"DETAILS MAKE THE SCENE"

By Jack Ellis



Some people build their structures the way the manufacture suggests. They want to make them the same color and style just like the manufacture's pictures. There is nothing wrong with doing it that way. If you build that way, you can still add details to add to the story of the structure. But if you want to make your structure a little different than all the rest, details will help you do that. When I say detail I'm not only just talking about those white metal or resin casting. I'm talking about new roof angles, chimneys, sheds, textures, colors and weathering. By adding these details you can make a $20.00 kit look like $50.00 kit. Detailing is a way to draw the eye into the scene. Don't be afraid to make the structure look different.

As I start to build a structure, I think what the structure will be used for. Is it a boarding house, a drug store, a factory, or a railroad building? When you by a kit, it doesn't have to be what the manufacturer meant it to be.

One of the major criteria in creating a story about the structure is the era you are modeling. When you add different details they must be proper for your era. If you are only running steam era loco and put diesel junk parts by the roundhouse, that will not work. A little research into the building material and building style of the era will help make your structure fit your era.

The next criteria is the part of the country you are modeling. We all love those water tanks on top of buildings. The problem is they are not on the outside of building in the northern colder climates. Make the details fit the part of the country you are modeling.



File photo farmhouse

With those two major criteria set you can have fun and make a story about the structure you are building. many modelers name their structures after people they know or would like to honor. Make your own signs. Think of the people who would have worked or lived in these structures and what detail they would have had on or around the structures. A big help with building any structure is taking file photo of differencing prototype structures for reference when building. The

file photo could be types of buildings, the detail on or around the buildings the way they are painted, and the way they weather. If you don't live in the part of the country you are modeling. get in contact with modeler who does and ask if he has any photos or could he take some. Another good source of older photos is a web site ***www.shorpy.com.*** Or I will **Google** pictures of the type of building I'm looking for. There are different era pictures to choose from. Make a file on your computer and save all the pictures you like and use them for references. While you are looking on the web you can look for pictures of structures you would like to build. A sort of a wish list of structures. You could even try scratch building models. If you have been building craftsman kit you probably have all the skill and tools you need to scratch build structures.


File photo brick detail



File photo Spot Lunch



File photo garage

In the file photo Garage, look all the details in the picture. The signs, pumps, barrels even the car. They all complete the scene.

Color

The structure color can make a difference in the appearance of the structure. If you are going to place the structure on a layout the color may make a difference. If you have block of structures all about the same color, the eye will see them as one structure. But change the colors of each structure and the eye will see the individual structures. Remember, detail is what makes the eye to stop and look. If you want to make a structure look taller paint a contrasting color band around the bottom 1/3 of the structure.

Color Harmony

In visual experiences, harmony is something that is pleasing to the eye. It engages the viewer and it creates an inner sense of order, a balance in the visual experience. When something is not harmonious, it's either boring or chaotic. At one extreme is a visual experience that is so bland that the viewer is not engaged. The human brain will reject under-stimulating information. At the other extreme is a visual experience that is so overdone, so chaotic that the viewer can't stand to look at it. The human brain rejects what it cannot organize, what it cannot understand? The visual task requires that we present a logical structure. Color harmony delivers visual interest and a sense of order.



What colors go with what colors? The best examples are right outside your window. Look around at the houses and factories in your town and pick the ones you like. There are exceptions to this rule. Different parts of the country sometimes use colors unique to their region. New England likes to paint their buildings white because white wash was cheap. I like to make color charts with the colors I will be using on buildings. They are color swatches on pieces of white cardboard with the manufacturer's name and number and the name of the color. Each piece of cardboard will have about ten color swatches: all greens. One with reds, one blacks, one with white, and so on. This way, I can lay one color swatch over an other and see how they go together. Just remember not to pick shiny and bright colors. Shiny color tends to give the model a toy like appearance. You have picked your colors for the body and the trim of the building. Remember if the colors are too close in hue the structure will not catch. Or if the contrast between the colors too much the eye will skip over the structure. I like to paint all the windows and doors first and prime all my casting and allow them to dry at least overnight. You have picked your colors for the body and the trim of the building. When picking colors for your structures remember if you are going to weather it with I&A. The I&A will darken the paint color. So paint a scrap pice of siding and wash it with I&A to see what color you end with.



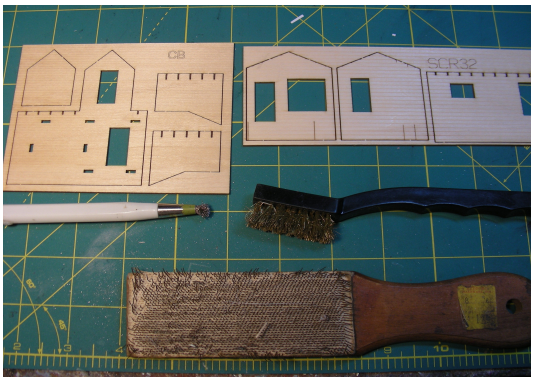
I like to paint all the windows and doors first. Prime all my castings and allow them to dry at least overnight. If the kit comes with laser cut windows, it's easier to paint them right on the sheet. You can spray or you can brush them by hand. Spraying is much faster. After they are dry, cut them from the sheet and assemble each window. If the window needs a little paint touchup, now is the time. If you are using plastic windows, cut them from the spur. Cut a piece of blue painters tape, roll the tape in a circle sticky side out, and stick the tape to a piece of cardboard. Press the windows on the tape. This will hold them in place when spray painting the windows. Remember to spray light

coats instead of one heavy coat. We don't want to cover the details on the window. After the paint has dried, dry brush the window with white or gray for a peeling paint look. A little ink & alcohol wash will dirty up the color

Tip: If you are building more than one building at a time, label the pieces of cardboard with the structures name.

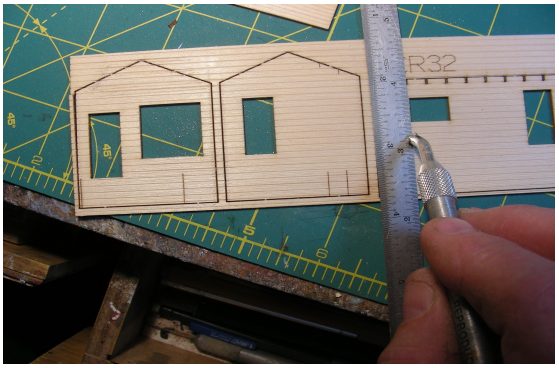
Distressing the walls

The next step will be the wall of the building. There are different ways to do this step. If you are going add grain and nail holes in your siding, it's easier to do it now before you remove the walls from their sheets. To grain the walls, you will need a wire brush (#22) to scratch the gain into the wood. For heavy grain I like to use a file card. File card is a stiff brush used to clean files. Drag the brush along the boards of the wall end to end.

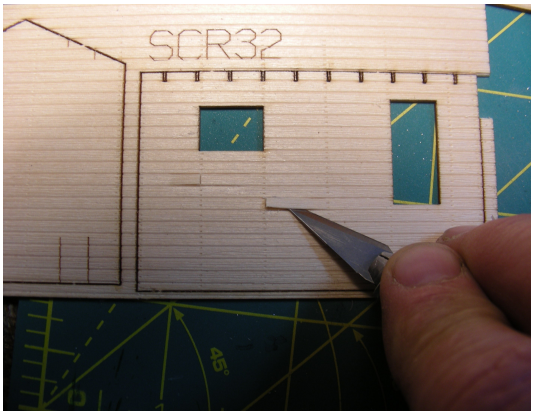


Tip: The tool I like to use to is a file card. This tool is used to clean metal files

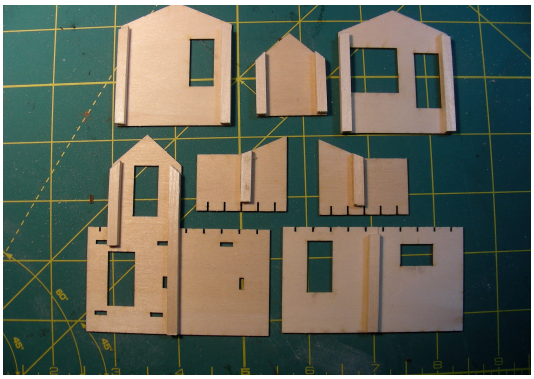
Now is the time to add nail holes. You will need a pounce wheel (#21) and a metal scale ruler (#6). A small square (#9) is a great help to keep the rows of nail holes straight. Start near the end of the wall. Run a line of nail holes from the bottom to the top. Then run other lines bottom to top two scale feet apart to the other end of the wall. Cut some board joints at the nail hole lines with a X-acto knife (#4) with a #11 blade.

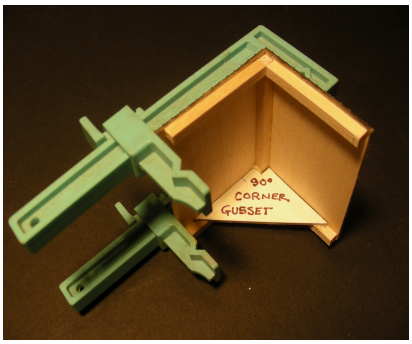


You can add a little distress to your wall by lifting boards on your walls. After you have cut some board joints, use a new #11 blade in your X-acto knife, place it up against the bottom edge of the boards at a acute angle, and slice along the bottom edge and gently lift up. This will make the board end look like it has come loose. You may want to keep in mind where you are going to place signs on the walls and not lift the board where the signs will be applied.



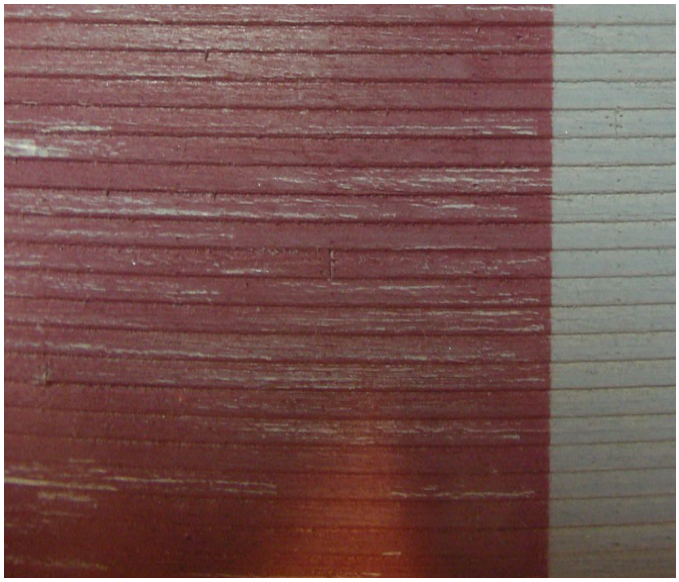
Now is the time to cut the walls from the sheets. Some modelers like to paint the walls before putting the bracing on the back of the walls. I like to use water base paints and lots of ink and alcohol so I need to brace the walls before I paint them to keep them from warping. Follow the directions for the location of the bracing. Yellow glue the bracing and clamps till the glue dries. I like to add bracing around the bottom of the walls. This will allow me to add gussets in the corners to straighten and keep the corner square.





Painting and staining the walls

We will go over two ways to paint walls. One way is to prime the wall first with a gray spray paint. This seals the wood and keeps the wood from warping. Next paint the wall color over the primer. You can spray or brush the paint on. After the paint dries, take a wire brush or fine sandpaper and lightly scratch some of the wall paint off revealing the primer below for that peeling paint look. The more topcoat of paint you scrape off, the more weathered it looks. You then give it a light wash of I&A for hightlights.



Tip: I happen to like the Wal Mart brand of spray paint for two reasons. One the cost about $1.00 a can and two the cheaper paint seems to have less pigments in them and seem not to hide the details and dry much quicker.

The second way is to do a heavy dry brushing of the wall color. Cover most of the bare wood but with a heavy dry brushing, leaving little spaces of wood without paint. Dry brushing is a technique where you dip a stiff square tipped brush into the paint and wipe most of the paint off on a paper towel. Let it dry about ten minutes then cover with Ink and Alcohol. This will stain the bit of bare wood and dissolve some of the thin paint. This will darken the wall paint color and stain the bare wood a gray color and color the nail holes. The corner boards and strip wood can be grained and colored in the same way. To add a little more weathering add a little more I&A were the board end meet and where the siding meets the corner boards.



Tip: If the walls warp when painting or staining. To flatten the wall out paint or stain the other side with the same amount of paint or stain

To add an older peeling paint look when adding the I&A take a knife and scrap off some of the paint along the boards on the wall. Then go back over the scrapings with I&A to stain the raw wood. This will give you a well worn painted affect.

Staining Wood

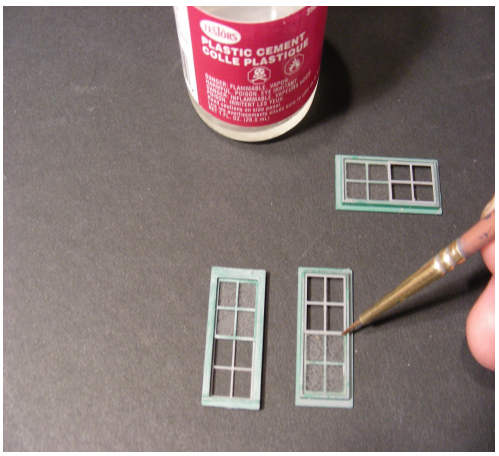


After you have added nail holes and grained your wood wall I like to use the ink and alcohol wash to stain the wood. Start light and add coats till you get it as dark as you want. Add more to the ends of boards and where the wall meets the ground. The wash brings out the details you have added to the walls. Don't forget nail holes go horizontal in vertical siding. You need to stain all the wood you are going to use on the structure at one time.

Sometimes it's hard trying to make plastic window casting look like wood. I first paint the window casting with a **Rust-Oleum Camouflage Sand** color in a rattle can spray paint and let I dry overnight. I then apply a wash of I & A over the whole window and let it dry. Sometime it doesn't cover the paint too well, but a second will do the trick. A light dry brush of white paint will complete the look.



Now it's time to add window glazing (window glass). I like to use **Evergreen clear sheet styrene sheet .005"** thick as my window glass. It cuts with a X-acto knife and glue with liquid plastic cement. I like to use **Testors Liquid Cement** because it doesn't craze the clear styrene. If you want the windows to look dirty spray a little **Testors Dull Cote** on the back of the sheet of clear styrene, not too much, just a light haze. Cut a strip off the sheet as wide as the windowpanes of the windows. If you are doing a double hung window, cut separate panes for the top and bottom. If you are doing a lot of the same window, cut your strips of the clear styrene. I cut the



height of the window sashes on my **North West Short Line Copper**. I chop enough window sashes to complete all the windows. Scrape off any paint that has gotten the back of the window Mullins. With a pair of tweezers, place a window glass into the upper sash. Dip a 00 paintbrush into the liquid plastic cement, pick up a small amount of cement and touch it to the corner of the window glass. Through capillary action, the glue will creep under the styrene and glue the styrene to the mullion of the windows. If you didn't use too much glue, you will not see the glue. Some kits come with the window glazing all ready cut for you. That's fine to use too. But some glazing material is cut with a laser. The laser sometimes hazes the glazing material. Sometimes a little **Testors Dull Cote** will hide haze.
When to install the windows. Before you assemble the four walls or after you finish the roof. Both way have their advantages. I like to install them after I finish the roof. I don't like to handle the model too much with the windows in place.

Changing the wall

Don't be afraid to change the way a manufacturer suggests building the structure. An easy way to change the look is to change the type of siding on the structure. Changing siding to vertical siding from horizontal siding or adding brick or stucco will change the look.

Brick:

Brick buildings were built to help stop the fires that were plaguing the inner cities
Raw bricks come in many colors. The brick color comes from the color of the clay used to make the brick. Different parts of the country have different colors of brick due to color of the clay used in the brick. A single building may have two different color bricks. They would use higher priced bricks on the front and cheaper bricks on the rear walls. There are many different materials to represent bricks. There are styrene kits, plaster, resin, sheet plastic and printed-paper. If the Craftsman kit comes with one of these, you will have to paint and weather them (not the printed paper).

Painting Brick:

Bricks come in many colors from orange to reds to tans and the brick can be painted. You need to choose the basic color you think will represent the building you are building. If you are using Ink& Alcohol to weather the brick, pick a lighter color for the brick. The I&A will darken the overall color. Some kits come with brick walls with the window and doors cast in. I like to paint the wall my brick color and then go back and paint the doors and windows. I then go back and touch-up the brick color around the doors and windows. With the wall painted with the basic color, I will go back and paint individual brick with darker reds, tans and browns at random.



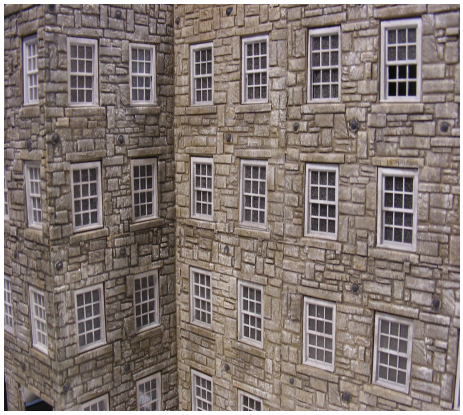
Mortar:

Mortar can be represented with many materials. There are a couple of mortar pastes on the market. A method I like to use **DAP Lightweight Spackling**. Take a little bit on your finger and rub it into the mortar line. Wipe off the top of the brick and any heavy deposit to get an even fill on the grout lines. After the Spackle dries you may color the mortar with washes or I&A. Next apply I&A under the windows in the corners and drips under the eaves. If you are applying mortar over a tan or yellow brick, use a wash of I&A. Don't forget you can use brick printed-paper on buildings not close to the viewer. Seal your paper with a matt spray when using weathering.



TIP: *All buildings are built on a foundation; so if the kit didn't come with one, build one with Brick, stone or Concrete. The one below is printed brick paper. Not to bad.*





Stone Walls:

There were two reasons they made the wall from stone. One was that stone was fireproof and the other was it was local material. There are some limitations with stone you can only build so high and most walls needed some kind of reinforcement. There are many different materials to represent Stone. There are styrene kits, plaster, resin, sheet plastic and printed-paper. If the Craftsman kit comes with one of these materials, you will have to paint and weather them. Brick paper is a printed material so you can't use a liquid weathering solution. Use Weathering Powers or chalks on Brick or stone printed-paper. I am going to break then into two categories. One is Styrene and Resin the other is Plaster. Some of the steps are the same. Each starts out a little different.

Plaster Stone Walls:

To seal or not to seal that is the question. I do not like to seal the plaster. The colors are more subdued tones. I like to use water base washes made with acrylic paints. I make up four washes with **Apple Barrel** Craft Paints **Dolphin Gray** (20781), **Territorial Beige** (20558), **Goose Feather (**20777) and **Black** (20504). These are semi-transparent washes more water than paint. You want to build up layer a little at a time. With water base washes I like to spray the casting with wet water, a couple drops of dishwashing liquid in water. I start with the lightest wash and stained about a third of the stones at random around each wall section. Then I started adding the other two colors now and then allowing the colors to run into each other, creating other shades. Mortar lines are added with a wash of black paint. I use a small pointed brush dipped into the black wash, touch the point to the mortar joint, and the wash will be pulled into the joint. Repeat until the entire wall mortar joints are covered. Repeat if the mortar joint are not dark enough. Add a little gray wash in the mortar joint for variety. I like my mortar joints dark so the each stones stick out. Add some run-off streaks and rust stains.



Styrene and Resins:

I like to use water base washes made with acrylic paints but water based washes don't stick well to plastic and resins. So I primed the castings with white paint. By priming the casting white, this makes the staining process repeatable and the paint will give the washes something to stick to. I make up four washes with **Apple Barrel** Craft Paints

Dolphin Gray (20781), **Territorial Beige** (20558), **Goose Feather** (20777) and **Black** (20504). These are semi-transparent washes more water than paint. You want to build up layer a little at a time. With water base washes I like to spray the casting with wet water, a couple drops of dishwashing liquid in water. I start with the lightest wash and stained about a third of the stones at random around each wall section. Than I started adding the other two colors now and then allowing the colors to run into each other, creating other shades. Mortar lines are added with a wash of black paint. I use a small pointed brush dipped into the black wash, touch the point to the mortar joint, and the wash will pulled into the joint. Repeat until the entire wall mortar joints are covered. Repeat if the mortar joint are not dark enough. Add a little **Gray** (20781) wash in the mortar joint for variety. I like my mortar joints dark so the each stones stick out. Add some run-off streaks and rust stains. Stone retaining walls can be painted and weathered the same way

Tip: Don't forget the mold and mildew at the base of the wall where it meets the ground



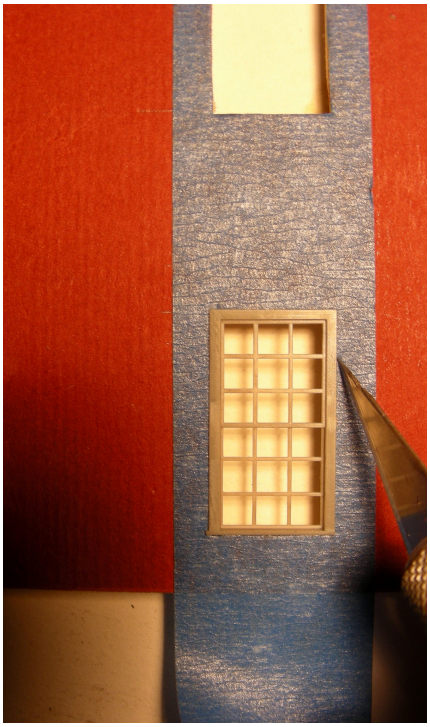
Stucco:

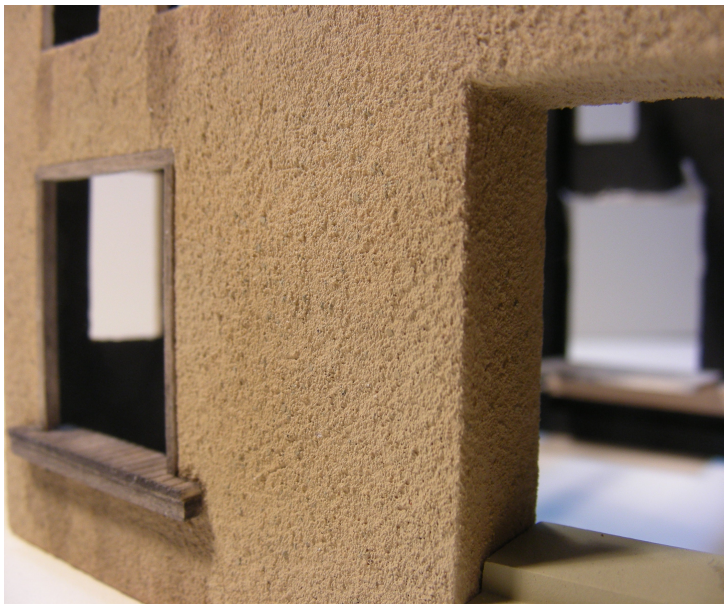
A low maintenance exterior wall covering made with Portland cement and sand and color pigment. Stucco was toweled on over brick, block and wood walls**.**

There are several ways to represent stucco walls. I have used **Rock Hard Water Putty** mixed with water and white glue. Brush on the water putty with ¼" paint brush in small swirling motions. I read on one of the forums about a product called **Ceramic Stucco** by **Liquitex** a paste with a very fine sand mixed in and stippled on with a ¼"
Stencil brush. I found **Ceramic Stucco** at most art supply stores. There are a couple of things I like to do before I apply the Stucco. I like to put the walls together before I apply the stucco. I apply **Squadron Putty** on the corner and sand it smooth to hide the corner seams. With the **Liquitex** you need to prime the **Squadron Putty**. You can now apply the stucco and then scrape it off around the windows and vents. I did find an easier way to recess the windows and doors. Apply blue painter's tape over the window opening and cut out the opening. Place the window in the opening and cut the tape with a hobby knife with a new blade around the outside of the window. Peel the tape outside the window frame leaving



a strip of tape around the window opening. After applying the Stucco paste, remove the tape. This will leave a recess for the window or door. To add some trim built in to the stucco, cut some strips of thin card stock and glue it to the building walls. Then stipple the stucco paste over the entire wall (photo at the top shows the trim on the bottom with out stucco and on the trim on the top stuccoed over). I like to spray paint the stuccoed walls. Color for the wall mostly depends on the part of the country you are modeling. Small drips of I&A under the windows and doors will complete the look.





Woodshakes:

Wood shakes are applied the same as three tab and slate shingles. The alignment is different with wood shakes. They are random width. When you align the rows, try not to align shingles with the adjacent rows. Wood shingles were also used on the walls of the buildings. Treat the walls the same as the roof starting shingle strips at the bottom and working your way up. Don't forget to draw the guideline on the walls. When finished, trim the sides of the walls with a X-acto knife with a sharp blade. Sand the end of the wall with 220 grit sandpaper to make the shingles flush. This will make the corner boards easier to apply. For a well worn look start by scribing lines on the sub wall and painting it with a light tan and when dry, hit it with some

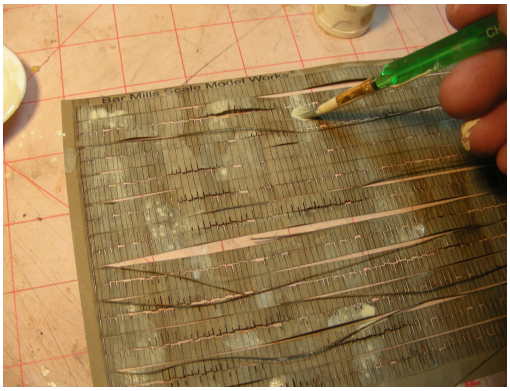


ink and alcohol so it looks like old boards. Add some torn tarpaper. Next cut some individual singles from a strip and glue them on one at a time in a random pattern to look like they are falling off. About 1/3 of the way up the wall, start installing whole rows of shingles to the top of the wall. Trim the shingles with a knife and sand the edge flush. Glue on the corner boards.



Coloring Shingles:

Shingles that come Bark Brown or white may be weathered to a gray weathered look. For the gray weathered look we used washes. We used water based **Apple Barrel Craft Paint** mix with water to make a transparent wash. Lay the sheets of shingles on a paper towel on a flat surface. We bought a pallet tray and three colors of **Apple Barrel Craft Paint, Dolphin Gray, Pewter Gray** and **Goose Feather** and ¼"round brush. Fill three cups on the pallet tray with water. Put three full brush loads of paint from one color into one cup and mix with the water. Repeat with the other two colors. Now you have three different color washes. Dip the brush into the lightest wash and paint random stripes up and down the whole sheet of shingles. Leave some of the brown color of the shingles. If the washes are too light you may add paint to the washes to darken them up but not too dark to cover the lines printed on the shingles. Next paint random stripes with the other two colors. You may add strips of paint straight from the bottle but don't over do it. Don't worry about the stripes.



The shingles strips will not line up when applied to the roof and walls. The sheets of shingles will bend and twist when wet but when glued down, will lay flat. Cut the wall strips from the sheets and mix the strips together. Apply the strips of shingles to the wall on the lines provided. If lines are not provided draw them on the wall yourself. We used yellow glue to apply the shingles. Squeeze a line of glue on a piece of paper and dip just the top edge of the strip of shingles into the glue and apply to the roof or wall. When the glue has dried turn the wall section over and cut out the door and window openings and along the edges with a sharp knife. With a piece of 220 grit sandpaper on a flat surface, sand the sides of the wall lightly



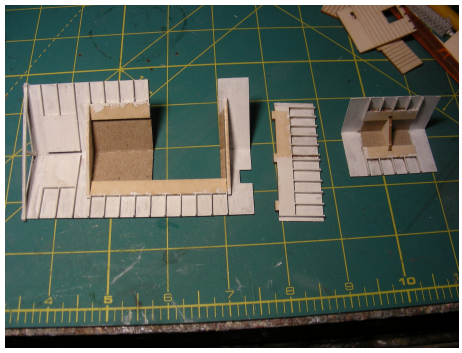
so they will fit tight against the corner posts. With the wall completely shingled, dry brush the wall with white paint. A flat brush works best. Dip the brush into the paint and wipe most of the paint off on a paper towel. Then lightly brush the wall from bottom to top. You should apply a very little paint to the edge of the shingles but don't over do it. The dry brushing will lighten the overall appearance of the building.

Tip: If you are shingling the whole building and the roof, stain the roof shingles a light brown so the roof will have some contrast with the walls.

You can also add side building, sheds, and towers and out building with difference siding material than the main structure to change the look of the structure.

Roof Materials

The kits come supplied with a roof material. You can change the roof material to change the look of the structure.
The roof is a very important part of the building. People who see model railroad view it from above, so the first thing you see is the roof. There are a lot of details you can put on the roof. The kits come supplied with a roof material. You can change the roof material to change the look of the structure There are a lot of roof coverings. Slate, Asphalt, Metal, Shakes and Tarpaper just to name a few. Most of the coverings come in many different colors. I am going to group together the Slate, Asphalt three tab shingles and shakes. All three are installed in a very similar manor. We will also go over Metal, gravel and tarpaper.



The sub roofs are made of cardboard or wood. . If the sub roof doesn't come with alignment lines for the shingles, you need to add them. The first alignment line is the height of the shingle strip. The rest of the lines are the height of the exposed shingle. Draw the line over and paint the edges the color of the trim or body of the building about ¼ inch in all the way around the sub roof with a pencil. After the lines are on the sub roof, turn the roof over and paint the edges and eaves the color of the trim or body of the building. It's a lot easier to paint the eaves with the roof off the structure.

Appling shingles:



Asphalt three tab shingles, Slate shingles and wood shakes are all installed basically the same way. If the roof is a simple roof with no valleys, you can lay the sub roof flat and shingle it that way. Start with a starter strip the same color as the shingles under the first strip of shingles. The starter strip is half the width of one course of shingles. The starter strip will allow the second row of shingles to lay flat.

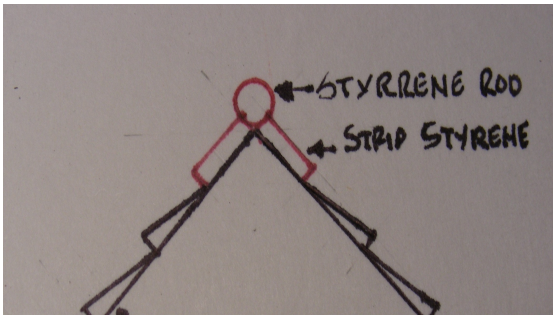
With three tab shingles and slate shingles you need to stagger the joint. Offset the next row by a half tab and align the rest of the rows the same way all the way to the top. Allow the rows of shingles to extend over the ends of the sub roof. Cut them off with a X-acto knife with a new #11 blade. After you install the shingles streak some black and white lines from top to bottom with weathering powers.





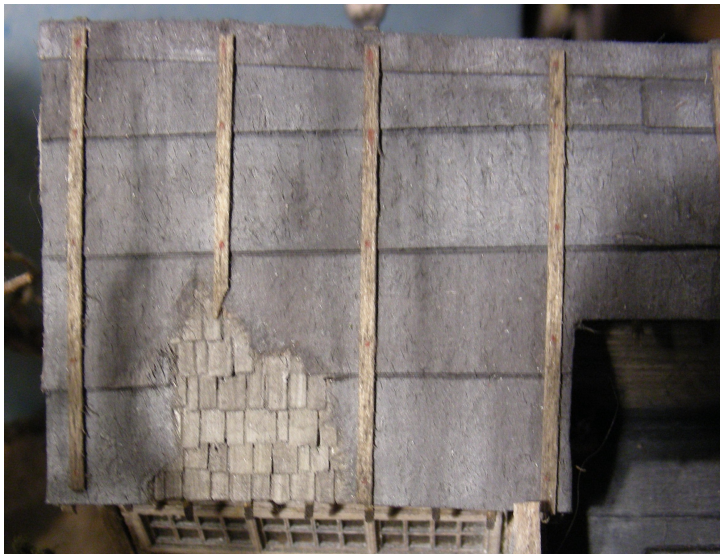
If the roof has a valley in it I like to assemble the roof and then apply the shingles. You can cut each row of shingles to the angles of he roof valley. Work from the valley to the edge of the roof. It is a little harder to do it this way but you get a tighter seam in your valley. Don't forget to stagger the shingles. Valleys can be done with copper flashing. Cut your shingles back about 1/16" from the center of the valley on both sides. Add your flashing. I like to use copper tape or Alum duck tape.

To cap a slate roof you can cut a scale foot piece of flashing material and bend it over the cap. Paint with Ceramcoat Green Sea Dry brush white and wash with Ink & Alcohol. For a fancier cap glue a 3/64 Styrene rod to the top of the roof peak. Then add a.015-.060 Strip styrene on either side on the peak of the roof. Paint with Ceramcoat Green Sea Dry brush white and wash with Ink & Alcohol.



Tip: When slate shingling a roof and you are in a rush to get it done, ***Northeastern Scale Lumber*** *makes sheet of slate shingles all lay up in a sheet. Just cut to the size of he roof and glue down.*

Tarpaper:



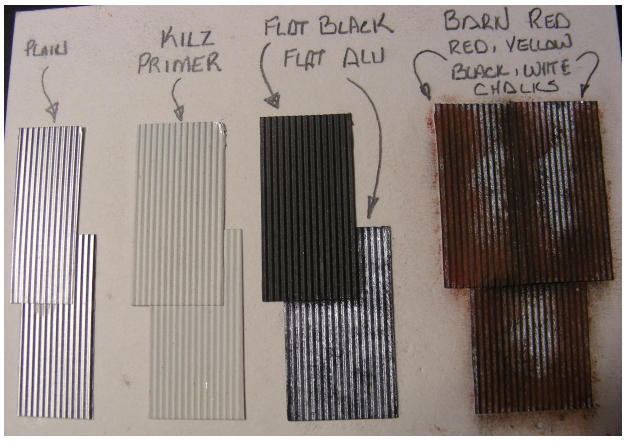
Tarpaper is an under laiment for shingles. What you see on roofs is roll roofing 3ft wide and 40ft long made from the same material as asphalt shingles. Tarpaper was used when hot tarring a flat roof. Rolled roofing comes in red, black, green and tan. The kit will come with it's own Tarpaper and you may use it. I like to make my own with **Charcoal Sketchpad Paper**. You can by it at any art store and one pad will last lifetime. Cut a piece from the pad big enough to cover the roof of the building. Lightly sand the paper with 220 sandpaper in one direction. This will rough up the surface of the paper and give the paper some texture. Paint the paper with brush from top to bottom. The brush will give an uneven color to the paper. Let the paper dry over night then cut the sheet into scale 3ft strips with a X-acto knife and a straight edge. Draw guide lines about 2 and ¾ scale ft apart across the roof for each row of tarpaper. Start at the bottom of the roof and glue down the first strip with white glue. 3M Transfer tape may also be used to hold down tarpaper. Cut the tape in strips long enough to cover the sub roof from side to side. Place the stripes across the roof one at a time in row from top to bottom and trim the side flush with roof sides. Peel back the backing from just the bottom stripe of tape. You will be able to see the guidelines through the tape. Hang the tarpaper over the bottom edge of the roof abut 1/32". Use the lines as guides to place each rows to the top of the roof. After you have covered the bottom row of tape with tarpaper, peel off the next row of tape and cover it with tarpaper. Working your way to the top of the roof each row of tape at a time. For the cap on the roof cut a strip about 2-scale ft wide long enough to go across the top of the roof. Mark the strip and fold it down the middle and glue over the peak of he roof. To highlight the edges of the tarpaper strips, use a marker the same color as the shingles and run the marker along the bottom of the strip. If the building is old, add some patches or tears in the tarpaper. If you want you can add battens over the tarpaper to hold it down in the wind. Lightly sprinkle weathering powders over the roof and brush from top to bottom. Use Black, gray and white weathering powders. This will leave streaks from top to bottom

Standing Seam Roofing

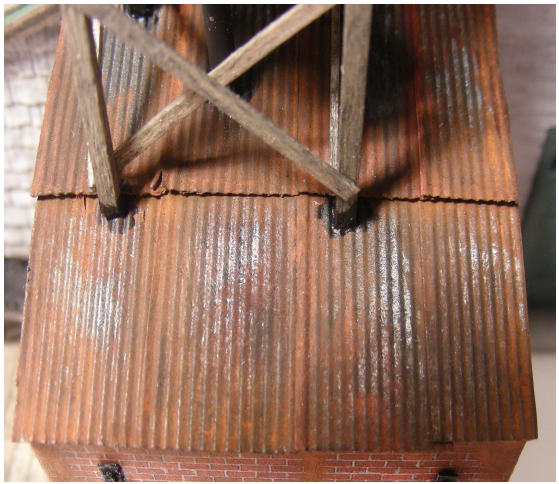


Standing Seam Roofing is a flat metal sheet with ribs about every 2ft. If you want to replace the roof that comes with the kit Evergreen Styrene makes a standing seam roofing material. It comes in 6x12" sheets with strip styrene for the ribs. It can be cut to fit your way is to glue scale 2x4s as ribs from the bottom to the peak of the roof about 4-scale ft apart on the roof that comes with the kit. They make a thin aluminum metal duck tape. Don't get the aluminum Mylar model. Another duck tape. Cut the tape into strips about 4-½-scale ft. Lay the tape strip over the roof with the ribs align the tape edge with the edge of the roof. With a wooden craft stick burnish the tape down slowly around the ribs keep the tap wrinkle free. The metal tape will stretch a little around the rib. Trim the bottom and edges with a sharp knife. For the ridge cap, cut a piece of tape 3-scale ft wide and long enough to go across the roof. Fold in half, peel off the backing and carefully apply to the peak of the roof and trim. We will paint and weather the standing seam and corrugated the same and will discuss this later.

Corrugated Roofing:



There are many companies that make metal corrugated roofing material. Any of them will do. Most corrugated roofing material comes in strips 8-scale ft. high. Take **3m Transfer Tape** and apply to the back of the corrugated roofing. Trim the edges with a knife. Cut the strip into piece 3-scale ft. wide. Cut enough pieces to cover the roof. Scissors are the best tool to cut the pieces. Cut a piece of masking tape roll the tape in a circle sticky side out and stick the tape to a piece of cardboard and press the pieces of roofing on the tape. This will hold them in place when spray painting. Remember to spray light coats instead of one heavy coat. We don't want to fill in the corrugations. Buy a Spray can of white **Kilz Primer- Sealer Stainblocker.** This primer will stick to the aluminum and won't rub off. Coat the prices of roofing with two light coats of the **Kilz Primer**. When they are dry spray two light coats of flat black. Let the pieces dry overnight. Next dry brush the roofing strips with **Polly Scale Flat Aluminum** with a flat brush. Put on enough paint to turn the roofing silver but not completely covering up all the black. Stipple on **Apple Barrel**



Barn Red acrylic paint along the edges and the bottom of the roofing. Stippling is like dry brushing. Stippling is technique where you dip a stiff square tipped brush into the paint and wipe most of the paint off on a paper towel. Stab the brush on the object with light stroke. Great for putting blotchy paint on the object. Let the paint dry for about a minute. Then apply weathering powder. I like to use the red color. Dip a 2/0 brush into ink and alcohol then into the red weather powder. Then go over the red paint you have already put on. Apply a little more Ink and alcohol and rub the weathering powders in. Last add a little dry orange powder, next black and last a little white powder. Peel the backing off the transfer tap and press the individual sheets of roofing to the sub roof. Lay the pieces along the bottom edge of the roof side by side overlapping about 3 corrugations till you complete the row. You may have to trim the end piece to fit the roof. Lay up the next row as you did the first row, overlapping the row below about 1/8 of an inch. Repeat laying up rows till you complete the roof. If you have trimmed the roofing on the edges you will need to touch-up the edges, with paint and weathering powders.

Tip: New product corrugated paper roofing material may be painted and weathered the same way as metal but you don't have to prime it white first .Cut and tear the edges to simulate eaten away roofing

Rusted and eaten away corrugated roofing:

This can be achieved if you have a source of P C Board Etch ant from Radio Shack that is no longer sold. This is great look but takes some time and practice.

WARNING: The etch ant is acid and needs to be treated with care. Use only in well ventilated areas. Wear gloves and safety glasses. If you have a spray booth, do the etching in the booth with the blower on. If spilled, the etch ant will stain.



Cut the strip into piece 3-scale ft. wide. Cut enough pieces to cover the roof. Scissors are the best tool to cut the pieces. You will need two glass containers, one to hold the etch ant and one for the water. Use a pair of tweezers to dip one end of a piece of roofing into the etch ant and watch for the bubbles and smoke. As soon as you see the smoke take the pieces out of the etch ant and swish it in the water. Don't be slow or the pieces will be eaten away. If you like the affect, leave it in the water and do another piece. If it needs more, repeat the etch ant step till you get the affect you like. When done, rinse the pieces with fresh water. When dry, color the roofing material with weather powders reds and light browns. Make a couple of extra pieces of rotted roofing for detail ground clutter.

Tip: Try using alcohol as a carrier for your weathering powders. Dip a 2/0 brush into ink and alcohol then into the weathering powders and paint small drip on your building.

Signs

Signs tell the purpose and the era of the building



Signs add a lot to our models. Signs help to tell the story of the structure. They will date the structure, tell the purpose of the structure, can give directions add color. There are different types of signs, Billboards, signs that stand-alone, paper poster signs, and signs painted on the sides of buildings. Signs will help define the era you are modeling. Pick appropriate signs for your era. If you are modeling the forties, don't use signs for autos from the sixties. A lot of the early signs were made out of paper and put up like wallpaper so all your signs don't have to be in perfect shape. The signs peeled and faded and had new signs stuck over old ones.

Tip: Signs: Take the originals from the kit and copy them on a color copier and put the originals in a binder for later use. If you use an ink jet copier, you will need to seal the signs with a clear acrylic spray.

The next technique I learned from Mark Doyon. Start by copying the sign on a plain piece of copier paper. Take a piece of tissue paper (the kind used to wrap shirts and gifts) and cut apiece big enough to cover the copied sign. Tape the edges of the tissue paper down to the copier paper. Now run the paper back thru the copier so it prints on the tissue paper over the copied sign. When the tissue sign dries the sign needs to be sealed so the ink won't run. A clear acrylic spray will seal the sign. Spray two light coats on both sides of the signs. Use an X-acto knife with a new #11 blade to cut the sign as close as possible from its surrounding paper and apply diluted white glue to it's entire back. Cover the sign with a piece of wax paper and press and burnish onto the wall.

Sign printed on plain copier paper



Sign printed on tissue paper



After the signs have dried, you may want to weather the sign. A light wash of light Ink and Alcohol brushed on from the top to the bottom will age the sign. A little white weathering powder brushed over the sign will fade the colors on the sign but don't over do it. Dry brushing over the sign lightly from top to bottom with the building color will help make the sign appear painted on.

There are all kinds of signs on the Internet for free. When you are downloading, make sure the signs do not have faded trademark in the middle of the sign. Again just Google pictures of the type sign you are looking for download, then and make them the size you want

Detail parts

Most kits come with some detail parts. Metal and resin castings relating to the kit. Chimneys, vents, tires, gas pumps, full shelves, desks, work benches, oil drum, barrels, fire hydrants, tanks, boxes, crates, junk piles and larger resin casting like stone and brick walls, loading docks and tanks just to name a few.

Tip: Glue hard to hold casting to a woodcraft stick with a small amount of white glue. The bottom of the casting will not get painted but when you glue it to the model you won't see the bottom

Painting small castings:



The problem with small parts is holding them while you paint them. Glue them to a wood craft stick with a small amount of white glue. The bottom of the casting will not get painted but when you glue it to the model you won't see the bottom. I like to prime the castings with white paint first. I like to use acrylic craft paint. Two reasons one is price two it make washes with just water. We used water based Apple Barrel craft paint mix with water to make a transparent wash. For detail parts that look like they are made wood, I use brown washes. We bought a paint pallet tray and two colors of **Apple Barrel Craft Paint, Golden Brown (20524) and Burnt Umber (20512)** and ¼"round brush. Fill two cups on the pallet tray with water. Put three full brush loads of paint from one color into one



cup and mix with the water. Repeat with the other color. Now you have two different color washes. Dip the brush into the **Golden Brown** wash and paint the detail part all over. Don't worry about sections that are not representing wood. Painting the parts will cover the wash easily. Next dip the brush into the Burnt Umber wash and paint over the **Golden Brown** wash. The darker wash will bring out the wood grain. Repeat if needed. Now paint the part of the casting that doesn't represent wood with straight acrylic paint with the appropriate color. A couple of good small brushes a 0, 2/0 and 3/0 will do the job. Wash the whole casting with ink and alcohol to dull the colors. If the casting is representing metal, first paint it black. Then dry brush with silver paint and add some rust color weather powders over the silver. Sometimes a light dry brushing of white will bring out more of the details



Tip: When painting straight from the paint bottle, use the bottle top as a paint cup. This way you don't get too much paint on the brush.



The last step in painting detail parts is a light dry brushing with white or light gray. Just don't over do it. To paint metal like trashcans with ribbed sides, paint it silver and then wash it with ink and alcohol and dry brush with white pa[illegible].

How to paint Engraved letters

It's hard to paint small letter and have them come out good. Engraved letter are even harder. Here is a little trick to paint engraved letters. It's Fast and not messy can be used on any scale. First you will need a part with engraved letter on it. I will be using a coke button to demonstrate on.



I will need paint for the color of the button (red). I used a red spray can on the buttons. Second I will use ***Fast'N Final lightweight acrylic spackling*** but any lightweight acrylic spackling compound will do. You can pick some at any hardware or big box store.

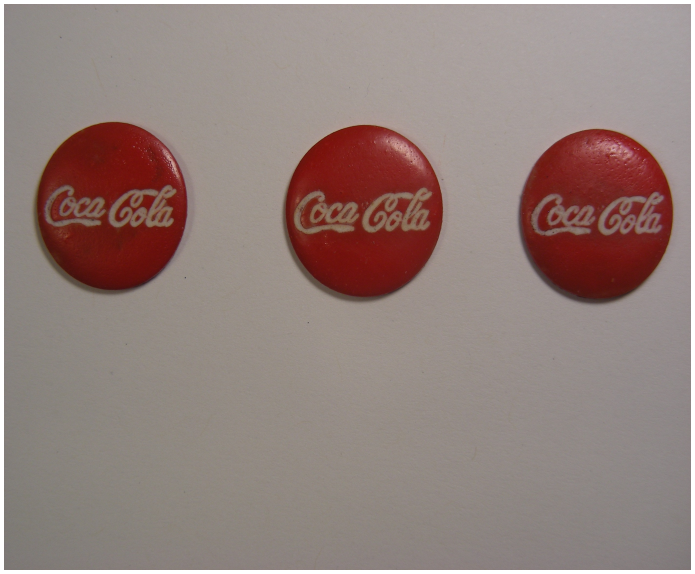


I rolled a piece of tape and pressed it to a piece of cardboard so I can spray paint the coke buttons. I put the painted buttons aside and let them dry over night. If try to apply the Spackle before the paint completely dry it dissolve some of the paint and change the color of the Spackle

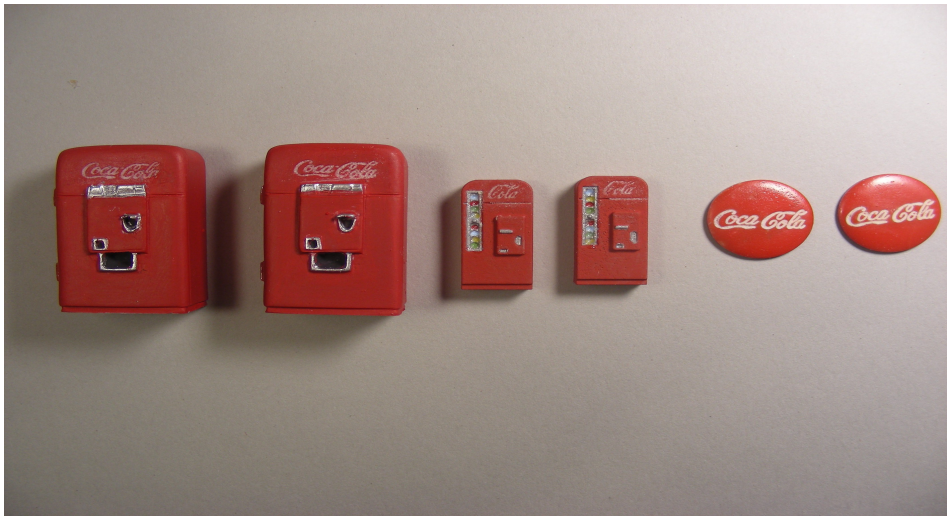
I rolled a piece of tape and pressed it to a piece of cardboard so I can spray paint the coke buttons. I put the painted buttons aside and let them dry over night. Don't try to apply the Spackle before the paint is completely dry it dissolves some of the paint and change the color of the Spackle



Here what the buttons look like when they are done



You can use this technique on any engraved letters on any painted surface. It is fast and easy.

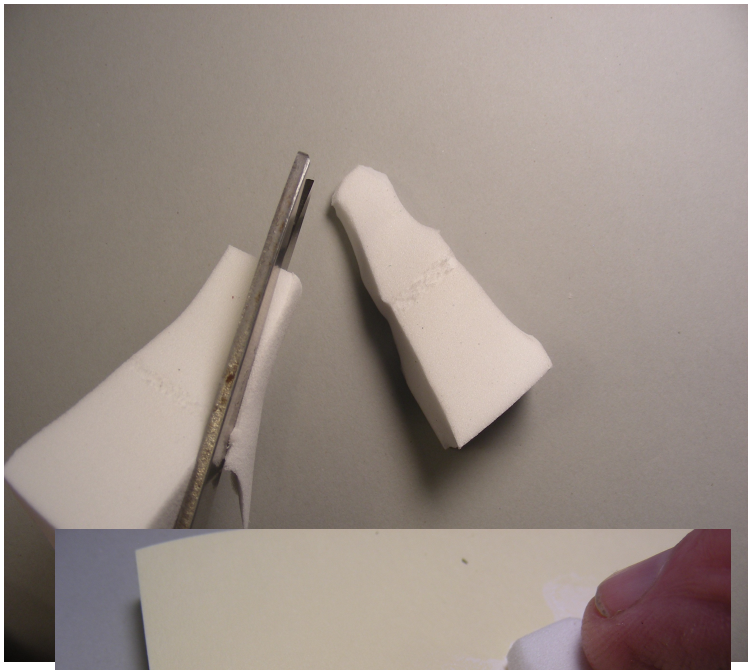


Painting Raised

Raised letters are a little bit different. We need some way to paint just the letters. The technique I use is quite simple and you don't need too much skill. You need to by a package of ***Wedge Applicator Sponges***. These are firm sponges used to apply makeup.
These sponges can be used in other techniques as an applicator. In this demonstration I need ***White Acrylic Paint*** and a Green painted mailbox. (For you later era modelers the mailbox will be blue). I keep a pad of ***Post It Notes*** on my desk to use as a paint palette.



We need to cut the Wedge sponge to fit the spot were the raised are. If there is other raised area cut the sponge so it will only touch the letters. Test the sponge and make sure it only touches the raised





With a paintbrush apply some paint on the Post It Note. It doesn't take a lot of paint maybe a paintbrush full. Dab the cut sponge into the paint and dab the sponge on the post it note till most of the pain is off the sponge. You only need a little paint on the



Make sure you center the sponge over the letters **now ever so lightly** touch the sponge to the raised letters. It takes a very light touch. Look at the letter and see if you have enough paint on the tops of the letters. If the letters need more paint. Again ever so lightly touch the sponge to the top of the letters. Repeat till you have enough on the letters. If you get paint around the letters you can go back with the background color and a small brush and paint over the white paint.

If it comes out a mess just paint over it with the green paint and try again.

A little touch up with the green paint and a small brush and bit rust and weathering and this mailbox is complete.

I have tried many ways to paint these letters and have found this to be the easy way. This add one more level of detail



Make your own Detail Parts

There are lots of detail items you can make your self. Most of them are not hard to build. Thing like down spouts from roofs, roof vents, window shades and curtains and ground clutter.

Window curtains will add another level of detail. I like to make my window curtains out of kitchen tin foil. It easy to cut, shape and paint. Cut oa few strips f tin foil a little taller then the window you are going to place the shades in. Paint the strip with **Kilz Primer- Sealer** before you fold/crumple the tin foil. White, off white or light gray seen to work the best for curtains colors but most light colors will do. After you paint the strips let then dry overnight before you fold/crumple them. Lay a strip of tin foil flat and work from one end fold/crumple the strip trying to create vertical folds. They don't have to be uniform. They can have some waver in them. It takes a few tries at folding/crumpling to get them to look like hanging curtains. Now cut your strip into ¼ wide curtains. To install the curtain in the window, apply a dab of **Aleene's Tacky Glue** to the top of the curtains where it will not show through the window. If you have installed window shades, the curtains can be attach too the top of the shade. If you have some open windows on your model, let the curtains stick out the open window like they are blowing in the wind.

Window shades are File folder cut down to size and glued with **Aleene's Tacky Glue**. The shades can be any color tan and green seem to work best.



Tin foil also makes great tarps over crates and machinery. Cut a piece of tin foil to cover the pile of stuff you want to cover. Paint it white or a light tan and let it dry over night. Place the center of the tin foil over the center of the pile of stuff and press it over the pile to the bottom of the pile. It will fold and crease like a tarp would. The tin foil will hold its shape and a little Aleene's Tacky Glue to hold it in place. Hit with a little Ink & alcohol to bring out the folds and creases. You don't have to use detail part as your pile to cover. A few blocks of strip wood and other shape will do. No one will know.

Curtains and window shades give the appearance that there is something inside your building. Another trick is to open a window or a door with a little detail inside. Makes the building look lived in. You will have to add a little floor space inside the door. Large open door gives you an opportunity to add some interior detail.





This is a little something that just tops the wall. The finial on top of the front wall was made with a pin with a round head and small square of strip styrene plastic with a hole in the center. Painted to look like cement. The pins with the round heads also make good lamp globes.

Pin with round head can be used for a couple of details. The pins come in many color and sizes. See if you can find the pins with small white round heads. They come in small box with enough to last you a long time.



You can use the round-headed pins for light over door. The round head of the pin represents the globe of the light. If you have any of the **Tichy** Lamp shades stick the pin through the lampshade and glue the round head to the lampshade. You have a light with a white globe. The pin wire is very stiff and hard to bend. They are hard to make gooseneck lamps from. If you are making lights that mount on the wall cut a small square of black paper to act as a base for the lamp.



Adding Canopy support wirers: These are the wires that hold up a roof over a loading dock when post won't do. Pick the size wire you want to use. Cut the wire to length. You want to find an insulated wire with the wire size about same size as the wire you are going to use to support the roof. Strip a 2" piece of insulation off the wire. Cut the insulation to a scale 6-8" and slide it over the support wire. The bit of insulation will represent a turnbuckle on the support wire. Bend the wire to fit in holes drilled in the roof and the structure. Cut small pieces of black paper to

represent backing plates were the wires attach to the structure. This adds a little more detail to the scene.

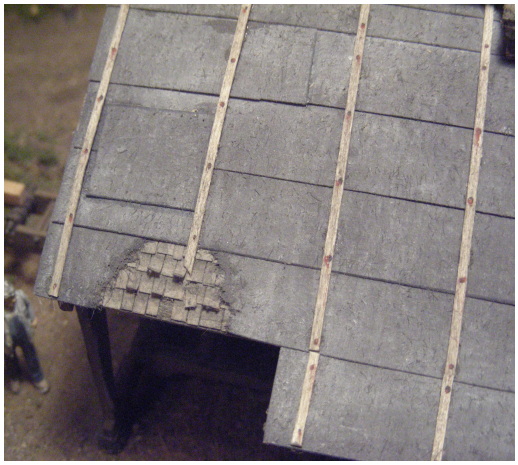
Roof Details

.

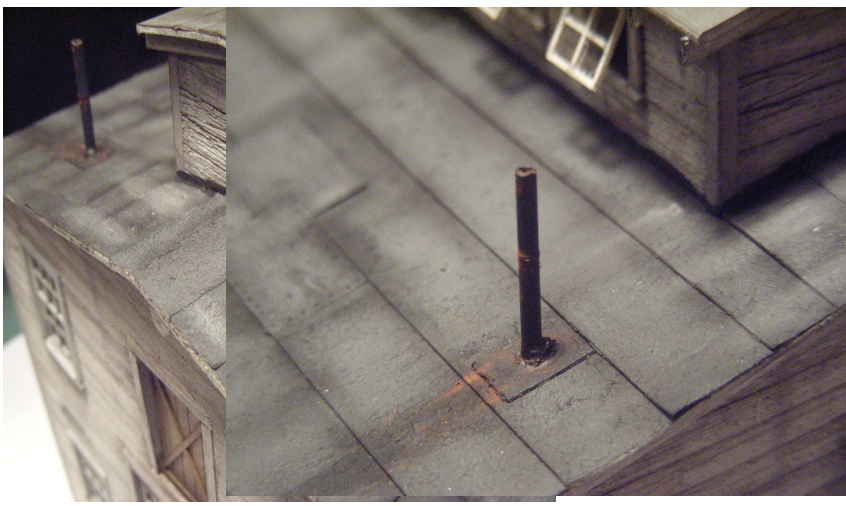
The roof is a very important part of the building. People who see model railroad view it from above, so the first thing you see is the roof. There are a lot of details you can put on the roof. The kits come supplied with a roof material. You can change the roof material to change the look of the structure

One of the simplest roof details is a patch in the roof material. A patch on a tarpaper roof or a ripped tarpaper roof with shingles showing under. Make a roof patch with a corrugated metal panel. Cut the patches out of the same material on the roof and glue them down with white glue. You may put nail holes in the edges of the patch with a pin. On flat roofs you can outline with the black tar to highlight the patch. These patches show the wear on the roof of the structure.





If you use tarpaper on your roof you can add strips of wood as hold-downs for the tarpaper. Another detail that is easy to do is add sealing tar between the walls and the roof and around pipes and chimneys. To make the tar take straight white glue and add black acrylic paint and mix it to a black looking tar color. With a O brush paint a fine line of tar along the walls and around the pipe and chimneys.



Almost all structures have vent pipes sticking thought the roof. Cut a small piece of metal tubing. Drill the appropriate size hole in the roof were

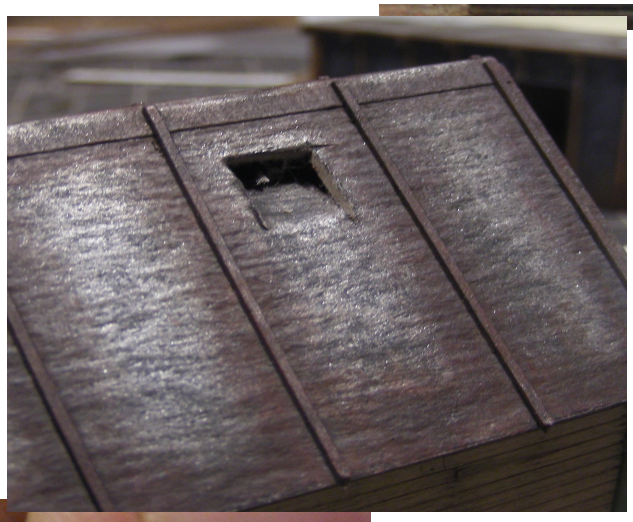
you want the vent pipe. Cut a square piece of black paper for roof flashing. Poke a hole in the paper for the pipe to fit trough and glue the paper and the pipe to the roof. Make sure the pie stand up straight. Add a little rust color weather powers and make small streak down the roof.

There are tons of roof details you add.

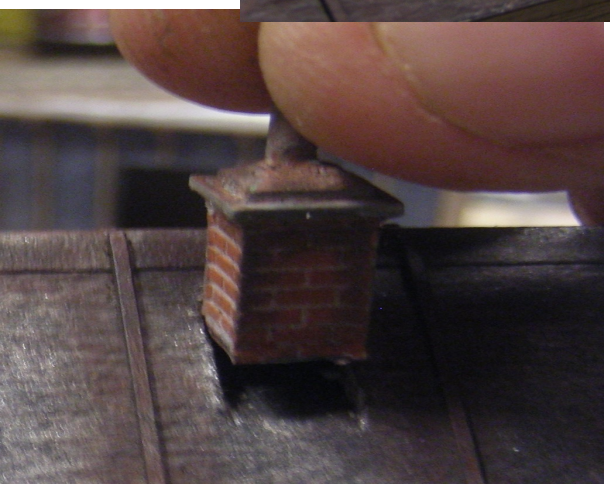
Roof hatch, roof vents, chimneys, water tanks, cupolas, TV antennas, Water towers, Small buildings, and add some clutter. Dirt, boards, a tire, small castings



Inserting a Chimney in a pitched Roof:



Place the chimney on the roof were you want it. Trace around Left and right sides and top. With a sharp blade cut left and right sides and top. Do not cut the bottom.



Test fit the chimney. If the chimney does not fit. Cut the sides or top till it does. Test fit again. With the chimney out

add some glue to the bottom and the bottom of the sides. Place the chimney in the hole. (I use Tackie Glue) Wipe off any glue that leaks on the roof. Make sure the chimney is Plum (Streight up and down). Turn the building around look from all sides to make sure it is plum



. Mix up some white glue and flat black paint an with a 00 brush add som roof tar around the bottom of the chimney. Add a black strip Washed down the roof not to much. You are done. If the chimney is in the peak of the Cut all four sides and down the middle. Fold the two taps in and glue the chimney in. Make sure it is Plum as before. But up what ever you are using for a cap and you are done.

Window Detail:



You add some interest to the windows of your structures by adding details to the windows. You can have windows open or half open. There are a few manufactures that sell windows that are open and partly open. Add a vent to the window or a fan.





A detail that changes the look of a structure is awning. Placing awning over windows or over a storefront change the look of the building. And also date the building. Awnings are easy to build. Paper

or cardstock are used to crate an awning. Large awning need small wire bent to hold them up in the front. The awning can be one color or have stripes. I have included some awning on the back pages for you to try out.have included some awning on the back pages for you to try out.



Add a Broken window for interest. Cut the glazing material with a knife to look like broken glass.

Adding pipe and wires

Another tool we have to create details is solder. Solder come in difference diameters. Depending on the scale you build in will depend on the size of the solder you use. For air hose and gas hose I use .022 dia. and for larger hoses .062 dia. both from **Radio Shack.** You may also use the solder for wire running up the side of a structure. The solder is easy to bend. It will need to primed and then painted.

Fire Escapes

I have found that details that you can see through and light looking and a lot of realisms to the structure. There a couple of manufactures that make fire escape. Vectercut is one



Clutter

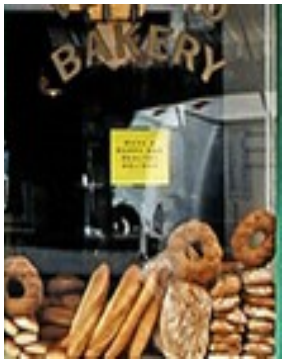
Clutter can be fun part of a build. Because it means I am almost done with the build. Clutter can be as simple as bits of strip wood leaning up ageist a structure or newspaper on the ground. Just remember the time era and what details would be at that structure. We all love those cast detail part you get to buy and paint. Detail parts are like clamps you can't have enough. Don't forget to add lots of people. It's best to add them in groups of three.





Storefront windows

What to do with those big windows on storefronts? I will **Google** pictures of storefront bakery and select a picture I'm looking for. There are different era pictures to choose from. Make a file on your computer and save all the pictures. You may have to straighten it or crop it but most of the time the picture is usable. All the picture editing is done in **Window Word**



Storefront windows



Storefront windows



Add the extras

Interiors

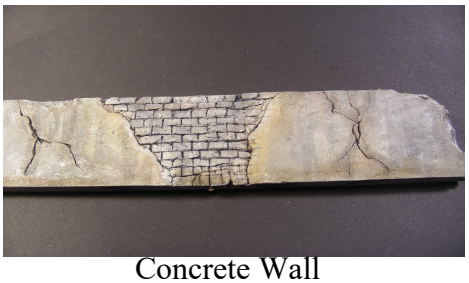
Don.t forget the interior detail. There are hundreds of suppliers of interior detail parts. Just think of what the company would have on the inside of the structure. Anything from a car dealership to a drug store. Stuctures with large windows and doors are prime candidates for some kind of interior detail. Rember interior detail can give you just a glimpe of what is on the inside. It does not have to be super detailed.

Carving Styrofoam

Retaining Walls Loading Docks



Cut Stone Wall

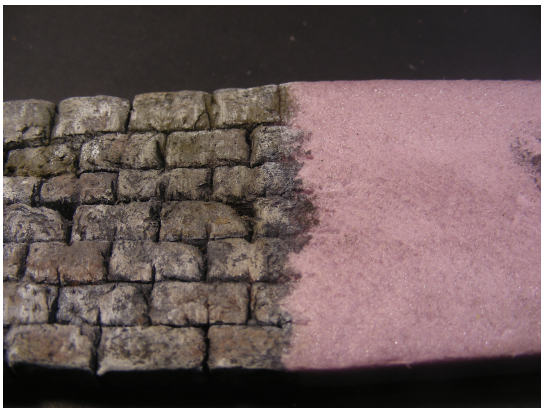


Concrete Wall

Carving Looks harder than it is. You can use the pink or blue Styrofoam sheet insulation. You can buy small 2ft by 2ft sheet at Home Depot. First you will have to cut it down to the size you need. For retaining walls. Cut to a thickness of about ¼ of inch and as tall as you want the wall. For a loading dock cut a rectangle to fit the space of the dock and about a thickness of ½ inch. You can cut the Styrofoam with hot wire cutter, band saw or serrated knife. Once you have your blank wall or loading dock. You need to decide what you want carve in the Styrofoam. For a concrete retaining wall. Carve in some cracks or Chips. For chip either break of chunks or cut them with a knife.

For stonewalls decide what type of wall you want. Cut stone, stacked stone, brick or stucco. With a #2 pencil you can layout the wall on a piece of tracing paper. Turn the paper over and rub the side of the pencil lead over the back of the paper. Lay the tracing paper face up on the blank wall Styrofoam and go over the line you have drawn. It will transfer the design to the Styrofoam or you can free draw the stones.

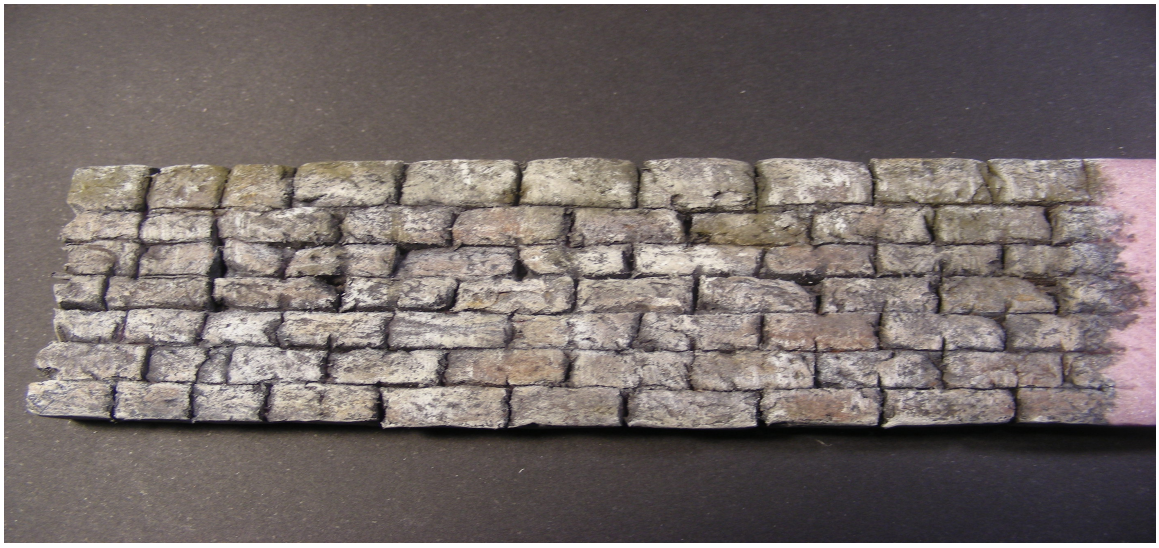
If you are carving a block wall. With exto cut your horizontal line first. Don't cut the line too deep. Now cut your vertical line
For cut stonewalls you can free hand cut the stone remember not to cut to deep. After you cut your line you need to make them a little wider. I used a small metal ruler. Slid it in the cut line and wiggled up and down or side-to-side to make the lines wider. Don't be to aggressive making the line wider. With just the corner of the ruler press down on one block to recess it. Also round some of the blocks corners. This gives an uneven look.



Last thing is to texture the face of the blocks Cut square Tin foil and roll it into a ball about 1" round. Now roll the ball over the face of the wall. Pressing down with uneven pressure.

You need to use acrylic Paint so it won't hurt the Styrofoam. Paint the whole wall flat black. You may paint individual stones light gray, brown, tan, earth tones. Now dry brush a gray then dry brush white over the whole wall. With a black wash brush some streaks

from top to bottom. Add a little brown and green weathering chalk along the bottom of the wall.



Cement Wall are a bit easier. Once you have your wall cut, you add some cracked edges or broken spots. Break then off or use a knife. When you paint these spots. With the paint still wet sprinkle on some fine sand and let it dry into the paint. This will give a very ruff texture. Add a few cracks with a sharp knife. When you draw the knife to make the crack wiggle as you draw the knife. You can add a stone cap strip to the top of the wall. Cut a thin strip of Styrofoam and glue top of the wall Tacky Glue. Cut in blocks into the cap and texture with the tin foil ball.

You need to use acrylic Paint so it won't hurt the Styrofoam. Paint the whole wall flat black. Then paint gray over the whole wall. After a light coat of gray I like to rub it in with my fingers. This lets some of the black show through. Next I do the same with white and light tan also rub them in with my fingers. Next A black wash Over the cracks and chips. Add some black wash drips from top to bottom and at the bottom the cracks. Add a little brown and green weathering chalk along the bottom of the wall. Londing dock are ccarved and painted as the same as the retaining wall.



This is a quick over view of **Details make the scene**. Remember this is to be used with the instructions that come with the kit. If the kits suggest a technique but you don't want to do it on that particular model, try it on a scrap of wood and see how it works. You may use it on a future model. Don't be afraid to experiment with different techniques. All the skills you have learned building kits can be used in scratch building your own structures. After you have built a number of craftsman kits try one where you change it around or add story and make it your own. This is the first step to scratch building you own models.

Detail Parts supply company

Monster Model & Laser Works — **Brick & Stone wood sheets**
Email jimmy@monstermodelworks.com
www.monstermodelworks.com
Phone 1-760-271-4030

Mt. Albert Scale Models — **Scale strip wood and sheet scribed siding**
P.O. Box 1218 Mt Albert, ON LOG IMO Canada
Email Mail@mtalbert.com
www.mtalbert.com
Phone: 905-473-3161

Bar Mills Scale Model Works — **Laser cut shingles & detail parts 1 Kit**
P.O. Box 609 Bar Mills, ME 04004
www.bermillsmodels.com
Phone: 1-207-929-3400

Kappler Mill& Lumber Co. — **Scale strip wood and sheet scribed siding**
8908 108th St. NE. Arlington, WA 98223
Email office@kapplerusa.com
www.kapplerusa.com
Phone: 1-800-811-1011

SS LTD — **Detail Parts & Interior Detail parts**
P.O. Box 253 Inman, KS 67546
Email: scale@scale-structures.com
www.scale-strutures.com
Phone: 1-800-352-1554

Tichy Train Group — **Styrene windows & doors Styrene detail parts**
P.O. Box 220 Alamance NC. 27201-0220
www.tichytraingroup.com
Phone: 1-336-329-9038

Rusty Stumps Scale Models — **Laser cut door & windows**
6785 Cherry Blossom W. Dr Fishers, IN 46038 — **Laser cut shingles detail parts**
www.rustystumps.com

Micro-Mark — **Tools paint, strip wood &styrene**
Berkely Heights, NJ 07922 — **Transfer tape, glues**
www.miromark.com

Evergreen Scale Models — **Styrene Scale strips & shapes**
18620-f 141 1st Ave. Northeast Woodinville WA 98072 — **Styrene sheet scribed**
sidingwww.evergreenscalemodels.com

Clover House — **Dry Transfer & Scratch Building Supplies**
P.O. Box 215 Veradale, WA 99037-0215

Grandt Line — **Styrene windows & doors**
104d B Shary Court Concord, CA 94518 — **Architectural details**
email: grandt@pacball.net
www.grandtline.com

B.E.S.T — **Laser cut shingles & Tar paper**
375 Bean Hill RD. Belmont, NH 03220 — **detail parts**
www.besttrains.com
Phone: 1-603-267-1818

Northeastern Scale Lumber Co. — Scale strip wood and sheet scribed siding
99 Cross Street Methuen, MA 01844 — **Styrene windows & doors**
email: info@northeasternscalelumber.com — **Corrugated paper & metal roofing**
www.northeasternscalelumber.com
Onsite Store

Northeastern Craftsman Structures Supply
99 Cross Street Methuen, MA 01844
Phone: 1-978-683-6327

Wm. K. Walthers Inc. — **Scratch building supplies**
5601 W. Florist Ave. Milwaukee, WI 53218-1622
email: Custsern@walthers.com
www.walthers.com

The N Scale Architect — **Styrene Sheet Brick & detail parts**
e-mail thenarch@delhiel.net
www.thenarch.com
Phone: 1-607-746-8416



Scenic express
e-mail *www.scenicexpress.com*
Model Landscaping Supply
175Sheffield Dr.#100Delmont, PA 15626

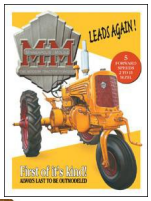


























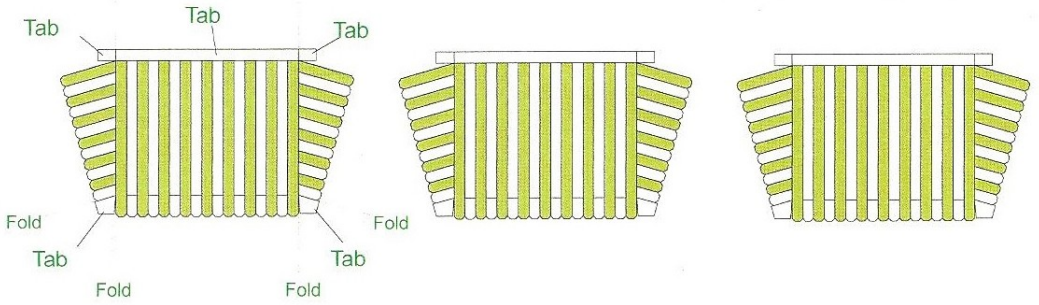


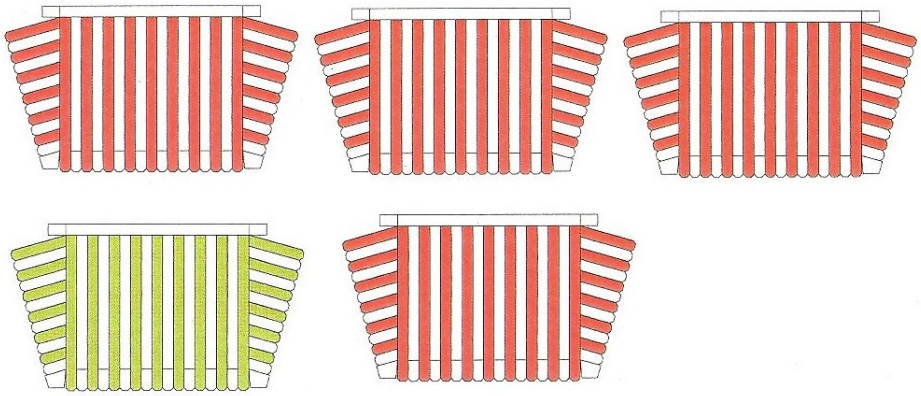
Awnings

I am printing these awning in ho scale. They are printed Microsoft Word. To make the awning bigger or smaller click on the awning then click on the corner and drag to the size you need for your scale.

AWNINGS & ALTERNATES

Cut out and fold on dashed lines
Fold in tabs and use for gluing surface





Cut out shades and glue in place
on back of windows
Place glue in the areas shown (3 side borders)

Alternate Window Shades

