

## astro

**CUSTOMER PART APPLICATION AM TECHNOLOGY**  Astro Lighting Ltd Altea 360 LED Prototype Working prototype SLA, Formlabs Form 2

## **PROCESS**

The prototype for Astro Lighting's Altea 360 LED wall light combines two materials on the Formlabs Form 2 SLA 3D printer: White resin for the Altea diffuser and Grey Pro resin for the Altea body. Combining the printed white resin diffuser with a working light fitted between the two printed parts, allowed the team to replicate the diffusion of light through the model.

Prior to bringing additive technology in-house, the team at Astro Lighting would have used CNC milling to fabricate this working prototype. The printed assembly was produced as per the final production part with a much shorter lead time, giving the ability to rapidly test fit, function and assembly.

RETURN ON INVESTMENT	
TRADITIONAL FABRICATION	COST OF £800 FOR THE FULL ASSEMBLY, USING CNC MILLING
3D PRINTING	COST OF £25 FOR THE FULL ASSEMBLY
COST SAVING	97% COST SAVING
TIME SAVING	LEAD TIME REDUCTION FROM 2 WEEKS TO 22 HOURS (93%)

## **ABOUT ASTRO LIGHTING**

Founded in 1997, John Fearon and James Bassant came together to create Astro with a shared commitment to British lighting design and a passion for quality and precision. Astro's creative ethos has remained consistent throughout - that good design demands simplicity. Astro design all of their light fittings in-house, and bring a large number of new designs to market each year.

"3D printing is an essential part of our product development process at Astro Lighting. The main reasons that we 3D print are twofold; firstly, our Concept Designers want to be able to judge the aesthetic and present their new designs in 3 dimensions, and secondly, our Design Engineers need to validate the form and function of our new parts before we invest in tooling. We have been 3D printing, inhouse, for the last 15 years. The cost and time saved because of this technology has been beyond measure."

Rob Speck, **Engineering Manager** 

www.astrolighting.com

