Subject: Making nice looking grilles
Posted by lon on Tue, 28 Dec 2004 20:16:28 GMT
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Back in my kit making days, the method for making a fabricgrille was to staple some velcro on the cabinet, thenstretch the fabric over the grilled frame by spray gluingone side, the opposite side,a third , a foe\urth and finallypull tight at the edges. but I'd like to get the discussion started at making the framefor scratch build. I have failed at trying to cut quarterround stock in a 2 cent mitre box. Nothing is square and_besides that the sides don't line up worth squat either. There are hand miter box systems with the saw which I'veseen, but don't kniow what level of improvement would beprovided over the old wood one. The saw looks nice and theblade is like a hack saw blade only wider and should cutsquare. I thought of using a length of picture framing material. Then there's the 'chord system' where the fabric ispressed into a groove and the rope chord is forced in tokeep it in place. I would use silk fabric because it is sound neutral. Fastening the frame to the cabinet is usually donewith those ball and socket thingies, magnets, or the ol' velcro.With the last kits I built, the ball and socket thingies suckedand the pre-drilled holes to line everything up sucked too. What methods are being used here that give an at leastbearable and at best professional look? BTW... new info in the Group build Plug and Play speakers too.

Subject: Re: Making nice looking grilles
Posted by Bill Fitzmaurice on Wed, 29 Dec 2004 02:15:37 GMT
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One of the better methods was (perhaps first) used way back when by Henry Kloss, who put fabric over a masonite panel that had cutouts large enough to clear the driver frames but otherwise was solid, so not only did it serve as a grille frame, it also transformed the baffle to the equivalent of flush mounting the drivers for diffraction control.

Subject: Re: Oh no! Bamberglab is gone!
Posted by BillEpstein on Thu, 30 Dec 2004 01:42:01 GMT
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Used to be a really good tutorial on constructing frames and covering them. You want to cut them from a sheet of 3/4 MDF the same size as the baffle. leave the edges about 1 1/2" wide and 45 degrees at the corners so there is more strength. That eliminated cutting and gluing miters.Position the frame on the baffle and tape it in place. Drill a very small hole through the frame into the baffle where the mounting plug things will go. Then use the hole as astarting guide for drilling the actual size holes. That eliminates the positioning dilemma.Spray the front and sides of the frame with PAM vegetable oil spray. Place the fabric on a table, put the frame over it upside

down and cover the exposed part of the fabric with newspaper. Now spray the inside part of the frame with 3M 90 adhesive. Let it develop a "tack" and, beginning at the middle of one long side position the fabric in the glue. The PAM allows the fabric to slide and keeps the visible part out of the glue. Stretch and place the other long side, then the 2 short sides leaving all the corners for last. Trim away as much of the bunched fabric in the corners as possible with a scissors.You will get some glue on the visible parts so don't use a light color fabric.I will never use this method again HAH! but instead rout a dado all the way around the frame and place the fabric with rubber screen spline.

Subject: Re: Oh no! Bamberglab is gone!
Posted by lon on Fri, 31 Dec 2004 05:40:55 GMT
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Hah! Can you say more about the screen spline method...or does it speak for itself, so to speak?

Subject: Re:Yes. nt
Posted by BillEpstein on Fri, 31 Dec 2004 09:18:40 GMT
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Subject: Re:Yes. nt
Posted by lon on Sat, 08 Jan 2005 03:13:59 GMT
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Bill, Any link possible that will show the grille-making process.signed,lon (Mr. Spoonfed)

Subject: Re:Sorry to hear you don't have Google in the Badlands
Posted by BillEpstein on Sat, 08 Jan 2005 09:02:22 GMT
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Just the first of many Google hits!
Spoonfed instructions

Subject: Re:Sorry to hear you don't have Google in the Badlands
Posted by lon on Sat, 08 Jan 2005 18:51:05 GMT
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The ghost of Bob Hope must be in your computer. Ok, let me ask it another way. What is the router bit usedfor the 'screen chord' technique and how is the the chord pressedinto the groove?

Subject: Re: I just flew in from Guam and boy are my.....
Posted by BillEpstein on Sun, 09 Jan 2005 02:00:03 GMT
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....arms tired!Ya want a decent miter saw Jorgensen at HD,etc. makes one like in the link but about $40. The Veritas will cut picture frame quality miters, tho'. Instead of the MDF I make the frame from 1 1/2"X 3/4" maple, miter the ends and cut kerfs in them to accept 1/4" plywood splines. Really strong and easy to glue-up. Also thee are prettty good corner clamps available see my post about miter clamps.Rout a groove with a 2 flute upshear 1/8" bit. Then just use rubber screen spline you get at HD, etc. Push it in with a spline tool which is just a grooved roller. Heck, you can use a screwdriver or the back of a chisel but not the wive;s butter knife.
 Deadly good mitersaw by Veritas

Subject: What are Splines? (nt)
Posted by GarMan on Sun, 09 Jan 2005 04:29:50 GMT
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nt

Subject: Re: What are Splines? (nt)
Posted by BillEpstein on Sun, 09 Jan 2005 08:42:28 GMT
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Splines are reinforcements or, as I just discovered while Googling the word, frames for 3-D Computer Graphics modeling. The link tells how to use them to repair a screen. Same technique for installing grill cloth.Woodworking splines are narrow bits of wood that are used to join 2 workpieces, like using biscuits. When making a tabletop, for instance, you would cut a Dado (groove) in each of the edges of the pieces to be joined into the top. Correctly cut, splines in the grooves help align the glue-up and strengthen the joint. Splines in picture-frames are placed where the corners come together to align and strengthen the miter joint. In both cases a weak Butt

joint becomes a mechanically strong one which has most of the features of a Mortise and Tenon Joint, one of the strongest joints in woodworking.To make the joint, first cut the miters. Then run each of the cut edges over the blade of the table saw, holding the workpiece so that the angled cut edge sits flat against the table. Make 1 pass with each of the 8 ends then another moving the fence a bit to create a groove just wide enough to accept your spline stock, usually 1/4" thick. If you have a Dado set of blades you can do this in one pass. Now dry fit the frame pieces and splines to be sure the width of the splines matches up with the depth of the grooves and the workpieces can be drawn tight. Too wide or too narrow splines will ruin the joint. The splines should protrude past the edges of the workpiece inside and outside of the assembled frame.Now glue-up the frame. Properly sized splines will eliminate the need for clamps as they will swell a bit with the wet glue and hold the workpieces. Tape or small clamps can be used but the splines generally are in the way. There are special corner clamps that allow for the protrusion of the splines.After the glue is cured, trim off the excess spline material with a block plane and/or chisel. You have a strong and good looking joint.
Screen Splines

Subject: Re: What are Splines? (nt)
Posted by GarMan on Mon, 10 Jan 2005 14:11:55 GMT
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Thanks for the tutorial Bill. I'll have to pass on this technique as I don't have access to a tablesaw. I've seen this technique done after the glue-up by passing the frame over a tablesaw on a 45 degree jig.
