

PRODUCT DATA SHEET

King® MasonBond 400®

Polymer-modified mortar

PRODUCT DESCRIPTION

King® MasonBond 400® is a premixed, factory-bagged mortar specially designed for the installation of cultured bricks, stones, as well as for granite pavers and slabs. King® MasonBond 400® is formulated with cementitious materials, polymer, masonry sand with controlled grain size, and other carefully selected additives.

CHARACTERISTICS / ADVANTAGES

- Factory calibrated mix
- High bond strength
- Superior workability
- High compressive strength and long-term durability
- Excellent resistance to de-icing salts

WHERE TO USE

- Bonding brick and cultured stone to a variety of vertical surfaces
- Bedding granite paver and slabs on horizontal surfaces
- Installing steps in hardscaping work
- Can be used for interior and exterior applications

PRODUCT INFORMATION

Packaging	30 kg (66 lb) triple-lined bags, polywrapped on wooden pallets
Appearance / Colour	Powder / Grey
	Note: May be coloured at the job site using the King® Colour-Plus Pigment System exclusive to Sika Canada. All pigments used conform to the requirements of ASTM C979 <i>Pigments for Integrally Colored Concrete</i> .
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.
Volatile organic compound (VOC) content	< 0.1 g/L (SCAQMD Rule #1168)
CSC MasterFormat®	04 05 13 - Masonry Mortaring and Grouting Specifications template are available on Sika Canada Website

TECHNICAL INFORMATION

Compressive Strength	ASTM C109 - Minimum		
	1 day	7 days	28 days
	8 MPa	15 MPa	20 MPa
	(1160 psi)	(2175 psi)	(2900 psi)
Pull-Off Strength	CSA A23.2-6B / Bond Strength		
	Support	Average Strength	
		MPa	psi
	Concrete board	< 1.10	< 159.54
	Concrete board + metal lath	< 1.30	< 188.55
	Concrete block	< 1.26	< 182.75
Water Vapour Transmission	ASTM E96		
	4.5 Perms - Metric		
Porosity	EN-1015-7 Method / Air Content		
	18 % Maximum		
Salt Resistance	ASTM C672		
	Number of Cycles	Mass Loss	
	50	< 50 g/m ² (1.5 oz/yd ²)	
		[Durability criteria: < 500 g/m ² (14.7 oz/yd ²)]	
Yield	Approx. 0.018 m ³ (0.65 ft ³) of fresh mortar per 30 kg (66 lb) bag		
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.		
Flowability	ASTM C1437		
	75 % +/- 5%		

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.

LIMITATIONS

- Do not use the King® MasonBond 400® as a mortar for laying conventional masonry units. Visit the Sika Canada [recommendations website section](#).
- 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.
- Never use on frozen surfaces.

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.

MIXING

Small quantity

Important: In order to avoid segregation issues, always mix the total content of one bag. If less than a 30 kg of King® MasonBond 400® is required, dry mix - without water – the total content of the bag in a clean container, take the required amount, and then add water to the amount withdrawn from the mixture.

Large quantity

Always mix the entire content of the bag. Mix the King® MasonBond 400® with a maximum of 4.5 L (1.2 US gal) of water per 30 kg (66 lb) of mortar in a clean mortar mixer. Pour 4.0 L (1.0 US gal) of water into the mixer and add 30 kg (66 lb) of King® MasonBond 400®. Mix for three (3) to five (5) minutes, or five (5) to ten (10) minutes 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 ob-

tain the desired consistency.

APPLICATION

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

Refers to the [King® MasonBond 400® Userguide](#) available on Sika Canada Website

CLEAN UP

This product contains a polymer in powder form. Avoid contact with the surface of the elements to be installed.

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.

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 recom-

mendations, 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.