

GONDOLA LUMBER LOAD

A cheap load from scraps for an Athearn 50' gon.

What do you do when you have a project and there's a lot of wood off-cuts left over?

The answer is simple: you take the off-cuts and build lumber loads. I'll show you how I built a load for a gon. The idea is to build a load that looks interesting and is easy and robust to handle. **Figure 1** is the resulting load.



Figure 1

Figure 2 shows the off-cuts from an Espee snowshed project that I'm building at the moment. These are the sulfur ends of 12" fire lighters. The fire lighters are about 3mm X 3.5 mm in thickness and 12" long, which scales to about 10"X12" X 87' in HO, the right thickness for a load. As you can see, the pile is big!



Figure 2

I rinsed the ends clean of the remaining sulfur, leaving only the pink residue from the coloring to represent treatment of some kind. This pink coloring is of moot value if the load is going into a gondola as the ends are not visible above the rim of the car.

I selected several off-cuts, about 25mm (1") in length and laid them in the bottom of the car to see how many I'd need to fill the floor. Once I had figured that out, I took away 2...



Figure 3

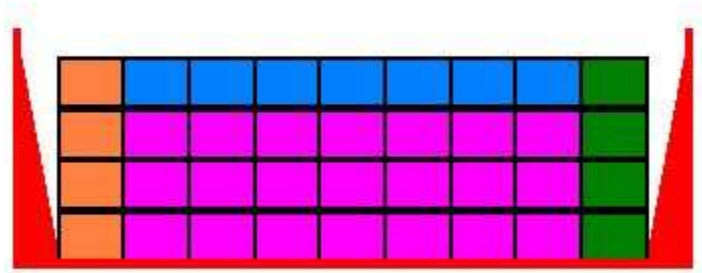
...and glued the rest together.



Figure 4

My gon needed 9 to fill the floor, so I glued 7 of them together with white wood glue. Similarly, the load will be stacked 4 rows high to be level with the top of the gon. Again I took 1 row away from the reckoning. To fill a gon, I'd need 4 rows x 9 in a row = 36 lengths of lumber. Those of you who know me will know that I am miserly by nature and

I wasn't going to toss away 36 strips of wood that could go on another project. Our 3 rows x 7 in a row gave us 21 pieces of off-cut glued as per the photo above.



Cross-section of gon wood load

Figure 5

I was liberal with the glue on the sides, but took care to keep both ends relatively glue free. I made a point of keeping the stained sides together and more-or-less in line. The result was that the other end was very uneven. This is not a problem as the chances that mill would've cut all the lengths exactly the same is extremely remote.

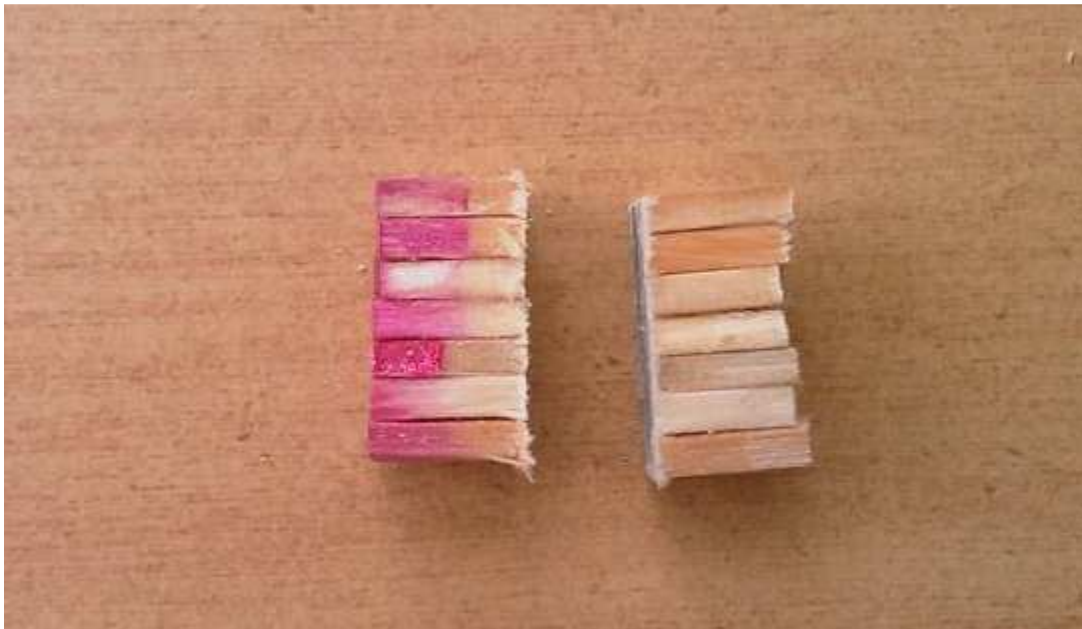


Figure 6

Once the 21 piece block had dried, I cut the block in half across the width and sand the cuts to get rid of the debris. The cut ends would be facing towards the middle of my load and the pink and jagged ends would be the outside- pretty much as you see it now. I now have two blocks which are 1 row too low and 2 rows too narrow for the gon. The

remaining “skin” will be made up of lumber that has been cut to 166mm (6.5”) long, 2mm shorter than the inner length of the Athearn 50’ gon which I chose for the project.



Figure 7

I selected 15 strips of wood for the skin. I made the mistake of choosing the off-cut lengths from my snow shed project which had been discarded due to the fact that they weren't straight or otherwise damaged. This bent lumber (in **figure 7**) was extremely difficult to glue and I ended up gluing 1 length at a time; a very time consuming effort.

Luckily this paid off in the end in that the load was square when it had dried- talk about dumb luck! Anyway, I cut the lumber to the aforementioned 166mm and proceeded to glue a row of 7 (for the top) and two rows of 4 (for the sides) together (In the diagram in **figure 5** they're represented by the orange, green and blue rows).

Unfortunately, my luck with the pink ends ran out at this stage; no matter. Accuracy and squareness is more important; there's nothing an airbrush couldn't fix. You can save time by not rushing the project at this point. To assist with the strengthening, I also added a brace underneath, across the rows more or less in the center. Take care to make sure that the vertical braces on the two rows of 4 won't interfere with the horizontal brace on the row of 7. Make sure that the lumber is glued tightly to each other. If not, light will shine through and reveal the empty cavern inside.



Figure 8

Once the 3 rows had dried, I glued the skins to the two blocks of 21 that I already had. I started by gluing the side rows. I selected which side of the block was top and lightly sanded the bottom level.

I turned the block upside down and proceeded to glue the top and one side to it, being careful to make sure that they were square and vertical. I have a small sheet of glass that has a flat surface and this comes in handy at finding a smooth flat surface for just such work.

I also test fitted the second side and sanded it where necessary to make sure it had a good fit. After the two rows had dried, I added the side row. I left the whole lot to dry for 24 hours. I now had a load of lumber which did not have an inner core.



Figure 9

In figure 9, I test fitted my load and found it fit perfectly. A bit of judicious sanding may be necessary if the load doesn't fit in. I intend to add some weight to my load and I'll glue pieces of off-cut lead and large nuts to the empty space on the underside of the load at some point.

I removed the load and gently scraped it with my saw blade to get rid of any unsightly burrs that were standing up and any visible traces of glue. The final step in getting the load ready for shipping is to wind several turns of cotton around the lumber and to glue it using superglue or wood glue to represent the batten material. I decided to put 4 rows of batten on the lumber, spaced with the eye as evenly apart as I could get it.



Figure10

Conclusion:

I would be hesitant to make this load for a larger gon. I would rather consider putting two loads of 30' in a 65' mill gon than one long 65' load of lumber. A mill gon is far more suited for a large steel beam of 65' or even a load of pipes.

I didn't want to weather the lumber any further than its raw state so I left it as-is.

Another way of securing the load would be to use 4 rows X 8 in a row and to fasten it down with a wooden frame similar to that used on flat car lumber loads. As soon as the next load is done, I'll show you how to put this load onto a flatcar.

Cost of project:

This is the best part of the project. It cost me

Nothing

I had everything I used in the scrap box.