Hand & Eye

Lighting for all the senses.

What we celebrate

Curiosity is at the heart of all our work. When we have an idea, our approach is to learn by getting our hands dirty and experimenting. This allows us to get a feel for the inherent nature of the materials and build both a conceptual and tacit understanding of what we are doing. Our work celebrates the unique qualities of each material and we look for the small details that show this appreciation in all our designs.

This picture was taken when we were starting out and developing our first collection of <u>Terracotta</u> pendants. The rich colour and velvety texture of the terracotta, along with the sense of the long history of the material, makes it difficult not to touch it! We worked hard to develop a glaze that would offer a more modern counterpoint whilst still allowing the terracotta presence to reveal itself through the semi-translucent glaze. We also love the imperfect but beautiful lines created by the hand-dipped glaze. It is these tiny details that we believe make all the difference.

In this booklet, we would like to share with you some snippets of our design thinking and experimentation with materials that have helped form our lighting collection.



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0 Wall

Recycled material

We love the idea of making something beautiful out of waste and find joy in the process of taking discarded by-products and giving them value again.

Whilst researching the waste produced in the ceramics industry, we started working with a fantastic UK company who take ceramic and glass waste products and recycle them into a new composite type of stone material. The process compacts a dry mix of 98% recycled ceramic

and glass waste into simple timber moulds. These are then fired at low temperatures creating beautiful surfaces made entirely of UK-sourced waste materials. It's also a beautiful end product with each terrazzo-style piece being totally unique.

We appreciate the idea that our ceramic waste can form a small part of our \underline{lo} wall light.

Cast bronze

Our <u>Melina</u> pendant lights involve metal casting to create the bronze fittings. Made in the UK by a company who are skilled in the manufacturing process of investment casting, it's amazing to see the way the process works, a more high-tech version of a technique that has existed for thousands of years. Also called 'lost wax casting' the process starts by creating wax models from the designer's 3D drawings. These are then connected as a tree-like structure which is used to make the ceramic mould. The wax is then melted away leaving the mould ready for the metal casting where molten bronze is used to fill the mould, solidifying as it cools. The mould is then removed, and the metal parts are separated from their 'tree' before being carefully finished. The result is our beautiful, bronze fitting with a lovely solidity and matt texture. We believe all of this effort is worth it as the look and feel can't be matched by surface applied finishes.

Melina Pendant



Mould-blown glass

We are working with a fantastic workshop in Poland for our glass products. The glass blowing process they use is called mould-blowing. A glob of molten glass is placed on the end of a blowpipe and then carefully lowered into a timber mould that has been soaked in water. The blower then rotates the glass globe whilst inflating it inside the mould. One of the more difficult aspects of the process is knowing when the shape needs to be removed from the mould as the blower cannot see how it is progressing inside the mould which means they need to get a feel for each design. Once ready, the mould is opened and the glass is placed into a furnace to slowly reduce the temperature down from 800 degrees centigrade to ensure it does not cool too quickly and crack. For the <u>Mela</u> and <u>Melina</u> lights we created a special diagonal mould which means the mould split line is erased as the glass is turned inside the mould. The glass shades have been designed with a little dimple on the underside that creates a subtle focusing of the light inside this gentle shape. We produce two variants of the glass each offering a very different atmosphere and light quality. The <u>Mela</u> family shades are an etched opal glass that emits the softest of glows through the velvet-like surface of the glass. The <u>Melina</u> family is also available in a clear etched glass that transforms the shade to have an inner glow effect.

Mela Pendant





Melina Wall

Melina Linear



Terracotta

When we started designing our first-ever light we knew that we wanted to use terracotta. We were used to seeing this material used in a utilitarian and rustic way for tableware and external elements like plant and chimney pots and we wanted to bring its beautiful warmth and texture together with a more modern shape and glaze combination. Our terracotta shades are made using a slip casting technique which starts with filling plaster moulds with liquid clay and allowing this to partially dry before pouring out the excess. The leather-hard terracotta is then removed from the mould and hand finished. The shades are then bisque-fired, dip-glazed by hand and fired again.

Terracotta L Pendant Fuji Pendant Terracotta M Pendant Rigatoni M/L Pendant

This repeated firing has a lovely way of deepening the colour creating an even richer finish.

We took the idea of combining traditional materials and modern simple forms even further with the <u>A-Beam</u>. Made using a hybrid of high-tech processes and traditional craftsmanship, this light strikes a wonderful balance between the

A-Beam Suspension Duo Table

imperfections inherent in ceramics and a level of precision not normally associated with the material. The design also features our powered hanging system, which further plays with the contrast between the weight of the beam and its effortless suspension.



Extrusion

We use quite a few extrusions for Hand & Eye products with both our <u>A-Beam</u> and <u>O-Beam</u> lights being made in this way. We work with great factories in Italy and Germany who take the clay, add pigments for the colour, and then squeeze this through extrusion dies to create the shape. These very long extrusions are then hung onto special rods and fired in large vertical kilns before being cut down to size. This process is hard to get right since the extrusions can warp during the firing process but any material that is not used is crushed and recycled back into the unfired clay mix to help make the clay more predictable. The beauty of this recycled content is that it is visible as small fragments of slightly different coloured clay when you cut through the ceramics. We designed the <u>O-Beam</u> to take advantage of the differences between the surface of the ceramics and the cut face by forming the light openings with a waterjet cutter that creates a very clean-cut opening.

Inside the <u>O-Beam</u> we have engineered our own extruded aluminium LED mount and heatsink core, and an extruded LED diffuser that ensures a high quality of diffused light and output from this uniquely crafted light.

O-Beam Suspension





Chroma Pendant

Colour glaze

For our colour-glazed lights we aim for a real clarity of colour. We start with a white body earthenware clay, since any other clay effects the purity of the glaze colour, and this white clay enables us to have fun with some lovely, clean colours.

For our <u>Chroma</u> range, we chose 'quiet' colours creating a sense of calm and rooted in inspiration from nature: sand dunes, straw and raven's feathers. Working with a glaze specialist we developed these into the <u>Chroma</u> Oyster, Mustard and Liquorice as a satin glaze, which is soft but retains some reflection. The Liquorice was particularly difficult to get right but in the end was created by altering the cobalt content of the glaze and making it a bit more matt. Getting a glaze right is definitely a science, but it feels more like magic. The glazed shades are put into the kiln one colour and come out another, with the end result only evident once the firing is complete.



Morandi Pendant

Wheel thrown ceramics

We love the differences between production methods and the way each can achieve unique qualities. Our Morandi and Kamin pendants are both wheel-thrown, where the clay is placed on a wheel which is turned by the potter as they use their hands to 'throw' the clay, carefully forming the shape between their fingers rather than producing the shape from a mould. The potter uses memory and the feel of making to reproduce the shapes.

The <u>Morandi</u> collection, made by Linda Bloomfield from porcelain, is organic like a family, with each

shade being different and unique but sharing the same recognizable DNA set by the form and overlapping glaze effect. The <u>Kamin</u> pendant is made by Justin Page who, by contrast, throws each piece to near identical form whilst leaving the subtle marks of a wheel thrown piece visible. It's a beautiful combination of accuracy and hand made qualities that is combined with a soft white glaze, which is enlivened by iron particles in the clay. It's great to see how the same manufacture process can create such different outcomes depending on the makers intent.



Kamin Pendant

Silicone

Our extensive work and understanding of the limitations of ceramics has led us to one of our favourite combinations of materials in our range — ceramic and silicone.

Whatever way it is produced, the tolerances of ceramics make each batch a little different. Silicone is therefore the perfect partner with its flexibility to accommodate differences ensuring that there is always a good fit between the two components. We love the contrast between this synthetic material and the earthy clay, which creates an intriguing material combination of opposites that very much enjoy each other's company. We have used an opaque silicone for our <u>A-Beam</u> end bungs that allow the ceramic section to remain visible whilst hiding the light source inside the beam. The silicone wall fixing plate on our <u>Gooseberry</u> wall lights is a deep green colour offering a discreet injection of colour to the design which can be customised for larger orders.

The flexibility of silicone also lies in our ability to play with translucency. Our <u>Fuji</u> and <u>O-Beam</u> use translucent silicone that allows light to shine though softly, adding a subtle glow to functional parts. For our <u>Poly</u> wall light we played with the thickness of the silicone to create an interesting halo light effect.

Fuji Pendant





Isla wall

Through coloured porcelain

Our range includes a variety of types of pottery, and each is coloured in a different way. Where many have the colour applied as a separate layer over the bisque-fired clay, our <u>Isla</u> wall lights are different. Made by British potter Sue Pryke in some of her signature colours, these use a porcelain ceramic that has the pigment throughout the clay. This makes the colour the same throughout the material, giving our shades a particular type of warmth and richness which we love. Left unglazed, the raw coloured clay has a super-matt texture with just a little clear gloss glaze applied inside the shade to add to the glow of the light. Combined with the gentle colours, this material gives the simple form of our <u>Isla</u> wall light a particular charm. Hand and Eye Studio is a UK-based lighting design company with a clean-lined design aesthetic. We explore materials and production processes in innovative ways, challenging the materials and production capabilities throughout our development stages. Our finished designs celebrate the inherent qualities of the materials, to create unique, desirable and beautiful lighting.

Like good architecture, good lighting has a transformative effect on our spaces and how we live. Our recognition of this has been a driver for us to make products using the latest in lighting technology, so that the quality of the light source itself enhances the environment. Hand and Eye's design team is led by Tom Housden, with some commissions from and collaborations with other likeminded designers. We work with makers in the UK and Europe who share our vision of making things that are built to last using materials that are of high quality.

We sell directly to customers buying for their houses and businesses and work with architects, designers and specifiers around the world for both residential and commercial projects. We also accept bespoke commissions.

For more information: info@handandeyestudio.co.uk

