This is a HO scale scratch build using plans from Pat Harriman's book "Early Wood Frame and Stone Structures". This is a build of the second plan in the book, Colin's Cabin. Plans for this build can be purchased from Model Railroad Hobbyist Magazine in printed book or a PDF download. Find both options here: https://store.mrhmag.com/store/c5/Books.html

Picture 1: Collins Cabin - Scratch Built

INTRO AND THREAD GOALS:

I want to try using some construction and weathering techniques which are new, at least to myself, or which I want to modify to fit my modeling style. I feel that prior to continuing to some craftsman kits and a major project, I want to increase my wood weathering skills and stone carving/coloring techniques. Building some structures from Pat's plans will provide the opportunity to expand my skill sets and test different techniques.

Colin's Cabin - Prototype Photos for Coloring and Siding Build:

As I'm using the build to test/play with techniques, I will not be constructing the structure as suggested in Harriman's book.

I will attempt to show/describe:
-- The effect or technique which I want to achieve or try out.
-- How I approached the effect/technique(s), what tools I used and in what order so that others may be able to reproduce the effect(s) should one wish to capture the effect or try out the technique.
-- The results of the various attempts, and what I think I may want to consider for the future.

My overall goal is to create a notebook for future reference. I hope the notebook will also contain your thoughts and suggestions as that will only add perspective to the notes

Additional Sandbox Build Threads:
Small Miner's Cabin: (HO Scale)
https://newtracksmodeling.com/sandbox-series-small-miners-shack-by-kris-p-blackmarr/
-- Base hues for wood coloring.
-- Carving Plaster Castings.
-- Coloring Plaster Castings for Colorado Clear Creek area.
-- Mortar line coloring in plaster cast stone walls.
-- Faded/worn paint on individual boards.

Build Goals:
1) Base Weathering:
--Attempt to recreate in HO scale the raw, old wood colors as seen on the tipple reference picture#2. (Also see a few of the following pages within the thread for additional information.)
2) Try a mortar line product to add texture to wood to simulate concrete.
3) Stone carving and coloring:
-- Use Hydrocal or Plaster of Paris (POP) to create a stone chimney/foundation and color the castings to fit into Colorado rocky mountain hues as found in the Clear Creek area.
-- Identify possible ways to easily create/carve crumbling of a plaster foundation.
4) Use of laser cut window product in scratch building. Study in coloring and weathering.

Basic Construction:
-- HO scale board-by-board over a mat board template. (Matboard: Crescent Mfg.# 948. Two sides colored; beige/white)
-- Attached roof will be shingled.
-- One window in the structure will be a laser cut product.
-- Scratch built door
-- Plaster foundation and chimney.

As some of the members of the forum may know from the railroad-line.com forum, I have been trying to work out a good system of creating the coloring in HO and O scales for the siding shown in the photo below.

This has come up in a couple of my build threads, and many great modelers have taken on the task to assist with coming up with methods to reproduce the colors. This has resulted in a couple of build threads containing some excellent discussions with examples of weathering and how-to's to obtain the hues.One of the problems has always been the 'sheen' seen on the prototype. This has always totally stumped me in my attempts.

Here is the issue. A lot of the cheap structures built in the Colorado hills used a cheap pine which contains a high content of sap. The sap comes out of the cut wood and produces the yellow-orange and dark orange-black hues. In addition, there is a 'sheen' often associated to the coloring. This weathering/coloring occurs quickly (appx. 4-5 years is what I'm told) so it may be a somewhat common coloring associated to siding used on a lot of structures in the Colorado narrow gauge areas. Thus, my desire to identify an easy method to capture the coloring of the prototype.

Discovering a technique has been elusive for my style of modeling. Instead of trying to capture the entire feel of the prototype, I'm going to focus only on the various orange-yellow hues. Kevin's technique (Reference link in "Build Goals") holds some promise if I can modify it slightly and make it fit into HO scale. I'm not going to worry about the 'sheen' of the prototype on this build, but mainly focus on obtaining colors easily.

Also, note all of the 'yellow' knots within the siding boards. Need to look at how to simulate this hue also, with their dark outer 'ring'.

Picture 2: Orange / Black natural weathering colors.

Tools & Technique: Templates

1) Cut one long strip of mat board 56 scale foot long by 16 scale foot wide.
2) Cut long strip into two strips. 32 foot long and 24 foot long.
3) Square cut edges with True Sander.
4) Cut the 32-foot-long strip into two 8-foot-wide strips.
5) Square cut edges on True Sander.
6) Cut 6 inches off the two end pieces.
7) Cut the 24 foot long (short piece) into two 12-foot-long pieces.
8) Mark the end walls with a line at 8 foot height. Use the side walls as a template to obtain the correct 8' height. This will ensure that all walls are the same height.
9) Note on <u>both</u> sides the "top" and "Bottom" sections of the walls.
10) Cut one (or both) of the 32 foot by 8-foot walls in half. This will produce the two 16 feet by 8-foot walls for the structure sides. Note that there is also one (or two if cut earlier) practice walls.
11) Square all sides of walls with True Sander.
12) Measure and cut door and window openings.
13) Color all edges, openings and both sides of the mat-board with Prismacolor French Grey 90%, PM-163.

Tools & Technique: Siding - Adding Wood Grain and Knot Holes

Material: Kappler 12-inch lengths scale strip wood:
A) 2x8 (9)
B) 2x6 (2)
C) 3x7 (1)

1) Grain both sides strip wood with file card brush.
2) Grain both sides strip wood with steel wire brush.
3) Add knot holes at random using a #64 wire bit in pin vice. I drilled a total of 30 holes.
4) Sand with green sanding pad.

Tools & Technique: Siding - Base Weathering and Coloring

Material: Soft Pastels:
A) Schmincke Burnt Sienna #17-018-068-B
B) Rembrandt Raw Umber # 408-3
C) Schmincke Flesh Ochre #17--016-023-H
D) Rembrandt Yellow Ochre #227.3
NOTE: Towards end of build dry-brush siding with Builder-in-Scale Yellow Wood or Brown Wood stain.
http://www.builders-in-scale.com/bis/parts-weather.html

Apply to both sides of strip wood:
1) Scrape chalk powder onto strip wood using a straight edge razor blade. Scrape a med layer of raw umber and flesh ochre (approx. 40%-60% powder mix) and set with clear ETOH (ETOH = Rubbing Alcohol) applied with a Loew-Cornell Fabric Dye #6 brush.
2) Scrape light dusting of flesh and yellow ochre onto wood.
3) While wood still damp, apply heavy wash of Silverwood applied with fabric brush.
4) Brush with stiff wire brush.
5) Wipe wood with ETOH soaked paper towel.
6) Random stipple with Silverwood wash and then blend using fabric brush.
7) Cut all siding to length, allowing extra for trimming once applied to sub-walls.
8) Wire brush all cut board ends.
9) Lightly stain cut ends with Silverwood using a cheap #3 soft round brush. Stain ends in small bundles (approx. 4-6 boards).

Tools & Technique: *Apply Siding to long walls*

1) Apply siding using yellow carpenter's glue.
2) Board over window and door openings.
3) Trim siding excess from top of walls using #18 blade in a #5 handle. Use sub-wall as cutting guide and trim via 'punch' type of cuts.
4) Cut out door sides with #18 blade.
Cut out door header and window using #17 blade.
5) Square/smooth cuts and edges of mat-board with emery board (nail file) and square needle file.
6) Stain all cut edges with light solution of A-I (light A-I = 1 tsp/pint non-waterproof black India ink in one pint rubbing alcohol.) using small brush #2 round brush. Apply wash using brush hairs by ferrule to control volume of wash applied. (Use brush hairs between lines in drawing below.)
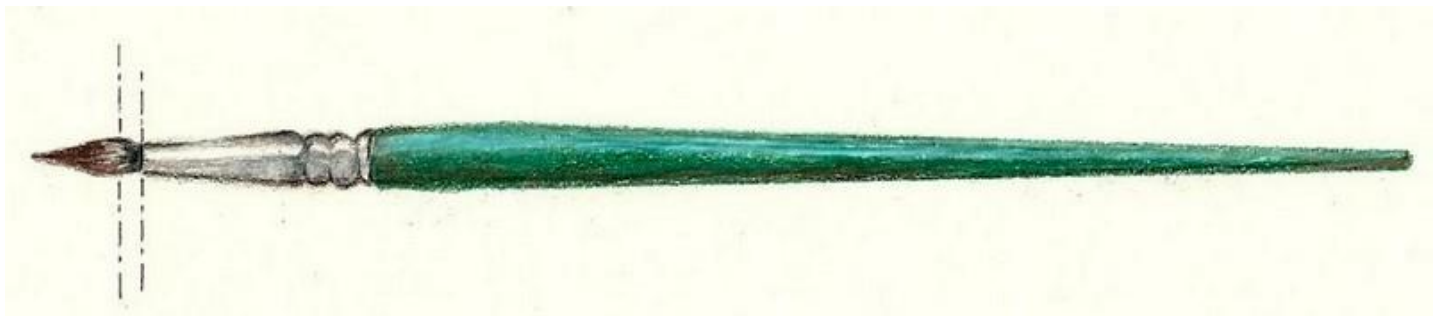
Picture 3: Paint Brush Wash Application. Drawing by Anita Maxson – used with permission.

Tools & Technique: *Apply Siding to end walls*

1) Cut siding to scale 8-foot lengths.
2) Wire brush all ends of siding.
3) Mark sub-walls with lines for split/short boards. The lines will become cut and glue guides.
4) Apply siding using stop across bottom of wall to create even board height on wall.
5) Stain top ends of siding with Silverwood wash. Use a #1 liner soft hair brush to color the board ends.
6) Color with Silverwood all ends of scrap cut from long side walls.
7) Add siding to upper end sections of wall ends using scraps from long walls..
8) Trim excess siding from upper section of end walls using the sub-wall mat-board as a cutting guide.
9) Use emery board to sand smooth the board edges to the mat-board sub-wall.
10) Color all wall edges with Silverwood wash using a cheap soft haired mop brush.

Picture 4: Basic Siding Coloring - note nail holes.

Picture 5: Note weathering created by wicking of stain on board ends; particularly the random mid-wall board lengths & ground contact.

Picture 6 :Individual board coloring.

I tend to spend some weekends each year kicking around some of the old towns in the Colorado area to gather pictures for the wintertime modeling season.

In the past I was in Leadville poking around the old Scandinavian enclave area around west 1st, 2nd and 3rd streets, in the 300 to 700 blocks. A few pictures from that area of town of a couple of structures for weathering ideas and color reference.

By the way, I loved the 'extension' ladder against the brick structure so much I just had to share it with you. Careful study of the pictures will show a lot of old colors on the doors and trim. And that short brick fireplace with it's 'platform' will for sure show up on one of my models prior to the end of this year.

Anyway, I hope that you can see from the 2nd, 3rd and last pictures why I colored the this structure the way I have. And should anyone want higher resolution pictures to work from, shoot me a email. I have removed around 50% of the resolution to make the file sizes smaller for posting.

Picture 6: Orange, brown & silverwood colored siding.

Picture 7: Orange siding along with brick. Note the chimney on a stand.

Picture 8: Orange edge coloring on dark brown-black weathered clapboard. Note the ladder extension and light buff dirt color.

Picture 9: Orange hue wood sheet with red siding.

Picture 10: Orange hue weathered doors.

11: Orange toned false front with yellow knots.

Thought that I'd take a moment and share with those who are interested how I use the pictures which I take for my modeling. I apply the same 'general review process' of both model and prototype pictures which I look at here on the forum.

In general, when I take a picture of the 'real deal', I always try to include in the picture:
1) Some actual soil color, or at least something showing the ground around the structure.
2) An angle shot to enhance shadows.
3) Some reference background colors.
4) Some specific reasons (at least 3) for the reference shot.

When I get home, I have time to further study the pictures and often glen additional information.

Looking at the 3rd picture above, the reason I composed (ideas I had in mind at the time) the photo was to show:
1) The extension ladder, and how the top was fit into the top of the ladder, and the wide spacing of rungs. Additionally, the grey was interesting in that it closely reminded me of a 'gull grey' color which got painted on wood.
2) The used brick which makes up the structure. (How does one carve and color used brick anyway??)
3) Note the brickwork around the 4 pane window and how deep the window is set into the wall.

4) A **real big focus for this shot** was the corner of the foreground structure with it's very dark blues (almost black) color contrast to the brown-red hued wood siding in the background. I also noted the **sage green** of the fascia board on the foreground structure and composed the shot with the green tree to assist in referencing the color hues.
5) The height of the short brick chimney and it's platform.
6) The size of the top wood beam going across the top of the brick structure.

Upon looking at the picture now I have also noted:
1) The various tree types in the background.
2) The leaning telephone pole.
3) The secondary wood header in the brick structure doorway.
4) The looped wire (probably barbed) hanging on the left side of the chimney platform.
5) The metal sheet bent down the front of the chimney platform. The metal sheet probably extends under the chimney. Note how the coloring changes from the orange-red brick color to the violet-black hue in the center along with the changes in surface texture.
6) The ends of the boards forming the roof under the corrugated metal roof (I have pictures of the roof which is held down by rocks). This gives a idea of size of the wood used.
7) The number of brick courses above the roof line providing an idea of chimney height.
8) The hinges and lock on the door of the wood structure connected to the brick structure.
9) The hole above the door appears to be cut almost like a bird entry. (Reason for such a opening?)
10) Height of grasses at base of structure.
11) Tar paper roofing is tacked down over the edge of the black structure.
12) Only one side (left jamb) of the 4 pane widow is worn down to the wood, with pant still good on the muntins.
13) The really crooked top rung of the 'extension' ladder.
14) The strong brown-red hues on the bottom edge of the clapboard siding on the foreground structure.
15) The general hues of color on the siding of the yellow-brown structure.
16) The size of the header above the door in the wood structure connected to the brick structure.
17) Note the 'brown and black' knot holes of the siding. Often, they are yellow on siding at this overall coloring state, at least here in Colorado. Looking at the wood structure connected to the bricks here.
18) The large foundation beam on which the black structure sits.
19) Shape of brick chimney just above the black structure in the far background.

The above is how I use 'reference' the photos. I use all the photos I take in much the same way. I hope this will help others in using 'reference' photos when they look at the many wonderful photos available to each modeler.

Picture 12: Various colors of weathered metal roofing.

Tools & Technique: Siding Details
1) Add individual nail holes with straight pin held in hemostats.
Note: Want to see effect on nail holes when brown or yellow wood wash is applied.

Tools & Technique: Brace Walls
Material: Kappler 8x8 scale strip wood:
1) Cut 8x8 wood to fit walls and corners. Allow for 8x8 at corner joint for wall overlap (side walls over end walls).
2) Color all brace pieces with PM-163
3) Glue into place.

Tools & Technique: Window and Door Framing, Door Construction and Coloring of Corner Trim, Fascia, Porch Rafters
Material: Kappler 12-inch lengths scale strip wood:
A) 1x4 (1)
B) 1x6 (2)
C) 2x6 (2)
D) 1x8 (1)

1) Pre-stain 1x6 with Brett's Brew (Sierra West Scale Models) or Silverwood.
2) Grain all wood with stiff steel wire brush.
3) Add knot holes to 2x6 with #64 wire bit. Total of five knot holes over the total wood length were created.
4) Sand with green scrub pad.
5) Color using same colors and sequence as siding.

Frame Window:
1) Create sill at bottom of window using 1x8. Install with 1x8 flush with backside of wall producing a scale 2 inch extension past the wall face.
2) Use 1x6 to frame the balance of the opening making sure that the framing is flush with the wall face.
3) Use Lase-Art 4 pane window sanded to fit window opening. Use emery board to sand as needed.

Color window casting
A) Color window face by scraping a small pile of the colors pastels which were used to color the wall.
B) Use a #1 soft round and Silverwood to make a few drops of 'paint'. Color the window casting with the pastel solution.

Add glass
C) Cut clear PVC .005 inch for glass to fit window.
--NOTE: My PVC sheet had been dusted with a light spray of Dullcoat. I also added cracked glass in one of the window panes.
D)Attach glass using the adhesive backing on widow.

Install Window
F) Glue completed window into wall opening. Aleen's Fast Grab Tacky Glue was used.

Frame Window Opening
G) Add outside window framing to wall face using 1x4 and Aleen's Fast Grab Tacky Glue.

Tools & Technique: Door Construction and Framing
Material: Colored Kappler strip wood:
A) 1x4
B) 1x6

NOTE: Use two-sided tape to hold door strip wood in position until frame is completed.
1) Line door opening with colored 1x6. Make sure edges are flush with wall face.
2) Form door over two-sided tape using 1x4's.
3) Add Z-frame bracing to door face using 1x6.
4) Add nail holes to Z-brace with straight pin held in hemostats.
5) Color all door edges with Silverwood using hairs near brush ferrule.
6) With door face down on paper towel, flood backside with Silverwood.

General Construction Notes: Glue Sides Together
1) Glue one end and one side together creating an "L".
2) Glue the other side and end walls together creating a second "L".
3) Glue the two sub-assemblies together.
4) Add corner trim using 1x6 or 1x8. Trim corner trim to fit roof angles as trim is added.
5) Sand walls to fit roof angles.

Glue door into place

6) Frame door opening with 1x4.

7) Glue door into place.

8) Touch-up all sanded and cut surfaces with Silverwood, light A-I or soft pastels as required.

Picture 13: Walls assembled. Note inside bracing.

Picture 14: Side wall top edge sanded at roof angle.

Picture 15: Open door & window framing.

Roof and Stonework

<u>Preliminary Evaluation: Structure Coloring and Chimney Casting Carving</u>
1) Try a lighter brown-red hue pastel to obtain a lighter coloring of the siding.
2) Try increased volume of yellow-orange hue pastel to obtain stronger yellow wood coloring tones.
3) Try dark A-I solution to obtain some of the black fade tones.
4) Try dark A-I solution to when applying a dark violet or blue-black pastel to obtain black fade tones.
5) Do not use wood with knotholes for outside framing of door entries.
6) Try 1x10 (with this mat-board thickness) to obtain a more pronounced window sill.
7) **** Continue use of laser cut windows which have been colored with soft pastels or paint and frame openings with strip wood.
8) Soften/lightly round the four long edges of a POP chimney casting prior to carving stones. Need to increase stone definition on corner edges.
9) DO NOT use power disk sander to sand POP blanks to size.

FOUNDATION SCREW-UP:
We all screw-up in our modeling, and this learning process is the major reason for these 'sandbox' builds. As these models are 'learning tools', I am not concerned about making changes during the build.

I tried to use my 4" disk sander to do some precision sanding of the plaster foundation blanks. Totally wrong idea. With practice, one can probably use a power sander, but I don't think my modeling will include power sanding of plaster. The clean-up time was more than what it would have taken to cut and then touch-up sand the pieces. Plus, I took off way too much plaster using the disk sander.

This led to a few options for the foundation:
1) Recast the foundation blanks for stone carving.
2) Use the existing blanks and cut small 'pillars'. I could then carve stones into the pillars and use the pillars to support the structure.
3) Carve small stone wall foundation pieces. (Maybe stone pillars to support a corner or two??)
4) Use 6x6 strip wood textured as concrete and use this as a foundation on the entire structure. (Testing a concrete texture idea is one of the build goals.)
5) Cut a small block from one of the shorted blanks and carve stones into it or color to represent concrete. This could then be used as a base for the chimney.

As this is a sandbox build, I'm probably going choose options 4 and 5 for this build. I'm not married to having a carved stone foundation on this build.

Tools & Technique: Carving the Chimney
1) Plaster of Paris (POP) was used to form blanks for the scale 2 foot 6 inch square chimney.
2) Prior to carving, I marked the blank with horizontal pencil lines every scale two feet on all faces to help keep the carved stones in horizontal lines to some extent.
3) The chimney was fully carved using various dental tools and picks.
4) A stiff steel wire brush was then used in a circular motion to add texture to the stone faces and round the edges of the carved stones.
5) The wire brush was then used in a stippling motion to add additional texture to the stones.
6) Once the outside was carved, I drilled a small hole in the top of the casting. This was then filed out using various files to form and square the chimney opening. The chimney opening is about 1/2 inch deep and the walls of the casting are about 1/16th of an inch thick.
7) The top of the chimney and opening were then lightly wire brushed and stippled to add texture.
8) The long corner edges of the chimney were then wire brushed to lightly round the sharp corners. This did not add additional dimensional differences between the stone edges as I had hoped.
9) Touch-up carving done as needed.

Tools & Technique: How to Build a Stone Wall by Karl Osolinski
I was doing a bit of review of sites for ways to color stones, and came across this gem. Karl O has always been one to watch and learn from, so I thought that I'd share this link for my future reference: http://www.railroad-line.com/forum/topic.asp?ARCHIVE=true&TOPIC_ID=8357 (Note: Railroad-line.com is currently upgrading their server and is off-line as of this writing (7-30-2021). If the site does not return soon, I will change this reference.)

Tools & Technique: Concrete Base from Wood
Material:
A) Builders-In-Scale Light Grey Mortar Mix #110
---- http://www.builders-in-scale.com/bis/parts-weather.html
B) Polly Scale Aged Concrete Paint #F414320
C) Scale 6x6 strip wood
D) Stabilo Pastel Pencil Golden Ochre Light #692
E) Stabilo Pastel Pencil Burnt Ochre #620

I wanted to determine if I could obtain more texture and eliminate the joint seams when using wood to simulate concrete. Sealing and painting the wood is OK but it does not have the 'texture' of concrete and there is an issue with joints. This test also includes adding additional color 'stains' to the concrete using pastel pencils.

1) Cut 6x6 to match foundation walls.
2) Color strip wood with Polly Scale paint and mortar mix. This was mixed to be a soupy paint, about the same as pancake batter.
3) Once dry, glue strip wood to structure base.
4) Repaint strip wood with paint-mortar mix using finger to force mortar mix into joints to create a seamless foundation. Re-painting was done with a #1 soft round brush.

Foundation touch-up:
5) Allow Concrete-Mortar mix to cure dry.
6) Add areas of color to foundation with pastel pencils.
7) Lightly scrub/blend using a soft #1 round brush the pastels into the concrete coloring using Silverwood.
8) Lightly flood the joint between the siding and foundation with a small amount of Silverwood. Allow the Silverwood to color the top of the exposed 6x6 and some small amount of wicking up the siding.

Picture 16: Simulated concrete foundation.

Tools & Technique: Porch

Materials:
A) 4x4 strip wood
B) 4x6 strip wood
C) 2x6 strip wood
D) MikeC's #8 ink stain (Reference Mike Chambers 3 tutorials "Staining and Weathering Stripwood" for stain recipes at:
https://www.rustystumps.com/howtoarticles.php --THANKS FOR KEEPING THESE TUTORIALS AVAILABLE--
E) Prismacolor Marker Cool Grey 30% #PM-110
F) Prismacolor Marker French Grey 40% #PM-158

1) Cut 4x4 to create foundation for porch.
2) Cut 4x6 wood 'gussets' to help keep frame square and add support.
3) Wire brush the 4x4's.
4) Stain all parts with MikeC's #8 stain.
5) Glue the frame together with the 4x6's on the inside of the corners.
6) Stain 2x6 decking with PM-110 and allow to dry.
7) Stain 2x6 decking with PM-158 and allow to dry.
8) Wire brush all 2x6 strip wood.
9) Cut decking to length allowing a 1 inch overhang on each short end of the porch frame.
10) Wire brush all cut ends and treat with Silverwood. To control wicking, dip the cut ends into stain left in bottle lid after shaking solution bottle.
11) Glue deck planks into place on frame.
12) When glue is dry, weather deck with Silverwood. Apply Silverwood from back of decking with deck face down on paper towel. Flood back of deck with Silverwood using a #5 soft hair or mop brush.
NOTE:
By using 4x4's and 2x6 deck planks, the porch floor will become flush with the bottom of the door which is sitting just above the 6x6 concrete foundation.

General Construction Notes:
1) Add roof ridge pole using stained 8x8.

Tools & Technique: Roof

Materials:
A) .040 thick card stock
B) Prismacolor Cool Grey 40% #PM-111
C) Prismacolor French Grey 90% #PM-163
D) Thick viscosity ACC

1) Cut out sub-roof from .040 thick card stock.
2) Score lines for folds in card-stock to match changes in roof angles.
----- Score top of card stock for roof peak.
----- Lightly score bottom of card stock for porch roof angle
3) Cut out chimney notch making sure to center notch with roof peak.
4) Color top of card stock with PM-163.
5) Color bottom and edges of card stock with PM-111.
6) Lightly score bottom of porch roof section every scale six inches.
7) Recolor bottom of porch section with PM-111 to help scribe lines stand out.
8) Seal porch section (bottom side) of roof with thick ACC. This will help hold roof angle, prevent/limit warping.
9) Color bottom structure section of card stock with PM-163.
10) Color chimney cutout edges with PM-163.

Tools & Technique: Chimney Coloring

Material:
A) Krylon Flat White Spray Can - Interior/Exterior
B) Delta Ceramcoat Raw Sienna #02411
C) Americana Brunt Sienna #DA063
D) Delta Ceramcoat Burnt Umber #02025
E) Delta Ceramcoat Sandstone #02402
F) Delta Ceramcoat Charcoal #02436
G) Silverwood
H) Medium solution of A-I wash
I) Lifecolor Smoke #TSC-208
J) Bragdon Enterprises Weathering Powder - Soot Black #FF-64
K) Bragdon's Enterprises Dust Bowl Brown, #FF-66
L) Bragdon's Enterprises Ash, FF-68
M) Water in mist bottle

A lot of the rocks found in the Clear Creek area of Colorado have a lot of small white speckles of color. I wanted to see if I could capture this effect in the coloring of the plaster castings.

1) Using the Krylon Flat White, the castings were 'qusi-sealed' by using very quick passes of the paint spray. The castings were held at one-half arm's length to allow for an orange-peel paint application. Two very light coats of paint were applied to the carved chimney. Allow casting to dry.
2) Casting was then washed with Silverwood using a #4 soft round brush and quick, light strokes in a circular motion. The casting was not moist when the Silverwood was applied.
3) A wash of Raw Sienna (4 drops paint/7 drops water) was applied to stones at random. I selected the squarer stones, leaving the flatter-thin stones for later coloring with red tones.
4) A second wash was made by adding an additional 2 drops of paint and 4 drops of water. This was applied at random to the same style of stones in the casting. A few of the earlier colored stones were also colored again.
5) A second application of the wash was again applied to the stones at random while the stones were still damp from the prior application. This was done in random, again coloring some of the prior colored stones as well as a few 'fresh' stones.
6) A single drop of Burnt Sienna was added to the existing wash and applied to the damp stones at random and included a few of the 'fresh' stones.
7) A new wash (3 drops Raw Sienna, 1 drop of the prior wash and 5 drops water) was applied to stones at random.
7) A new wash was created (4 drops Raw Sienna, 2 drops Burnt Sienna and 9 drops water and applied to the stones at random. A few of the 'flat-thin' stones also were lightly colored.
8) A drop of Brunt Umber was added to the existing wash and 3 drops of water. The casting was misted with water and the wash applied at random. Some of the stones were just highlighted with excess paint being removed with the swipe of a finger.
9) Add 2 drips of Brunt Umber and 5 drops water for a red wash. Applied to flat-thin stones at random including remaining 'fresh' flat-thin stones. Mist casting after wash application.
10) A new wash (Sandstone 3 drops: water 7 drops) was created and applied at random to colored stones and remaining 'fresh' stones.
11) Mist castings and apply second application of wash at random, again highlighting some of the prior-colored stones.
12) Add one drop Burnt Umber and 2 drops water and apply to stones after misting. Highlight some stones.
13) Add one drop Burnt Umber and 2 drops water. Apply to stones after misting.
14) Allow castings to dry.
15) Apply medium A-I wash to grout lines using capillary action. Brush used: Winsor & Newton Galeria Round-S #1.
Chimney Opening:
--NOTE-- Gesso was tested to determine if any effect on the texture of the chimney opening and to limit light fusion thru the thin plaster.
16) Cover the interior of the chimney opening with Gesso. Allow to dry.
17) Color the interior of the chimney with the acrylic smoke paint. Feather the paint onto the top of the stones at the opening.
18) While still damp, apply Soot weathering powder using a small round brush.

19) Using a #4 soft round, lightly feather a small amount Soot weathering powder around the outside of the chimney to about 1/3rd inch down from the top.

A very light dusting of the weathering powders were applied to the castings using a toothbrush. The castings were scrubbed fairly hard in all directions during the application of the weathering powders using the toothbrush.

20) Primary powder used was the Dust Bowl Brown which was scrubbed on prior to the Ash being applied.
21) A bit of Ash was applied at random.
22) A very light application of the Dust Bowl Brown was then applied in a touch-up manner.
23) Touch-up the top exterior of the chimney with Soot.

Preliminary Evaluation: Plaster Castings Coloring
1) Stones were carved to approximate the same size stones as carved in the Small Miners Shack build. and came out as expected.
*** Continue to use 2-foot marking on blanks to assist in stone carving.
2) Need to use sanding tool to further reduce the sharp corner edges of the chimney prior to carving.
3) Need to try holding carved blank approximately 2/3rds of an arm's length when qusi-sealing the piece. At 1/2 arm's length, the casting became too sealed even with very quick and light passes of spray can. The peel was also a bit more dense than desired.
4) *** Continue to use Gesso on chimney opening and opening edges as the acrylic smoke paint and chalks adhere better resulting in better coloring and increased texture.
5) *** General coloring instructions provide reproducible coloring of plaster stones.
6) *** Broken carved blank can be glued together with 5-minute epoxy prior to weathering powders being applied. Once weathering powders applied, the break in the casting is very difficult to detect.
7) Need to determine a method/tool to add more texture on small blanks once carved using some kind of tool to stipple with.
8) Need to add a bit more mortar mix to paint to create a bit thicker paste for application to joints. In general, the texture and coloring is good.

As you can see from the pictures which follow;
A) The stones came out to be about the same size as carved in the first build.
B) The coloring of the plaster is reproducible using the coloring instructions.

Picture 17: Carved Plaster-of-Paris chimney.

Picture 18: Colored chimney matches prior build.

Materials used for mortar and paint:
A) Builders-In-Scale Light Grey Mortar Mix #110
---- http://www.builders-in-scale.com/bis/parts-weather.html (Towards bottom of page. There are two different mortar mixes, one is light and the other is dark. I think the dark mortar mix would not work here as it is pretty dark and gets darker when used.)
B) Polly Scale Aged Concrete Paint #F414320. (Probably any concrete hued acrylic paint would work.)

Color strip wood with Polly Scale paint and mortar mix. The paint was mixed with the mortar powder be a thick paint, about the same as pancake batter.

Below are this builds chimney beside a O-scale chimney being carved. I've also included some of the tools which I use to carve plaster.

Picture 19: Tools used to carve plaster.

Tools & Technique: _Shingle Roof_

Material:
A) Paper Creek Wood Shake Shingles #2040.
B) 3M Double Sided Transfer Tape 1/2 inch wide #465

1) Draw guidelines on the roof for shingle rows.
2) Mark in a different color pencil the line for the roof peak center fold and the fold at the porch angle seam.
3) Cover roof in sections laying only one tape application at a time. Apply tape using shingle row guidelines.
4) Extend shingles past roof edges for later trimming.
5) Shingle roof omitting roof peak pieces/seam.
6) Trim shingles. Use scale 4x4 as spacer against card stock edges and then trim excess shingle material. Punch cut with new #18 blade using a rocking motion of the #5 handle.
7) Lightly sand shingle edges to smooth.
8) Apply Silverwood to shingle edges using brush hair by ferrule on #4 soft round. Lightly tap brush on paper towel to remove excess wash. Apply wash by placing ferrule hairs on edge of shingle and pulling so wash is removed from brush and a small amount of excess wash is going onto the top of the shingles. A full roof side can be colored with a single brush load of wash.
9) Glue roof onto structure using 5-minute epoxy.
10) Using porch as guide, mark underside of porch roof for the 3 vertical posts and 4x4 roof porch beam.

Porch Supports
1) Stain 4x4 strip wood to match siding.
2) Cut 4x4 post to length.
3) Cut long top support 4x4 beam to length. Make sure to cut to fit inside of porch deck frame end pieces.
4) Stain cut ends with light A-I. Use stain bottle lid to color cut ends.
5) Build 3-post porch roof support frame over double-sided Scotch-Tape.
6) Glue support frame to porch deck using 5-minute epoxy.

Roof Peak
1) Add roof peak piece(s).
2) Stain lightly to match general roof color as needed.
3) Dust roof with fine dirt. (Sift dirt thru 3 layers of pantyhose.)
4) Spot stipple light A-I with #5 soft round. Stipple entire roof.

Dry Brush Structure:
Materials:
Builders-in-Square Yellow Wood #132.

1) Dry brush siding of structure with yellow wood stain making sure to keep stain off concrete foundation. Dry brush with 10/0 soft fan brush.

Complete Porch
1) Glue porch into place using 5-minute epoxy.
2) Add fascia. Color each fascia angle cut by dip of cut end into lid of light A-I.

Add Chimney
Materials:
Gallery Glass Liquid Leading - black #16025
---- (http://www.plaidonline.com/gallery-glass-liquid-leading/79/product.htm)

1) Add chimney to structure using 5-minute epoxy.
2) Add tar seal around chimney-roof gap with Liquid Leading. Apply with small stiff sewing needle held in hemostats. Use water during application to keep liquid thin and to assist in obtaining a smooth flow into the seam. Keep the surface of the leading smooth with water.
3) Allow to dry.
4) Apply light amount of grimy grey weathering powder or pastel chalk using a #1 round brush.

Touch-ups
1) Lightly dry-brush roof shingles with Delta Ceramcoat Sandstone #02402 applied with soft 10/0 fan brush. Lightly brush from the bottom of the roof up to the roof peak to highlight the shingle bottom edges.
2) Dry-brush entire structure with Delta Ceramcoat Soft Grey #02515.
3) Brush dark grey weathering powder or soft pastel onto roof area near chimney using 1/2 inch flat wash brush.

Build Evaluation:
1) *** Dry-brushing with Yellow Wood solution did wonders in subtle coloring of structure siding as well as improving the texture of individual siding boards.
*** Yellow Wood appears a critical key *** in attempting to capture prototype 'yellow-orange to black siding colors values.
--- Note that final color of structure siding very close to 2nd picture of first page of this thread.
2) Use of mortar line product to add texture to simulate concrete needs additional review.
--- It appears to need to be a thicker paste when applied to the strip wood and to cover the joints.
--- Need to refine the use of pastel pencils to add additional color hues of aged concrete to the strip wood coloring.
3) Color chimney/foundation carvings to fit Clear Creek, Colorado colors worked well.
*** Current color mixes and application sequence works and is reproducible.
--- Need to color more stones using the Sandstone base colors.
--- Carving of base not completed.
4) Use of laser-cut window product(s).
*** Continue to use laser cut windows with strip wood lining the window opening and outside frame.
--- Use 1x10 strip wood for window sill in future to make window sill stand out a bit more.
5)*** Continue to use Gesso in chimney prior to coloring.
6) *** Continue to use weathering powder to tone-down coloring and remove high gloss of Liquid Leading.
Overall:
1) Pleased with use of Yellow Wood in final sequence dry-brushing of siding.
2) Need to increase rounding of corner edges of carved chimney.
3) Need to increase texture of individual stones in carved stones.
4) DO NOT use weathering powder in final dusting of roof soot deposits coloring due to very limited control of color. Return to soft pastels for this application.
5) DO NOT use strip wood for door framing which has knotholes.

Picture 20: Front of completed cabin.

Picture 21: End view of completed cabin.

Picture 22: Backside of completed cabin.

Picture 23: Chimney end view of completed cabin.

Picture 24: Orange hue weathering comparison to references.

Picture 25: Two cabins built in the "Sandbox".