

Arki-Flow G31

ID: G3-G31
Version: 1
Edition: 1

Non-shrink cementitious grout

Description

Arki-Flow G31, a multi-purpose non-shrink, cementitious grout, consists of a blend of Portland cement, graded aggregates, and special chemical additives.

Mixing Arki-Flow G31 with controlled amount of water yields a flowing grout able to fill gap thicknesses from 10 to 75 mm.

In the plastic stage, Arki-Flow G31 develops a positive volumetric expansion by means of gaseous system.

Key functions

- Assembly grouting of machine beds, crane rails, etc.
- Filling gaps between pre-cast concrete elements.
- Filling the volume between foundation's socket and pre-cast concrete columns.
- Filling gaps between concrete foundation and steel bedplates.
- Anchoring of anchors, bolts and masts.

Product properties*

Appearance:	Grey cementitious powder
Bulk density:	1.75 kg/l
Wet density:	2.28 kg/l
Mixing water:	~ 3.5 liters per 20 kg bag
Compressive strength: (ASTM C109)	40 MPa at 7 days 55 MPa at 28 days
Flexural strength: (ASTM C348)	6.0 MPa at 7 days 9.0 MPa at 28 days
Time for expansion:	10 minutes (Start) 24 hours (End)

* Values are valid at ambient temperature of 23°C and at 55% relative humidity using standard water/powder ratio.

Directions for use

Surface preparation

The substrate must be clean, sound and free of any surface contamination. Absorbent surface should be saturated thoroughly. Metal surfaces (iron and steel) should be free from scale, rust, oil and grease. Any shuttering should be watertight and of good strength to prevent deformation.

Mixing

Consistency is dependent largely on the amount of mixing-water used. Standard value is about 3.5 litres of water per 20 kg bag of Arki-Flow G31. The Arki-Flow G31 must be added slowly to the water during the mixing process which should be carried out using a grout mixer or a slow speed drill fitted with high shear mixing paddle. Mixing should remain for at least 3 minutes until the material becomes smooth and even in consistency.

At high temperatures, condition the powder bags in a cool environment prior to use and use chilled water for mixing to keep temperature below 30°C.

Material Placing

Pour the mixed grout into the prepared area such that the grout has the shortest distance to travel. Ensure that air displaced by the grout is allowed to escape. When carrying out base plate grouting, ensure sufficient head of pressure is maintained to keep grout flowing. Exposed areas of the grout surface should be kept as small as possible.

In hot weather, base plates and foundations must be shaded from direct sunlight.

Curing

To lower rate of water evaporation, treat exposed surfaces with Arki-Cure curing compound or with continuous application of water and/or wet Hessian.

Cleaning

Clean contaminated tools and mixer immediately after application with water. Hardened grout can be removed by mechanical means or with Arki-Clean ACD.

Storage and shelf life

Arki-Flow G31 has a shelf life of 12 months when stored in a dry place and good warehouse conditions in unopened, undamaged original packaging.

Packaging

Arki-Flow G31 is supplied in 20 kg bags.

Safety precautions

Arki-Flow G31 is a non-flammable material

Arki-Flow G31 is not classified as hazardous material under current legislations.

Arki-Flow G31 contains cement. Therefore unnecessary contact with the product is to be avoided.

Accidental contact with skin or eyes should be washed off with plenty of clean water. In the event of prolonged irritation, seek medical advice.

Arki-Flow G31

Material should be disposed according to local regulations.

For further information refer to the material safety data sheet.

Technical support

Arki provides assistance to its customers and gives site support, consultations and technical advice on all aspects related to specifications and application methods of construction chemicals and building materials.

Additional Arki products

Arki produces high quality products intended for use in construction activity, among these products:

- Concrete admixtures
- Concrete repair materials.
- Mould release agents and curing compounds.
- Adhesives and waterproofing materials.
- Flooring systems.
- Protective coatings.

Product quality

All Arki products are manufactured under a quality management system independently certified to conform to the requirements of the international standards.



P O Box 301100,
Riyadh 11372, Saudi Arabia
Tele: 920006343
Fax: +966 1 4891700
e-mail: info@arkichem.com

www.arki.sa

Users should always refer to the most recent issue of the product technical data-sheet for the product concerned, copies of which will be supplied on request.
Arki products are guaranteed against defective materials and manufacture and are sold subject to Arki standard terms and conditions of sales.
Because the storage, handling and application of these products are beyond our control, we can accept no liability for the results obtained.