



The INVENTIONERS STOW-OR-GO TABLE

THE TEN POUND HOME PRACTICE TABLE FOR FLL TEAMS INSTRUCTIONS

Materials:

Quantity	Product	
1	1.5x2x8 Foam Insulation (pink)	\$11.36
1	1 1/2 x4x8 Sheet Rigid Foam Insulation Board	\$23.45
4 ft	duct tape	\$.50
4 (1 pkg)	3" corner braces	\$ 3.97
8	1" drywall screws	\$.90
24	2" drywall screws	\$ 5.94
1 tube	Insulation adhesive	\$ 3.44
1 roll	Black contact paper (or black duct tape)	\$ 6.48
	Total for Materials:	\$56.04

2009 prices

Tools Needed:

Utility Knife (adult use only)
4 ft to 8 ft straight edge
Tape Measure
Ruler

Caulking Gun
Screw driver (preferably powered)
Scissors
Large working area

Step-by-Step Instructions:

Please refer to Photos Page as you build your table

Best tip: Check with your local Home Depot to see if they will cut the foam pieces for you. You can offer to use them as an in-kind sponsor – while you are mentioning sponsorship, ask for a materials donation!

- For pink foam insulation - measure 3 1/2 inches and using utility knife (adults only!) and straight edge cut 3 8-ft pieces of foam (finished pieces will be 8 ft x 3 1/2 in.) (or use a sharp electric knife or band saw)
- Cut one of these 8 ft pieces into two 45 inch long pieces (finished pieces will be 45 in. x 3 1/2 in.)
- Apply adhesive to flattest 1 1/2" side of one of the remaining 8 ft pink foam pieces and adhere it to the 8 ft side of the rigid foam board with the 1 1/2" edge in line with the outside edge of the rigid foam. Repeat for parallel side.
- Apply adhesive to flattest 1 1/2" side of 45" piece of pink foam and place between the two 8 ft pieces of foam on one end of the rigid board. Keep all these side pieces perpendicular to the rigid foam board. Repeat for other end of rigid board.
- Put rigid foam board on edge and screw in eight 2" drywall screws per side piece from under the board (see diagram) and four screws along the 45" end pieces. Place 2 drywall screws per 45" side piece through 8 ft side pieces – see diagram
- Allow adhesive to dry 15 –20 minutes.
- Using 1" drywall screws, attach corner braces to all outside corners.
- Find center of rigid board at 4 ft mark. Using utility knife, score 8 ft board in half from the top side, leaving the foil covering intact on bottom, then cut completely through 8 ft x 3 1/2 in. side pieces at same point. Bend table back to break the score lines. Table will fold in half with bottoms together. Reinforce by adding 4 ft strip of duct tape to this "hinge".
- Using black contact paper (or duct tape), cover pink sides – important: **do not wrap the contact paper or black duct tape around the ends of the pink sides at the hinge** – the table won't come together – see photo page – "Top View of Fold" to see what the side pieces should look like at the hinge.
- Voila – a lightweight, fairly durable (but handle carefully – it's still foam!), "stowable", portable, FLL competition table!!
- Contact us – The Inventioners – at TheInventioners@yahoo.com to tell us you used our design and let us know how it works for you.

The logo for 'The INVENTIONEERS STOW-OR-GO TABLE' is set against a red rectangular background. The word 'The' is in a cursive font, while 'INVENTIONEERS' is in a bold, blocky font with various mechanical icons (a lightbulb, a pencil, a gear, a globe, and a magnifying glass) integrated into the letters. Below it, 'STOW-OR-GO TABLE' is written in a large, bold, italicized font with a yellow and black outline.

THE TEN POUND HOME PRACTICE TABLE FOR FLL TEAMS

ADDITIONAL INSTRUCTIONS

More tips from the Inventionees

■ We still have the first STOW-or-GO table we built over 2 years ago and it is still in good shape with heavy use and being dragged all around the country! Leaning on the table with your hand will not cause any problems if the table is up on saw horses or a table. If the table is on the floor, heavy leaning with hands or knees might cause indentations. These are not as much of an obstacle as bumps would be. Remember, plywood tables will have knots and irregularities that might affect your robot at tournaments - the team should try to design a robot that will not be affected by minor table surface differences!

■ The STOW-or-GO table was designed primarily for teams that have space issues and must take the table down in between meetings or teams that will be meeting at different locations. If you feel your use will be heavy (not just normal take down and set up but travel and rough handling), let us know and we can give you some tips for the heavy-use table.

■ The only warning to speak of is that kneeling or leaning heavily on the table top (see above), or dropping sharp objects on it with force may create pock marks which we find are easily fixed with a piece of duct tape. As far as recommendations go, we encourage people to approach their local Home Depot store to see if they will cut the foam walls (including cutting the 8 foot sides in half). Our Home Depot (Londonderry, NH) contact said he was going to use a band saw. If Home Depot cuts the foam wall pieces, the only job left that requires a utility knife is the scoring of the rigid foam sheet for folding.

■ The other thing to note is when applying the contact paper (you can also use black duct tape, though it is pretty thick) to the walls, **don't fold it into the split in the walls on the long sides** - the table won't open all the way flat. We put the contact paper on with the table open and use one continuous piece of contact paper on the long sides. Then we slice the paper at the split so there isn't any extra paper to fold in. We finish off any **outside** corners like wrapping a present.

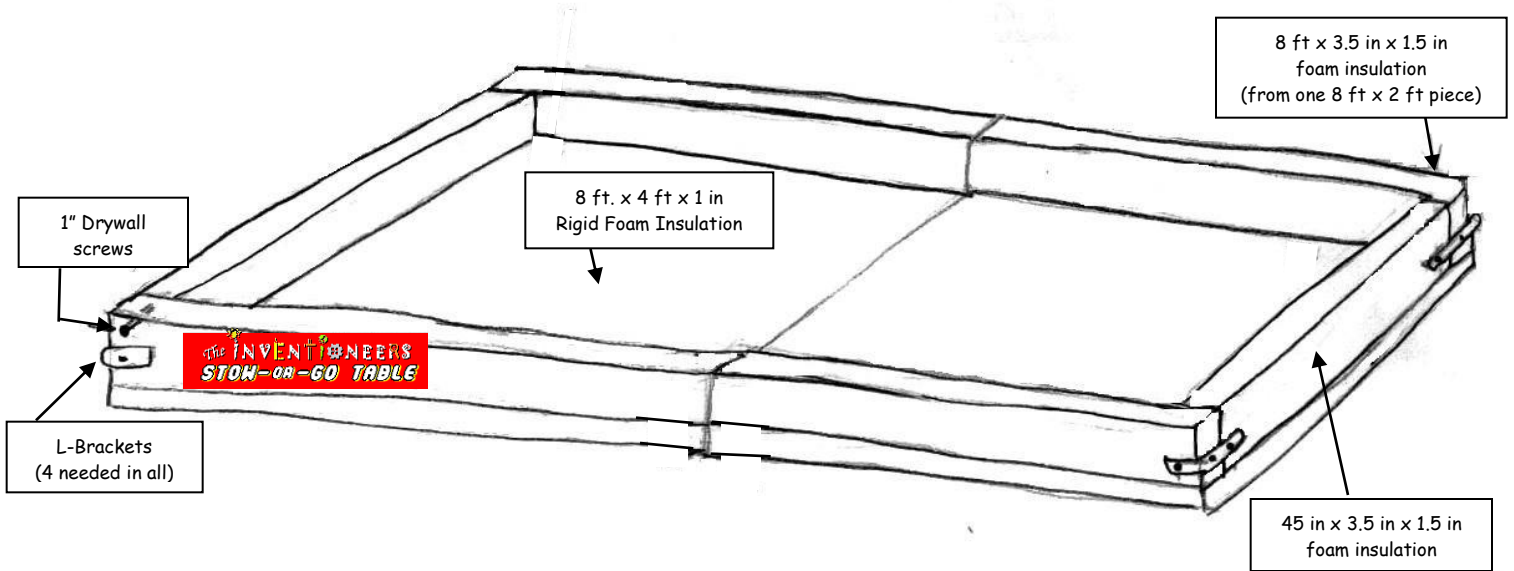
■ Please refer to the Photos page while you are building your table.

■ When setting up the table for first use after building or storage, just make sure that the two halves line up properly so they mesh at the split so there is no ridge in the middle of the table. Also, no smoking should be allowed around the table.

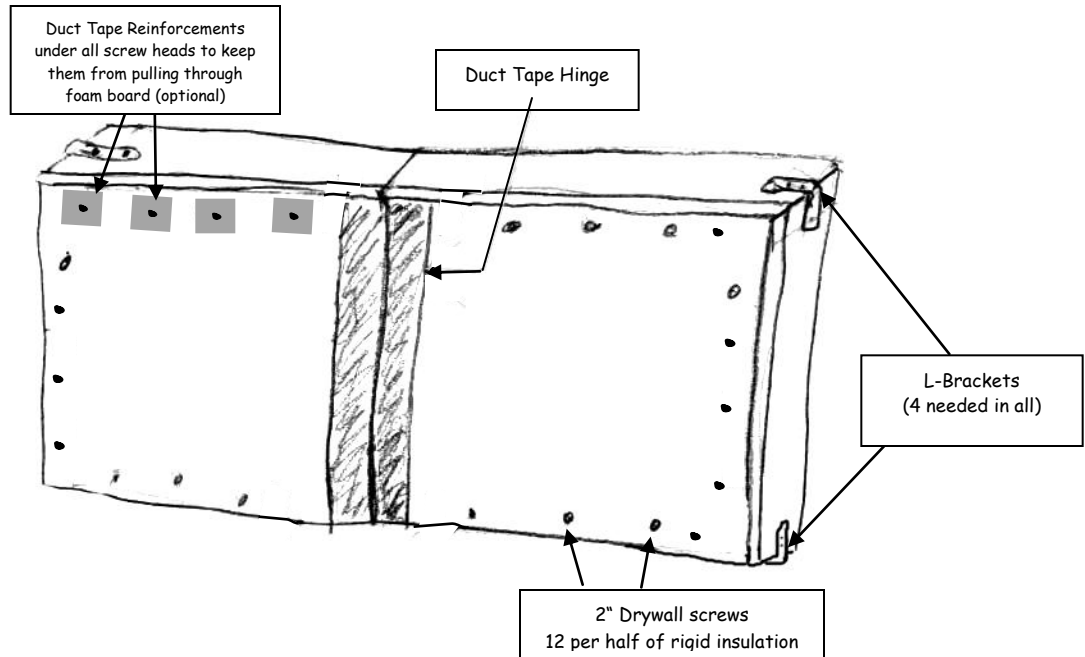
■ We are so happy to share our design which we have tested for over 2 years. We only ask that you credit our team, The Inventionees, to anyone who asks about your table.

The INVENTIONEERS STOW-OR-GO TABLE

TOP VIEW



BOTTOM VIEW



The INVENTIONEERS STOW-OR-GO TABLE



Building the STOW-or-GO measuring top for scoring



Measuring to cut foam side pieces



Finished table- top view



The finished table- bottom view



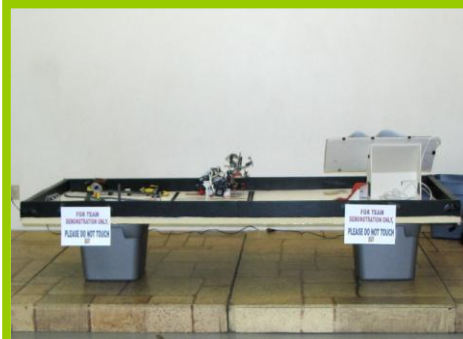
The finished table- top view of fold



The finished table- bottom view of fold



At the ABCs of FLL Workshop 8/26/09



At SEE Science Center



At Leach Library, Londonderry



With Scott Evans,
FIRST Global Game Designer



With Nancy Lane and Dana Chism,
FIRST Place Managers



At Parenting NH Summer Camp Expo