

QUV Test Report

The samples were exposed to 1500 hours of artificial weathering in accordance with ISO 11507 (ASTM G154) in a Q-Lab QUV cabinet using UVA340 lamps and operating a continuously cycling test program of 4 hours UV at 60°C at an irradiance of 0.71 W/m²/nm and 4 hours condensation at 50°C. Color measurements in accordance with ISO 11664 (ASTM E1164) and 60° Gloss measurements in accordance with ISO 2813 (ASTM D523) were carried out before and after the test. The total color change as a result of the weathering was expressed in ΔE_{94} units.

Explanation of ΔE_{94}

ΔE_{94} value	Meaning
0 - 1	A normally invisible difference
1 - 2	Very small difference, only obvious to a trained eye
2 - 3.5	Medium difference, also obvious to an untrained eye
3.5 - 5	An obvious difference
> 6	A very obvious difference

Coatings submitted to weathering test

Coating	Article number
Recoat 2K Floor	88142
Recoat 2K Concrete	88252
Recoat 2K High Gloss	88672
Recoat 2K Anti-Graffiti Matt	98352
Recoat 2K Anti-Graffiti Gloss	98772

Results

Gloss change on weathering		
Sample	Exposure (hrs)	60° Gloss
Control	0	92.6
	1500	90.1
Recoat 2K Floor	0	4.4
	1500	4.1
Recoat 2K Concrete	0	3.3
	1500	2.9
Recoat 2K High Gloss	0	94.0
	1500	93.9
Recoat 2K Anti-Graffiti Matt	0	4.2
	1500	4.0
Recoat 2K Anti-Graffiti Gloss	0	93.5
	1500	93.3

Color change on weathering					
Sample	Exposure (hrs)	L	a	b	ΔE_{94}
Control	0	77.4	8.0	78.5	6.4
	1500	75.9	11.8	73.6	
Recoat Floor	0	76.5	13.5	80.9	0.5
	1500	76.8	13.2	80.7	
Recoat Concrete	0	77.7	11.0	79.2	0.8
	1500	77.4	11.6	79.7	
Recoat High Gloss	0	76.8	13.6	80.9	0.3
	1500	76.7	13.4	80.6	
Recoat Anti-Graffiti Matt	0	77.2	13.3	79.9	0.8
	1500	76.9	13.2	80.1	
Recoat Anti-Graffiti Gloss	0	77.6	13.8	80.4	0.7
	1500	77.7	13.6	80.2	