

BGC Concrete's exclusive range of exposed mixes will add value to your building project.

The success of using this range of mixes depends upon planning and attention to detail, an experienced contractor should always be appointed to achieve the best results. The contractor should be aware of the limits and details of the mix supplied, correct ordering and placement of concrete in addition to expert finishing skills are required to ensure that a consistent presentable job is achieved. Remember the trade skills employed are as important as the mix being supplied, don't cut corners. The process is not just good luck on the day!

To assist your selection process all mixes are coded, no names, just codes. It is imperative that you quote the correct code, it will have the appearance of EX2514A12, the detail identifies the type of mix, in this case exposed, its strength, aggregate size and type and the cement colour. Without the code we are unable to supply. BGC Concrete personnel are available to provide expert advice once you have selected the mix and required finish.

#### • Set Retarders

Consistency is everything, same day washing is not as effective as the use of a surface set retarder which allows the concrete to be exposed on the following day. Same day washing is reliant upon the skills of the contractor, it can be affected by differential setting times of the concrete, ambient temperatures, areas of shade etc basically the concrete has to be consistently hard to ensure an even level of exposure, if too soft the concrete can be overexposed this will result in an entirely different appearance of the finished surface. BGC Concrete would recommend the use of surface set retarders, they take the risk out of exposed concrete and achieve a more consistent look if applied to manufacturers recommendations.

#### • Seeding

Expensive aggregates can be hand seeded, be aware this is a subjective issue, supervise the contractor, or seed the slab yourself to the desired level. Make sure you have enough aggregate

to seed the slab before you start pouring, divide the aggregate into portions and place it at locations around the slab to ensure that each area is covered and that you don't run out. Seeded aggregates should be soaked 1 hour before using. Always comply with the safety regime on site, wear PPE as required and ensure scaffold is in place on all elevated work areas.

#### • Reinforcement

If mesh is being used ensure that the correct cover is achieved, you don't want to see mesh being exposed in the washing operation.

#### • Pumping

As exposed mixes contain a higher percentage of coarse aggregate difficulties can be experienced in pumping such mixes. We recommend squeeze pumps as opposed to piston type pumps, if the mix contains white sand a squeeze pump is a MUST.

#### • Joints

Plan the joint layout before starting, if the contractor is not tooling joints on the day of the pour, cutting of the joints MUST take place early the next day, don't DELAY, cracks will appear at re-entrant corners without fail!

#### • Expansion

Exposed aggregates abutting brick work should always have expansion foam separating the two materials. This allows for expansion and for the two materials to move independently, that is the concrete does not stick to the brickwork and result in cracking.

#### • Thickness

Whether 75 or 100mm it needs to be CONSISTENT, the prepared surface should be level, if not the thinner areas may result in cracking, often at some point in the future. All pipes to soak wells etc should be within the sand, not concrete, as a weakness leading to cracking will result.

#### • Area

Don't ask the contractor to do too much, it's easy to pour initially however chasing the concrete to achieve the desired level of exposure if you are not using a surface setting retarders can often lead to an inconsistent appearance.

#### • Water

Make sure that you have an adequate water supply and pressure to wash the concrete, if using a surface set retarder it is likely that a pressure washer will be used to expose the surface on the next day.

#### • Site

On sloping sites it is even more important that a surface retarder is used, it's better to apply several even coats to avoid rivulets of chemical running down the surface, this can result in these areas being over exposed if too much is applied in one pass of the spray. Ensure that an area is prepared to act as a reservoir for the washed concrete run off, if there is a garage at the bottom of the driveway, pour the garage later, this will allow the water to collect in the sand under the garage and avoid costly clean up operations. You will probably need a pump to pour the garage later, protect the exposed aggregate driveway, do not allow heavy vehicles to drive on newly laid exposed areas.

#### • Accelerators

Precautions need to be taken if accelerators are to be used in the mix. The sub base should be fully saturated to minimize rapid water loss and the potential for plastic shrinkage (cracking).

#### • Acid washing

Generally completed several days following placement, essentially used to 'clean' aggregates in the mix prior to sealing. This process should be completed by a qualified applicator.

#### • Sealers

There are various options for sealing, sealers are available in matt and gloss type finishes, they may be water or solvent based, please refer to supplier or contractor to confirm your selection.