

Uniclass	EPIC F312
CI/SfB Sept 2008	Yq4

K LIME Kilwaughter Chemical
Company Limited
Natural Hydraulic Lime Mortar





K Lime: a range of dry bagged mortars made from Natural Hydraulic Lime, selected sand and other performance enhancing additives, derived from natural sources.

DRY BAGGED: SIMPLY ADD WATER FOR A STRESS FREE SOLUTION

What is K Lime?

K Lime Natural Hydraulic Lime Mortar is a range of dry bagged mortars that requires only the addition of water and thorough mixing. The range is made from a blend of Natural Hydraulic Lime, carefully selected white limestone graded sand and other performance enhancing additives, derived from natural sources. The mortars are available in 3 different grades and have been designed for use in stonemasonry, pointing, brick laying, block laying and as a plaster and render. K Lime simplifies the perceived complexity in the use of lime, creating a stress free solution for your project that's as easy as 1, 2, 3. Just choose from the 3 different grades below to suit your project or call our Technical Support Team for expert advice.

- 1. Coarse 413** **2. Setting 213** **3. Finishing 112**



The K Lime range uses natural hydraulic lime rather than cement as a binder. For many centuries lime has been used as the binder of choice in both masonry construction and to provide a durable finish protecting the building from weather elements. Recently the construction industry has been rediscovering the benefits of hydraulic lime for today's challenging environment. In conjunction with industry-leading experts the K Lime team has carried out an extensive research and development programme. This ensures the range provides all the benefits of traditional lime mortar for today's modern marketplace. The range is designed to be used for both new build and renovation projects.

Hydraulic lime and sand mixes are known for their flexibility, breathability and durability in comparison to cement and sand mixes.

Quality




K Lime is manufactured under ISO 9001 and carries the British Standards Institute Kitemark® licence. The Kitemark® is the world's premier symbol of trust, integrity and quality ensuring that vital product safety and performance requirements are met. BS EN 998:2003 is a British and European Standard entitled 'Specification for Mortar for Masonry'. It is published in two parts; part 1 deals with 'Rendering and Plastering Mortar' and part 2 deals with 'Masonry Mortar'. Achieving a kitemark to BS EN998 for the K Lime range is your guarantee that K Lime has satisfied the most rigorous of quality testing processes.

K Lime and the Environment

Natural hydraulic lime uses less energy in production and absorbs more CO₂ throughout curing than Ordinary Portland Cement (OPC), therefore reducing CO₂ emissions. K Lime Natural Hydraulic Lime Mortars are much more flexible than OPC derived products and can better accommodate movement within the structure. The new K Lime range is not only good for the environment but it is also good for the building.

Environmental considerations are an integral part of Kilwaughter's business practice. Therefore, in manufacturing the K Lime range, care has been taken to ensure from the earliest stages of product design through to manufacturing, modern technologies have been utilised, in conjunction with natural products to help to reduce carbon footprint. Kilwaughter Chemical Co Ltd operates an Environment Management system.



Coarse 413 	Setting 213 	Finishing 112 
<p>Used for building random rubble and coarse stonework to a nominal joint thickness of 25mm.</p> <p>Used for plastering or dubbing out irregular backgrounds and where heavier coats are required.</p> <p>Can also be used as a hydraulic lime floor screed.</p>	<p>Used for pointing, building bricks, blocks and cut stone for a nominal 8-10mm joint thickness.</p> <p>Used for plastering at 8-10mm thickness. Setting 213 can be wood floated as a suitable background for painting.</p> <p>Can also be used as bedding for natural stone floor tiles.</p>	<p>Used for pointing, building dressed stone for a nominal joint thickness of 4-6mm.</p> <p>Used for plastering as a finish coat. Finishing 112 is designed to be steel floated for a 2-4mm thickness for a fine finish.</p> <p>Can also be used as bedding for natural stone floor tiles.</p>



K Lime Natural Hydraulic Lime Mortars are available in 3 different grades covering mortar requirements in various construction projects. The range provides a wide range of benefits, as detailed below.



ALLOWS STRUCTURE TO BREATHE

more flexible than opc based products

PROVEN BY TIME TO PROVIDE STRENGTH AND DURABILITY

can eliminate the need for movement joints

USE WITH MODERN & TRADITIONAL BUILDING MATERIALS

enhanced workability & performance

JUST ADD WATER & MIX THOROUGHLY

STONEMWORK & RUBBLE

K Lime Coarse 413



Purpose	EN 998-2:2003 for Building
<p>Designed for building random rubble and coarse stonework at a nominal joint thickness of 25mm.</p> <p>Coverage: 1.6-1.8kg / mm thick / sq m</p> <p>Require: Joint Width: 25mm, Joint Depth: 50mm Approx 11 metre of Joint per 25 kg bag. or Approx 40-50 kg / sq m for random rubble.</p>	<p>Designed general purpose masonry mortar for external use in elements subject to structural requirements.</p> <p>Workable Life: > 8 hrs Air Content: 23% Chloride Content: 0.02% Dry Bulk Density: 1580 kg/m³ Compressive Strength: M1 Initial Shear Strength: 0.15 N/mm² (tab. value) Water Absorption: 0.67 kg/m²min 0.5 Water Vapour Permeability: 5/20 u Reaction to Fire: Class A1 Thermal Conductivity: P= 50% - 0.63 W/mK (tab value) P= 90% - 0.72 W/mK (tab value)</p>

Purpose	EN 998-1:2003 for Plastering
<p>Designed for dubbing out irregular backgrounds and where heavier coats are required.</p> <p>Coverage: 1.6-1.8kg / mm / thick / sq m</p> <p>Require: 22-29 kg / sq m approx for 14-16 mm thickness</p>	<p>Workable Life: > 8 hours Capillary Water Absorption: W0 Compressive Strength Class: CS1 Adhesion: 0.16 N/mm² (FP - b) Water Vapour Permeability: 0.16 Dry Bulk Density: 1580 kg/m² Air Content: 23% Reaction to Fire: Class A1 Thermal Conductivity: P=50% - 0.63 W/mK (tab value) P=90% - 0.72 W/mK (tab value) Durability (against freeze thaw): based on provisions valid in UK and Ireland</p>



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It has long been recognised that excessively strong mortars can lead to reduced bond and cracking, which may result in cracking being induced in the bricks and blocks instead of the mortar joints. In a situation where structural movement takes place, lime mortars can better accommodate this movement, whereas excessively strong mortars will tend to resist movement perhaps until some cracking occurs.

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Mortar Industry Association

K Lime Setting 213



Purpose	EN 998-2:2003 for Building
<p>Designed for pointing, building bricks, blocks and cut stone at a nominal 8-10mm joint thickness.</p> <p>Coverage: 1.6-1.8kg / mm thick / sq m</p> <p>Require: Joint Width: 10mm, Joint Depth: 75mm Approx 18 metre of Joint per 25 kg bag.</p> <p>or</p> <p>Approx. 14-18kg per sq m approx for block laying (15-18mm joint thickness).</p>	<p>Designed general purpose masonry mortar for external use in elements subject to structural requirements.</p> <p>Workable Life: > 8 hours</p> <p>Air Content: 26%</p> <p>Chloride Content: 0.02%</p> <p>Dry Bulk Density: 1460 kg/m³</p> <p>Compressive Strength: M1</p> <p>Initial Shear Strength: 0.15 N/mm² (tab. value)</p> <p>Water Absorption: 0.75 kg/m² min 0.5</p> <p>Water Vapour Permeability: 5/20 u</p> <p>Thermal Conductivity: P=50% - 0.45 W/mK (tab value) P=90% - 0.52 W/mK (tab value)</p> <p>Reaction to Fire: Class A1</p>

Purpose	EN 998-1:2003 for Plastering
<p>Designed for rendering and plastering at 8-10mm thickness. Setting 213 can be wood floated as a suitable background for painting. Can be spray applied.</p> <p>Coverage: 1.6-1.8 kg / mm thick / sq m</p> <p>Require: 13-18 kg /sq m approx for 8-10 mm thickness</p>	<p>Workable Life: > 8 hours</p> <p>Capillary Water Absorption: W0</p> <p>Compressive Strength Class: CS1</p> <p>Adhesion: 0.14 N/mm² (FP - a)</p> <p>Water Vapour Permeability: 0.01</p> <p>Dry Bulk Density: 1460 kg/m²</p> <p>Thermal Conductivity: P=50% - 0.45 W/mK (tab value) P=90% - 0.52 W/mK (tab value)</p> <p>Air Content: 26%</p> <p>Reaction to Fire: Class A1</p> <p>Durability (against freeze thaw): based on provisions valid in UK and Ireland</p>



K Lime Finishing 112



Purpose	EN 998-2:2003 for Building																				
<p>Designed for pointing, building dressed stone at a nominal joint thickness of 4-6mm. Can also be used on internal applications.</p> <p>Coverage: 1.6-1.8kg / mm thick / sq m</p> <p>Require: Joint Width: 5mm, Joint Depth: 75mm Approx 35 metre of Joint per 25 kg bag.</p> <p>or</p> <p>Approx 13-19 kg / sq m for brick laying (4-6mm joint thickness)</p>	<p>Designed general purpose masonry mortar for external use in elements subject to structural requirements.</p> <table> <tr> <td>Workable Life:</td> <td>> 8 hrs</td> </tr> <tr> <td>Air Content:</td> <td>18%</td> </tr> <tr> <td>Chloride Content:</td> <td>0.02%</td> </tr> <tr> <td>Dry Bulk Density:</td> <td>1500 kg/m³</td> </tr> <tr> <td>Compressive Strength:</td> <td>M1</td> </tr> <tr> <td>Initial Shear Strength:</td> <td>0.15 N/mm² (tab. value)</td> </tr> <tr> <td>Water Absorption:</td> <td>1.218 kg/m².min^{0.5}</td> </tr> <tr> <td>Water Vapour Permeability:</td> <td>5/20 u</td> </tr> <tr> <td>Thermal Conductivity:</td> <td>P=50% - 0.47 W/mK (tab value) P=90% - 0.54 W/mK (tab value)</td> </tr> <tr> <td>Reaction to Fire:</td> <td>Class A1</td> </tr> </table>	Workable Life:	> 8 hrs	Air Content:	18%	Chloride Content:	0.02%	Dry Bulk Density:	1500 kg/m ³	Compressive Strength:	M1	Initial Shear Strength:	0.15 N/mm ² (tab. value)	Water Absorption:	1.218 kg/m ² .min ^{0.5}	Water Vapour Permeability:	5/20 u	Thermal Conductivity:	P=50% - 0.47 W/mK (tab value) P=90% - 0.54 W/mK (tab value)	Reaction to Fire:	Class A1
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Purpose	EN 998-1:2003 for Plastering																		
<p>Designed for rendering and plastering as a finish coat. Finishing 112 is designed to be steel floated for a 2-4mm thickness, ready for painting. Can be spray applied. Can also be used on internal applications.</p> <p>Coverage: 1.6-1.8 kg / mm thick / sq m</p> <p>Require: 3-7 kg / sq m approx for 2-4 mm thickness</p>	<table> <tr> <td>Workable Life:</td> <td>> 8 hours</td> </tr> <tr> <td>Capillary Water Absorption:</td> <td>W0</td> </tr> <tr> <td>Compressive Strength Class:</td> <td>CS1</td> </tr> <tr> <td>Water Vapour Permeability:</td> <td>0.06</td> </tr> <tr> <td>Dry Bulk Density:</td> <td>1500 kg/m²</td> </tr> <tr> <td>Thermal Conductivity:</td> <td>P=50% - 0.47 W/mK (tab value) P=90% - 0.54 W/mK (tab value)</td> </tr> <tr> <td>Air Content:</td> <td>18%</td> </tr> <tr> <td>Reaction to Fire:</td> <td>Class A1</td> </tr> <tr> <td>Durability (against freeze thaw):</td> <td>based on provisions valid in UK and Ireland</td> </tr> </table>	Workable Life:	> 8 hours	Capillary Water Absorption:	W0	Compressive Strength Class:	CS1	Water Vapour Permeability:	0.06	Dry Bulk Density:	1500 kg/m ²	Thermal Conductivity:	P=50% - 0.47 W/mK (tab value) P=90% - 0.54 W/mK (tab value)	Air Content:	18%	Reaction to Fire:	Class A1	Durability (against freeze thaw):	based on provisions valid in UK and Ireland
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MAINTENANCE	K RANGE	
<p>K Lime is a suitable substrate for a good quality vapour permeable calcium silicate or lime based paint.</p>	<p>Also available:</p> <ul style="list-style-type: none"> • K Rend (Coloured Renders) • K Mix (Construction Mortars) • K Post • K Rend Traditional White Mortar 	<p>Complementary Products:</p> <ul style="list-style-type: none"> • K Bead (PVC) • Tools • Alkali Resistant Reinforcing Mesh • R7 Liquid Acrylic • m-tec M300 Spray Machine



www.K-Rend.co.uk



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