

QUALITIES OF CONCRETE

A GUIDE TO THE UNIQUE QUALITIES OF CONCRETE





The unique qualities of concrete allow Blend Concrete Design to produce pieces that are a perfect fit for indoor and outdoor spaces. Blend Concrete Design embraces the natural and raw textures and tonal qualities of concrete

to create pieces that are truly one of a kind. Air pockets, colour variation and natural patina are distinctive qualities of this unique material, which we believe only add to the character and beauty of our pieces.

FIBRE REINFORCED CONCRETE

We create our pieces using fibre reinforced concrete (FRC). By adding engineered fibres into the mix, the strength of the concrete is increased and the need for steel reinforcement is eliminated. It also allows us to pour our FRC pieces far thinner than

traditional concrete, making them lighter and easier to transport.

Due to the nature of the material fibres are sometimes visible on the surface of the product.

TERRAZZO

Blend Concrete Design produces terrazzo pieces by combining FRC with decorative aggregate.

While we are able to control the type and amount of aggregate included in the mix, the handcrafted nature of the product means we have little control over the aggregate

dispersal and we can't control the exact arrangement and spacing of the aggregate. Whilst we strive for consistent aggregate exposure, there willbesomevariation in the surface finish.

The aggregate is exposed through a process of manually grinding back the concrete. This process is done by hand.



AIR POCKETS

We have developed mould fabrication and concrete pouring techniques which minimise the likelihood of air pockets. Air pockets often feature on the surfaces of our pieces due to the natural qualities of concrete and the handcrafted nature of our products.

We believe unique and varied airpockets only add to the character of our pieces.









SEALING

Concrete is naturally a porous material. We apply layers of high quality sealant to protect our pieces from stains and scratches.

We have tested a variety of sealants to provide our clients with the best protection for their pieces. Similar to other materials such as stone or timber, if concrete surfaces are not cared for it makes them vulnerable to staining or scratching.

Be sure to follow the care and maintenance guide available on our website to best care for your concrete piece.

AGEING

Natural ageing during the lifecycle of a concrete piece is referred to as a patina. The look of your concrete piece will change over time. We believe that the characteristics of concrete only become more beautiful and unique.



COLOUR VARIATION

We offer a range of concrete colours. Our colour range is pigment based. We create our colours by adding a percentage of oxide into our FRC mix.

Due to the handcrafted and raw nature of our FRC, there is often variation in colour across surfaces. Colour variation between pieces and samples is to be expected and celebrated.









HAIRLINE FRACTURES

Hairline fractures refer to fine fissures that appear on the surface or within the material at a very narrow width. These fractures are superficial and do not compromise the overall structural integrity of the concrete. Engineered

fibres are introduced into the concrete mix to enhance its tensile strength and durability, however, due to various factors like temperature fluctuations hairline fractures can occur.

WATER RETENTION

Temporary water retention refers to concrete's ability to hold water for a short period. When water is absorbed into the concrete surface, it may temporarily darken the area until it evaporates. Fortunately, this water absorption does not harm the concrete

or sealer. However, it's important to note that if the liquid spilled has a certain level of acidity, it can potentially stain the sealer. Examples of liquids that may cause staining if left unclean for a period of time include wine, sauce and coffee.



