

Sometimes there are structures, like friends, that enter your life and make an impact that's hard to ignore. **Palzer's Plumbing Supply** is one of those buildings. Its design is based on a business in my hometown. The unique shape always caught my imagination and I knew it would make a fun kit to build. Originally a home, then a warehouse, and now currently a realtor office, you can see the additions that have morphed it over the years. Build it into Palzer's or use your imagination to see what you can come up with for your railroad!

- ✓ Hobby knife, with an #11 Xacto Blade
- ✓ Fine File
- ✓ Square & Ruler
- ✓ Pounce tool or T-Pin/Needle

Tools & Supplies needed

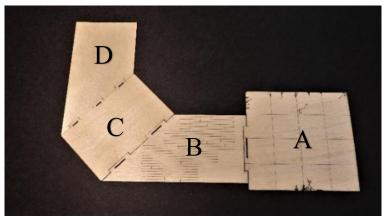
- ✓ 1-2-3 blocks (optional)
- ✓ Small magnets (optional)
- ✓ NWSL Chopper (optional)
- ✓ PVA glue or wood glue
- ✓ Cyanoacrylate glue (CA glue)
- ✓ Paints & Brushes
- ✓ Tweezers
- ✓ Patience
- / Fun

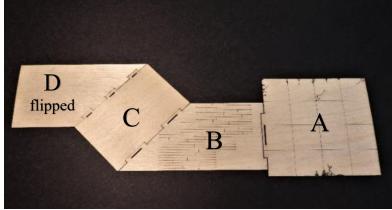
Pre-assembly

- 1. Inspect all sheets of laser cut materials against the diagrams provided in the instructions checking for any missing pieces or damaged parts. Please reach out to us with any issue.
- 2. Before starting your model, read through these instructions completely to become familiar with the parts and assembly sequence.

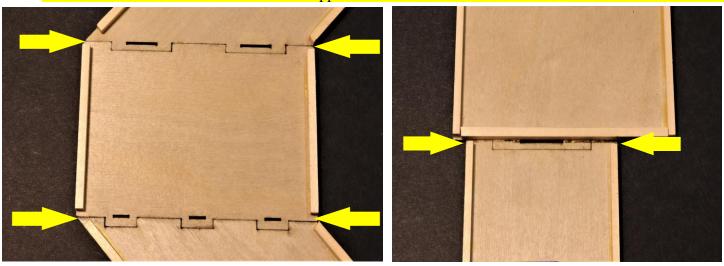
The Foundation

3. Palzer's is designed as an "L" shaped structure. It is based on an actual building in the town of Bernardsville, NJ. However, during the R&D of this kit we noticed that the tabs in the foundation floor allowed for an elongated "Z" shaped structure as well. Some modifications to a couple of the walls would have to be done to achieve that layout. We would love to see some of you build Palzer's into that configuration. For our purposes in the kit, though, we will show you how to construct the kit in the standard "L" shaped way.

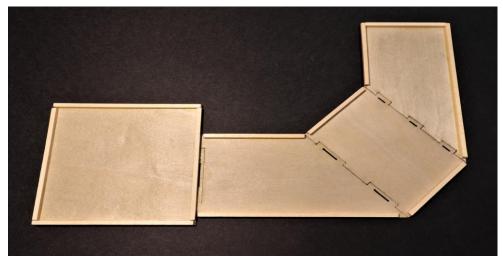




- 4. A good foundation is key to any structure, and Palzer's is no different. It is important that each step is followed for it to be square and glued securely. Otherwise, some of the later steps may be more difficult to align. Take the 4 horizontal foundation pieces (parts # A, B, C, D) and remove them from the sprews. Clean up any tabs left by the sprew with a file. You will notice that there are 1, 2, and 3 notched tabs cut into the foundation parts. These aid you in the proper location and alignment of the floor. BE SURE THE ENGRAVED FACE OF THE FLOOR IS FACING UP. YOU WANT TO SEE THE FLOOR BOARDS AND CRACKED CONCRETE PATTERNS. Apply wood glue to the edge of the TAB end of part A and fit it into the corresponding notch in part B. Hold in place with a flat weight while drying. Continue the same gluing process for the other 2 foundation pieces (parts C & D), making sure to align the proper notches to each other. Apply weights to these connections as well. Allow to dry completely... remember, this is a foundation. MAKE IT STRONG!
- 5. Pay careful attention around the center structure when sizing up the 1/8" boards. You will need to leave gaps in a few key spots, indicated by the yellow arrows in the pictures below. You don't want to have them interfere with the internal supports that will fit into the notches on the floor.



6. Next glue 1/8" square bracing to the outside edges of the floor. This stiffens the floor, and the wider 1/8" board allows a greater gluing surface for the vertical foundation pieces to adhere to. Flip over the floor so the engraved boards and cracked concrete are facing down. Cut the bracing out of the 1/8"x1/8" basswood provided in the kit. Use the floor edges, around the perimeter, as a guide for proper length of each brace. Make sure the 1/8" board is flush to the edge of the floor by using a 1-2-3 block placed on the outside edge of the 1/8" board.



7. Start adding the foundation elevation by gluing parts #1, 2, and 3 into the notches in the bottom of the floor. Each piece has a different number of tabs that match the notches in the floor. For example, part #1 has 1 tab in it and is glued into the single notch in part A. Repeat this process with the 2 and 3 notched pieces into parts B and C.



8. At this point, you may want to paint the stone textured wood sheets before gluing them onto the sides of the floor. Reference the tutorial "A Mine Mount Minute..." included in this kit, for a technique on how to paint realistic stone walls. You can also find this tutorial, along with other tutorials, on our website www.minemountmodels.com. If you decide to paint your walls, let them dry before gluing them to the

foundation pieces. Otherwise, just proceed to the next step.

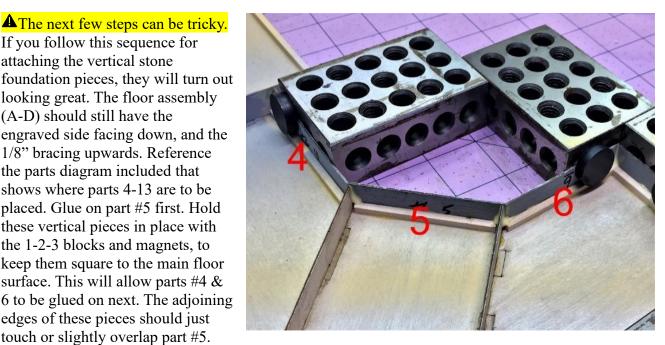


If you follow this sequence for attaching the vertical stone foundation pieces, they will turn out looking great. The floor assembly (A-D) should still have the engraved side facing down, and the 1/8" bracing upwards. Reference the parts diagram included that shows where parts 4-13 are to be placed. Glue on part #5 first. Hold these vertical pieces in place with the 1-2-3 blocks and magnets, to keep them square to the main floor

surface. This will allow parts #4 &

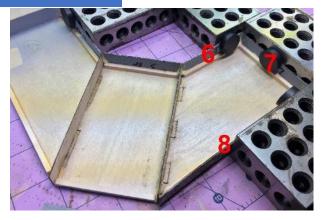
edges of these pieces should just touch or slightly overlap part #5.

9. The next few steps can be tricky.

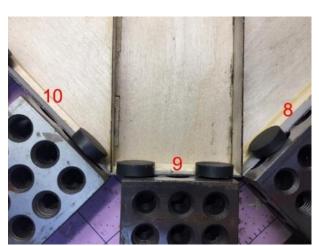


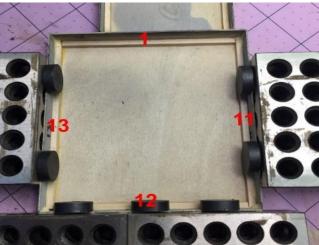
This helps hide the plywood edges. You may have to file or trim the pieces to achieve a good fit.

10. The next pieces to glue on are parts #7 & 8. Part #8's edge should be even with the edge of the outside corner (adjacent to where part #7 will go). Before gluing into place, check to make sure it doesn't overhang past part #3. This will allow part #9 to disguise the edge of the plywood. Glue on part #7 to the end of the building. It should butt up against or slightly cover up the ends of parts #6 & 8. Again, hold these pieces vertical while gluing by using blocks and magnets.



- 11. The edge of part #10 should be tight against part #1. Before gluing into place, check to make sure it doesn't overhang past part #2 (like part #8 in step 10). Now part #9 can be glued on with its sides overlapping #8 & 10. Allow this part of the assembly to dry before moving on. Once dry, you may have to file back the ends of part #9 to make the stone work blend together with # 8 & 10. Touch up with some paint that matches the stone colors. This area will be covered with the front porch later in the build, so an exact match isn't necessary.
- 12. Now move on to the concrete foundation for the warehouse section parts #11, 12, & 13. These parts have cracked concrete patterns engraved on one side. Be sure to have these facing outwards when gluing up. The cracks will match up with the cracked patterns on the top face of the concrete floor as well. Parts 11 & 13 are glued on first and should cover the end of part 1 and be even with the edge where part 12 will be. Now glue on the last foundation part 12. Hold the three pieces square using 1-2-3 blocks.





13. Currently the foundation is complete. You can clean up and file any corners. Touching up the edges with the foundation paint will make the joints disappear.

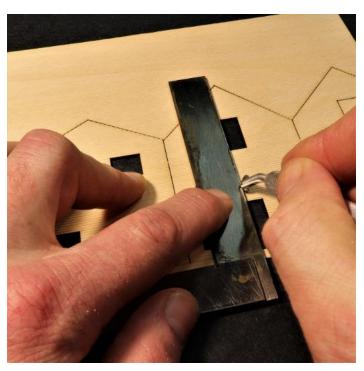


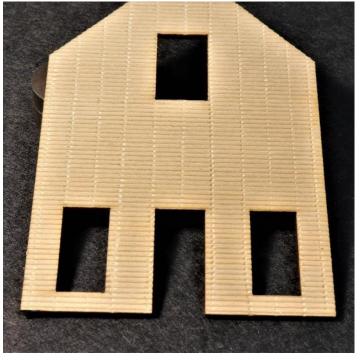


The Walls

The angles of the walls and how they intersect with the main center structure is a major part in the character of this building. In turn, they also make it a bit of a challenge to align the walls properly. Take your time with these steps and check it against the outline of the foundation you built earlier. This will insure the walls sit correct on the foundation.

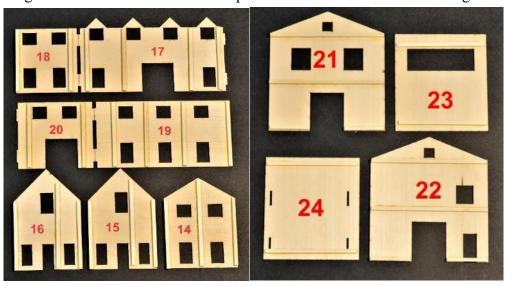
14. The next step is optional, but if you decide to add nail holes on the clapboard siding, it will increase the next level of realism. Use a pounce tool to speed up the process of adding nail holes. Pounce tools come in a variety of diameters, so be sure to use the size that creates evenly spaced holes on all the boards. We find them easier to add with a small square as a guide, while the parts are still attached to the full sheets. If you're a glutton for punishment, this step can also be done with a pin or small awl, individually adding nails to each board.



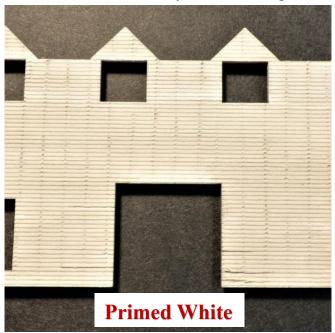


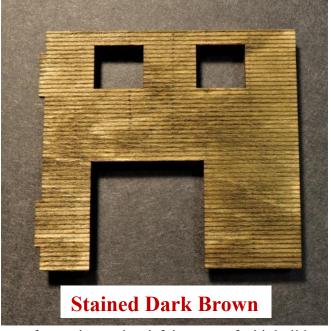
15. The wall bracing comes next. This is to stiffen the walls and keep them from warping when paint is applied. Use the 1/8" x 1/8" stripwood for the bracing. Reference the photos below to position the pieces and approximate length of each. There is also a chart provided in the instructions showing the

positions of the bracing in red. Be sure that the bracing on the 3 peaked clapboard pieces (parts #14, 15, 16) are flush with the outside edges. And that the bracing on long and short clapboard walls (parts #18, 19) are set in from the edge at least 1/8". This allows the corners to butt up flush.



16. After the bracing has dried thoroughly, decide the type of finish you want to apply to your building. We started by priming the back side of the clapboard and board-n-batten (BnB) siding pieces with Rustoleum black primer. This helps hide wondering eyes from seeing anything through windows and doors. We primed the outside of the pieces with Rustoleum white. You can also color the siding with a Hunterline Stain or alcohol and India ink wash for a more worn look once the topcoat paint is applied. Allowing some of the undercoat color to show through the paint gives the building an aged and weathered look. Always remember to paint or stain both sides of the wood to minimize warping.



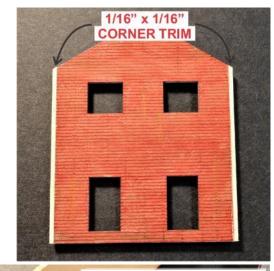


17. So, picking the colors of your structure can be the most frustrating and satisfying part of a kit build. We hemmed and hawed over the coloring of Palzer's, but once we settled on the final rendition the creative juices were ready to charge ahead with the build. We chose to paint the clapboard a red color with off-white trim, while the large warehouse section is a gray color with off-white trim. There are as many techniques for painting a model structure as there are modelers. Ours is just a suggestion of how it can be done. Use your favorite way and add that personality that only your structures can have.

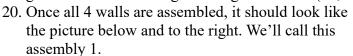




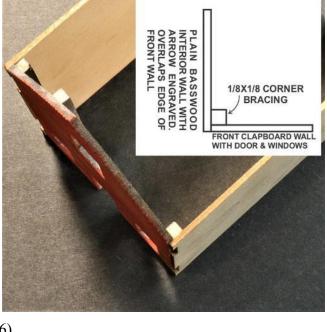
18. Time to add the corner trim on the one end wall (part #14). Before cutting and attaching the 1/16" x 1/16" stripwood, you should paint it your desired trim color. Ours is a slight off-white so it stands out against the red building. After the paint dries, cut 2 lengths about 1/8" longer than the sides of part 14. Glue on the corner boards, allowing about 1/16" to overhang the top and bottom of the wall. This extra will be trimmed flush once dry.



19. Now to assemble the center structure. The one that is at a 45-degree angle to the rest of the building. This requires parts #15, 16, 25, 26. Part 15 (consider this the front wall) has a small notch partially cut into it, just below the second story window. This notch is for an optional sign that can be mounted to the wall in a later step. If you want to model the dripping faucet Palzer sign, cut the top and bottom of the small notch to remove it. Otherwise, leave it in place for now. You can always change your mind later. Parts 25, 26 have an arrow engraved on each. Part 15 should be the wall that the engraved arrows on parts 25, and 26 point at, indicating the front of the building. When gluing to the gable walls, be sure that both arrows point the same direction. This insures that the slots on the top edge are aligned correctly. The interior walls (25, 26) are glued to the outside edge of the gabled walls (15, 16).

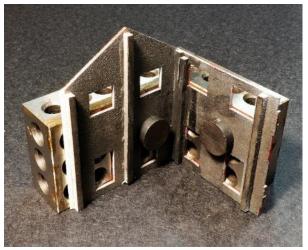








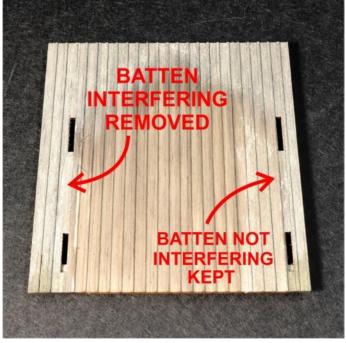
21. The wing section of the building is the next to assemble. We'll call this assembly 2. This requires parts #14, 18, and 19. Start with gluing 14(gable end) to 18(short wall), with the aid of the 1-2-3 block to keep walls square to each other, and the bottom edges even. Allow to dry before gluing on 19 (long wall) to the opposite edge of part 14.

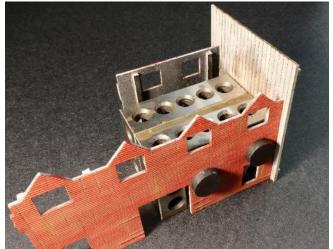




- 22. The other wing section requires parts #17, 20, and 24. One thing you must look out for on part 24 (warehouse wall with 4 slots) are the vertical battens. One of the battens might fall in line with the slots where 17 or 20 might fit into, and this will keep the wall joint from butting up tight against each other. An easy fix is to simply remove the batten with a hobby knife up to the height of the walls that are being interfered with.
- 23. Part 20 (short wall, flat top) can now be glued to the left side of the BnB wall. Insert the 2 tabs on 20 into the 2 slots in 24. Use 1-2-3 blocks and magnets to hold square while the glue dries. Repeat the process for part 17 (long wall with 4 peaked gables). Again, hold square with blocks and magnets while drying. We'll call this assembly 3. See below for details.







24. Now you should have 3 sub-assemblies for the clapboard building. Dry fit the assemblies together to check for any misalignment. Now is the time to make minor adjustments before gluing them all together. You can also check the fit of all 3 assemblies on top of the foundation you completed earlier. Making sure that the building doesn't overhang or fall short of the foundation edges too much. They should all line up.









All photos are dry fitting of the 3 wall sub-assemblies





25. Once you are satisfied with the fit of all the sub-assemblies and foundation, you can start to glue the sections together. We start by attaching assembly 1 and 2 together. Each corner of assembly 1 have two notches in them, these match up with the 2 tabs on the walls of assembly 2. Be sure to have part 15, with the small notch for the faucet sign, facing towards the outside of the L-shape. The 45-degree angles will be a bit of a challenge to clamp together while the glue dries. The joints don't have to be cosmetically perfect because they will be covered with trim pieces later.

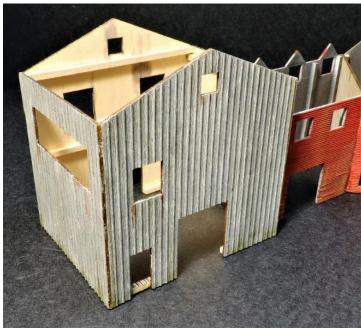


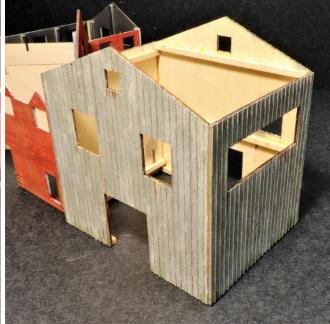
26. Once the last step is dry, you can pretty much repeat step 25, but this time with assemblies 1 and 3. Again, you want to line up the slots on assembly 1 with the tabs of assembly 3. Glue, clamp, and let dry before moving on.



27. It's time to add the 3 remaining warehouse wall pieces (parts #21, 22, and 23). Start with part 21 and glue it to part 24 that is already attached to the main structure. Make sure that the edge of 21 is on the inside of 24 (like the arrangement you did on assembly 1, step 19). Use a couple 1-2-3 blocks stacked up to hold the corner square with the aid of magnets. Move on to attaching part 22, squaring with blocks and magnets, and finally attach part 23 to the edges of 21 and 22. As an option, wall 23 could be flipped upside down (with the large window on the bottom) for a different look. Once dry, touch up the exposed edges of BnB to match the rest of the wall coloring.







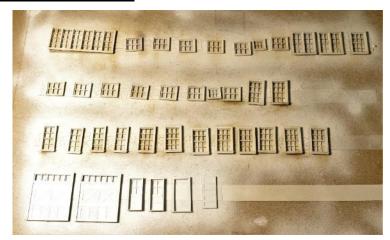
28. Attaching the completed wall assembly to the foundation assembly is quite easy. Check the alignment and fit of the walls on the foundation one last time before gluing. We apply wood glue to all the bottom edges of the walls. This insures a strong bond between the walls and foundation. Then you just need to place them on the foundation. Apply a little weight on top of the walls for a tight bond joint. Let dry thoroughly.

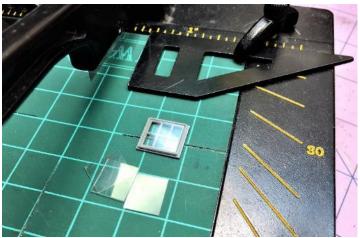


The Windows & Doors

29. Palzer's has a variety of windows and doors that are laser cut/engraved microplywood and Tichy plastic components. Paint all the Tichy parts with your trim color before installing them on the model. Use the sheet of acrylic glazing provided in the kit to add the window glass to the frames. They must be cut to size with a nice sharp blade and straight edge. In this picture the doors & windows have been sprayed "reefer white", with the windows already receiving a dusting of weathering powders to tone them down a bit.

Another option for cutting the acrylic glazing is to use a NorthWest Short Line Chopper. This makes quick work of mass producing the many window sizes that are in this kit. Cutting accurate sized panes allows a nice fit for the "glass" right up against the mullions of the windows. The glazing is held in place with a plastic model glue, or we prefer to use MEK - Methyl Ethel Ketone solvent. MEK can be found in the paint department of your local hardware store.





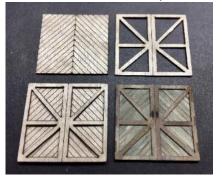
30. The locations of the different window and door styles are straight forward. Most of the windows are the 6 over 6 double sash style on the 1st floor, and the single 6 lite eyebrow windows on the 2nd floor. Where they do change up are in the center, angled structure that has the entry man doors on each side. The doors are flanked by 4 over 4 double sash windows, and above the door is another 6 over 6 double sash window. See below photos for reference.





31. The laser engraved warehouse doors are made from 1/64" plywood that has an adhesive backing on it to make assembling the doors and frames easier. Remove the adhesive covering on the back of the parts to stick the frame on top of the door material. There are two crossbuck wooden doors (parts #25, and 26), one for each side of the clapboard main building. There is one small hatch door (parts #27, and 28) for the second floor of the large warehouse, loading dock side. There are also two large rollup doors (parts #29, and 30), one for each side of the BnB warehouse. The kit includes two optional Tichy #8038 baggage doors that can be used in place of the large rollup doors, to represent an earlier time period.

Crossbuck Doors #25, 26



Hatch Door #27, 28



Rollup Door #29, 30

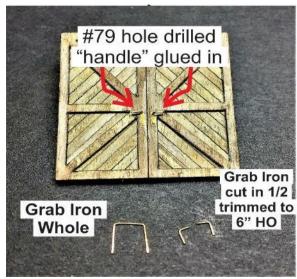


Here are the 2 options; the engraved rollup doors and the Tichy Baggage doors.





32. An optional detail that can be added to the crossbuck doors are lever style handles. These were created by using Tichy grab irons mfg. #3021. 4 of these are provided in the kit parts bag, along with the Tichy windows and doors. Start by cutting the U-shaped grab iron in half, then trim 1 leg of the "L" shape to approximately 6 HO scale inches (about 1/16" shy). Drill 2 #79 drill bit holes in each door 36 HO scale inches from the bottom of the doors. Glue the long leg of the "L" into the holes with CA glue.

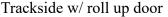


33. With the warehouse doors painted, assembled, and weathered you can install them in their appropriate spots. The 2 laser engraved crossbuck doors can be installed in the large openings of the clapboard siding (parts #17, and 20).

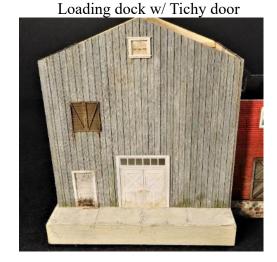




34. The doors and windows of the BnB warehouse can be installed now. This is where you can decide if you want the large Tichy crossbuck doors or the engraved roll up doors. For the prototype display model, we added the roll up door on the "trackside" of the warehouse and the Tichy door to the wider loading dock side of the warehouse. This is so people can see the choices available. In the below pictures you can see the other windows and doors are also added to the gabled walls of the BnB warehouse. Notice the location of the small hatch (Part #27 & 28) on the second floor.







35. The picture to the right shows the location of the large 6-bay window piece. Again, this is the wall that could have been attached upside-down with the opening at the bottom to get a different look.



The Loading Docks & Stairs

The vertical support legs, joists, and roof supports for the loading docks are cut from 1/16" Masonite. The top deck surfaces are engraved in 1/32" plywood. The rafters, stairs, and stringers are also made from 1/32" plywood. The cross bracing is made from 1/32"x1/16" stripwood.

- 36. Stain or paint the parts before removing them from the sprew sheets. We used a few different Hunterline stains like Dark Brown, Driftwood, and Light Gray.
- 37. Start with the large rectangular loading dock surface (part #36). Place it engraved side down, making note of the 3 small "X's" on the engraved deck. The "X" marks the location for the roof support legs. They are along the front edge of the dock. One side of the joists (part #38) has engraved lines on it. Make sure they face up when gluing it on. The lines will aid you in aligning the vertical support legs in the next step. Glue on the deck joists to the bottom, aligning the long edge of the joists with the backside edge of the top deck (opposite the "X" side). Use a straightedge to help align the joists. Place a weight on top to help it dry flat.
- 38. Move on to the vertical support legs of the dock (part #40 x2). Use the 1/32"x1/16" stripwood provided to cut out the diagonal cross bracing. Measure from the top of a leg to the bottom of the adjacent leg. Cut enough of these to brace the front and back of each leg (approximately 20 pieces). Glue in place and allow to dry, making sure they create a crisscross pattern.





39. With the bottom of the joists still facing up, use the engraved guidelines to align the leg assemblies, and glue in place. Make sure they are perpendicular to the joists.



40. The trapezoidal shaped loading dock is next. Place the engraved top deck (part #35) engraved side face down. The trapezoidal joist (part #39) is glued on, again with the engraved guidelines for the leg assemblies facing up. Align the long edges of the pieces using a straightedge (like in step 37).

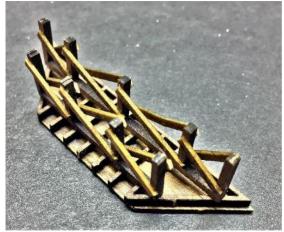


41. Take the vertical leg supports (parts #41, and 42) for the small dock and use the 1/32"x1/16" stripwood to add cross bracing to them, as well. On these legs there are different spacings between each leg. So, you will have to measure for each piece. Attach them on the front and back of each leg, creating a crisscross pattern.



42. As in step 39, use the guidelines on the joists to properly space the leg assemblies. Glue them on, making sure they are perpendicular to the joists.

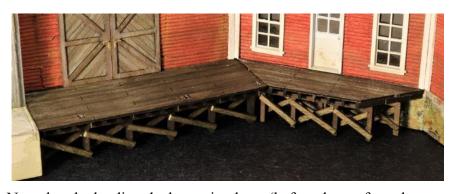




43. With the 2 loading docks built, it is time to attach them to the building. Starting with the rectangular dock assembly, make sure the 3 "X"s are facing away from the main building wall. Adhere the dock to the inside corner of the L-shape building, with the short side of the dock up against the "concrete" foundation, and the long side against the clapboard wall. The top of the dock should be even with the bottom of the crossbuck warehouse door.



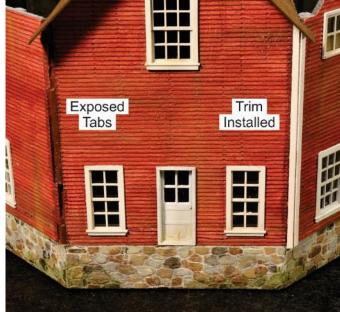
44. The trapezoidal dock assembly is glued on next. This is located to the right of the rectangular dock, with the long side of the trapezoid against the clapboard wall with the personnel door. Both tops of the docks should be even with each other in height.



45. A little aside for some trim work. Now that the loading docks are in place, (before the roof overhang is assembled) you need to install the corner trim. These are located where the center angular structure and the 2 wings meet, both sides of the building. The tabs that align the clapboard walls are visible and they need to be covered up. This is done with 1/32" x 1/16" stripwood. Each of the 4 corners use 2 pieces cut to length. Measure from the top of the wall to above the loading dock, for the 2 inside corners. For the 2 outside corners, measure from the top of the wall to just above the stone foundation. Cut the top of the trim to match the angles of the rooflines. The 1/16" wide wood should

just coverup the tabs for convincing trim work.





46. Now back to the loading docks. To keep the workers dry on a rainy day, or cooler when the summer sun is beating down on them, we need to install a proper roof overhang. The roof supports are made from Masonite (parts #43, and 44). The thin rafter support (part # 43) has small notches cut into one edge. These notches are to help align the rafters, and they need to face up. This piece is glued just above the crossbuck door. It should fit in between the BnB warehouse wall and the corner trim you applied in the last step.



47. The timber roof support (part #44) is glued to the front edge of the rectangular dock. The 3 legs should line up with the 3 "X"s along the front edge. The longer support on top should be on the left side, close to the BnB warehouse. Prop up this piece vertically until dry.





48. The rafters (parts #37) are fragile. Be careful removing them from the plywood sheet. Cut them apart into 12 separate rafters. You only use 11 of them in this step. Use the extra just incase one brakes. The easiest way to install them on top of the timber supports is to put a small dot of glue in a set of notches that are aligned with each other, then use tweezers to place the rafter into the notches. Make sure the 90-degree corner of the triangle is up against the clapboard.





49. The roof sheathing (part #45) can be covered with a variety of different materials. The kit includes a sheet of laser engraved self-stick strips for the rolled roofing and standing seam roofing. But shingles or corrugated material will look great, too. Paint the sheathing a dark color just to help mask it in case any of it shows through your finished roof. We painted the rolled roofing self-stick materials with a grimy black color and followed that up with various washes of browns. We topped it off with weathering powders. Apply the first strip of rolled roofing to the bottom edge of part #45. Allow it to overhang the edges. You can trim it to the base sheathing by flipping it over and using a sharp blade. The next strip will overlap the first by about 1/32". It will take 3 strips to cover up the roof. Rub your finger on the rolled roofing to ensure proper adhesion to the base sheathing.

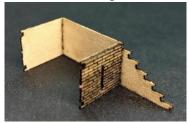




The Brick Porch

The brick porch and railings are made from engraved 1/32" plywood. The slate step treads are 1/64" plywood. There's a story behind the strange direction of the stairs. Originally the front stoop stairs were located coming straight out from the door, on the long front edge of the porch, but more and more customers were complaining about their safety with the railroad tracks so close. So, to ease the customers nerves, Old Man Palzer moved the stairs to the side of the porch. On to the assembly!

50. The base of the brick porch uses parts #77-81. Start with the front part #77 laying engraved side down. Attach #79 by inserting the two small tabs on one side into the small notch towards the middle bottom of #77, facing the engraved brick side towards the stair treads. Next #78 is added to the end of #77. The long tab on #77 fits the long slot on #78. Each short side of #81 has two tabs that fit into the two slots on the backside of #78 & 79. Install the shorter stairway side part #80. It fits into the long slot of #79. There are 6 very small stair risers with engraved brick part #82 (x6). Attach these between the stair pieces #77 and 80.









51. Add the concrete top part #83 to the brick base. The six stair treads part #84 get glued to the steps.





52. You can attach the porch in 3 different directions. We chose to attach it so that the stairs were away from the stone foundation. See pictures for reference.



53. The railings (Part #85, and 86) are next.

These are delicate pieces so take care removing them from the sheet and installing them. Attach #85 to the long side and down the steps. Attach #86 with the vertical railing pole up against the building, and the two horizontal railings in line with the corner post on #85.



The Roof

The roof on the clapboard building has 1/32" laser board as the base sheathing. The kit includes laser cut shake shingles to go on this section. The BnB warehouse has 1/16" basswood as the base, and it has a standing seam style roof applied to it, made with engraved self-stick sheets.

54. First add the roof supports. They act like rafters in a prototype roofing system, keeping the roof sheathing from sagging in the middle. Use parts #64, 65, 66 and 1/8" basswood strips to create the supports. Only 2 of them need the additional 1/8" basswood added to the edges (see photo to the right for position). It doesn't matter which 2 supports you choose because they are all the same shape.



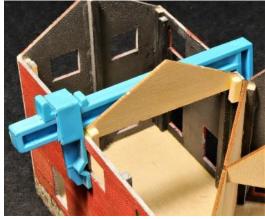
55. The 3rd support doesn't need the 1/8" basswood because it is glued against the BnB wall. This provides plenty of rigidity. Apply glue to one side of the support with the 1/8" basswood added. It should fit snug between the two walls that are attached to the BnB warehouse wall. If the fit is too tight, some filing may be needed



56. The 2 remaining supports are glued as close as possible to the center angled structure as possible but remain perpendicular to the outside long clapboard walls. This should cause them to basically split the length of the roof in half, adding the support that is needed.



57. The center structure has a taller support (part #67) that fits into the two notches of the walls that have the arrows engraved in them (reference step 19). Use a 1-2-3 block and magnet to keep it perpendicular to the top of the walls as the glue dries.



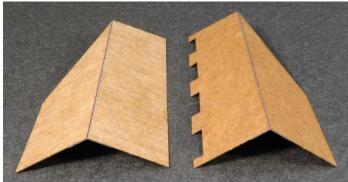


58. Attaching the laser board sheathing is next. Start with the center structure (parts #46, and 47). They both have a rectangular and triangular notch along one edge of them. Part #46 is just slightly shorter, allowing part #47 to overlap it at the peak of the roof. If the front wall (part #15) is facing you, part #46 is glued on the right side, with the rectangular notch along the front wall. Then part 47 is glued on the left side, with its rectangular notch along the front wall. Prop some weights on top of these pieces while the glue dries, ensuring that they are secure to the end gable walls and the center support.



59. Parts #48-51 are the pieces for the roofs on the two wings of the building. To make the assembly easier we taped the corresponding roof sections together before test fitting them into place. The laser board has one side that is smoother and shinier than the other side. For parts #48, and 49 you want the smooth side facing down on a flat surface, while parts #50, and 51 the smooth side faces up. Any type of masking tape will work for this step. Apply the tape down the center of the two roof halves. Then trim the tape to the edges of the laser board. Flip the 2 assemblies over and draw lines parallel with the bottom edges. These lines will help guide you when installing the shingles later. Fold the roof halves into a V to start creating the pitch of the roofs.





60. Test fit these pieces on the roof to see if any of them need filing or trimming. No matter how square you think you assembled all the walls, with so many angles converging, it is almost inevitable that one of them will not match up perfectly. Once satisfied with the fit of the roof sheathing, add glue to the top surfaces of the walls that will adjoin to the roofs. Apply a bead of glue where the angled edges of the laser board lay on

top of the center structure roof. Place weights on the roof sheathing and allow to dry thoroughly before moving onto the next step.





61. The roof should look like this now that the sheathing is installed. Notice the guidelines drawn on with a pencil to help the installation of the shingles.



62. The 4 small peaked gables are a nice distinguishing feature of Palzer's. To accomplish them is easy though. Eight pieces of part #52 are used, 1 for each side of the gables. They are "right triangles", meaning one of the 3 corners is a 90-degree angle. The corner of the 90-degree should be at the front peak of the gable. Glue along the top of each small gable and along the long back edge of each triangle that rests on the main roof sheathing.



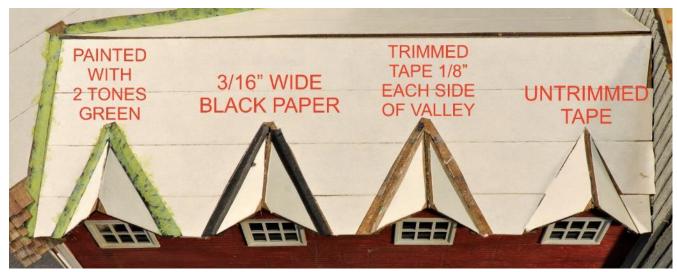


The Shingles

- 63. We prefer to use double stick tape to adhere the shingles to the roof. Cover the entire roof with the tape. We find it easiest to use the peak of the roofs as a straight edge, applying the first row along there and working our way down to the bottom edges. Trim any extra tape to the edges of the roof sheathing.
- 64. To hide the joints in the valleys of the roof, use the thin black paper provided with the kit. Cut the paper into strips approximately 3/16" wide. Trim the white cover of the double



- stick tape back 1/8" from each side of the valleys. Peel off the white protective cover, leaving the adhesive behind.
- 65. Crease the black strip lengthwise to create a V and tape it down to each valley. Trim it back to the edge of the roof. It can be left black to simulate tar paper. We chose to paint it a green color to represent copper flashing that has patina on it. The 4 steps are shown (Right-Left) in the picture.



66. We suggest painting the sheet of shake shingles while they are still all attached together. Our painting technique can be found on another "A Mine Mount Minute..." included in this kit. A sample can be seen in the pictures below.





- 67. If you are new to applying laser cut shingles, we suggest starting with one of the plain flat roof surfaces. Get used to the technique of how to align the shingle rows with proper spacing. If you're an old hat at this... then head right for those 4 gables and knock the hard stuff out first! The rest of the roof will be a breeze after them.
- 68. Just like the prototype, always start shingles with the bottom row. Peal off the bottom row of double-sided tape. Cut one row of shingles from the sheet. Apply it to the bottom edge of the sheathing, letting the jagged side overhang the edge slightly. Press down across the strip to secure it.



69. The next row should overlap the previous about halfway. The jagged edge should just touch the top edge of the vertical slits on the previous row. To ensure that the shingles strip is adhered properly, we use a blunt object like the handle of a jewelers file to run along the top edge, pressing it into the adhesive.



70. When you get to any of the valley areas, trim the end of the strip approximately 1/16" from both sides of the center of the valley. This should expose the black paper "flashing" for a realistic look. The picture to the right shows this in the tricky valleys of the 4 gables.



71. Every roof has projections on them, like chimneys and vents. Palzer's is no exception. The kit includes a cast metal chimney by BEST Trains, and a length of 1/16" aluminum tubing. Choose a spot on the roof where you want the chimney to be. The bottom of the chimney casting is flat, so it needs to be filed to an angle that matches the pitch of the roof. This will make the chimney stand vertically. Cut and remove the covering of the double stick tape where you want the chimney. Test fit and check for it being plumb. Paint the chimney prior to gluing in place.







72. When the shingle strips reach the bottom of the chimney, it is time to add more black paper flashing, this time around the base of the chimney. Again, cut the paper 1/8" wide and crease lengthwise into a "V" shape. One leg of the V should be flat on the roof, and the other leg of the V going up the side of the chimney. This requires 4 pieces, with 1 piece at the bottom, then 2 pieces along the sides, and finally topped off with a piece at the crest of the chimney. Now you can work the shingle strips around the chimney.



73. For the aluminum vent, cut a 1" piece from the 1/16" tubing. Drill a 1/16" hole in the roof sheathing where you want the vent. Cut a ½" square of black paper. Drill a small hole in the center of the paper and push the aluminum tube through it to represent boot flashing around the vent. Slide the tube into the roof sheathing to desired height. Then slide the black paper down to the surface of the roof and glue in place. Now work the shingles around the vent and up to the top ridge of the roof.



74. On the top ridge of the roof, cut shingles need to be installed. In the sheet with the laser cut shingles we provide long strips with an engrave line lengthwise. Paint these the same as the rest of the shingles. This strip needs to be cut into 3/16" long sections. If you own a NWSL Chopper, this is the time to use it! Cut a lot... you're gonna need 'em. These 3/16" long sections will be used to cover the ridge. Prior to gluing them onto the ridge, slightly crease the shingle into a "V" shape along the engraved line. Not too much, you don't want to break it in half.



75. Starting at one end of the ridge, glue on one of the shingles. The next shingle will overlap the first halfway. Continue the process of overlapping the previous shingle halfway until you reach the other end of the ridge.





76. When a lower ridge meets a taller roof, the shingle strip of the taller roof should overlap the ridge shingles.



77. Now your shingled roof is complete. See picture for reference.



The Standing Seam Roof

78. To help support the center of the tall warehouse roof, a center beam is made from a piece of 1/8" stripwood. Use the distance between the 2 gabled BnB walls. Glue this piece between the 2 peaks of the gables, and clamp in place while it dries.



79. The main support for the metal standing seam roof on the tall warehouse section is 1/16" basswood with engraved lines (parts #68, and 69). We painted the wood black to help hide any wood color that might show after the roofing material is installed. Part #68 is slightly shorter than #69. #68 needs to be installed on the side that is connected to the main building, overhanging above the shake shingled roof. #69 is installed on the other side above the 6-bay window.



80. The sheet of laser engraved self-stick strips for the standing seam roofing is used for the roof covering. Paint the adhesive material while still on the full sheet. We chose green, but metal roofing comes in a variety of colors. Use the lines engraved on the roof as a guideline to keep the strips evenly spaced, and the overlap between two sheets precise. Apply the first strip to the edge closest to

the long side of the building (the side closest to the railroad tracks in the display pictures). Align its edge to the first engraved line on the roof. It should overhang the gable side by about 1/16". Crease this overhanging material along the length of the roof. Allow the strips to overhang the low ends of the roof. These will be trimmed later.



81. Palzer's has a cyclone vent included that will look good on top of the metal roof. Choose where you want it to be and place a square section of the "metal" roofing there. Drill a hole in the center of the square that matches the diameter of the base of the vent. Paint the vent and set aside. It will be glued

into the hole later.





82. The next strip is lined up with the next guideline on the roof, causing the strip to overlap the first strip by approximately 1/16". Use a straightedge and a blunt edged object, like the jeweler file earlier on the shingles, and press firmly along the length where the pieces overlap. This gives the illusion of a



83. Continue applying the strips across the roof. Lining them up to the guidelines and creasing the overlap. Cut the strips that intersect with the vent flashing square. Crease around the flashing as well. Trim any extra material around the bottom edges of the roof.



84. Included on the sheet with the wide strips are two medium and three narrow strips. These should be painted the same color as the metal roof. Two of the narrow strips are applied along the edge of the two gable ends. These cover up the plain edge of the wide metal roofing material. Install it so half of the width is overhanging the edge, then fold it over so it sticks to the side of the 1/16" base basswood. The medium width strip is applied on the top ridge of the roof, covering over the main wide strips and the narrow edge strips. The vent can be glued in place.



The Signs

We provide a sheet with all the signs to model Palzer's as seen in the kit photos. You may use them on this kit, or if you decide to change the name of the structure, save them for future use. Making color copies of the signs is recommended for your personal use only. There are also 2 styles of stencils, cut from .011" laser board, for creating painted signs on the walls.

85. The paper signs are straight forward. Even though the paper they are printed on is thin, for modeling purposes we suggest using a fine 220 grit sandpaper to thin them even more. Before cutting them from the sheet, sand the back of the paper. A light circular motion seems to be the safest way to achieve a consistent thickness. If you want an even more worn and weathered sign, sand it until you see the colored ink showing through the back. Even to the point of creating small tears in the paper can have an interesting effect.

- 86. Cut out the sign with a new sharp knife and straightedge. Glue them onto the areas you like. Checkout the photographs for our suggestions.
- 87. The sign with the arched top that says "est. 1923 Palzer Plumbing Supply" has a matching mounting back and frame (parts #54, 55). This can be used as main sign for above the rear entry door. The parts have adhesive back. Cut out the paper sign, peel off the adhesive protective backing to the

mounting plate #54, and stick it onto the back of the paper sign. Peel off the protective backing of the frame #55 and stick it onto the paper sign. Glue on complete sign anywhere you want on the building.





88. One of the key signs on the whole structure is the dripping faucet sign. This is cut out of 1/64" plywood with adhesive backing (parts #56, 57, and 58). The center piece of the sign #56 has the drip on it and the lower hanging plaque. Parts #57 & 58 go on each side of # 56. Peel off the adhesive coating, line up #57 to match #56, and stick it on. Do the same with #58. Paint the sign your desired color. Then cut out the rectangular "Palzer" paper signs and stick them on



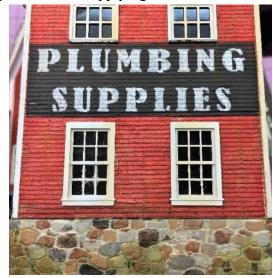


- each side of the lower plaque. The tiny notch below the window in part #15 should be cut out if you plan to glue on the sign
- 89. The stencil signs are easy to apply and very effective as painted on wall signs. Use the clapboard as guidelines to make the stencils straight on your building. Tape them down with a low tack painter's tape. Use a course natural sponge to achieve a random pattern when applying the paint. Take your time and dab the paint on one letter at a time.



90. You can also add a background color onto the clapboard before applying the stencil.



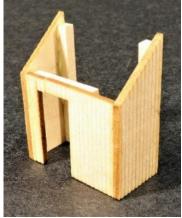


The Small Lean-to

91. This neat little structure was design as an option, so that you could place this anywhere along the first-floor foundation. It's tall enough that it will cover up any one of the first-floor windows. It requires three scribed basswood wall sections (parts# 59, 60, and 61). Add 1/8" bracing to the tall edges of #60 & 61, and across #59 above the door way to reinforce the delicate piece. Glue the sides

(# 60, and 61) to the sides of #59.





92. Paint the walls and attach them to the location you chose on the main structure. Add roof section (part #53) on top of the lean-to. A slate style shingles sheet is provided in the kit. Paint them a gray color. Apply double-stick tape to the small roof. Stick on the strips of shingle the same way you did the shake shingles on the main roof. Again, take a small 1/8" wide strip of the black paper and glue it across the top ridge where the lean-to roof meets the clapboard siding. Install the Tichy door. This small detail is complete.



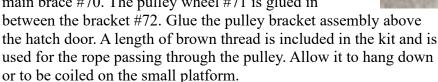
The Details

The fun is in the details. Palzer's has a variety of different types of details, from metal castings to plastic fixtures to laser engraved and cut ones. Some of these features we will break down into small separate sections below.

- 93. A few quick details are the Tichy wall mounted light fixtures. Six are included in the kit. Remove the 2 parts (bracket & light hood) from the sprew. Glue them together with a plastic compatible adhesive. Paint them and apply to the building. The logical locations we chose are above the entry and warehouse doors, and one above each black sign on the front of the building.
- 94. Below the small hatch door on the second floor of the BnB warehouse is a platform (parts #73 & 74[x3]). Part #73 has lines engraved on it, face the lines down on a flat surface and glue on three #74 brackets to the bottom of the platform. Be sure to have the 90-degree corner of the brackets even with the edge of the platform. The platform assembly is glued underneath the hatch door.



95. Another detail is the hoist arm above the hatch on the second floor of the BnB warehouse. This is made from 1/16" Masonite (parts #70, 71), 1/32" laser board (part #72), and 1/32" x 1/16" stripwood. Stain or paint all parts before assembly. Cut two pieces of stripwood approximately ½" long to use as diagonal supports on #70. See pictures for locations of all parts. Part #72 acts as the pulley bracket. There are two lines engraved towards the center of this piece, they are where you crease it to a 90-degree angle, so that it wraps around the main brace #70. The pulley wheel #71 is glued in







96. There are two small overhanging roofs above the warehouse doors on the "trackside" of the building. Part #75 is the roof sheathing. Glue on four support brackets part #76 evenly spaced across #75. Be sure that the longest side of the triangle #76 is glued to #75. This will allow the roof to slope away from the building once glued on above the doors. We painted them grimy black with a metallic shine to represent a metal overhang.



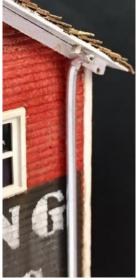


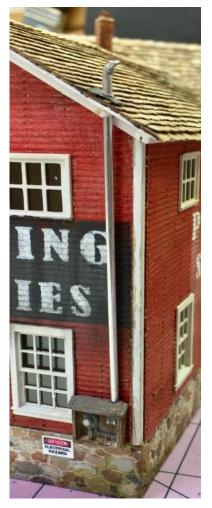


97. A metal casting of an electrical service panel is included in the kit. Decide where you want it placed on the lower wall section and glue on. A length of 1/16" aluminum tubing (same used for the roof vent) is included in the kit. This is used for the conduit coming down from the roof to the top of the service panel. Measure the distance from the panel to ¼" above or ¼" below the roof line. The electrical service can be above or below, depending on what you want. If you decide to run it above the roof line, drill a 1/16" hole through the edge of the roof that is directly above the panel. Bend the end of the conduit to a 90-degree elbow. Again, cut a ¼" square of the black paper and use as a flashing boot around the conduit penetrating the roof. Slide the

conduit through the hole in the roof and glue the end on top of the electrical panel. Slide the black flashing down to touch the roof shingles and glue in place.







A sheet of sidewalk sections is included in the kit, enough to create 16" of linear concrete walks with 4 quarter round sections.

The sidewalks are an easy detail to make the building settle down into the scene around it. You can model clean, newer sidewalks, or really beat them up with cracks, chipped edges, raised sections from upheaval, or completely chunked up sections. Just look around your neighborhood for inspiration. A little vegetation growing in the cracks never hurts either.

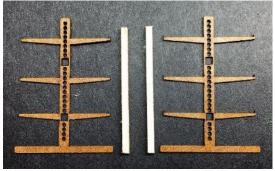
The Sidewalk



The Pipe Racks

The pipe rack is a cool little detail we are including in the kit. We have seen this type of rack used around plumbing and lumber yards, both inside a warehouse and outside in the yards for bulk material storage. This nice detail is available as a separate kit on our website.

98. There are two styles of racks; a single sided and a double sided. Both are assembled the same way. You can make them as long or as short as you want. The vertical uprights of the prototype racks are usually 8ft apart, so cut the 1/16" x 1/16" stripwood to multiples of 8 scale feet (8, 16, 24, etc.). A single section would require two uprights and two pieces of stripwood cut to 8ft HO scale. A double section would require three uprights and two pieces of stripwood cut to 16ft HO scale. The stripwood will fit through the two square holes in the uprights. A small amount of glue on each joint will be enough to hold this delicate structure together. The pipes on the racks are not included in the kit, but a variety of small diameter tubing or scale stripwood will complete the scene. Just cut them to 10ft and 20ft HO scale lengths and add them to the racks. Any leftover scraps of tubing or wood can be used as cutoffs or junk piles below the rack.







The model will be complete at this point. Add as many details as you would like.

We want to thank you for enjoying the building of **PALZER'S PLUMBING SUPPLY**. Please share your finished build by sending good quality pictures to info@MineMountModels.com and we will post them in the "Customer Build Gallery" section of our website. Also, checkout our other products by visiting

www.MineMountModels.com



Thank you, Ron & Michelle













