Assembly & Fabrication

The team cut the steel conduit to the size determined by the drawing. The steel was then welded together and this formed the frame of our cots. The frames were then painted using a green paint to make them aesthetically pleasing as well as provide corrosion resistance. The fabric was created using a polyester material that had to be cut to the proper size in order to adequately fit the cot. The steel rods used in the reinforcement of the edges of the fabric were cut to fit the fabric. We went around the cut fabric and marked off 4” and 2” so we knew where to place the rods and where to fold the fabric over. We then used a spray adhesive and applied it rigorously around the edges and glued the steel rods inside the fabric. The edges were also cut and folded over to ensure the fabric would not fray. Holes were then cut into the fabric and were reinforced using a steel ring to prevent tearing. Ratchet straps were then placed in these holes and were attached along the frame to secure the fabric tightly. A wire loop was attached on both ends of the cot so the customer would be able to hang the cot from the pulley system that was established. Finally, rubber feet were added onto the ends of the cots to cover up any holes that bed bugs may potentially live in and prevent the cots from scratching the floors when in use.