

## **Dornika artificial stone**

**Artificial stone** is a name for various kinds of synthetic stone products used from the 18th century onward. They have been used in building construction, civil engineering work, and industrial uses.

One of the earliest was *Lithodipyra* ([AKA Coade stone](#)) produced from 1769 to 1833. Later, artificial stone production was followed with different methods.

**Dornika artificial stone** is produced based on plain concrete which the sand is mainly used as the fine filler. Chemicals and modifying admixtures provide necessary cohesion between all components and ensure the stone strength. The material color is defined by the mineral pigment which is resistant to alkaline and ultraviolet. The mixture produced in this process set in polyurethane or silicone moulds which perfectly copy the natural stone surface relief. It could be made more cheaply and more uniform than natural stone, and was widely used. In engineering projects, it had the advantage that transporting the bulk materials and casting them near the place of use was cheaper than transporting very large pieces of stone.

### **The advantages of the Dornika artificial stone:**

- Dornika artificial stone is much lighter than natural stone which makes it more convenient to work with
  - Dornika artificial stone can be used both for interior and exterior finishing
  - Concrete stone is easy to cut and adjust
  - Dornika artificial stone is easy to install and it does not require any further maintenance securely protecting the faced surface from aggressive environment impact
  - Dornika artificial stone is much cheaper than natural stone
  - The production technology allows for a wide range of stone colors, shapes and textures giving multiple possibilities for decoration
- The Dornika artificial stone has good thermal insulation characteristics

The products manufactured by the Dornika technology have high wearproof characteristics:

- Compressing strength from 600 to 1000 kg/cm<sup>2</sup>
- Tensile strength at bend from 60 to 150 kg/cm<sup>2</sup>
- Frost resistance not less than 500 cycles (F500)  
(freezing at -20° C and defrosting at +20° C)
- Water absorbing characteristic less than 3%
- Wearability (abrasive resistance) less than 0,4 g/cm<sup>2</sup>