

LA CONCRETE ACCELERATED

Product code

TP133, packaging listed overleaf

Description

LA Concrete Accelerated is a blend of special Portland cements, quality continuously graded non ASR reactive aggregates and admixtures. The product, when mixed with water, produces a homogenous concrete which will not segregate or bleed and has a dual shrinkage compensating system giving volume stability in both the plastic and hardened states. The mixed material has high flow characteristics.

LA Concrete Accelerated may be used for all concrete repairs wherever a flowing rapid strength gain concrete is required. The product is easily mixed and placed under gravity or by approved pumping techniques. The placed material is self compacting and will displace air from the repair area ensuring a strong bond between the placed material and the repair substrate.

Uses include: Motorway bridge repairs
Repairs to structural concrete elements.
Protection of corroded and damaged reinforced concrete.
Refurbishment of soffits to bridge beams and crossheads
Cold weather applications.
Rapid bedding concrete.

Specification Outline

Concrete repairs and replacement shall be carried out using LA Concrete Accelerated as manufactured by Parex Ltd. The product must be stored, handled and used strictly in accordance with the manufacturer's instructions.

Quality Assurance

Parex Ltd is a firm of Assessed Capability. The Company's quality system conforms to BS EN ISO 9001:2008 and is assessed by UK CARES LTD.

Standards

L.A. Repair Concrete conforms to the requirements of the Department of Transport Standard BD27/86, clause 4, "Materials for the Repair of Concrete Highway Structures".

L.A. Repair Concrete conforms to the requirements of "the Department of Transport Specification for Highway Works, clause 1704.6 Control of Alkali Silica Reaction."

Typical Concrete Properties @ 20°C

Consistency

Water Content %	Ltr/25kg Bag	Consistency
12	3.0	Flowing Concrete

Consistency Life

Temperature °C	Water Content %	Ltr/25kg Bag	Concrete Slightly Agitated
20	12	3.0	30 Minutes
10	12	3.0	60 Minutes

Set times (EN 197-1)

Temperature °C	Water content %	Ltr/25kg bag	Initial Set /min	Final Set /min
20	12	3.0	25	47
10	12	3.0	50	65

Compressive Strength

Temp °C	Water Content %	2 Hour N/mm ²	4 Hour N/mm ²	1 Day N/mm ²	28 Days N/mm ²
20	12	15	20	35	60
10	12	5	20	35	60

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Typical Concrete Properties

Density @ Water Content 12% 2250kg/m³

Shrinkage LA Concrete Accelerated is shrinkage compensated.

Bond Strength 55N/mm² (slant shear BS6319)

Instructions For Use

Preparation

Surfaces to be repaired should be roughened to produce a good mechanical key. Ensure all contact surfaces are clean, free of contamination. Concrete surfaces should be soaked then blown free of standing water prior to concreting. Enclosed formwork sections should have drain holes to remove any standing water.

Formwork must give sufficient hydrostatic head for the concrete to flow across the work area and be strong enough to resist the force of concreting.

When placing concrete upwards from the bottom of a section, air release and tell-tale outlets may be required.

Mixing

The recommended water addition is 3.0 litres (12%) per 25 kg bag. Place the required quantity of water in a suitable forced action mixer such as a Cretangle. Alternatively for small quantities place the required quantity of water into a suitable mixing vessel and mix with a low speed-high torque drill with mortar stirrer. Slowly add the powder to the water whilst continuously mixing. After all the powder has been added mix for a further minute to ensure a smooth lump free consistency is achieved.

Placing

Ensure that sufficient LA Concrete Accelerated has been mixed and available such that the placing operation can be carried out in one continuous pour. Place the mixed LA Concrete Accelerated from one side of the work piece until the area is full.

When placing concrete through a flexible tube to the bottom of the section being repaired, pour the LA Concrete Accelerated slowly and continuously to displace air upwards within the work piece.

At temperatures in excess of 20°C care must be taken to ensure that there is sufficient working life to complete the task. Working life decreases with increase in temperature. For applications above 20°C it is recommended that trial work be carried out or contact Technical Services Department for advice.

Instructions for Use

Curing

At temperatures between 5°C and 35°C, formwork should be left in place until the compressive strength of the L.A. Concrete Accelerated has reached at least 10N/mm² (usually between 2 and 4 hours). Once the formwork has been struck any exposed concrete should be cured immediately with Polycure sprayed at a rate of 10m² per litre. In adverse ambient conditions of rapid drying such as high temperatures and drying winds apply a second coat of Polycure after the first coat has dried. In cold ambient conditions protect recently placed concrete from freezing.

Precautions

Health and Safety

L.A. Concrete Accelerated is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash thoroughly with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice.

Full health and safety data are given in Product Safety Data Sheet.

Fire

L.A. Concrete Accelerated is non-flammable

Yield

L.A. Concrete Accelerated is packed in 25kg bags. The yield obtained is approximately 12.4 litres of mixed material.

Storage And Shelf Life

L.A. Concrete Accelerated will have a shelf life of 12 months when kept in dry conditions at a temperature of 5°C to 45°C. Storage at higher temperatures or high humidity may reduce the shelf life.

Packaging And Ordering

L.A. Concrete Accelerated is supplied in:

25kg bag Product Code TP 133

For further information and sales please contact your local Parex office as listed below.

Parex Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Parex Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Parex Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.