

Appendix A3: Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates (D2244-23)

Project: 24-06-P0055

Client: Nortem

Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates

Operator: Joy Obande
Date: 21/05/2024
Method: ASTM D2244-16
Test Condition: 23 ± 2°C and 50 ± 5% RH

Test Equipment:
Conditioning Room: MII # B13334

DATE:	21/05/2024
Project No.:	24-06-P0055
Proposal No.:	23-006-510947
Client:	Nortem
Contact:	Sam Karafarin
Specimen Description:	Aluminium Fluted Panels
Test Description:	Spectrophotometric Colour Measurements Delta E Summary
No. of Samples:	6
No. of Specimens / Sample:	6
Test Method(s):	ASTM D2244-16 Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
Equipment:	Gretag Macbeth ColourEye XTH Spectrophotometer, MII: A13519, Cal. Date: 2021-02-18, Cal. Due Date: 2021-08-18 Reverification: 2021-08-18, Cal. Due Date: 2024-05-21
Display:	COLORMETRIC
Colour Equation:	CIELAB
Illuminate:	D65
Observer Angle:	10°
Area View:	Regular
Specular:	Included

Client Identification	Element ID	Interval (hours)	Measured Colour			Colour Change from Initial			
			L*	a*	b*	ΔL*	Δa*	Δb*	ΔE*
Front-1		0	25.18	0.02	0.19				
		250	13.37	-0.20	-0.22	-11.81	-0.23	-0.40	11.82
Front -2		0	25.42	-0.03	0.18				
		250	11.32	0.63	-0.99	-14.10	0.66	-1.18	14.16
Front-3		0	24.91	-0.01	0.30				
		250	11.82	3.99	0.44	-13.10	4.00	0.14	13.69
Back-1		0	25.06	0.06	0.30				
		250	15.39	-0.65	-2.31	-9.67	-0.71	-2.60	10.04
Back-2		0	24.66	-0.02	0.17				
		250	17.97	-0.80	-3.67	-6.69	-0.78	-3.84	7.75
Back-3		0	25.08	0.00	0.19				
		250	17.31	0.36	-0.14	-7.76	0.36	-0.33	7.78