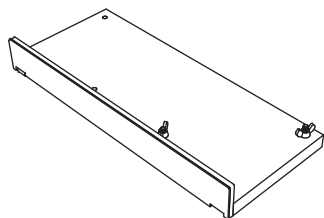
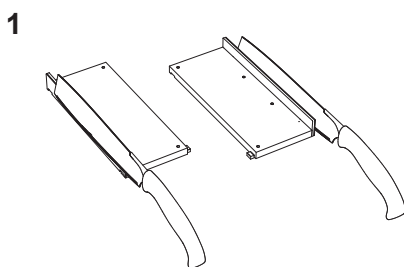
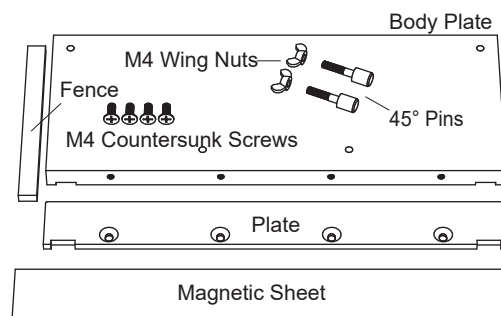


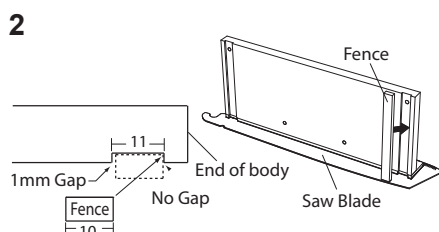
# MIRAI Aluminum Cross Cut Guide



The Cross Cut Guide is a tool used in the book, *Woodworking Joinery by Hand*, to crosscut workpieces. By utilizing the magnetic sheet to attach the saw to the guide, the workpiece is cut in a straight line and at right angles. The saw blade should be the MIRAI Alpha 265 Flush Cut Pull Saw Blade.

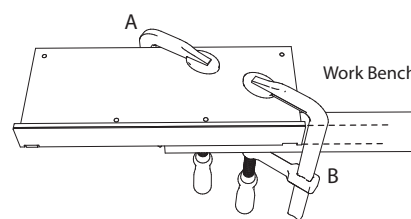


The Cross Cut Guide can be used for either left or right handed use and is determined by the side to which the fence is attached. For whichever side you choose, the fence is attached by placing it against the groove on the side nearest the saw's grip.



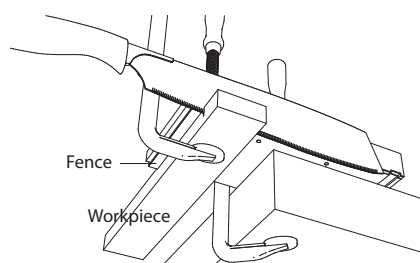
Attach the saw blade to the magnetic sheet as shown. This is to ensure that the fence does protrude beyond the magnetic sheet. Attach the fence to the groove with double-sided tape. At this point, the fence should be attached alongside the wall of the groove on the side closest to the end of the body. This leaves a 1 mm gap on the other side.

### 3 [Installation on the Workbench]



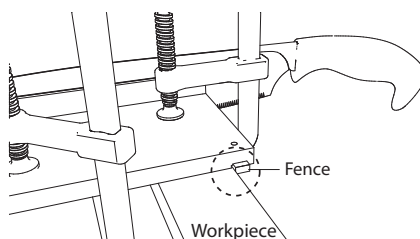
For installation on the workbench, clamps can be mounted at A, B, or both A and B. For position B, be careful the clamp does not extend beyond the magnetic sheet (dotted line). This is to allow for the necessary saw blade clearance

### 4 [Cutting Workpiece]



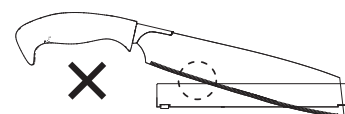
Align the cut-off position of the workpiece with the magnetic sheet of the guide. Secure the workpiece firmly to the guide with the clamp. At this point, clamp the workpiece while it is registered firmly against the fence. First-time users tend to be distracted by the position of the workpiece cut-off and neglect to register the workpiece against the fence. This makes it impossible to cut the workpiece at a right angle.

### 5

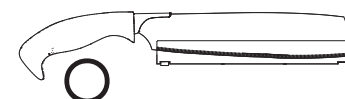


The clamping position should be in the middle of the workpiece's width, slightly closer to the magnetic sheet. Also make sure there is no gap between the workpiece and the fence (dotted circle section). The workpiece should be pulled tight against the fence when clamping.

### 6 [Notes]

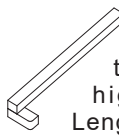


If the saw teeth protrude from the magnetic sheet, then the sheet will be scratched.



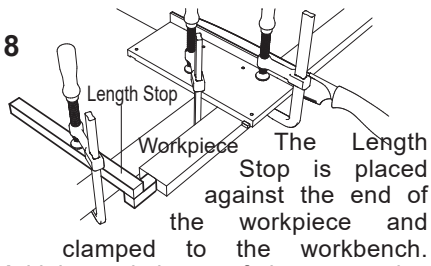
Cut the workpiece with the saw horizontal so the saw teeth do not scratch through the magnetic sheet.

## 7 【Length Stop/Length Hook】



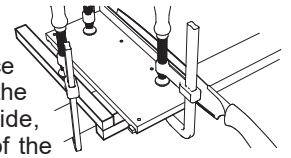
Shop-made Length Stops allow workpieces to be cut to the same length with a high degree of accuracy. Length stops can be made as shown in the diagram. Thickness: 20 mm square. Long arm length: 250 mm. Short arm length: 45 mm.

8



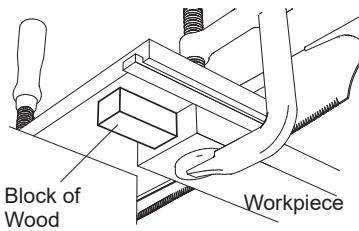
The Length Stop is placed against the end of the workpiece and clamped to the workbench. Multiple workpieces of the same size can be cut due to the functionality of the lengthstop.

9



If the workpiece is shorter than the Cross Cut Guide, the short arm of the Length Stop can be registered under the guide to make contact with the end of the workpiece.

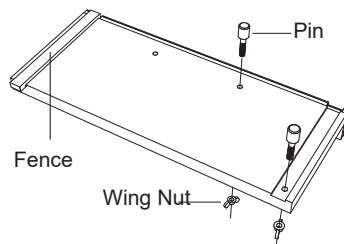
10



### Block of Wood

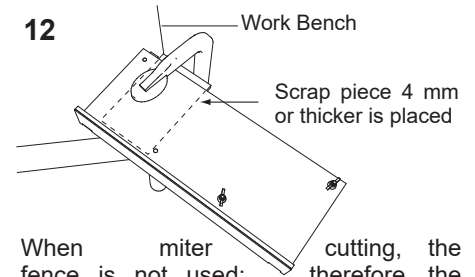
If the workpiece to be cut is even shorter, a block of wood can be attached to the underside of the cross-cut guide with double-sided tape to act as a stopper.

## 11 【Miter cutting uses 45° pins】



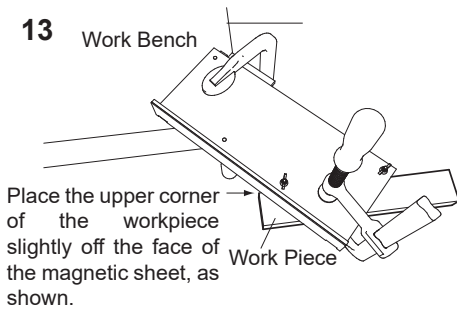
Miter cutting uses 45° pins. Insert the pins into the two holes located on the opposite side of the fence and tighten with the included wing nuts. The pins that are inserted into the holes are just slightly thicker to ensure there is as little play as possible. If the pins are difficult to insert into the holes, gently tap them in.

12



When miter cutting, the fence is not used; therefore, the guide is rotated and the fence is positioned on the workbench side. Next, clamp at approximately 45° from the workbench corner as shown. A 4 mm or thicker piece of scrap wood is then clamped between the guide and the workbench (dotted line). In this way, the guide is kept horizontal.

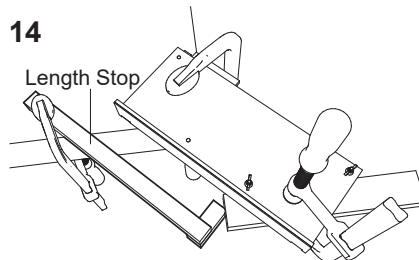
13



Place the upper corner of the workpiece slightly off the face of the magnetic sheet, as shown.

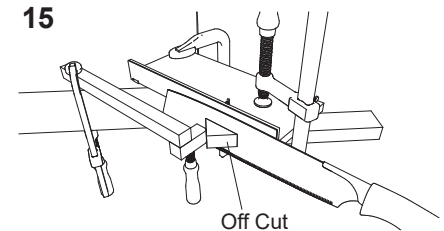
Pre-cut the workpiece to the desired dimensions, press it against the pins, and then clamp. At this point, the part to be cut off is also aligned to the guide by eye.

14



Place the length stop against the end of the workpiece and clamp it to the workbench firmly. This determines the distance the workpiece will extend in front of the magnetic sheet. Therefore, even if the workpieces of different lengths are clamped, the distance of these pieces will be the same.

15



This method requires shorter sawing strokes than usual. Use shorter strokes to avoid hitting the workbench with the saw tip. When one cut is made, turn the workpiece over and make the additional cuts.

### Note:

When cutting a workpiece to the same length with the length stop, first clamp the workpiece where you want to cut it off, aligning the guides. Next, place the length stop at the end of the workpiece and clamp it to the workbench. You are now ready to cut, but to ensure accuracy, loosen the clamp holding the workpiece in place, re-attach the end of the workpiece to the length stop, clamp it again, and then start cutting.