

Lambert® Retarder V

Water based concrete surface retarder

Description

Lambert Retarder V chemical retarder is directly applied to formwork to provide a simple, economic method of exposing aggregates in freshly poured face down concrete, or sprayed on the concrete surface for face up panels or slabs. The action of Lambert Retarder V products is to retard the hydration of cement at the surface matrix of concrete.

Lambert Retarder V is available in one etch depth, the particular depth of exposure as 2~4 mm

The above depth is a guide which is based on grade C30 concrete, with a maximum aggregate size of 20 mm. Site trials are recommended.

Uses

To produce an exposed aggregate concrete finish in either face down or face up concrete manufacture, and to produce a mechanically sound construction joint. Typical uses include

- ❖ Precast concrete panels.
- ❖ Insitu construction joints.
- ❖ Surface preparation of fresh concrete prior to rendering.

Advantages

- ❖ Excellent results with high temperature concreting.
 - ❖ Suitable across a wide variety of job-site conditions and mould surfaces, including steel, fiberglass, concrete and timber.
 - ❖ Suitable for large units where hydration heat is high.
 - ❖ Economical in application.
 - ❖ Mould release agent not required.
 - ❖ Non toxic and non flammable.
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Instructions for use

Surface preparation

All formwork must be non-porous, clean and dry. Porous timber or concrete moulds should be coated with suitable polyurethane sealer.

Concrete placing

Once applied Lambert Retarder V must be protected from rain and any dust buildup. Lambert Retarder V may be applied up to 24 hours in advance of a concrete pour. Once vibration is complete the section should not be disturbed to avoid interference with the retarder penetration of the surface layer.

Trial procedures

Trials and samples duplicating actual production conditions are essential in determining the effects of the various parameters and in developing a standard procedure. Trials are best carried out by personnel who will be involved in the full project.

Application

Lambert Retarder V should be well-mixed before use. The use of a mechanical mixer is recommended to ensure that any settled material is re-dispersed.

Lambert Retarder V should be applied in a thin, uniform manner by brush, spray or roller, at a rate of 10 to 12 m²/litre (0.08 to 0.10 litres/m²). This coverage can normally be obtained in a single application.

For face down application, the surface retarder should be completely dry prior to placing concrete, this typically takes 15 to 20 minutes depending upon ambient conditions.

For face up applications, Lambert Retarder V should be spray applied to concrete immediately following final placing and finishing, whilst the concrete is still wet.

Removal of Retarded Layer

Once the bulk concrete has hardened sufficiently the shutters or moulds can be removed. The retarded portion of the concrete matrix is easily removed by wire brush or water-washing.

Delay in removal of the retarded matrix will result in a lighter and less uniform depth of etch.

Compatibility

A trials to assess any effect should be carried out before the main project.

Lambert Retarder V is suitable for use with all types of Portland cements and cement replacement materials such as PFA, GGBFS and silica fume.

Limitations

Surfaces coated with Lambert Retarder V must be protected from water, including rain and condensation, at all times before placement of concrete.

Whilst effective on mixes incorporating GGBFS or silica fume, tests should be conducted to determine performance.

Fire

Lambert Retarder V is water based and non-flammable.

Cleaning and Disposal

Spillages of Lambert Retarder V should be absorbed onto sand, earth or vermiculite and transferred to suitable containers.

The disposal of excess or waste material and empty containers should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

Packaging

Lambert Retarder V is available in 14.5 litre drum

Coverage

Lambert Retarder V: 10 to 12 m²/litre

Storage

Store in a dry area under normal warehouse storage conditions. Lambert Retarder V should be protected from frost, if the material becomes frozen, it should be completely thawed and then thoroughly mixed prior to use.

Lambert Retarder V has a minimum shelf life of 6 months provided the temperature is kept within the range of 5°C to 30°C.

Health and Safety

Lambert Retarder V is non-toxic unless ingested in large quantities. Skin and eye contamination can be removed by washing with clean water. If eye contact is severe, or significant ingestion occurs medical advice should be sought.

Notes

The information, and, in particular, the recommendations relating to the application and end use of Lambert products, are given in good faith based on Lambert's knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respects of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request

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