



TUGGERANONG ARCHERY CLUB

How to make Rag Filled Field Butts

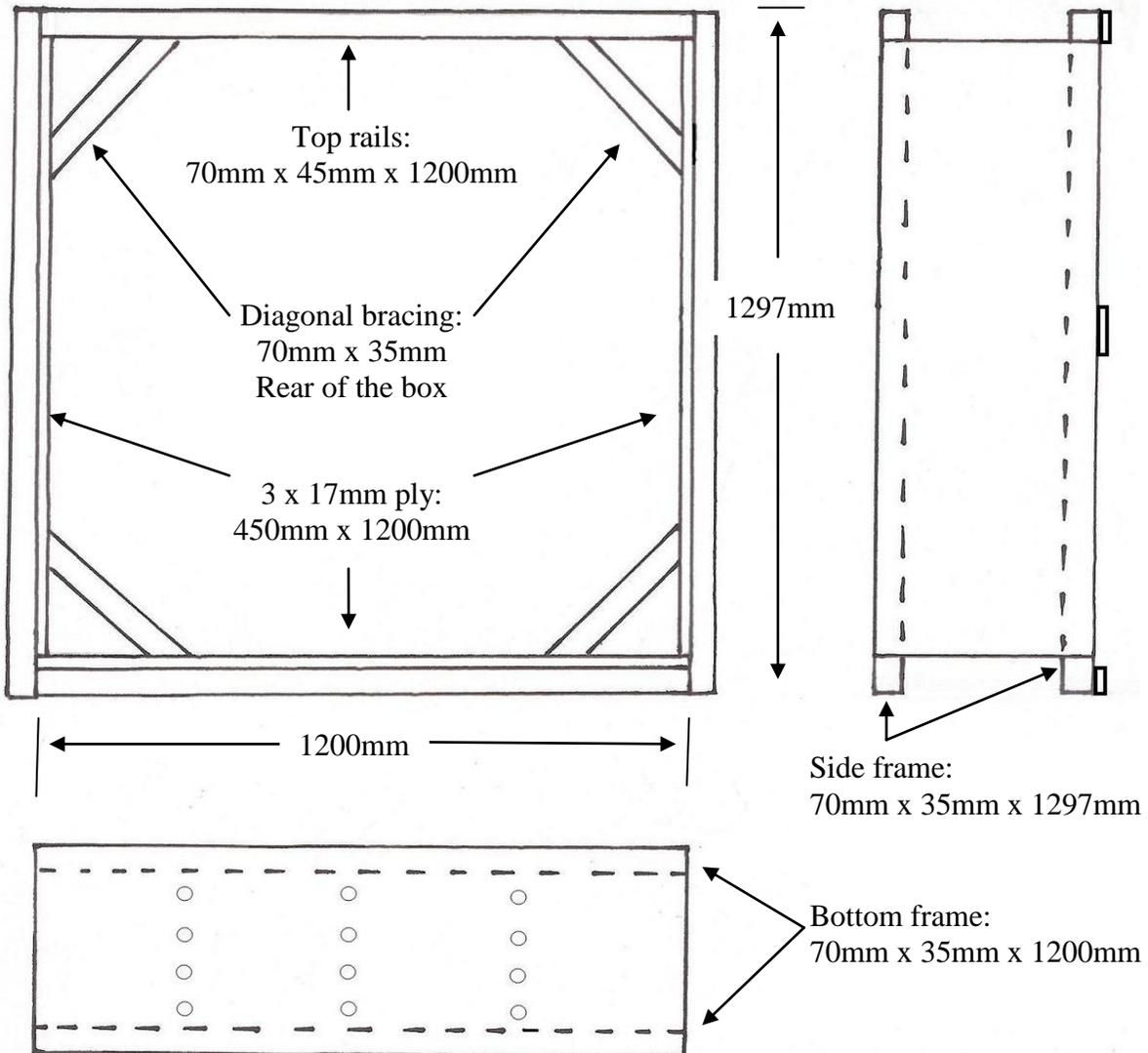
By Gary Hobson



After the successful construction and trialing of the Target Butts we have since designed and trialed 24 Field Butts, the design and construction are shown in this document.

The plan

The Field butts are a very simple construction consisting of 3 pieces of ply which are framed with construction grade pine, like the Target butts they are covered with shade cloth (front) and galvanised mesh on the back.



The sides and the bottom are simply made by screwing the ply to the framing pine with the bottom being flush and the side having a 45mm over hang on the top and a 52mm over hang on the bottom, to allow for the top rails and the bottom frame.

NOTE: the bottom frame has drainage holes cut into the ply to allow for better ventilation.

NOTE: the battons holding the mesh in place can be seen on the side diagram, unlike the target butts there are no hinges, the mesh is simply held by the battons.

Making the field butt



The picture on the left shows the bottom panel, note the rails and the ply sheathing are screwed together and flush at the ends, you can also see the drainage/air holes.

The picture on the right shows one of the sides where the rails extend past the ply sheathing and are pre drilled for the final box construction.



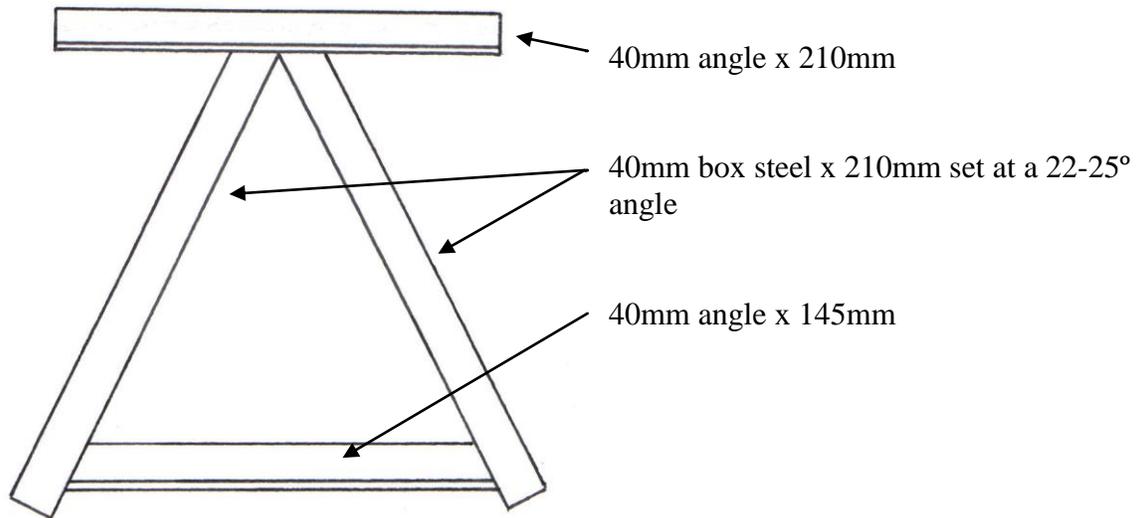
Left: shows the top rails screwed to the side rails and the attachment of the cross bracing

Bottom left: here the painting has been completed, shade cloth stapled to the front and the batons screwed to the frame to hold the shade cloth.

Bottom right: shows the galvanised mesh has been attached with 3 batons (top, middle and bottom).



Leg Brackets



Making the Leg Brackets



The picture on the left shows the construction of the 'A' frame leg bracket. The bracket is welded together and painted with anti-rust paint.

The bracket is attached to the box by 1/4" cup head bolts.

The picture right shows the completed butt. The legs can be made any length, I recommend the use of a strong hardwood this will help with the longevity and strength.



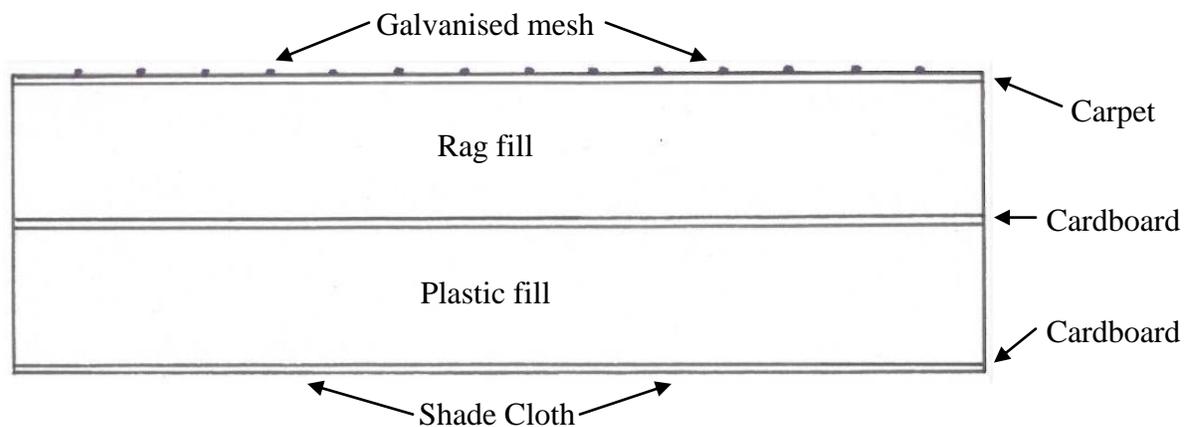
Filling the butts



Pictured above you can see the filling of the Target Butts (note: the Field Butts are filled to the same specifications), we have layed 3 butts onto their faced and opened the backs. The filling consists of a sheet of thick cardboard 1200mm square to form the face then a thick layer of plastic wrap, we used the shrink wrap from pallets. There must be enough plastic than when squeezed down it makes atleast half of the depth of the box.

Another layer of cardboard (divider) then the rest of the box is filled with rags, this is then squeezed down, a piece of carpet 1200mm square covers the rags, the back is then closed and screwed down with the battons.

In the diagram below you can see the different layers. The cardboard on the front adds a little stiffness so the arrow stands horizontal, the plastic wrap is for ease of penetration while slowing the arrow down, the cardboard in the centre is only a divider, the rag in the rear of the box stops the arrow and the carpet backing holds all the fill in and allows ventilation.



Positioning and securing the butt



Chest handles are fitted to the side for easy moving. They also serve as a tie-down point where ropes can be attached to the butt to make it more stable on the field.

Also note the 'rubber' conveyor belt which has been cut and attached to the top to help with the weather proofing of the butt

Note: the star pickets that are used to tie the butts into position either through the handles or simply tied to the handles or batons on the back, they are also used for the distance and target numbers.

In the Field



<http://www.tuggeranongarchery.com.au/>