Make Your Very Own Stay Puft Marshmallow Stand

Say hello to the Stay Puft Marshmallow Stand . . .
Featuring the one and only "Platform Puft" !!!

— Introducing the Stay Marshmallow Stand —

Base and Marshmallow "Platform Puft" devised by JB Nisley

This stand was Inspired by Gary Hotson's Indoor Model Weight Stand featured in the FEBRUARY 2022 CASEY'S (KC'S) Free Flight BLOG Post. (The above link will take you to Gary's stand for a closer look.)

Outlined here is what I think are fairly easy directions to make a Stay Puft Marshmallow Stand for yourself, and while you're at it, go ahead and make a few extras for your fellow Aeromodellers! :)

Keep in mind that you can personalize your stand any way you want or keep it easy to build & simple—making it take less time to make.

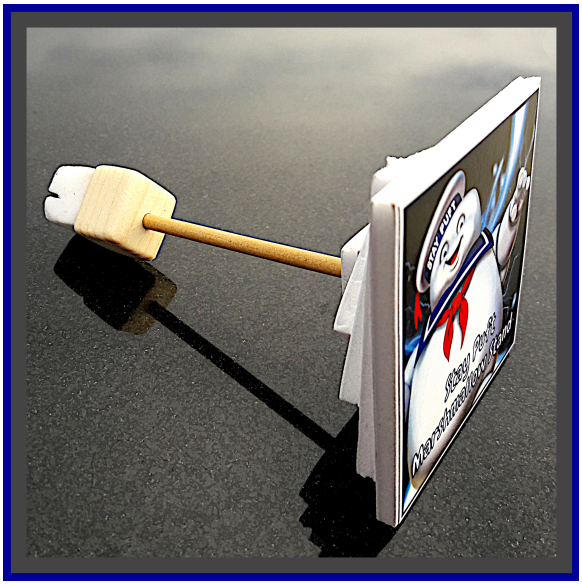
There's a certain amount of inherent elegance in the simplicity of Gary's Indoor Model Weight Stand. Architect Louis Sullivan's (1856-1924) famous axiom, "form ever follows function," became the touchstone for many architects and engineers and it certainly applies here. Gary's "no-nonsense design of his weight stand certainly has its place with many aeromodellers today, however, if you enjoy a touch of whimsy, then the **"Stay Puft"** approach may be an option for you. **;-)**

The purpose of this stand is to hold a light weight indoor model (or parts there of) safely while weighing it on a Digital Kitchen Gram Scale. As Gary says: "Getting a handle on the weights is important."

Let's start by focusing on the base. It can be constructed out of balsa or alternatively—a good quality 3/16" Foam Core Board available from a variety of sources. Buying cheap, poor quality foam core board will only lead to problems later on in the author's opinion. Walmart carries an excellent product: Elmer's Acid-Free Foam Board, 20" x 30" x 3/16". Online it's a 2 pack, in-store you can by 1 sheet. You'll have plenty.

The stand's light weight base is built up by progressively gluing squares sized at 3", 2-1/2", 2", 1-1/2" and 1", then drilling a hole.

If you haven't already, be sure to take the time and $ to invest in a Fiskars 18" x 24" cutting Mat. For my tool box I absolutely love my WorkLion 9" x 12" Cutting Mat. (You absolutely, simply can't go wrong!)



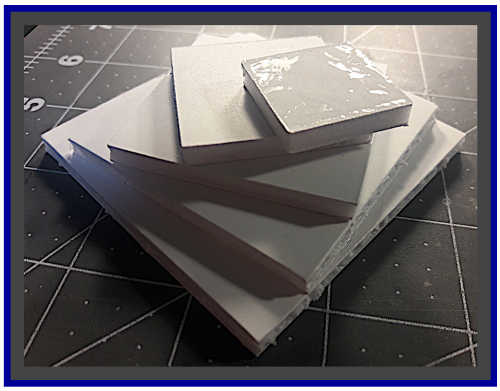
Pictured above is the way the underside of the base should look when the stand Is completed if you opt to go with the image of the Stay Puft guy. The photo of him shown here will print just under 3" which is just the right size. :)

See the March 2022 CASEY'S (KC'S) Free Flight BLOG Post to access an 8 x 11 PDF file to print six images on one page or print this page for just one. Casey's (KC's) Free Flight BLOG can be found on the KCFreeFlight.org website.

Start the construction of the stand's base by cutting the foam core board into strips using the widths of the squares indicated at the left. Using a straight edge such as an 18" long metal ruler and a new #11 Exacto blade or a #3 Scalpel Knife Handle with #11 Surgical Blade, begin cutting the strips using the cutting mat's built-in inch grid to line up the cuts with the straight edge ruler. This will greatly aid in making the cutting of the strips and ultimately the squares much more easy to complete and also way more accurate. Pay close attention to accurate measurements. This greater accuracy will make all the difference in producing a nicer outcome. Also—cutting long strips allows the ability to make additional squares to make additional bases. Cutting squares for six bases will not take you that much extra time as compared to making just one. There will also inevitably be miss-cuts and uneven cut lines so this will conveniently serve as a safety net to allow you to set those compromised ones aside. Next, cut the 90˚cross cuts again by carefully lining up the grid lines on the cutting mat.

Foam Core Board believe-it-or-not can be sanded much like you can with Balsa Wood. Start with 220 grit sandpaper using a sanding block, then finish with 400 grit. Sanding Sticks actually work better in my opinion. Look for them at your local hobby shop or click this link.

— NOW COMES THE FUN PART !!! ;D



Initially Nisley intended for the squares to be glued like a traditional stairway— all lined up squarely at 90º angles. After spilling them, he realized that the squares could be rotated like a spiral staircase.

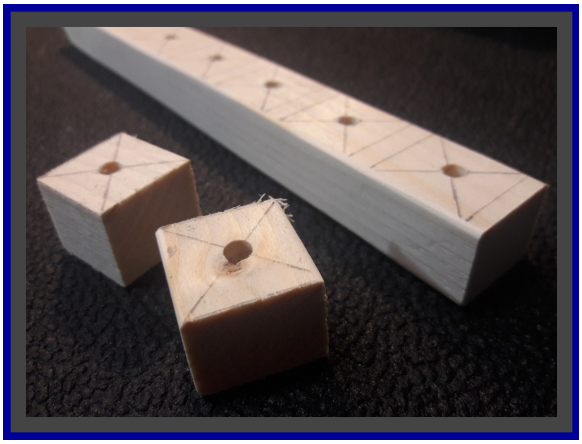
Voilà! — A New Stay Puft Spiral Staircase Base was born !!! — Nisley chose this option, but it's entirely up to you.

Actually the squares are not that hard to line up in a spiral. With white or Clear Elmer's Glue, start by gluing the largest two squares. Spread the glue with your finger evenly but sparingly (paper thin) over the ***entire surface*** (even the edges) of the 2-1/2"square. (See photo above for an idea of the thickness.) Place it carefully glue side down on the 3" square roughly at 22.5º (you can eyeball it) with it touching the outside edges of the larger 3" one. If the glue was applied correctly, it should be wet enough for you to be able to slide the square around a bit to give you enough time to visually align it properly. (Trust me!) Now apply even pressure with your fingertips. (Don't use clamps.) Continue applying **even** pressure for 20 to 30 seconds making sure it's aligned. Excess glue can be immediately wiped away with a paint brush dipped in water—but if you do—absorb the water away quickly with a tissue. Continue adding other squares in this manor until you have a miniature spiral staircase! With the last two layers, try ahead of time to think about having the top 1" square line up visually at 90º with the bottom 3" square. It's nice if you can, but it isn't end of the world if you can't.

After showing this to Gary Hodson—he said I should tell folks that I mathematically planned to make this happen with a program ran on a super computer that I programmed . . . *but the truth is—I didn't.* :(

For a FUN DISTRACTION—Check This Web Page Out !!!

STAY PUFT: How Did This Movie Monster Come To Life? (It's a good read.)



Now it's time to build what I call the mast and crow's nest topped with a marshmallow. The mast I used is is a 3/16" dowel but an unsharpened pencil will work just fine.

I drilled my 3/16" hole in a 7/8" x 7/8" x 3/4" piece of pine with a drill press, but you can also just CA the perfectly flat end of the pencil to a square piece of 1/4" or 3/8" balsa.

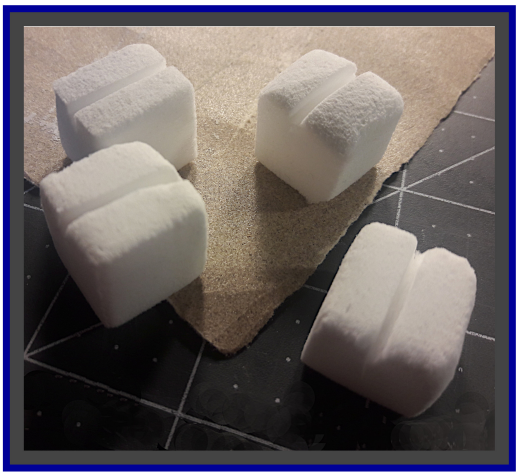
Gary Hodson's stand uses a plastic tube to hold the dowel. If you go this route and find your mast is a bit too loose, wrap Scotch tape around the base of the dowel or pencil to lessen the gap for a tighter fit.

Gary's base is optimized for the platform size of his scale. Feel free to enlarge the dimensions of your base as needed to fit yours.

Notice that Gary has a different approach to the foam holder. Use what works for you . . .

Next is what I call the Marshmallow Foam Wedge Holder The Absolute Fluffiest Crowning Jewel !!!

You can use any number of sources of foam but I like the generic versions of the Mr. Clean Magic Erasers because the finished sanded sponge looks very much like a real marshmallow. Generic knock offs begin life square and flat sided which is what you want—nothing fancy is needed here. Here's one you can buy called an All-Purpose Easy Eraser Sponge.



Finally a large Snap Bladed Utility knife is a perfect way to make cuts in the foam because you can extend the blade to the actual thickness you need. You don't have to be very precise when cutting the cube shapes, but they should roughly fit their intended platform's size. These guys are rarely perfect. This you'll find out—makes the task easier.

It's a good idea to plan on carving out a bunch of these cubes. My platform for them is 7/8" so I made mine 3/4." After a while you'll get better at slicing foam. You'll then be able to get picky . . . . perhaps picking out the pessimistic ones to arrive at your preferred pile of perfect "Platform Pufts" !!!

Surprisingly the next step is the lost art (?) of sanding the cubes with 220 grit sandpaper until they look like . . . . well . . . . Marshmallows! Who would have guessed?

You're almost done now . . . . Carefully make a slit in the top of the foam cube kinda like I have it in the photos and test the results with a scrap of balsa for its holding power.

The platform for the foam can be finished how you like. I sanded the corners on mine but you can leave it untouched as Gary has done. You can also spray or paint a clear coating on the wood, and the rest of it for that matter, if desired. The last step is to CA your "marshmallow" to your platform (Clear Elmer's Glue also works, but needs 8 hours to dry.)

Relax if your crow's nest/marshmallow combo looks a little lopsided. We're not making precision parts here for a Swiss Army Knife. In fact a funky looking marshmallow is probably the way it should look IMO. Save your more precise detailed work for your flying models !!!

Now finally you're able to admire your masterpiece . . . all the while knowing your friends will be jealous. ;) If you can—send us pictures of your creation(s).