



# Ironstone Mortars

Caring for your older building

## European Standard Performance Tests Ironstone Lime Mortar NHL 3.5

### Ironstone Old White NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	158.35ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1836 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.62 Kg(m <sup>2</sup> min <sup>0.5</sup> )
Compressive Strength	EN1015-11	1.68Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.35 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1688.28 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	15.58%

### Ironstone Fine NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	190.66ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1865.3 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.8 Kg(m <sup>2</sup> min <sup>0.5</sup> )
Compressive Strength	EN1015-11	1.89 Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.381 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1655.07 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	10.38%

## Ironstone Chalk NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	180ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1945.06 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.75 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	2.14Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.375 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1989.36 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	8.93%

## Ironstone Lite NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	167.69ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	2021.73 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.79 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	2.65Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.47 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1808.98Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	6.86%

## Ironstone Yorkshire NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	188.01ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1936.13 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.98 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	2.18 Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.40 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1725 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	9.06%

## Ironstone Cream NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	162.29ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1989.36 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.68 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	2.14Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.38 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1797.59 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	8.93%

## Ironstone Pebble NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	152.26ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	2024.8 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.7Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	1.32Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.50 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1881.83 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	8.9%

## Ironstone Sandstone NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	169.26ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1961.73 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.72 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	2.22Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.39 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1742.25 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	9.16%

## Ironstone Slate NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	165.53ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1756.5 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.68 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	1.98Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.40 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1760.93 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	8.13%

## Ironstone Saltaire NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	182.11ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	11869.73 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.79 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	2.35 Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.34 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1639.51 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	10.91%

## Ironstone Terracotta NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	191.38ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1870.9 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.83 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	1.79 Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.37 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1672.85 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	9.9%

## Ironstone Light Brown NHL 3.5

Test	Standard	Performance
Water Addition Rate	EN1015-3	180.14ml per 1kg of mortar
Fresh Mortar Density	EN1015-6	1939.33 Kg/m <sup>3</sup>
Water Absorption	EN1015 -18	1.83 Kg(m <sup>2</sup> min0.5)
Compressive Strength	EN1015-11	1.66 Nmm <sup>2</sup> (mean value)
Flexural Strength	EN1015-11	0.36 Nmm <sup>2</sup> (mean value)
Dried Mortar Density	EN1015-10	1686.7 Kg/m <sup>3</sup>
Air Entrainment	EN1015-7	9.07%

Manufactured in the UK in partnership with Heidelberg Materials Soci  
Ironstone products are CE marked and manufactured under an ISO9001:2015 accredited Factory Production Control System

Womersleys Ltd  
Ravensthorpe Industrial Estate,  
Low Mill Lane, Ravensthorpe,  
West Yorkshire, WF13 3LN, UK

