

# **DECLARATION OF PERFORMANCE**

RL TRM 1 Roadstone Trowel Ready Mortar 36 Hour.

## 1. Unique identification code of the product type:

Code	Description	Compressive Strength (N/mm <sup>2</sup> )	Portion Of Constituents By Volume	
			Cement	Sand
1630002	Trowel Ready Mortar M4 36 hr.	≥4.0	1	6
1630003	Trowel Ready Mortar M6 36 Hr.	≥6.0	1	4
1630005	Trowel Ready Mortar M12 36 Hr.	≥12.0	1	3

- Intended use -as mortar in common, facing or exposed masonry and internal walls in load bearing or non-load bearing building and civil engineering applications in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes I.S. EN 1996, 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).
- 3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5)
  - Roadstone Ltd. Fortunestown Dublin 24



- 4. N/A
- 5. System of AVCP System 4
- 6. Harmonised Standard: I.S. EN 998-2:2016 Specification for mortar for masonry. Masonry mortar

### 7. Declared Performance

Characteristic	Declared Performance	Harmonised Technical Specification
Compressive Strength	As shown in Table above To Table NA.3 of the NA to I.S. EN 1996-1-1	I.S. EN 1015-11 NA to I.S. EN 1996-1-1
Portion of Constituents by Volume	As shown in Table above To Table NA.3 of the NA to I.S. EN 1996-1-1	I.S. EN 998-2 NA to I.S. EN 1996-1-1
Bond Strength	0.15N/mm <sup>2</sup>	I.S. EN 998-2 Annex C
Chloride Content	0.066%	I.S. EN 101517
Reaction to Fire	Class A1	Based on Commission Decision 200/605 EC amending 96/603 EC
Water Absorption	NPD	N/A
Water Vapour Permeability	U15/35	I.S. EN 1745
Thermal Conductivity	(10, dry) 0.82W/mK Tabulated mean value P=50%	I.S. EN 1745
Durability against freeze/thaw	Durability of a mortar is dependent on many factors including, design, detailing, masonry type and strength, exposures (ground conditions, location, wind, rain, temperatures etc.) and applied finishes. As these are design factors advise on mortar strength should be given by a Structural Engineer.** M4 - MX2.1 Low risk of saturation without Freezing (rendered MX2.2) M6 - MX2.2 High risk of saturation without Freezing M12 - MX3.2 High risk of saturation with freezing Mortar produced with aggregate in accordance with I.S. EN 13129 (Aggregates for mortar) and S.R. 18 :2021 (Guidance on the use of I.S. EN 13129, Aggregates for mortar)	<ul> <li>** For durability classifications refer to I.S. EN 1996, Eurocode 6, Design of masonry structures, including Table NA. 3 of the National Annex to I.S. EN 1996-1-1, for prescribed masonry mortars which are based on prescribed minimum cement contents and S.R. 325:2013 + A2:2018 / AC 2019 Recommendations for the Design of Masonry Structures in Ireland to Eurocode 6, in particular Table 14, Durability of masonry in finished construction.</li> <li>To prevent the ingress of wind driven rain Bucket Handle and Weather Struck Joints are preferred.</li> </ul>
Dangerous Substances	None	I.S. EN 998-2 Z.A. 3

\*NPD = No Performance Determined

The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone ltd.

# Signed for and on behalf of the manufacturer by: Alan Lowe, Senior Technical Manager, Roadstone Ltd.

(Name and Function) Belgard, 28/03/2022 (Place and Date of Issue)

(Signature)

NA to I.S. EN 1996-1-1:2005

Table NA.3 — Acceptable Assumed Equivalent Mixes for Prescribed Masonry Mortars (Subclause 3.2.2(1))

Compressive	Equivalent Prescribed Mortars (Proportion of Materials by Volume) (see Note)			Mortar
Strength Class <sup>a</sup>	Cement:Lime:Sand with or without Air Entrainment	Masonry Cement:Sand	Cement:Sand with or without Air Entrainment	Designation
M12	1:0 to 1/4:3	Not suitable	Not suitable	(i)
M6	1:1/2:4 to 41/2	1:21/2 to 31/2	1:3 to 4	(ii)
M4	1:1:5 to 6	1:4 to 5	1:5 to 6	(iii)
M2	1:2:8 to 9	1:51/2 to 61/2	1:7 to 8	(iv)
The number fol	lowing the M is the compr	essive strength for t	he class at 28 days in N/	mm <sup>2</sup>
	sand portion is given as, for fines whilst the higher figure			

# Roadstone Ltd. Fortunestown Dublin 24



I.S. EN 998-2:2016 Specification for mortar for masonry. Masonry mortar **TRM (Trowel Ready Mortar 36Hr)** 

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Characteristic	Declared Performance			
Compressive Strength	M4 , M6 or M12			
eenip eeene en ongin	To Table NA.3 of the NA to I.S. EN 1996-1-1 (Below)			
	Table NA.3 of the NA to I.S. EN 1996-1-1			
	Table NA.3 — Acceptable Assumed Equivalent Mixes for Prescribed Masonry Mortans (Subclause 3.2.2(1))			
	Equivalent Prescribed Mortars (Proportion of Materials by Volume) (see Note)			
Portion of Constituents by Volume	Compressive Mortar Strength Cement:Lime:Sand Masonry Cement:Sand with Class <sup>a</sup> With or without Air Cement:Sand or without Air Entrainment Entrainment			
,	M12 1.0 to %3 Not suitable (i)			
	M6 1:3/34 to 43/5 1:27/s to 35/5 1:31 to 4 (#) M4 1:1:5 to 6 1:4 to 5 1:5 to 6 (#)			
	M2 1/2/8 to 9 1/5% to 6% 1/7 to 8 (W)			
	<sup>6</sup> The number following the M is the compressive strength for the class at 28 days in Nimm <sup>2</sup> NOTE. When the sand portion is given as, for example, 5 to 6, the lower figure should be used with adds containing a higher proportion of free what the higher figure should be used with ands containing a lower proportion of free.			
Bond Strength	0.15N/mm <sup>2</sup>			
Chloride Content	0.066%			
Reaction to Fire	Class A1			
Water Absorption	NPD			
Water Vapour Permeability	U15/35			
Thermal Conductivity	(10, dry) 0.82W/mK			
merinal Conductivity	Tabulated mean value P=50%			
	Durability of a mortar is dependent on many factors including, design, detailing, masonry type and strength, exposures (ground conditions, location, wind, rain, temperatures etc.) and applied finishes. As these are design factors, advise on mortar strength should be given by a Structural Engineer. Reference should be made to S.R. 325:2013 + A2:2018 / AC 2019 Recommendations for the Design of Masonry Structures in Ireland to Eurocode 6, in particular Table 14, Durability of masonry in finished construction.			
Durability against freeze/thaw	To prevent the ingress of wind driven rain Bucket Handle and Weather Struck Joints are preferred.			
	M4 - MX2.1 Low risk of saturation without Freezing (rendered MX2.2)			
	M6 - MX2.2 High risk of saturation without Freezing			
	M12 - MX3.2 High risk of saturation with freezing			
	Mortar produced with aggregate in accordance with I.S. EN 13129 (Aggregates for mortar) and S.R. 18 :2021 (Guidance on the use of I.S. I 13129, Aggregates for mortar)			
Dangerous Substances	None			

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### Material Safety Data Sheet - Mortar, Renders and Screeds

1. (a) Identification of Product

Mortar, Renders and Screeds.

(b) <u>Name of</u> <u>Company</u> Roadstone Dublin Ltd. Fortunestown, Dublin 24.

Phone (01) 4041200

(c) Application

A **bedding mortar** is designed to be laid between bricks, blocks, stone or other construction materials.

A **rendering mortar** is designed to be applied to a wall in one or more thin coats.

A screed is designed to be applied to an in-situ base and suitably finished to receive the flooring.

Use of mortars, renders and screeds should be in accordance with the relevant National/European Union codes of practice.

- 2. Composition of Ingredients-
- (a) Mortar or render is composed of:-
  - Cementitious material (this may be cement or a mixture with lime).
  - ii) Fine aggregates.
  - ii) Water.
  - iv)Admixtures; these may be added to improve the properties of the fresh and hardened material.
     Pigments may be added to colour the product to customer's requirements.

- (b) The composition of a screed is similar to the above but lime is not added.
- (c) A lime sand mortar may be supplied. This is a mixture of lime and sand to which admixtures may be added. The cement is added on site. The resulting mixtures are abrasive & alkaline.

#### 3. Hazard Identification

#### (a) Fresh Mortar, Renders and Screeds

Fresh mortar, renders and screeds contain cement and water with the result that an alkaline solution is produced.

Prolonged skin contact with wet mortar, renders and screeds can result in cement burns. The abrasiveness of the constituents can aggravate the effect.

Repeated skin contact with fresh mortar, renders and screeds over a period may cause irritant contact dermatitis.The abrasiveness of the constituents can aggravate the effect.

Some skins are more sensitive to fresh mortar, renders and screeds and to the small amounts of chromate, which may be present and can develop allergic contact dermatitis; however this is rare.

#### (b) Hardened Mortar, Renders and Screeds

Cutting, drilling or hammering of hardened mortar, renders or screeds can create dust. If inhaled in excessive quantities over extended periods, respirable dust can constitute a long-term hazard.

Cutting, drilling or hammering of hardened mortar, renders and screeds unless adequately controlled, can project

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particles at high velocity with consequent risk of impact damage and/or injury particularly to exposed areas of the body and eyes.



#### 4. First Aid Measures

First aid treatment is as follows:

#### 4.1 <u>Eve Contact (Fresh Mortar,</u> <u>Renders & Screeds)</u>

Immediately rinse under running water and seek medical advice.

#### 4.2 <u>Skin Contact (Fresh Mortar,</u> <u>Renders & Screeds)</u>

Immediately rinse affected areas under running water.

#### 4.3 Cuts/Abrasions

Cuts/abrasions from hardened mortar, renders or screeds, or particles of same, should be cleaned and treated using the normal First-Aid method. Wounds must receive prompt medical attention.

In all cases of doubt or where symptoms persist medical advice must be obtained.

#### 5. Fire Fighting Measures

Not applicable.

#### 6. Accidental Release Measures

- 6.1 Avoid contact with skin.
- 6.2 Prevent entry of fresh mortar, renders or screeds into water courses, drains or other areas where hardened materials cause problems.

6.3 Take up product using appropriate equipment.

#### 7. <u>Handling</u>

- 7.1 Avoid contact with eyes and skin.
- 7.2 Before lifting
- 7.3 Always size up the load. Always follow safe lifting and manual handling procedures.

#### 7.3 Mortar Tubs

Mortar tubs should only be used as a container for mortars and are not designed for any other purpose i.e. cranage.

#### 8. Exposure Controls/Personal Protection

#### 8.1 Hand Protection

Wear suitable protective gloves.

#### 8.2 Skin Protection

Avoid contact with skin. Overalls should be worn.

#### 8.3 Eye Protection

Wear goggles to prevent eye contact from splashing of fresh mortar, renders, and screeds, or flying particles when hammering hardened mortar, renders and screeds.

#### 8.4 <u>Masks</u>

Wear appropriate respiratory protection when cutting, drilling or hammering hardened mortar, renders and screeds.

#### 8.5 Footwear

Wear knee high rubber boots or similar with protective toecaps.

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#### 8.6 Kneepads

Wear kneepads when kneeling on fresh mortar, renders and screeds.

#### 9. Physical & Chemical Properties

Density is typically 1.7 tonnes per cubic metre. pH level of fresh mortar, renders and screeds is typically 12.

Mortar, renders and screeds harden through a chemical reaction between cement and water. The product is abrasive.

#### 10. Stability & Reactivity

Not applicable.

#### 11. Toxicological Information

No risk upon observance of safety instructions at 6, 7 & 8 above.

#### 12. Ecological Information

Fresh mortar, renders and screeds may result in change in pH level and may influence aquatic life forms.

Hardened mortar, renders and screeds have no ecological effects.

#### 13. Disposal Considerations

Hardened mortar, renders and screeds may be recycled or placed in approved licensed landfill site.

#### 14. Transportation

No risk on observance of safety instructions at 6, 7 & 8 above.

### 15. <u>Regulatory Information</u>

Not applicable.

#### 16. Other Information

#### <u>Storage</u>

Mortar, renders and screeds can remain fresh for several days, extending the period during which the precautions given above should continue to be taken and during which access by unauthorised persons should be prevented.

#### <u>Recommended Uses and</u> <u>Restrictions</u>

Mortars, renders and screeds must be adequately cured before structural loads are imposed.

It is recommended that users refer to BS 8000 Part 3 1989, *Workmanship on Building Sites*, for guidance on heights of lifts to avoid over stressing of Mortar in the lower courses and to allow time for the mortar to develop sufficient strength.

Care should be taken to prevent damage to finished work due to weather and building operations.

Temporary support should be provided to structures to prevent damage by wind.

Issued May 2011

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