

AE Furniture

Alene Sloan

My brief was to design a contemporary furniture brand, with a range of living room products and produce a practical piece of furniture. My aim was to create furniture that was affordable, yet made of quality materials, with the design considering current trends to enable the products to suit any living space. I identified constraints such as materials to create my product, a style that would be suitable for a range of spaces and possible consumers, which helped shaped the final result.

Researching current furniture design trends and popular furniture retailers like IKEA, Matt Blatt, Freedom and Domayne for inspiration, my biggest influence was mid-century armchair designs between 1947 -1957, in particular, Poul Jensens Z chair. I chose to base my furniture designs around my armchair design, focusing on sharp exaggerated angles as my statement design feature. Ludwig Mies Van Der Rohe and Charles and Ray Eames designs have organic clean lines, without embellishment, which inspired my designs to focus on form and lines, with minimal attention drawn to fabric choice and decorative joints. Materials for my product range, were inspired by a current Adelaide designer Ross Thompson whose work is influenced by midcentury designs and minimalistic Japanese principals.

I wanted to design a range of furniture with a particular sharp line style, creating a dateless and sleek design to suit any home, making one piece of functioning furniture from that collection. I designed six furniture pieces including an armchair, two-seater, ottoman, entertainment unit and a large and small coffee table, using the armchair as the foundation piece, with all other furniture items being designed to match this one product. Beginning my idea generation with sketches and refining them further using Fusion 360, all designs include sharp angles, replicated from the legs of the armchair, with the armchair, two-seater and ottoman having identical angled legs. The entertainment unit replicates the chairs front legs for the body on the left and the separate smaller legs are angled outward, the same as the small legs for the chairs. The coffee tables are an exact replica of the chairs angled legs. All designs incorporate line and balance into their design. The lengths of the supports and legs balance the extreme and sharp lines from the angles. The armchair from a side profile has the back and front leg compensating for the height and back.

Production on my armchair began with timber choice. Initially I wanted to use Jarrah, however, this was costly and did not match the initial purpose of my brief, in "affordable furniture". I decided on Blackwood, an Australian hardwood that has an attractive grain and was available in 70mm x 20mm, required for the chairs frame. It was the best choice financially and practically, matching the aim of my furniture brand as a local, affordable, quality material, which has naturally visual elements that make it contemporary in its look.

Fusion 360 enabled me to create my technical drawings and accurate measurements for the product of my chair. The timber ordered was 25mm x 75mm rough sawn, meaning each side was planed and thickened. I already possessed basic skills for furniture construction, with the ability to use drop and table saws, routers, domino and biscuit cutters, however, was still unsure of the best method to attach the legs without compromising their strength, later solving this through using biscuits. All timber needed to be planed and thickened to 20mm x 70 mm, with the side frames cut at 33.5 degrees from

the same timber piece for consistency. The back slats of the chair are all cut and fixed into place with biscuits and dominos. The armrest and legs, identical on both the left and right, are secured with dowels and biscuits through the back leg. The legs of the chair are screwed from the inside and dominos are used between the back and front legs.

From my original design, the armchairs measurement was altered during production due to mistakes made by me. The original angle of the back of the chair to the base was supposed to be 113 degrees, however, the finished chair is 118 degrees, due to me setting the drop saw to the wrong degree. This mistake was not realised until the back with the slats were glued and dried. The only way to fix this would have been to recut the already glued frame, which was not possible within the time frame.

The angle of the back did not create a major issue for the overall production, however, the final product appears as more of a reclined outdoor deck chair than an indoor armchair. The differing angle forced me to change all the measurements for the armrest and legs positioning. Attaching the actual frame was a difficult task and required me to measure and mark the side frame to place and secure with screws from the inside, opposed to just glue, to ensure it was connected and would hold. Once the legs were secured, the next issue was securing the armrest and replicating the biscuits to the armrest to match the design. I created a jig, which resembled a T shape, which clapped to the outside where the leg and armrest meet. While cutting the first section for the biscuit, I made the mistake of moving while it was cutting, resulting in a wider cut. I then had to replicate this for the remaining cuts on the armrest, meaning I had to cut oak to make a perfect fitting biscuit to fit the larger hole, rather than using standard supplied biscuits. I ended up using a router table to round each side, then cutting to length to fit and secure the armrest to the legs. Once the frame was complete, I needed to attach the webbing to enable the chair to support cushions, I chose webbing as this was a common method found in mid-century chairs. Creating a wooden frame insert I used a staple gun to attach the webbing, ensuring each was pulled tight across the frame and woven to ensure maximum effectiveness. To create cushions, I was advised to purchase 110mm thick foam, which tends to shrink to 100mm. Purchasing material for the covers was difficult due to my indecisive of colouring, my final decision being dark grey, a neutral colour that suits most décor and contrasted against the oiled black timber.

Deciding on the company's branding, I started with a name originating from my initials of AES. Through refinement, the branding turned into AE Furniture, as I wanted it to reflect the furniture designs which worked with A, as this letter enabled me to explore different angles and matched the sharp lines in my furniture designs. The finished logo is a modern, sleek, minimalistic design, with text focused on capital sans serif font. An interplay of lettering, especially the main AE, gives the communication as a furniture manufacturer.

The final product, company branding and furniture designs meet my intended brief to create a contemporary, mid-century styled range which enhances and compliments the timber and materials, using sharp lines. My armchair is a direct reflection of my personal vision for my furniture company, being constructed entirely from quality materials in an aesthetic that imitates my desire for creative designs.

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