

CULTURED BRICK & STONE

The installation of cultured brick and stone is not overseen by the CSA standards.



However, taking into account the specific desired mortar properties, Sika recommends the use of a polymer-modified mortar such as King® MasonBond 400®.



COLOUR MATCHING

Ensuring the perfect colour match is essential to a successful project. At Sika Canada, our trained laboratory staff is able to match the designed colour using the best quality pigment available.

In order to keep pace with jobsites, while giving priority to quality products, we also offer the possibility to colour your mortars on site thank to the exclusive King® Colour-Plus Pigment System offered by Sika Canada.

TRAINING CENTRE

At Sika Canada, we adhere to the principle of knowledge sharing. To learn more about our products or to find out about techniques and good practices in terms of restoration, ask your Sika Canada Sales Representative about the next seminar at our training centre.

Sika is happy to assist you with your projects by providing recommendations. However, please note that the information and advice contained in this section and any other advice is given in good faith on the basis of Sika's current knowledge and experience of the products when properly stored, handled, and applied under normal conditions and in accordance with Sika's recommendations. This information applies only to the products expressly covered herein. In the event of changes in application conditions, such as changes in substrates, etc., or in the event of an application other than that described herein, the user should consult Sika Technical Services prior to using Sika products. The information and data contained in this section are provided solely to provide the user with additional information on Sika products. The contents hereof in no way dispense the user of Sika products from testing them before applying them for the intended purpose. All orders for Sika products are subject to Sika's current Terms and Conditions of Sale available on Sika's website. The user must always refer to the most recent version of the local Sika Product Data Sheet prior to each use, available on the Sika website, copies of which will be supplied on request. The user should always refer to the most recent version of the local Sika Product Data Sheet for information on the applicable Sika Limited Warranty.

OUR LOCATIONS

Head Office

601, Delmar Avenue,
Pointe-Claire (Quebec) H9R 4A9

Other locations

Boisbriand (Quebec)
Brantford; Cambridge; Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (Colombie-Britannique)

SIKA CANADA INC.

1-800-933-7452 • www.sika.ca



BUILD

**SELECTION GUIDE
FOR MORTARS
AND GROUTS FOR
NEW CONSTRUCTION**

SELECTION GUIDE FOR MORTARS AND GROUTS FOR MODERN MASONRY UNITS (CSA A 179-14, TABLE A.1)

APPLICATION	APPLICATION BUILDING SEGMENT	RECOMMENDED MORTAR TYPE	KING PRODUCT
EXTERIOR, ABOVE GROUND	Load-bearing walls requiring high compressive strength	S	King® 2-1-9
	Load-bearing walls requiring low compressive strength	N	King® 1-1-6
	Non-load-bearing walls	N	King® 1-1-6
	Parapets walls and masonry exposed to a high level of saturation such as chimneys and free-standing exterior walls	S	King® 2-1-9
EXTERIOR AT/OR BELOW GROUND LEVEL	Foundation walls, retaining walls, man-holes, sewers, pavement, walks, patios	S	King® 2-1-9
INTERIOR	Load-bearing walls requiring high compressive strength	S	King® 2-1-9 King® Block
	Load-bearing walls requiring low compressive strength	N	King® 1-1-6 King® MasonGO 100
	Non-load-bearing walls	N	King® 1-1-6 King® MasonGO 100

MINIMUM COMPRESSIVE STRENGTHS (CSA A179-14 TABLE 6)

		LABORATORY	ON SITE
TYPE N	7 Days	3.0 MPa (435 psi)	2.0 MPa (290 psi)
	28 Days	5.0 MPa (725 psi)	3.5 MPa (508 psi)
TYPE S	7 Days	7.5 MPa (1088 psi)	5.0 MPa (725 psi)
	28 Days	12.5 MPa (1813 psi)	8.5 MPa (1233 psi)

NOTE: This selection guide only applies to new construction. In the case of a restoration project, please refer to the selection [guide for mortars and grouts for restoration of historical buildings](#) published by Sika, and available on the website at www.sika.ca

SELECTION GUIDE FOR GROUTS

LOAD-BEARING CAPACITY*	PRODUCT**	MPA (PSI) @ 28 DAYS
MEDIUM	King® CELLFILLER E-20	20 MPa (2900 psi)
HIGH	King® CELLFILLER E-30	30 MPa (4350 psi)

*Sika Canada recommends to always consult a structural engineer when calculating the loadbearing capacities of a wall.

**All masonry grouts presented in this guide are of expansive type. Sika Canada recommends always to use a grout with expansive properties. The expansion compensates for the shrinkage usually observed.

SUSTAINABILITY & LEED CONTRIBUTIONS

MANUFACTURER INVENTORY KING 1-1-6

SIKA'S SUSTAINABILITY COMMITMENT
As a global company, Sika is committed to sustainable development. Through continuous investing, training, reporting and communication, we aim to create a better world. We support UN's 17 Sustainable Development Goals (SDGs) and contribute to the well-being of our stakeholders and communities in all the markets where we operate and where we are active.

PURPOSE
This report, in conjunction with Sika Canada Inc.'s Strategic Sustainability Statement, is designed to provide a comprehensive overview of our environmental, social and governance (ESG) performance. It is intended to inform and engage our stakeholders on our sustainability strategy and progress.

LEED v4/v4.1 Credits:

- MR Credit - Building Product Disclosure & Optimization: Environmental Product Declaration
- MR Credit - Building Product Disclosure & Optimization - Material Ingredients: Manufacturer Inventory
- MR Credit - Building Product Disclosure & Optimization - Sourcing of Raw Materials: Raw material source & extraction reporting

SIKA MASONRY MORTARS AND GROUTS

PRODUCT-SPECIFIC TYPE III ENVIRONMENTAL PRODUCT DECLARATION (EPD)

The development of this environmental product declaration (EPD) for Sika masonry mortars and grouts was conducted in accordance with the requirements of the International Organization for Standardization (ISO) 14025 and the European Commission (EC) Directive 2014/52/EU. The EPD was developed in accordance with the European Commission (EC) Directive 2014/52/EU and has been verified by the ADEP Sustainability Services (ADEP-SS).

For more information about Sika Canada Inc., please go to www.sika.ca

Issue date: July 7, 2023



Visit the Mortars and Masonry Grouts section of the Sika Canada website to discover our product portfolio and resource centre including: Product Data and Safety Sheets, Colour Charts, Quantity Estimator, Selection Guides, Specification Templates and LEED documentation.

The production of all Sika products is governed by an ISO 9001:2015 certified management system.

C AND VC SERIES

Nowadays, the particle of the sand used in modern mortars is often not suitable for the restoration of historic buildings. Reason why we introduced the C and VC series mortars contains a coarser sand. The majority of restoration mortars now manufactured by Sika Canada are available in regular version, C Series or VC Series.

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RESTORE



SELECTION GUIDE FOR MORTARS AND GROUTS FOR THE RESTORATION OF HISTORICAL BUILDINGS

MORTAR SELECTION

YEAR OF CONSTRUCTION	TYPE OF WORK	COMPRESSIVE STRENGTH ^(a)	RECOMMENDATIONS
BEFORE 1900	BEDDING	LOW-MEDIUM	King® HLM-500
		MEDIUM-HIGH	King® HLM-500
	REPOINTING	LOW-MEDIUM	King® HLM-350
		MEDIUM-HIGH	King® HLM-500
FROM 1900 TO 1940	BEDDING	LOW-MEDIUM	King® HLM-500 or King® MasonMix
		MEDIUM-HIGH	King® MasonMix 600
	REPOINTING	LOW-MEDIUM	King® HLM-350 or King® MasonCare® 300 or King® MasonCare® 1258
		MEDIUM-HIGH	King® HLM-500
FROM 1940 TO 1975	BEDDING	LOW-MEDIUM	King® HLM-500 or King® MasonMix
		MEDIUM-HIGH	King® MasonMix 600
	REPOINTING	LOW-MEDIUM	King® MasonCare® 300 or King® MasonCare® 1258
		MEDIUM-HIGH	King® HLM-500 or King® MasonMix 600
FROM 1975 TO TODAY	BEDDING	LOW-MEDIUM	King® 1-1-6
		MEDIUM-HIGH	King® 2-1-9
	REPOINTING	LOW-MEDIUM	King® MasonCare® 300 or King® MasonCare® 1258
		MEDIUM-HIGH	King® 1-1-6 or King® 2-1-9

^(a) Low to medium compressive strength: regular walls.

Medium to high compressive strength: Parapets, foundation wall, chimney, load bearing walls, stairs.

PRODUCT	APPLICATION	BINDER	AVERAGE COMPRESSIVE STRENGTH ^(b)		MINIMUM CURE
			7 days	28 days	Humid ^(d)
King® HLM-350	Repointing	Hydraulic Lime	0.7 MPa (101 psi)	1.8 MPa (145 psi)	3-7 days
King® HLM-500	Bedding	Hydraulic Lime	0.7 MPa (101 psi)	1.8 MPa (145 psi)	3-7 days
King® HLM-500	Repointing	Hydraulic Lime	More than 3MPa (435 psi) at 28 days ^(c)		3-7 days
King® 1-1-6	Bedding	Lime-Cement	3.5 MPa (435 psi)	6.5 MPa (943 psi)	No
King® 1-1-6	Repointing	Lime-Cement	More than 7 MPa (1015 Psi) at 28 days ^(c)		3-7 days
King® MasonCare® 300	Repointing	Lime-Cement	3.5 MPa (507 psi)	4 MPa (580 psi)	3-7 days
King® MasonCare® 1258	Repointing	Lime-Cement	4 MPa (580 psi)	4.5 MPa (652 psi)	3-7 days
King® MasonMix	Bedding	Lime-Cement	2 MPa (290 psi)	2.5 MPa (363 psi)	No
King® MasonMix 600	Bedding	Lime-Cement	3 MPa (435 psi)	4 MPa (580 psi)	No
King® MasonMix 600	Repointing	Lime-Cement	More than 6 MPa (870 Psi) at 28 days ^(c)		3-7 days

^(b) Compressive Strength: Results obtained in laboratory, on site result may vary.

^(c) Final resistance will depends on many factors.

^(d) Time for cure depends on many factors, especially winds and temperature.

NOTE: This selection guide applies to masonry restoration project. In the case of a new construction, please refer to [the selection guide for mortars and grouts for new construction](#) published by Sika Canada, and available on the website at www.sika.ca

SELECTION CRITERIA FOR MORTARS

Several principles must be respected when it comes to successful restoration projects. Among the most important, are the following:

- Avoid introducing a raw material that was not part of the original building;
- In terms of compressive strength, the new mortar should be of equal or lower value than the original mortar;
- In terms of vapour transmission, the new mortar must have equal or higher values then the original mortar.

Other factors to consider include the following:

- The time of the year when the restoration work will take place;
- The building element to be restored (i.e. Chimney, buttress, foundation wall, etc.) ;
- The time frame, work-force, budget, etc.

GROUT SELECTION

YEAR OF CONSTRUCTION	RECOMMENDATIONS
Before 1900	King® HL-5
From 1900 to 1975	King® HL-5 or King® RPL-6
From 1975 to today	King® RPL-6 or King® RPL-20

PRODUCTS	BINDER	COMPRESSIVE STRENGTH AT 28 DAYS
King® HL-5	Hydraulic lime	5 MPa (725 psi)
King® RPL-6	Air Lime and Portland Cement	6 MPa (870 psi)
King® RPL-20	Air Lime and Portland Cement	15-20 MPa (2175-2900 psi)



Visit the **Masonry Heritage Mortars & Grouts** section of the **Sika Canada website** to discover our **product portfolio and resource centre** including:

Product Data and Safety Sheets, Selection Guides and Specification Templates.