VERSION: 02

ISSUED: APR 2025

LARSEN HIGHWAYS

TECHNICAL DATA SHEET

RRC15

EN1504-3 CLASS R4

HIGH WEAR RESISTANCE

TRAFFIC IN 3 HOURS

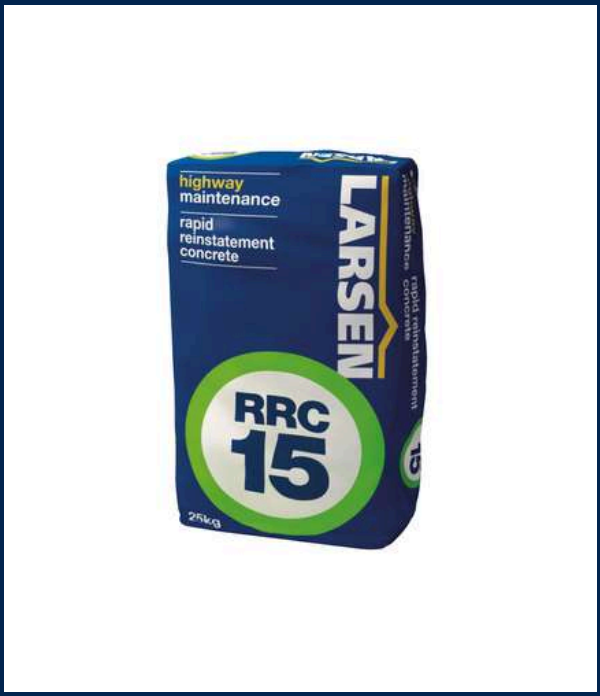
SELF PRIMING

SHRINKAGE COMPENSATED

SLIP/SKID RESISTANT

FREEZE/THAW RESISTANT

DE-ICING SALT RESISTANT



Larsen Highways RRC15 is a fast set high early strength concrete for reinstatements large or small. It has been independently tested to EN1504-3 Class R4. Designed for use in car parks, warehouses, ramps and slipways, farm buildings and loading bays, and other concrete hardstandings and concrete roads. It is suitable for patch or full-depth repairs with quick re-opening to traffic.

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 17/H251

HAPAS

For further information, consult our Technical Department.

Belfast **028 9077 4000** Birmingham **028 9053 5409** Dublin **01 8348255**

LarsenBuildingProducts.com

TECHNICAL DATA SHEET

PRODUCT INFORMATION

FORM	Granular
COLOUR	Grey
MAX AGGREGATE	6mm
HAZARD INFORMATION	IRRITANT - Contains Cement. Consult Safety Data Sheet before use
CLEANING	Clean tools, equipment, etc. using warm water. Mechanical means are necessary when the product has set.
PACKAGING	25 kg multi-ply paper bag
STORAGE INSTRUCTIONS	Store unopened containers in a cool, dry, dry location away from extremes of temperature.
SHELF LIFE	6 months in unopened manufacturer's containers

APPLICATION INFORMATION

WATER DEMAND	25kg Bag + 2.0-2.5L water
APPLICATION TEMP:	+3 to +30°C
BED THICKNESS:	25-100mm (thicker repairs possible in localized areas or when bulked out with suitable 10mm aggregate)
WORKING TIME:	15-20min
SETTING TIME:	30 min
TRAFFIC TIME:	3 hours typically
COVERAGE:	25 kg will produce approx. 12L of mortar When bulked out 2 x 25kg RRC15 + 1X25kg aggregate produces 30L of mortar

PERFORMANCE INFORMATION

DENSITY	2200/kgm^3
COMPRESSIVE STRENGTH	3hr - >20MPa 28 day - >60MPa
FLEXURAL STRENGTH	7 day - 7MPa 28 day - 9MPa
ADHESION STRENGTH	3.3MPa (28 day) 3MPa (After 50 Freeze/thaw cycles with de-icing salts)
CARBONATION RESISTANCE	4.7mm (reference concrete = 9.6mm)
MODULUS OF ELASTICITY	34.1GPa
SLIP/SKID RESISTANCE	Class III Wet - SRV 60 Dry - SRV 74

DIRECTIONS FOR USE

PREPARATION

All concrete substrates should be at least 25MPa and have all deteriorated material saw cut out and mechanically removed to a minimum depth of 25mm. Preparation should be carried out by suitable mechanical means but in such a way as to prevent micro-cracking in the substrate. The prepared surface should have a surface tensile strength in excess of 1MPa. All substrates should be clean and thoroughly sound and free from oils, grease, dust, loose particles or any other contaminants which may interfere with adhesion. They should be pre-soaked but free from standing water. Due to the speed of set it is recommended to work in areas of less than 2m^2

MIXING

Add 2.0-2.5L of water per 25kg bag to achieve desired workability. Mix thoroughly by suitable mechanical mixer. Should more water be added, the hardened properties of the product will be reduced. Highways RRC15 will begin to set in 15 minutes, do not try to remix or wet-up RRC15 which has ‘gone off’.
For depths greater than 100mm, RRC15 may be bulked out with 10mm crushed granite (or similar non-reactive) aggregate. Mix at a ratio of 2 x 25kg RRC15 to 1x25 kg of aggregate. Ensure thoroughly mixed.

APPLICATION

Highways RRC15 should be worked into the pre-dampened substrate with a stiff brush immediately prior to filling the area. Then immediately trowel RRC15 working the material into the sides and base first before screeding level and float or brush finishing as required.

The hardened surface of RRC15 may require mechanical preparation when subsequent products, e.g. tile adhesives, levelling compounds or coatings are to be applied.

DIRECTIONS FOR USE CONT.

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Larsen Building Products
4 West Bank Road
Belfast, BT3 9JL
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GB17/872895

EN1504-3

DOP No: DOP-1504-003

Concrete repair product for structural repair CC mortar (based on hydraulic cement)

Compressive strength	Class R4
Chloride Ion Content	≤0,05 %
Adhesive Bond	≥ 2.0 MPa
Carbonation resistance	Pass
Elastic modulus	≥20GPa
Freeze Thaw Cycling with Deicing Salt	≥ 2.0 MPa After 50 cycles
Slip/skid resistance	Class III: >55 wet test
Reaction to Fire	Class A1
Release of Dangerous Substances	Complies with 5.3 Consult MSDS

QUALITY

This product is manufactured in a plant controlled under an integrated management system third party certified to BS EN ISO 9001 and BS EN ISO 14001 and a third party certified FPC to EN1504.

RESTRICTIONS

Speed of set and strength development will be affected by site and substrate temperature. Warm conditions will accelerate setting and cold conditions will slow setting. Protect freshly placed material from freezing until set. In adverse weather conditions, RRC15 should not be used if the temperature is below 3°C on a falling temperature or below 1°C on a rising thermometer. Protect patch from inclement weather, freezing etc until sufficiently strong to resist damage. In hot or windy conditions, cure with an appropriate curing membrane, polythene or wet hessian.