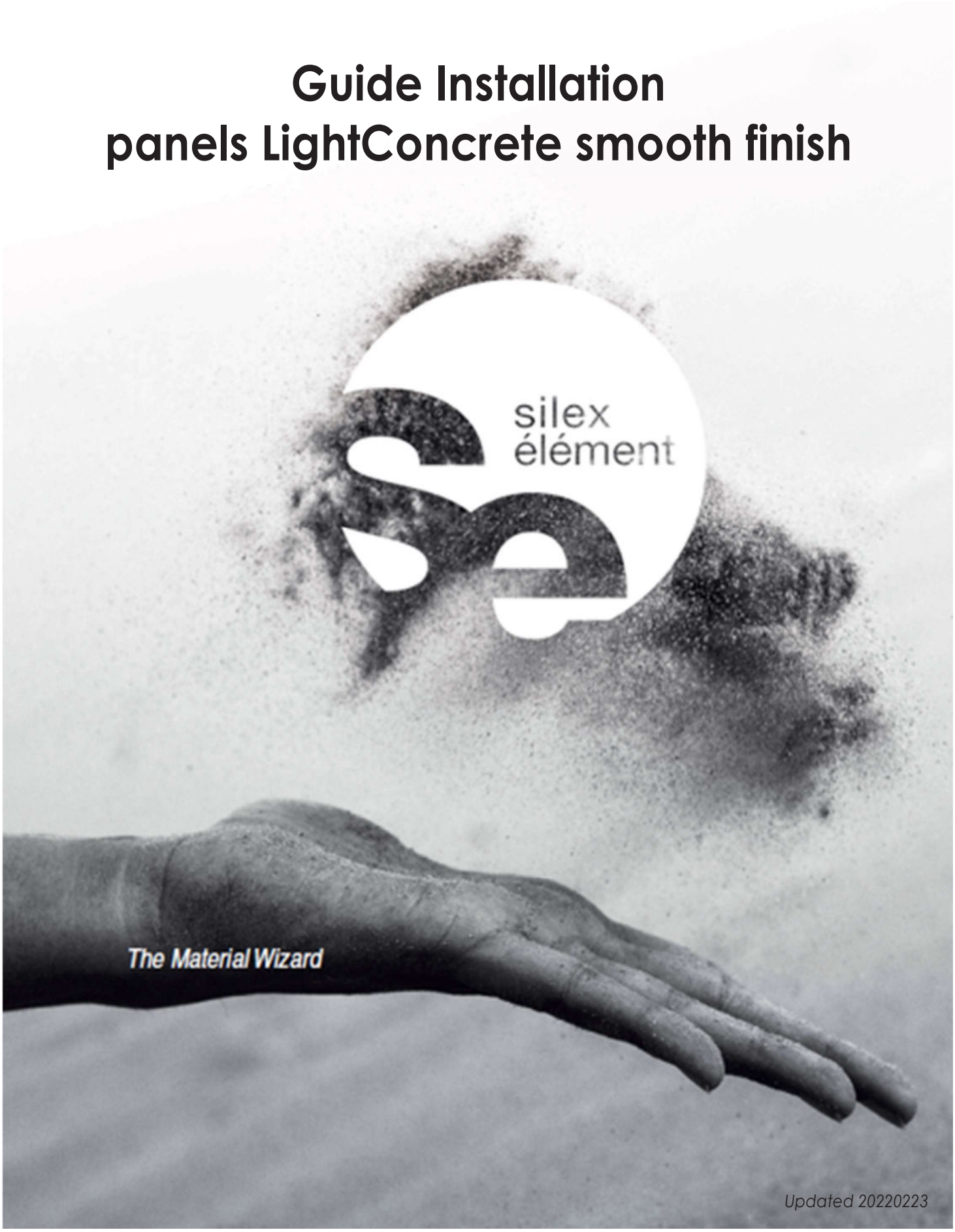
Guide Installation
panels LightConcrete smooth finish



Updated 20220223

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LightConcrete - smooth finish

Ultralight smooth concrete decorative panel

STANDARD FORMATS

6" x 48"	24" x 48"
8" x 48"	24" x 72"
24" x 96"	48" x 96"

COLORS

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

Natural

Limestone

Mineral

Ash

Slate

FINISH Satin or matte

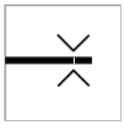
DESCRIPTION

The handmade ***LightConcrete*** panel is thin, ultralight, and easy to handle during fitting. Once installed, it exhibits concrete nuanced smooth look and feel, without the environmental impact of solid concrete, contributing to reducing carbon footprint. The panel is easy to install with the recommended adhesive (see **Silex Guide Installation panels LightConcrete smooth finish**), and easy to clean with mild organic products.

APPLICATION

The ***LightConcrete - smooth finish*** panel is perfect for commercial and residential interior design in reception halls, meeting rooms, family rooms or dining rooms, or even in bathrooms! With its properties and design, ***LightConcrete*** panels are an ideal choice for architects, builders, designers, and homeowners looking to differentiate their projects.

Thinness ± 5/16" ±0.7%

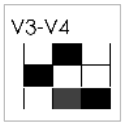


Ultralight 1.9 lbs./ft²

Easy to clean with mild organic products

Antibacterial

Color variations, inherent to concrete material, color shade sensitive



Fire resistant

Water resistant

LightConcrete - smooth finish 48" x 96" - Natural

LightConcrete - smooth finish 48" x 96" - Mineral

LightConcrete - smooth finish 48" x 96" - Limestone

LightConcrete - smooth finish 48" x 96" - Ash

PROPER USE

LightConcrete panels can be cut and installed on many substrates except glass and metal, ideally on fiber cement or drywall, on walls or ceilings. Once installed, the panels are fire and water resistant, and suited for fireplace surrounds or moist environments, for use as backsplashes or in bathrooms, or even in shower areas with the proper installation and additional surface protection. ***LightConcrete*** **panels should not be installed on floors.**

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.**

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 ***LightConcrete - smooth finish*** panels, varies based on inventory at hand, from **2 to 6 weeks**, including artisanal manufacturing, 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 installation of the product.

Refer to **Silex Guide Storage and Handling**, and **Silex Guide Installation panels LightConcrete smooth finish**.

The Silex *LightConcrete* panel cannot be used as structural support. It should not be installed outdoors, nor on floors, nor be in direct contact with water (i.e., shower area, basin, or pools) without appropriate installation and additional surface protection. It should not be in direct contact with intense heat source nor running water before installation. **Do not use water-based adhesive for installation**.

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

WARRANTY

Manufacturing defect warranty period for ***LightConcrete*** panels is 10 years with normal product usage, as recommended by Silex element.

As with any item made of concrete or metal, the panel finish may exhibit microcracks, irregularities and uneven surface, which do not compromise the integrity of the product. These singularities are not manufacturing defects but are an integral part of each panel's unique embellishment.

No warranty applies if the panel has been improperly transported, handled, or installed, or if it has undergone damage caused by a third party or due to faulty substates. See **Silex Guide Installation panels LightConcrete smooth finish**. There is no guarantee on anticipated results.

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

MATERIALS AND TOOLS, AS REQUIRED

Recommended Silex Products

- ADBOND EXTRÊME 5692 solvent-free hybrid construction adhesive (1 tube of 295 ml (10 oz) for ± 32 ft^2 of panels). **Do not use water-based adhesive for installation**.
- **Silex Finishing Mortar**, optional, similar color variation as panels, to fill in joint spaces.
- **Silex Touch-up Mortar**, optional, similar color variation as panels, to fill in any installation holes.
- **Silex Sealer**, optional, for additional protection of backsplashes, high traffic, and damp areas. Sealer is sufficient for any horizontal surface that does not require special protection.
- **Silex Varnish**, optional, is required for any damp environment, such as in bathrooms (do not install ***LightConcrete*** panels on the floor), and for horizontal high traffic areas, or for added protection of backsplashes and shower areas.

Resources

Downloadable on silexelement.com/pages/guides

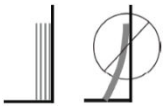
- **Silex Guide Installation panels LightConcrete smooth finish**
- **Silex Guide Storage and Handling**

Tools and equipment

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

TRANSPORTATION, STORAGE, HANDLING AND RUBBLE DISPOSAL

Transport panel packaging vertically on the long edge, and not flat, horizontally. Store them laterally lengthwise against a wall in a dry place, away from moisture and cold temperatures.



Remove panels from packaging and **check they comply with initial order** (color, format, quantity, and condition). Store them lengthwise against a wall, to avoid warping panels, or simply stack them flat on leveled ground. **Allow panels to absorb room humidity for about 24h before installation.**

Even if panels have a bending resistance, **large formats must be handled by at least two people** to lift horizontally on a plywood board for installation phase and transport vertically. For panel overturn, have one hand on each side (width & length) and be careful of panel corners. Refer to **Silex Guide Storage and Handling** in enclosed appendix.

To reduce ecological footprint, please take renovation wastes to your local recycling facility.

***** Wear protective equipment when handling, cutting, and installing panels. *****

PRIOR TO INSTALLATION

Substrate preparation

*Panels must be installed on a **flat smooth, clean, dry, and dust-free substrate** for better adhesive bond.*

*If **Silex Finishing Mortar** is not used to fill in the 2 mm (1/16") joint spaces, it is advised to **paint substrate surface area** with a color in harmony with panels' shades **before proceeding with the installation phase**, for a more pleasing final rendering.*

Panels must be straight (not curved) for the installation phase

*As any living material, a **panel can exhibit a slight curvature** due to a change in temperature. To return the panel to its original shape, lightly wet the back of the panel, then place it, finished side down, on a level surface, and evenly distribute weight on top, for 24h. It is possible to stack several panels.*

Do not press excessively on the panel to avoid damaging it during installation.
Do not put the panel in direct contact with intense heat or water.

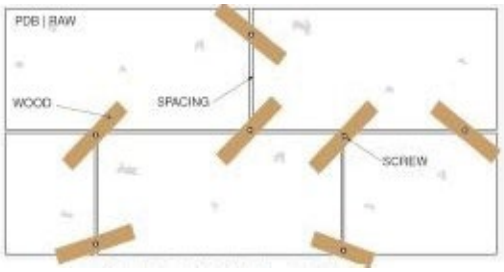
*Leave at least a **2 mm** (1/16") **spacing between panels** while installing with adhesive, for panel expansion. The space can be left as is or filled with **Silex Finishing Mortar** of similar color variation.*

*A **metal edge profile**, i.e., Schluter®, can be used (refer to manufacturer's Website for installation).*

***Installation technique for large 24" x 48" and 48" x 96" panels**, in addition to the adhesive, to strengthen the panel hold while the adhesive fully sets (24h).*

***Ceiling installation**: Place each panel (finished face down) on a smaller plywood board, which will act as a support for horizontal lifting of the panel to the ceiling, handled by at least two people. Apply adhesive and fix panel in place as recommended below.*

***Wood shims best option**: use self-drilling screws suitable to substrate behind panels. Screw in temporary wood shims into joint spaces to hold each panel in place while the adhesive fully sets.*



***Nailing option**: use finishing nails (18 Ga) with appropriate gun pressure in order not to damage panel.*
***Installation holes fill in option**: use **Silex Touch-up Mortar**, of a similar panel color variation, to fill in any installation holes. Smooth off any mortar excess with a damp sponge.*

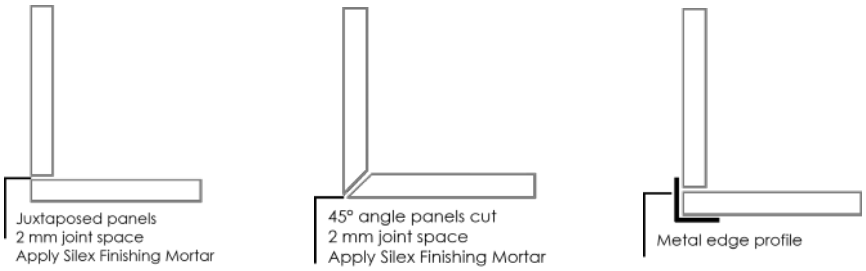
CUTTING

The cutting phase is to be carried out in a ventilated area with protective equipment against dust.

*Apply painter's masking tape onto surface to be cut, before proceeding. To cut panel full **length or width**, use a wet saw, an angle grinder, or a circular saw with a diamond blade, leaning against a guide rail, held by clamps. **Do not use a mechanical tile cutter**. Smooth cut edges with sandpaper.*

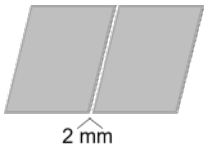
***To make an opening** (sockets, cables, etc.) apply painter's masking tape onto surface to be cut. To start the cut, drill a hole in the panel with a drill fitted with a concrete bit. Use an electric oscillating saw. Smooth cut edges with sandpaper.*

*Wall **corner junctions** can be done in several ways. Panels can be juxtaposed, cut at a 45° angle, or covered with a metal edge profile. Use a circular saw with a guide to make a 45 ° angle cut.*



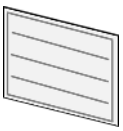
BONDING

Silex recommends the hybrid construction adhesive, isocyanate, phthalate and solvent free **ADBOND EXTREME 5692 (Adfast)** for panels installation onto a variety of substrate (1 tube of 295 ml (10 oz) for ± 32 ft² of panels). Refer to the manufacturer's recommendations. **Do not apply water-based adhesive to panels**. Leave a 2 mm (1/16") joint space for panel expansion.



***For horizontal panel installation**: apply ADBOND EXTREME 5692 adhesive, using a caulking gun, around the entire perimeter of the panel, at least 1.5" from the edge, and inside in horizontal lines ± 8" apart.*

***For vertical panel installation**: apply ADBOND EXTREME 5692 adhesive, using a caulking gun, around the entire perimeter of the panel, at least 1.5" from the edge, and inside in vertical lines ± 8" apart.*



SILEX FINISHING MORTAR

Silex Finishing Mortar is available in a similar shade as the finished panels. The mortar can be used to fill in temporary large panel installation holes and/or joint spaces. The **Silex Finishing Mortar** is a premixed and pre-colored powder.

Mortar mixture ratio *is 3.5 parts of powder to 1 part of water. Let mixture stand for 5 min. before use. Mixture should be smooth but able to hold into the trowel on its own. Keep the same ratio for all mixtures. To fill the joints, first apply painter's masking tape to panels outer edges to protect them from overflows. Humidify joint spaces with a wrung out sponge so mortar bond would be optimal. Apply mortar in joint spaces with a joint knife. Use a damp sponge to remove any excess and to even out. Rinse and wring out the sponge with each pass. Remove painter's tape while the mortar is wet. The mortar sets in about 15 min.*

SILEX SEALER

One coat of colorless **Silex Sealer** has been applied in the finishing phase of the manufacturing process. After installation, an additional coat of **Silex Sealer** should be applied on site, for increased protection of backsplashes, high traffic areas and solicited surfaces. Surface should be thoroughly dusted, wiped clean, and fully dry before application.

*Temperature of application of Silex Sealer 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. Pour sealer into a paint tray. Begin application on corners and edges with a stain and paint brush, then apply sealer over the entire surface in a thin layer with no extra thickness. Remove excess liquids and drips with a clean microfiber cloth. While drying, protect the unfinished surface from stains and damage. Remove painter's masking tape while sealer is still damp.*

SILEX VARNISH

Silex Sealer provides sufficient protection for unsolicited horizontal surfaces. The **Silex Varnish** is required for installation in moist environments, such as bathrooms, in the shower area, and for highly solicited horizontal surfaces, or for adequate protection of kitchen backsplashes. Do not install ***LightConcrete*** panels on the floor. Up to two coats of colorless **Silex Varnish**, satin, or matte finish, can be applied. Allow at least 24h for the last coat to dry.

*Temperature of application of **Silex Varnish** 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**). Apply painter's masking tape on outer edges of the surface area to protect from overflows. Apply using a slit foam lacquer roller (water washable). **Wait 24h between each coat**. During drying time, protect surface from stains and impairment. Remove painter's masking tape while varnish is still damp.*

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

LightConcrete panels 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.

INSTALLATION STEPS

Refer to **Silex Guide Installation panels LightConcrete smooth finish** (downloadable on silexelement.com/pages/guides) and to shared tips for each step.

1. Make sure appropriate products' quantities have been ordered with an installation diagram
2. Open packaging, verify content, and prepare required tools, accessories, and protective equipment
3. As required, prepare and prime substrate surface
4. Verify levels and measurements, including the 2 mm (1/16") joint spaces between panels
5. If panels exhibit a slight curvature, refer to Silex technique and tips to revert to original shape
6. Cover floor and furniture with protective sheets, and proceed with surface preparation
7. Follow Silex recommendations for panel cutting, and sand edges if necessary
8. Handle large panels by two people, and use a plywood board for horizontal lifting as instructed
9. Apply bonding adhesive to panel back side
10. Do not forget to account for a 2 mm (1/16") joint space during panel installation
11. For swifter bonding, and for larger panels, use temporary wood shims
12. After the adhesive fully sets (24h), remove temporary wood shims
13. Protect panels edges with painter's masking tape for the following applicable steps
14. Optional finishing: fill in joint spaces with **Silex Finishing Mortar**
15. Optional finishing: fill in installation holes with **Silex Finishing Mortar** or **Silex Touch-up Mortar**
16. Apply **Silex Sealer** and/or **Silex Varnish** to high-traffic area, solicited surface, bathroom, or backsplash
17. Bring renovation wastes to the local recycling facility
18. Design the best lighting to highlight panels visual and texture effects and variations

Installation Equipment List

Table listing Silex element products for **LightConcrete - smooth finish**.

	LightConcrete Panel installation
Recommended by Silex: **ADBOND EXTRÊME 5692 hybrid construction adhesive** 1 tube of 295 ml (10 oz) for ± 32 ft² of panels	To add to initial order based on total panel ft²
Silex Finishing Mortar Pigmented powder in similar shade variation as panel color Designed for LightConcrete panels Ref.: 1 kg (2.20 lbs.) for ± 40 ft²	Optional Joint spaces
Silex Touch-up Mortar Pigmented powder in similar shade variation as panel color Designed for LightConcrete panels Ref.: 0.45 kg (1 lb.) for ± 20 ft²	Optional To fill in installation holes
Silex Sealer Colorless, satin, or matte finish Ref.: 946 ml (32 oz) for 2-coat coverage of ± 120 ft²	Optional For additional protection of backsplashes and high-traffic areas
Silex Varnish Colorless, satin, or matte finish Ref.: 946 ml (32 oz) for 2-coat coverage of ± 100 ft²	Optional For extra protection of backsplashes and high-traffic areas
Find accessories available on Silex Website	Visit www.silexelement.com

Quantity conversion in US units

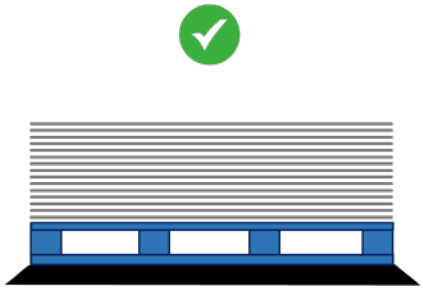
Table of required tools and equipment for Silex **LightConcrete - smooth finish** panel installation.

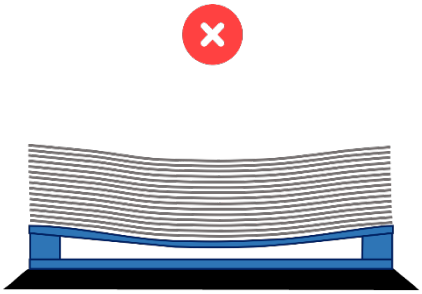
Tools and equipment	LightConcrete Panel installation
Safety eyewear	√
Dust mask	√
Gloves	√
ADBOND EXTRÊME 5692 **Hybrid construction adhesive** 1 tube of 295 ml (10 oz) for ± 32 ft² of panels	√
Angle square	√
Beam level	√
Caulking gun	√
Circular saw with a diamond blade	√
Container for rubbles	√
Dust extractor	√
Electrical oscillating saw	√
Installation diagram	√
Microfiber cloths	√
Protective sheets	√
Wet saw	√

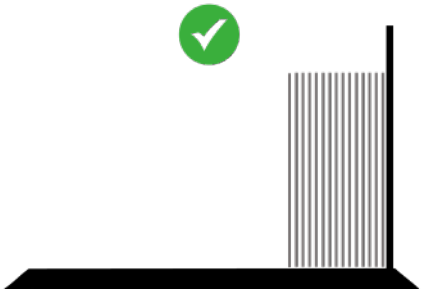
Table of required and optional tools and equipment for Silex product installation.

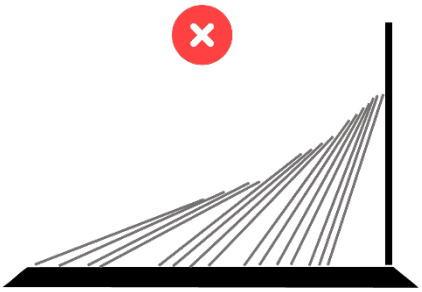
Tools and equipment	LightConcrete Panel installation
Angle grinder	√ Cutting angles
Clamps	√ Cutting length
Guide rail for saw	√ Cutting length
Sandpaper sheets 120 & 220 grit	Optional Sanding
Plywood board slightly smaller than larger size panels	√ Large panels Handling
Drill with masonry drill bit	Optional Large panels
Finishing nails (18 Ga)	Optional Large panels
Nail gun	Optional Large panels
Self-drilling screws	Optional Large panels
Wood shims	Optional Large panels
Grout sponge	Optional Mortar
Joint knife 4" or 5"	Optional Mortar
Measuring cup	Optional Mortar
Painter's masking tape	Optional Mortar/Sealer/Varnish
Paint tray	Optional Sealer/Varnish
Slit foam lacquer roller	Optional Sealer/Varnish
Stain and paint brush	Optional Sealer/Varnish
Metal edge profile (i.e., Schluter®)	Optional
Laser level	Optional

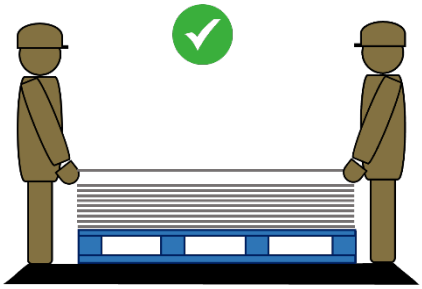
Silex Guide Storage and Handling

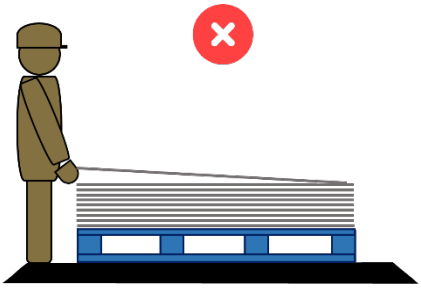




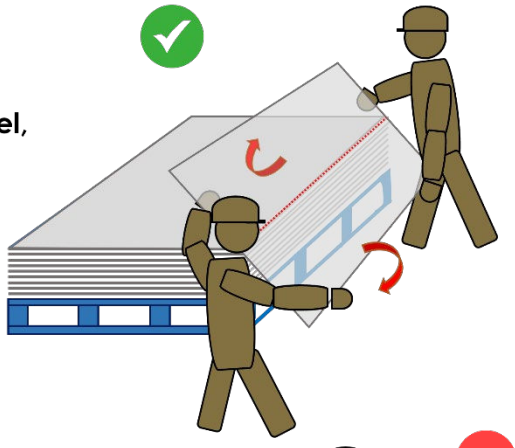


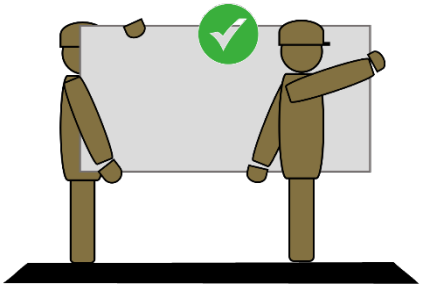


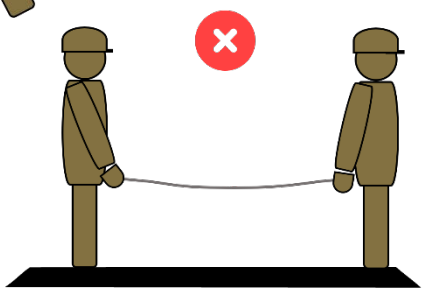




To avoid bending the center of the panel, lean on stack pile to rotate the panel vertically.







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