

Plastic Opacity Fabric Formed Column

Plasticity

Our piece uses the elastic material properties of woven fabric in conjunction with the fluid properties of liquid concrete to produce an organic concrete form. This expresses concrete's dual contradictory states of fluidity and cast solidity.

We used a variety of fabrics to generate different forms and textures; cotton fabric produced rounded organic forms with a very fine surface detail, whereas nylon geo-tec fabric produced less bulbous forms with a coarse grained surface texture.

Using fabric instead of conventional rigid formwork allows the concrete to 'breathe' during the casting process and excess water is allowed to escape as the concrete sets; this gives a high-quality concrete finish that is more durable and weather-resistant than conventionally cast concrete.

We focused on producing different varieties and combinations of concrete columns, developing a jointing detail between columns that allowed complete creative flexibility in generating innovative variations of form and texture for the central shaft of each column.

Using this technique we could therefore fully investigate concrete's potential for the dual (and contradictory) qualities of plasticity and opacity.

In conventionally formed concrete the final form of the piece is pre-defined and absolutely controlled by solid formwork, in fabric formed concrete the fluid/viscous/liquid properties of the concrete are allowed to speak in conjunction with the elastic properties of the fabric bag. The final cast piece is therefore inherently expressive of its plastic casting process.



plastic construction processes: stitching, stretching, pouring, working, revealing

Plastic Opacity Fabric Formed Column

Opacity

We investigated the idea of the column as a physically solid object that can be seen as an opaque form.

The surface contains a reflective quality that confuses the apparent solidity of the piece and generates a seemingly opaque and transparent materiality. We saw opacity and reflection as intrinsically similar qualities.

The process of fabric forming is honest to the materiality of concrete – it generates authenticity through concrete. The final cast pieces are expressive of the fabric process under which they were formed.

We also developed an idea of literal opacity through the form of the columns; the surfaces are continuous with punched holes and the pieces have no edges or flat surfaces. They can be arranged in multiple combinations as an opaque matrix; putting one column behind the other demonstrates the capabilities of the columns for allowing light to permeate and penetrate the solid form of the concrete.