

Auditing Test Report

Lab No. : 40164-3

Client

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

Date: 14/02/2018

JOB No SA13-4043

Sampling Date:

23/01/2018

Testing Date:

13/02/2018

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

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	98	450	451	90	90	No leak	No leak	11	131 ± 1.5	131.5								
150 mm / 100 mm	≥ 146	147		455									90	90	No leak	No leak	18	186 ± 2.0	187
200 SS / 100 mm	≥ 195	199	500	499	90	91	No leak	No leak	2	260 ± 0.5	260.5								
200 ES / 100 mm		198		498									92	92	No leak	No leak	4	275 ± 0.5	275.4
200 SS / 150 mm	199	499		92									92	No leak	No leak	5	260 ± 0.5	260.4	
200 ES / 150 mm	198	501		94									94	No leak	No leak	8	275 ± 0.5	275.4	
250 SS / 150 mm	≥ 244	250		503									95	95	No leak	No leak	9	317.5 ± 0.5	317.4
250 ES / 150 mm		251		497									94	94	No leak	No leak	15	341.5 ± 0.5	341.3
300 SS / 150 mm	≥ 293	302		498									92	92	No leak	No leak	14	371.5 ± 0.5	371.4
300 ES / 150 mm		302		504									93	93	No leak	No leak	12	398.5 ± 0.5	398.3
350 ES / 150 mm	≥ 341	352		502									92	92	No leak	No leak	2	459 ± 0.5	459.4
400 SS / 150 mm	≥ 390	401		1001									91	91	No leak	No leak	5	483.5 ± 0.5	483.4
400 ES / 150 mm		402	1002	92	92	No leak	No leak	8	515.5 ± 0.5	515.2									
450 ES / 150 mm	≥ 439	450	1001	93	93	No leak	No leak	17	579 ± 0.5	579.4									
500 SS / 150 mm	≥ 487	501	1003	90	90	No leak	No leak	14	605 ± 0.5	605.3									
500 ES / 150 mm		502	1005	94	94	No leak	No leak	15	637 ± 0.5	637.3									
600 ES / 150 mm	≥ 585	602	1004	95	95	No leak	No leak	11	758 ± 0.5	758.3									
200 SS / 200 SS	≥ 195	199	608	95	95	No leak	No leak	10	260 ± 0.5	260.5									
250 SS / 200 SS	≥ 244	249	609	92	92	No leak	No leak	9	317.5 ± 0.5	317.5									
250 ES / 200 SS		254	605	92	92	No leak	No leak	8	341.5 ± 0.5	341.3									
300 SS / 200 SS	≥ 293	301	604	94	94	No leak	No leak	15	371.5 ± 0.5	371.2									
300 ES / 200 SS		303	608	94	94	No leak	No leak	12	398.5 ± 0.5	398.2									
350 ES / 200 SS	≥ 341	351	602	95	95	No leak	No leak	9	459 ± 0.5	459.2									
400 SS / 200 SS	≥ 390	405	1001	92	92	No leak	No leak	15	483.5 ± 0.5	483.2									
400 ES / 200 SS		404	1005	91	91	No leak	No leak	18	515.5 ± 0.5	515.2									
450 ES / 200 SS	≥ 439	455	1008	90	90	No leak	No leak	19	579 ± 0.5	579.5									
500 SS / 200 SS	≥ 487	504	1009	90	90	No leak	No leak	22	605 ± 0.5	605.3									
500 ES / 200 SS		502	1007	93	93	No leak	No leak	21	637 ± 0.5	637.4									
600 ES / 200 SS	≥ 585	601	1008	95	95	No leak	No leak	21	758 ± 0.5	758.9									
100 mm / 100 mm	≥ 96	99	450	452	94	94	No leak	No leak	19	131 ± 1.5	131.7								
150 mm / 150 mm	≥ 146	151	500	501	92	92	No leak	No leak	16	186 ± 2.0	187.2								
200 SS / 200 SS	≥ 195	199	600	606	95	95	No leak	No leak	13	260 ± 0.5	260.3								
200 ES / 200 ES		198	600	604	91	91	No leak	No leak	12	275 ± 0.5	275.4								
250 SS / 250 SS	≥ 244	255	650	655	93	93	No leak	No leak	9	317.5 ± 0.5	317.6								
250 ES / 250 ES		256	650	654	94	94	No leak	No leak	18	341.5 ± 0.5	341.3								
300 SS / 300 SS	≥ 293	305	700	709	95	95	No leak	No leak	15	371.5 ± 0.5	371.5								
300 ES / 300 ES		306	800	802	90	90	No leak	No leak	14	398.5 ± 0.5	398.5								
350 ES / 350 ES	≥ 341	356	900	901	90	90	No leak	No leak	10	459 ± 0.5	459.5								
400 SS / 400 SS	≥ 390	399	1000	1004	94	94	No leak	No leak	9	483.5 ± 0.5	483.4								
400 ES / 400 ES		401	1000	1002	95	95	No leak	No leak	14	515.5 ± 0.5	515.4								
450 ES / 450 ES	≥ 439	453	1100	1101	90	90	No leak	No leak	12	579 ± 0.5	579.4								
500 SS / 500 SS	≥ 487	502	1175	1172	94	94	No leak	No leak	15	605 ± 0.5	605.3								
500 ES / 500 ES		501	1200	1205	95	95	No leak	No leak	18	637 ± 0.5	637.2								
600 ES / 600 ES	≥ 585	604	1350	1353	94	94	No leak	No leak	14	758 ± 0.5	758.3								
700 ES / 700 ES	≥ 682	703	1550	1555	90	90	No leak	No leak	10	871 ± 0.5	871.2								

T-Junctions

90° ± 5

No visible leakage within 15 minutes under pressure 0.5 bar

Pressure drop shall not exceed 25 mm when subjected to 100 mm pressure during standard time

FUGRO - SUHAIMI LTD

ANIL K MATHEW

