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MULTIBOL 343

Surface Retarder for Exposed Aggregate Finish

Description
MULTIBOL 343 Concrete Surface Retarder is specially formulated for treating the contact face of freshly placed concrete, delaying the setting time of the surface matrix such that after releasing the concrete from the form, the surface film of cement paste may be washed or brushed away. This will leave the surface as a clean textured exposed aggregate finish or alternatively as a keying mechanism for plaster render work. MULTIBOL 343 can also be used to produce satisfactory key joints in structural concrete avoiding the expense of hacking or bush hammering.

Typical Applications
The retarding element in MULTIBOL 343 products only delays the hydration of the cement in contact with the mould surface and does not in any way weaken the ultimate strength of the concrete mass. It is used for providing a key for plaster work and, if aggregate is carefully selected, a pleasing and decorative exposed aggregate surface finish may be obtained.
* MULTIBOL 343 STANDARD - for application to previously untreated timber and other absorbent surfaces. A green /brown liquid of medium-high viscosity.
* MULTIBOL 343 RED - for application to metal, plastic, treated timber and other non-absorbent surfaces. A pink-red liquid of medium viscosity.
* MULTIBOL 343 WHITE - covers the same applications as MULTIBOL 343 Red but is intended for use in conjunction with white cement. A white liquid of medium viscosity.
* MULTIBOL 343 SPECIAL - specifically designed for use on heated moulds / high temperature conditions. A paste-like consistency of high viscosity.

Directions for Use
* MULTIBOL 343 should be thoroughly stirred to ensure complete homogeneity. Application is by brush and should be carried out evenly over the interior shutter surface at least one hour before the concrete is poured. All moulds and formwork, etc. should be clean and free of water, oil and grease at the time of application.
* Once the moulds have been treated the MULTIBOL 343 film should be protected from rain or other damage. Care should be taken when placing, tamping or vibrating the concrete that the flow of concrete across the face of the mould is kept to a minimum. Poker vibrators should not be allowed to scour the internal face of the mould. The concrete should generally be released from the moulds within 48 hours after placing and the retarded surface should then be immediately sprayed with water and all loosely adhering material brushed away.
* Depending on the thickness at which the MULTIBOL 343 is applied the retarding effect can be extended up to 3 days. Immediately the moulds are released they should be cleaned removing any unset cement. The loose material should not be left to harden and in turn become difficult to remove.

Coverage
Field trials should be conducted with the specific concrete mix designs to determine the optimum depth of penetration of the MULTIBOL 343 surface retarder vs. coverage rate, related to actual requirements. As a guide, the following coverage rates should be utilized:
* MULTIBOL 343 STANDARD / RED / WHITE - up to 8mm penetration, use (6 to 8m² / litre initially. For a greater depth of retardation, use 3 to 5m² / litre).
* MULTIBOL 343 SPECIAL 2.5 to 3.5m² / litre initially depending on depth of retardation and operating temperatures.

Curing
It is essential that alt concrete be cured to achieve design strength and reduce moisture loss Cure with MULTICURE curing compounds.

Compatibility
All grades of MULTIBOL 343 are suitable for use with Normal Portland Rapid Hardening and High Alumina Cements. When Rapid Hardening Cement is used (or concrete containing an accelerating admixture) or when elevated curing temperature are employed it is advisable to produce trial panels ascertaining the optimum time at which the retarder is operative. With High Alumina Cements the forms should be released and the surface washed within 6 to 8 hours after pouring the concrete.

Packaging
Supplied in 25 and 200 litre drums

Quality Assurance
MCC LIMPOPO's production and testing programmes comply with local testing standards.

Updates
This data sheet supersedes all previous issues prior to this date: 31/05/97.