

# ROADMASTER ULTRA PLUS

## HIGH EARLY STRENGTH BEDDING MORTAR

(D.o.T. HIGHWAY AGENCY SPEC HD27/04 COMPLIANT)

### **DESCRIPTION**

The mortar is a rapid setting general purpose bedding mortar designed to be used where time is at a premium. This is a blend of cements, aggregates, silica sand and other additives designed to control the setting time and strength development of the material.

An advantage is that this cementitious mortar is more cost effective than most epoxy or polyester resin mortars.

### **USES**

The Mortar is used in any situation where the minimum of delay and work disruption are of prime importance. Typical uses include: bedding-in manhole covers and frames, gully grates and frames, fixing in fencing posts, signposts, and all street furniture.

### **TRAFFIC TIME**

The set mortar can receive traffic at 30 minutes during the summer and 45 minutes during winter and therefore complies with the following specification.

Department of Transport HD 27/04  
Design Manual for Roads and Bridges Vol 7 Sec 2

Clause 3.11 Mortars for bedding iron work such as manhole cover frames during repairs may be trafficked when the strength is expected to be 20N/mm<sup>2</sup>. For rapid construction, this strength should be achieved within 2 hours.

### **MIXING**

Thorough mixing of the mortar is essential and the best results are achieved by using a cretriangle or similar pan mixer, although this material can be mixed by hand. Mixing water should comply with the requirements of BS EN 1008 (as for the making of concrete).

The material should be mixed to achieve a stiff, non slump consistency.

### **APPLICATION**

#### **Substrate Quality**

All substrates must be clean and free from laitance, dust and loose particles. All traces of contamination, such as oils, greases and chemicals should be removed.

#### **Substrate Preparation**

Correct surface preparation is vital to ensure the successful application and durable performance of the mortar.

All substrates should be dampened with water prior to the application of the Mortar but should be free from standing water.

The Mortar should not be used in temperatures below 5°C when unprotected from frost.

The Mortar should not be applied in thicknesses less than 10mm.

## Cementitious Systems

### Clean Up

Tools and equipment can be cleaned easily with water. Cleaning of tools and equipment should be carried out as soon as practicable, well away from the application area. Surplus material should be swept away and disposed of in accordance with the requirements of the Local Authority.

### **PRODUCT DATA**

#### Typical product performance<sup>(a)</sup>

Compressive strength at 18 - 22°C N/mm<sup>2</sup>

45 min	2 hr	1 day	7 days	28 days
<b>20</b>	<b>26-28</b>	<b>34-36</b>	<b>45-47</b>	<b>50-55</b>

Flexural N/mm<sup>2</sup>

45 min	2 hrs	1 day	7 days	28 days
3.5-4	4.5-5.5	6.5-7.5	7.5-8.5	9-10

(a) typical values; all tests carried out based on the optimum water:powder ratio 0.11

### **HEALTH & SAFETY**

For health and safety data, see sheet reference 50/1A.

Users are advised to wear face masks, goggles, gloves and overalls when handling, mixing and applying **RoadMaster** products.

### **YIELD**

Based on the optimum water:powder ratio (0.11).

Litres product/ 25kg sack	25kg sacks/ m <sup>3</sup> product
11.9	83

### **PACKAGING & STORAGE**

The Mortar is supplied pre-packed in nominal 25kg sacks which should be stored under cover and clear of the ground. Storage conditions should be dry. Do not stack more than two pallets high; protect from moisture and temperatures below 5°C. Under normal conditions, in unopened packaging, the shelf life is 9 months.

### **QUALITY CONTROL**

Factory blended, tested and packaged in the UK for Adomast Ltd to quality control procedures in accordance with BS EN ISO 9001 Series.