

PROPOSED EXPERIMENT FOR ALTERNATE COMBAT ARCHERY BLUNT CONSTRUCTION

i. All blunts must be securely attached via tape, glue, cable ties, etc. The method does not matter as long as it is securely attached; however at least one piece of strapping, electrical or duct tape must extend over the blunt and be securely attached to the shaft on both sides. This will be tested by marshals by grabbing and pulling on the blunt with moderate force while twisting it slightly.

If the blunt shows signs of moving off of the shaft, then it fails. (Twisting around the shaft is okay.)

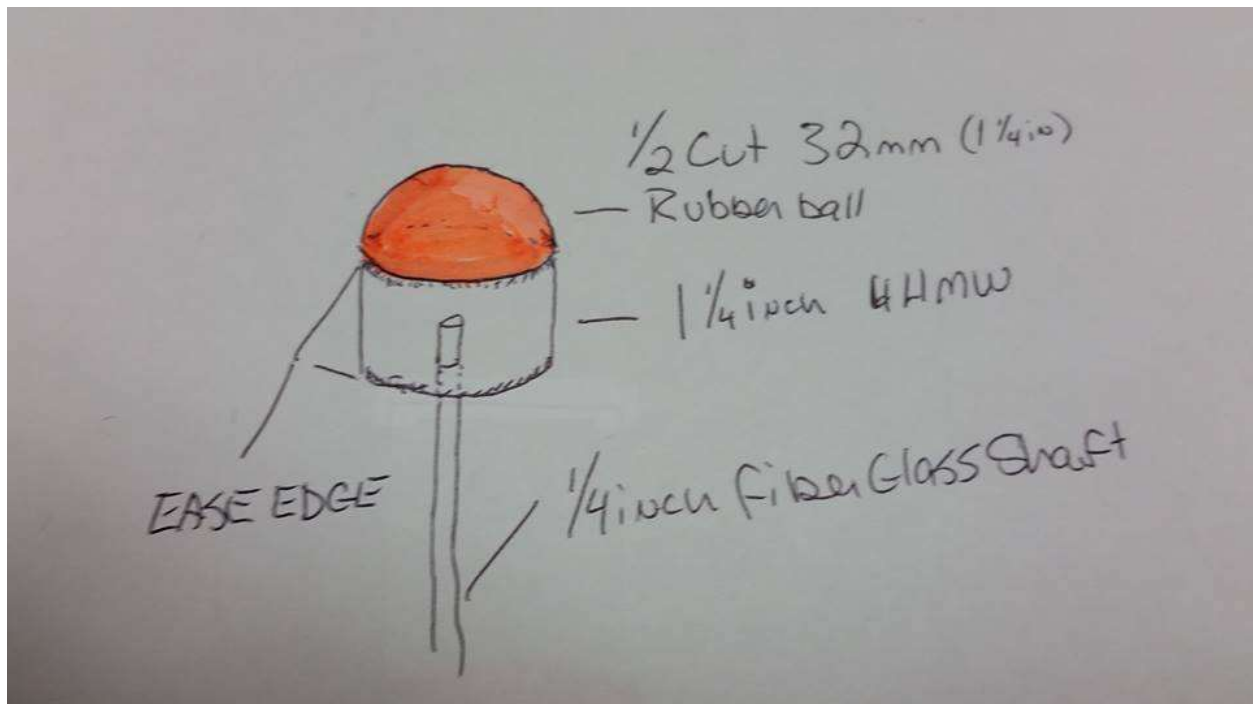
V.A.L. BLUNT

UHMW (Ultra-High Molecular Weight Polyethylene)

1. V.A.L. Blunts are constructed of at least 1.25 inches (31.8 cm) diameter UHMW rod with a hole drilled in it to accept the shaft.
2. The shaft hole must be at least .5 inch (12.7 mm) deep and there must be at least .5 inch (12.7 mm) of UHMW in front of the shaft.
3. 1/2 of 1.25 inch (32mm) Rubber Ball must be added in front of the blunt and be at least the same diameter as the blunt.

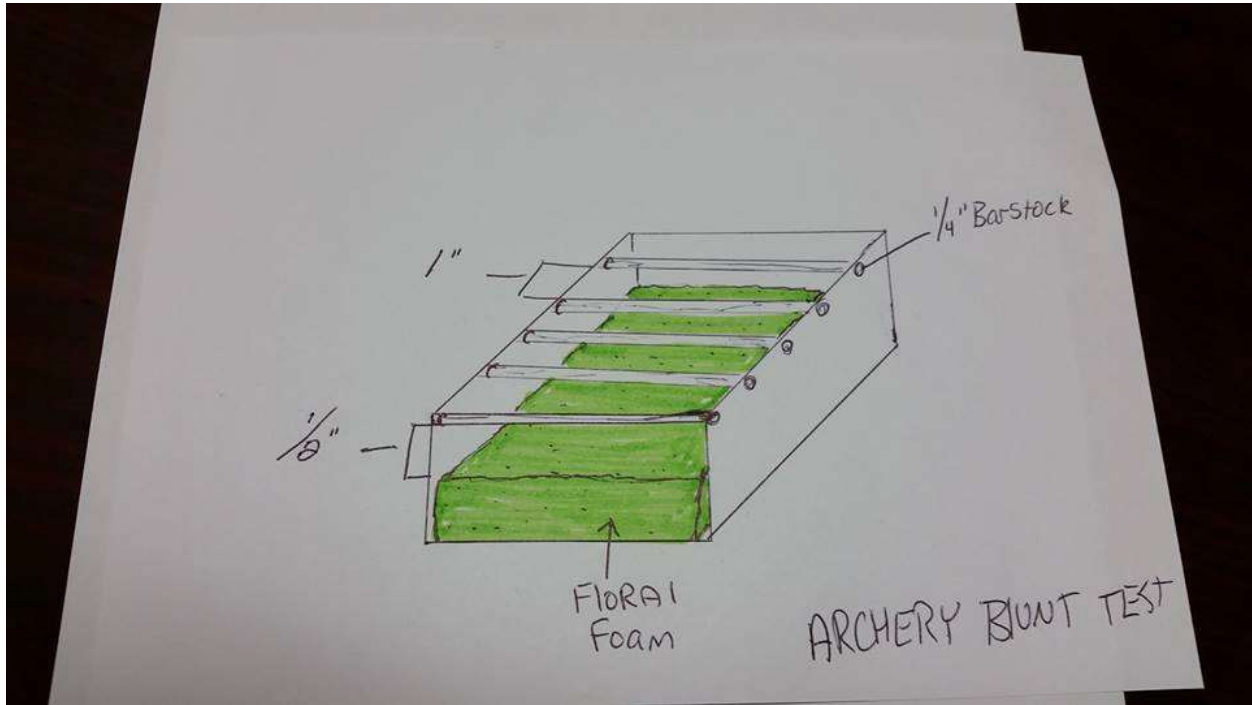
I DELETED FOAM WRAP FOR INITIAL EXPERIMENT. I BELIEVE THEM TO BE UNNECESSARY WITH THIS DESIGN. I HAVE ADDITIONAL OPTIONS FOR CONSTRUCTION LISTED BELOW THAT INCLUDE THE FOAM WRAP.

4. The front edges of the blunt must be rounded over.
5. As long as all other requirements are met, the blunt may have material removed for aerodynamic or weight reducing purposes.



CONSTRUCTION OF TEST BOX

1. Build a sturdy frame of wood or metal a minimum of 1" deep.
2. Overall dimensions should be no less than 4" x 4"
3. Firmly affix .25 inch (1/4 inch) bar stock to top spaced no more than 1 inch apart to simulate a bargrill.
4. Place floral foam inside box spaced exactly .5 inch (1/2 inch) below bars.



TESTING MEATHOD

1. Fire multiple VAL Blunts at the test box from "Clear the bow", 10 feet, & 20 feet.
2. Use Max Poundage Crossbows and Bows.
3. Check floral foam for any sign of contact and/or deformation caused by blunt penetration.
4. Repeat multiple times from multiple angles.
5. Publish findings on static tests.
6. Move to Stationary Armored Combatant tests.
7. Publish statements and findings from Stationary Armored Combatant tests.

Testing shall be done by several members of the archery community around the kingdom. All archers conducting the experiment will receive a test box or instructions to build one as well as the materials and instructions for constructing the blunts themselves. This should add as many variables as possible and lead to the greatest possibility for failure or show the greatest margin of success. Secondary tests if reasonable safety levels have been established shall include Stationary Armored Combatant tests wherein a fully armored combatant shall be fired upon from the same set distances and record the effects of the strike including bounce back, felt impact, flight stability, and durability of design. These shall include comparisons to standard UHMW blunts and Baldar Blunts.

The reason for the experiment is to allow for a “homemade” blunt that closely resembles a Baldar Blunt, to increase cost efficiency, & decreases the general participant’s reliance on or need to purchase commercially produced “Name Brand” goods to participate in this aspect of the SCA.

ADDITIONAL CONSTRUCTION MEETHODS IF NEEDED

1. Standard VAL Blunt w/ 1.25 UHMW and 32mm Rubber Ball
2. Standard VAL Blunt w/ 1.25 UHMW and 32mm Rubber Ball & 1/8” Foam Side Wrap

