

PRODUCT DATA SHEET

King[®] MasonMix

Masonry mortar for laying applications

PRODUCT DESCRIPTION

The King[®] MasonMix is a premixed, factory-bagged Type O mortar specially designed for laying masonry units in non-load-bearing wall applications. This mortar is formulated with Portland Cement, Type S hydrated lime, masonry sand with controlled grain size and an air-entraining admixture.

WHERE TO USE

- Ideal for the construction of non-load-bearing walls
- Can be used for interior and exterior applications

CHARACTERISTICS / ADVANTAGES

- Factory calibrated mix
- Good water vapour transmission properties
- Excellent workability
- Low compressive strength
- Self-healing properties

APPROVALS / CERTIFICATES

Compliance with *CSA-A179-14, Mortar and grout for unit masonry* (for Type O mortar with addition of water in the field, Annex A, Table A3).

PRODUCT INFORMATION

CSC MasterFormat[®]	04 05 13 - Masonry Mortaring and Grouting Specifications template are available on Sika Canada Website
Packaging	30 kg (66 lb) triple-lined bags, polywrapped on wooden pallets
Shelf Life	12 months in original, unopened bag
Storage Conditions	Always store in a dry area, protected from the weather. At the job site, an additional tarpaulin must be used to cover the product to prevent water infiltration.
Appearance / Colour	Powder / Grey, Cream or Custom colours Note: May be factory-coloured or at job site using the King [®] Colour-Plus Pigment System exclusive to Sika Canada. All pigments used conform to the requirements of <i>ASTM C979 Pigments for Integrally Colored Concrete</i> .

TECHNICAL INFORMATION

Compressive Strength	ASTM C109 - Minimum
-----------------------------	---------------------

	7 days	28 days
King® MasonMix Grey	2 MPa (290 psi)	2.5 MPa (363 psi)
King® MasonMix Cream	2 MPa (290 psi)	2.5 MPa (363 psi)

Note: The pigments used to colour the mortar have no effect on its mechanical properties.

Shrinkage	ASTM C596	
	King® MasonMix Grey	0.16 % at 91 days
	King® MasonMix Cream	0.157 % at 91 days
Water Absorption	ASTM C1506 / Water Retention 70 % Minimum	
Water Vapour Transmission	ASTM E96	
	King® MasonMix Cream	25 Perms
Porosity	EN-1015-7 Method / Air Content 14 % Maximum	

APPLICATION INFORMATION

Yield	Approx. 0.018 m ³ (0.65 ft ³) of fresh mortar per 30 kg (66 lb) bag	
Flowability	ASTM C1437 / Flow 105 % to 115 %	
Product Temperature	Refer to the "Placement condition" section on the Specifications template document on Sika Canada Website.	
Ambient Air Temperature	Refer to the "Placement condition" section on the Specifications template document on Sika Canada Website.	
Substrate Temperature	Refer to the "Placement condition" section on the Specifications template document on Sika Canada Website.	

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

All values required by the CSA A-179-14 Standard, as well as values of the King® MasonMix product, are obtained under laboratory conditions. The values of the King® MasonMix product are applicable when the product is used as a laying mortar.

LIMITATIONS

- Never add admixtures at the job site to modify set time, workability, or any other property of the mortar in its plastic or hardened state.
- Always use potable water.
- Use only the recommended water dosage to obtain the desired properties of the mortar in its plastic or hardened state.
- Do not use King® MasonMix for below ground level application.
- Never use on frozen surfaces.
- Colour variations on the hardened mortar can be observed even if the mortar in-place has been previ-

ously factory-prepared and complies with the project specifications. These colour variations are mainly attributable to inadequate application conditions such as delay between mixing and tooling of joints, lack of protection against the weather during installation, or variable absorption/moisture rates of the construction elements. In order to avoid an undesirable result, we recommend that you pay particular attention to these points.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

MIXING

Small batch

Important: In order to avoid segregation issues, always mix the total content of one bag. If less than a 30 kg

(66 lb) of King® MasonMix is required, dry mix - without water – the total contents of the bag in a clean container, take the required amount, and then add water to the amount withdrawn from the mixture.

Large batch

Always mix the entire contents of the bag. Mix the King® MasonMix with a maximum of 5 L (1.3 US gal) of water per 30 kg (66 lb) bag in a clean mortar mixer. Pour 4.5 L (1.2 US gal) of water into the mixer and add 30 kg (66 lb) of King® MasonMix. Mix for five (5) minutes, or five (5) to ten (10) minutes when using a coloured mortar or when a colourant is added at the job site. Allow the mortar to stand for a short period of time. Using the remaining water, adjust the mortar to obtain the desired consistency.

APPLICATION

The application of the mortar must comply with the requirements of Sections 6 and 7 of CSA-A371-14.

APPLICATION METHOD / TOOLS

MORTAR PLACEMENT

Avoid working in direct sunlight or exposed to winds. The sun and the wind are factors to take into account in order to avoid cracking problems. Never apply mortar on frozen surfaces.

TOOLING OF THE JOINTS

The tooling of joints exposed to rain is an important step that contributes to the waterproofing of the masonry system and must be done using a jointer. The amount of water present in the mortar joint at the time of tooling will determine the final colour of the cured mortar. To avoid colour variation, ensure that the mortar joint always contains the same amount of water when it is tooled. As a general rule, the joint is considered ready to be tooled when the mortar has hardened sufficiently such that a finger mark remains.

CLEAN UP

In order to avoid the use of chemicals, it is always recommended to remove as much mortar splashes or stains as possible before the material hardens. Use water, a piece of burlap or wood. If the use of cleaning products is necessary, be sure to contact the manufacturer of the product to validate the compatibility and the procedure to follow. It is important to mention to the manufacturer that it is a hydrated lime-based mortar with the addition of iron and titanium oxides pigments when coloured.

Regardless of the technique or product selected, it is essential to preserve the integrity of the mortar.

Be sure to clean a test area before proceeding with the work.

Clean all tools and equipment after use with water. Once hardened, the product can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.