

DESIGNING IN CONCRETE

- A HELPFUL GUIDE TO CREATING A BESPOKE PRODUCT -

1. FORM

Concrete is capable of producing beautiful forms due to its incredible flexibility. However, the more complex a shape, the more likely it is to increase the establishment costs (costs for moulds).

Our in-house mould fabrication team can assist with design options to ensure your design intent is not lost.

STEEL MOULDS

- Can be re-used 100+ times
- Not applicable for curves in two directions, or curved tapers.
- Allows adjustments to unit length without requiring extra moulds

FIBREGLASS MOULDS

- Can be re-used 20+ times
- Can be used for complex curves
- Double the cost of steel moulds
- Required option for units varying in width & height

EDGES

- Edges can affect costs - a rounded edge on a radius in plan view requires a fibreglass mould.
- In contrast, a **chamfered** edge adds almost no cost.
- Try to minimize the number of radii in plan view. Each new radius requires a new mould.

WEIGHT

VOLUME (m³) x 2.5 = WEIGHT (t)

Aim for 4 tonnes maximum per unit when designing seat modules.
e.g. 4000L x 600W x 600H = 3600kg

2. REINFORCEMENT

SVC/Anston can advise on costs and requirements for steel reinforcing. However, we recommend consulting an engineer for definitive computations.

AGGREGATE MATERIALS

- A variety of stone aggregates are available. The types of aggregates used may also have an effect on base colour.
- Consult our **catalogue** for design inspiration, or call us to discuss more options.

3. COLOUR

The addition of oxides allows beautiful colours in concrete, but can involve additional costs.

Cost/colour
PLAIN GREY
OFF-WHITE/CHARCOAL
COLOURED OXIDES
(blue, green etc.)

Low

High

4. FINISH

Our base price includes a smooth, off-mould finish rated Class 1 as per AS3610. Class 1 finishes can only be achieved on the top and vertical faces of a product.

SHOT BLAST: **add 10%**
GRIND: **add 40%**
HONE: **add 80%**
BUFF: **add 80%**
POLISH: **add 150%**

5. ADDITIONAL FEATURES

Our concrete seat bases can easily accommodate **timber tops** and **timber batten seats**. Please contact us if you would like to discuss your design options.

Other elements such as **light casings**, **rebates**, and **junction boxes** can be cast into concrete products. Please contact us for recommended suppliers of these additional features.

ANTI-SKATE

Solutions such as steel buttons or blades are always attached *after* products have been cast.

SEALING

- Sealing concrete provides extra resistance against stains and graffiti.
- Our extensive R&D into different sealing products means we can offer the best option for your application.

7. LIFTING

Sling recesses are popular where they can be hidden beneath floor level.

Cast-in **SwiftLift anchors** do remain visible, so they are best used in areas where they can be concealed by a timber surface element.

6. FIXINGS

The most effective method is for Reidbar inserts to be cast into the base of the product.

We then supply loose bars that are screwed into the base while hovering over grout tubes in an in-situ base.

FALL to the top of any concrete units is easiest achieved on site as part of the installation process, rather than designed into the product which causes more complexities.