



# Sharpening Made Simple

By Joe Hurst-Wajszczuk

To appreciate the benefits of a hand plane, you need to know how to sharpen a plane iron. Fortunately, sharpening is a lot easier than you might think. Here's my stone-simple system for shaving-sharp edges. The core of the system is a 1000/6000 King combination waterstone (#09C31, \$42.00), a simple honing guide (#03121, \$15.75), and a water-resistant sharpening station I made from a piece of phenolic plywood. The nice thing about this system is that there's room to grow. For a superior edge, I recommend an 8000-grit Norton (#822462, \$99.99).

With a new blade, you'll need to flatten and hone the back. I prefer to do this with sandpaper adhered to a granite plate. Alternatively, you can use the flat cast iron top of a table saw or jointer. Start with 220-grit paper, but step back to a coarser grit if you wear out the paper before removing the mill marks. When scratches replace the mill marks, step to the next finer grit. After working your way up to 600 grit, wipe off any residue, and then polish the back on your finest waterstone.

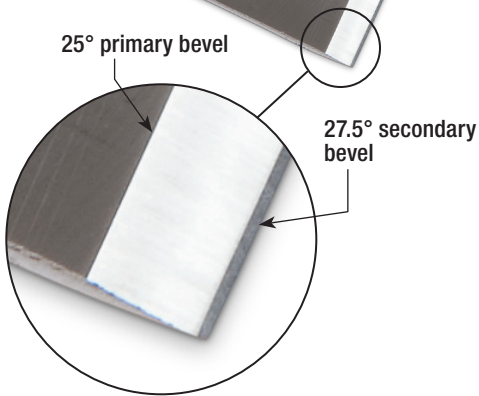
Now it's time to work the bevel. Most blades come ground to 25°. Using the phenolic's factory edge as a guide, I attached a pair of stops to the sharpening station. I calibrated the first stop so that the bevel rests flat on the stone. Clamp the blade in the honing

guide, and roll the guide back and forth across the 1000-grit stone until you feel a burr on the back edge of the blade.

To speed up the sharpening process, I hone the front-most portion of the primary bevel. To focus on the "secondary bevel," set a 1/8"-thick spacer between the station's first stop and the tip of the blade, and readjust the honing guide. (The change of distance adds about 2°). Now, roll the jig over the 6000-grit stone about a dozen times. If you have one, repeat the process with the 8000 stone. At this point, the secondary bevel should look like a thin band, as shown in the photo, above, left.

The last step is removing the burr. To do this, draw the back of the blade against your finest stone, as shown below. Then set the honing guide back on the stone and pull the blade toward you. Repeat this back-then-front honing process about 8-10 times or until the burr falls off. Now remove the blade from the jig and wipe it down with oil to prevent rust.

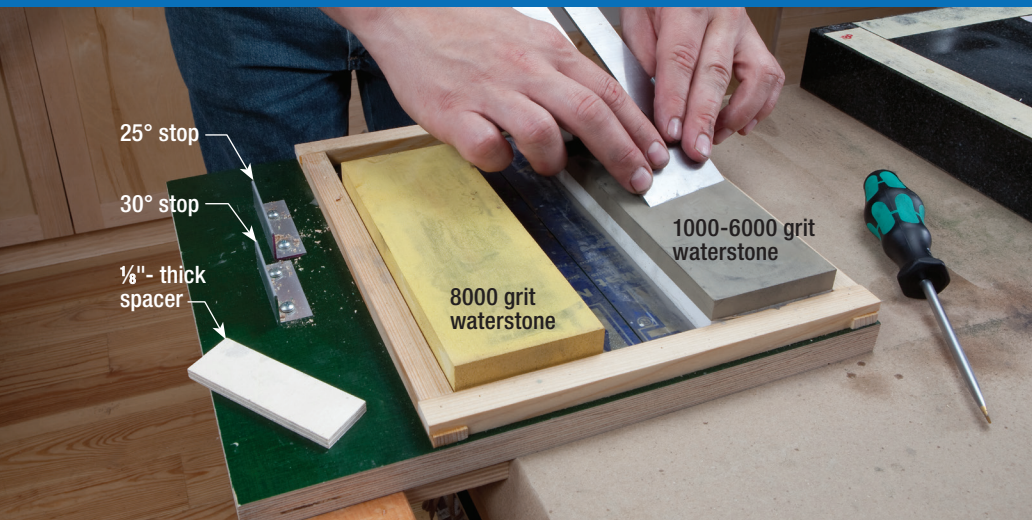
If the secondary bevel begins to widen, you have two choices: Reset the primary bevel with a grinding wheel, or use the second stop to hone a 30° bevel. Because of the way the blade sits in a plane, a few extra degrees does not affect performance. You'll need to regrind the bevel eventually, but the higher angle can keep you working a little while longer.



## STEP 1: Flatten the Back



## STEP 2: Hone the Bevel



## STEP 3: Remove the Burr

