

# Clamping Up



**Q** How tight should I tighten my clamps? How close together do I have to put them to be sure my edge joints are as strong as they should be?

**A** The best glue joints result from well-made, cleanly fitted joints rather than from extreme “crush-to-fit” clamp pressure. Reasonable glue-up and even pressure distribution are the soundest way to be sure edges are extremely close to each other to create a high-strength bond.

Apply a modest film of glue to both surfaces, working it with your finger, a roller or a brush to insure thorough wetting of the wood. Tighten your clamps until you see beads of squeeze-out all the way along the joint—then stop! That's tight enough. You don't need to apply either so much glue or so much pressure that glue streams out and runs off on the floor.

It's actually pretty easy to insure even pressure distribution. Pressure applied by a clamp head spreads uniformly at about 45° right and left from its point of contact with your work. Thus the area of even pressure along a joint varies depending on the width of the boards you're joining. Judicious use of extended clamp pads can help you minimize the number of clamps required on many glue-ups. For instance, if you're gluing together two 2"-wide boards 4' long, using scrap 1/2" plywood clamp pads, it will take 8 clamps to apply uniform pressure along the length of the joint. If you use a couple of spare 1x4s as clamp pads instead, you'll get the job done with only 4 clamps instead. As long as you have a very thin glue line and a small but consistent amount of glue squeeze-out all the way along, you've done the job just right.

