# **AGILIA**

# **Customers Guidelines**

## **ORDERING**

- ▶ Due to the very fluid nature of Agilia, mixer volumes are reduced, typically delivering quantities 1m³ less than the carrying capacity of the mixer truck, i.e. in volumes of 5m³ on a 6m³ capacity vehicle.
- ▶ With as much notice as possible, (minimum 3 days), please give the plant or sales office a site contact, full details of the site, including total quantity required, delivery instructions, method of placement and details of any access issues on site.

# SITE PREPARATION

- ▶ Agilia is a highly fluid material, it is therefore essential that the area to be poured is fully sealed to minimise grout leakage. This is best achieved using sheets of polythene with fully-taped seams.
- Foam strips should be placed around the edge and cast in to allow expansion and avoid restraint.
- Polythene used to line the base should be pulled as flat as possible ridges or folds will induce cracking.
- ▶ The site must be protected as much as possible from draughts and water damage. Any standing water in the area prior to pouring must be removed before beginning to avoid damage to the concrete.
- As with all concrete, it is inadvisable to pour in heavy rain as this will damage the surface finish and affect the slab's ability to receive floor-coverings.
- Agilia should be treated as any flowing concrete. As such, it will require crack-control mesh and saw-cut joints to control shrinkage stresses. It may be possible to replace mesh with structural fibres, please consult your Aggregate Industries Technical Specialist.

## **PLACING**

- ▶ Ensure adequate Personal Protective Equipment is available, including at least the following:
  - ▶ Watertight wellington boots or similar
  - Long trousers and long-sleeved top to protect against cement burns
  - ▶ Eye protection to protect against splashes
  - Gloves

- Agilia can be placed via pump, skip or straight-tipped from the concrete mixer truck.
- Levels are usually achieved using laser or liquid level indicators from a single datum point and individual level tripods placed in a regular grid pattern can be used to obtain point levels.
- ▶ Please note, Agilia cannot be laid to falls.
- ▶ The minimum average depth for Agilia is 75mm. In accordance with BS8204 and CIRIA Technical report 184, joint spacing should be in the order of 4m x 4m.

## FINISHING AND CURING

- When the concrete has been placed to required level, T-shaped bars made from cylindrical tubing, known as "dappled bars" should be used to achieve the final finish.
- ▶ A steady 'up and down' motion of the dapple bar should be used to cause a series of waves in the surface of the fresh concrete, penetrating to a depth roughly equal to the diameter of the bar and taking care to maintain contact with the concrete at all times.

  This action should be continued while moving slowly backwards in a straight line from the starting point, restarting to travel parallel to the previous pass with a slight overlap.
- Once the entire slab has been dappled in this way, return to the start point and re-dapple the surface using a much lighter action, penetrating only 10-15mm into the surface of the slab. This pass should travel at right-angles to the original direction.
- ▶ Once the final finish has been achieved, the concrete must receive an adequate coating of a minimum 90% efficient curing membrane in accordance with the manufacturer's recommendation; (this is typically 4-5 m²/tt). Curing agents can be water or solvent based, but water-based products are most commonly used and better suited for internal applications. Application of the curing agent or other method curing is essential in windy or drying conditions to reduce the risk of plastic shrinkage cracking. For larger pours where access to apply the curing agent would be prohibitive, the process must be combined as the slab in cast.
- As with any concrete slab, induced joints will require cutting leaving a maximum bay dimension of 4m and a maximum length to width ratio of 1:1.5 (as per Concrete Society Technical Report 34). This should be completed as soon as the concrete is sufficiently 'hard' to avoid damage to the arris.

For further information, to place an order or to speak to one of our Agila specialists, please contact the following sales offices:

**Scotland** - 01698 870947 <u>No</u>rth - 01283 712677

Midlands and South East - 01283 712677

South West - 01752 485201









