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 first plan in the book, the **Small Miners Shack**.

INTRO AND THREAD GOALS:
I want to try using some construction and weathering techniques which are new, or which I want to modify, to fit my modeling style. I feel that prior to continuing on to some craftsman kits and continuing 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.

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.

I will not be building the structure to my usual standards as these builds will be in the sandbox. As such, I'll be building the models only to layout or front of layout quality. I probably will not keep any of the models, but will donate the completed structures or mini-dioramas to a few local clubs.

Build Goals:
1) Base Weathering:
Attempt to recreate in HO scale the raw, old wood colors as seen in Chuck Doan's Fordson Tractor diorama. Using a modified Chuck Doan's base weathering technique, I'm looking only at the base color weathering as used on the backdrop structure knowing that a lot of the detail will not be included/visible in HO scale.
2) Peeling Paint using a resist and acrylic paint:
-- References to be updated in appx 4-6 weeks if needed. See YOUtUBE video dated 7/17/2021 for additional information.---
3) Stone Carving and Coloring:
-- Use Hydrocal or Plaster of Paris (POP) to create a stone chimney/foundation and color the casting to fit into Colorado rocky mountain hues as found in the Clear Creek area.
-- Identify a way to easily create/carve the hole in the top of the casting without affecting (breaking/ chipping) the carved casting.

Basic Construction:
-- HO scale board-by-board over a mat board template. (Mat board: Crescent Mfg.# 948. Two sides colored; beige/white)
-- Attached roof will be shingled.
-- One window in the structure will be covered over with boards or plywood.
-- Plaster foundation and chimney.

Tools & Technique: Templates

Note: Color white side of mat board with 2 washes of medium A-I.

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 insure that all walls are the same height.
9) Note on both 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 foot 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.

Tools & Technique: Siding - Weathering and Coloring

Material: Kappler 12 inch lengths scale 2x8 and a couple strips of 3x8 strip wood.

1) Stain siding strip wood with 8 applications of Silverwood allowing time for drying between applications.
2) Grain strip wood with file card brush.
3) Sand with green sanding pad.
4) Stain wood according to following schedule; Add approximately 1/4 of total strip wood volume to staining after two Silverwood applications to introduce color variance:

A) Two Silverwood applications using plush.
B) Sand all stained wood with green sanding pad.
C) Add the remaining 1/4 volume of strip wood to be stained.
D) Two Silverwood applications using plush.
E) 2nd pass with file card and sand with green sanding pad on all wood strips.
F) Single Silverwood application with plush.
G) Add knot holes
H) Single Silverwood application with plush.
I) Color knotholes with wash of ETOH (Alcohol) and Noodler's Non-waterproof Ink, Kiowa Pecan.
J) Sand all wood with green sanding pad.
K) Two Silverwood applications using plush.

Color dried strip wood using odor-less mineral spirits and lightly thinned Delta Ceramcoat Barn Red acrylic. Use blue painters tape to remove paint.

5) Flood strip wood with mineral spirits using a #4 round. Allow approximately 3 minutes for mineral spirits to dry.
6) Using a soft #4 round, stipple red paint onto strip wood. Allow to dry approximately 2-3 minutes.
7) Use painters tape to remove paint. Apply tape with heavy pressure and then lift from strip wood.

Tools & Technique: Apply Siding to Template
1) Apply siding using yellow glue.
2) Siding applied to corners of template without siding traps.
3) Add individual nail holes with straight pin held in hemostats.
4) Light A-I wash over wall face and edges.

Careful review of the top picture will revel 3 rows of nail holes going horizontally across the wall. Think that's about the only thing I got right so far.

Preliminary Evaluation: Siding Color
1) The resist/tape technique used provides a 'worn' paint effect, but does not achieve the desired peeling paint effect. Need to use a stronger tack tape and possibly a bit more drying time for the paint prior to the tape application.
2) The base coloring is absent of brown and orange-brown hues. Need to use pastel pencils in ocher and sienna hues to draw in color accents prior to final two Silverwood applications.
3) Forgot to add the heavy tear graining around the oversized knotholes.
4) I like the effect of multiple applications of Silverwood. Six to eight applications sounds excessive, but provides a good base color with natural variances in the gray tones. Color hues are much more effective than with just two to three Silverwood applications. The light sanding every two to three applications of Silverwood appears to be important in the final appearance of the coloring. Without the sanding the final colors are too dark and become muddled.
5) Nail holes are subtle, not overdone, and effective for a contest build. Not necessary at this build level.

--HUGE ERROR--
6) Acrylic craft 'Barn Red' is way too dark and will make the structure a shadow when viewed under normal layout lighting. (I knew that using this color from prior experience that the structure would become too dark of a red hue. Duhhh...) Need to use Ceramcoat 'Opaque Red' #2507 to obtain a preferable red hue.

Tools & Technique: **Apply Siding to Template** (continued)
5) Use a emery board or small steel nail file to even boards top edges.
6) Wire brush top board edges to add aging on cut edges.
7) Use light solution A-I wash to color top board edges.
8) Starting from center of end wall apply siding using existing boards as placement guide. Prior to applying individual siding board, color cut edge of board with light A-I solution.
--TIP-- Color board end by dipping cut end into lid of A-I solution. Just shake the A-I wash and then use wash remaining in the lid. Replace lid and shake bottle to replenish wash in lid as needed.
9) Cut excess siding from backside following mat-board template.
10) Sand edges with emery board or some other sanding tool.
11) Color edges of walls/mat-board with MikeC's #8 stain. (See https://www.rustystumps.com/howtoarticles.php if you need stain recipes.)

Tools & Technique: Door - coloring and construction
Material: Kappler 12 inch lengths 2x4 and 4x6 strip wood.
1) Grain wood with file card.
2) Sand with green sanding pad.
3) Color with marker; broad tip. Prismacolor French Grey 40%.
4) Sand with green sanding pad.
As some old Frenchman used to live here, I wanted to use a different color for the trim than the usual white. I wanted a fading blue hue.
5) Mix color:
-- 8 drops Vellejo Flat Blue #70962
-- 1 drop Vellejo Orange-Red #70910
6) Stipple using a dry brush with the blue color. A #2 stencil brush was used.
7) Frame door opening (6 pieces) using 4x6.
Color all cut ends of frame boards with light A-I wash using the A-I solution lid as in earlier steps.
8) Cut 2x4 strip wood to fit door opening.
9) Color cut ends with light A-I by dipping ends in lid after shaking wash solution.
10) Use 1/4 inch double sided tape to hold door 2x4's in-line during addition of door Z-brace support.
11) Cut Z-support frame from 4x6 strip wood.
12) Color cut ends with light A-I and apply to 2x4's making the door.
13) Mount door flush with wall interior.

<u>Tools & Technique:</u> Window - coloring and framing
Materials: Kappler 12 inch lengths 2x4 and 2x6 strip wood.
1) Grain wood with file card.
2) Sand with green sanding pad.
3) Color with marker; broad tip. Prismacolor French Grey 40%.
4) Sand with green sanding pad.
5) Mix color:
-- 2 drops water
-- 4 drops Delta Ceramcoat Barn Red #2490
-- 1 drop Vallejo Pale Grey-Blue #70907 (warning: 2 drops and paint will obtain pink hue.)
6) Stipple using a dry brush with the red color. A #2 stencil brush was used.
7) Frame window opening (8 pieces) using 2x6.
Color all cut ends of frame boards with light A-I wash using the A-I solution lid as in earlier steps.
8) Frame window with 2x4. (7 pieces)
9) Use 2x6 for window sill board. Use 2x to obtain flush sill overhang on outside of window opening.

Well, nothing real exciting here, but just some updates. As this is kind of standard modeling techniques, I'll not be adding construction notes for future reference.

Bracing was added to the walls while still flat. I used scale 8x8's colored with a Prismacolor French Grey 90% art marker using the large end.

Windows were then addressed. I fully framed one window using 1x6's with a 1x8 sill. The cut edges were touched up with a medium solution of A-I.

I then used some scrap wood which had been colored in a prior project to board over the framed window. Individual nail holes were added. The boards were then given a heavy wash from the back side while the face of the wall was on a paper towel to help pull the wash through the board seams. Silverwood was used as the wash.

The single window casting is a Grandt Line from my scrap box, thus I do not have the casting part number. The casting was primed with a Vallejo acrylic tan paint. Once dry, the casting was then colored using the blue paint and a stipple technique as outlined earlier.

The walls were then glued together using magnets, small metal squares, machinist blocks and 2x2 inch metal plates.
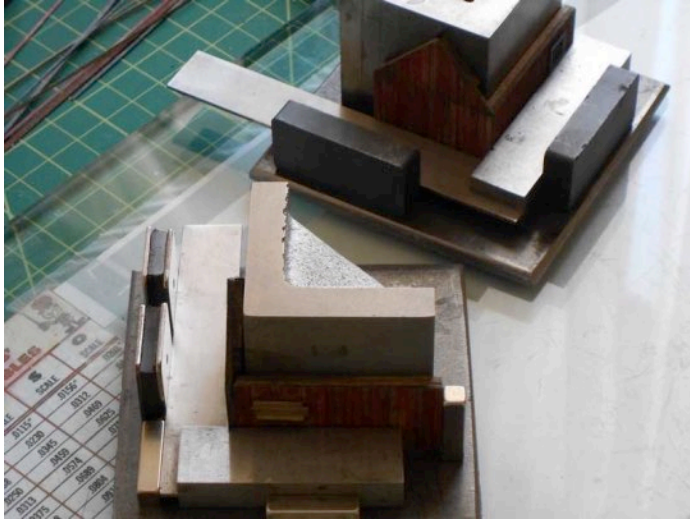
As a side note, in my gluing jigs I use really strong magnets obtained from http://www.kjmagnetics.com.

Plaster of Paris (POP) was used to form blanks for the scale 3 foot square chimney and the stone foundations. (My Hydrocal is in storage and not worth digging out for maybe one 1/2 cup's worth.)

The chimney was fully carved. Prior to carving, I marked the blank with horizontal pencil lines every 1/2 inch to help keep the carved stones in line to some extent.

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 the chimney opening. The hole is about 1/2 inch deep and the walls of the casting are about 1/16th of an inch thick.

To add additional texture to the carving, I used a very stiff wire brush (welding scraping brush) and lightly used a stippling motion over the entire casting. The casting was then brushed using a circular motion. Unfortunately the texture really does not show in the pictures.

The foundation for the structure is made of POP blanks 1/4 inch thick. These were carved and had the same wire brush treatment as noted above. The foundation walls were glued together and once dry, some POP was applied to the seams. Once the POP was dry, it was sanded and then carved to match the grout lines on the existing carved stones. This was then given the wire brush treatment, making sure to support the walls so the seams did not separate.

I will be using Downtown Deco's recommendations for prep & painting the castings. Acrylic craft paints will be used for coloring, creating washes made by diluting the paint about 75%. Randy has a how to on using plaster castings: https://www.downtowndeco.com/site/assemble-paintweather-hydrocal-structure-kit/

I will deviate from Randy's techniques by adding some gesso to the inside of the chimney casting to help limit any dark coloring wash leaking through the thin wall.

.
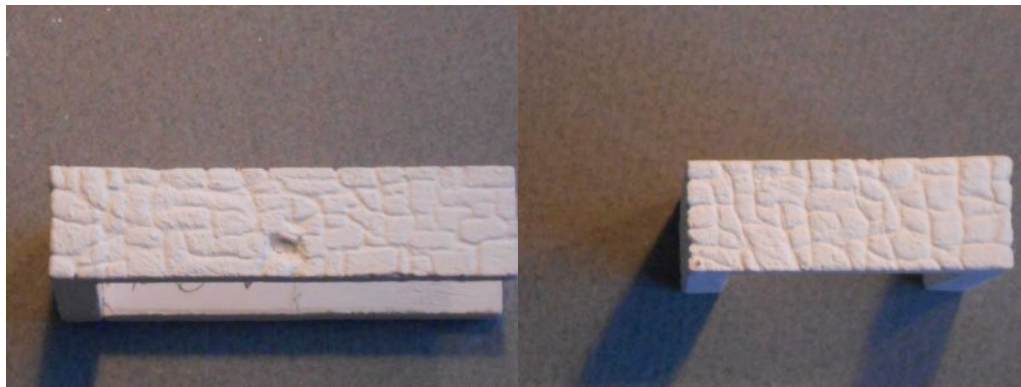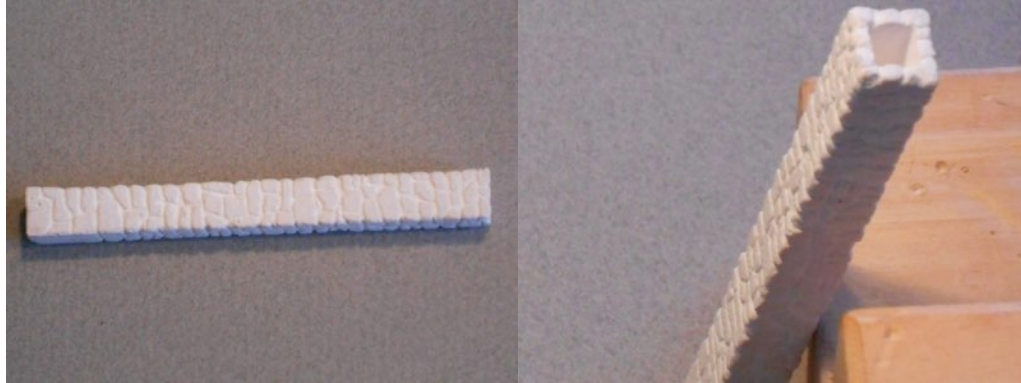
<u>Tools & Technique</u>: Plaster Foundation and Chimney Coloring
Material:
A) Krylon Flat White Spray Can - Interior/Exterior
B) Delta Ceramcoat Raw Sienna #02411
C) Americana Burnt Sienna #DA063
D) Delta Ceramcoat Burnt Umber #02025
E) Delta Ceramcoat Sandstone #02402
F) Silverwood
G) Medium solution of A-I wash
H) Lifecolor Smoke #TSC-208
I) Bragdon Enterprises Weathering Powder - Soot Black #FF-64
J) 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 'quasi-sealed' by using very quick passes of the paint spray. The castings were held at arm's length to allow for an orange-peel paint application. Three very light coats of paint were applied to the castings. Allow castings to dry.
2) Castings were then washed with Silverwood using a #4 soft round brush and quick, light strokes in a circular motion. The castings were 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 more square 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) were 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 castings were 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.

Tools & Technique: Plaster Foundation and Chimney Coloring (Continued)

15) Apply medium A-I wash to grout lines using capillary action. Brush used: Winsor & Newton Galleria Round-S #1.

Chimney Opening:

--NOTE-- No gesso used as planned.

16) Color the interior of the chimney with the acrylic smoke paint. Feather the paint onto the top of the stones at the opening.

17) While still damp, apply Soot weathering powder using a small round brush.

18) 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.

Additional Bracing:

My foundation casting was glued using yellow carpenter's wood glue. I found that the casting became unstable during the coloring due to the large volume of moisture.

19) 1/4 inch square strip wood was cut and glued into the corners using 5 minute epoxy. A smaller square piece strip wood was also glued into place towards the open end for additional support.
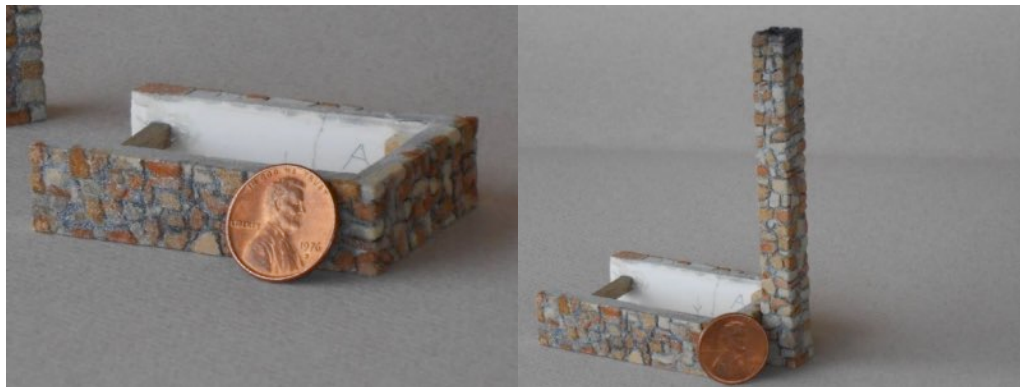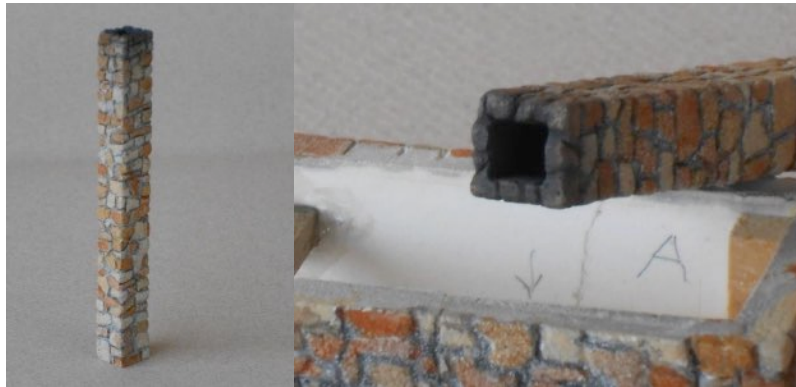
<u>Preliminary Evaluation: Plaster Castings Coloring</u>
1) The speckles are a bit too much for HO scale. It may be workable in O-scale. Correction is to try holding the castings at 1/2 arm's length and only 'quasi-seal' the castings with 2 applications. Goal is to reduce the orange-peel texture and obtain smaller orange-peel paint droplets during the painting session. Will attempt to diminish existing effect in later weathering steps.
2) Use gesso on interior of chimney. The existing insides of chimney are too flat/smooth.
3) The grout lines are colored correctly, so continue to use Silverwood solution to prime casting and medium A-I to color grout lines. (Hey... got something right!)
4) The overall colors are about right for the stones. (Reference Picture below; lower 1/3 of chimney was being used for coloring reference.)

--HUGE ERROR--
5) Add additional bracing to castings prior to starting coloring process.
5a) Re-consider using 5-minute epoxy for gluing plaster castings.

Diorama Note:
When this structure is in place, approximately 1/2 of the foundation casting will be covered by dirt. The soil will go at about a 20-25 degree angle down the side of the foundation, with the front door of the structure being somewhat even with the land. The full length of the foundation blank was carved and colored for practice and to allow more flexibility when installing on the diorama base.

I tried to lightly sand the colored castings per Randy's (Downtown Deco) tutorial, but on the first wall did not like the results, so I did not continue with the light sanding.

I normally will avoid weathering powders and use soft pastels in my modeling. This is because weathering powders are not as user friendly as pastels due to the adhesive in the weathering powders. I made an exception in this case and used Bragdon's Enterprises weathering powders to tone the castings down. I wanted to see how an aggressive application of a weathering powder would affect the 'speckling' on the castings.

Tools & Technique: Plaster Foundation and Chimney Coloring (continued)
Material:
A) Bragdon's Enterprises Dust Bowl Brown, #FF-66
B) Bragdon's Enterprises Ash, FF-68
C) Bragdon's Enterprises Soot Black, #FF-64
D) Delta Ceramcoat Charcoal #02436

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.

1) Interior of foundation painted with Charcoal acrylic and allowed to dry.
2) Primary powder used was the Dust Bowl Brown which was scrubbed on prior to the Ash being applied.
3) A bit of Ash was applied at random.
4) A very light application of the Dust Bowl Brown was then applied in a touch-up manner.
5) Touch-up the top exterior of the chimney with Soot.

The foundation received a light mist of Aqua-Net hairspray. When dried, this gave the casting a light satin finish and some of the 'speckling' had returned. The foundation was then re-dusted with the weathering powders to remove the speckling and reduce the minor gloss.

I have run into the sealing and gloss issues in the past with plaster and hairsprays; thus one of reasons for my not using soft pastels in this case.

The application of the weathering powders did make a large visual improvement to the castings. Overall, the colors became the expected hues to closely match the referenced photo colors. The 'speckling' of the castings was also greatly reduced. The end effect is better than I expected.
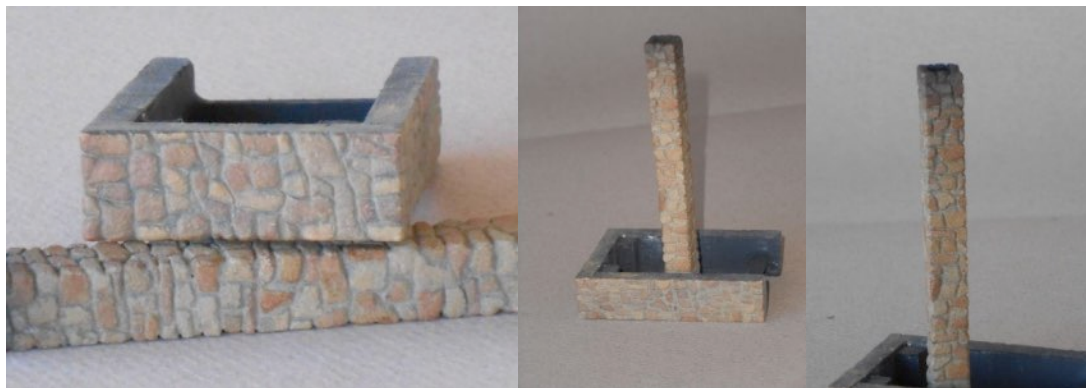
I think folks were afraid to say anything about the earlier colors in the castings, which is fine as this is a 'technique notebook' for myself and others who may want to use it. I had learned from prior plaster kits (Downtown Deco and Tom York) that the coloring would come into line with the soft pastels or weathering powders. The trick is to get the base colors of paint close to where you want to go, leaving them a bit light in hue and then using earth colored tones of pastels to bring the castings into line. I have never been able to accomplish this with paints alone.

What did surprise me was how well the 'speckling' was hidden/removed. I really did not expect the results achieved. I don't know exactly why this occurred. My first thought was that the aggressive brushing with the toothbrush removed some of the orange-peel paint, but when the speckles came back with the hairspray, I ruled out this possibility.

The second 'surprise' was the grout color. I have come close in the past, but I really like the color in this build. I normally have used a <u>light</u> A-I wash with other base colors in the past builds with plaster kits, but I think the Silverwood base color and the <u>medium</u> A-I solution worked together well. This discovery alone made this build worth it.

Finally, I was pleased to find that carving plaster is not all that hard. I have pretty limited experience in carving plaster, and it is mostly limited to rocks and stuff. I have been putting off the attempts at carving structure stuff for fear of it being too difficult. Wrong... Anyone can do it with just a bit of time and really simple tools. So I can now feel really comfortable in using those old Trains of Texas wall castings I have laying around. (I actually considered using one of the Trains of Texas castings for this build, but decided up front to do some carving to change my modeling experience.

To answer a couple of questions:
1) I had not thought of doing notes on scenery as I really 'wing-it' and follow just a few hard rules. I will consider it however.
2) I'm not really sure what I'm doing with the diorama. This is a 'test' area. If I get into a strong diorama scene, then the structures may not be as useful to others to use, and I'm still planning on donating these sandbox builds to local clubs. This structure is turning out well enough that I'm starting to consider having it judged for a merit award for the NMRA AP award in structures. I would then give it away or use it in some clinics prior to the donation.
3) I am planning on doing a couple more simple builds as I still have some things to work out technique wise prior to returning to my 'serious' modeling. So yes, I will build a couple more structures using Pat's plans and expand the 'notebook'.

Nothing special, but for future reference a few notes.

This section of the build reminded me of how much I have a personal hate/distaste of 5-minute epoxy. I really, really hate using the stuff and avoid it as much as possible. That said, it does have its place and the stuff does join parts really well.... But, I still hate it and my reinforcement of my aversion to this adhesive only continues to be bolstered with each use. It is my contempt of epoxy which had me using yellow carpenter's glue to join the foundation castings prior to coloring.

<u>General Construction Notes</u>:

1) Roof cut from card-stock cardboard.

2) Draw shingle placement guidelines.

3) Color roof stock bottom (inside) and edges with Prismacolor French Grey 50%, #PM-159.

4) Score center fold line for roof peak.

5) Add shingles. Rusty Stumps Simulated Cedar Shake, #D5002 was product used. Lightly weathered from prior project.

6) Trim excess shingle rows allowing for a 1/16th inch overhang on sides. Use a plastic drafting triangle held against roof stock and trim-off excess shingle material.

7) Cut notch for chimney into roof.

8) Color newly cut edges of chimney notch with Prismacolor PM-159.

9) Cut 2x4 shingle strip for long sides of roof, cutting even with roof base card-stock.

10) Cut 2x4 fascia boards for ends of building roof.

11) Color all cut board ends with Silverwood by dipping into small amount of solution left in lid after shaking bottle.

12) Add 2x4 shingle strip to roof stock long sides, gluing even with roof base edge under shingle overhang.

13) 5-minute epoxy roof onto structure making sure chimney notch flush with structure end wall.

14) 5-minute epoxy the structure to the foundation making sure not to place epoxy near the outside edge of the foundation.

15) 5-minute epoxy the chimney into position making sure casting is vertical. I had left a small section of one chimney side blank to provide a good gluing surface.

16) Add front end wall fascia boards, gluing flush against roof card-stock under shingle overhang.

General Construction Notes:

1) Wood Porch:

--A) Used strip wood to create wood planked porch. Wood was weathered using multiple washes of Silverwood and light/medium A-I solutions.

--B) Floor board ends were weathered prior to placement on porch foundation.

--C) Nail holes were added.

--D) Flooring surface was scored to show foot path to outside privy and other use.

2) Added porch roof:

--A) Roof cut from card-stock cardboard.

--B) Draw shingle placement guidelines.

--C) Color roof stock bottom (bottom) and edges with Prismacolor French Grey 50%, #PM-159.

--D) Add shingles. Rusty Stumps Simulated Cedar Shake, #D5002 was product used. Lightly weathered from prior project.

--E) Trim excess shingle rows allowing for a 1/16th inch overhang on sides. Use a plastic drafting triangle held against roof stock and trim-off excess shingle material.

--F) Underside framed with weathered 4x4's.

--G) Scale 2x4's were weathered and attached forming additional porch roof rafters.

Porch frame support:

--A) 1/4 inch square strip colored and cut to fit across open end of foundation to support strip wood porch. This was glued into place using Eileen's Fast Grip Tacky Glue.

--B) Wood porch attached to support base and structure using 5-minute epoxy.

3) Porch roof attached to structure:

--A) Weathered O-scale 2x2's were used as supports for roof.

--B) A weathered 2x6 was added at seam between porch roof and structure.

Simulated tar sealing:

--A) Gallery Glass Liquid Leading was applied around chimney roof notch roof-structure seam to simulate a tar sealing.

--B) While still damp, lightly dusted with a medium grey pastel powder.

4) Touch-ups:

--A) A final touch-up of acrylic smoke paint followed by a light dusting with black powdered pastel dusting.

--B) Plaster stones raw edges from handling were addressed using an acrylic brown paint wash.

--C) Both roofs were lightly weathered using various soft pastel powders set with Silverwood and Weather-it. Weather-it was used closer to chimney and feathered into the Silverwood used towards the opposite end of the roof. A small fan brush was used to apply the weathering solutions.

--D) Figure glued in place on porch.

--F) Structure dry-brushed with a light grey craft acrylic.

--G) Finely sifted dirt dusted on roofs to complete weathering.

<u>Final Evaluation</u>:

Build Goals:

1) Base Weathering:

Attempt to recreate in HO scale the raw, old wood colors as seen in Chuck Doan's Fordson Tractor diorama did not work.

--A) Advantage in using several applications of Silverwood with light sanding every two-three applications provides great silver toned wood.

--B) Possibly need to use pastel pencils to draw on various wood tones during weathering wash applications.

2) Peeling Paint using a resist and acrylic paint failed:

--A) Achieved a good 'worn' paint effect for the scale using described technique.

--B) Need to try stronger tack type of tape coupled to possible longer paint drying time.

--C) Possibly two layers of paint prior to tape application.

3) Stone Carving and Coloring:

-- Use Hydrocal or Plaster of Paris (POP) to create a stone chimney/foundation and color the casting to fit into Colorado rocky mountain hues as found in the Clear Creek area.

--A) Did not find it necessary to tape around or otherwise support carved exterior prior to creating chimney opening.

--B) Apply gesso to inside of chimney opening to remove smooth surface prior to coloring.

--C) Need to reduce distance between rattle-can used as primer and casting to create a smaller orange-peel texture on castings.

**D) Continue to color-prime stone castings with Silverwood. Use medium A-I to color mortar lines.

**E) Continue with established POP coloring using acrylics followed with weathering powders or soft pastels.

--F) Discontinue use of hairspray fixative. Possibly use artist's pastel fixative.

Overall, the structure turned out a bit better than I expected. I did find it difficult to not add fine details to the structure, and that I was forcing myself to 'let the detail' go as not needed at this build level.

In the past, I have only done plaster kits which I glued together using yellow glue. I need to re-visit 5-minute epoxy to construct structure due to the volume of moisture used in carving stones to remove seam lines.

REEVALUATE 5-minute epoxy use

I have a few additional ideas to try out on my next sandbox build which will be carried over to that build.

Final Pictures of the **Small Miners Shack** and prototype miners' cabin.