

SUBJECT:

Testing of FBE coating submitted by PAR FERRO Coatings PVT. LTD.

TESTED FOR:

PAR FERRO COATINGS PVT. LTD
129, Matheswartala Road
Kolkata – 700046, WB, India.

Attn: Mr Souvik Sarkar

SAMPLE RECEIVED DATE:

04 Jul 2024

TEST DATE:

05 Oct 2024

DESCRIPTION OF SAMPLE:

One lot of FBE BLUE POWDER pipes and panels were received. The descriptions are as follow:

Product descriptions	Submitted samples
ECO COAT FBE BLUE POWDER PFC/7017	Box 1: Consist of 20 pieces 50 mm X 150 mm coated panels
	Box 2: DN 200 Spigot coated pipe - 1 length
	Box 3: DN 200 Spigot coated pipe – 1 length



The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council

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METHOD OF TEST:

BS EN 14901:2014 - Ductile iron pipes, fittings and accessories. Epoxy coating (heavy duty) of ductile iron fittings and accessories. Requirements and test methods

TEST CONDUCTED:

1. Non-porosity
2. Cross linkage
3. Heat ageing resistance in air

BS EN 598: 2007-A1: 2009 Ductile iron pipes, fittings, accessories and their joints for sewerage applications. Requirements and test methods

TEST CONDUCTED:

Abrasion Resistance

TEST RESULTS:

Table 1 - Non-porosity Test

Test	Result	BS EN 14901:2014 Requirements Clause 6.4
Clause 7.2.4	Passed	No electrical puncture shall Occur

Table 2 - Cross linkage Test

Test	Result	BS EN 14901:2014 Requirements Clause 6.5
Clause 7.1.6	Passed	No deviation against reference test sample

Table 3 - Heat ageing resistance in air Test

Test	Results	BS EN 14901:2014 Requirements Clause 6.6.2
Sample stored in a hot oven at 110°C for 30 days	Passed	No electrical puncture
Sample stored in a hot oven at 110°C for 60 days	Passed	
Sample stored in a hot oven at 110°C for 90 days	Passed	

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TEST RESULTS (CONT'D):

Table 4 - Abrasion resistance

Sample Reference	Results		BS EN 598: 2007 +A1: 2009, Requirements (Clause 5.9)
	Coating thickness measurements before tests (mm)	Coating thickness measurements after tests (mm)	
Point 1	0.263	0.252	The pipes shall not have an abrasion depth greater than 0,2 mm after 100 000 movements (50 000 cycles) for epoxy or polyurethane linings
Point 2	0.261	0.245	
Point 3	0.282	0.245	
Point 4	0.329	0.265	
Point 5	0.334	0.227	
Point 6	0.342	0.222	
Point 7	0.410	0.248	
Point 8	0.408	0.221	
Point 9	0.384	0.233	
Point 10	0.332	0.216	
Point 11	0.323	0.132	
Point 12	0.321	0.256	
Point 13	0.280	0.245	
Point 14	0.267	0.243	
Point 15	0.281	0.271	
Average	0.32	0.23	


Ong Yeo Chuan
Testing Officer


Chua Peck Cheong
Senior Manager

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