

Our primary aim is to provide customers with the very best level of service that can be expected. Our goal is your complete satisfaction and to achieve this, our dedicated personnel will assist with your enquiry in a professional and timely manner.

Our highway maintenance range balances technical merit and user friendliness without compromising either. Quality, performance and development are all synonymous with Larsen Highway products, all developed with the professional user in mind.

LARSE

4000 \$1

0

2

1

## LARSEN

LARSEN



















## **36.7 MILLION VEHICLES REGISTERED FOR USE ON THE ROADS OF GREAT BRITAIN**





Never before has the need for reliable, first time permanent reinstatement methods been as critical. To meet this demand, we have further enhanced our comprehensive range of high performance road maintenance products.

Larsen Building Products, as part of the Larsen group of companies, has been manufacturing quality products since establishment in 1975. Larsen has now grown to become a market-leading manufacturer of a comprehensive range of products for the construction and civil engineering industries. 2008 saw the next step in Larsen's growth with the completion of a purpose-built manufacturing facility in the port of Belfast. This industry-leading computer-controlled facility has a production capacity of over 2,000 bags of product per hour.

#### CONTACT US

Northern Ireland: 02890 774000 England: 02890 535430 highways@larsenbuildingproducts.com



HAPAS, The Highway Authorities' Product Approval scheme was established to provide a nationally recognised approval for innovative products and systems used in highways and related areas. All HAPAS approvals involve laboratory and road tests, site inspection, performance trials and an evaluation of production.

Larsen Building Products have specifically formulated high performance products that embrace the HAPAS scheme delivering stand-alone product approvals offering greater flexibility to the contractor / specifier.



#### BBA/HAPAS APPROVED MBM104 IRONWORK BEDDING MORTAR CERTIFICATE: 17/H261

Larsen Highways MBM104 is a two component high performance, fibre reinforced bedding mortar providing all the benefits of a resin based mortar with the ease of use associated with cement based mortar.



#### BBA/HAPAS APPROVED MBM60 IRONWORK BEDDING MORTAR CERTIFICATE: 17/H261

Larsen Highways MBM60 is a single component, rapid strength bedding mortar suitable for installation and reinstatement of all types of access covers, as well as bedding of kerbs and emergency repairs.



#### BBA/HAPAS APPROVED PM04 IRONWORK BEDDING MORTAR

CERTIFICATE: 17/H261

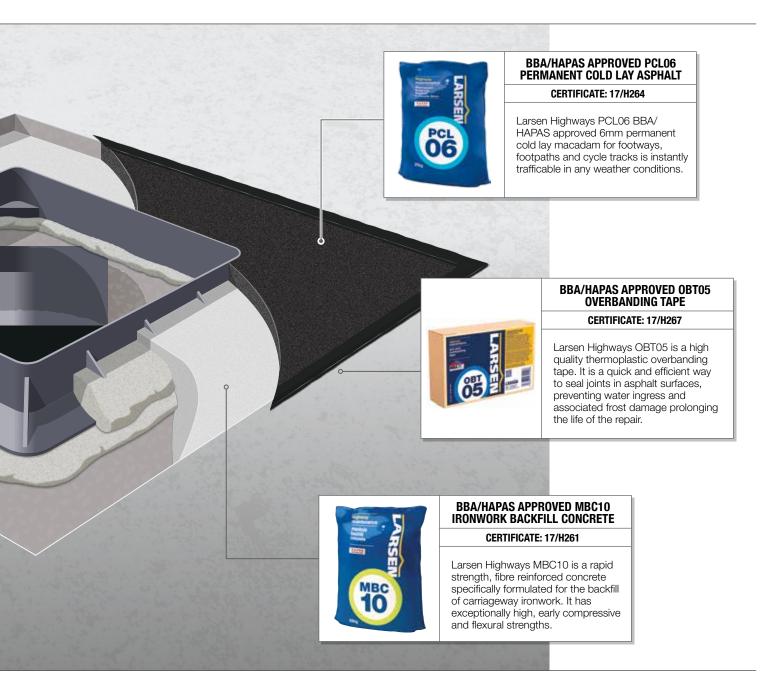
Larsen PM04 is a two component non-slump polyester resin mortar. Larsen PM04 is suitable for rapidly bedding ironwork in heavily trafficked areas.

Larsen Building Products portfolio of BBA/HAPAS approved highway maintenance materials:

- A range of ironwork bedding mortars, cementitious & polyester.
- Backfill concrete.
- Thermoplastic overbanding.
- Permanent cold-lay asphalt concrete 6mm.
- Instant pothole repair.

Larsen Building Products BBA/ HAPAS approved ironwork bedding mortars and backfill concrete

- Can be used individually or as a system.
- Suitable for all types of carriageway, no restrictions.
- Suitable for all types of ironwork up to and including Group 4 of BS EN 124.



## MANHOLE BEDDING MORTAR





Larsen Highways MBM30 is a single component bedding mortar formulated to achieve the required 20N/mm<sup>2</sup> in just 30 minutes. Suitable for the installation and reinstatement of all types of access covers, as well as bedding kerbs and emergency repairs.

Suitable for ironwork conforming to BS EN 124.

Complies with the Department of Transport Design Manual for Roads & Bridges HD27/15.



Test	Larsen MBM3	30
Compressive strength	>20N/mm <sup>2</sup> >30N/mm <sup>2</sup> >60N/mm <sup>2</sup>	at 30 minutes at 1 hour at 28 days
Flexural strength	8N/mm <sup>2</sup>	at 28 days
Tensile strength	>5N/mm <sup>2</sup>	at 28 days
Shrinkage	<0.1%	
Frost resistant	Frost Resistant	
Traffic time	30 minutes depending on site conditions	
Working time	5 – 10 minutes	
Set time	10 – 20 minutes	
Bed depth	10 – 75mm in one pass	
Packaging	25kg bag / 25kg bucket	
Pallet quantity	56 bags / 42 buckets	
Shelf life	6 months in unopened packaging from date of manufacture	
	Depending on tom	paratura, all tasts wara carried out at 20°C

Depending on temperature, all tests were carried out at 20°C. Cold temperatures retard and warm temperatures accelerate.

## MANHOLE BEDDING MORTAR





Larsen Highways MBM60 is a single component, rapid strength bedding mortar suitable for installation and reinstatement of all types of access covers, as well as bedding of kerbs and emergency repairs.

Suitable for ironwork conforming to BS EN 124.

Complies with Department of Transport Design Manual for Roads and Bridges HD27/15.





Test	Larsen M
Compressive strength	>20N/mm <sup>2</sup> >60N/mm <sup>2</sup>
Flexural strength	8N/mm <sup>2</sup>
Tensile strength	>5N/mm <sup>2</sup>
Shrinkage	<0.1%
Frost resistant	Frost resist
Traffic time	Within 1 hc
Working time	5-10 minut
Set time	20 minutes
Bed depth	10-75mm i
Packaging	25kg bag /
Pallet quantity	56 bags / 4
Shelf life	6 months in from date c
	Depending or Cold tempera

Larsen MBM60	)	
>20N/mm <sup>2</sup> >60N/mm <sup>2</sup>	within 1 hour at 28 days	
8N/mm <sup>2</sup>	at 28 days	
>5N/mm <sup>2</sup>	at 28 days	
<0.1%		
Frost resistant		
Within 1 hour		
5-10 minutes		
20 minutes		
10-75mm in one	pass	
25kg bag / 25kg	bucket	
56 bags / 42 buc	kets	
6 months in unop from date of man		

## MANHOLE BEDDING MORTAR





Larsen Highways MBM90 is a single part, all-purpose, rapid strength concrete, specifically formulated for the bedding of access covers and general repairs.

Suitable for ironwork conforming to BS EN 124.

Complies with Department of Transport Design Manual for Roads and Bridges HD27/15.



Test
Compressive strength
Tensile strength
Shrinkage
Frost resistant
Traffic time
Working time
Set time
Bed depth
Packaging
Pallet quantity
Shelf life

Larsen MBM90	)	
>20N/mm <sup>2</sup> >25N/mm <sup>2</sup> >50N/mm <sup>2</sup>	after 2 hours after 1 day at 28 days	
>3.5N/mm <sup>2</sup>	at 28 days	
<0.1%		
Frost resistant		
90 minutes		
5-10 minutes		
20 minutes		
10-75mm in one	pass	
25kg bag / 25kg	bucket	
56 bags / 42 bud	ckets	
6 months in unop from date of mar		

Depending on temperature, all tests were carried out at 20°C. Cold temperatures retard and warm temperatures accelerate.





Larsen Highways MBM104 is a two component high performance, fibre reinforced bedding mortar providing all the benefits of a resin based mortar with the ease of use associated with cement based mortar.

Suitable for installation and reinstatement of all types of access covers.

No disposal of hazardous waste.

Exceptional performance in wet weather conditions.

Complies with Department of Transport Design Manual for Roads & Bridges HA104/09.

Complies with Department of Transport Design Manual for Roads & Bridges HD27/15.

Complies with NRA MCDRW Vol 1 Clause 507.1.





Test
Compressive strength
Tensile strength
Shrinkage
Frost resistant
Traffic time
Working time
Set time
Bed depth
Packaging
Pallet quantity
Shelf life

Larsen MBM1	04	
>30N/mm² >60N/mm²	after 3 hours at 28 days	
>5N/mm²	after 3 hours	
<0.1%	at 28 days	
Frost resistant		
Within 1 hour		
15 minutes		
20-25 minutes		
10-50mm in one	pass	
20kg bag & 2.5l	bottle	
18kg bucket co 16kg powder &		
48 bags and bo	ttles / 56 buckets	
6 months in unc from date of ma		

# POLYESTER MORTAR





Larsen PM04 is a two component non-slump polyester resin mortar. Larsen PM04 is suitable for bedding all types of ironwork in heavily trafficked areas. Also used for bedding and repairing kerbs, flagstones, copings and for nonstructural repairs to concrete units.

Easy to use two pack fast-setting system.

Suitable for installation and reinstatement of all types of access covers.

Complies with Department of Transport Design Manual for Roads and Bridges HA104/09.

Complies with Department of Transport Design Manual for Roads & Bridges HD27/15.

Complies with NRA MCDRW Vol 1 Clause 507.1.





Test
Compressive strength
Tensile strength
Flexural strength
Frost resistant
Traffic time
Working time
Set time
Bed depth
Packaging
Pallet quantity
Shelf life

Larsen PM04	
>50N/mm <sup>2</sup>	at 3 hours
>10N/mm <sup>2</sup>	at 3 hours
>20N/mm <sup>2</sup>	at 3 hours
Frost resistant	
Within 1 hour	
10 minutes @ 20	)°C
20-25 minutes	
10-50mm in one	pass
6.5kg bucket / 1	2.5kg bucket / 25kg bucket
25kg buckets x 6.5kg buckets x	42no. / 12.5kg buckets x 56no. 64no.
12 months in un from date of mai	
	erature, all tests were carried out at 20°C

Cold temperatures retard and warm temperatures accelerate.

## IANHOL RE





Larsen Highways MBC10 is a rapid strength, fibre reinforced concrete specifically formulated for the backfill of carriageway ironwork and haunching reinstatements, as well as post, sign, fence and barrier erection. It has exceptionally high, early compressive and flexural strengths.





Test
Compressive strength
Flexural strength
Shrinkage
Frost resistant
Traffic time
Working time
Set time
Bed depth
Packaging
Pallet quantity
Shelf life

Larsen MB	C10
>20N/mm <sup>2</sup> >60N/mm <sup>2</sup>	after 90 minutes at 28 days
>6N/mm <sup>2</sup>	at 28 days
Shrinkage co	ompensated - eliminates cracking
Frost resista	nt
Within 1 hou	ır
5-10 minute	S
10-20 minut	es
30-250mm i	n one pass
25kg bag / 2	25kg bucket
56 bags / 42	2 buckets
	unopened bags manufacture
Deservations	tomporture all tooto ware corriad out at 20%







Larsen Highways SFX30 is a rapid hardening professional grade signfix, specifically formulated to provide an instant hold when fixing in place signs, lighting columns, barriers, posts, poles, speed cameras, fences and street furniture.



after 28 days

Test	
Compressive strength	
Working time	
Set time	
Packaging	
Pallet quantity	
Shelf life	

30N/mm<sup>2</sup>

5-10 minutes

15 minutes

25kg bags

56 bags

6 months in unopened bags from date of manufacture

## **RAPID** REINSTATEMENT CONCRETE

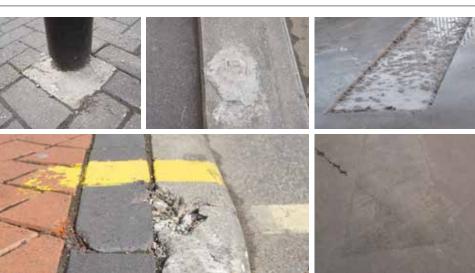






Larsen Highways RRC05 is a rapid-set surfacing concrete designed for making good blemishes and repairs to all concrete surfaces such as roads, paths and driveways. It can also be used for the installation of small ironwork, posts and access points for infrastructure and utilities.

RRC15 is a fast-set high early strength concrete for repairs large or small. Suitable for use in car parks, warehouses, farm buildings and bridge decks.



Test	Larsen RRC05		Larsen RRC	Larsen RRC15	
Compressive strength	>15N/mm² 60N/mm²	after 2 hours at 28 days	>30N/mm² 40N/mm² 60N/mm²	after 3 hours at 24 hours at 28 days	
Flexural strength	4N/mm <sup>2</sup> 8N/mm <sup>2</sup>	at 7 days at 28 days	7N/mm² 9N/mm²	at 7 days at 28 days	
Shrinkage	<0.1%		<0.1%		
Frost resistant	Frost resistant		Frost resistant		
Working time	5-10 minutes		15-20 minutes		
Set time	15 minutes		30 minutes		
Bed depth	10-100mm		25-100mm	25-100mm	
Packaging	25kg bags		25kg bags	25kg bags	
Pallet quantity	56 bags		56 bags		
Shelf life	6 months in unopened bags from date of manufacture		6 months in unopened bags from date of manufacture		

## **EPOXY MORTAR**





Larsen Highways EM is a three part pack solvent-free epoxy resin mortar, perfectly suited for areas where exceptional strength and bond are required.

Larsen Highways EM is a high strength, fast and easy to apply epoxy mortar perfect for repairing damaged kerbs, steps and general concrete repair for areas of intense wear and tear.



Lars	Test
70N	Compressive strength
25N	Flexural strength
>2N	Tensile Bond strength
from	Bed depth
10-1	Working time
24 h 48 h appr	Traffic time
10kę	Pack sizes
Ligh	Colours
6 ma from	Shelf life

Larsen EM	
70N/mm <sup>2</sup>	after 28 days
25N/mm <sup>2</sup>	
>2N/mm <sup>2</sup>	
from 4mm-30mm	I
10-15 minutes	approx at 20°C
24 hours - light fo 48 hours - vehicu approx at 20°C	
10kg	Yield 5 litres
Light grey	
6 months in unop from date of man	
Deneralizer en terrer	rature, all tasts were serviced out at 20°C

## **PERMANENT COLD LAY ASPHALT**





Larsen Highways PCL06 BBA/HAPAS approved 6mm permanent cold lay macadam for footways, footpaths and cycle tracks is instantly trafficable in any weather conditions.

Advanced and modern binder technology delivers improved workability and storage life, making it easier to achieve good compaction and a durable surface finish.

#### Advantages:

**BBA/HAPAS** Approved

Fast, effective & permanent reinstatement for footway, footpaths and cycle tracks

All weather use Excellent storage life





Packaging
Pallet quantity
Shelf life

Larsen	PCL06
--------	-------

25kg bag / 25kg bucket

56 bags / 52 buckets

At least 6 months stored correctly in sealed containers

## **INSTANT POTHOLE REPAIR**





Larsen Highways IPR06 is BBA/ HAPAS approved as an instant and permanent solution for roads, pavements, driveways, car park maintenance companies, school caretakers and homeowners. It is instantly trafficable in any weather conditions, hot, wet or freezing.

#### Advantages:

BBA/HAPAS Approved One visit for an instant and permanent repair Open to traffic immediately All weather use PSV>60





Packaging Pallet quantity Shelf life

#### Larsen IPR06

25kg bag / 25kg bucket

56 bags / 52 buckets

At least 6 months stored correctly in sealed containers

Depending on temperature, all tests were carried out at 20°C. Cold temperatures retard and warm temperatures accelerate.

### **BITUMEN EDGE SPRAY**





Larsen Highways BES10 is a bitumen spray that is applied to the vertical edge of the ironwork and surface of the backfill concrete prior to the application of asphalt. BES10 promotes the bond from the asphalt to the concrete and seals the edges preventing water ingress.



Packaging
Cans per box
Coverage

Shelf life

#### Larsen BES10

500ml aerosol can

12

5.2 linear metres at 1mm thickness and a 40mm deep section

12 months from date of manufacture

# THERMOPLASTIC OVERBANDING TAPE





Larsen Highways OBT05 is a high quality BBA/HAPAS Approved thermoplastic overbanding tape. It is a quick and efficient way to seal joints in asphalt surfaces, preventing water ingress and associated frost damage prolonging the life of the repair.

#### Advantages:

**BBA/HAPAS** Approved Prevents water ingress Prolongs the life of the repair Traffic in 10 minutes Easy to apply No waste





Packaging
Rolls per box
Quantity per pallet
Shelf life

#### Larsen OBT05

5 metre rolls, 35mm wide x 3mm deep

12

60 boxes

12 months stored correctly in manufacturers packaging

## THERMOPLASTIC LINE MARKING





Larsen Highways TLM05 is a thermoplastic line marking solution. It offers a convenient and cost effective method for the reinstatement of lines. Ideally suited for the utility sector contractor, TLM05 is easily applied with one operator and one gas burner.

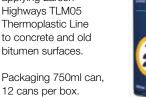
Conforms to European standards and the specification for reinstatement of openings in highways.

- Non-toxic
- Environmentally friendly
- Lasts 10 times longer than paint

5m x 100mm roll 10 rolls per box White, yellow, primrose or red.

#### THERMOPLASTIC PRIMER

Larsen Highways TPR25 Thermoplastic Primer is used as a priming agent when applying Larsen Highways TLM05 Thermoplastic Line to concrete and old bitumen surfaces.





## **HIGH FRICTION SURFACING**





Larsen Highways HFS15 High Friction Surfacing patch pack is the complete, fast and cost effective solution for patching areas after maintenance. Perfect for repairs to junctions, car parks, roundabouts, cycle tracks and pedestrian areas in general. Can also be used as a high friction surface for manhole covers.

Available in red, green, grey, buff and black.



Test
Traffic time
Working time
Pack size
Pallet quantity
Colours
Shelf life

#### Larsen HFS15

1-2 hours depending on temperature and humidity

10-20 minutes @ 20°C

15.5kg buckets

48 buckets

Red, green, grey, buff and black

6 months in unopened bags from date of manufacture

Depending on temperature, all tests were carried out at 20°C. Cold temperatures retard and warm temperatures accelerate.

# A BETTER WAY TO LOOK AFTER YOUR HIGHWAY









www.larsenbuildingproducts.com highways@larsenbuildingproducts.com Birmingham T: 028 9053 5409



NORTHERN IRELAND T 028 9077 4000 F 028 9077 6945

ENGLAND T 028 9053 5430

IRELAND T 01 8348255 F 01 8348277

www.larsenbuildingproducts.com

highways@larsenbuildingproducts.com