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Subject: Apocalypse!

Posted by [Mike.e](#) on Sat, 13 Dec 2003 02:05:03 GMT

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well its complete! -my 40hz basshorn (practise one for the 8" woofer glued it lastnite. Subjective sound=quieter than expected Very nice quality!

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Subject: More apocalyptical pics

Posted by [Mike.e](#) on Sat, 13 Dec 2003 02:12:36 GMT

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Subject: Re: More apocalyptical pics

Posted by [Wayne Parham](#) on Sat, 13 Dec 2003 02:48:31 GMT

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Looks like you've been havin' fun! Also makes a guy really appreciate a good cabinetmaker, ey?

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Subject: YAY for Joiners!

Posted by [Mike.e](#) on Sat, 13 Dec 2003 03:55:14 GMT

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I know, im SO GLAD they guy cut it perfectly \*phew\* it was as perfect as could be, the stuff up was me not ensuring the flare was in correct position. but i knew id have to make a practise one, before making a good one for lab12. now il see how much performance i can squeeese out of the lab12, im looking at 104db efficiencies and 1600cm ONLY mouth area and 299cm length that il have to cram in somewhere. Also next time il get silicon sealant with a LONG straw on the end, so i can reach deep into the horn while one side is off! More CAD /hornresping now.. and compromises.. and design conflicts.. :P.. u know the story. Cheers

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Subject: Re: No fasteners needed for complex glue-ups of horns

Posted by [BillEpstein](#) on Sat, 13 Dec 2003 09:47:57 GMT

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My Fostex backhorns pesented the same problem. I glued and nailed the innards into 3

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sub-assemblies and positioned them on one of the side pieces. Drew lines around them so I'd be sure where they went. Laid down a bead of polyurethane construction adhesive on the down facing-edges, PL400 (brand doesn't matter) and then placed the sub-assemblies back in position. Just used hand pressure to displace enough glue to see some squeeze-out and know the edges were reasonably flat against the side. Waited a bit for the glue to develop enough tack to hold the pieces against pressure (about 10 minutes) and then made a sandwich placing the second side on top and lightly clamped it on using cauls. Next day I removed the second side, put a bead of the glue on the exposed edges of the pieces and replaced the second side. I did use some finish nails to orient the side square against the top and bottom and then once more lightly clamped the whole thing. The construction adhesive in a tube also eliminated the need for a sealant because it is a caulking. It's a permanently flexible adhesive/caulk that gives you a good airtight joint. Creating is more like performing than listening

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Subject: Re: No fasteners needed for complex glue-ups of horns  
Posted by [Mike.e](#) on Sat, 13 Dec 2003 10:41:40 GMT  
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Like this, and Side B gets the same treatment, before side A is glued. Practical? I don't mind using screws to keep the panels clamped (I have no clamps). For the lab12 horn I have to buy silicon sealant to ensure it's sealed, rather than squirt 500ml of PVA woodglue down a joint, half of it missing as the bottle can't actually fit in the tight folds. Cheers! At the moment I'm modeling up a 32hz bass horn, but having trouble making the rear sealed chamber as small as it should be - while keeping the horn length what it should! :-S It only takes me 1hr to CAD a horn, but it's trial and error to get a horn that has no wastage :-S

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Subject: Re: Not exactly  
Posted by [BillEpstein](#) on Sat, 13 Dec 2003 12:10:32 GMT  
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Lots of ways to skin that cat but what I was trying to describe eliminated the inevitable change of position caused by the torque of the screws. No fasteners go into the sub-assemblies at all. I put your "A" side on the bench, outside down. Located the sub-assemblies and drew lines around them. Then put the glue on one side (edges) of the subs and placed them within the lines. It's important to push down on the subs so they flatten out the glue a little and become "stuck". Otherwise any subsequent action, placing side "B" or putting weight on "B" may cause movement. So now side "A" has subs glued to it. Place side "B" on top, and, since you don't have clamps, get the Britannica or Madonna's coffee table book or a piece of concrete, etc and weight down side "B". No glue between the subs and "B" at this point. Next day you remove "B", spread glue on the exposed edges of the subs, replace "B", position it square with a few nails and put the weight back on. I used 1 1/4", 4 penny finish nails, 2 on one side and 2 more on an adjacent side just to maintain square while I weighted "B". Be sure to countersink them which really improves the mechanical action and allows them to be easily hidden. All the weight required is enough to

flatten the glue just as you did by hand in the first step to glue "A". 24 hours later it's done. The main thing about this method is eliminating using screws to fasten the sub-assemblies at all. Just let the urethane adhesive do its job. BTW, I am NOT talking about Gorilla Glue or other brands of that type. They expand as they dry and they dry hard. Very bad for creating an airtight seal. What is called for is any of the various brands of Urethane "construction" adhesive that comes in a cardboard tube and requires a caulking gun. It becomes tacky rather quickly at almost any temperature, does not expand as it dries and remains permanently flexible so acts as a sealant. Once the sub-assemblies have sat in it for a few minutes you could actually turn the whole thing over and they would stay put. The "squeeze-out" is a bit of a bother to remove. Try to remove it too soon and it just gunks up your scraper or knife. Wait too long and it's really tenacious. It peels right off after a couple of hours, tho'. If it's quite dry, you can cut or chisel along the edge of the glue bead and then it peels okay and sand the residue. Worth the trouble. I realise all this borders on pedantry but describing a mental image is so hard. I talk to people all day about their kitchen or deck or pole barn ideas and it gets pretty hilarious at times when something clear in their minds just doesn't come across in words. Of course they think I'm a Cretin. Here's an interchange between myself and Steve Culton on wiring up a fairly simple on-off switch, DPDT, I think. Real Abbot and Costello stuff: Who's On First. Creating is more like performing than listening

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Subject: No fasteners

Posted by [Mike.e](#) on Mon, 15 Dec 2003 11:44:21 GMT

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Thanks bill, So the subsections are simply squeezed together? dont i need to just slightly apply pressure on them laterally to be sure? i think a no screws way would be much more attractive and it doesnt move the panels too.. a few kg pressure is enough? so a few bricks, i have those about. i use selleys aquadhere wood glue PVA , works fine for me. Cheers!

home.