# CITY OF GRANBURY 

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Historic Preservation

## DESIGN GUIDELINES

## 12. COLORS

## Definitions

Primary Pigment Colors

## Secondary Pigment Colors

## Tertiary Pigment Colors

Primary Light Wave Colors

Complementary Light Wave Colors

Color Temperature

A set of pigment colors that cannot be mixed from any others; from which all other colors may be derived, e.g. blue, yellow and red.

A color formed by mixing two primary colors in equal quantities, e.g. green from blue and yellow, orange from yellow and red, and purple from blue and red.

A color produced by mixing two secondary colors in varying amounts, e.g. olives from green and orange, deep browns from orange and purple, or maroons from red, brown and blue, etc. Popular colors used in combinations for "Victorian" architecture exterior color schemes.

For pigment, a set of light wave colors visible on the electromagnetic spectrum that cannot be mixed from any others (red, blue, and yellow). For light, a set of light waves from which other wave colors may be derived (red, blue, and green).

The complement of blue is yellow. The complement of red is blue-green. The complement of green is purple. The combination of two complementary colors yields white light.

The temperature of particular light waves on the color spectrum expressed in degrees Kelvin. Color temperatures of lights used for historic buildings lie within 3000 degrees Kelvin and 3500 degrees Kelvin. An incandescent lamp may have a temperature range from 2850 to 3200 degrees Kelvin. The effect of light instruments above 3500 degrees Kelvin, for example in cool white fluorescent, ( 4100 degrees Kelvin) will be too cold; sodium vapor lamps at 2700 degrees Kelvin distort normal perception of color. Average daylight at midday has a temperature of 5400 to 5600 degrees Kelvin.

## Regulations for Colors

Architectural styles found in Granbury have fairly definable color pigment palettes:
Gothic (1860-1890); Greek and Italian Revival (1840-1870), which lagged to 1890 in
Granbury; High Victorian (1870-1900); Neoclassical and Colonial Revival (1890-1950); and Modern (1900-1975).

Exterior pigment colors of buildings commonly ranged from dominant white of the late Greek Revival style through the pale earth tones of early Victorian and the dark, rich (muddy) colors most often associated with Victorian (see Queen Anne below), and to the gradual return to white in Classic Revival and light pastels during the Colonial Revival period.

Arts and Crafts (Modern) styles continued to use rich color palettes of deep reds, browns and olive greens, during the same period as Colonial Revival architects specified white elevations with green shutters, or blue, gray or yellow elevations trimmed in white.

Queen Anne, Second Empire, Shingle, and Stick, all circa the 1870s, featured rich, tertiary colors for exterior decoration; grouping parts of a building in one or more colors; and detailing in contrasting colors the shape of doors, windows and other feature elements.

## Prohibited:

- Individual colors other than those appropriate for the period. Appropriate color palettes are available at the city's Community Development Department or available online on palettes specific to the construction age of the building.
- For the commercial and square district, pigment colors other than those illustrated on drawings on file in the City Hall or online color palettes that match the existing colors seen on the square.
- Changing paint colors on buildings in a historic district or on a historic landmark without approval by the Historic Preservation Commission.
- Color schemes other than those used in the original historic period for the particular style.
- Accessories (such as fencing, free standing and attached signs) of painted colors other than those appropriate to the period, and/or incompatible with those of the main building to which they are attached. (See Section 8, Design Guidelines for Signs.)
- Changing paint colors on signs or accessories in a historic district or on a historic landmark without approval by the Historic Preservation Commission.
- Street furniture of colors other than the original period.
- Plastics with integral color incompatible with the style.

■ Lighting instruments with color temperatures higher than the 3000 to 3500 degrees Kelvin range, or lower than 2850 degrees. These include prohibited cool white fluorescent, mercury vapor, xenon, and sodium vapor (yellow) lamps.

- Faux finishes, such as marble, stippling, and copper patina.


## Restoration of Original Colors

Historic buildings in Granbury are likely to have been repainted at least three or more times. It is usually possible to ascertain original colors by laboratory analysis of paint scrapings. The process includes:
(I) Lay a 2-inch piece of 3M "Library" tape vertically over each area to be analyzed. With a sharp knife, cut through and lift a l-inch sample of paint down to the raw wood in five to six locations over the field of the façade, peeling the sample from the top down to prevent layers from flaking away, being careful to maintain all the layers of each sample intact. Label separate envelopes and key each sample to its location on a diagram of the façade.
(2) Seek areas behind trim or other obscure areas where paint may have bled. Scrape filings of paint from each area into separate bags. Filings may appear to be only oxidized gray powder, but lab analysis will show the original color wave spectrum. These scrapings may offer a verification check on the field samples.
(3) Building color palettes popular at the turn of the 19th to early 20th century often included five or more colors. Repeat this process on all architectural feature areas, such as columns, capitals, belt courses, corner boards, cornices, brackets, balustrades, railing tops, gable trim and infill, etc. Be sure to label each envelope and key it to a location diagram of the building façade. You may be very surprised at the colors hidden in your gray paint powder.
(4) Seal the envelopes and send to a laboratory for analysis (see the Granbury Historic Preservation Officer for recommendations). Include the keyed façade diagram for the interpretation of the laboratory. The laboratory will define the original color wave spectrums, and forward them to the Munsell Laboratory, who will have the specified color chips sent to you for use in matching pigments. If the process seems difficult, seek professional help to make the appropriate scrapings.

