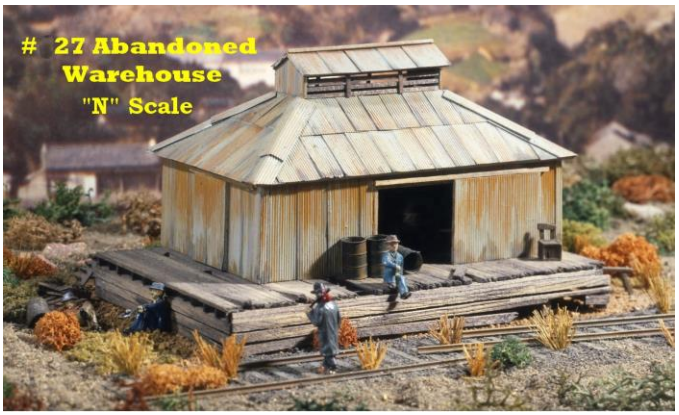
Campbell Scale Models



FREIGHT STORAGE SHED

Kit # 27, N Scale

The Freight Storage Shed is a small on-line business which is perfect for a branch or short line style of model railroad operation. However, it would work equally well as a line side structure for a larger mainline operation.

Obviously the structure has seen better days but it can be modeled either rundown, brand-new or anything in between. One thing is sure; the Freight Storage Shed will be a real standout on your layout.

Before beginning the Storage Shed examine the parts and familiarize yourself with their locations on the model. Read thru the instructions and try to visualize each step before starting any construction. The drawings are actual size to enable the modeler to use them as templates if necessary. In using any drawings as templates first check them against the parts. Sometimes changes in humidity or temperature will cause the paper and wood to shrink or swell, making the drawings slightly out of scale. If the parts do not fit exactly, work from the center, splitting the difference. A few of the wood parts are "stock" sizes and must be cut to fit as construction progresses. Remember to use the stock-length wood wisely. Do not discard any excess material after a part has been cut. Save all end-cuts and when cutting other parts use the shortest pieces whenever possible.

STEP 1: PAINTING AND STAINING THE WOOD PARTS

All wood parts should be stained or painted before construction begins since the glue will seal the wood and the paint will not penetrate at these joints.

A weathered stain is recommended for all of the wood parts in this kit to represent a weathered building. However, you can paint the wood if you wish to represent a newer structure. All of the wood parts may need to be rubbed lightly with fine steel wool before the first coat of paint or stain to help obtain a smooth finish then painted a second coat.

STEP 2: CUTTING OUT THE WALLS AND ROOFS

Cut out all of the wall and roof pieces from the cards along the heavy black outline using a sharp knife against a straight-edge guide. (For all cutting and trimming we recommend using X-acto #11 blades). Cut out all door and window openings in the walls. Save the door cutouts for use as the freight doors. Check the fit of the plastic windows. If necessary trim the openings for a perfect fit, but do not glue any of the parts in place at this time.

STEP 3: THE CORRUGATED ALUMINUM

#804	1 pc.	9/16" x 4-1/2"	Corrugated aluminum
#805	3 pcs.	13/16" x 6-1/2"	Corrugated aluminum

Examine the kit carefully and note that there are two different heights of corrugated aluminum provided for covering the cardstock wall and roof cards. These cards are noted as to the height of corrugation to be used.

Prototype corrugation comes in 26 inch widths so when overlapped they cover a 24 inch section. Cut all of the corrugated aluminum into scale 26 inch panels (about 3/16 inch wide), keeping the different heights separated.

The corrugated metal is easy to work with and will have a clean edge if it is cut with a very sharp knife. Use several light strokes as opposed to one firm stroke, we do not recommend cutting with scissors. If you prefer to lay the corrugation in just one sheet across the length of the wall or roof, this can be accomplished by gluing the strips of metal to the cardstock and trimming the edges as indicated in the following steps for corrugating the walls and roofs. However, the building will have much more character and realism if the corrugated metal is cut into scale width panels as indicated.

Prior to bonding the corrugation to the walls or roof consider spray painting the corrugation with SP Lettering Gray and then after cutting and bonding retouch the shiny edges. See Step 7 below.

For bonding the aluminum to the cardstock use either Wilhold's RC-56 (Decorator's) Glue or Walther's "Goo". (“Five Minute Epoxy” also works well.) Commercial white glues such as Elmer's or Blue Bird are not satisfactory for use with the aluminum.

STEP 4: CORRUGATING THE WALLS

A,B,C,D,E	Cardstock	Wall cards

On walls B and C it is necessary that the corrugation be glued in place to extend 1/16" x 3/32" past the vertical (side) edges of these two walls. The excess length will be folded and glued around the corners after the four walls are assembled later. Walls A and D are to be corrugated with the side edges flush. Glue the aluminum flush with the tops of all walls allowing the excess to extend at the bottom.

In corrugating the four walls, glue the appropriate sized aluminum to the cardstock, starting at one side edge and proceeding (horizontally) to the opposite, overlapping each panel vertically by about one or two corrugation "ribs". Completely cover all door and window openings. Corrugate ventilator wall E with the four foot aluminum. Glue these panels with enough overhang for the corrugation to be bent around the corners of the cardstock walls. With a single-edge razor slit the doors along the card "grain" to thin the appearance. Do not worry about "fuzz" on the back side as this will not be seen. Cover the freight doors with corrugation at this time also.

As each wall is completed, turn it face-down on a piece of waxed paper and weight it to prevent warping. When all of the walls are dry, (weighting them for a 24 hour period is recommended), clear all door and window openings. Recheck the fit of all plastic parts, trimming the cardstock walls if necessary for a perfect fit.

STEP 5: CORRUGATING THE ROOF

AA,BB,CC	Cardstock	Roof cards

The roofs are corrugated in basically the same manner as the walls. Begin by aligning and gluing the 13/16" wide panels flush with the top of the AA and BB roof cards allowing the excess on the AA cards to protrude at the bottom. Using a single-edge razor blade split the roof cards CC along the card "grain" lengthwise to thin the roof sections for a more prototypical width.

Now cover roof cards CC with the 9/16" corrugation and with the aluminum flush at the top and extending beyond the bottom edge. Also allow a 1/32" overhang on each side of the roof CC cards. Now as with the wall cards, set these cards aside weighted to dry. When these are thoroughly dry, cut the aluminum leaving a 1/32" overhang at the bottom edges of all roof cards.

STEP 6: THE WALL STIFFENERS

A5	3 pcs.	1/16 x 1/16 x 6-1/2 in.	Wall stiffener material

The inside wall stiffeners are to straighten and strengthen the cardstock walls. Turn the four wall sections face-down in front of you. On walls A and B measure in 3/64" from both sides and draw vertical lines the height of the walls at these locations. Cut four A5 vertical stiffeners 3/4" long each and glue in place to the inside edges of the lines.

Cut more A5 material to fit horizontally between the vertical braces as shown in the Front and Back Views. Glue these horizontal braces in place. Measure in 7/64" from both side edges of walls C and D and draw a verticals line at these locations. Using the Left and Right Views cut and glue the horizontal stiffeners between the marks flush with the top and bottom of the walls. Set the walls aside, weighted to dry flat.

STEP 7: PAINTING THE CORRUGATION

Floquil products have proven to be the best paint available for the aluminum material. Before painting give the corrugated walls and roof an even spray coat of Testor's Dullcote (the corrugation has a tendency to be slippery and the Dullcote will give it a little texture so the paint will hold). When the spray is dry, paint the walls and roofs with Floquil's S.P. Lettering Gray (RR130). The light gray color will give the metal an "oxidized" look and will serve as a good base coat if you choose to give your structure a rusted look. Wait until the paint is thoroughly dry and then lightly spray the pieces again with Dullcote. Let this dry, then if you wish the rusted effect, use Floquil's Model Railroad Weathering Kit. Using a "dry-brush" technique add Rust (RR73) paint to the panels, brushing up with single uneven strokes from bottom edges to about the center of each panel. Since the panels are overlapped, some dirt would have accumulated under the edges and overlap seams, therefore dry brush Grime (RR86) and Weathered Black (RR17) paint at these areas. Do not over stroke as this will cause the paint and spray to lift from the aluminum, leaving shiny streaks. Before the weathering colors have a chance to set up completely, use a thin wash of S.P. Lettering Gray, stroking over each panel lightly and carefully blending the colors, eliminating that blotchy look. For a heavily rusted panel consider Tuscan Red but apply lightly.

STEP 8: THE DOOR FRAME AND TRACKS

A6	1 pc.	1/32 x 3/64 x 5-1/2 in.	Door trim & track mat'l.

Lay walls A and B face-down on a flat surface in front of you. Cut sections of A6 door frame material to fit horizontally along the top of both door openings and glue in place. Cut four sections of A6 material to fit along the vertical side edges of both doors as shown in the drawings. Glue these to the inside edges of the door openings and set the two walls aside to dry.

Cut a section of A6 door track material 3/4" long for over door D and glue in place as shown in the Left View. Cut another door track 15/16" long from the remaining A6 material and glue in place to wall A as shown in the Front View.

STEP 9: PAINTING AND INSTALLING THE WINDOWS

A9	2 pcs.	Dark Gray Plastic	Windows

Paint the windows your trim color. When dry glue these in place in their proper locations. Cut the acetate in half and attach in place behind the windows.

STEP 10: ASSEMBLING THE WALLS

Assembly of the walls is a simple process. Glue walls C and D to the inside edges of walls A and B, making certain that the walls dry square. When dry, fold the excess corrugation around the .corners of the walls to hide the corner cardstock joints. Glue door A and D in place at this time, either closed or ajar as preferred.

STEP 11: THE ROOF VENTILATOR

A7	2 pcs.	1/16 x 3/16 x 15/16 in.	Ventilator material

Glue the two A7 ventilator sections between the wall E sections as shown in the View and Isometric Drawings. Be certain this assembly dries square.

STEP 12: ASSEMBLING THE ROOF AND VENTILATOR

A8	1 pc.	3/64 x 3/64 x 1-3/16 in.	Roof cap material

Test fit the four main roof sections together in their proper arrangement. Trim if necessary, and when satisfied with the fit glue the four roof sections together. Allow this assembly to dry thoroughly.

Glue the ventilator assembly on top of the roof and allow this to dry thoroughly. Butt the peak edges of the ventilator roof sections CC and tape them together at the seam. Glue the ventilator roof on the ventilator assembly. Glue the A8 cap strip in place in the seam between the roof CC sections.

Using left-over corrugation material cut strips 1/8" wide and bend in the middle to cover the seams where the AA-BB roof sections join. Cut the sections of corrugation to fit around the ventilator at top and the roof corners at the bottom as shown below in Diagram 1.

Do not glue this corrugation in place until it is painted as described in Step 7. When the paint is dry glue the corrugation in place over the seams.

STEP 13: THE ROOF FASCIA

A6	2 pcs.	1/32 x 3/64 x 5-1/2 in.	Fascia material

Using the A6 material cut and glue the fascia strips to the eaves of the roof card, under the aluminum overhang. Cut the longer pieces first, and glue them in place. Then cut the two shorter pieces to fit between the long sections and glue them in place.

Using the Right and Left Views cut the fascia for under the roof CC overhangs and glue in place as shown.

STEP 14: THE DOCK FLOOR AND JOISTS

A3	15 pcs.	1/32 x 1/16 x 1-11/16 in.	Dock joists
A4	1 pc.	3/64 x 1-11/16 x 2-21/32 in.	Deck material

Attach two strips of double sided “Removable” Scotch tape across the Plan View. Attach the A4 deck material groove-side-down onto the tape over its drawing counterpart.

Glue the fifteen joists in place, on edge, aligning them with the marks on the drawing, flush with both edges as shown. Leave this assembly in place on the drawing to dry.

STEP 15: FINISHING THE DOCK

Al	2 pcs	3/64 x 3/16 x 2-21/32”	Dock facing sections
A2	2 pcs.	3/64 x 3/16 x 1-19/32”	Dock facing sections
A5	1 pc.	1/16 x 1/16 x 6-1/2”	Dock support material

On the inside surface of both Al facing sections, measure in 3/64" from both sides and make a mark at the top. Cut two sections of A5 material 2-9/16" long each and glue in place to the Al sections flush with the top edges between the marks. Using the Foundation View as a guide, glue the four facing sections together making certain this assembly dries perfectly square.

Glue the facing unit to the A3 joists as shown in the Isometric View with the A5 supports on top and attached to the joists. Allow this to dry. Glue the corrugated shed assembly onto the dock assembly as shown in the Plan View. Allow this to dry.

STEP 16: THE STAIR ASSEMBLY

A3	1 pc.	1/32 x 1/16 x 2-21/32”	Stair material

Using Figure 1 as a guide cut two stair stringers from the A3 material. Lay the two stringers over Figure 1 and using the horizontal lines mark the locations of the three treads onto the stringers. Attach a piece of double sided scotch tape over Figure 2, and attach the two stringers to the tape over their drawing counterparts making certain both stringers are aligned with each other.

Cut three treads from the A3 material 3/16" long each. Glue the treads onto the inside of the stringers at the marks made earlier. Allow this assembly to dry thoroughly.

Carefully remove the stair assembly from the tape by running a single-edge razor blade between the tape and stairs. Glue the stair assembly in place as shown in the drawings.

STEP 17: COMPLETING THE FREIGHT STORAGE SHED

Touch up any areas where paint or stain has been disturbed by cutting, trimming or where just bare wood or metal shows. Your Freight Storage Shed is now complete. This structures' appearance will be greatly enhanced by the addition of barrels, oil drums, crates, maybe even an old pick-up truck.