

## Auditing Test Report

Date: 14/02/2018

Lab No. : 40164-1

Job No. SA13-4043

### Client

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

### 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: **Bends (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**

	Bend Type	Internal Diameter (mm)		Angle of Curvature (°)		Water Tightness (L/m <sup>2</sup> )		Air Tightness (mm)		Joint Interchangeability (mm)	
		Req.	Actual	Req.	Actual	Req.	Actual	Req.	Actual	Req.	Actual
<b>Bends</b>	Bend 100 mm 45°	≥ 96	100	45°± 5	45	No visible leakage within 5 minutes under pressure 0.5 bar	No leak	Pressure drop shall not exceed 25 mm when subjected to 100 mm pressure during standard time	5	131 ± 1.5	131.5
	Bend 100 mm 90°		101	90°± 5	91		No leak		8	132	
	Bend 150 mm 45°	≥ 146	150	45°± 5	42		No leak		6	187	
	Bend 150 mm 90°		151	90°± 5	91		No leak		8	187.5	
	Bend 200 SS 45°	≥ 195	201	45°± 5	45		No leak		8	260.2	
	Bend 200 SS 90°		200	90°± 5	92		No leak		9	260.1	
	Bend 200 ES 45°		199	45°± 5	44		No leak		4	275	
	Bend 200 ES 90°		199	90°± 5	89		No leak		5	275.4	
	Bend 250 SS 45°	≥ 244	251	45°± 5	44		No leak		8	317.6	
	Bend 250 SS 90°		250	90°± 5	93		No leak		7	317.5	
	Bend 250 ES 45°		252	45°± 5	46		No leak		8	341.6	
	Bend 250 ES 90°		249	90°± 5	92		No leak		1	341.2	
	Bend 300 SS 45°	≥ 293	302	45°± 5	48		No leak		2	371.7	
	Bend 300 SS 90°		303	90°± 5	91		No leak		10	371.8	
	Bend 300 ES 45°		303	45°± 5	46		No leak		11	398.5	
	Bend 300 ES 90°		305	90°± 5	94		No leak		11	398.7	
	Bend 350 ES 45°	≥ 341	350	45°± 5	46		No leak		9	459.2	
	Bend 350 ES 90°		355	90°± 5	94		No leak		8	459.3	
	Bend 400 SS 45°	≥ 390	401	45°± 5	42		No leak		7	483.6	
	Bend 400 SS 90°		402	90°± 5	92		No leak		10	483.5	
	Bend 400 ES 45°		400	45°± 5	48		No leak		11	515.9	
	Bend 400 ES 90°		400	90°± 5	93		No leak		15	515.8	
	Bend 500 SS 45°	≥ 487	500	45°± 5	44		No leak		11	605.2	
	Bend 500 SS 90°		500.5	90°± 5	94		No leak		16	605.4	
	Bend 500 ES 45°		501	45°± 5	44		No leak		8	637.4	
	Bend 500 ES 90°		501	90°± 5	91		No leak		11	637.3	
	Bend 600 ES 45°	≥ 585	601	45°± 5	50		No leak		8	758.4	
	Bend 600 ES 90°		603	90°± 5	91		No leak		10	758.3	
Bend 700 ES 45°	≥ 682	709	45°± 5	47	No leak	13	871.3				
Bend 700 ES 90°		704	90°± 5	92	No leak	14	871.4				

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