

Fan Relocation Project

It's long been the plan to relocate the deck lanai fan to be centered in the entertainment area. This can be done several ways, but aesthetically we think the use of a box beam to fully contain the wiring and mounting system is the best approach. Of course, it is more complicated than a strut, but looks better in the end.

First step was to build a box. Of course, unless I used plywood, there was no treated board stock wide enough, so first step first was to edge glue (biscuits) treated trim boards to make up the wide stock needed. With that done, I made a U-shaped box with web members to reinforce the box



Building a box – glue up.

I didn't take pictures of the internal blocking needed for the 4" junction box, but it is installed fastened to a center mounted, glue-block reinforced web member installed with a mounting bracket lag bolted the reinforcement. I cut the 4" J-box hole and designed the mounting system so that I could use a 1/4" drive wrench thru the J-box hole for the short lag bolts used to install the bracket. [I used the the side mount back j-box from Home Depot \(Titan Industries CMB 150-SM\)](#). It is two part, so the side bracket could be mounted into pre-drilled holes after the box beam was installed to the ceiling, and then wire pulled and the J-box screwed to the bracket.



CMB 150-SM Ceiling Fan Fixture

The actual installation points for the box beam was a center top-glued block, pre-drilled for short lag bolts that could be installed thru the J-box opening to hold the center of the box to the deck ceiling.

End plates fastened to the beams secure the box to the beams on either end.

With plates mounted to be beam, I used a belt sander to make the minor adjustments to scribe the end of the box to fit between the beams, and huffed, and puffed, and heaved, and got it into place with several ups and downs to tweak it to fit. In the picture below you can see where the old fan was mounted off center on the beam to the left. Box beam is now painted and ready for the fan in the master bedroom to be relocated to the lanai.



Paint Ready