

Begin construction by making up the following sub-assemblies:

**UNDERFRAME**

Temporarily pin the sub-floors to the inner roof as shown in fig. 1. Drill the 1/32" holes in the bolsters. Cement 1/16" x 1/8" side sills, 3/64" x 3/16" center strip, bolsters and 3/64" see bars to sub-floors. Trim center sill as shown on the full size template, cut the brake lever slots and cement the 3/64" angles in place. Cut the cross-members to length and cement center sill to underframes as in fig. 2. Remove the underframe from the roof and cement the floor boards in place as shown in fig. 3. Cement the end blocks and inner roof to underframe and set the whole assembly aside.

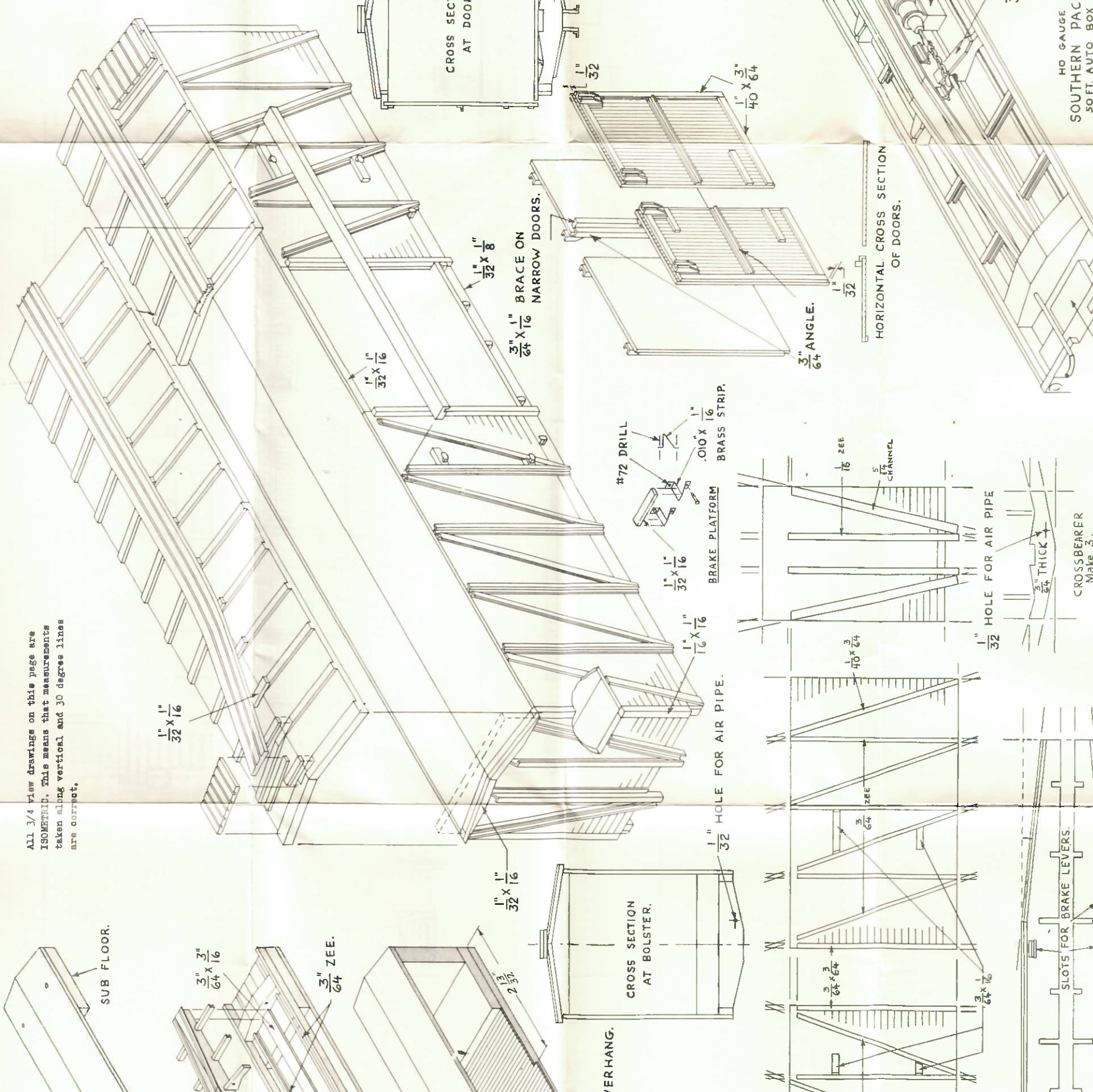
**SIDES, ENDS and DOORS**

Use the template to locate the bracing. Cement the vertical members first. Lines on the drawing indicate cementing surfaces. The door drawings are self explanatory. Use special care in locating the top and bottom cross bracing.

**WHEEL ASSEMBLY**

Cement sides to body. Cement filler strips in door opening and attach door track. Attach end sheathing and corner posts. Trim tops of ends flush with inner roof. Cement center section of outer roof to inner roof. Note that the edges of outer roofs are cut to the proper angle. Don't get them on backward. Attach the end sections of the outer roof. Cement the fascia strips under the ends of the outer roof. The outer roof ends, which were made slightly oversize, may now be trimmed flush with the fascias.

Roof details and location of the various hardware items are clearly shown on the drawings. Fit the doors after the rest of the car is painted and decals applied. Drill pilot holes for the spike door guides. Because of the wide variety of HO couplers in use, choice of these is left to the builder.



Stripwood and structural shapes are color coded as follows:

1/40" x 3/64" .RED	3/64" x 1/16" .YELLOW
3/64" x 3/64" . "	3/64" x 3/16" . "
3/64" Angle . . . . . "	
3/64" Zee . . . . . "	1/32" x 3/32" .GREEN
	1/16" x 1/16" . "
	1/32" x 1/16" .BLUE
	1/32" x 1/8" . "
	1/16" x 1/8" .BLACK
	1/16" Zee . . . . . "

Use 1/32" wire for brake staff and main air pipe; 1/64" wire for brake rods.

Make brake levers from .010 x 1/16" brass strip.

5" / 32 THICK.

1" x 3" / 32

HO GAUGE  
SOUTHERN PACIFIC  
SOFT. AUTO BOX CAR

A QUALITY HO KIT

