

# 40' STEEL UNDERFRAME BOX CAR WOODEN SIDES, ENDS AND DOORS

## 6', 8', Single Door, Door and a Half, and Double Door

We have worked to produce kits that are less expensive and easily modified by you the S scale modeler to represent a large group of steam era box cars. **These kits are designed for modelers who are 14 years or older.**

You can obtain these as a basic body kit; that is to say you get a complete basic body kit less brake system, trucks, couplers, or decals. If needed, you can order needed detail parts from

We have become aware of the challenges that many S Scale modelers have these days locating detail parts, since hobby shops are disappearing across the country. However, we are also aware that many of you have a stash of parts, trucks and couplers. Therefore, we will not insist on selling you something which you may already have. We will supply GRANDT AB brakes, AMERICAN

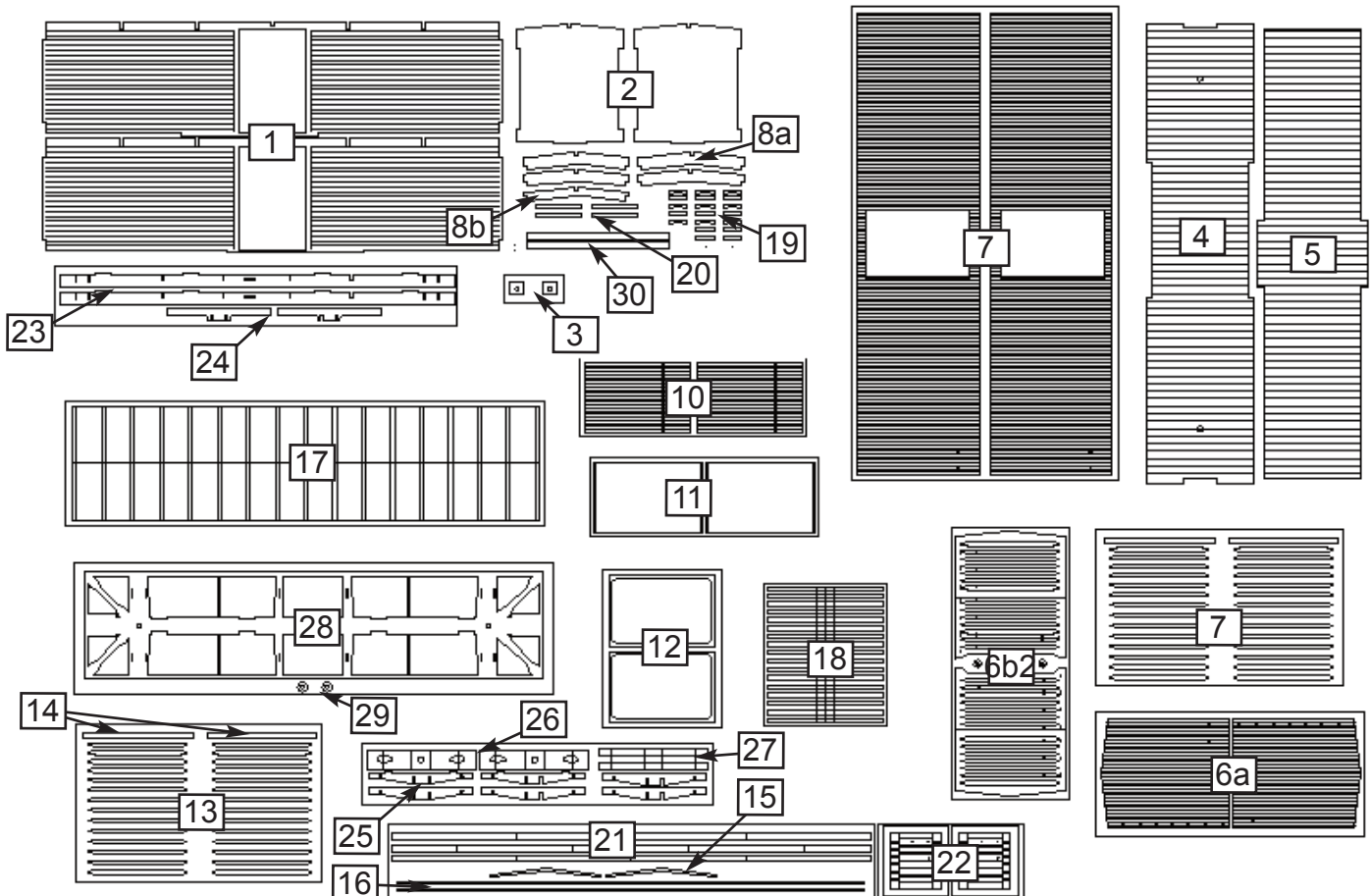
MODELS trucks, and KADEE 802 COUPLERS, if you need them, when you order them with your kit(s).

We suggest you contact Jerry Glow ([www.jerryglowdecals.com](http://www.jerryglowdecals.com)), if you do not have decals for your prototype or private railroad.

We have found the following items useful in building our kits.

#11 EXACTO knife with several new blades

- ALEENE'S TACKY GLUE
- Machinist Square
- NAPA Red Primer
- NAPA red auto body sanding pad
- Wire cutting pliers for forming grab irons
- Xuron clipper
- Red (Coarse) Sanding Stick
- Green (Medium) Sanding Stick



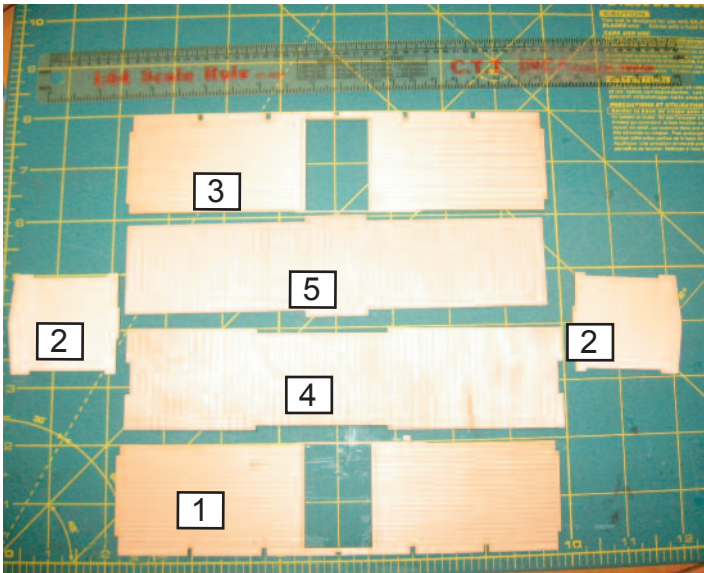
**The Supply Car, LLC**  
<http://thesupplycar.com>

## ASSEMBLY INSTRUCTIONS

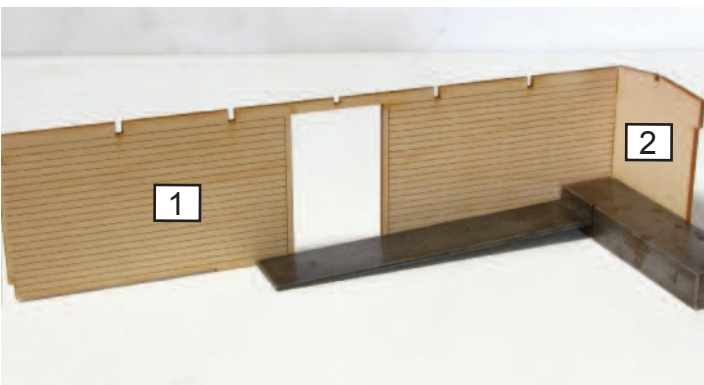
**Stage 1** – Start by building the body core.

Layout - – see IMAGE # 1

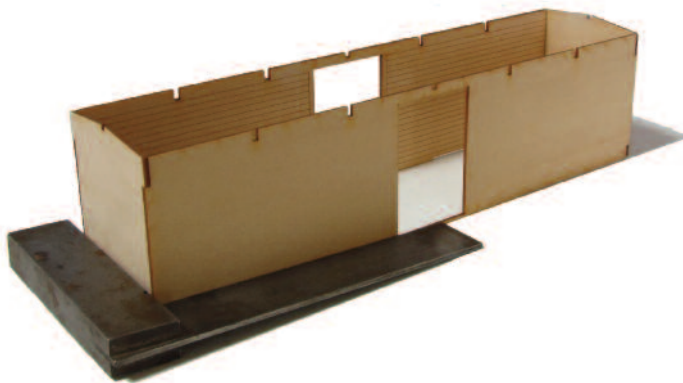
- a) Interior Ends(#2) - 2
- b) Interior sides(#1) - 2
- b) Underside floor(#3) - 1



Setting aside the interior floor **4** for the moment, dry fit the interior ends **2** to the interior sides **1**, then turn over the box you have formed and insert the underside floor **4** with 'boards' facing up, NOT facing inside, but outside. The notches on this floor only fit one way. When you turn this dry fit body over you should not see floor boards inside the car's interior. Now take the steel underframe base **X** and test fit it to the bottom of the car. You may find the underframe base is slightly wider than the underside floor, and if so just add shim stock to slightly widen the floor pieces.

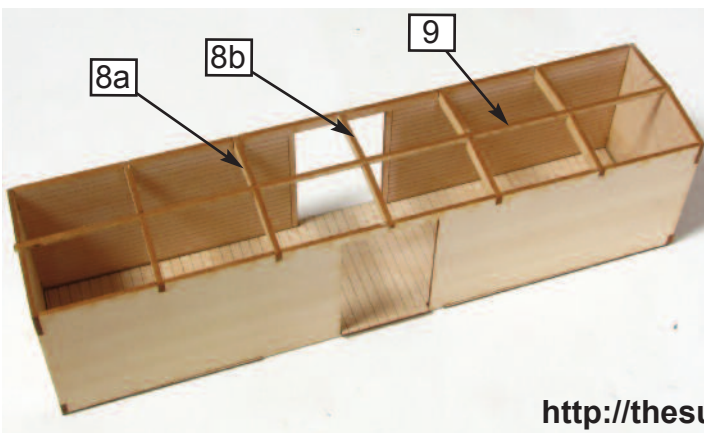


Using ALEENE'S TACKY GLUE, glue one end and side together, use a square and set aside. Repeat the process with the other side and end. Allow both 4-5 minutes to dry, then glue the two halves together checking for square



After another 4-5 minutes turn the assembled interior walls upside down and glue in the subfloor. Now glue in the Roof Support Ribs **8** and Roof Center Beam **9**, rib **8b** goes over the door opening.

Once glue is applied check with square again and set aside for at least 30 minutes.



## Stage 2 – Adding to the core

Using ALEENE'S, glue the Interior Floor **5** to the inside of the body core. Place some weights on it to hold it for about 30 minutes, until dry.

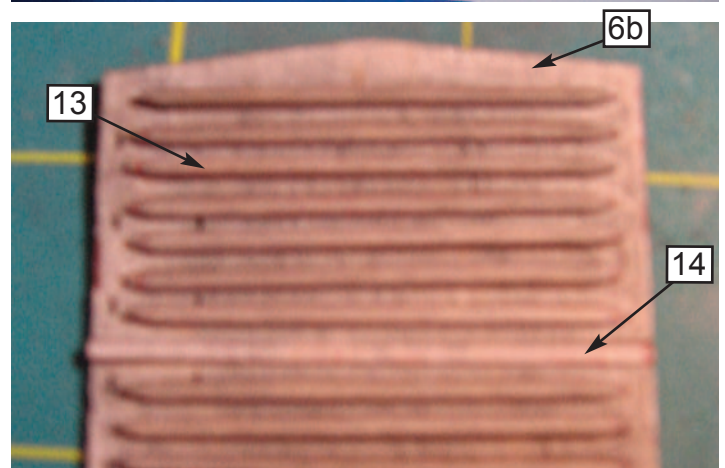
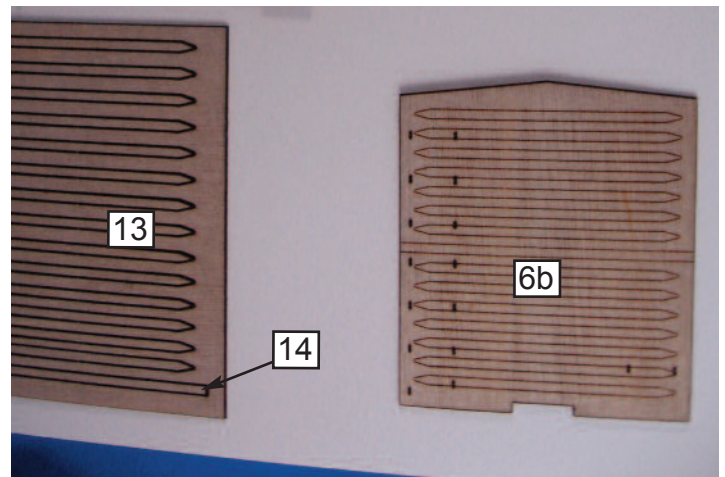
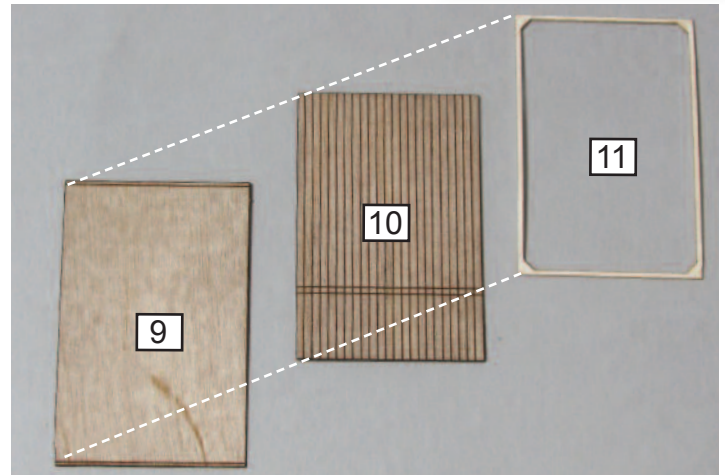
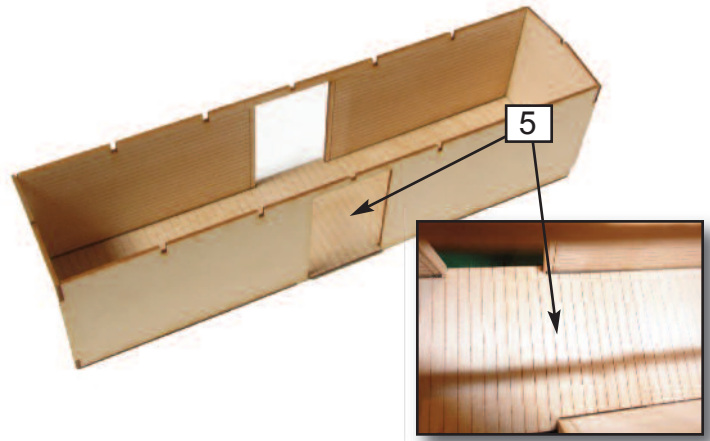
While you're waiting for the floor to dry, let's build up the doors **17**. There are three components to the wood doors; the Back Sheet, Front Sheet, and Trim. They are all self-stick and you need only to peel off the white covers, align both parts, and press together. You will note that the back sheet is taller than the front sheet. Align the bottom edge of the front sheet and the back sheet. The back sheet will stand a bit proud of the front. This will tuck under the Door Guide piece later. See photos.

Test fit the exterior sides **6** and one exterior end **7**. The end should overlap both sides.

*NOTE:* When you attach the sides and ends, you will align the top edge with the top edge of the core.

If you have a kit with "Steel Ends" **6b** you will start with forming the individual ribs **13**. Each piece needs to be lightly sanded to a trapezoidal shape, not to a half round shape. The top of the rib should be almost flat, and only slightly rounded over to the sides. The sides slope down to the base, and are mostly flat as well. The ends of each rib are tapered to a rounded tip. Each rib is mounted to the end using the etched outlines as a guide. Here's a good tip: if you're using an end ladder instead of individual grab irons, then take a clothespin and a good straight piece of stock. Clip the stock to the right edge of the end, just outside of the laser marks. Abut the end of the ribs against this stock as you glue them, and when finished, all the right edges are aligned vertically. When you mount the ladder, any variation in the final length of your ribs will be covered by the ladder. You can use a bit of putty around the joint between each rib and the end to round off this seam as well.

The kits with "Wood Ends" **6a** are simple peel and stick pieces aligned as per above.



You will also see the application of Ye Olde Huff 'n Puff white metal ends in some the photos. There are a lot of compatible parts out there to help you individualize and modify these kits. Feel free to kitbash to your heart's content, and yes, send us pictures!

Use the two sides 7 to make sure the end 6 is centered to avoid leaving the exterior end off center. Attach the end assembly 6 to the core body by first peeling off the white backing. Then align the end with the top of the core body, SLOWLY RUBBING the top of the end, across the part. This will attach the end to the core. Make sure that the top edge is even with none of the core body showing, and do not have any of the end panel above the end of the core body.

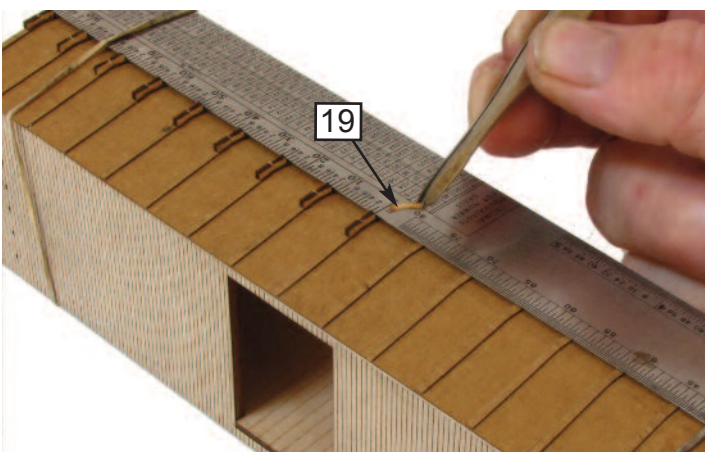
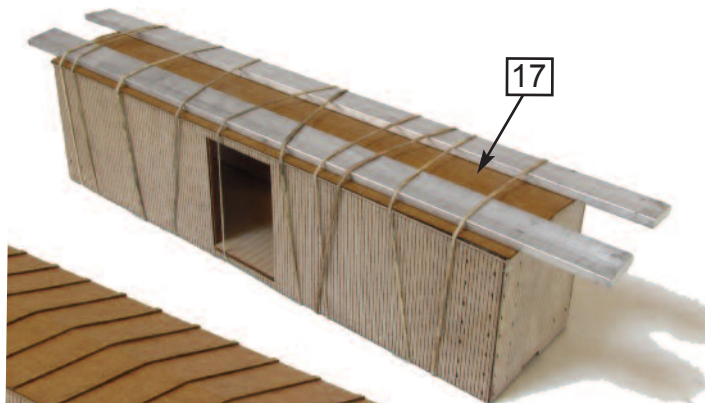
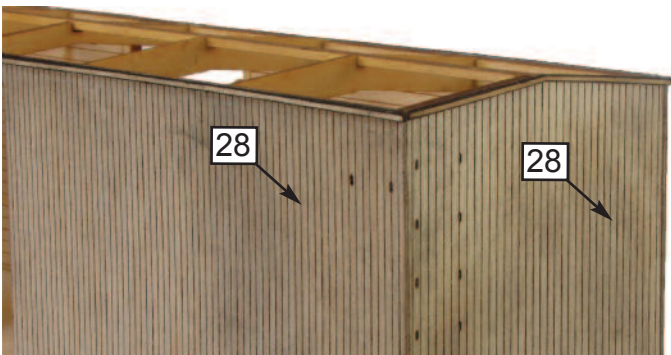
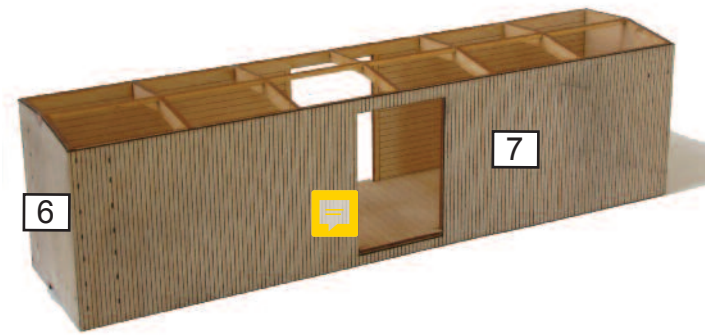
At this point repeat process with both sides and then the remaining end.

Now you should remove the fascia strips for each end of the body. Notice that they also have a sticky backing covered by white material. Peel off the back on one, align it carefully along top edge of car end and press it home. Repeat with opposite end. Then remove the side fascia from the sheet. Notice that they are longer than the car sides and they overlap the end fascia. Decide which end to cut to make the corners even. Add the doors and the door guides and the basic sides and ends are finished.

You should decide how much weight you want to install within the body. We used self adhering lead weights to bring the model up to 5.5 oz. We used a scale to weigh the remaining parts including trucks, trucks screws, the roof material and under-frame materials which allowed us to determine how much weight to use.

### Stage 3 – Let's finish.

The roof 17 can now be glued in place. Use several rubber bands and some plastic or wood strips laid lengthways to hold the roof flat to the carlines and body as the glue dried. Make sure that the etched lines for the roof ribs are on the top. Now peel and stick the ribs 18 in place. SEE PHOTOS. Find the Roofwalk Supports 19 and glue one to each rib. The center of the ribs are scribed to help you align the, down the centerline of the car.



Also add the 4 Roofwalk Lateral Supports **20**. Add the roofwalk boards **21** and the peel and stick Roofwalk Lateral pieces **22**, and the roof is complete.

Flip the body over and let's finish the underside. Gather up the Underside Frame Group parts including the two Center Sills, Body Bolsters and Truck Mount, the 2 styles of Cross Supports. You'll see in a few of the photos, the use of a white metal bolster/coupler pocket casting. Again feel free to substitute your own parts.

Take the 2 center sills **23** with the channel facing outboard, and slip 2 of the body bolster parts **25** into the pre-cut slots. Take some Aleene's on a toothpick and put a drop or two at each joint. Repeat with each of the remaining bolsters and cross supports **24** and the remaining two **25**. Now run a thin bead of Aleene's down each piece and flip the assembly over and place it on your floor. Secure with a couple rubber bands and allow to dry. Glue the two truck screw blocks **3** into the hollows, and press on the two small washers **29** after peeling off the paper backing.

There you have it! Add grab irons, brake detail, tack boards and any other details to replicate your favorite prototype, and trucks and couplers to suit. She's ready for the paint shop! Please send us pictures...and always, have fun!

