

Number 1

Semi-Dry Cast

The first manufacturing method involves compacting a semi-dry cast stone mix into moulds, and with certain products the finished casting can be demoulded almost immediately for curing.

As the name implies, semi-dry casting involves the use of low water content or 'earth moist' mix. The fine aggregates used in the mix are graded so that thorough compaction can be achieved. Computerised batching is typically used to ensure the consistency of materials and measure water content. Semi-dry products can either be manufactured using a high quality cast stone mix throughout or by employing a backing mix with a cast stone facing mix.

The semi-dry approach enables repetitive elements to be cast in considerable numbers and relatively quickly. The finished surface of the semi-dry cast stone products tend to have an open texture, like sawn natural stone.

The process is most suited to traditional sized elements such as cills, heads, string courses and copings. Structural items can be produced so long as the reinforcement requirement does not inhibit compaction. The ability to reinforce semi-dry cast stone is yet another advantage over natural stone.

Units are generally cast face down into wooden moulds using pneumatic or electric sand rammers. Alternatively, steel hand moulding machines or 'machine mould' can be used to produce consistently sharp, crisp arrises suitable for ashlar and details such as L quoins and plain band courses. The benefits of machine mould are even shorter lead times and lower cost.

