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RESTORATION

COLOR ANALYSIS STUDY
of the
Metropolitan Apartments Building
located at
505 East Broadway
Long Beach, California 90802

Report prepared by
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August 3, 2019

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Metropolitan Apartments
505 East Broadway
Long Beach, CA 908027

COLOR ANALYSIS STUDY of several interior rooms at the Metropolitan Apartments located at 505 East Broadway, Long Beach, CA 90802.

The Metropolitan Apartments Building was originally constructed in 1922 in a Spanish style. The mixed-use building was redesigned in a Streamline Moderne style by noted architect W. Horace Austin after the structure suffered damage in the 1933 Long Beach Earthquake. The existing structure maintains several distinctive characteristics, including the building's original bays, fire escape, and spire.

SAMPLE LOCATIONS
The focus of this color analysis study is to determine the original historic paint colors. The locations of analysis are on the exterior of the building.

SAMPLE PROCESSING and RESULTS
The samples were retrieved July 17, 2019. They were then processed, examined and documented by July 25-August 3, 2019. The procedure used to analyze these color sequences consists of these steps: 1) sample removal, 2) sample mounting, 3) paint layer identification, 4) paint color identification, and 5) sample storage.

The description of these steps are as follows:

Sample Removal
The paint samples are removed from each area with a scalpel. Samples are taken to include a portion of the substrate to ensure that a full paint layering sequence is obtained. Once removed, the paint samples are stored in coin envelopes for transport.

Sample Mounting
The samples are embedded in a resin then ground and polished to achieve a uniform surface with a clear cross-section.

Paint Layer Identification

Paint color layers are identified under microscope beginning with the layer immediately above the substrate. Varnishes, shellacs and other resinous finishes, fibers, and stains, do not fall into an obvious color category and are identified by their material name. Paint layering chronologies are usually established for several elements in an interior room or on the exterior of a building, even if the objective of the paint study is only to document accurate paint colors.

Paint Identification

After the original paint color is identified, it is matched to a custom color. This becomes a color reference card for each sample.

Sample Storage

The samples are then prepared for storage. They are labeled with the reference number assigned to each sample and securely filed for future reference.

EXTERIOR COLORS

Following are the findings:

Sample #1

This sample was taken from the wall base at the second floor. The sample has nine layers of paint. The first is a blue green integral colored plaster (not shown in photo), followed by a beige, yellow, white, dark turquoise, plaster (possibly a patch), off-white, pale turquoise, pale turquoise, and the current pale turquoise layer. The original surface appears to be a blue green integral colored plaster.

Sample #2

This sample was taken from the speed stripe on the second floor. The sample has seven layers of paint. The first is a golden yellow, followed by a beige, turquoise, beige, pale turquoise, turquoise, and the current pale yellow layer. The original surface appears to be a golden yellow color.

Sample #3

This sample was taken from the fire escape on the second floor. The sample has seven layers of paint. The first is an off-white, followed by a beige, red/orange, beige, cream, dark red and the current black layer. The original surface appears to be an off-white color.

Sample #4

This sample was taken from the exterior door on the second floor landing. The sample has eleven layers of paint. The first is a beige layer with silver leaf, followed by a beige, beige, beige, white, turquoise, dark lavender, light lavender, white, and the current yellow layer. The original surface appears to be a beige paint (primer) with silver leaf applied over it.

Sample #5

This sample was taken from the pier at the roof top. The sample has seven layers of paint. The first is a blue green integral colored plaster (not shown in photo), followed by a beige, white, yellow, white, lavender, and the current pale turquoise layer. The original surface appears to be a blue green integral colored plaster.

Sample #6
This sample was taken from the parapet at the roof top. The sample has eleven layers of paint. The first is a blue green integral colored plaster, followed by some silver leaf, a beige layer, yellow, white, pale turquoise, off-white, dark turquoise, pale turquoise, off-white, and the current pale turquoise layer. The original surface appears to be a blue green integral colored plaster.

Sample #7
This sample was taken from the base 3 wall. The sample has nine layers. The first is a blue green integral colored plaster, followed by a beige, beige, yellow, dusty pink, terra cotta, pale turquoise, pale turquoise, terra cotta, and the current terra cotta paint. The original surface appears to be a blue green integral colored plaster.
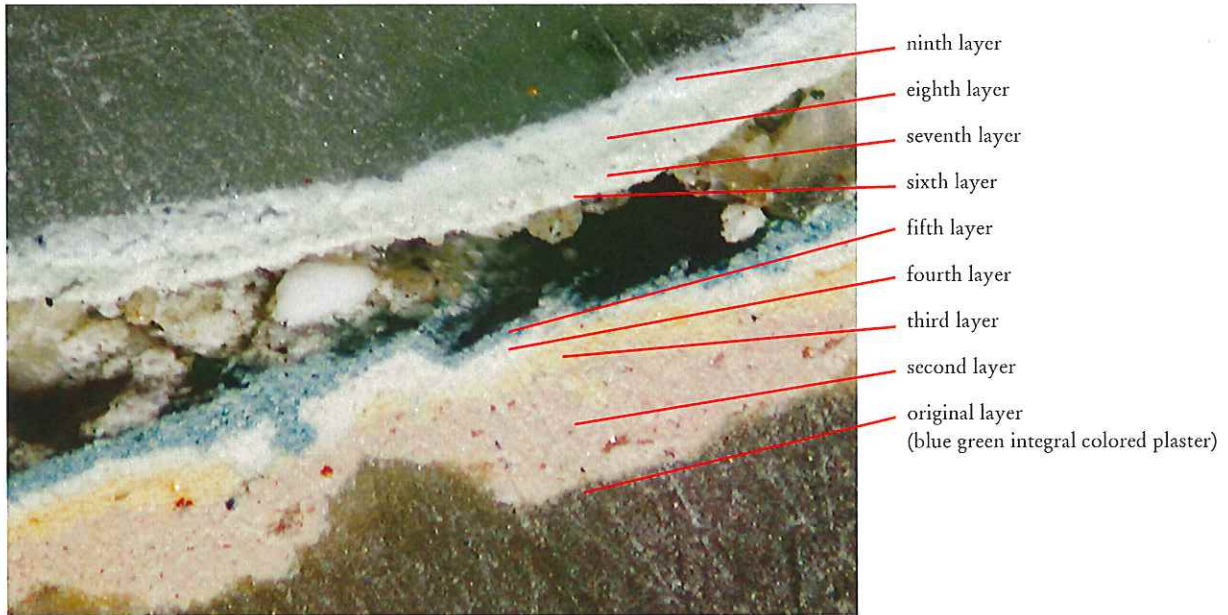
Sample #8
This sample was taken from the Linden Street base wall. The sample has nine layers of paint. The first is a blue green integral colored plaster (not shown in photo), followed by a terra cotta red, yellow, white, dark turquoise, pale turquoise, white, pale turquoise, and the pale turquoise layer. The original surface appears to be a blue green integral colored plaster.

SAMPLE #1 Wall

- ninth layer
- eighth layer
- seventh layer
- sixth layer
- fifth layer
- fourth layer
- third layer
- second layer
- original layer
  (blue green integral colored plaster)

PLEASE NOTE:
Microphotograph is representative of layering only and is not accurate for color.
Refer to MUNSELL Color and chip sample for true color.
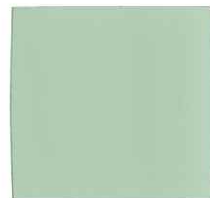
MUNSELL COLOR
hue = 9.48GY
value = 7.1
chroma = 1.7

Light Reflection Value 45

COMMERCIAL COLOR
Dunn Edwards DE5654 Fresh Thyme

SAMPLE #2 Speed Stripe

- seventh layer
- sixth layer
- fifth layer
- fourth layer
- third layer
- second layer
- original paint layer

PLEASE NOTE:
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Refer to MUNSELL Color and chip sample for true color.

MUNSELL COLOR
hue = 1.54Y
value = 8.3
chroma = 4.1

Light Reflection Value 64

COMMERCIAL COLOR
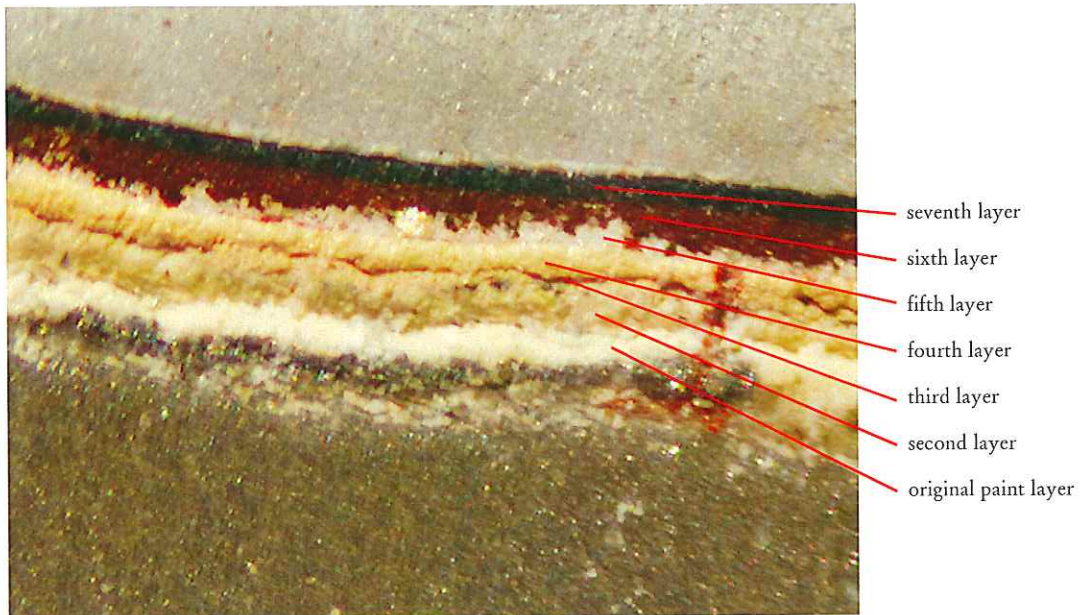Dunn Edwards DE5366 Midland Tan

SAMPLE #3 Fire Escape

- seventh layer
- sixth layer
- fifth layer
- fourth layer
- third layer
- second layer
- original paint layer

PLEASE NOTE:
Microphotograph is representative of layering only and is not accurate for color.
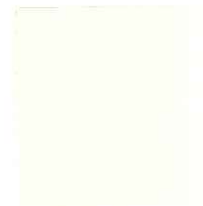Refer to MUNSELL Color and chip sample for true color.

MUNSELL COLOR
hue = 4.00Y
value = 9.3
chroma = 1.4

Light Reflection Value 86

COMMERCIAL COLOR
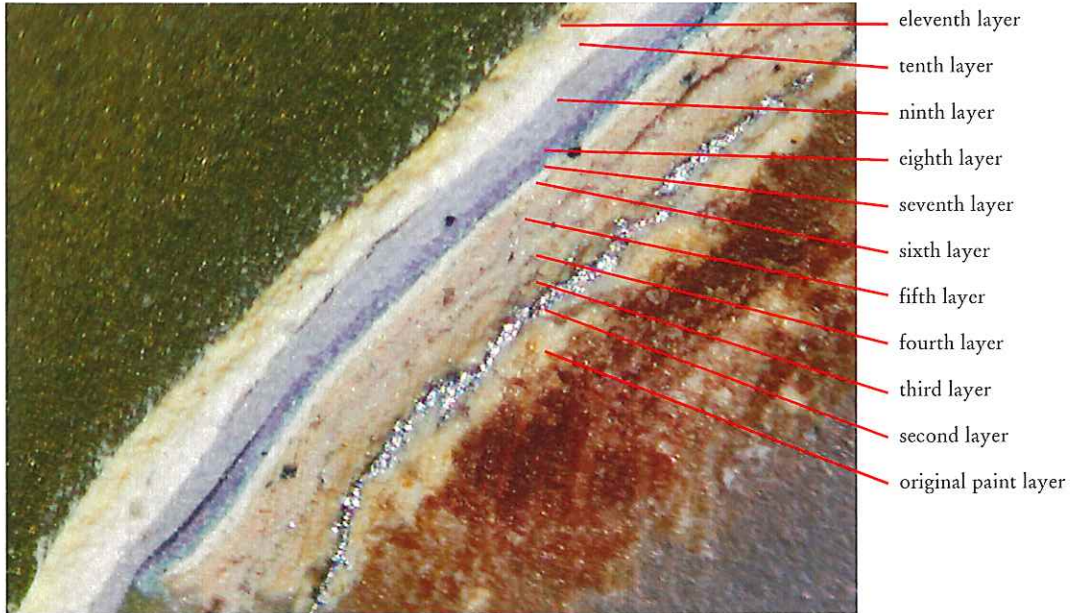Dunn Edwards DE5329 Parchment Paper

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SAMPLE #4 2nd Floor Exterior Door

eleventh layer
tenth layer
ninth layer
eighth layer
seventh layer
sixth layer
fifth layer
fourth layer
third layer
second layer
original paint layer

PLEASE NOTE:
Microphotograph is representative of layering only and is not accurate for color.

MUNSELL COLOR
hue = 9.31YR
value = 8.2
chroma = 1.6

Light Reflection Value 62

COMMERCIAL COLOR
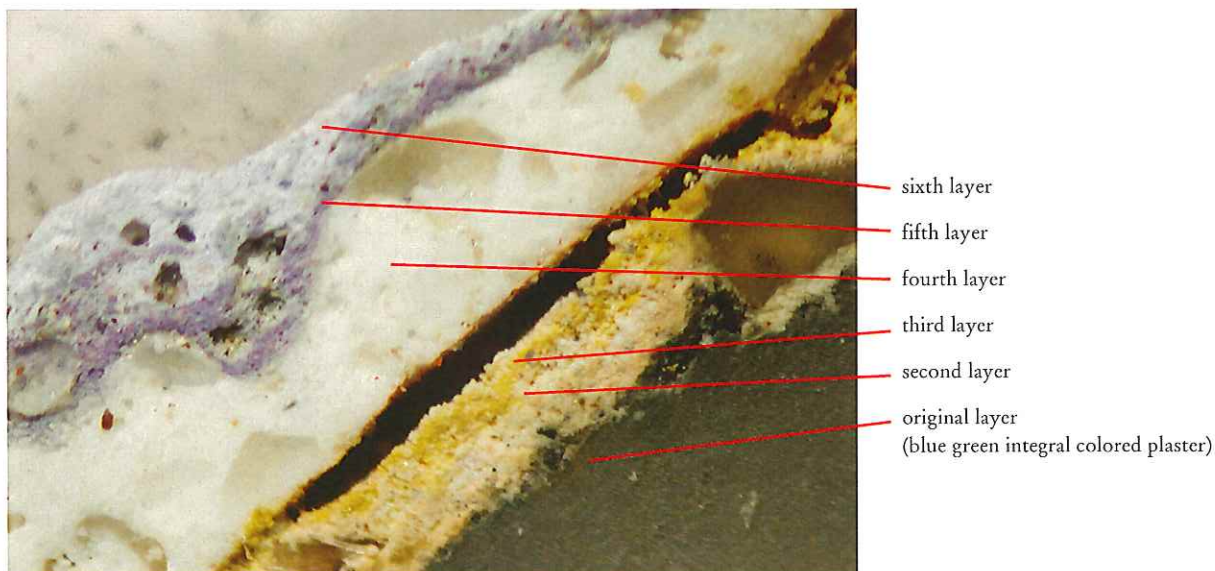Dunn Edwards DE6128 Sand Dune
Secondary Layer: Silver Leaf

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SAMPLE #5 Pier

sixth layer
fifth layer
fourth layer
third layer
second layer
original layer
(blue green integral colored plaster)

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MUNSELL COLOR
hue = 9.48GY
value = 7.1
chroma = 1.7

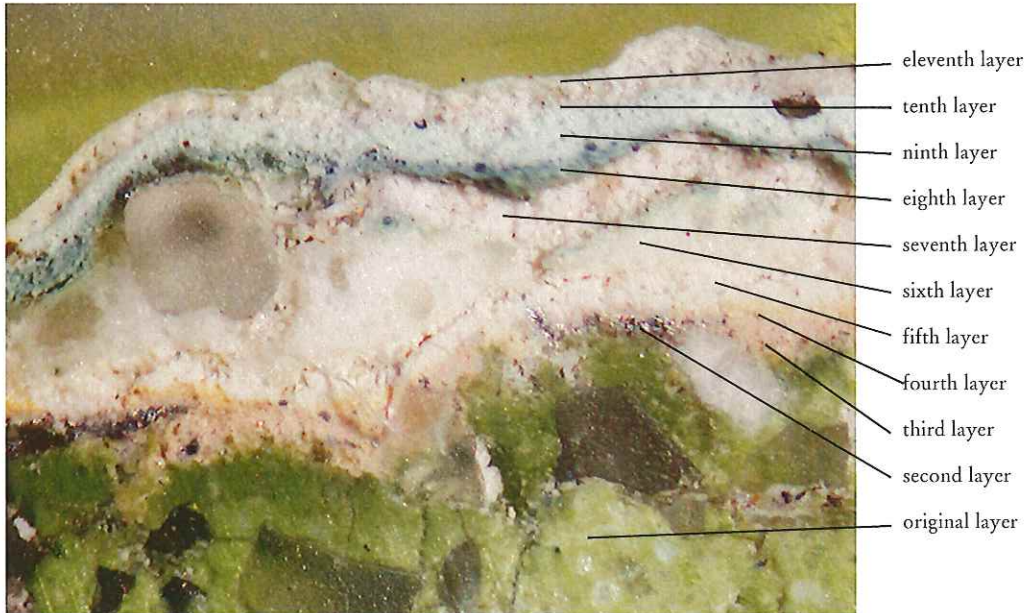Light Reflection Value 45

COMMERCIAL COLOR
Dunn Edwards DE5654 Fresh Thyme

SAMPLE #6 Parapet

eleventh layer
tenth layer
ninth layer
eighth layer
seventh layer
sixth layer
fifth layer
fourth layer
third layer
second layer
original layer

PLEASE NOTE:

Microphotograph is representative of layering only and is not accurate for color.
Refer to MUNSELL Color and chip sample for true color.
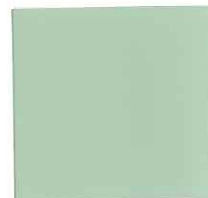
MUNSELL COLOR
hue = 9.48GY
value = 7.1
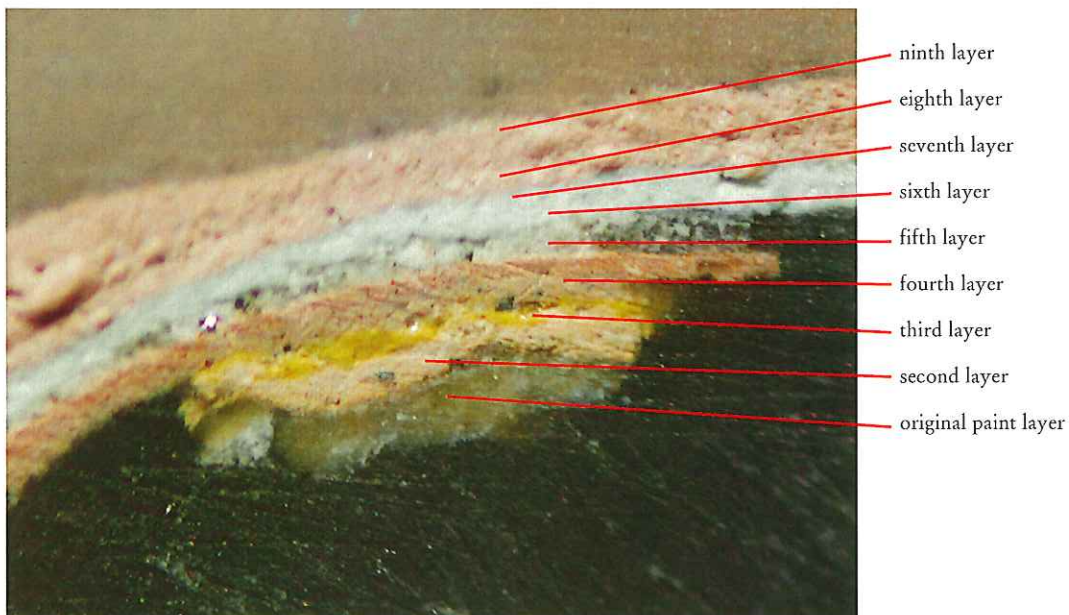chroma = 1.7

Light Reflection Value 45

COMMERCIAL COLOR
Dunn Edwards DE5654 Fresh Thyme

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SAMPLE #7 Wall (Base 3)

- ninth layer
- eighth layer
- seventh layer
- sixth layer
- fifth layer
- fourth layer
- third layer
- second layer
- original paint layer

PLEASE NOTE:
Microphotograph is representative of layering only and is not accurate for color.
Refer to MUNSELL Color and chip sample for true color.

MUNSELL COLOR
hue = 9.48GY
value = 7.1
chroma = 1.7

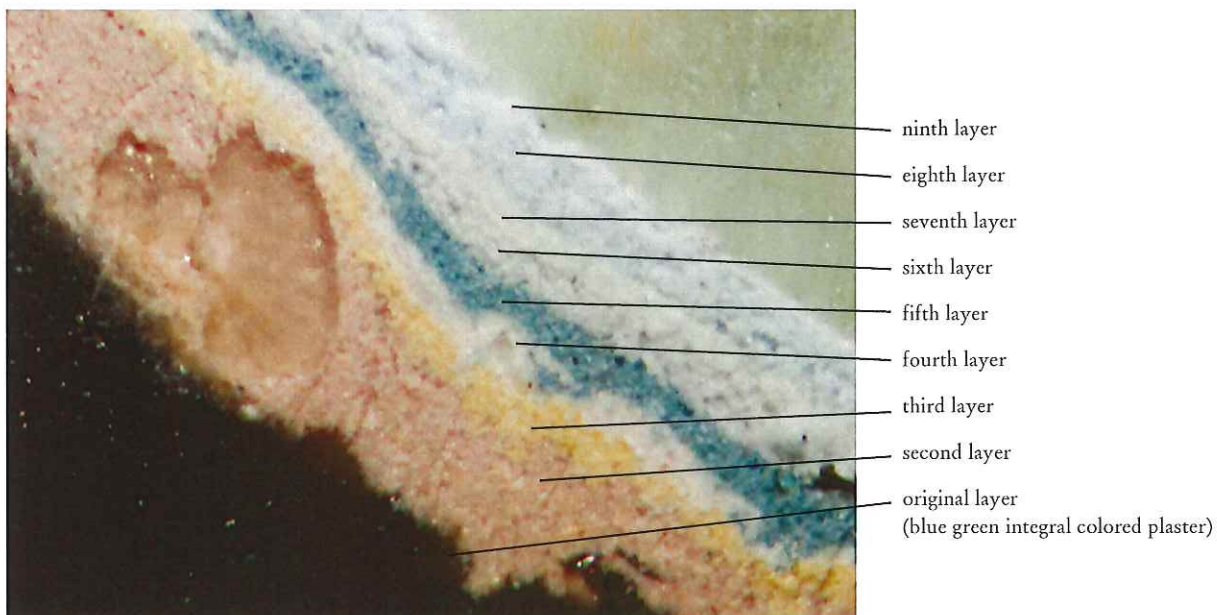Light Reflection Value 45

COMMERCIAL COLOR
Dunn Edwards DE5654 Fresh Thyme

SAMPLE #8 Linden Base (West Elevation)

ninth layer

eighth layer

seventh layer

sixth layer

fifth layer

fourth layer

third layer

second layer

original layer
(blue green integral colored plaster)

PLEASE NOTE:
Microphotograph is representative of layering only and is not accurate for color.
Refer to MUNSELL Color and chip sample for true color.
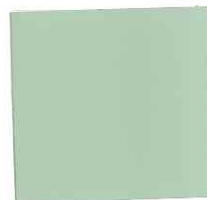
MUNSELL COLOR
hue = 9.48GY
value = 7.1
chroma = 1.7

Light Reflection Value 45

COMMERCIAL COLOR
Dunn Edwards DE5654 Fresh Thyme

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