Panama City Marina Civic Center Color Stability Analysis

Original Application Date: October, 2012

Background:

The Panama City Marina Civic Center, located in Panama City, Florida, was coated in October of 2012 with the TEXCOTE® COOLWALL® SUPERCOTE™ SMOOTH TEXTURE SYSTEM and TEXCOTE® REFLECT-TEC® SYSTEM, incorporating IR reflective pigment technology and evaluated for color change over time. The chosen colors for the exterior walls were COOLWALL® SUPERCOTE™ Bleached Sand (Off-White) and COOLWALL® SUPERCOTE™ Fading Rose. The metallic side doors were coated with TEXCOTE® REFLECT-TEC® Bleached Sand (Off-White), matching the colors of the walls. Color change readings (DELTA E values) were taken in different locations of the building using an X-Rite portable Spectrophotometer, Model SP60. All DELTA E values were calculated using CIE DELTA E criterion.

Observations:

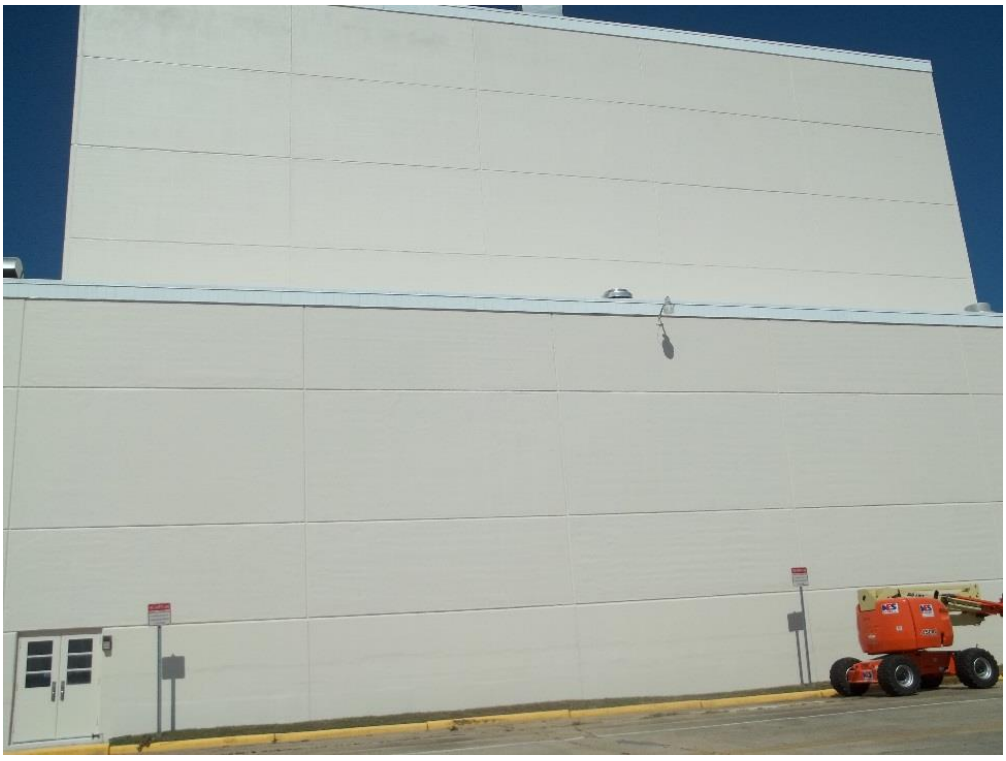
The average values of these color readings that were taken from different locations of the building are shown in the charts below. These Delta average values were attained after 52 months' exposure (4 years, 4 months). Panama City, Florida, USA has an average annual rainfall of over 80". The climate in this region ranges from the low teens in the winter to over 100° Fahrenheit with 100% humidity during the summer. With this building located directly on the bay, these walls are exposed to salt air and other weather conditions such as heavy rain, ultraviolet light from the sun, high humidity and high winds. Both the TEXCOTE® COOLWALL® SUPERCOTE™ SMOOTH TEXTURE SYSTEM and the TEXCOTE® REFLECT-TEC® SYSTEM demonstrate outstanding color retention of less than 4.0 units on all sides of the building after more than 4 years of exposure. Conventional exterior paints after similar periods of exposure usually have Delta averages of 15 units or more. These walls also do not show any sign of mold growth, including the North wall, chalking or cracking of the coating and show an excellent resistance to dirt pick-up.

Northern Exposure

Conclusion:
The colors in these two TEXCOTE® Systems have outstanding color retention and excellent water repellency after 52 months due to Texcote® IR reflective technology. After 4 years of being applied on the Panama City Marina Civic Center, they continue to exhibit an amazing ability to retain color fastness and resist color fading.

Western Exposure

Western Exposure



Southern Exposure

Eastern Exposure

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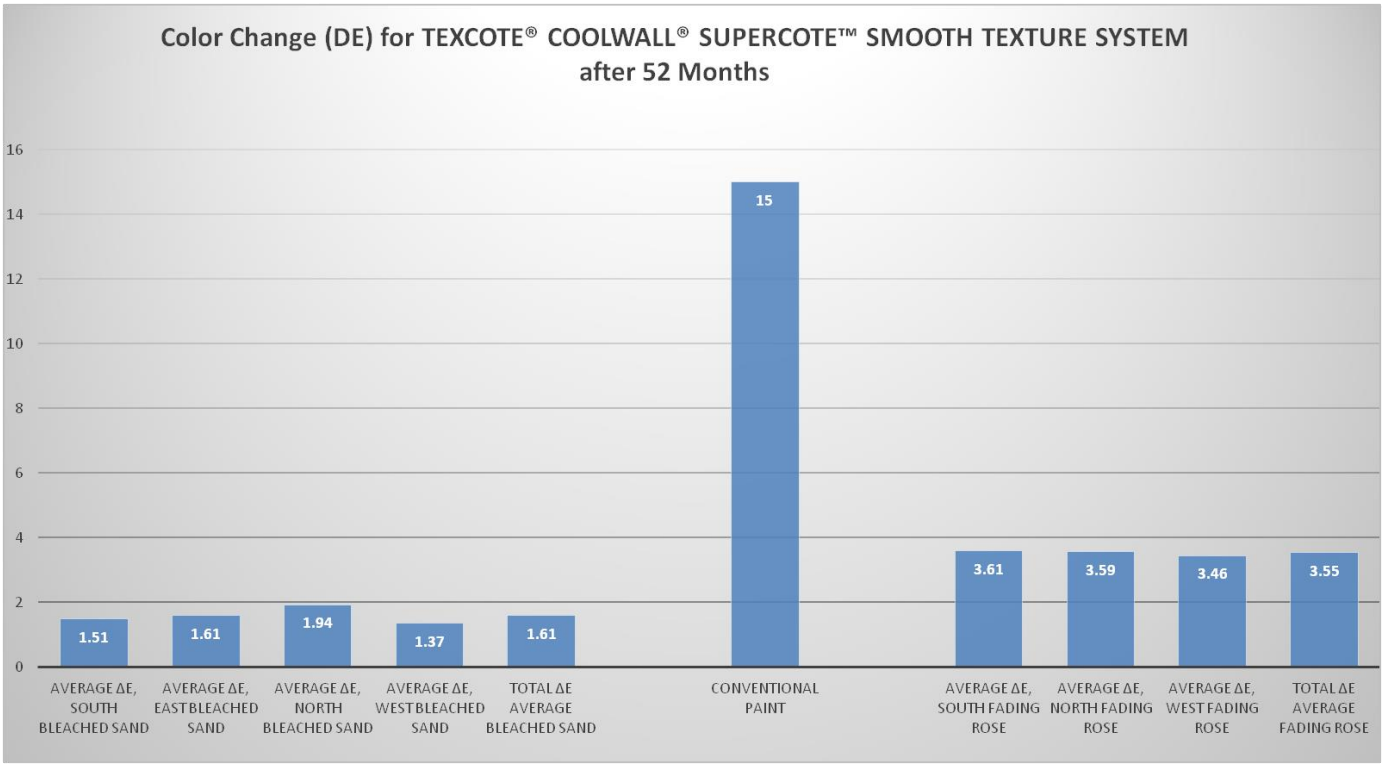
Northern Exposure

DE after 52 months (4 years, 4 months), TEXCOTE® COOLWALL® SUPERCOTE™

Panama City Marina Civic Center	DL	Da	Db	DE
Cool-Wall, Bleached Sand (Off-white) Color				
Average ΔE, South	0.84	0.38	0.89	**1.51**
Average ΔE, East	1.23	0.39	0.89	**1.61**
Average ΔE, North	1.23	0.47	1.12	**1.94**
Average ΔE, West	0.03	0.22	0.97	**1.37**
Total ΔE Average				**1.61**
Cool – Wall, Fading Rose Color				
Average ΔE, South	0.12	3.56	0.56	**3.61**
Average ΔE, North	0.86	3.45	0.58	**3.59**
Average ΔE, West	0.76	3.31	0.66	**3.46**
Total ΔE Average				**3.55**

Bleached Sand **Fading Rose**



DE after 52 months, TEXCOTE® REFLECT-TEC®

Metallic Doors	DL	Da	Db	DE
Reflect-Tec, Bleached Sand (Off-white) Color				
Average ΔE, South Doors	1.7	0.63	0.69	**1.69**
Average ΔE, North Doors	1.64	0.58	0.72	**1.62**
Total ΔE Average				**1.66**

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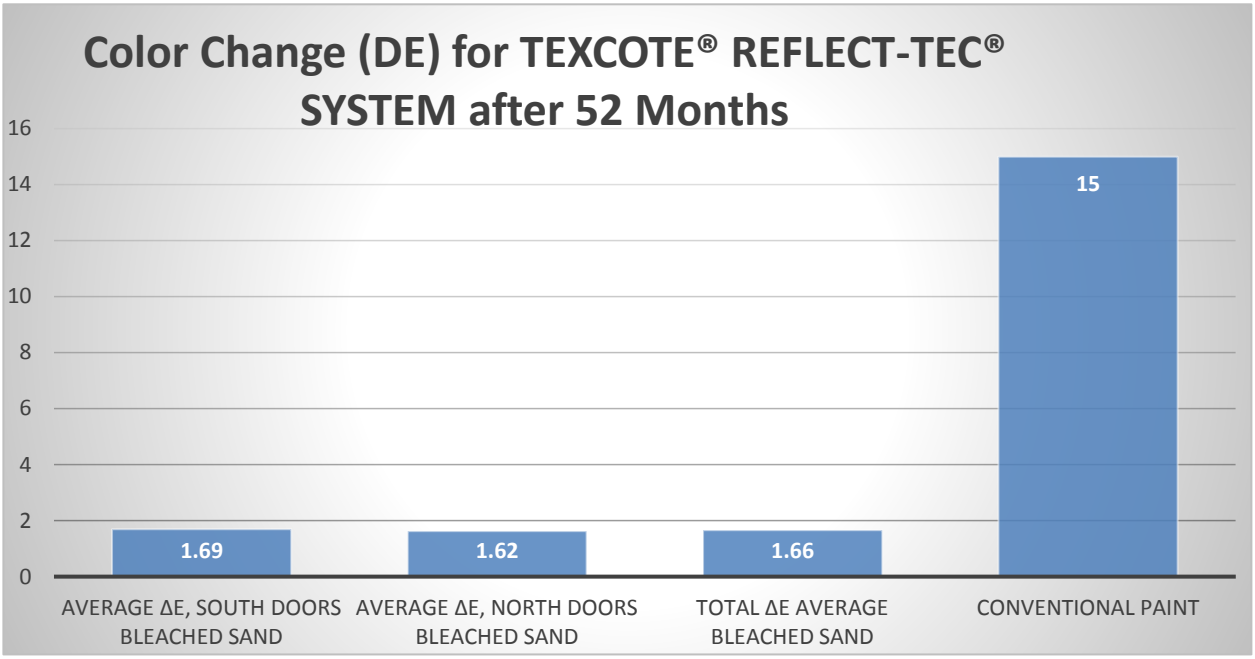
Color Change (DE) for TEXCOTE® REFLECT-TEC® SYSTEM after 52 Months
16
14
12
10
8
6
4
2
0
1.69
1.62
1.66
15
AVERAGE ΔE, SOUTH DOORS BLEACHED SAND
AVERAGE ΔE, NORTH DOORS BLEACHED SAND
TOTAL ΔE AVERAGE BLEACHED SAND
CONVENTIONAL PAINT