

## ideas taking shape



## Kilsaran are the natural choice

Kilsaran

Kilsaran Dry Mortar Plant

## Introduction



For over five decades Kilsaran has supplied its innovative construction products to the commercial market helping shape the landscape in both Ireland and the UK. Whether building a new home, or specifying a product for a multi-million euro project, Kilsaran KPRO Façades & Mortars provide peace of mind, through superior quality products formulated, designed and produced by experts, for experts.

We are the natural choice for architects, specification and construction professionals seeking solutions to their construction materials requirements. Our extensive range of high quality Dry Mortar Products are backed with unrivalled technical support along with competitive pricing. This means that we can provide our customers with a full support service guaranteeing a professional service and speedy delivery every time.







Innovative high quality construction products, formulated, designed and produced by experts, for experts.



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## About Kilsaran

Kilsaran are the market leader in dry mortar products and systems. Founded in 1964, Kilsaran are a well-established and trusted name within the construction industry. We pride ourselves on our vast product range and tightly controlled processes, with specific emphasis placed on quality, service, sustainability and above all customer needs.

## Knowledge, Trust & Experience

### Facility

Our production facility, which was upgraded in 2020, has been in operation since 2006 and is to the forefront of dry mortar production technology and amongst the most modern across Europe and the world.

Our facilities have an annual output capacity in excess of 350,000 tonnes, and has the ability to package over 3000 bags of product every hour.

We have invested heavily in our on-site laboratories, allowing us to carry out a vast range of analysis, testing, research and development of dry mortar products.

### Team

Kilsaran has a Dry Products team consisting of production staff, and technical personnel with engineering backgrounds and unrivalled experience in dry mortar products and systems spanning 25 years.

Our technical team are responsible for the research and development of our new products, the on-going testing and analysis of our products and assisting our clients in the specification and use of our product range.













### **Product Quality**

At Kilsaran, we know that product quality begins with sourcing and utilising quality raw materials. All constituent raw material in our Dry Products are rigorously tested and scrutinised to the most current material standards; EN 197—Cement, EN 13139—Aggregates for Mortar, EN 459—Building Lime etc. Kilsaran Dry Products are all manufactured in accordance with the requirements of the national and European product standards. These include EN 998-1—Rendering and Plastering Mortars, EN998-2—Masonry Mortars, EN13813—Screed Materials, BS 7533— Pavements Constructed with clay, natural stone or concrete pavers, and EN 1504-Products and Systems for the Protection and Repair of Concrete Structures.



### Accreditation

To ensure compliance with CE Marking of construction products in accordance with CPR (EU) No. 305/2011. Kilsaran also hold third party Factory Production Control Certification for their masonry mortar products in accordance with EN 998-2, and their repair products in accordance with EN 1504.

A wide range of Kilsaran KPRO Façade rendering mortars and systems also hold NSAI Agremént certification.

### Delivery

As a group, Kilsaran have a fleet of over 300 delivery vehicles. These range from specialist silo delivery and refill lorries to crane assisted flatbeds and curtain-sided articulated lorries. Our extensive range of fleet, coupled with a highly experienced and efficient logistics team ensures prompt delivery of our products across Ireland and the UK.

### **Sustainability**

Being environmentally friendly is not new to us at Kilsaran. Our products are produced in a state-of-the-art plant, designed to achieve the highest environmental processing standards. Our products are produced using eco friendly raw materials, and our plant and process are ISO 14001 certified.

Kilsaran is committed to improving its continuously environmental processes and reducing its carbon footprint. We also have, in collaboration with the Irish Green Building Council published our EPD for dry mortar products.







As a market leader in dry mortar products, Kilsaran offer an extensive range of pre-mixed rendering mortars. Produced in an ISO 9001, 14001 and 50001 controlled environment. All Kilsaran rendering and plastering mortar products are CE marked in accordance with EN 998-1 and Construction Products Regulation No. 305/2011. A number of our rendering and plastering mortars also hold NSAI Agremént certification.

All Kilsaran rendering mortars also have their factory production control independently certified to EN 998-1:2010 further demonstrating their superior quality and stringently controlled production processes. Kilsaran's extensive range of renders provides customers, designers and specifiers with a full range of façade solutions. Whether looking for preparatory products, undercoats, or coloured decorative finish coat renders. Kilsaran has a render to suit your needs.

Kilsaran rendering mortars are produced in accordance with the requirements of EN 998-1, and are available in the strength classifications as set out in the European standard. Kilsaran rendering mortars are designed for use in accordance with EN 13914. All our rendering mortars are formulated to provide excellent adhesion, superior crack resistance and superb durability.

Whatever the project, choosing a Kilsaran render as part of your façade solution ensures consistency, durability and an un-rivalled aesthetic finish.



### GP General Purpose Render

### Description

KPRO GP Render is a general-purpose rendering mortar for use as a multi-coat render for internal and external use. GP Render complies with the requirements of IS EN 998-1 and should be used in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated, the product is a CS III render for use, both internally and externally. It is suitable for both hand and machine application and can be given a knapped, sponged or floated finish.

#### **Applications**

KPRO GP Render is suitable for use internally and externally in the following applications, • As both a scratch coat and finish coat external rendering mortar with a nap, sponge, or floated finish.

• As both a scratch coat and finish coat internal plastering mortar with a nap, sponge, or floated finish.

- · As a scratch/undercoat internal plastering mortar to receive gypsum skim finish.
- As an internal air-tight coat parge coat

#### **Product Use**

KPRO GP Render is suitable for both hand and machine application.

**Mixing:** This product should be mixed in a suitable site mixer, continuous mixer, or spray render machine. Clean water should be added at a steady, constant rate to ensure mix consistency and uniformity of the finished coat. Typical water addition of 4.5-5 litres per 25Kg of dry material will produce a light workable material. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the material.

**Applying:** In all instances, KPRO GP Render should be used and applied in strict accordance with EN 1996, EN 13914, and the manufacturer's instructions. No scud coat is required when applied by a spray rendering machine; however, if the material is being hand-applied Kilsaran recommends using a suitable scud coat. For further information on the application of our Renders, please see our KPRO Render & Plaster Application Guide. In all instances, KPRO GP Render should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO GP Render is produced in an EN 998-1 Factory Production Control and ISO 9001 quality-controlled environment to the requirements of a general-purpose render as set out in EN 998-1:2016. KRO GP Render also holds NSAI Agremént certification.

CE		
Kilsaran Concrete,		
Piercetown D	unboyne Co. Meath Ireland	
	13	
EN 998-1		
General purpose rendering mortar (GP) for use in external rendering and internal plastering.		
Compressive Strength	Category CS III	
Reaction to Fire	Class A1	
Water Absorption	W <sub>c</sub> 2	
Water Vapour Permeability	μ < 10	
Adhesion	≥0.2 MPa (A)	
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.67 W/mK	
Durability (against freeze - thaw)	Please refer to water absorption and adhesion	



#### **Benefits**

- · Consistently high-quality mix
- Constantly available supply
- Increased productivity
- Eliminates inaccurate site mixing
- Excellent workability and adhesion
- Low shrinkage/good crack resistance
- Convenient and User-Friendly
- Eliminates wastage

• Promotes cleaner and safer sites Approximate Yield

Coat	Coverage
Thickness	per 25kg bag
10mm	1.20 m²
12mm	1.00 m²
15mm	0.85 m²

### **Application Temperatures**



+5°C to +30°C

### Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

### Pack Size





### DURAREND

### Description

KPRO DuraRend is a natural grey coloured one-coat rendering mortar for use as a single coat render for both internal and external use. DuraRend complies with the requirements of IS EN 998-1 and should be used in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated, the product is a CS III render for use, both internally and externally. It is suitable for both hand and machine application and can be given a knapped, sponged or floated finish.

### Applications

DuraRend is suitable for use internally and externally in the following applications,

• Single coat rendering mortar given a knapped, sponged or floated finish.

• As an undercoat to receive a decorative render finish (as part of our DuraRend Systems).

### **Product Use**

KPRO DuraRend is formulated for both hand and machine application.

**Mixing:** This product should be mixed in a suitable site mixer, continuous mixer, or spray render machine. Clean water should be added at a steady, constant rate. Typical water addition of 4.75-5.0 litres per 25Kg of dry material will produce a light workable material. Re-mixing or the later addition of water is not permitted.

**Applying:** Please note whilst DuraRend can be given a sponged, float or nap finish, slight colour shading may occur due to the nature of these finishes. It is therefore recommended that the finished render surface is painted or given a decorative finish. The minimum finished thickness of KPRO DuraRend should be no less than 15mm (20mm in severe exposures). For further information on the application of our Renders, please see our KPRO Render & Plaster Application Guide. In all instances, KPRO DuraRend should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO DuraRend is produced in an EN 998-1 Factory Production Control and ISO 9001 quality-controlled environment to the requirements of one coat render as set out in EN 998-1:2016. KRO DuraRend and DuraRend Systems also hold NSAI Agremént certification.

	CE
Kilsaran Concrete, Piercetown Dunboyne Co. Meath Ireland 13	
EN 998-1 One coat rendering mortar (OC) for use in external rendering and internal plastering.	
Compressive Strength	Category CS III
Reaction to Fire	Class A1
Water Absorption	W <sub>c</sub> 2
Water Vapour Permeability	μ < 10
Water Vapour Permeability After Weathering Cycles	<1ml/cm <sup>2</sup> after 48 Hours
Adhesion After Weathering Cycles	≥0.2 MPa (B)
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.61 W/mK
Durability (against freeze - thaw)	Please refer to water vapour permeability and adhesion after weathering cycles



### **Benefits**

- · Consistently high-quality mix
- Designed for single coat application
- Increased productivity
- Eliminates inaccurate site mixing
- Excellent workability and adhesion
- Low shrinkage/good crack resistance
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### **Approximate Yield**

Coat	Coverage
Thickness	per 25kg bag
10mm	1.20 m²
12mm	1.00 m²
15mm	0.85 m²
18mm	0.75 m²

### **Application Temperatures**



+5°C to +30°C

#### Health & Safety Please refer to the relevant Material Safety data sheet online at

www.kilsaran.ie.

### Pack Size







### **UNO** One Coat Render

### Description

KPRO UNO is a self-coloured, breathable, weather-resistant rendering mortar. UNO's unique polymer modification and silicone integration offers an aesthetic, low maintenance and durable façade solution that fully complies to the requirements of EN 998-1. UNO should be used and applied in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated the product is a CS III render for use as a decorative, single coat render for both internal and external use.

### Applications

KPRO UNO is a through-coloured decorative, single coat render for external use in the following applications,

· Single coat decorative rendering mortar providing a scrapped textured finish.

• Coloured decorative topcoat render, applied over a suitable undercoat, providing a scrapped textured finish.

### **Product Use**

KPRO UNO One Coat Renders are formulated for both hand and machine application. Please note it is recommended that KPRO UNO is given a scrapped texture finish to ensure colour conformity of finish.

**Mixing:** This product should be mixed in a suitable site mixer, continuous mixer, or spray render machine. Clean water should be added at steady, constant rate to ensure mix consistency and uniformity of the finished coat. Typical water addition of 5-6 litres per 25Kg of dry material will produce a light workable material. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the life and colour.

**Applying:** The minimum finished thickness of KPRO UNO renders should be no less than 15mm (20mm in severe exposures). When using KPRO UNO as a render coat for dry dash finishes the minimum thickness should be no less than 20mm. Due to its formulation, KPRO UNO Ultra White, may be given a sponge or nap finish. For further information on the application of our Renders please see our KPRO Render & Plaster Application Guide. In all instances KPRO UNO should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO UNO Renders are produced in an EN 998-1 Factory Production Control and ISO 9001 quality-controlled environment to the requirements of a one coat render as set out in EN 998-1:2016. KRO UNO Renders also hold NSAI Agremént certification.

	CE
Kilsaran Concrete, Piercetown Dunboyne Co. Meath Ireland 13	
EN 998-1	
One coat rendering mortar (OC) for use in external rendering and internal plastering.	
Compressive Strength	Category CS III
Reaction to Fire	Class A1
Water Absorption	W <sub>c</sub> 2
Water Vapour Permeability	μ < 10
Water Vapour Permeability After Weathering Cycles	<1ml/cm <sup>2</sup> after 48 Hours
Adhesion After Weathering Cycles	≥0.2 MPa (C)
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.47 W/mK
Durability (against freeze - thaw)	Please refer to water vapour permeability and adhesion after weathering cycles



### **Benefits**

- · Consistently high-quality mix
- Designed for single coat application
- Increased productivity
- Breathable
- Excellent workability and adhesion
- Low shrinkage/good crack resistance
- Water repellent silicone technology
  - Polymer modified
  - Promotes cleaner and safer sites

### **Approximate Yield**

Coat	Coverage
Thickness	per 25kg bag
10mm	1.55 m²
12mm	1.30 m²
15mm	1.00 m <sup>2</sup>
18mm	0.85 m <sup>2</sup>

### **Application Temperatures**



+5°C to +30°C

### Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

### Pack Size







### **TCR** Top Coat Render

### Description

KPRO TCR is a naturally white, through coloured rendering mortar for use as part of a multicoat rendering system. TCR complies to the requirements of EN 998-1 and should be used in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated the product is a CS III render for use, both internally and externally. It is suitable for both hand and machine application over a suitable undercoat and can be given a scrapped, napped, sponged or wooden float finish.

### **Applications**

KPRO TCR is suitable for use internally and externally in the following applications,

· Coloured decorative topcoat render, applied over a suitable undercoat, such as KPRO Facade GP.

### **Product Use**

KPRO TCR is suitable for both hand and machine application.

Mixing: This product should be mixed in a suitable site mixer, continuous mixer, or spray render machine. Clean water should be added at steady, constant rate to ensure mix consistency and uniformity of the finished coat. Typical water addition of 4.5-5.5 litres per 25Kg of dry material will produce a light workable material. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the material.

Applying: In all instances KPRO TCR should be used and applied in strict accordance with EN 1996, EN 13914, and the manufacturer's instructions. Base coats should be lightly dampened prior to application of KPRO TCR to control and mitigate against excessive suction. The minimum finished thickness of KPRO TCR is 10mm. The finished thickness of KPRO TCR shall be no thicker than the previous base coat.

For further information on the application of our Renders please see our KPRO Render & Plaster Application Guide. In all instances KPRO TCR should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO TCR is produced in an EN 998-1 Factory Production Control and ISO 9001 qualitycontrolled environment to the requirements of a coloured render (CR) as set out in EN 998-1:2016.

CE		
Kilsaran Concrete, Piercetown Dunboyne Co. Meath Ireland 21		
EN 998-1 Coloured rendering mortar (CR) for use in external rendering and internal plastering.		
Compressive Strength	Category CS III	
Reaction to Fire	Class A1	
Water Absorption	W <sub>c</sub> 1	
Water Vapour Permeability	μ < 10	
Adhesion	≥0.2 MPa (B)	
Thermal Conductivity	(ʎ <sub>10, dry</sub> ) 0.67 W/mK	
Durability (against freeze - thaw)	Please refer to water absorption and adhesion	



### **Benefits**

- · Consistently high quality mix
- Constantly available supply
- Suitable for a range of finishes
- Eliminates inaccurate site mixing
- · Excellent workability and adhesion
- Low shrinkage/good crack resistance
- · Convenient and User-Friendly
- · Eliminates wastage
- · Promotes cleaner and safer sites **Approximate Yield**

Coat	Coverage
Thickness	per 25kg bag
10mm	1.20 m²
12mm	1.00 m <sup>2</sup>
15mm	0.85 m²

### **Application Temperatures**



**Health & Safety** Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### SB Super Bond

### Description

KPRO Super Bond is a preparatory rendering mortar for use as a preparatory coat on internal and external walls. Super Bond complies to the requirements of IS EN 998-1 and should be used in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated the product is a CS IV render for use, both internally and externally. It is suitable for both hand and machine application.

### Applications

Super Bond is a highly polymer modified preparatory treatment render designed to,

- Provide a key coat on smooth, low suction and friable backgrounds.
- For equalizing suction on highly porous or dissimilar backgrounds.
- Once cured, and hardened it produces a high-quality substrate for follow on render coats.

### **Product Use**

KPRO Super Bond Render is suitable for both hand and machine application.

**Mixing:** The dry product should be mixed, in a suitable mixer or paddle drill, with 5.0 - 5.25 litres of clean potable water to produce a creamy rendering mortar.

**Applying:** Apply a tight 4-5mm coat of render to the background and stipple by working the product into the surface with a hand brush. Alternatively, the render can be applied to the background at a 4-5mm thickness and stippled with a stipple roller to provide a key.

### **Technical Data**

KPRO Super Bond is produced in an EN 998-1 Factory Production Control and ISO 9001 quality-controlled environment to the requirements of a general-purpose render as set out in EN 998-1:2016.

CE		
Kilsaran Concrete,		
Piercetown Dunboyne Co. Meath Ireland		
EN 998-1 General purpose rendering mortar (GP) for use in external rendering and internal plastering.		
Compressive Strength	Category CS IV	
Reaction to Fire	Class A1	
Water Absorption	W <sub>c</sub> 2	
Water Vapour Permeability	μ < 10	
Adhesion	≥0.7 MPa (A)	
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.61W/mK	
Durability (against freeze - thaw)	Please refer to water absorption and adhesion	



#### **Benefits**

- Consistently high-quality mix
- · Eliminates inaccurate site mixing
- Excellent adhesion to smooth and low suction backgrounds
- Equalises suction on dissimilar backgrounds
- Low shrinkage/good crack resistance
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### **Approximate Yield**

Coat	Coverage
Thickness	per 25kg bag
3mm	4.40 m <sup>2</sup>
4mm	3.30 m <sup>2</sup>
5mm	2.60 m <sup>2</sup>

### **Application Temperatures**



+5°C to +30°C

### Health & Safety

Please refer to the relevant Material Safety data sheet online at <u>www.kilsaran.ie</u>.



### **DR** Dash Receiver

### Description

KPRO Dash is a through-coloured rendering mortar backing coat for receiving dry dashing stone. It is formulated to give an extended free time allowing the dashing stone to be received with greater ease and less rebound. KPRO Dash complies with the requirements of IS EN 998-1 and should be used in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated, the product is a CS III render for use, both internally and externally. It is suitable for both hand and machine application

### Applications

KPRO Dash is suitable internally and externally in the following applications,

• Provide a coloured butter coat (backing coat) to receive dry dash stone.

### **Product Use**

KPRO Dash is suitable for both hand and machine application. The fresh product should be applied over a suitably prepared and cured render undercoat such as KPRO GP Render.

**Mixing:** This product should be mixed in a suitable site mixer, continuous mixer, or spray render machine. Clean water should be added at a steady, constant rate to ensure mix consistency and uniformity of the finished coat. Typical water addition of 5-6 litres per 25Kg of dry material will produce a light workable material. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the life and colour **Applying:** KPRO Dash should be applied in a 7-10mm coat and levelled using a straight edge or darby. Dashing stone should be evenly applied to the freshly rendered surface and tamped into place with a wooden float if required. For further information on the application of our Renders please see our KPRO Render & Plaster Application Guide. In all instances, KPRO Dash should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO DASH is produced in an EN 998-1 Factory Production Control and ISO 9001 quality-controlled environment to the requirements of a general-purpose render as set out in EN 998-1:2016.

CE		
Kilsaran Concrete,		
Piercetown D	ounboyne Co. Meath Ireland	
	13	
EN 998-1		
General purpose rendering mortar (GP) for use in external rendering and internal plastering.		
Compressive Strength	Category CS III	
Reaction to Fire	Class A1	
Water Absorption	W <sub>c</sub> 2	
Water Vapour Permeability	μ < 10	
Adhesion	≥0.2 MPa (A)	
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.61 W/mK	
Durability (against freeze - thaw)	Please refer to water absorption and adhesion	



### **Benefits**

- Consistently high-quality mix
- · Eliminates inaccuracy of site mixing
- Extended open time.
- Low shrinkage/good crack resistance
- Available in a range of colours
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites Approximate Yield

Coat	Coverage
Thickness	per 25kg bag
7mm	1.80 m²
8mm	1.60 m <sup>2</sup>
10mm	1.20 m <sup>2</sup>

### **Application Temperatures**



### Health & Safety

Please refer to the relevant Material Safety data sheet online at <u>www.kilsaran.ie</u>.

### Pack Size





### **RC** Roughcast Render

### Description

KPRO RC is a through coloured roughcast rendering mortar, for use as part of a multi-coat rendering system. RC complies to the requirements of EN 998-1 and should be used in accordance with EN 13914 part 1 and manufacturer's instructions. Unless otherwise stated the product is a CS IV render for use, externally. The product is designed for hand application over a KPRO Facade DR(dash receiver) butter coat of the same colour. The KPRO Facade RC rendering system satisfies the requirements of rendering mortars for use on structures with exposure categories of 'severe' and 'very severe'.

### Applications

KPRO RC is suitable for use externally in the following applications,

 Coloured decorative roughcast render, for use as a final harling coat, in a three-coat system comprising of a suitable base coat (KPRO Facade GP), and a coloured butter coat (KPRO Façade DR).

#### **Product Use**

KPRO RC is suitable for hand application, by means of throwing/harling.

Mixing: This product should be mixed in a suitable site mixer, or with a suitable paddle drill. Clean water should be added at steady, constant rate to ensure mix consistency and uniformity of the finished coat. Typical water addition of 5-6 litres per 25Kg of dry material will produce a smooth, semi-fluid material. Water can be adjusted slightly to cater for application technique. Re-agitation may be required, if the material is left resting for long periods, however the later addition of water is not permitted as this will have an adverse effect on the material. Applying: In all instances KPRO RC should be used and applied in strict accordance with EN 1996, EN 13914, and the manufacturer's instructions. Apply an 8-10mm of KPRO GP render base coat, key the surface, and allow to dry and fully harden. Next apply a 6-8mm coat of KPRO DR dash receiver (the same colour as the chosen roughcast) and level the surface. Allow the DR to pick up but not harden. Whilst the DR coat is still green, apply the KPRO RC roughcast render to the surface using a hand scoop, harling trowel or mechanical applicator. Ensure to obtain a even spread of material across the wall surface. For further information on the application of our Renders please see our KPRO Render & Plaster Application Guide. In all instances KPRO RC should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO RC is produced in an EN 998-1 Factory Production Control and ISO 9001 qualitycontrolled environment to the requirements of a coloured render (CR) as set out in EN 998-1

	CE		
Ki	Isaran Concrete,		
Piercetown D	ounboyne Co. Meath Ireland		
	22		
	EN 998-1		
Coloured rendering mortar (CR) for	r use in external rendering and internal plastering.		
Compressive Strength	Category CS IV		
Reaction to Fire	Class A1		
Water Absorption	Wc2		
Water Vapour Permeability	μ < 10		
Adhesion	≥0.2 MPa (B)		
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.67 W/mK		
Durability (against freeze - thaw)	Please refer to water absorption and adhesion		



#### **Benefits**

- Consistently high quality mix
- Constantly available supply
- · Available in a range of colours
- · Eliminates inaccurate site mixing
- Excellent workability and adhesion
- Low shrinkage/good crack resistance
- · Convenient and User-Friendly
- Eliminates wastage
- · Promotes cleaner and safer sites

#### **Approximate Yield**

Coverage	Material Req.
per 25kg bag	per m <sup>2</sup>
1.5kg/mm/m <sup>2</sup>	12-15kg

#### **Application Temperatures**



+5°C to +30°C

#### **Health & Safety**

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

#### Pack Size



### HLR Hydraulic Lime Render

### Description

Kilsaran

KPRO

FACADE

KRO HLR is a natural coloured hydraulic lime rendering mortar designed for multi-coat render systems. The product is formulated for use as an undercoat and finishing topcoat in external rendering and internal plastering. Hydraulic Lime Render complies with the requirements of IS EN 998-1 and should be used in accordance with EN 13914 parts 1 & 2 and manufacturer's instructions. Unless otherwise stated, the product is a CS I render. It is suitable for both hand and machine application.

### Applications

KRPO HLR is suitable internally and externally in the following applications,

- In new building work where a breathable, low carbon material is required.
- In restoration work on old and historic buildings.

### **Product Use**

KPRO HLR Render is suitable for both hand and machine application.

**Mixing:** This product only requires the addition of clean water. Our Hydraulic Lime Render should be mixed in a suitable site mixer, continuous mixer, or spray render machine. Water should be added at a steady, constant rate to ensure mix consistency and uniformity of the finished coat. Typical water addition of 5-6 litres per 25Kg of dry material will produce a light workable material. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the life and colour consistency of the product.

**Applying:** In all instances, KPRO HLR Render should be used and applied in strict accordance with EN 1996, EN 13914, and the manufacturer's instructions. No scud coat is required when applied by a spray rendering machine, however if the material is being hand applied, Kilsaran recommend the use of a suitable scud coat. For further information on the application of our Renders please see our KPRO Render & Plaster Application Guide. In all instances KPRO HLR Render should be used and applied in strict accordance with I.S./B.S. EN 13914 and the manufacturer's instructions.

### **Technical Data**

KPRO HLR Render is produced in an EN 998-1 Factory Production Control, and ISO 9001 quality-controlled environment to the requirements of a general-purpose render as set out in EN 998-1:2016. KPRO GP Render also holds NSAI Agremént certification.

	CE		
Ki	ilsaran Concrete,		
Piercetown D	Dunboyne Co. Meath Ireland		
	13 EN 008 1		
General purpose rendering mortar (GP) for use in external rendering and internal plastering.			
Compressive Strength	Category CS I		
Reaction to Fire	Class A1		
Water Absorption	W0		
Water Vapour Permeability	μ < 10		
Adhesion	NPD		
Thermal Conductivity	(ʎ <sub>10, dry</sub> ) 0.61 W/mK		
Durability (against freeze - thaw)	Evaluation based on provisions valid in the intended place of use of the mortar.		



### **Benefits**

- · Consistently high-quality mix
- Environmentally Friendly
- Eliminates inaccurate site mixing
- Excellent workability and adhesion
- Breathable and Flexible
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### **Approximate Yield**

Coat	Coverage		
Thickness	per 25kg bag		
10mm	1.50 m²		
12mm	1.20 m <sup>2</sup>		
15mm	1.00 m <sup>2</sup>		

### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.









Developed in Germany over 60 years ago, dry mortar and dry mortar systems have become the dominant and most trusted forms of mortars in a multitude of countries worldwide. Kilsaran are the market leaders in dry mortar technology and provide the most comprehensive portfolio of dry mortar products.

Kilsaran's dedicated staff has dry mortar expertise spanning 20 years and is committed to helping you find the most suitable mortar product for your project. Kilsaran mortars are produced in an ISO 9001, 14001 and 50001 controlled environment, and all our masonry mortars are CE marked in accordance with the new Construction Products Regulation 305/2011.

Kilsaran Masonry Mortars are produced in accordance with the requirements of EN 998-2 and are available as designed or prescribed mortar mixes as set out in EN 1996 (Eurocode 6) and the newly published SR 325.

Whether building a new home or specifying a multi-million euro project, Kilsaran dry mortars provide peace of mind through superior quality products formulated, designed and produced by experts for experts.



### **MASONRY MORTAR**

### Description

KPRO Masonry Mortar is a natural coloured masonry mortar designed for jointing and pointing of masonry units. The product complies with the requirements of IS EN 998-2 and should be used in accordance with EN 1996 (Eurocode 6), SR 325 and manufacturer's instructions.

#### **Applications**

Masonry Mortar is suitable for the following applications,

· Jointing and Pointing of brickwork, blockwork and natural stone

### **Product Use**

Suitable for use in temperatures between +3°C and +30°C. Mix with clean potable water to achieve a workable homogeneous mix. Kilsaran masonry mortars should be used in accordance with EN 1996 (EC6) and SR 325. KPRO masonry mortar is a standard, non-pigmented, natural coloured product, and thus colour consistency is not guaranteed. For colour dependant applications, please consult our coloured mortar range

#### **Technical Data**

KPRO Masonry Mortars are produced in an ISO 9001 quality-controlled environment and are third party certified to EN 998-2, system 2+. Our masonry mortars are produced to the requirements of a designed general-purpose masonry mortar as set out in EN 998-2. KPRO Masonry Mortars are available in a range of strength classes to suit your specification.

		CE		
Pierc	Ki etown D	Isaran Concrete Junboyne Co. Me	, eath Ireland	
Designed general purpose mas	onry moi struc	EN 998-2 rtar for internal a ctural requiremen	nd external use in ele nts	ements subject to
Compressive Strength		M4	M6	M12
Initial Shear Strength		0.15 N/mm <sup>2</sup> (tab.value)	0.15 N/mm² (tab.value)	0.15 N/mm² (tab.value)
Contents of Chloride	<b>≥</b> ≤ 0.1% ≤ 0.1% ≤ 0.1%			≤ 0.1%
Reaction to Fire	Class A1 Class A1 Class A1			
Water Absorption         0.3 kg/m².min <sup>0.5</sup> 0.1 g/m².min <sup>0.5</sup> 0.1 kg/m².min <sup>0.5</sup>			0.1 kg/m².min <sup>0.5</sup>	
Water Vapour Permeabili	<b>bility</b> μ 15/35 μ 15/35 μ 15/35			μ 15/35
Thermal Conductivity		(λ10, dry) 0.61         (λ <sub>10, dry</sub> ) 0.61         (λ <sub>10, dry</sub> ) 0.6           W/mK         W/mK         W/mK		
Durability (against freeze - t	gainst freeze - thaw) Evaluation based on provisions valid in the intende place of use of the mortar.			id in the intended rtar.
Compressive Strength Class		Equivalent P	Prescribed Masonry	Mortars
Compressive Strength Class	Ceme	nt:Lime:Sand	Cement:Sand	Designation

Comprossive Strength Class	Equivalent i rescribed masonry mortars			
compressive Strength Class	Cement:Lime:Sand	Cement:Sand	Designation	
M12	1:0/¼:3	-	(i)	
M6	1:1/2:4/41/2	1:3/4	(ii)	
M4	1:1:5/6	1:5/6	(iii)	
M2	1:2:8/9	1:7/8	(iv)	



#### **Benefits**

- CE Marked designed masonry mortar
- Manufactured in a 3rd party certified EN 998-2 factory production control system to level 2+ conformity
- · Consistently high quality mix
- Constantly available supply
- · Eliminates inaccurate site mixing
- Reduced Labour
- Increases site efficiency
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### **Approximate Yield**

Masonry Unit Type	No. per tonne	No. per 25kg
Standard Brick	1950	48
100mm Solid (edge)	880	22
100mm Solid (flat)	450	11
215mm Twin Pot Hollow	450	11

+ Yields are approximate based on a 10mm joint and do not take into account wastage.

#### **Application Temperatures**



Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk Silos





### **COLOURED MASONRY MORTAR**

### Description

KPRO Coloured Masonry Mortar is a through-coloured masonry mortar designed for jointing and pointing of masonry units. The product complies to the requirements of IS EN 998-2 and should be used in accordance with EN 1996 (Eurocode 6), SR 325 and manufacturer's instructions. Masonry Mortar is a designed mortar and is available in the following categories as standard.

### Applications

Masonry Mortar is suitable for the following applications, · Jointing and Pointing of brickwork, blockwork and natural stone

### **Product Use**

Suitable for use in temperatures between +3°C and +30°C. Mix with clean potable water to achieve a workable homogeneous mix. KPRO coloured masonry mortars should be used in accordance with EN 1996 (EC6) and SR 325. Our coloured masonry mortars are pigmented and available in 10 standard colours. Please consult our colour shade guide to view the colour range available

### **Technical Data**

KPRO Coloured Masonry Mortars are produced in an ISO 9001 guality-controlled environment and are third party certified to EN 998-2, system 2+. Our masonry mortars are produced to the requirements of a designed general-purpose masonry mortar as set out in EN 998-2. KPRO masonry mortars are available in a range of strength classes to suit your specification.

		CE			
Kilsaran Concrete, Piercetown Dunboyne Co. Meath Ireland 13					
EN 998-2 Designed general purpose masonry mortar for internal and external use in elements subject to structural requirements				ments subject	
Compressive Strength M4 M4 (white base)			hite base)		
Initial Shear Strength	al Shear Strength 0.15 N/mm <sup>2</sup> (tab.value) 0.15 N/mm <sup>2</sup> (tab.value)		m² (tab.value)		
Contents of Chloride	Contents of Chloride $\leq 0.1\%$ $\leq 0.1\%$			0.1%	
Reaction to Fire	n to Fire Class A1 Class A1		ass A1		
Water Absorption	0.3 kg/m².min <sup>0.5</sup> 0.3 kg/m².min			g/m².min <sup>0.5</sup>	
Water Vapour Permeabilit	l <b>ity</b> μ 15/35 μ 15/35			15/35	
Thermal Conductivity		(λ <sub>10, dry</sub> ) 0.61 W/mK (λ <sub>10, dry</sub> ) 0.61 V		0.61 W/mK	
Durability (against freeze - th	naw)	<ul> <li>Evaluation based on provisions valid in the intended place of use of the mortar.</li> </ul>			valid in the mortar.
Compressive Strength Class		Equivalent Pr	escribed	Masonry M	ortars
Compressive Strength Class Ceme		ent:Lime:Sand	Ceme	nt:Sand	Designation

Compressive Strength Class	Equivalent Prescribed Masonry Mortars			
compressive Strength Class	Cement:Lime:Sand	Cement:Sand	Designation	
M12	1:0/¼:3	-	(i)	
M6	1:1/2:4/41/2	1:3/4	(ii)	
M4	1:1:5/6	1:5/6	(iii)	
M2	1:2:8/9	1:7/8	(iv)	



### **Benefits**

- · CE Marked designed masonry mortar
- · Manufactured in a 3rd party certified EN 998-2 factory production control system to level 2+ conformity
- · Computer batched colour consistent mix
- · Constantly available supply
- · Eliminates inaccurate site mixing
- Reduced Labour
- Increases site efficiency
- · Convenient and User-Friendly
- · Eliminates wastage
- · Promotes cleaner and safer sites

### **Approximate Yield**

Masonry Unit Type	No. per tonne	No. per 25kg
Standard Brick	1950	48
100mm Solid (edge)	880	22
100mm Solid (flat)	450	11
215mm Twin Pot Hollow	450	11

+ Yields are approximate based on a 10mm joint and do not take into account wastage.

### **Application Temperatures**



+3°C to +30°C

### **Health & Safety** Please refer to the relevant Material

Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk Silos







### HLM Hydraulic Lime Mortar

### Description

KPRO HLM is a natural coloured hydraulic lime masonry mortar designed for jointing and pointing of masonry units. The product complies with the requirements of IS EN 998-2 and should be used in accordance with EN 1996 (Eurocode 6), SR 325 and manufacturer's instructions. HLM is a designed mortar and is available in a range of strength categories standard.

### **Applications**

Masonry Mortar is suitable for the following applications. · Jointing and Pointing of brickwork, blockwork and natural stone

### **Product Use**

Suitable for use in temperatures between +3°C and +30°C. This product only requires the addition of clean water. Our HLM should be mixed in a suitable site mixer or with a paddle drill. Water should be added at a steady, constant rate to ensure mix consistency and uniformity of the product. Typical water addition of 3.5-4.5 litres per 25Kg of dry material will produce a light workable material. Mixing outputs vary, and this will affect the quantity of water required. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the life and colour consistency of the product. For further information, please visit www.kilsaran.ie

### **Technical Data**

KPRO HLM Masonry Mortars are produced in an ISO 9001 quality-controlled environment and are third party certified to EN 998-2, system 2+. Our masonry mortars are produced to the requirements of a designed general-purpose masonry mortar as set out in EN 998-2. KPRO HLM masonry mortars are available in a range of strength classes to suit your specification.

	CE			
Kilsaran Concrete, Piercetown Dunboyne Co. Meath Ireland 13				
EN 998-2 Designed general purpose masonry mortar for internal and external use in elements subject to structural requirements				
Compressive Strength	M1 M2.5			
Initial Shear Strength	0.15 N/mm² (tab. value)	0.15 N/mm² (tab. value)		
Contents of Chloride	NPD NPD			
Reaction to Fire	Class A1 Class A1			
Water Absorption	NPD	NPD		
Water Vapour Permeability	µ 15/35	µ 15/35		
Thermal Conductivity	(λ <sub>10, dry</sub> ) 0.61 W/mK	(λ <sub>10, dry</sub> ) 0.61 W/mK		
Durability (against freeze - thaw)	Evaluation based on provisions valid in the intended place of use of the mortar.			



### **Benefits**

- · CE Marked designed masonry mortar
- · Manufactured in a 3rd party certified EN 998-2 factory production control system to level 2+ conformity
- · Computer batched colour consistent mix
- · Constantly available supply
- · Eliminates inaccurate site mixing
- Reduced Labour
- Increases site efficiency
- · Convenient and User-Friendly
- · Eliminates wastage
- · Promotes cleaner and safer sites

### **Approximate Yield**

Masonry Unit Type	No. per tonne	No. per 25kg
Standard Brick	1300	33
100mm Solid (edge)	620	16
100mm Solid (flat)	320	8
215mm Twin Pot Hollow	320	8

### **Application Temperatures**



+3°C to +30°C

### **Health & Safety**

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk Silos





### **ROOF TILE MORTAR**

### Description

KPRO Roof Tile Mortar is pigmented through-coloured mortar designed for the bedding of clay and concrete roof tiles. The product is available in 3 colours as standard.





Charcoal

Bole Brown Rustic Red

### Applications

Roof Tile Mortar is suitable for the following applications,

· Bedding of clay and concrete roof tiles and ridge tiles

### **Product Use**

Suitable for use in temperatures between +3°C and +30°C. Mix with clean potable water to achieve a workable homogeneous mix. KPRO Roof Tile mortars should be used in accordance with BS 5534.

### **Technical Data**

KPRO Roof Tile mortars are produced in an ISO 9001 quality-controlled environment to the requirements of BS 5534.

Characteristic	Data value
Proportion of Constituents	1 part cement : 3 parts sand
Compressive Strength	12 N/mm²
Tensile Adhesion Strength	> 0.15 N/mm <sup>2</sup>



### **Benefits**

- Consistently high-quality mix
- Eliminates inaccurate site mixing
- Available in a range of colours
- Consistent colour
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### **Approximate Yield**

No.	Liner
per 25kg	metres
1	6-6.25

### **Application Temperatures**



### Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

#### Pack Size







### **CLADDING MORTAR**

### Description

KPRO Cladding Mortar is a mortar mix specifically formulated for the application of cladding units to prepared backgrounds, both internally and externally. The product is available in 3 colours as standard.







Standard Grev

### **Applications**

KPRO Cladding Mortar is suitable for the following applications,

- Installation of lightweight veneer stone
- Installation of natural stone cladding units\* (please note product use below)
- Installation of brick slips
- · Pointing of cladding units and brick slips

### **Product Use**

Suitable for use in temperatures between +5°C and +30°C. The background should be clean, dry and free from all dust and grease. Paints, sealers, efflorescence and biological growth must be removed prior to application of the product. Prior to application, dampen the background with a light mist of clean potable water. Avoid saturating the background.

Mix the contents of a 25kg bag with 3.5-4.5 litres of clean potable water to create a workable, homogenous mortar mix. Use a trowel to apply a generous 10-12mm of mortar to the back of the cladding units. Place the cladding unit in position on the wall and press firmly into position in a twisting motion. When pressing the unit, ensure the fresh mortar begins squeezes out from underneath, thus eliminating air pockets and ensuring a good bond. Horizontal and vertical joints should be sealed by applying a layer of mortar on their edges prior to placing of consecutive courses.

When installing larger units, it may be required to apply a layer of fresh mortar to the substrate with a notched trowel and also a ring of mortar to the back of the unit (ensuring to leave a void in the centre) before placing it into position. Firmly pressing the unit into position will remove any air voids and ensure a good bond. Begin cladding from the bottom of the wall and brace each stone with a spacer as work continues upwards.

\*When installing natural stone and/or normal density stone units mechanical fixing is advised.

### **Technical Data**

KPRO Roof Tile mortars are produced in an ISO 9001 guality-controlled environment to the requirements of BS 5534.

Characteristic	Data value
Compressive Strength	≥ 8 N/mm²
Flexural Strength	≥ 4 N/mm²
Fresh Density	1950 kg/m³
Hardened Density	1800 kg/m³
Water Retention	≥75%



### **Benefits**

- Consistently high-quality mix
- Eliminates inaccurate site mixing
- Reduction in labour
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### **Approximate Yield**



### **Application Temperatures**



### **Health & Safetv**

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.







For almost 50 years, Kilsaran has been supplying high quality ready mixed concrete products to the construction industry. Coupled with their technical expertise, this experience gave birth to a range of pre-mixed micro concrete products for use in all construction sectors.

Kilsaran's pre-mixed micro concretes range offers customers concrete solutions in pre-blended, pre-batched, conveniently sized units.

Whether looking for an ultra-fast setting product or a customary concrete mix, Kilsaran's pre-mixed micro concretes offer a convenient, user friendly and above all, quality concreting solution.



### MPC Multi Purpose Concrete

### Description

KPRO Multi-Purpose Concrete is a 30 N/mm<sup>2</sup> micro concrete mix suitable for use in all general concrete work, both internally and externally.

### **Applications**

Multi-Purpose Concrete is suitable for use in the following applications,

- Constructing or repairing footpaths, driveways, patios etc.
- · House, wall and shed foundations
- · Laying of draining channels and services
- All other general concrete work.

### Product Use

**Preparation:** Ensure the area is free from any dust, dirt or grease, and have a suitable sub-base where required. If using the material for reinstatement purposes, cut back edges of surrounding concrete and prime if necessary, with a suitable primer (such as Kilsaran Priming Slurry) immediately before installation.

**Mixing:** Multi-Purpose Concrete should be mixed with 2.5 - 3.3 litres of clean potable water to create a workable concrete mix. Slight water adjustments may be required to obtain the desired consistency. Excessive addition of water will weaken the mix considerably.

**Placing:** Once mixed, place the fresh material in the prepared area to a depth of 25mm-100mm. The surface should be cured with a water-based curing membrane and protected from premature drying and cold weather.

### **Technical Data**

KPRO MPC is produced in an ISO 9001 quality-controlled environment. MPC is a 30 N/mm<sup>2</sup> concrete as standard, however other strength classes are available upon request.

Characteristic	Data value
Compressive Strength (28 days)	40 N/mm²
Density	2200 kg/m³
Water-proofing & Anti Washout Agents	Available upon request
Polypropylene Fibres	Available upon request



### **Benefits**

- · Consistently high-quality mix
- Constant available supply
- · Eliminates inaccurate site mixing
- Increases site efficiency
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### **Approximate Yield**

No. 25kg Bags	Approximate m <sup>3</sup>
1	0.01
2	0.02
5	0.06
10	0.1
20	0.2
40	0.5

### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### RSC Rapid Setting Concrete

### Description

KPRO RSC rapid setting concrete is a 40 N/mm<sup>2</sup> micro concrete mix suitable for use in all general concrete work, both internally and externally, where rapid setting and rapid strength development are required.

### **Applications**

RSC is suitable for use in the following applications,

- Repair footpaths, driveways, patios etc.
- Installation of ironwork and street furniture
- Haunching for paving and kerbing
- Post, sign and fence erection
- General concrete work where fast setting and rapid strength development are required.

### **Product Use**

**Preparation:** Ensure the area is free from any dust, dirt or grease, and have a suitable sub-base where required. If using the material for reinstatement purposes, cut back edges of surrounding concrete and prime if necessary, with a suitable primer (such as Kilsaran Priming Slurry) immediately before installation.

**Mixing:** Rapid Setting Concrete should be mixed with 2.5 - 3.3 litres of clean potable water to create a workable concrete mix. Slight water adjustments may be required to obtain the desired consistency. Excessive addition of water will weaken the mixture considerably. RSC is a fast setting product, mix only enough material that can be installed in 10 minutes.

**Placing:** Once mixed, place the fresh material in the prepared area to a depth of 25mm-100mm. The surface should be cured with a water-based curing membrane and protected from premature drying and cold weather. For further information, please visit www.kilsaran.ie or consult our RRC technical datasheet.

### **Technical Data**

KPRO RSC is produced in an ISO 9001 quality-controlled environment. RSC is a 40 N/mm<sup>2</sup> concrete as standard, however other strength classes are available upon request.

Characteristic	Data value			
Compressive Strength	6 hrs	24 hrs	7 day	28 day
Compressive Orioligan	10 N/mm²	25 N/mm²	30 N/mm²	40 N/mm²
Pot Life	10 mins			
Initial Set	20 mins			
Final Set	60 mins			
Water-proofing & Anti Washout Agents	Available upon request			
Polypropylene Fibres	Available upon request			



### **Benefits**

- Rapid setting mix
- Rapid strength development
- Consistently high-quality mix
- Constant available supply
- · Eliminates inaccurate site mixing
- Increases site efficiency
- · Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### **Approximate Yield**

No. 25kg Bags	Approximate m <sup>3</sup>
1	0.01
2	0.02
5	0.06
10	0.1
20	0.2
40	0.5

### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at

Pack Size - 25kg premixed bags

www.kilsaran.ie.





### POST 10 Rapid Setting Post Concrete

### Description

Post 10 is a rapid setting, micro concrete mix designed for the rapid installation and anchoring of all types of timber, plastic, metal and concrete posts.

### Applications

Post 10 is suitable for use in the following applications,

· Setting of metal, wooden and plastic posts in domestic applications.

### **Product Use**

**Preparation:** Dig a hole to the correct dimensions according to the post size (refer to product yield table)

Mixing: Prior mixing not required. See instructions below.

### Placing: Follow the steps below,

- 1. Fill the hole halfway with water and position the post vertically in the hole
- 2. Pour Post 10 evenly into the hole and around the post up to the water level. Sprinkle any visible dry powder with water.
- 3. Immediately adjust the level and position the post as required and support for 5 minutes, or until setting begins.
- 4. Lightly tap the surface to remove any trapped air

### **Technical Data**

KPRO Post 10 is produced in an ISO 9001 quality-controlled environment. Post 10 is a 20 N/mm<sup>2</sup> concrete as standard

Characteristic	Data value
Compressive Strength (28 days)	20N/mm²
Density	2000 kg/m³
Initial Set	5-7 mins
Final Set	10 mins



#### **Benefits**

- Rapid setting, final set in just 10 minutes
- · Eliminates mixing, none required
- Reduction in labour
- · Convenient and User-Friendly
- · Eliminates wastage
- · Promotes cleaner and safer sites

### **Approximate Yield**

Bound	150 x 450	0.50
50mm	200 x 300	0.66
301111	200 x 600	1.50
	150 x 600	0.50
Square	200 x 600	1.00
75mm	250 x 600	2.00
	300 x 600	3.00
	200 x 750	1.00
Square	250 x 450	1.50
100mm	300 x 450	2.00
	300 x 750	3.50

\*Approximate yield only.

### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

### Pack Size





### 3:1 General Purpose Sand & Cement

### Description

3:1 General Purpose Sand & Cement is a prescribed mix of washed well graded sand and grey cement for use as a general-purpose sand and cement mix for a wide range of applications.

### Applications

3:1 General Purpose Sand & Cement is suitable for use in the following applications,

- Minor concrete repairs
- Masonry patch repairs
- · Bedding mix for paving units
- Mortars for stonework

#### **Product Use**

**Preparation:** Ensure the area is free from any dust, dirt or grease, and have a suitable sub-base where required. If using the material for patch repairs, cut back edges of surrounding material and prime if necessary, with a suitable primer (such as Kilsaran Priming Slurry) immediately before installation.

**Mixing:** 3:1 General Purpose Sand & Cement can be mixed in a semi-dry state for use as bedding or haunching mix, or in a plastic state to use as a mortar or concrete mix. Follow the approximate water additions below,

	Semi-Dry		Pla	stic
Quantity of Material	25 Kg	10 Kg	25 Kg	10 Kg
Water Addition	2.0-3.0 ltr	0.8-1.2 ltr	3.5-4.0 ltr	1.4-1.6 ltr

**Placing:** Dependant of final application, but good concreting and masonry practices should be followed.

### **Technical Data**

KPRO MPC is produced in an ISO 9001 quality-controlled environment. MPC is a 30 N/mm<sup>2</sup> concrete as standard, however other strength classes are available upon request.

Characteristic	Data value
Compressive Strength (28 days)	30 N/mm²
Density	2200 kg/m³
Water-proofing & Anti Washout Agents	Available upon request
Polypropylene Fibres	Available upon request



#### **Benefits**

- Consistently high-quality mix
- Constant available supply
- · Eliminates inaccurate site mixing
- · Increases site efficiency
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### **Approximate Yield**

No. 25kg Bags	Approximate m <sup>3</sup>
1	0.01
2	0.02
5	0.06
10	0.1
20	0.2
40	0.5

### **Application Temperatures**



### Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.



Kilsaran **KPRO** FLOOR



Floor screed products from Kilsaran have been trusted, specified and used by architects and engineers throughout Ireland and the UK for many years.

Kilsaran's range of screed products includes self-levelling and semi-dry cementitious screeds. Kilsaran screeds are produced in ISO 9001, 14001 and 50001 controlled environment to the requirements of EN 13813 and all our screeds are CE marked in accordance to EN 13813 and Construction Products Regulation 305/2011.

With screed products suitable for domestic and commercial applications, Kilsaran has a screed solution for the private, public and healthcare sectors. Whether building a private house or multi-room apartment complex, Kilsaran screed products are the number one choice for a durable, high-quality screed solution.



### FLS-401 Sand & Cement Screed

#### Description

Kilsaran

KPRO

KPRO Floor FLS screeds are semi-dry, fibre reinforced levelling screeds for use in domestic, commercial and industrial applications. The product complies with the requirements of EN 13813 and should be used in accordance with this standard and manufacturer's instructions.

### **Applications**

KPRO Floor FLS screeds are suitable for use internally, in bonded, un-bonded and floating screed constructions. The material provides a smooth level surface for easy installation of final floor coverings. They are not designed for use as a wearing surface. KPRO Floor FLS screeds are suitable for use in at the following thicknesses

#### **Product Use**

Ensure the supporting concrete base has a minimum strength of C25/30, is stable, sound and free from any dust, dirt or grease. The supportive base should then be pre-soaked and have all ponded water removed prior to application. Kilsaran KPRO Floor FLS screeds are for use internally as a levelling screed and should be mixed with clean potable water on-site to produce a semi-dry screed material. The material is placed, compacted and levelled by use of a screeding board. In all instances, the products should be used in accordance with BS 8204-1.

**Preparation:** For bonded screeds, the supporting base should then be pre-soaked, having ponded water removed, and should be primed with a suitable cementitious primer such as KPRO Street PS. For unbonded and floating screeds, ensure the plastic membrane is secured, overlapped at joints and taped. For heated screed, ensure underfloor heating is turned off prior to installation of the screed material. For further information, consult BS 8204-1.

Mixing: The 25kg bag of material should be mixed with 2.3-2.5 litres of clean potable water on-site to produce a semi-dry screed material.

Placing: The material is placed, compacted and levelled by use of a screeding board. In all instances, KPRO Floor FLS screeds should be used in accordance with BS 8204-1.

#### **Technical Data**

KPRO SC screeds are produced in an ISO 9001 quality-controlled environment to the requirements of EN 13813.

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Kilsaran Concrete,		
Piercetown D	unboyne Co. Meath Ireland	
13		
EN 13813		
CT – C25 – F4		
Cement based levelling screed material for internal use		
Compressive Strength	C25	
Flexural Strength	F4	
Reaction to Fire A1		
Release of Corrosive Substances	СТ	



#### **Benefits**

- · Consistently high-quality mix
- Constantly available supply
- Increased productivity
- · Eliminates inaccurate site mixing
- Low shrinkage/good crack resistance
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### Laying Depths

Screed Construction	Minimum
Туре	Depth
Bonded	50mm
Un-bonded	60mm
Un-bonded (Commercial)	75mm
Floating	75mm
Coverage over UFH pipes	60mm

#### **Approximate Yield**

Coat Thickness	Coverage per 25kg bag
1	0.011
10	0.11
20	0.23
40	0.45

#### **Application Temperatures**



+5°C to +30°C

#### **Health & Safety**

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk silos





### FLC-301 Rapid Hardening Self Smoothing Compound

### Description

Kilsaran

**K PRC** 

KPRO Floor FLC-301 screed is a rapid hardening and rapid drying cementitious levelling compound for use in domestic and commercial applications. The product complies to the requirements of EN 13813 and should be used in accordance with this standard and manufacturer's instructions.

#### Applications

KPRO Floor FLC-301 screed is suitable for use internally to prepare substrates, by providing a smooth unbroken surface of 2-40mm, prior to installation of final floor coverings. For application depths greater than 20mm the introduction of Kilsaran 3-5mm grit is recommended. Suitable substrates are;

- Sand & Cement screeds
- Concrete
- · Calcium Sulphate screeds (\*must be primed)
- Heated Screeds

#### **Product Use**

Ensure the supporting concrete base/screed is stable, sound and free from any dust, dirt or grease. The supporting base should then be primed using a suitable acrylic or waterbased primer prior to application. Priming of the substrate is critical to ensure sufficient flow life of the compound and to minimise entrapped air bubbles rising through the fresh compound material.

**Preparation:** Concrete, sand & cement and calcium sulphate screeds must be at least 28 days old and have a residual moisture level of  $\leq$  2.0% CM, or a relative humidity of  $\leq$  75% prior to installation of KPRO Floor FLC-301. Substrates should be dry, strong, crack free, with all loose debris/laitance removed and capable of supporting the weight of the compound material. Joints in the substrate should be carried through the FLC-301 and suitable perimeter strips should be incorporated at junctions etc. to restrain the fluid like fresh material. Heated screeds shall have their heating commissioned and turned off (off for a minimum of 4 days) prior to installation of FLC-301.

**Mixing:** The 25kg bag of material should be mixed with 5.75 - 6.0 litres clean potable water. Add the dry powder to the water and mix mechanically with a suitable paddle mixer until a lump free homogenous mix is achieved. Allow the fresh material to sit for 1 minute and then thoroughly stir/reagitate. In larger areas the use of a suitable screed pump is advised. Freshly mixed FLC-301 should be <u>installed within 20-30 minutes of mixing</u>. At application thicknesses greater than 20mm the introduction of Kilsaran 3-5mm grit is recommended. At the mixing stage, add 1 part Kilsaran 3/5mm grit to 5 parts FLC-301 i.e. 5kg of Kilsaran 3/5mm grit to 25kg of FLC-301, and ensure complete mixing.

**Placing:** Pour the mixed FLC-301 onto the prepared substrate. The mixed compound will flow across the floor surface and self-smooth during the first 15 minutes of its 20-30 minutes working time. Spread the fresh material uniformly, using a steel trowel or squeegee to the required thickness. A spiked roller may be used to aid the release of trapped air bubbles and is recommended on larger areas. A steel finishing float can be used for feather touch up work within the 20-30 minute working life. Apply at temperatures above 5°C.

**Curing:** Freshly completed work should be protected from draughts until hardening takes place. Impervious floor coverings can be laid after 24 hours\* depending on material thickness, room relative humidity and room temperature. Floor coverings should only be installed after the material has reached a residual moisture level of 2.0% CM. Approximate drying times are noted in the adjacent table.

<sup>†</sup>Drying times are based on 20°C and 60% RH. Changes in temperature and humidity levels can affect these times.



#### **Benefits**

- Consistently high-quality mix
- Rapid Hardening Walk on in 3 hours
- Polymer Modified
- 30 minute working time
- Low shrinkage/good crack resistance
- Convenient and User-Friendly
- Can be used from 2mm 40mm depths
  Solvent free

### Laying Depths

Screed Thickness	Depth
Minimum	2mm
Maximum	40mm*

### Approximate Drying Times<sup>+</sup>

Screed Thickness	Days
2mm	1 day
10-15mm	3 days
20-30mm	5 days
40mm	7 days

#### **Approximate Yield**

Screed Depth	Coverage per 25kg bag
2	2.9 m <sup>2</sup>
10	1.5 m²
20	0.75 m <sup>2</sup>
40	0.37 m <sup>2</sup>

#### **Application Temperatures**



### Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### **Technical Data**

KPRO Floor FLC-301 screed is produced in an ISO 9001 quality-controlled environment to the requirements. The product is tested and marketed in accordance to CPR 305/2011 and complies with classification CT-C25-F5 in accordance to EN 13813.

Characteristic	Data Value			
enaracteriotic	3 Hr	1 Day	7 Day	28 Day
Compressive Strength	≥ 5 N/mm²	≥ 15 N/mm²	≥ 20 N/mm²	≥ 25 N/mm²
Flexural Strength	≥ 2 N/mm²	≥ 4 N/mm²	≥ 5 N/mm²	≥ 6 N/mm²
Working Time (20°C)	20-30 mins			
Flow Life (20°C)	15 mins			
Initial Set	30 mins			
Final Set	2 hours			

CE		
Kilsaran Concrete,		
Piercetown Dunboyne Co. Meath Ireland		
	13	
EN 13813		
CT – C25 – F5		
Cement based levelling screed material for internal use		
Compressive Strength	C25	
Flexural Strength	F5	
Reaction to Fire A1		
Release of Corrosive Substances	СТ	



### FLS-410 Polymer Sand & Cement Screed

### Description

Kilsaran

**K**PRC

KPRO Floor FLS-410 screed is a polymer modified, semi-dry, fibre reinforced levelling screeds for use in domestic, commercial and industrial applications. The product complies with the requirements of EN 13813 and should be used in accordance with this standard and manufacturer's instructions.

#### **Applications**

KPRO Floor FLS-410 screed is suitable for use internally, in bonded, un-bonded and floating screed constructions. The material provides a smooth level surface for easy installation of final floor coverings. It is not designed for use as a wearing surface.

#### **Product Use**

Ensure the supporting concrete base has a minimum strength of C25/30, is stable, sound and free from any dust, dirt or grease. The supportive base should then be pre-soaked and have all ponded water removed prior to application. KPRO Floor FLS-410 screed is for use internally as a levelling screed and should be mixed with clean potable water on-site to produce a semi-dry screed material. The material is placed, compacted and levelled by use of a screeding board. In all instances, the products should be used in accordance with BS 8204-3.

**Preparation:** For bonded screeds, the supporting base should then be pre-soaked, having ponded water removed, and should be primed with a suitable cementitious primer such as KPRO Street PS. For unbonded and floating screeds. ensure the plastic membrane is secured, overlapped at joints and taped. For heated screed, ensure underfloor heating is turned off prior to installation of the screed material. For further information, consult BS 8204-1.

**Mixing:** The 25kg bag of material should be mixed with 2.3-2.5 litres of clean potable water on-site to produce a semi-dry screed material.

**Placing:** The material is placed, compacted and levelled by use of a screeding board. In all instances, KPRO Floor FLS-410 should be used in accordance with BS 8204-1&3.

#### **Technical Data**

KPRO SC screeds are produced in an ISO 9001 quality-controlled environment to the requirements of EN 13813.

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Kil	saran Concrete,	
Piercetown D	unboyne Co. Meath Ireland	
13		
EN 13813		
CT – C25 – F4		
Cement based levelling screed material for internal use		
Compressive Strength	C25	
Flexural Strength	F4	
Reaction to Fire	A1	
Release of Corrosive Substances	СТ	



#### **Benefits**

- · Consistently high-quality mix
- · Constantly available supply
- Polymer Modified
- Eliminates inaccurate site mixing
- Low shrinkage/good crack resistance
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### Laying Depths

Screed Construction	Minimum
Туре	Depth
Bonded	25mm
Un-bonded	45mm
Un-bonded (Commercial)	50mm
Floating	55mm
Coverage over UFH pipes	35mm

#### **Approximate Yield**

Coat Thickness	Coverage per 25kg bag
1	0.011
10	0.11
20	0.23
40	0.45

#### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at

#### Pack Size

- 25kg premixed bags

www.kilsaran.ie.

- Bulk silos
- Kilsaran ideas taking shape







As a market leader in dry mortar technologies, Kilsaran offer a range of specialist mortars, bedding concretes and primers for use in the design and construction of urban trafficked pavements, in villages, cities and town centres. With a product range including bedding concretes, cementitious primers and flowable jointing mortars, Kilsaran can offer a complete streetscape range of products produced in ISO 9001 and 14001 controlled environments to the requirements of BS 7533.

Kilsaran's Streetscape range offers a flexible delivery system with options of bulk deliveries in our silos, in addition to smaller single pack units. Our unrivalled knowledge in the design, construction and maintenance of trafficked pavements, coupled with our flexible delivery system and quality products, makes Kilsaran's Streetscape range the first choice for your streetscape solution.



### HSBC High Strength Bedding Concrete

### Description

HSBC is a natural grey, high strength bedding concrete that provides a bound base for natural stone and concrete paving units. The product complies with the requirements of BS 7533 and should be used in accordance with this standard and manufacturer's instructions.

### **Applications**

HSBC is suitable for use at depths of 10-75mm, in the following applications,

- Bedding layer for concrete paving flags, concrete paving bricks and natural stone flags, bricks and setts.
- Haunching and bedding of drainage channels.
- Pointing and haunching of kerbs and kerb setts.

#### **Product Use**

Ensure the supporting base is stable, sound and free from any dust, dirt or grease. The supporting base should then be pre-soaked and have all ponded water removed prior to application

**Preparation:** Before using KPRO HSBC, the preparation of the concrete base is of critical importance. Ensure that the surface is stable and not liable to settlement or heave. Remove all dust, grease and debris. Place the product on a pre-soaked and then freshly primed base. Spread the HSBC around the area to the desired depth.

**Mixing:** This product only requires the addition of clean water. Our HSBC should be mixed in a suitable site mixer or with a paddle drill. The powder should be added gradually to the measured water in the mixing vessel and mixed for 3-5 minutes. Typical water addition of 2.3-2.5 litres per 25Kg of dry material will produce a stiff binding material. Material mixed from our bulk silos should be done so in accordance with the site training given by our technical team.

**Placing:** HSBC can be laid in depths of 10-75mm in one layer. Greater depths can be achieved using the layer on layer method. Place the product on the pre-soaked and freshly primed base and spread it to the desired depth. Prime the back of the paving unit and immediately place it in position, using a rubber mallet to bed and level.

#### **Technical Data**

KPRO HSBC is produced in an ISO 9001 quality-controlled environment to the requirements of BS 7533.

Characteristic	Data value
Compressive Strength (28 days)	43 N/mm²
Density	1900 kg/m³
Adhesion Strength	> 1.4 N/mm²
Adhesion Strength (with priming slurry)	> 2.0 N/mm²
Modulus of Elasticity	16,000
Shrinkage	<0.1%



#### **Benefits**

- Consistently high-quality mix
- Eliminates inaccurate site mixing
- Complies with BS 7533
- Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### **Approximate Yield**

Coat	Coverage	25kg bag
Thickness	per 25kg bag	per m <sup>2</sup>
10	19	1
20	38	2
30	57	3
40	76	4
50	95	4
60	114	5
70	133	6
75	143	6

#### **Application Temperatures**



+5°C to +30°C

### Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk silos



KPRC



### **RSJM** Rapid Set Jointing Mortar

#### Description

RSJM is a natural grey, shrinkage compensated, rapid setting jointing mortar with a fluid consistency, designed for use in rigid construction of pavement and carriageways. The product complies with the requirements of BS 7533 and should be used in accordance with this standard and manufacturer's instructions.

#### Applications

RSJM is suitable for use in the following applications,

- · Jointing of paved pedestrian areas in town centres
- Jointing of paved pathways and carriageways.
- Jointing of natural stone and clay pavements/carriageways where a rigid or bound, void-free joint is required.

### **Product Use**

Joints must be free from dust, grease or any loose debris. The application area must be pre-soaked with clean water immediately before application of the material, ensuring to remove any ponded water from the surface.

**Preparation:** Joints must be free from dust, grease or any loose debris. The application area must be pre-soaked with clean water immediately before application of the material, ensuring to remove any ponded water from the surface.

**Mixing:** RSJM should be mixed in a suitable site mixer or with a paddle drill, with approximately 4.25 litres of clean potable water (per 25kg bag of material) for 3 minutes to reach a lump free-flowing consistent slurry. Do not remix or add additional water to the mix. Only mix enough material, which can be placed within 10 minutes.

**Placing:** Pour the fresh mortar onto the prepared, paved area and chase into all joints with a soft brush or squeegee. Ensure joints are full, allowing for settlement and remove any excess material with the squeegee once joints are full. Spray a mist of water onto the area at all times to aid the cleaning process. When the joints are sufficiently hard (this could be as soon as 15 minutes) remove any residual material with a constant flow of water and a diagonal sweeping action. A specifically designed belt cleaner can also be used. Timing and experience are critical to ensure no staining occurs. Once cleaned, inspect all areas to ensure all excess mortar is removed.

### **Technical Data**

KPRO RSJM is produced in an ISO 9001 quality-controlled environment to the requirements of BS 7533.

Characteristic	Data value
Compressive Strength (28 days)	> 53 N/mm²
Flexural Strength (28 days)	> 9 N/mm²
Density	2060 kg/m³
Adhesion Strength	> 1.5 N/mm²
Modulus of Elasticity	20,000 N/mm²
Shrinkage	<0.1%
Initial Set	15 min
Final Set	60 min
Colour	Standard Grey



#### Benefits

- Rapid Setting Initial set in 15 minutes
- Shrinkage compensated
- Light foot traffic in just 1 hour
- Complies with BS 7533
- Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

#### **Approximate Yield**

Paving Flag	25kg Yield (m²)	Paving Block	25kg Yield (m²)
400x400x40	7.1	100x100x60	2.4
400x400x50	5.8	100x100x80	1.8
400x400x60	4.8	200x100x60	1.7
450x450x40	8.1	200x100x80	1.3
450x450x50	6.4	200x200x60	1.3
450x450x60	5.4	200x200x80	1.0
600x300x50	5.8	240x160x60	2.5
600x300x60	4.8	240x160x80	1.9
600x600x50	8.6	200x300x60	2.9
600x600x60	7.1	200x300x80	2.2

#### **Application Temperatures**



### Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### **PS** Priming Slurry

### Description

Priming Slurry is a polymer-modified, cement-based primer designed to provide an exceptional bond between HSBC and the paving unit. The product complies with the requirements of BS 7533 and should be used in accordance with this standard and manufacturer's instructions.

### Applications

Priming Slurry is suitable for use in the following applications,

- Priming of road base and paving units, in pavement and carriageway construction.
- Priming of concrete surfaces prior to repairing with KPRO Repair products.
- Cement-based primer for use in bonded screed construction.

### **Product Use**

Suitable for use in temperatures between +5°C and +30°C.

**Preparation:** Before using Priming Slurry, the preparation of the concrete base is of critical importance. Ensure the supporting base is stable, sound and free from any dust, dirt or grease. Once clean, the base should be pre-soaked and have all ponded water removed prior to application of the priming slurry.

**Mixing:** Priming Slurry should be mixed in a suitable site mixer or with a paddle drill with approximately 5.0-5.4 litres of clean potable water per 20kg bag of material for 3-4 minutes to reach the desired consistency, suitable for priming.

**Placing:** Once mixed, apply a 1mm-2mm coat of priming slurry to the pre-soaked base. Following the installation of the bedding material, such as Kilsaran HSBC, all paving units should be pre-soaked and then have their bedding face coated with a 1mm-2mm coat of the priming slurry and then placed into position. When using as a bonding slurry for screed, mix as stated above and apply the fresh material to the clean, prepared base (as mentioned above). Whilst the slurry is still fresh, and wet install the freshly mixed screed material and finish accordingly. Prime areas in succession to avoid the product setting before installation of the screed material.

### **Technical Data**

KPRO PS is produced in an ISO 9001 quality-controlled environment to the requirements of BS 7533.

Characteristic	Data value
Adhesion Strength (28 days)	>2 N/mm²
Pot Life	60 min
Colour	Standard Grey



### **Benefits**

- Consistently high-quality mix
- Eliminates inaccurate site mixing
- Complies with BS 7533
- Improves adhesive strength of paving
- Convenient and User-Friendly
- Eliminates wastage
- Promotes cleaner and safer sites

### **Approximate Yield**

Priming Application	Kgs per m <sup>2</sup>	m² per 20kg bag
Paving Unit	1.2	17
Paving Unit + Base	2.2	9

### **Application Temperatures**



+5°C to +30°C

### Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### T60 Rapid Bedding Mortar

### Description

T60 is a rapid set, rapid strength, bedding mortar designed for the bedding of ironworks as part of the Department of Transport Part 4 HD 27/94, where mortars for bedding ironwork (such as utility holes, cover frames) during repairs should reach 20N/mm<sup>2</sup> within 2 hours.

### Applications

T60 is suitable for use in the following applications,

- · Bedding and raising street ironwork
- Utility Holes, frames and gullies
- · Bedding posts, railings and bollards
- Bedding of precast units
- Emergency bedding of stone setts, slabs and cobbles

#### **Product Use**

Suitable for use in temperatures between +5°C and +30°C.

**Preparation:** Before using T60, ensure the area is free from any dust, dirt or grease, pre-soaked and having all ponded water removed prior to application.

**Mixing:** T60 should be mixed in a forced action mixer or by hand with 2.5-2.7 litres of clean potable water until a stiff, zero slump and the homogenous mix is achieved. Mix only enough material that can be placed and finished in 5-10 minutes.

**Placing:** Once mixed, place the fresh material in the prepared area in depths from 10mm-75mm. For applications of greater depths, the material can be bulked out with well-graded 10mm aggregate. When bedding frames ensure to position and level as soon as possible after placing. Exposed areas should be given a floated finish. Once the initial set of the material has taken place the area can be backfilled.

### **Technical Data**

KPRO T60 is produced in an ISO 9001 quality-controlled environment to the requirements of BS 7533.

Characteristic		Data Value		
Characteristic		Flexural	Compressive	
	1 Hour	5 N/mm²	20 N/mm <sup>2</sup>	
	2 Hours	5.5 N/mm²	25 N/mm²	
Strength (28 days)	1 Day	7 N/mm²	35 N/mm²	
-	7 Day	8 N/mm²	45 N/mm²	
	28 Days	10 N/mm²	50 N/mm²	
Fresh Density	2200kg/m <sup>3</sup>			
Pot Life	5 min-10 min			
Initial Set	15 min			
Final Set	20 min			



#### **Benefits**

- Rapid Setting Initial set in 15 minutes
- Shrinkage compensated
- · Light foot traffic in just 1 hour
- High early and ultimate strength
- Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Minimum traffic disruption

### **Approximate Yield**

Bedding Depth	Kgs per m <sup>2</sup>	25kg bag per m²
10	20	1
20	40	2
30	60	3
40	80	4
50	100	4
60	120	5
70	140	6
75	150	6

#### **Application Temperatures**



#### Health & Safety Please refer to the relevan

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

### Pack Size





### RRC 60 Rapid Reinstatement Concrete

### Description

RRC 60 is a rapid setting, rapid strength reinstatement concrete and can be used as per clause 1032 and 1106 of the NRA specification for road works, as well as other concrete reinstatement work where fast setting and early trafficking are essential.

### **Applications**

RRC 60 is suitable for the following applications,

- Reinstating footpaths, driveways, patios
- Surface surrounds of posts, railings and bollards
- Surface surrounds to services in footpaths, e.g. hydrants etc.
- Reinstating surfaces where early trafficking is required.

### **Product Use**

Suitable for use in temperatures between +5°C and +30°C.

**Preparation:** Ensure the area is free from any dust, dirt or grease, and pre-dampened prior to application. Cut or scrabble existing concrete to a depth of at least 10mm before placing RRC 60, as feather edge finishing is not recommended. The use of a suitable primer (such as Kilsaran Priming Slurry) is recommended for smooth substrates prior to placing.

**Mixing:** RRC 60 should be mixed with 2.75-3.15 litres of clean potable water per 25 kg bag to achieve a workable concrete mix. Mixing can be carried out by a rotary or paddle mixer or by hand. Only mix enough material that can be placed within 5 minutes.

**Placing:** Once mixed place, the fresh material in the prepared area to a depth of 25mm-100mm. The reinstated area should be cured with a water-based curing membrane and protected from premature drying and cold weather. It is recommended that the area is also cured in accordance with clause 1027 of the NRA specification for roadworks (2000)

### **Technical Data**

KPRO RRC60 is produced in an ISO 9001 quality-controlled environment.

Characteristic		Data Value		
Characteristic		Flexural	Compressive	
	1 Hour	3 N/mm²	10 N/mm²	
	2 Hours	4 N/mm²	15 N/mm²	
Strength (28 days)	4 Hours	<b>5</b> N/mm²	20 N/mm²	
	1 Day	6 N/mm²	30 N/mm²	
	7 Day	11 N/mm²	50 N/mm²	
	28 Days	12 N/mm²	60 N/mm²	
Fresh Density	2000kg/m <sup>3</sup>			
Pot Life	5 min-10 min			
Initial Set	10 min			
Final Set	15 min			



#### Benefits

- Rapid Setting Final set in 15 minutes
- Shrinkage compensated
- Light foot traffic in just 1 hour
- One-part component
- Long term durability
- Poly fibre modified
- Eliminates wastage
- Freeze thaw resistant

### **Approximate Yield**

Bedding Depth	Kgs per m <sup>2</sup>	25kg bag per m²
10	20	1
20	40	2
30	60	3
40	80	4
50	100	4
60	120	5
70	140	6
75	150	6

### **Application Temperatures**



+5°C to +30°C

Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.









Today's engineering techniques and practices are increasingly calling for fast setting and high strength, structural construction grouts. Kilsaran's range of Grouts includes high strength non-shrink products and dry pack materials to accommodate a multitude of grouting needs.

Kilsaran Grouts are produced in ISO 9001 and 14001 controlled enviroments are formulated as single component products for ease of use.

Kilsaran Grouts are produced in ISO 9001, 14001 and 50001 controlled enviroments. A number of our grouts are also produced in an EN 1504 factory production controlled environment and hold third party certification to EN 1504.



### NSG 2601-HF Non-Shrink Grout – High Flow

### Description

KPRO NSG 2601-HF is a pre-blended, highly flowable non-shrink grout that fully complies with the requirements of EN 1504 parts 3 and 6, and also the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications. The product is mixed with a controlled amount of clean water to produce a highly flowable grout. NSG 2601-HF is formulated to give high flow characteristics with a low water demand, thus ensuring high early strength, no shrinkage, and long term durability.

### Applications

NSG 2601-HF is suitable for use at depths of 10-100mm, in the following applications,

- Large baseplate grouting for stanchions, plant and machinery
- Jointing of precast concrete
   units
- Bedding of precast concrete
   units
- Soil, ground and rock anchoring
- Anchoring of reinforcing steel bars
- Fixing rails and bolts
- Duct filling for pre-stressed and post-tensioned elements.
- Underpinning

### Product Use

**Mixing:** To achieve a high fluidity grout, mix the contents of a 25kg bag with 3.2-3.5 litres of clean potable water. Using excessive water (above 0.2 water/solid ratio) will affect the overall performance of the product. Mixing should be carried out in a suitable container by forced action using a paddle or high shear vane mixer or grouting pump. The powder should be added gradually to the measured water in the mixing vessel and mixed for 5 minutes until a smooth, cohesive consistency is achieved. Once mixed, no further water should be added.

**Placing:** NSG 2601-HF is used for applications from 10 – 100mm in thickness. All surfaces must be clean and free from laitance, dust, debris and all oils etc. The area to be grouted should be pre-soaked for a minimum of 2 hours to avoid absorption. The grout should be placed within 20 minutes of mixing to guarantee maximum physical properties performance. Formwork should be prepared effectively to contain the fluid grout. Place grout from a sufficient height and flow to ensure no air entrapment. On competition of process all exposed areas should be cured with a suitable curing membrane.

**Baseplate:** Ensure that a sufficient supply of material will be mixed in order to avoid interruption when filling. Always pour from one side and use air vents were necessary to avoid air entrapment. Pour from a height to ensure maximum compaction and use a rod to aid filling. Do not vibrate the grout. Temporary levelling shims should be greased if they are to be removed after grout hardens.

**Formwork:** As the grout is free-flowing it is important to ensure the formwork is sufficiently prepared to avoid leaks. A sacrificial concrete mix can be used to fix the baseplate shutter or as a bern. Keep unrestrained areas around the baseplate to less than 150mm.

**Curing:** Should be as per standard practices for cement-based products. Grout should be protected from strong sunlight and cold weather.



#### **Benefits**

- Non-Shrink formula
- High early and ultimate strength
- High flowability with no segregation
- Can be pumped or poured
- · Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Chloride free

#### **Approximate Yield**

No. 25kg	Approximate
bags	litres
1	13.0

### **Application Temperatures**



### Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk Silos





### **Technical Data**

KPRO NSG 2601-HF fully complies with the requirements of EN 1504 parts 3 and 6, and also the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications.

Characteristic	1 Day	7 Day	28 Day
Compressive Strength	21 MPa	45 MPa	60 MPa
Flexural Strength	5 MPa	7 MPa	10 MPa
Fresh Density	2200 kg/m³		
Early Expansion	1.50%		
Segregation (Glass Plates)	Nil		
Bleeding (Glass Plates)	Nil		
Initial Set	5 hours		
Final Set	7 hours		
Compressive Strain	< 1.00%		

### Compliance

KPRO NSG 2601-HF is tested and marketed in accordance with CPR 305/2011 and complies with classification R4 according to EN 1504-3 and the requirements of EN 1504 -6 : Anchoring of reinforced steel bar.

	CE
Kil	saran Concrete
Piercetown D	unbovne Co. Meath Ireland
	20
EN1	504-3 :EN 1504-6
Concrete repair products for structur Anchoring	al repair CC mortar (based on hydraulic cement) : of reinforcing steel bar.
Compressive Strength	R4 (≥ 45 MPa)
Adhesive Bond by pull-off	≥ 2.0 MPa
Chloride ion content	≤ 0.05%
Carbonation Resistance	Pass
Elastic Modulus	23 GPa
Thermal Compatibility – Part 1: Freeze-thaw	≥ 2.0 MPa
Testing of anchoring products By pull-out method	≤ 0.6mm @ 75kN load
Resistance to fire	Class A1
Dangerous Substances	Complies with 5.4 of EN 1015 parts 3 & 6





### NSG 2601 Non-Shrink Grout

### Description

KPRO NSG 2601 is a pre-blended, non-shrink grout that fully complies with the requirements of EN 1504 parts 3 and 6, and also the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications. The product is mixed with a controlled amount of clean water to produce a free-flowing grout or stiff bedding mix. NSG 2601 is formulated to give high flow characteristics with low water demand, thus ensuring high early strength, no shrinkage, and long term durability.

### Applications

KPRO NSG 2601 is suitable for use at depths of 10-100mm, in the following applications,

Bedding precast units

Grouting bearing plinths

Anchoring

- · Stanchion baseplates
- Machine & Plant baseplates
- · Jointing precast concrete panels
- Duct Filling

### **Product Use**

To achieve a high fluid grout, mix the contents of a 25kg bag with 5 litres of clean potable water. Using excessive water affect the overall performance of the product. Mixing should be carried out in a suitable container by forced action using a paddle or high shear vane mixer. The powder should be added gradually to the measured water in the mixing vessel and mixed for 2-3 minutes until a smooth, cohesive consistency is achieved. Once mixed no further water should be added. To achieve a plastic trowelable consistency, mix the contents of a 25kg bag with 2.75 litres of clean potable water and mix in the same manner.

**Placing:** KPRO NSG 2601 is used for applications from 10 - 100mm in thickness. All surfaces must be clean and free from laitance, dust, debris and all oils etc. The area to be grouted should be pre-soaked for a minimum of 2 hours to avoid absorption. The grout should be placed as soon as possible after mixing to guarantee maximum physical properties performance.

**Baseplate:** Ensure that a sufficient supply of material will be mixed in order to avoid interruption when filling. Always pour from one side and use air vents were necessary to avoid air entrapment. Pour from a height to ensure maximum compaction and use a rod to aid filling. Do not vibrate the grout. Temporary levelling shims should be greased if they are to be removed after grout hardens.

**Formwork:** As the grout is free-flowing it is important to ensure the formwork is sufficiently prepared to avoid leaks. A sacrificial concrete mix can be used to fix the baseplate shutter or as a bern. Keep unrestrained areas around the baseplate to less than 150mm.

**Curing:** Should be as per standard practices for cement-based products. Grout should be protected from strong sunlight and cold weather.

### **Benefits**

- Non-Shrink formula
- High early and ultimate strength
- High workability with no segregation
- Can be pumped or poured
- Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Chloride free

### **Approximate Yield**

No. 25kg	Approximate
bags	litres
1	13.0

### **Application Temperatures**



### Health & Safety

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

- 25kg premixed bags
- Bulk Silos





### **Technical Data**

KPRO NSG 2601 fully complies with the requirements of EN 1504 parts 3 and 6, and also the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications.

Characteristic	1 Day	7 Day	28 Day
Compressive Strength	21 MPa	45 MPa	60 MPa
Flexural Strength	5 MPa	7 MPa	10 MPa
Fresh Density	2200 kg/m³		
Early Expansion	1.50%		
Segregation (Glass Plates)	Nil		
Bleeding (Glass Plates)	Nil		
Initial Set	5 hours		
Final Set	7 hours		
Compressive Strain	< 1.00%		

### Compliance

KPRO NSG 2601 is tested and marketed in accordance with CPR 305/2011 and complies with classification R4 according to EN 1504-3 and the requirements of EN 1504 -6 : Anchoring of reinforced steel bar.

	CE		
Kil	saran Concrete,		
Piercetown D	unboyne Co. Meath Ireland		
EN1	504-3 :EN 1504-6		
Concrete repair products for structural repair CC mortar (based on hydraulic cement) : Anchoring of reinforcing steel bar.			
Compressive Strength R4 (≥ 45 MPa)			
Adhesive Bond by pull-off	≥ 2.0 MPa		
Chloride ion content	≤ 0.05%		
Carbonation Resistance	Pass		
Elastic Modulus	23 GPa		
Thermal Compatibility – Part 1: Freeze-thaw	≥ 2.0 MPa		
Testing of anchoring products By pull-out method	≤ 0.6mm @ 75kN load		
Resistance to fire	Class A1		
Dangerous Substances	Complies with 5.4 of EN 1015 parts 3 & 6		





### DRY PACK 50 Dry Pack Grout

### Description

Dry Pack 50 is a pre-blended dry pack ,shrinkage compensated grout that fully complies with the requirements of EN 1504 parts 3 and 6. The product is mixed with a controlled amount of clean water to produce a dry packing grout. Dry Pack 50 is formulated to give high-performance characteristics with low water demand, thus ensuring high early strength and long term durability.

### Applications

Dry Pack 50 is suitable for use at depths of 5-100mm, in the following applications,

- Jointing of precast concrete units
- Bedding of precast concrete
   units
- Creating a shutter for grouting applications

### **Product Use**

**Mixing:** To achieve dry pack grout, mix the contents of a 25kg bag with 2.0-2.5 litres of clean potable water. Using excessive water will affect the overall performance of the product. Mixing should be carried out in a suitable container by forced action using a paddle or high shear vane mixer. The powder should be added gradually to the measured water in the mixing vessel and mixed for 3-5 minutes until a stiff homogeneous consistency is achieved. Once mixed, no further water should be added.

**Placing:** Dry Pack 50 is used for applications from 5 – 100mm in thickness. All surfaces must be clean and free from laitance, dust, debris and all oils etc. The area to be grouted should be pre-wetted and left in a saturated surface dry condition to avoid excessive absorption. Place grout into the prepared area and use a suitable ramming tool to ensure complete filling and compaction. Allow the material to stiffen and finish exposed areas with a dampened steel float/trowel. On competition of process, all exposed areas should be cured with a suitable curing membrane.

**Curing:** Should be as per standard practices for cement-based products. Grout should be protected from strong sunlight and cold weather.

### **Technical Data**

KPRO NSG 2601-HF fully complies with the requirements of EN 1504 parts 3 and 6, and also, the Specification of Highway Works Volume 1:Clause 2601 in NRA and Department of Transport Publications.

Characteristic	1 Day	7 Day	28 Day
Compressive Strength	15 MPa	40 MPa	50 MPa
Flexural Strength	-	-	8 MPa
Fresh Density	2200 kg/m³		
Early Expansion	n/a		
Segregation (Glass Plates)	n/a		
Bleeding (Glass Plates)	n/a		
Pot Life	30 mins		
Initial Set	180 mins		
Final Set	240 mins		



### **Benefits**

- Shrinkage compensated formula
- High early and ultimate strength
- Long term durability
- Convenient and User-Friendly
- Eliminates wastage
- Chloride free

### **Approximate Yield**



### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### Compliance

KPRO Dry Pack 50 is tested and marketed in accordance to CPR 305/2011 and complies with classification R4 according with EN 1504-3 and the requirements of EN 1504 -6 : Anchoring of reinforced steel bar.

	((		
Ki	saran Concrete,		
Piercetown D	unboyne Co. Meath Ireland		
ENA	20		
ENT Concrete renair products for structur	504-3 :EN 1504-6		
Anchoring	of reinforcing steel bar.		
Compressive Strength R4 (≥ 45 MPa)			
Adhesive Bond by pull-off	≥ 2.0 MPa		
Chloride ion content	≤ 0.05%		
Carbonation Resistance	Pass		
Elastic Modulus	23 GPa		
Thermal Compatibility – Part 1: Freeze-thaw	≥ 2.0 MPa		
Testing of anchoring products By pull-out method	≤ 0.6mm @ 75kN load		
Resistance to fire	Class A1		
Dangerous Substances	Complies with 5.4 of EN 1015 parts 3 & 6		





### TJM Rapid Thixotropic Jointing Mortar (Rapid)

### Description

KPRO TJM Rapid is a pre-blended, cementitious, thixotropic jointing mortar for the pointing and trowelling of precast panels and units. The product is mixed with a controlled amount of clean water to produce a plastic mortar grout. KPRO TJM Rapid is formulated to give thixotropic characteristics, allowing for ease of placement without the need for shuttering. Once placed TJM Rapid's thixotropic properties ensure the fresh mortar will resist slumping and remain in-situ.

### Applications

KPRO TJM Rapid is suitable for use in vertical and horizontal applications at gap thicknesses of 5-75mm, in the following applications,

- Pointing Structural gaps in precast units.
- Providing permanent in-situ shuttering in pre-cast panel joints for future grouting.

### **Product Use**

Mixing: To achieve a plastic thixotropic mortar, mix the contents of a 25kg bag with 3.0 -3.7 litres of clean potable water. Using excessive water affect the overall performance of the product. Mixing should be carried out in a suitable container by using a paddle or force action mixer. The powder should be added gradually to the measured water in the mixing vessel and mixed for until a smooth, plastic consistency is achieved. Do not over mix. Once mixed no further water should be added. Only mix enough material to allow placement within 20 minutes.

Placing: KPRO TJM Rapid is used for vertical and horizontal applications from 5-75mm in thickness. All surfaces must be clean and free from laitance, dust, debris and all oils etc. The area to be grouted should be pre-soaked (ensuring no ponded water) prior to placing of the mortar. The grout should be placed as soon as possible after mixing to guarantee the maximum physical properties performance. Fill the void/gap with the fresh mortar by means of a suitable pointing/caulking gun, or by pointing trowel. Once the material has picked up it should be tooled to give the desired finished texture, flush with the surrounding surfaces.

### **Technical Data**

KPRO TJM Rapid is produced in an ISO 9001 controlled environment and when mixed and used as stated will yield the following properties,

Characteristic	1 Day	7 Day	28 Day
Compressive Strength	≥ 25 MPa	≥ 45 MPa	≥ 55 MPa
Flexural Strength	≥5 MPa	≥9 MPa	≥ 10 MPa
Fresh Density		2100 kg/m³	
Pot Life	15-20 min		
Initial Set	25 min		
Final Set		60 mins	
Maximum Grain Size		1.0mm	



### **Benefits**

- Shrinkage compensated formula
- High early and ultimate strength
- Pre-blended to provide consistent mix
- · Can be placed with a pointing gun or pointing trowel
- · Long term durability
- · Rapid setting

### **Approximate Yield**

No. 25kg	Approximate
bags	litres
1	13.0

### **Application Temperatures**



### **Health & Safetv**

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.









Repair and reinstatement of concrete and masonry is a well-established discipline within the construction industry. At Kilsaran, we have an ever-expanding range of repair products. From products formulated to repair or reinstate complete works to products designed to resurface localised areas, Kilsaran has Repair Mortar to accommodate a multitude or repair of renovating needs.

Kilsaran Repair Mortars are produced in ISO 9001 and 14001 controlled environments, and all are formulated as single component products for ease of use.

Kilsaran Repair Mortars are produced in ISO 9001, 14001 and 50001 controlled environments. A number of KPRO Repair products are manufactured, and CE marked in accordance with EN 1504 and Construction Products Regulation No. 305/2011. Kilsaran holds EN 1504 third party factory production control certification.



### CSM-100 Resurfacing Concrete

### Description

KPRO CSM-100 is a rapid setting resurfacing mortar mix specifically formulated for a wide range of resurfacing applications between 2mm and 15mm in depth.

### **Applications**

- CSM-100 is suitable for use in the following applications,
- Resurfacing of concrete pathways
- Resurfacing of concrete driveways

• Resurfacing and repair of concrete stairwells and walkways, where early trafficking is required.

### **Product Use**

**Preparation:** Paints, sealers, and biological growth must be removed prior to application of the product. Existing concrete substrates should be scrabbled to expose the concrete aggregate. Prior to application, dampen the substrate with clean potable water. Absorbent substrates should be pre-soaked and have all ponded water removed. Expansion joints in the substrate must be carried through the resurfacing material.

**Mixing:** Mix the contents of a 25kg bag with 3.0-3.3 litres of clean potable water for 1-2 minutes using a rotary or paddle mixer. Only mix enough material that can be placed and finished in 15 minutes.

**Placing:** Once mixed, pour the fresh material onto the prepared substrate and level using a steel float or trowel. The overall finished thickness of Kilsaran CRM-100 should be 2mm-15mm. Once the material has stiffened slightly, edge and give the desired finish, such as brushed to create a non-slip surface. The new surface should be protected from extreme wind and/or sun.

**Curing:** The newly installed area should be cured as per standard practices for cement based products. Repair mortar should be protected from strong sunlight and cold weather. Care should be taken to ensure water does not run onto recently repaired areas less than 12 hours old.

### **Technical Data**

KPRO CSM-100 is tested in a certified ISO 9001 factory production control Quality Management environment

Characteristic		Data value	
		Flexural	Compressive
Strength	1 day	> 5 MPa	> 25 MPa
otiongti	7 day	> 7 MPa	> 35 MPa
	28 day	> 10 MPa	> 50 MPa
Fresh Density	2100 kg/m³		
Pot Life	15-20 mins		
Initial Set	20 mins		
Final Set	45 mins		
Open to Foot Traffic	90 mins		
Open to Vehicular Traffic	24 hours		



#### **Benefits**

- Thin application between 2mm and 15mm
- · Rapid setting and early strength
- · Early trafficking
- · Convenient and User-Friendly
- Chloride free
- Provides a durable finish

### Approximate Yield

Coat	m²
Thickness	per 25 kg bag
2mm	6.25
5mm	2.50
10mm	1.25
15mm	0.83

### **Application Temperatures**



Health & Safety Please refer to the relevant Material

Safety data sheet online at <u>www.kilsaran.ie</u>.





### CSM-101 Surface Fairing Coat

### Description

CSM 101 is a Concrete Surfacing Mortar suitable for use internally and externally as a fairing coat on vertical or overhead soffit concrete elements. CSM 101 is one component cement based, fine-grained, polymer-modified Class R2 mortar, meeting the requirements of EN1504-3. CSM 101 should be used in applications for levelling the surface up to 3mm in thickness, where the concrete will not be trafficked and also receive a subsequent coating.

#### **Applications**

CSM 101 is suitable for use on suitably prepared concrete surfaces in the following applications:

- · Filling in minor blowholes and defects such as honeycombing on concrete surfaces
- Levelling surface imperfections up to 3mm in depth
- Cosmetic Repairs to precast concrete elements such as stairs, architectural panels etc.

Note that the existing concrete should be above C16/20 compressive strength with a pull-off strength greater than 1.0 MPa, and a suitable primer may be required, depending on the substrate. With application, normal concrete curing procedures should be adhered to.

#### **Product Use**

This product only requires the addition of clean water. K-PRO CSM products should be mixed in a suitable forced action mixer or spiral screw paddle drill at a low speed to ensure a lump-free, smooth, consistent mortar. Mix the contents of a 20kg bag with 6.0 litres of clean potable water. Water should be measured and placed in the mixing container prior to adding the full 20kg bag of dry powder and mixed for a <u>minimum</u> of 3-5 minutes, taking care not to entrain air. The product should be used immediately after mixing in suitable weather conditions. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the product's life and durability.

**Placing:** KPRO CSM-101 is used for applications from 0.5mm – 3mm in thickness. All surfaces must be clean and free from laitance, dust, debris and all oils etc. Roughen the surface and expose the fine aggregate by light scabbling or grit-blasting. The area to be repaired should be pre-soaked immediately before application with residual surface water removed.

Apply the mixed material to the prepared substrate with a steel trowel as a scrape coat of minimal thickness. Apply the material, ensuring not to overwork, and trowel to a smooth finish. If a very smooth finish is required, a small amount of water can be flicked on to the fresh material's surface with a paintbrush prior to final trowelling

**Curing:** Should be as per standard practices for cement based products. Repair mortar should be protected from strong sunlight and cold weather. Care should be taken to ensure water does not run onto recently repaired areas less than 12 hours old.



#### **Benefits**

- Compatible with concrete strengths ranging from C16/20 to C35/45
- Excellent bond to concrete surfaces
  - Pre-mixed on component eliminates
  - inaccuracy of site mixing
  - Low permeability to water and chlorides
  - Chloride free

### **Approximate Yield**

Coat	m²
Thickness	per 20 kg bag
1mm	11.8
2mm	5.9
3mm	4.0

#### **Application Temperatures**



#### **Health & Safety**

Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.

#### **Pack Size**





### **Technical Data**

KPRO CSM-101 is tested and marketed in accordance with CPR 305/2011 and complies with classification R2 according to EN 1504-3 for the structural and non-structural repair of concrete structures using method 3.

	CE
Kil	Isaran Concrete,
Piercetown D	unboyne Co. Meath Ireland
	20
	EN1504-3
Polymer hydraulic ce	ment mortars and concretes (PCC)
Structural and n	on-structural repair, method 3
Compressive Strength	R2 (≥ 15 MPa)
Adhesive Bond by pull-off	≥ 0.8 MPa
Chloride ion content	≤ 0.05%
Carbonation Resistance	Pass
Elastic Modulus	NPD
Thermal Compatibility –	≥ 0.8 MPa
Part 1: Freeze-thaw	
Resistance to fire	Class A1
Dangerous Substances	Complies with 5.4 of EN 1504 parts 3 & 6





### CRM-201 General Purpose Reinstatement Mortar

### Description

KPRO CRM 201 is a General Purpose Concrete Reinstatement Mortar suitable for both internal and external use on vertical, horizontal and overhead concrete surfaces. CRM 201 is a one component cement based polymer modified Class R3 mortar, meeting the requirements of EN1504-3. CRM 201 should be used in applications where reinstatement requires a thickness from 10mm to 70mm on vertical surfaces and up to 60mm overhead. It should be applied in accordance with EN1504-10 recommendations.

### Applications

CRM 201 is suitable for use on suitably prepared concrete surfaces in the following applications:

- Repairing chips, gaps and holes in concrete
- Making good of corners on columns, pillars, walls, beams and slabs
- Smoothing over defects such as honeycombing, air voids, spacer holes etc.
- Repairs to soffits, lintels and beams
- Repairs to precast concrete elements such as stairs, tanks, liners, panels etc.
- Repairs by methods 3.1, 3.3, 4.4, 7.1 and 7.2 as set out in EN 1504-10

Note that the existing concrete should be above C12/15 compressive strength and a pull off strength greater than 1.0 MPa, and a suitable primer may be required depending on the substrate and whether reinforcing steel is exposed. Normal concrete curing procedures should be adhered to.

### Product Use

**Preparation:** Before using KPRO CRM-201, the preparation of the concrete substrate is of critical importance. Cut back the edges of the repair area to a depth of at least 10 mm to avoid feather-edging and to provide a square edge. Break out the complete repair area to a minimum depth of 10 mm up to the cut edge. Oil and grease residues should be removed by steam cleaning, detergent scrubbing or the use of a suitable degreaser. The effectiveness of decontamination should then be assessed by a pull-off test.

Expose and remove any corroded steel in the area to be repaired. Remove all loose scale and corrosion deposits. Steel should be cleaned to a bright condition, including the back of exposed steel bars, using an abrasive-blasting technique. If corrosion has occurred due to the presence of chlorides, the steel should be high-pressure washed with clean water immediately after abrasive-blasting to remove corrosion products from scratches and depressions of the steel surface. Prime the prepared steel (if present) using a brush, with KPRO Repair-PRIMEX, ensuring complete coverage and allow to dry.

Remove all dust, grease and debris from the area and pre-soak, removing all ponded water to leave the substrate in a saturated surface dry condition. Whilst the area is still in an S.S.D. condition apply a coat of KPRO Repair-PRIMEX. Scrub the fresh primer into the substrate with a brush and do not allow to dry before application of CRM-201.

**Mixing:** This product only requires the addition of clean potable water. K-PRO CRM products should be mixed in a suitable forced action mixer or spiral screw paddle drill at a low speed to ensure a lump free, smooth, consistent mortar. Mix the contents of a 25kg bag with 4.0-4.5 litres of clean potable water. Water should be measured and placed in the mixing container prior to addition of the full 25kg bag of dry powder and mixed for a minimum of 3-5 minutes taking care not to entrain air. The product should be used immediately after mixing in suitable weather conditions between 5°C and 25°C with seasonal concrete working conditions adhered to. Re-mixing or the later addition of water is not permitted as this will have an adverse effect on the life and durability of the product.



### **Benefits**

• Pre-mixed product only requiring the addition of water

• Excellent bond to concrete surfaces

• Pre-mixed on component eliminates inaccuracy of site mixing

- Low permeability to CO2 and chlorides
- High build characteristics
- Chloride free

### **Approximate Yield**

Coat	m²
Thickness	per 25 kg bag
10mm	1.50
20mm	0.75
40mm	0.38
60mm	0.25
80mm	0.19
100mm	0.15

### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





**Placing:** Ensure exposed steel is secured in place and primed. Any movement in exposed steel during CRM-201 application can affect mortar compaction and bond. Prime the prepared substrate (as described above) immediately before placing the CRM-201 reinstatement mortar.

Apply the fresh mortar to the primed area using a trowel or hand (wearing suitable protective gloves, please refer to SDS), compacting it fully into place, ensuring to encapsulate steel reinforcement if present. Application thicknesses up to 70mm (vertical) and 60mm (overhead) can be applied in a single application without formwork. For greater thicknesses, the use of formwork or using a layer on layer method is recommended. Trowel the surface level with its surroundings using a steel float or straight edge. Once the product has 'picked up' and stiffened slightly, use a wooden float or sponge to give the desired surface finish.

**Curing:** Should be as per standard practices for cement-based products. Repair mortar should be protected from strong sunlight and cold weather. Care should be taken to ensure water does not run onto recently repaired areas less than 12 hours old.

### **Technical Data**

KPRO CRM-201 is tested and marketed in accordance with CPR 305/2011 and complies with classification R3 according to EN 1504-3 for the structural and non-structural repair of concrete structures using method 3.1, 3.3, 4.4, 7.1 and 7.2 as set out in EN 1504-10

Characteristic		Data value	
Strength		Flexural	Compressive
	1 day	> 4.0 MPa	> 15.0 MPa
	7 day	> 8.0 MPa	> 30.0 MPa
	28 day	> 10.0 MPa	> 40.0 MPa
Fresh Density	2200 kg/m³		
Initial Set	2.5 hours		
Final Set	4 hours		

	CE	
Kilsaran Concrete,		
Piercetown E	Dunboyne Co. Meath Ireland	
20		
EN1504-3		
Concrete repair mortar for		
Companya o i va Otron ath		
Compressive Strength	R3 (≥ 25 MPa)	
Adhesive Bond by pull-off	≥ 1.5 MPa	
Chloride ion content	≤ 0.05%	
Carbonation Resistance	Pass	
Elastic Modulus	≥24 GPa	
Thermal Compatibility –	≥ 1.5 MPa	
Part 1: Freeze-thaw		
Resistance to fire	Class A1	
Dangerous Substances	Complies with 5.4 of EN 1504	





### CSM-120 Rapid Floor Patch Repair Mortar

### Description

KPRO CSM-120 is a rapid setting floor patch repair mortar specifically formulated for internal and external use. CSM-120 is a self-compacting repair mortar that can be used in a wide range of applications, between 10mm and 100mm in depth. For applications greater than 50mm CSM-120 can be bulked out with a 30% addition of Kilsaran 3-5mm grit. Greater depths are possible using a layer on layer method. KPRO CSM-120 meets the requirements of EN 13813 for screeding mortars.

#### **Applications**

CSM-120 is suitable for use on suitably prepared concrete surfaces in the following applications:

- · Internal and external repair to cementitious floor screeds
- · Localised reinstatement of areas of screeds and concrete slabs
- · Repairs to concrete stairs, steps, and reconstruction of their edges
- Filling and patching of chases and holes in concrete floors
- · Repairs to concrete pavements, ramps, and parking areas

### Product Use

### Preparation:

Suitable for use in temperatures between +5°C and +30°C. Substrates should be clean, dry and free from all dust and grease. Dampen substrate surfaces prior to installation, ensuring to avoid saturation. Cut back the area to be repaired to provide a straight edge with a minimum depth of 10mm (do not feather edge the material). Priming is not typically required on roughened surfaces; however, on smooth, dense or very absorbent substrates, the use of a bonding agent is recommended. Expose and remove any corroded steel in the area to be repaired. Remove all loose scale and corrosion deposits. Steel should be cleaned to a bright condition, including the back of exposed steel bars, using an abrasive-blasting technique. If corrosion has occurred due to the presence of chlorides, the steel should be high-pressure washed with clean water immediately after abrasive-blasting to remove corrosion products from scratches and depressions of the steel surface. Prime the prepared steel (if present) using a brush, with KPRO Repair-PRIMEX, ensuring complete coverage and allow to dry.

**Mixing:** This product only requires the addition of clean potable water. Add the contents of a 25kg bag to 3.75-4.00 litres of clean potable water. Mix the material for 1-3 minutes in a suitable drum mixer or use a suitable paddle mixer until a stiff mortar consistency is achieved. Using excess water will affect the overall performance of the product. Only mix enough material to allow application/installation within 5-10 minutes. For applications greater than 50mm CSM-120 can be bulked out with a 30% addition of Kilsaran 3-5mm grit.

### Placing:

CSM-120 should be placed and finished within 5-10 minutes of mixing. Once mixed, place the fresh material onto the prepared substrate and trowel firmly into position, ensuring full contact with the substrate is made. Once the material has stiffened, finish the surface with a wet trowel.

### Curing:

Itshould be as per standard practices for cement based-products. Repair mortar should be protected from strong sunlight and cold weather.



### **Benefits**

- Pre-mixed product only requiring the addition of water
- Rapid Setting and Rapid Strength development properties
- Excellent bond to concrete surfaces
- High abrasion resistance
- Chloride free

### **Approximate Yield**

Coat	m²
Thickness	per 25 kg bag
10mm	1.20
20mm	0.60
40mm	0.30
60mm	0.20
80mm	0.15
100mm	0.12

### **Application Temperatures**



Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.





### **Technical Data**

KPRO CSM-120 is tested and marketed in accordance with CPR 305/2011 and complies with classification CT-C50-F8 according to EN 13813 for screed materials.

Characteristic		Data value			
Strength		Flex	ural	Compressive	
	1 hour	≥ 4.0 I	N/mm²	≥ 15.0 N/mm²	
	2 hour	≥ 5.0 I	N/mm²	≥ 20.0 N/mm²	
	1 day	≥ 5.0 I	N/mm²	≥ 35.0 N/mm²	
	7 day	≥ 6.0 I	N/mm²	≥ 45.0 N/mm²	
	28 day	≥ 8.0 I	N/mm²	≥ 55.0 N/mm²	
Working Life	10 mins				
Initial Set	10 mins				
Final Set	30 mins				
Minimum Depth	10mm				
Maximum Depth	100mm				
Maximum Bay Size	4m <sup>2</sup>				
Trofficking Times (@	Pedestrian			60 mins	
Irafficking Time (@ 20°C)	Light Vehicular		120 mins		
	Heavy Vehicular		240 mins		

CE		
Kilsaran Concrete,		
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EN13813 Cementitious Screed Repair Mortar for use internally and externally,		
Compressive Strength	C55	
Flexural Strength	F8	
Resistance to Fire	Class A1	
Release of Corrosive Substances (pH)	СТ	
Water Permeability	NPD	
Water Vapour Permeability	NPD	





### CRM-203 Rapid Pavement Repair

### Description

KPRO CRM-203 is a rapid pavement repair mortar specifically formulated for a wide range of pavement repair applications between 30mm and 150mm in depth. Greater depths are possible using a layer on layer method. CRM-203 can be used as per clause 1032 and 1106 of the NRA Specification for Roadworks.

### Applications

CRM-203 is suitable for use in the following applications,

- · Reinstating footpaths, driveways and walkways
- · Surrounds to posts, railings and bollards
- Installing services in footpaths (hydrants etc.)

### **Product Use**

**Preparation:** Before using KPRO CRM-203, the preparation of the concrete area is of critical importance. Suitable for use in temperatures between +5°C and +30°C. Substrates should be clean, dry and free from all dust and grease. The use of a bonding agent is recommended. Dampen substrate surfaces prior to installation, ensuring to avoid saturation.

**Mixing:** Add the contents of a 25kg bag to 2.5-3.0 litres of clean potable water. Mix the material for 1-2 minutes in a suitable drum mixer or by using a suitable paddle mixer. Using excess water will affect the overall performance of the product.

**Placing:** CRM-203 should be placed and finished within 20 minutes of mixing. Once mixed, place the fresh material onto the prepared substrate and level using a steel float or trowel. The overall finished thickness of CRM-203 should be 30mm-150mm. Greater depths should be laid in a layer on layer method. Once the material has stiffened slightly, edge and give the desired finish, such as brushed to create a non-slip surface. The newly installed area should be cured in accordance with CL.1027 of the above mentioned standard specification.

**Curing:** The newly installed area should be cured in accordance with CL.1027 or should be as per standard practices for cement-based products. Repair mortar should be protected from strong sunlight and cold weather. Care should be taken to ensure water does not run onto recently repaired areas less than 12 hours old.

### **Technical Data**

KPRO CRM-203 is tested in a certified ISO 9001 factory production control Quality Management environment

Characteristic		Data value	
		Flexural	Compressive
	1 day	> 5.0 MPa	> 20.0 MPa
Strength	2 day	> 7.0 MPa	> 30.0 MPa
	7 day	> 10.0 MPa	> 45.0 MPa
	28 day	> 12.0 MPa	> 50.0 MPa
Fresh Density	2200 kg/m³		
Pot Life	20 mins		
Initial Set	40 mins		
Final Set	60 mins		
Open to Foot Traffic	90 mins		
Open to Vehicular Traffic	24 hours		



### **Benefits**

- Shrinkage compensated
- · Rapid setting and early strength
- Early trafficking
- Convenient and User-Friendly
- Chloride free
- Provides a durable finish
- · Freeze thaw resistant

### **Approximate Yield**

Coat	m²
Thickness	per 25 kg bag
30mm	3
50mm	5
80mm	7
100mm	9
120mm	10
150mm	13

### **Application Temperatures**



+5°C to +25°C

Health & Safety Please refer to the relevant Material Safety data sheet online at www.kilsaran.ie.



## Kilsaran KEPRO REPAIR REPAIR RANGE



### CSM-100 Resurfacing Concrete

KPRO CSM-100 is a rapid setting resurfacing mortar specifically formulated for a wide range of concrete resurfacing applications between 2mm and 15mm in depth.



### CSM-101 Surface Fairing Coat

CSM 101 is a Concrete Surfacing Mortar suitable for use internally and externally as a fairing coat on vertical or overhead soffit concrete elements. CSM 101 is one component cement based, fine grained, polymer modified Class R2 mortar, meeting the requirements of EN1504-3. CSM 101 should be used in applications for levelling the surface up to 3mm in thickness, where the concrete will not be trafficked and also receive a subsequent coating.



### CRM-201 General Purpose Reinstatement Mortar

KPRO CRM 201 is a General Purpose Concrete Reinstatement Mortar suitable for both internal and external use on vertical, horizontal and overhead concrete surfaces. CRM 201 is a one component cement based polymer modified Class R3 mortar, meeting the requirements of EN1504-3. CRM 201 should be used in applications where reinstatement requires a thickness from 10mm to 70mm on vertical surfaces and up to 60mm overhead. It should be applied in accordance with EN1504-10 recommendations.



### CSM-120 Rapid Floor Patch Repair Mortar

KPRO CSM-120 is a rapid setting floor patch repair mortar specifically formulated for internal and external use. CSM-120 is a self-compacting repair mortar that can be used in a wide range of applications, between 10mm and 100mm in depth. For applications greater than 50mm CSM-120 can be bulked out with a 30% addition of Kilsaran 3-5mm grit. KPRO CSM-120 meets the requirement of EN 13813 for screeding mortars.



### CRM-203 Rapid Pavement Repair

KPRO CRM-203 is a rapid pavement repair mortar specifically formulated for a wide range of pavement repair applications between 30mm and 150mm in depth. Greater depths are possible using a layer on layer method. CRM-203 can be used as per clause 1032 and 1106 of the NRA Specification for Roadworks.



## Disclaimers/Important Information



### **This Brochure**

We have taken every reasonable precaution to ensure that all details contained in the brochure are accurate. We are an innovative company and we seek to develop our product ranges and product lines on an on-going basis. We recommend that you check online www.kilsaran.ie or call directly Tel: 01 8026300 to ensure that you have the most up to date information to hand.

### **Technical Information**

Technical documentation for each product is now available on our website. Documents including technical data sheets, material safety data sheets, CE marking, declaration of performance and any certificates or guidance documents are available on our website at

https://www.kilsaran.ie/technical-library/ Please refer to this resource for the most up to date information on any of our dry products.



### **Our Products**

When our product is delivered and before it is used, the customer should satisfy themselves that the product is free from defects or damage. Kilsaran cannot accept liability for replacement costs and/or delays incurred as a result of product that is defective or damaged which has already been used. Any defects must be notified to Kilsaran immediately.

### Illustrations

Through the use of the most modern photographic techniques available we endeavour to ensure that the photographic illustrations of our products in this brochure are as accurate as possible. We do recommend that any final decision is based upon viewing a sample of the product where possible. These samples can be provided by centres stocking our product, your Kilsaran Representative or at our manufacturing facility in Brownstown Co. Kildare.

### **Returned Products**

Kilsaran does not accept returns on any materials.

### **Commitment to Customer Satisfaction**

We strive to provide the best products in the market backed up by superior customer service. If our products or service do not meet your expectations please contact us immediately.

# KPRO FACADES & MORTARS



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