

No.: TJIN2001000736ML

Date: Mar 13, 2020

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**CUSTOMER NAME:** DC Handrails & Ironwork Parts Ltd

ADDRESS: 3 Whickham Industrial Estate, Swalwell, Newcastle upon Tyne, NE16

3DA

Crowd Control Key Clamp Fence Panel Sample Name

**Product Specification** 48.3mm rail tube\*1100mm height

Material and Mark S195

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Date of Receipt Jan 16, 2020 **Testing Start Date** Jan 16, 2020 **Testing End Date** : Mar 13, 2020

Test result(s) For further details, please refer to the following page(s)

(Unless otherwise stated the results shown in this test report refer only to

the sample(s) tested)

Signed for

SGS-CSTC Standards Technical

Services(Tianjin) Co., Ltd

Kevin Zhou

Authorized signatory





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## Summary of Results:

No.	Test Item	Test Method	Result	Conclusion
1	Rail Test	BS 7818:1995 Clause 2.1.5	See Result	Pass
2	Posts Test	BS 7818:1995 Clause 2.1.5	See Result	Pass
3	Mesh Infill Test	BS 7818:1995 Clause 2.1.5	See Result	Pass

Note: Pass : Meet the requirements;

Fail: Does not meet the requirements;

/: Not Apply to the judgment.

The above test was carried out by a SGS internal laboratory.

## Original Sample Photo:





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1. Test Item: Rail Test

Test Method: BS 7818:1995 Clause 2.1.5

**Test Condition:** 

Specimen: Φ48.3mm x 1300mmx1105mm (Length x Height)

Load Class: Class 1

Design load: 500N/m, L=1200mm

Partial safety factor  $\gamma_{f1}$ : 1.2

#### Test Result:

	Test	Test Result			
Test Item	direction	Recovery of deflection (%)	Maximum deflection (mm)	Requirement	Conclusion
Rail Test	Horizontal	97.6	9.13	Recovery of deflection ≥ 95%	Pass
Tuil Tost	Vertical	95.7	0.23	Maximum deflection ≤ 50mm	. 300

Note: L=Post spacing in metres for intermediate posts, or post spacing/2 in metres for end and corner posts.

## Original Data:

Test load (N)	Horizontal deflection (mm)	Vertical deflection (mm)
0	0	0
132	1.08	0.03
279	2.36	0.07
426	3.80	0.10
573	5.38	0.14
720	7.44	0.23
0 (15min after removal of the test load)	0.18	0.01
Recovery of deflection (%)	97.6	95.7



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2. Test Item: Posts Test

Test Method: BS 7818:1995 Clause 2.1.5

**Test Condition:** 

Specimen: Φ48.3mm × 1300mm×1105mm (Length × Height)

Load Class: Class 1

Design load: 500L(transverse), 250L(longitudinal), L=1200mm

Partial safety factor yf1: 1.2

#### Test Result:

	Test	Test Result			Conclusion
Test Item direction		Recovery of deflection (%)	Maximum deflection (mm)	Requirement	
Posts	Transverse	98.2	3.89	Recovery of deflection ≥ 95%	Pass
Test	Longitudinal	98.0	3.99	Maximum deflection ≤ 50mm	F d55

Note: L=Post spacing in metres for intermediate posts, or post spacing/2 in metres for end and corner posts.

### Original data:

Transverse load (N)	Deflection (mm)	
0	0	
147	0.48	
294	1.01	
441	1.80	
588	2.65	
720	3.89	
0 (15min after removal of the test load)	0.07	
Recovery of deflection (%)	98.2	



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Longitudinal load (N)	Deflection (mm)	
0	0	
49	0.54	
98	1.02	
147	1.57	
196	2.05	
245	2.51	
294	3.10	
360	3.99	
0 (15min after removal of the test load)	0.08	
Recovery of deflection (%)	98.0	



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3. Test Item: Mesh Infill Test

Test Method: BS 7818:1995 Clause 2.1.5

**Test Condition:** 

Specimen: Φ48.3mm × 1300mm×1105mm (Length × Height)

Load Class: Class A Design load: 500N

Loading area: 125mm ×125mm Partial safety factor γ<sub>f1</sub>: 1.2

#### Test Result:

	Test Result			
Test Item	Recovery of	Maximum	Requirement	Conclusion
	deflection (%)	deflection (mm)		
Mesh Infill Test	98.4	10.58	Recovery of deflection ≥ 95%  Maximum deflection ≤ 50mm	Pass

## Original data:

Test load (N)	Deflection (mm)	
0	0	
147	3.51	
245	4.80	
343	6.44	
441	8.08	
539	10.14	
600	10.58	
0 (15min after removal of the test load)	0.17	
Recovery of deflection (%)	98.4	



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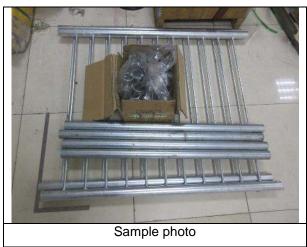
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\*\*\*\*\*\* End of report\*\*\*\*\*



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