

Guide Application Waxed Concrete smooth finish



The Material Wizard

Updated 20220301

Coated Waxed Concrete - smooth finish

Concrete coating - Wall or Floor & shower applications



STANDARD FORMATS

Wall Kits: 30 ft², 55 ft² or 120 ft²

Floor & Shower Kits: 25 ft², 50 ft² or 110 ft²

FINISH satin or matte

COLORS

For illustrative purposes. Order samples for materials natural color variations.



Natural



Limestone



Mineral



Ash



Slate

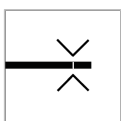
DESCRIPTION

For an industrial room decoration, Silex's **Waxed Concrete** direct application coating is the solution for residential or commercial projects. Its adhesion attributes, mechanical qualities, and waterproof properties make **Waxed Concrete** a finish of choice for interior decoration projects. **Silex Waxed Concrete Wall Kits** contain a pigmented concrete powder for water mixing, and **Silex Sealer**. **Silex Waxed Concrete Floor & Shower Kits** contain in addition: **Silex Admixture** to strengthen concrete mix, and **Silex Varnish (Two-component water-based urethane)** to better protect against water and stains. This process makes the surface more resistant and waterproof in high traffic areas and rooms exposed to moisture. The **Waxed concrete** is easy to clean with mild organic products.

APPLICATION

The **Waxed Concrete** mortar is applied with a trowel on multiple substrates, except glass and metal. It is ideal for a wall, floor, or shower area application, with its smooth finish and subtle visual variations.

Suggested overall layer
thickness: 2 mm (1/16")



Easy to clean with mild
organic products



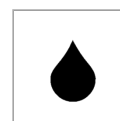
Antibacterial



Fire resistant



Water resistant





Waxed Concrete - Natural



Waxed Concrete - Limestone



Waxed Concrete - Slate



Waxed Concrete - Mineral



Waxed Concrete - Ash



Waxed Concrete - Ash



Waxed Concrete - Mineral



Waxed Concrete - Mineral



Waxed Concrete - Ash

Table of Content

Silex Guide Application Waxed Concrete smooth finish

Silex element Presentation

Terms and Conditions of Sale

Waxed Concrete mortar - smooth finish

Description

Application

Standard Formats and Packaging

Proper Use

Shipping Cost and Lead Time of Delivery

Cautionary Statement and Notice of Liability

Warranty

Materials and Tools

Storage, Handling and Rubble Disposal

Prior to Application

Mortar Mixing

Precautionary Measures and Drying Time

Waxed Concrete Application Technique

Sanding Coated Surface

Applying Silex Sealer

Applying Silex Varnish for Additional Protection of Floors & Shower Areas

Space Fitting

Lighting

Maintenance

Application Steps

Application Equipment List

Waxed Concrete- 1

Waxed Concrete- 1

Waxed Concrete- 1

Waxed Concrete- 4

Waxed Concrete- 4

Waxed Concrete- 5

Waxed Concrete- 5

Waxed Concrete- 5

Waxed Concrete- 6

Waxed Concrete- 6

Waxed Concrete- 7

Waxed Concrete- 8

Waxed Concrete- 8

Waxed Concrete- 9

Waxed Concrete- 10

Waxed Concrete- 10

Waxed Concrete- 10

Waxed Concrete- 10

Waxed Concrete- 10

Waxed Concrete- 10

Waxed Concrete- 11

Waxed Concrete- 12

Contact Page

STANDARD FORMATS AND PACKAGING

Remember to add 10% additional surface area ft² to your order, to ensure enough materials for application.

The kits are supplied in 100% recyclable containers.

Silex Waxed Concrete Wall Kits	3 standard formats for surface areas of: 30 ft ² 55 ft ² 120 ft ²	<u>Silex Waxed Concrete Wall Kit</u> - Pigmented concrete powder mix of very fine mortar - Finishing Silex Sealer Kit suitable for indoor applications of substrate not exposed to moisture, such as walls and ceilings. Use this kit on wood panels (MDF), plasterboard or gypsum boards, to enhance a fireplace or for an accent wall. For example: 19 kg (42 lbs.) of concrete mix and 0,8 L (27 oz) of sealer for a ±100 ft ² surface area.
Silex Waxed Concrete Floor & Shower Kits	Two standard formats for surface areas of: 25 ft ² 50 ft ² 110 ft ²	<u>Silex Waxed Concrete Floor & Shower Kit</u> - Pigmented concrete powder mix of very fine mortar - Strengthening Silex Admixture - Finishing Silex Sealer - Protective Silex Varnish Kit suitable for indoor applications in damp environments or high traffic areas. Use this kit for floor or shower area, in kitchen, and on porous surfaces (plaster, brick, concrete...), or on tiled substrate surfaces (with grout spacing), which require specific preparation before the Waxed Concrete application (contact Silex element for more detailed information). For example: 19 kg (42 lbs.) of concrete mix, 4.75 L (1.25 gal.) of admixture, 0.8 L (27 oz) of sealer, and 1 L (33.8 oz) of varnish for a ±100 ft ² area.

PROPER USE

Waxed Concrete is a 2 mm (1/16") thick direct application coating applied in two very thin layers. It is suitable for indoor use on new or already painted substrates, such as wood panels (MDF), plasterboard or gypsum boards. **Waxed Concrete** can be applied directly to old tiles or to a concrete floor, with additional surface preparation (contact Silex element for additional information). **Waxed Concrete** cannot be applied to glass, metal or to a wood floor planks. With its fire and water resistant, and antibacterial properties, once applied, **Waxed Concrete** is perfectly suited for fireplaces contours, on floors and in damp environments.

Images shown in this document are not contractual. Visuals and pictures are used for illustrative purposes of colors and projects possibilities. **For materials natural color variations, order product samples.**

Depending on substrate, project might require: two layers of **Waxed Concrete**, two coats of **Silex Sealer**, and three coats of **Silex Varnish** to strengthen and protect most exposed and solicited surfaces. Refer to **Silex Guide Application Waxed Concrete smooth finish**, downloadable from <https://silexelement.com>.

SHIPPING COST AND LEAD TIME OF DELIVERY

Shipping costs are invoiced in addition depending on freight weight, size, quantity, and destination.

Lead time of delivery for **Waxed Concrete** Kits, varies based on inventory at hand, from **5 to 10 business days**, including preparation, handling, and transport time, depending on product SKU, color, size, and quantity ordered. **Order recipients must check their emails (including junk mails) for the order shipping date confirmation notice.**

CAUTIONARY STATEMENT AND NOTICE OF LIABILITY

Before using Silex element products, the user has a duty of inquiry to ensure products are suitable for the purposes for which they are intended, and the user must verify order content upon delivery (color, size, quantity, and goods condition). The user will bear any, and all risks, and liability of whatever nature.

Follow Silex recommendations for handling, storage, and application of the product.

Refer to [Silex Guide Application Waxed Concrete smooth finish](#).

Silex Waxed Concrete cannot be used as structural support. It should not be applied outdoors. Only **Silex Waxed Concrete Floor & Shower Kits** are suitable for floors, high traffic surfaces, particularly humid environment, and direct contact with water, such as shower areas.

***** ANY OPEN CONTAINER, PRODUCT INSTALLED OR APPLIED WILL NOT BE REPLACED NOR REFUNDED *****

Keep out of reach of children!

WARRANTY

No warranty is applicable for applied **Waxed Concrete** products or if applied surface has undergone damage caused by a third party or due to faulty substates. There is no guarantee on anticipated results.

Read Silex Terms and Conditions of Sale readily available on Silex Website.

MATERIAL & TOOLS

Recommended Silex products

- **Silex Floor & Wall Primer**, optional per substrate required priming
- **Silex Waxed Concrete Wall Kit**
- **Silex Waxed Concrete Floor & Shower Kit**
- **Silex Sealer**, provided in **Silex Waxed Concrete Kits**
- **Silex Admixture**, strengthener included in **Silex Waxed Concrete Floor & Shower Kits**
- **Silex Varnish**, protector included in **Silex Waxed Concrete Floor & Shower Kits**

Resources

Downloadable on silexelement.com/pages/guides

- **Silex Guide Application Waxed Concrete smooth finish**

Tools and equipment

Refer to appendix tables under **Equipment list for installation**, and to **Silex Glossary Tools and Equipment**.

STORAGE, HANDLING AND RUBBLE DISPOSAL

Upon reception, check products comply with initial order (shade, products, and quantities). 100% recyclable containers can be heavy, they are to be handled with care. Do not store products in direct sunlight, in full heat or below 5° C (41° F). Store products in a dry place, away from moisture and cold.

To reduce your ecological footprint, store concrete residues in a container for rubbles. **Do not throw anything into drains.** Bring renovation waste, including bulk concrete aggregates, to your local sorting center or eco-center.

Waxed Concrete contains cement and can cause irritations. Trowel edges are sharp like razor blades!

***** Wear protective equipment when handling and applying product. *****

PRIOR TO APPLICATION

Contact Silex element at sales@silexelement.com for more detailed information.



First and foremost, carry out any required repair work (water leak or infiltration, structural consolidation, etc.) **on the surface area to be coated**, if substrate shows roughness or cracks due to building structural displacements or unsettled damages. The **Waxed Concrete** coating will NOT cover up any **pre-existing defects**, which will, in time, resurface on the **Waxed Concrete**.



The substrate surface area must be **solid, sound, without cracks, degreased, clean, dry, and dust-free** for better adhesion of the coating.



It is recommended to conduct mortar tests on the substrate to be surfaced.

Wall and ceiling surface areas preparation



The **Waxed Concrete** application can be done on **new or already painted walls and ceilings**, repaired, and cleaned as recommended. If the wall is covered with wallpaper, remove the wallpaper completely, clean and prepare the surface so it is uniform, to avoid color variations on finished coated surface.

Floor & shower surface area preparation



For new shower build or complete shower renovations, remember to **lay a waterproofing membrane**, as for ceramic tile installation, **before Waxed Concrete is applied**.



Floor surface area must be repaired and primed with **Silex Floor & Wall Primer** (contact Silex for additional information), **before Waxed Concrete is applied**.



A **porous surface** (paster, brick, concrete block, etc.) must be repaired and primed with **Silex Floor & Wall Primer** (contact Silex for additional information), **before Waxed Concrete is applied**.



An **epoxy surface** must be sanded and dusted beforehand. Any cracks must be sealed.



A **tiled surface** (any material with joints) must be repaired and primed with **Silex Resurfacing**, to fill and level joint spaces, and with a coating of **Silex Sealer** (contact Silex for additional information), **before Waxed Concrete is applied**.

Surface area preparation for heated flooring



It is possible to install **heated flooring** before coating with **Waxed Concrete**. Install the heated flooring as recommended by the manufacturer. Ensure to use a self-leveling product, then prime the floor with **Silex Floor & Wall Primer** (contact Silex for additional information), **before Waxed Concrete is applied**.

Application temperature and duration



Temperature of application should be between 5° C and 25° C (41° F and 77° F), ideally between 15° C and 20° C (**59° F and 68° F**). The **duration of use** of the **Waxed Concrete** mortar, at 20° C (**68° F**) is **20 min.**, time frame which allows to resurface about **20 ft²**.

MORTAR MIXING

The **Waxed Concrete** is a pigmented powder that requires to be mixed with clear water, to make a very fine mortar for walls and ceilings, or with provided **Silex Admixture** for floors and showers resurfacing. Plan the right amount of mortar batch, 4 kg (8.8 lbs.) at most, as **mix duration of use is approximately 20 min.**

Wall Kits - Powder and Water



Waxed Concrete contains cement and can cause irritations. Trowel edges are sharp like razor blades! Wear protective equipment when handling and applying product.



For a first mixture batch, use a maximum of 4 kg (8.8 lbs.) of powder for ± 1 L (33.8 oz) of clear water. **Powder-water mix is 4-parts powder to 1-part clear water.** Use a measuring cup to add water. In a clean bucket, pour powder and add 90% of recommended water amount. Mix by hand or with a mortar mixer with hexagonal shaft, or with a drill-mixer. Depending on consistency, add more water. **Make note the total amount of water added to keep the same powder-to-water ratio for all mixture batches, to avoid large variations of color shading.** Mixture should be homogeneous, lump-free, and smooth, but able to hold on the trowel. Let **mortar rest for 5 min.** before starting application.

Floor & shower Kits - Powder and Admixture



Waxed Concrete contains cement and can cause irritations. Trowel edges are sharp like razor blades! Wear protective equipment when handling and applying product.



For a first mixture batch, use a maximum of 4 kg (8.8 lbs.) of powder for ± 1 L (33.8 oz) of **Silex Admixture**. **Powder-admixture mix is 4-parts powder to 1-part admixture.** Use a measuring cup to add admixture. In a clean bucket, start by pouring 50% of the powder quantity, then add 50% of the admixture amount. Mix by hand or with a mortar mixer with hexagonal shaft, or with a drill-mixer. Finish off the mixture by adding the remaining admixture recommended quantity, then add the rest of the powder, and mix again. Depending on the desired consistency, add more adjuvant. **Make note of the total amount of adjuvant added to keep the same powder-to-adjuvant ratio for all mixture batches, to avoid large variations of color shading.** Mixture should be homogeneous, lump-free, and smooth, but able to hold on the trowel. Let **mortar rest for 5 min.** before starting the application.

PRECAUTIONARY MEASURES AND DYING TIME



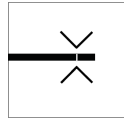
After each **Waxed Concrete**, **Silex Sealer**, or **Silex Varnish** coating: remove the protective painter's masking tape, **while substance is still moist. Clean tools immediately with water, before Waxed Concrete hardens.**



Protect the unfinished coated surface from wind, sun and frost, and the risk of stains and impairment, during drying and curing periods. Wait 12h to 24 h after each step before working on the surface again.

WAXED CONCRETE APPLICATION TECHNIQUE

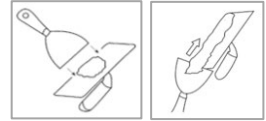
Apply **Waxed Concrete** mortar with a progressive rounded borders and angles stainless steel trowels, joint knife, or a plastic concrete trowel, in two 1 mm (1/25") thin crisscrossed coats, applied with different techniques.



If you run out of material, the applied coats might have been too thick.



Use the joint knife to place mortar on the trowel. Use **plasterer technique** to frequently recenter material on the trowel to reduce excess thickness. **Avoid large sweeping movements.** Use the joint knife to smooth edges and angles. **During application, avoid repetitive sweeping on the same areas.**



First coat of Waxed Concrete

The 1st coat of **Waxed Concrete** should be at least 1 mm (1/25") thick to serve as a decorative effects base.



Put painter's masking tape on outer edges of the surface area to protect from overflows.



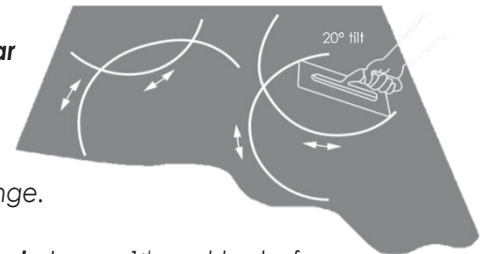
Apply with trowel's edge tilted at 20° angle, in **semi-circular crisscrossed sweeping movements**.



Use a damp grout sponge to **remove any mortar excess and to even out the layer**. After each pass, rinse and wring out sponge.



Before mortar fully hardens, **remove masking tape and clean tools**. Leave 1st coat to dry for 12h to 24h, depending on room temperature. **Protect unfinished surface from stains and impairment.**



Second coat of Waxed Concrete

The 1st coat should be fully dry before applying the 1 mm (1/25") thick 2nd and final **Waxed Concrete** coat.



Put painter's masking tape on outer edges of the surface area to protect from overflows. **Remove 1st coat aggregates by graining the dry surface with the joint knife.**



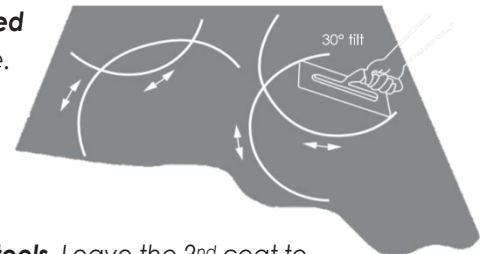
With more pressure, apply in semi-circular crisscrossed sweeping movements with trowel's edge tilted at 30° angle. This technique delivers a smoother, thinner, and denser coat.



The stainless steel trowel could leave dark marks. **For lighter shade mortar, smooth the surface with a plastic trowel.**



Before mortar fully hardens, **remove masking tape and clean tools**. Leave the 2nd coat to dry for at least 24h. **Protect unfinished surface from stains and impairment.**



SANDING COATED SURFACE

After 24h of drying time for the 2nd coat, proceed with the sanding phase, to smooth surface, and bring out the raw finish of the material.



*Sand the surface with a grain of 120 then 220 to smooth out irregularities. For large surfaces use an orbit sander. After sanding, **thoroughly dust off the surface with a wet sweep, then allow to air dry. Protect unfinished surface from stains and impairment.***

APPLYING SILEX SEALER

The **Silex Sealer** application phase can begin once surface has been thoroughly sanded, dusted, wiped clean, and is completely dry. If the surface is insufficiently primed, dust grains could rise-up to the surface with the sealer application. **Apply one (1) coat of Silex Sealer for walls or ceilings, and two (2) coats for floors or showers areas**, for added protection of heavily used surfaces.



*Put painter's masking tape on outer edges of the surface area to protect from overflows. Pour **Silex Sealer** into a paint tray. **Begin application at the corners and edges with a stain and paint brush.** Then apply sealer to the entire surface with a **stain pad, in a thin layer, leaving no extra thickness.** The **Silex Sealer** should be applied to **fully penetrate and saturate all surface pores**, to seal the concrete. Remove excess fluids and drips with a clean microfiber cloth. While drying, **protect the surface from stains and impairment.** Wait at least 6h between each coat.*

APPLYING SILEX VARNISH FOR ADDITIONAL PROTECTION OF FLOOR & SHOWER AREAS

Allow for at least 24h of sealer drying time before proceeding with the varnishing phase. **Apply three (3) Silex Varnish coats to protect high traffic floors and shower surfaces.**



*Colorless **Silex Varnish** provides enhance surface protection. Temperature of application should be between 5° C and 25° C (41° F and 77° F), ideally between 15° C and 20° C (**59° F and 68° F**). Put painter's masking tape on outer edges of surface area to protect from overflows. Apply 3 coats using a slit foam lacquer roller (water washable). **Wait 12h between each coat and at least 24h after the last coat before walking on the floor area or using the shower.** Protect unfinished surface from stains and impairment.*

SPACE FITTING



***Maximum hardening of a water-based varnish is reached approximately 20 days** after application. It is recommended to **wait at least 1 week before placing heavy furniture on the varnished surface**, to prevent potential floor markings.*



*It is possible to drill through the finished **Waxed Concrete** surface onto the structural substrate support, to install wall art works, a door stopper on the floor, or a soap dish in the shower. Once all stages of **Waxed Concrete** applications have been completed, screw with tools appropriate to the structural support material behind the **Waxed Concrete** (wood, MDF, concrete, etc.)*

LIGHTING

Design the best lighting that will highlight the variations of visual and texture effects, as the finished surface will absorb or reflect light, depending on the exposure and the light colors used.

MAINTENANCE

Waxed Concrete surfaces can be easily cleaned with mild organic products, and sponge soaked in lukewarm water and wrung out. Wipe with a clean cloth and let air dry.

APPLICATION STEPS

Read **Silex Guide Application Waxed Concrete smooth finish** (downloadable on silexelement.com/pages/guides) and refer to helpful tips for each step.

1. Make sure appropriate products' quantities have been ordered
2. Open packaging, verify content, and prepare required tools, accessories, and protective equipment
3. Repair and prime substrate surfaces, if necessary
4. Cover floor and/or furniture with protective sheets
5. Clean and prepare surface area
6. Put painter's masking tape on surface area outer edges
7. Use at most 4 kg (8.8 lbs.) of powder mix for a 1st batch. N.B. mix duration of application is \pm 20 min.
8. Apply 1st 1 mm (1/25") coat of **Waxed Concrete** according to recommended technique
9. Before mortar hardens, remove painter's masking tape and clean tool. Let surface dry
10. Protect unfinished surfaces from stains and impairment
11. Repeat steps 6 to 9 for the 2nd 1 mm (1/25") **Waxed Concrete** coat
12. After 24h of drying time, sand, dust off, and wet sweep surface. Let surface dry.
13. Apply **Silex Sealer** coats
14. For floor and shower areas, apply (3) three coats of **Silex Varnish**
15. Do not walk on floor area nor use shower for at least 24h
16. Wait 1 week before setting heavy furniture on finished floor
17. Bring renovation rubbles to a sorting center or eco-center
18. Design the best lighting to highlight **Waxed Concrete** unique shade variations

Application Equipment List






Table listing Silex element products for **Waxed Concrete - smooth finish**.

	Waxed Concrete Application
Silex Waxed Concrete Wall Kit Pigmented mortar powder 6 kg (13 lbs.) for 30 ft ² , 15 kg (33 lbs.) for 55 ft ² and 22.7 kg (48.5 lbs.) for 120 ft ² Applicable sealer quantity	√
Silex Waxed Concrete Floor & Shower Kit Pigmented mortar powder 15 kg (33 lbs.) for 50 ft ² and 22.7 kg (48.5 lbs.) for 110 ft ² Applicable admixture, sealer, and varnish quantities	√
Silex Sealer Colorless, satin, or matte finish Ref.: 946 ml (32 oz) - 2-coat coverage of ± 112 ft ²	Included in all Kits Protection of coated surfaces
Silex Admixture Ref.: 2.5 L (0.66 gal.) for ± 50 ft ² surface	Included in Floor & Shower Kits
Silex Varnish Colorless, satin, or matte finish Ref.: 946 ml (32 oz) - 2-coat coverage of ± 90 ft ²	Included in Floor & Shower Kit Additional protection of backsplashes and high-traffic areas
Silex Floor & Wall Primer Contact Silex element	Optional Subject to substrate priming requirement
Silex Resurfacing Contact Silex element	Optional Subject to substrate priming requirement
Find accessories available on Silex Website	Visit www.silexelement.com
Quantity conversion in US units	

Table of required tools and equipment for Silex **Waxed Concrete - smooth finish** application.

	Tools and equipment	Waxed Concrete Application
Safety eyewear		√
Dust mask		√
Gloves		√
Bucket for mortar mixing		√
Container for rubbles		√
Grout sponge		√
Joint knife 4" or 5"		√
Measuring cup		√
Microfiber cloths		√
Paint tray		√
Painter's masking tape		√
Progressive rounded borders and angles stainless steel trowel		√
Protective sheets		√
Sandpaper sheets 120 & 220 grit		√
Slit foam lacquer roller		√
Stain and paint brush		√
Stain pads		√

Table of optional tools and equipment for Silex **Waxed Concrete - smooth finish** application.

	Tools and equipment	Waxed Concrete Application
Dust extractor		Optional To dust
Mortar mixer with hexagonal shaft		Optional Mortar mixing
Drill with masonry drill bit		Optional Mortar mixing
Plastic concrete trowel		Optional For lighter shades
Orbit sander		Optional For larger surfaces