



SUMMARY REPORT

CORROSION PERFORMANCE TESTING

LPI SRIM

Description:

The linear polarisation resistance (LPR) method was used to assess the corrosion performance of LPI’s earth enhancing compound called “SRIM”. LPR testing was carried out over a suitable period of time on copper-coated steel and stainless steel electrodes embedded in SRIM. All LPR testing and analysis was carried out in accordance with IEC 62561-7, to obtain polarisation resistance values, R_p , as a function of time. Both electrode types were tested under “non-aggressive” and “aggressive” corrosion conditions.

IEC 62561-7 Pass Criteria:

Electrode Material	Required R_p (Ωm^2)	
	Non-aggressive Test	Aggressive Test
Copper, Copper-plated	> 4	> 8
Galvanised steel	> 3	> 7.6

LPR Test Results:

Non-aggressive LPR, R_p (Ωm^2) – Copper-coated steel electrode							
Sample	Start Date	Day 0	Day 1	Day 3	Day 4	Day 5	Day 33
A	11/12/2015	4.14	1.58	3.66	5.34	5.16	29.44
B		2.75	2.35	2.50	4.26	4.78	30.64

Non-aggressive LPR, R_p (Ωm^2) - Stainless steel electrode								
Sample	Start Date	Day 0	Day 1	Day 3	Day 5	Day 9	Day 15	Day 51
A	23/11/2015	7.89	17.32	20.35	10.33	24.83	26.00	28.42
B		9.34	4.61	14.26	7.77	14.88	13.01	15.26

Conclusions:

The corrosion performance of the earth enhancing compound “SRIM” meets the requirements of LPR test methodology in IEC 62561-7.

Signed:

Date: 25 July 2016

