



# Sika Systems and Solutions for Concrete Balcony Structures



## Sika Solutions for Concrete Balcony Structures

### Project-Related Needs and Functions of Balcony Flooring



Mechanical resistance is related to exposure generated by pedestrians and light wheeled transport as well as by wear from typical patio furniture.



Slip resistance is always a question of surface design. The specific environment defines the limits.



Crack-bridging ability means the coating system has enough elasticity to seal against cracking.



Thermal shock resistance means the coating system will not be negatively influenced by thermal exposure like ice, hail or warming up by sunshine.



UV resistance and resistance to yellowing have to be fulfilled by all flooring systems for outside use.



Structural Strengthening

> Balcony Coating and Waterproofing

#### **Resin Anchoring**



Sika<sup>®</sup> AnchorFix<sup>®</sup>

Injectable, high strength, non-sag resins for chemical anchoring. Available in regular or fast set for normal or cold weather applications.

#### **Corrosion Mitigation**



#### Sika FerroGard®

Corrosion inhibiting concrete and mortar admixture and surface-applied penetrative corrosion inhibitor.

#### Sika<sup>®</sup> Galvashield

Embedded galvanic anodes for corrosion prevention and control in reinforced concrete structures.

#### **Concrete Repair**



#### SikaTop<sup>®</sup>/SikaRepair<sup>®</sup>

Hand-applied or wet spray-applied high performance repair mortars available in general purpose, non-sag and selflevelling consistencies.

#### SikaQuick 1000/2500

Quick-setting, high strength, universal repair mortars that can support traffic in 1 hour and are overcoatable in 4 to 6 hours.

#### Sikacrete®-08 SCC

High-quality, durable, self-compacting concrete in a bag utilizing Sika's patented ViscoCrete® technology.





## Sika Leading Edge Technology

**Sikacrete<sup>®</sup> - ViscoCrete<sup>®</sup> Technology** For high quality, cutting edge, durable, self-compacting concrete-in-a-bag.

#### Sika FerroGard® Technology



Admixture and surface-applied corrosion inhibitors used to delay the onset of corrosion and to reduce the rate of any eventual corrosion.

#### Sika® Galvashield® Technology

Embedded galvanic anodes used to control on-going corrosion and to prevent the initiation of new corrosion activity in concrete structures.

#### Sika<sup>®</sup> EpoCem<sup>®</sup> Technology

Epoxy-cement moisture barriers and reprofiling mortars that allow the application of Sikafloor<sup>®</sup> and Sikagard<sup>®</sup> coating systems on green or damp concrete.

#### Sika® CarboDur®/SikaWrap Technology

Sika<sup>®</sup> CarboDur<sup>®</sup> and SikaWrap composite strengthening systems are non-corroding, lightweight, easy-to-apply, high strength and ultra-thin.

#### **Concrete Protection**



#### Sikagard<sup>®</sup> 550W Elastocolor

One-component, water based, crack bridging, elastomeric, decorative and protective coating with elastic base coat for concrete and masonry structures. Excellent resistance tom carbon dioxide and to chlorides.

#### Sikagard® 670W/Color A50

One-component, protective and decorative water based or solvent containing coatings for concrete and masonry. Carbonation, chloride and weather resistant, in addition to being available as smooth or textured finishes.

#### Sikagard® SN40/SN100

One-component, clear, breathable, water repellent, penetrating sealers used to protect concrete from chlorides.

#### **Balcony Flooring**



#### Sikalastic<sup>®</sup> 180/181<sup>CA</sup>

Elastomeric, crack bridging, polyurethane based, UV resistant, balcony waterproofing system available in smooth or textured finish.

#### SikaTop<sup>®</sup> Seal 107<sup>CA</sup>

Two-component, polymer modified, flexible, cementitious, water-proofing coating for concrete structures. High resistance to carbon dioxide and chlorides. Suitable for use in areas receiving foot traffic.

#### **Structural Strengthening**



#### Sikadur<sup>®</sup>

Two-component, solvent-free, multi-purpose, epoxy resins for crack injection, structural bonding, sealing and strengthening applications.

#### Sika® CarboDur®

Pultruded, carbon fibre reinforced polymer (CFRP) laminate strip designed for strengthening concrete, timber and masonry structures.

#### SikaWrap

Carbon fibre (CFRP) and/or E-glass fibre (GFRP) system reinforced polymer for structural strengthening of concrete.

#### **Joint Sealing**



Sikaflex<sup>®</sup>

Premium grade, one- and two- component, polyurethane sealants for expansion joints. Available in self-levelling and nonsag consistencies

#### Sikaflex<sup>®</sup> AT-Connection

Moisture-curing elastic sealant based on hybrid polyurethane technology. Ideal for connection and perimeter joints between porous and non porous substrates, specifically PVC and vinyl profiles.

Product type and use	Product name	Description A	Advantages
Anchoring : Setting anchors or rebar into existing concrete	Sika <sup>®</sup> AnchorFix <sup>®</sup> 2 <sup>ca</sup> /3 <sup>ca</sup>		Grades for cold weather or ambient conditions. Products for dry, damp, wet or water filled holes.
Corrosion Mitigation : Corrosion protection for embedded steel reinforcement	Sika® FerroGard® 901 Sika® FerroGard® 903		Penetrates the most dense concrete. Enhances the corrosion protection of repairs and durability of reinforced concrete. Reduces need to remove concrete.
	Sika <sup>®</sup> Galvashield XP or XP+	Embedded galvanic anodes for corrosion  prevention and control	Proven technology, focused protection, economical, long lasting.
Concrete Repair : Shallow repairs < 38 mm in depth, horizontal or vertical	SikaTop <sup>®</sup> 111/122/123 PLUS	or non-sag mortars, plus migrating	High bond strengths ensures superior adhesion. High compressive, high early strengths. Good freeze/thaw resistance.
	SikaRepair <sup>®</sup> 222/223 + Latex R	Early strength-gaining, cementitious  patching mortars	High early strength, easy to use.
	SikaQuick 1000/2500	Rapid hardening repair mortars	Rapid hardening, freeze/thaw resistance, easy to use (labour saving material).
Deep repairs > 38 mm or through slab repairs or form & pour	Sikacrete <sup>®</sup> -08 SCC	Self-compacting high quality concrete (SCC) in a bag, based on Sika ViscoCrete® technology	
Concrete Protection : Protective sealers and coatings to prevent water/chloride ingress	Sikagard <sup>®</sup> SN40/SN100	Silane sealers	Deep penetration for long lasting protection from weathering.
	Sikagard <sup>®</sup> 670W Sikagard <sup>®</sup> Color A50	Water-based and solvent-containing pigmented acrylic coatings	Excellent weathering and carbonation resistant properties. Coloured decorative finishes, easily recoated.
	Sikagard <sup>®</sup> 550W Elastocolor Sikagard <sup>®</sup> Elastic Base Coat	Elastic crack-bridging and anti carbonation coating with elastomeric base coat	Base coat and dynamic crack-bridging coating; provides resistance to carbonation, weathering and water penetration.
Balcony Flooring : Balcony waterproofing membranes and coatings	Sikalastic <sup>®</sup> 180/181 <sup>ca</sup>	Elastomeric, polyurethane based, ■ UV resistant, balcony waterproofing membrane	Applied in a 2- or 3-step process for rapid turn around.
	SikaTop <sup>®</sup> Seal 107 <sup>ca</sup>	Flexible, waterproofing and protective slurry coating	Protects against water penetration, yet water vapour permeable.
Structural Strengthening : Composite materials for structural strengthening/reinforcing	Sikadur <sup>®</sup> 30/31/32 Hi-Mod/35 Hi-Mod LV/52	High modulus, high strength structural epoxy adhesives and crack injection resins.	Excellent adhesion to concrete, masonry, metals, wood and most structural materials.
	Sika <sup>®</sup> Carbodur <sup>®</sup>	Heavy duty, CFRP strengthening system	Very high strength, light weight, corrosion resistant.
	SikaWrap E-Glass & Carbon Fibre		Flexible; can be wrapped around complex shapes. Good resistance to impact and corrosion.
Joint Sealing : Elastomeric joint sealants for expansion joints	Sikaflex <sup>®</sup> 1a/2c/15LM	Waterproof elastomeric sealants	Excellent joint movement, high elasticity, exceptional cut and tear resistance and long term durability.
	Sikaflex <sup>®</sup> AT - Connection	suitable for PVC and vinyl perimeter or connection joints.	Excellent adhesion on porous and non porous substrates, including PVC and vinyl. Primerless adhesion on many substrates. Good UV resistance and color stability; non-yellowing.

#### Other Sika brochures :



Ontario

6915 Davand Drive

Tel.: (905) 795-3177

Fax: (905) 795-3192

Mississauga, ON L5T 1L5





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, within their shelf life. 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 recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sika.ca.

Alberta

#### Sika Canada Inc.

601 Delmar Avenue Pointe-Claire, QC H9R 4A9 Tel.: (514) 697-2610 Fax: (514) 697-3087

18131–114th Avenue N.W. Edmonton, AB T5S 1T8 Tel.: (780) 486-6111 Fax: (780) 483-1580 1-800-933-SIKA www.sika.ca

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