

# Guide Installation panels PDB Concrete skin raw finish



*The Material Wizard*

updated 20220223

# Table of Content

## Silex Guide Installation panels PDB Concrete skin raw finish

<b>Peau de Béton™ - PDB Concrete skin - raw finish</b>	<b>PDB-raw finish- 1</b>
Description	PDB-raw finish- 1
Application	PDB-raw finish- 1
Panels Standard Formats and Packaging	PDB-raw finish- 4
Custom-Made Formats	PDB-raw finish- 4
Proper Use	PDB-raw finish- 4
Shipping Cost and Lead Time of Delivery	PDB-raw finish- 5
Cautionary Statement and Notice of Liability	PDB-raw finish- 5
Warranty	PDB-raw finish- 5
Materials and Tools, as required	PDB-raw finish- 6
Transportation, Storage, Handling and Rubble Disposal	PDB-raw finish- 6
Prior to Installation	PDB-raw finish- 7
Cutting	PDB-raw finish- 8
Bonding	PDB-raw finish- 8
Silex Finishing Mortar	PDB-raw finish- 9
Silex Sealer	PDB-raw finish- 9
Silex Varnish	PDB-raw finish- 9
Lighting	PDB-raw finish- 9
Maintenance	PDB-raw finish- 9
Installation Steps	PDB-raw finish- 10
Installation Equipment List	PDB-raw finish- 11

Guide Storage and Handling

Contact Page

# PDB Concrete skin - raw finish

Ultralight raw concrete decorative panel



## STANDARD FORMATS

8" x 48"      16" x 48"  
24" x 48"      48" x 96"

## COLORS



Ozone



Earth



Oxygen



Nickel



Xenon

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

**Onyx Set** - Combination of colors: 60% of Nickel, 30% of Xenon, and 10% of Oxygen.

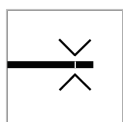
## DESCRIPTION

*Peau de béton™* (PDB) - **PDB Concrete skin**, Silex's flagship product, is made from a high performance concrete microlayer fused to a 1/4" mineral fiber and magnesium oxide blended board and is protected by a water-based sealer. The handmade production process enables to create one of a kind ultralight PDB panels, each revealing their own textures and patterns. Because of the natural materials used, PDB is an eco-responsible product. Its appearance and texture are identical to "real" concrete. Fire and mildew resistant, PDB panels are easy to handle and simple to install with the recommended construction adhesive (see [Silex Guide Installation panels PDB Concrete skin raw finish](#)).

## APPLICATION

**PDB Concrete skin** is ideal for indoor application for residential and commercial projects. Depending on the desired effect, panels can be installed horizontally or vertically. They should not be exposed directly to water (shower area) or to intense heat.

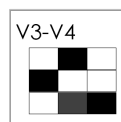
Thickness:  $\pm \frac{3}{16}$ "  
 $\pm 0.7\%$



Ultralight  
2.8 lbs./ft<sup>2</sup>



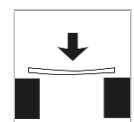
Color variations, inherent  
to concrete material,  
color shade sensitive



Splatter resistant



Bending resistance  
ASTM C348 > 11.4 MPa





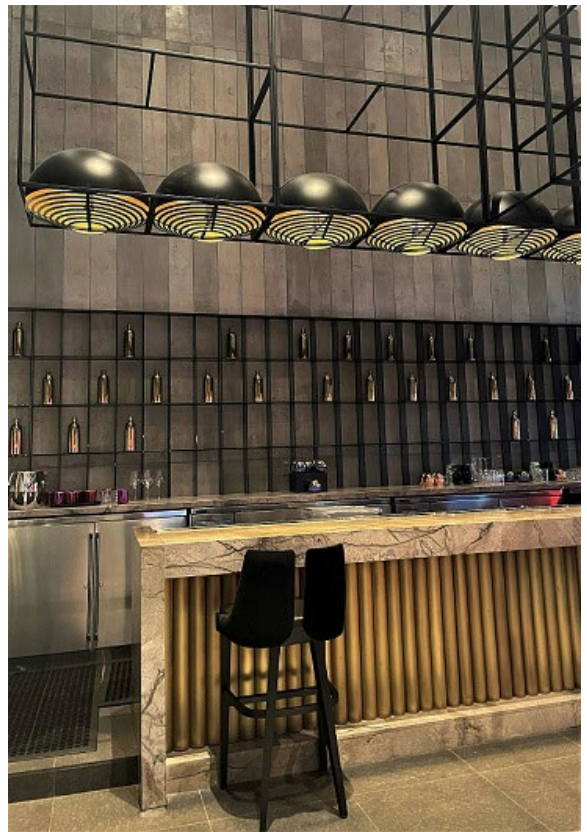
PDB Concrete skin - raw finish 48" x 96" - Oxygen



PDB Concrete skin - raw finish 16" x 48" - Ozone



PDB Concrete skin - raw finish 8" x 48" - Xenon



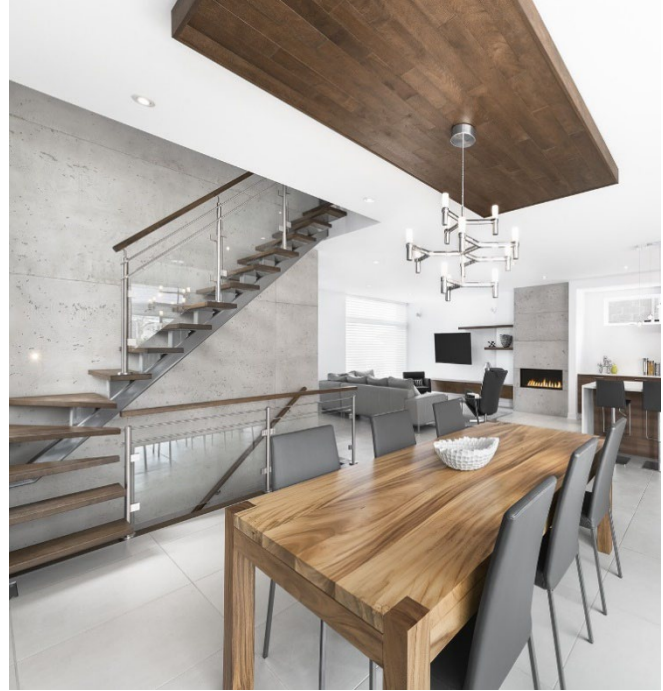
PDB Concrete skin - raw finish 8" x 48" - Oxygen



PDB Concrete skin - raw finish 8" x 48" - Nickel



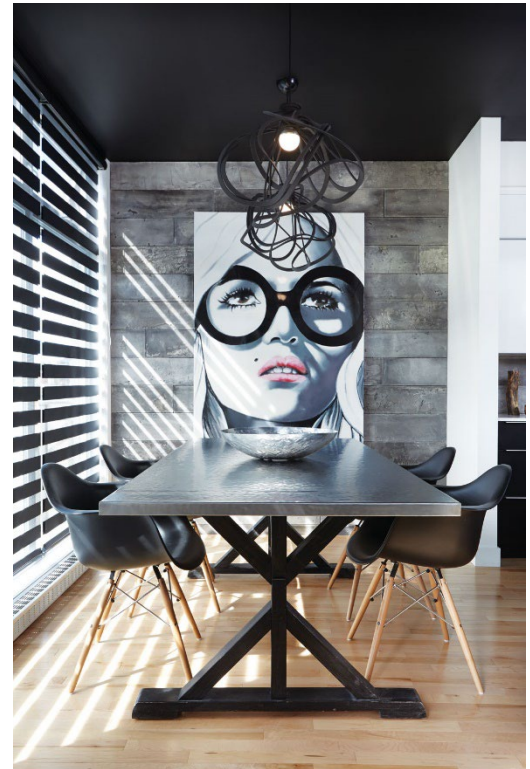
PDB Concrete skin - raw finish 8" x 48" - Xenon



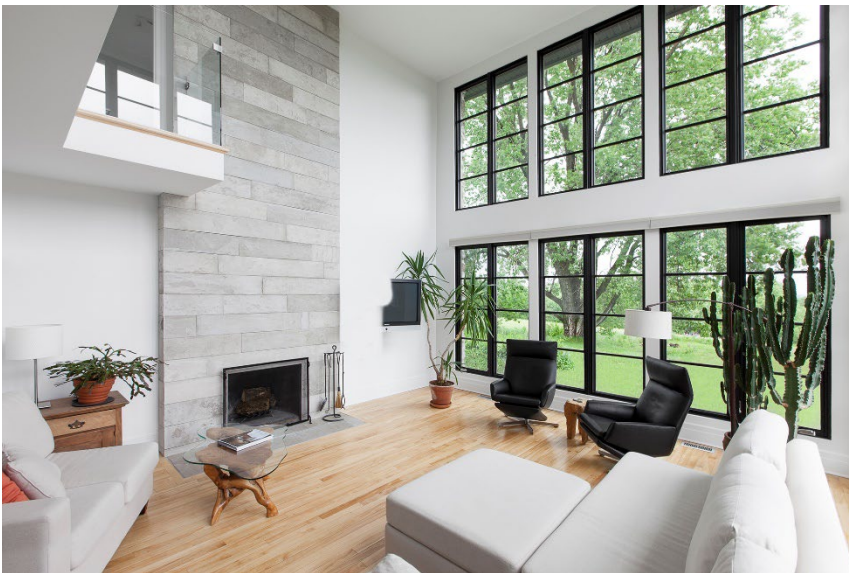
PDB Concrete skin - raw finish 24" x 48" - Oxygen



PDB Concrete skin - raw finish 24" x 48" - Earth



PDB Concrete skin - raw finish 8" x 48" - Oxygen & Nickel



PDB Concrete skin - raw finish 8" x 48" - Ozone

## PANELS STANDARD FORMATS AND PACKAGING

<b>8" x 48"</b> (2.7 ft <sup>2</sup> )	4 panels per case (48 cases per pallet)
<b>16" x 48"</b> (5.3 ft <sup>2</sup> )	2 panels per case (46 cases per pallet)
<b>24" x 48"</b> (8 ft <sup>2</sup> )	2 panels per case (30 case per pallet)
<b>48" x 96"</b> (32 ft <sup>2</sup> )	Minimum order: 4 panels (one pallet)

Panel measurement tolerance: ± 0.5%

## CUSTOM-MADE FORMATS

Custom sizes are available for large projects, at the same price per ft<sup>2</sup> as 48" x 96" panels, with additional applicable cutting charges. Contact Silex element at [sales@silexelement.com](mailto:sales@silexelement.com) for additional information.

## PROPER USE

**PDB Concrete skin** 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 heat and mold resistant, and suited for fireplace surrounds or moist environments, for use as backsplashes or in bathrooms. **PDB Concrete skin panels cannot be installed in shower area, on floors, nor on substrates exposed to heat over 200°C (392°F).**

Images presented 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 **PDB Concrete skin - raw 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 PDB Concrete skin raw finish](#).

**Silex PDB Concrete skin panels cannot be used as structural support.** They should not be installed outdoors, on floors nor be in direct contact with water (i.e., shower area, basin, or pools). They 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 **PDB Concrete skin** 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 PDB Concrete skin raw 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<sup>2</sup> 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 and high traffic areas. Sealer is sufficient for any horizontal surface that does not require special protection.
- **Silex Varnish**, optional, is required for any moist environment, such as in bathrooms (do not install **PDB Concrete skin** panels in a shower area or on the floor), and for horizontal high traffic areas, or for added protection of backsplashes.

### Resources

Downloadable on [silexelement.com/pages/guides](https://silexelement.com/pages/guides)

- **Silex Guide Installation panels PDB Concrete skin raw 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.



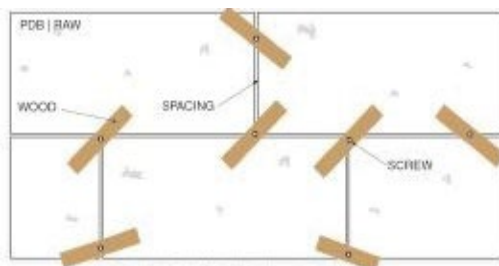
A **metal edge profile**, i.e., Schluter®, can be used (refer to manufacturer's Website for installation).



**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 screw into panel as recommended below.

**Wood shims 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.



**Screwing option:** use self-drilling screws suitable to substrate behind panels. Screw into the existing holes of panel texture. For temporary screwing, leave screw heads fully exposed so they could be easily removed once the adhesive has fully set. The **Silex Touch-up Mortar** can be used to fill in screw holes.

**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.



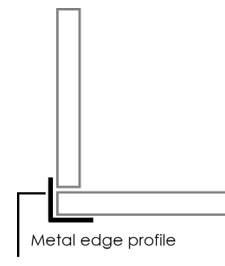
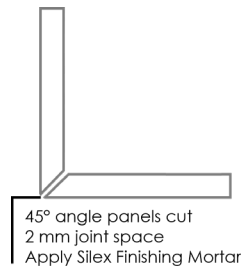
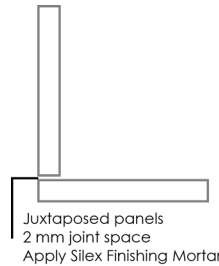
Apply painter's masking tape onto surface to be cut, before proceeding. To cut panel full **length or width**, use a wet saw, an angle grinder, or a circular saw with a diamond blade, leaning against a guide rail, held by clamps. **Do not use a mechanical file cutter.** Smooth cut edges with sandpaper.



**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.

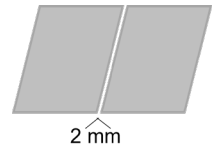


Wall **corner junctions** can be done in several ways. Panels can be juxtaposed, cut at a 45° angle, or covered with a metal edge profile. Use a circular saw with a guide to make a 45° angle cut.



## BONDING

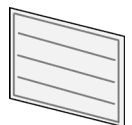
Silex recommends the hybrid construction adhesive, isocyanate, phthalate and solvent free **ADBOND EXTREME 5692 (Adfast)** for panels installation onto a variety of substrate (1 tube of 295 ml (10 oz) for ± 32 ft<sup>2</sup> of panels). Refer to the manufacturer's recommendations. **Do not apply water-based 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 (do not install **PDB Concrete skin** panels in the shower area or on the floor), and for highly solicited horizontal surfaces, or for adequate protection of kitchen backsplashes. Up to two coats of colorless **Silex Varnish**, satin, or matte finish, can be applied. Allow for 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

**PDB Concrete skin** 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 PDB Concrete skin - raw finish** (downloadable on [silxelement.com/pages/guides](http://silxelement.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 nails, temporary screws, or wood shims
12. After the adhesive fully sets (24h), remove temporary wood shims or screws
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 **PDB Concrete skin - raw finish**.

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

*Quantity conversion in US units*

Table of required tools and equipment for Silex **PDB Concrete skin - raw finish** panel installation.
















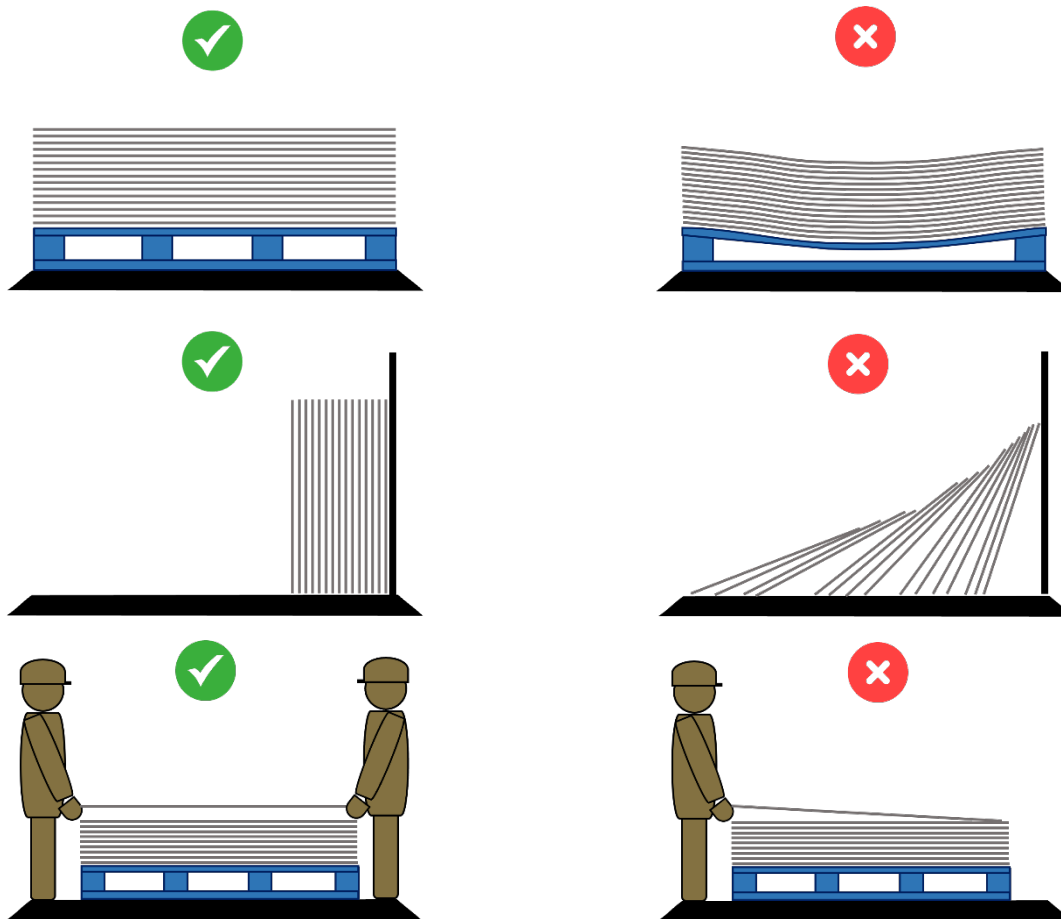
	Tools and equipment	PDB Concrete skin Panel installation
Safety eyewear		√
Dust mask		√
Gloves		√
<b>ADBOND EXTRÊME 5692</b> <b>Hybrid construction adhesive</b> 1 tube of 295 ml (10 oz) for ± 32 ft <sup>2</sup> of panels		√
Angle square		√
Beam level		√
Caulking gun		√
Circular saw with a diamond blade		√
Container for rubbles		√
Dust extractor		√
Electrical oscillating saw		√
Installation diagram		√
Microfiber cloths		√
Protective sheets		√
Wet saw		√

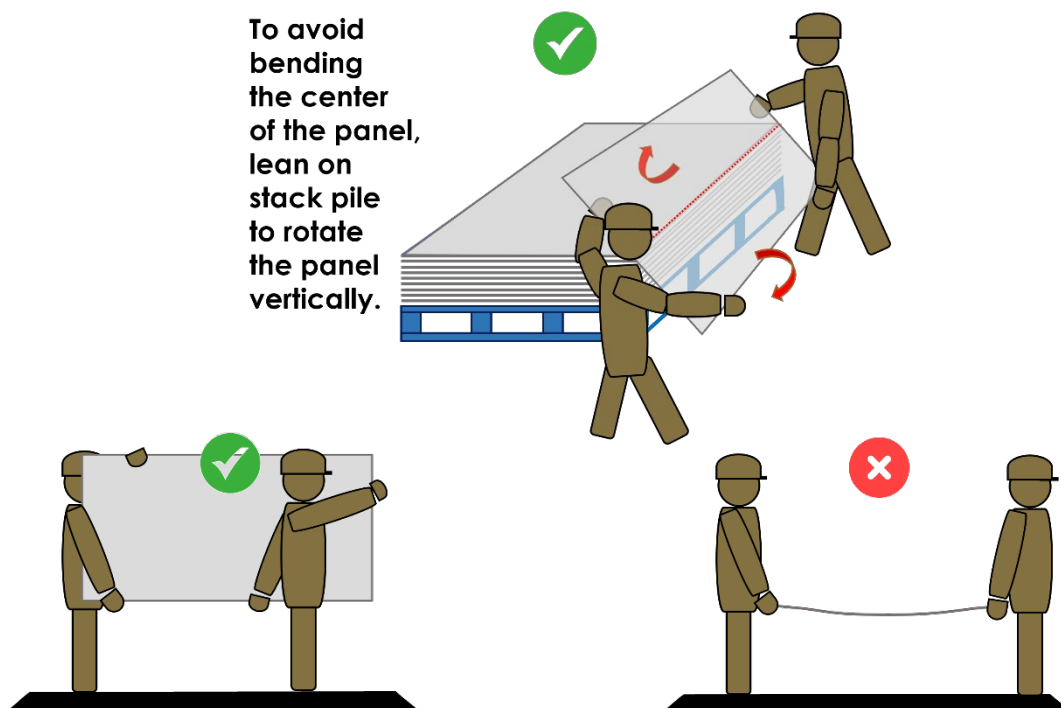
Table of required and optional tools and equipment for Silex product installation.

	Tools and equipment	PDB Concrete skin 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.







**Silex element**

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