (mm) | | |
|-----------------|------------------------|--------|--|--------|--------------|---------|---|-------------|---|-----------|----------------------------------|-------------|-------|
| | Req. | Actual | Nominal Length | Actual | Req. | Actual | Req. | Actual | Req. | Actual | Req. | Actual | |
| 100 mm / 100 mm | ≥ 96 | 100 | 450 | 451 | 90° ± 5 | 87 | No visible leakage within 15 minutes under pressure 0.5 bar | No leak | Pressure drop shall not exceed 25 mm when subjected to 100 mm pressure during standard time | 0 | 131 ± 1.5 | 131.9 | |
| 150 mm / 100 mm | ≥ 146 | 150 | | 499 | | 90 | | No leak | | 5 | 186 ± 2.0 | 187.2 | |
| 200 SS / 100 mm | ≥ 195 | 199 | 500 | 502 | | 91 | | No leak | | 5 | 260 ± 0.5 | 260.3 | |
| 200 ES / 100 mm | | 201 | | 501 | | 88 | | No leak | | 5 | 275 ± 0.5 | 275.3 | |
| 200 SS / 150 mm | | 199 | | 505 | | 89 | | No leak | | 10 | 260 ± 0.5 | 260.3 | |
| 200 ES / 150 mm | | 201 | | 505 | | 94 | | No leak | | 5 | 275 ± 0.5 | 275.5 | |
| 250 SS / 150 mm | | ≥ 244 | | 249 | | 503 | | 95 | | No leak | 9 | 317.5 ± 0.5 | 317.3 |
| 250 ES / 150 mm | ≥ 293 | 250 | 1000 | 497 | | 90 | | No leak | | 11 | 341.5 ± 0.5 | 341.5 | |
| 300 SS / 150 mm | | 301 | | 500 | | 92 | | No leak | | 5 | 371.5 ± 0.5 | 371.4 | |
| 300 ES / 150 mm | | 305 | | 504 | | 93 | | No leak | | 6 | 398.5 ± 0.5 | 398.9 | |
| 350 ES / 150 mm | | ≥ 341 | | 345 | | 502 | | 88 | | No leak | 2 | 459 ± 0.5 | 459.4 |
| 400 SS / 150 mm | | ≥ 390 | | 401 | | 1001 | | 89 | | No leak | 5 | 483.5 ± 0.5 | 483.4 |
| 400 ES / 150 mm | ≥ 439 | 402 | 600 | 1002 | | 92 | | No leak | | 8 | 515.5 ± 0.5 | 515.7 | |
| 450 ES / 150 mm | | 445 | | 1001 | | 93 | | No leak | | 11 | 579 ± 0.5 | 579.4 | |
| 500 SS / 150 mm | | ≥ 487 | | 495 | | 1000 | | 88 | | No leak | 14 | 605 ± 0.5 | 605.3 |
| 500 ES / 150 mm | | 505 | | 1005 | | 94 | | No leak | | 12 | 637 ± 0.5 | 637.4 | |
| 600 ES / 150 mm | | ≥ 585 | | 601 | | 1001 | | 95 | | No leak | 11 | 758 ± 0.5 | 758.1 |
| 200 SS / 200 SS | ≥ 195 | 201 | 600 | 608 | | 94 | | No leak | | 10 | 260 ± 0.5 | 260.4 | |
| 250 SS / 200 SS | ≥ 244 | 250 | | 602 | | 92 | | No leak | | 9 | 317.5 ± 0.5 | 317.8 | |
| 250 ES / 200 SS | ≥ 293 | 249 | | 605 | | 92 | | No leak | | 8 | 341.5 ± 0.5 | 341.4 | |
| 300 SS / 200 SS | | 303 | | 604 | 94 | No leak | 13 | 371.5 ± 0.5 | 371.2 | | | | |
| 300 ES / 200 SS | | 302 | | 610 | 94 | No leak | 12 | 398.5 ± 0.5 | 398.7 | | | | |
| 350 SS / 200 SS | ≥ 341 | 349 | 1000 | 603 | 95 | No leak | 9 | 459 ± 0.5 | 459.3 | | | | |
| 400 SS / 200 SS | ≥ 390 | 405 | | 999 | 92 | No leak | 10 | 483.5 ± 0.5 | 483.2 | | | | |
| 400 ES / 200 SS | ≥ 439 | 402 | | 1005 | 91 | No leak | 17 | 515.5 ± 0.5 | 515.4 | | | | |
| 450 ES / 200 SS | ≥ 487 | 449 | | 1008 | 90 | No leak | 19 | 579 ± 0.5 | 579.4 | | | | |
| 500 SS / 200 SS | ≥ 585 | 501 | | 1004 | 90 | No leak | 22 | 605 ± 0.5 | 605.3 | | | | |
| 500 ES / 200 SS | ≥ 682 | 502 | 1550 | 995 | 93 | No leak | 21 | 637 ± 0.5 | 637.2 | | | | |
| 600 ES / 200 SS | | 595 | | 1008 | 91 | No leak | 21 | 758 ± 0.5 | 758.4 | | | | |
| 100 mm / 100 mm | | ≥ 96 | | 101 | 450 | 449 | 94 | No leak | 10 | 131 ± 1.5 | 132.4 | | |
| 150 mm / 150 mm | ≥ 146 | 150 | 500 | 501 | 92 | No leak | 16 | 186 ± 2.0 | 187.7 | | | | |
| 200 SS / 200 SS | ≥ 195 | 199 | 600 | 606 | 95 | No leak | 13 | 260 ± 0.5 | 260.4 | | | | |
| 200 ES / 200 ES | | 200 | 600 | 604 | 94 | No leak | 12 | 275 ± 0.5 | 275.4 | | | | |
| 250 SS / 250 SS | ≥ 244 | 252 | 650 | 655 | 93 | No leak | 8 | 317.5 ± 0.5 | 317.6 | | | | |
| 250 ES / 250 ES | ≥ 293 | 250 | 650 | 654 | 94 | No leak | 16 | 341.5 ± 0.5 | 341.4 | | | | |
| 300 SS / 300 SS | | 303 | 700 | 709 | 95 | No leak | 15 | 371.5 ± 0.5 | 371.5 | | | | |
| 300 ES / 300 ES | | 304 | 800 | 802 | 90 | No leak | 9 | 398.5 ± 0.5 | 398.7 | | | | |
| 350 ES / 350 ES | ≥ 341 | 350 | 900 | 901 | 92 | No leak | 10 | 459 ± 0.5 | 459.4 | | | | |
| 400 SS / 400 SS | ≥ 390 | 400 | 1000 | 1003 | 93 | No leak | 13 | 483.5 ± 0.5 | 483.4 | | | | |
| 400 ES / 400 ES | | 400 | 1000 | 1002 | 95 | No leak | 14 | 515.5 ± 0.5 | 515.4 | | | | |
| 450 ES / 450 ES | ≥ 439 | 450 | 1100 | 1101 | 90 | No leak | 12 | 579 ± 0.5 | 579.3 | | | | |
| 500 SS / 500 SS | ≥ 487 | 502 | 1175 | 1171 | 94 | No leak | 19 | 605 ± 0.5 | 605.3 | | | | |
| 500 ES / 500 ES | | 505 | 1200 | 1205 | 91 | No leak | 15 | 637 ± 0.5 | 637.4 | | | | |
| 600 ES / 600 ES | ≥ 585 | 604 | 1350 | 1353 | 94 | No leak | 14 | 758 ± 0.5 | 758.3 | | | | |
| 700 ES / 700 ES | ≥ 682 | 705 | 1550 | 1552 | 90 | No leak | 4 | 871 ± 0.5 | 871.2 | | | | |

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