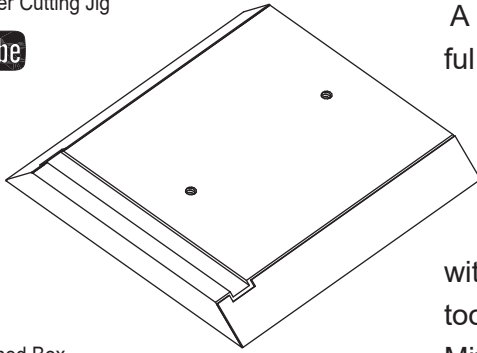


MIRAI Aluminum Case Miter Cutting Jig

MIRAI Aluminum Case Miter Cutting Jig

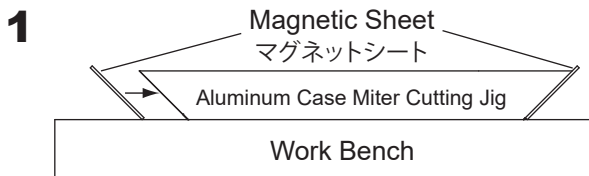


MAKING a MITERED and Splined Box

- Thickness 18mm high-precision aluminum plate.
- Maximum width of board that can be miter cut : 140mm=5-1/2" (This can be extended with a pair of shop made metal plates with magnetic sheets attached.)
- The fence and magnetic sheets are not included in this product

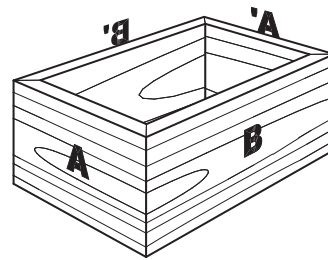
A box with a case miter joint has a clean and beautiful appearance because the ends are concealed; however, making it can be a difficult task.

This product also follows the idea of Sugita's Woodworking Method. The aim is to complete the miter joint by simply cutting with a hand saw, without trimming to fit with a hand plane or other tools. The results are in line with this aim. The Case Miter Cutting Jig is designed to use with a flush cut saw. We recommend the MIRAI α265 Flush Cut Pull Saw Blade. This product is suitable for those who are familiar with Sugita's Woodworking Method described in the book, Woodworking Joinery by Hand. The below instructions explain how to cut the box from a single piece of wood so the grain of three of the corners is connected.

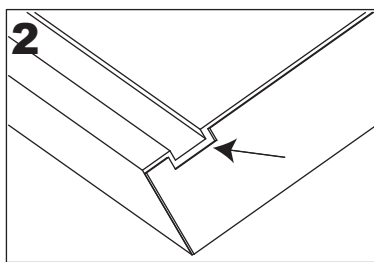


Apply the magnetic sheet to the mitered faces on both ends. Then Cut off the excess of the magnetic sheet.

マグネットシートを両側の45°面に貼る。次にはみ出しを切り落とす

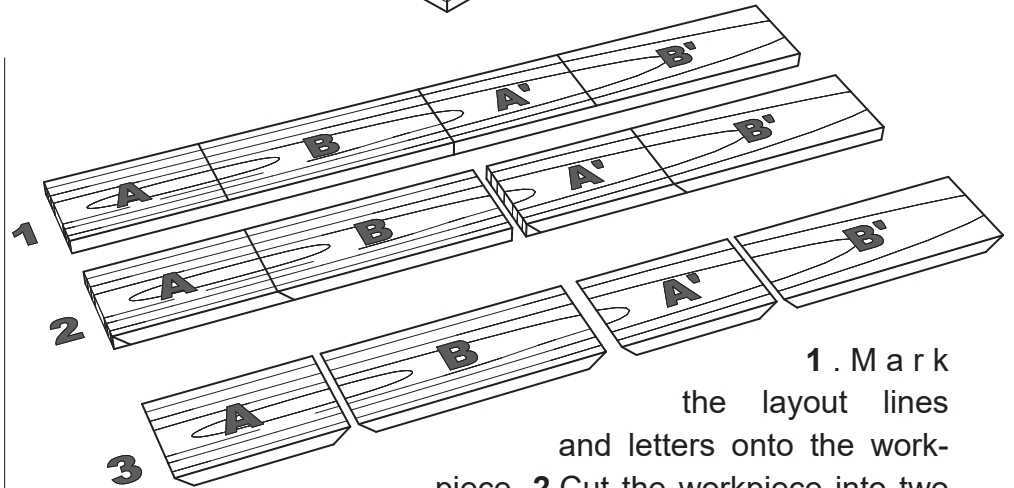


A and A': Same Length
B and B': Same Length



Trim the magnetic sheet around the end of the groove.

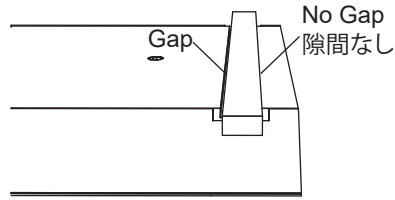
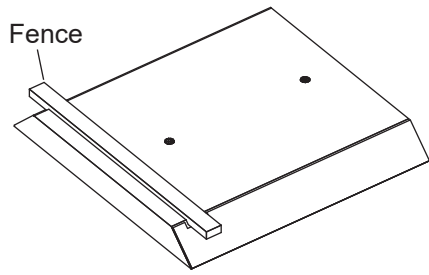
溝周囲のマグネットシートを大きめに切り取る



1. Mark the layout lines and letters onto the workpiece.
2. Cut the workpiece into two equal sections and miter cut the left ends of all pieces with the jig.
3. Miter cut on the right ends of all pieces. To do this, you will make a length stop from scrap wood as shown below. Apply two sided tape in this step. In addition, tape the length stop to the top of the miter jig prior to cutting in order to determine the length of each piece.

1. 板を短、長、短、長で墨付けする。2. 各部材の左側をジグで留め切りする。3. 各部材の右端を留め切りする。このとき長さストッパーを端材と両面テープで作り、ジグの上に貼る。これで部材の長さを決めることができる。

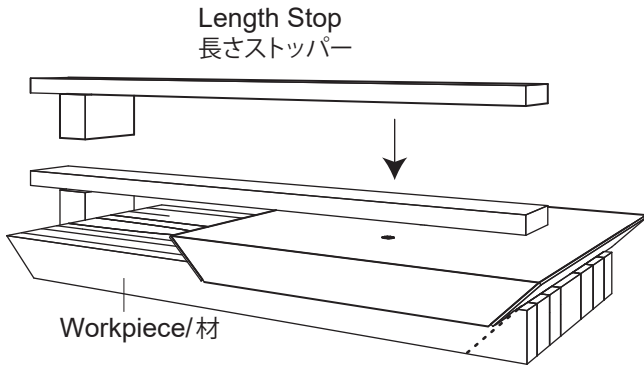
3 Attaching the Fence



The fence should be applied against the wall on the right side of the groove. The width of the groove is 11mm and the depth is 2mm. After the fence is applied, cut off the excess

with a saw. Double sided tape can be used to attach the fence.

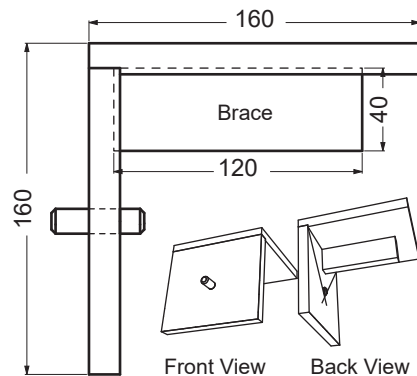
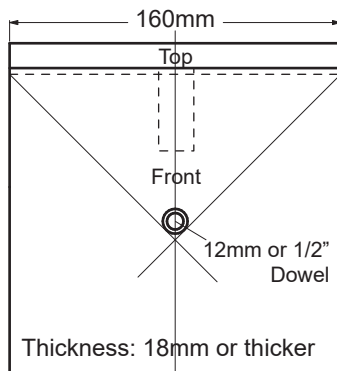
フェンスは図のように溝の右側に寄せ隙間をつくらず、両面テープで貼る。溝の幅は11mmで深さは2mmです。次にはみ出た部分をノコギリで切り落とす。



The length stop is made from scrap wood and double-sided tape, which is then affixed to the case miter cutting jig. In the diagram, the left end of the workpiece has already been miter cut and the length stop is against it. Clamp together the jig and the length stop, and then miter cut the right end in this position. The process is then repeated.

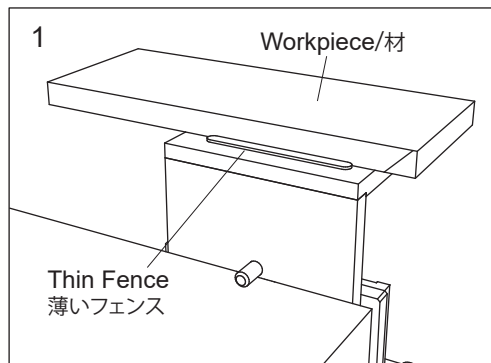
長さストッパーは端材と両面テープで作れ、それを大留めジグに貼る。図では材の左端がすでに留め切りされており、そこに長さストッパーが当たっている。ジグと長さストッパーをクランプし、この状態で右端を留め切りする。あとはこの作業を繰り返す。

The Case Miter Support

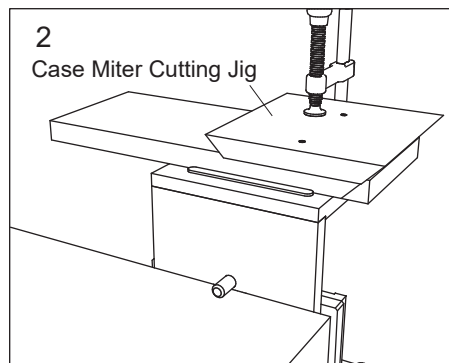


A shop-made Case Miter Support is used to miter cut workpieces while keeping the saw blade vertical. Therefore, it allows you to cut the workpiece in a very comfortable position.

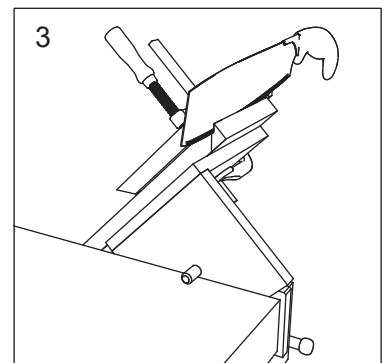
自作傾斜ジグはノコ刃を垂直に保ったまま材を留め切りするためのジグです。したがって楽な姿勢で材をカットすることが可能。



Place the workpiece on the Case Miter Support and register it against the fence.
傾斜ジグの上に材を載せフェンスにあてがう



Place the Case Miter Cutting jig on top of the workpiece and clamp the jig to both the workpiece and the miter support.
材の上に大留めジグを載せカットする位置を決めたら全体をクランプする



Tilt the entire jig to 45°. The saw can then cut the workpiece in a vertical position.
ジグ全体を45°傾ける。ノコギリは垂直のまま材をカットすることができる