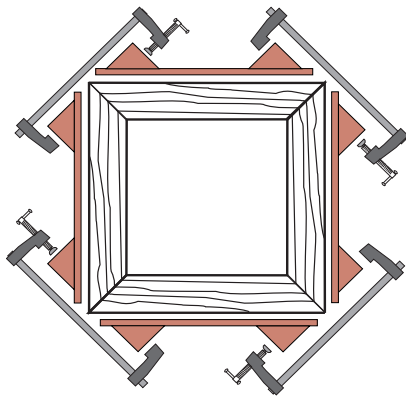


Another Taje Frid Solution

Assembling boxes or cases with mitered corners has long been one of woodworking's standard nightmares. Getting adequate clamp pressure across one wide miter joint is hard enough, but doing it on four corners at once is a prescription for frustration. Since the joint faces aren't parallel to the sides of the box, there's no obvious way to apply pressure directly across the joint. Laying clamps along all four sides and trying to tighten them not only simultaneously but identically as well is just as challenging as it sounds; you're always racing against your glue's working time, the box never wants to come out square, and even when it does you almost never manage to get all four corners joined clean and tight across their full width. You try clamping battens across each piece near the corner, but when you tighten a clamp across them the battens slip and the joint once again fails to close properly.



Danish woodworker and teacher Taje ("Tay") Frid solved the problem in his typical fashion, with remarkably simple shop-made fixtures that make clamping four (or more) mitered corners at once almost unbelievably easy and effective. Set your tablesaw or bandsaw at 45° and rip a triangular section from the edge of a piece of 4/4 scrap. Cut it into eight short battens whose length matches the width of your case. Now make four panels of the same width but slightly shorter than the case sides; use any scrap that comes to hand (1/4" plywood, solid lumber, whatever). Glue a length of triangular batten, hypotenuse down, across each end of each panel. Clamp a panel (moderate pressure is plenty) on each side of your box, then bring on two or more clamps across each corner. At first, tighten them all just enough to keep the clamps from falling off, but not enough to make the panels slip. When all clamps are in position, begin tightening two at a time at opposite corners, keeping an even strain on the panels until all clamps are snug and every joint is tight all the way across.

One last note: effective as it is, this system is not especially fast unless you have more than two hands. If you use a fast-setting glue like Titebond II, you'll drive yourself as crazy as usual, so use something more forgiving like original Titebond or white glue instead.

