

STONEREX CEMENT FIBER BOARD

Installation guide

for wood and steel frame





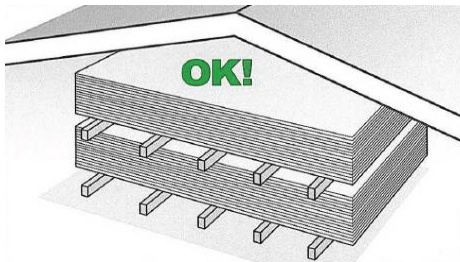
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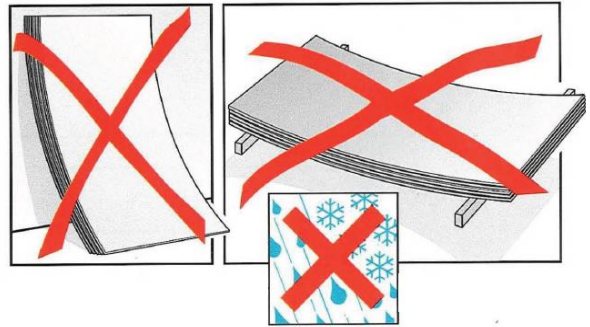


1. StoneREX Premium board installation quick overview!

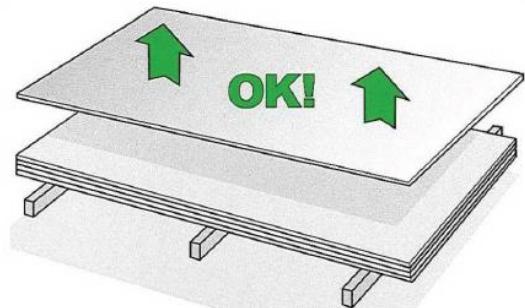
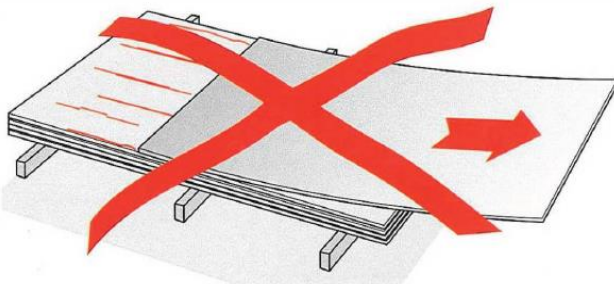
- 1.** Store the boards correctly under a solid roof construction and remove the packaging film! Air must be able to move freely around and under the stack of stored boards. Stored boards must be protected from rain, moisture, snow and dust.



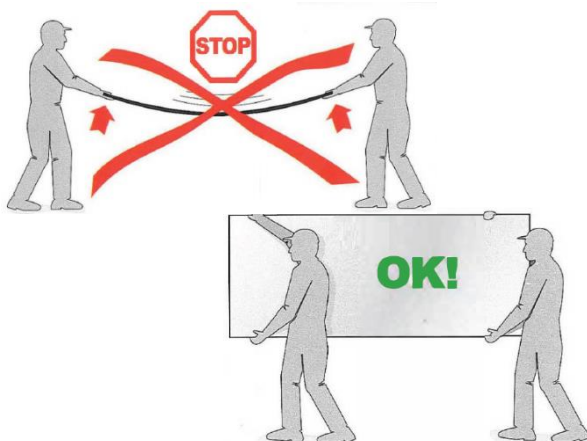
- 2.** Make sure the board is dry and clean before processing and installation!



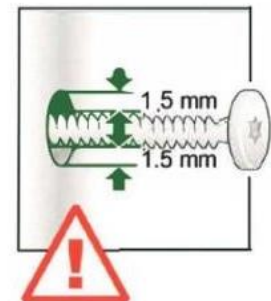
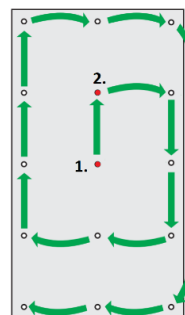
- 3.** When installing the board, lift the board straight out of the pack, avoid dragging!



- 4.** Carry the boards vertically out of the package!



- 5.** The predrilled hole must be drilled larger than a fastening screw or rivet of min. 3 mm, except for the first two fixed points, the pre-drilled hole of which must be the same size as the screw.



- 6.** Cut StoneREX Premium Granit and Premium Basic from the unfinished side (from the back)! StoneREX Premium Color boards can be cut from the painted side (from the front side)!

- 7.** After cutting the boards to size or drilling screw holes into the board, remove cement dust from the board surface immediately, preferably with a low-pressure compressor!



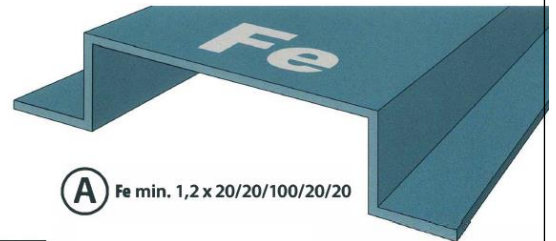
8. It is mandatory to add to each of the wood frame an EPDM UV resistant tape.



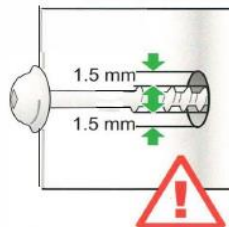
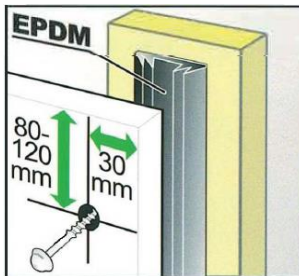
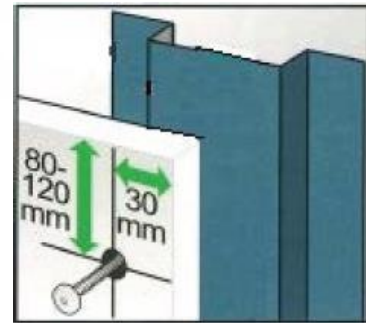
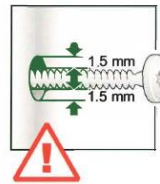
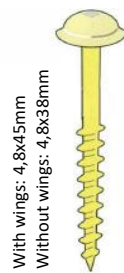
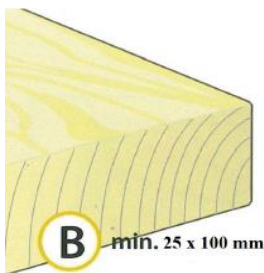
9. Treat the cut surfaces with fine-grained sandpaper and cover the concrete surface with a suitable paint!



10. Screw distance from the vertical edge min. 30 mm and from the horizontal edge min. 80 mm.



A Fe min. 1,2 x 20/20/100/20/20



11. Joint distance between the boards min. 8 mm

More details in the following guide!



2. Introduction and application

The main components of **StoneREX cement fiber board** are cement, cellulose and polypropylene fibers, which ensure the mechanical strength, non-flammability and good weather resistance of the board. The boards do not contain asbestos, formaldehyde or other substances harmful to health or nature. Cement fiber boards are mainly used as a facade cover board for ventilated facade solutions. StoneREX cement fiber boards are the most suitable choice for buildings where, in addition to the appearance of the facade, the durability, strength and ease of installation of the facade are also important. Premium cement fiber boards are suitable for covering the facades of private houses and apartment buildings, as well as for covering the facades of public buildings and agricultural, industrial and warehouse buildings that require higher impact resistance than in the normal environment, and for indoor use where strength and moisture resistance are important.

- Resistant to weather and temperature fluctuations.
- Very good mechanical strength and abrasion resistance.
- Frost resistant
- Non-flammable - fire class A2
- Environmentally friendly
- Good water resistance
- Does not contain substances hazardous to health
- Insect and mold resistant
- Non-conductive
- With good sound insulation

StoneREX Premium Basic fiber cement board is used for all kind of constructions. The board has a natural gray color as concrete and can be used for different construction elements as building board without any treatment. The board's strength is like concrete, it is resistant to weather conditions, fire, freezing temperatures, insects, mold and sun's UV radiation. Our colored facade boards StoneREX Premium Color and Premium Structure as well as StoneREX Premium Granit are produced using this very durable and strong basic board. The product is M1 certified - the product is safe for health and suitable for indoor use.



StoneREX Premium Color boards are painted with a color machine on the surface and edges. The color machine ensures a high-quality, even and smooth board surface. The back of the board is covered with moisture-proof varnish. The color tones can be selected according to the RAL and NCS color catalogs.



StoneREX Premium Color Structure has a unique board with a sand like surface structure. Available as through colored or simply surface painted facade cement fiber board. The unique surface technology guarantees durability and makes the material very resistant to scratches or any other mechanical wear. Boards are painted in RAL, NCS or in other colors of the catalog colors according to the customer's wishes. The unlimited choice of colors makes this product a favorite of architects and designers, as the boards are suitable for creating both modern and classic living environments.



StoneREX Premium Granit is a cement fiber board covered with natural stone chip, which is mainly used in the construction and renovation of ventilated facades of private houses, apartment buildings, public buildings and production and warehouse buildings. 16 different colors available.



3. StoneREX Premium board maintenance

StoneREX Premium boards require little maintenance. Inspect joints, fasteners and vents at least once a year. Timely elimination of injuries and defects prolongs the life of the facade.

In case you need to clean the boards, they can be washed with water by adding detergents that do not damage the finish or leave marks. Do not use abrasive detergents. Particularly soiled areas on the StoneREX board can be washed with a 10% acetic acid.

Apply it to the board with a soft cloth or sponge, leave to react for 5-10 minutes, clean it gently with a sponge and running water. Wash the boards with plenty of water, do not allow them to dry before washing. Repeat this process for complex stains. Washing cannot be done in direct sunlight.

If the acetic acid solution is not sufficient, StoneREX recommends using the SOLEDO GREEN concrete splash and concrete dust remover, which does not damage the painted surface and has been approved by our customers, to remove cement stains.



StoneREX Premium Granit boards covered with natural stone chip can be washed with a pressure washer. Avoid washing with too high pressure, the minimum distance from the board is 50cm. Moss and algae removers can be used before washing. Use cold water. Before cleaning, we recommend testing the selected method on a less visible part of the wall. Washing StoneREX Premium Color boards with a pressure washer is not recommended.

NB! The surface of StoneREX boards must not be cleaned when they are exposed to the sun or are hot for any other reason.

4. Storage and handling of StoneREX Premium boards

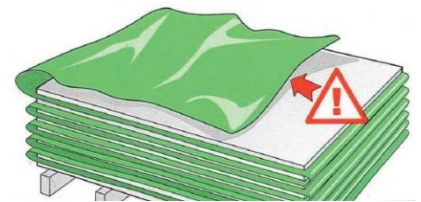
In StoneREX production, board packs are covered with a transport film to protect the boards from dust. When transporting boards in an open car, care must be taken to ensure that the film installed in the production protects the boards from rain and dirt.

If pallets with the boards are delivered to the construction site and the boards are stored outdoors, the protective film must be removed from the packaging and replaced with a tarpaulin, maintaining air circulation around and under the boards. If stored for more than two weeks, the pallets with the boards must be stored in a dry and ventilated room! Do not use a tarpaulin when building the canopy, which does not protect the boards from rain on the sides!

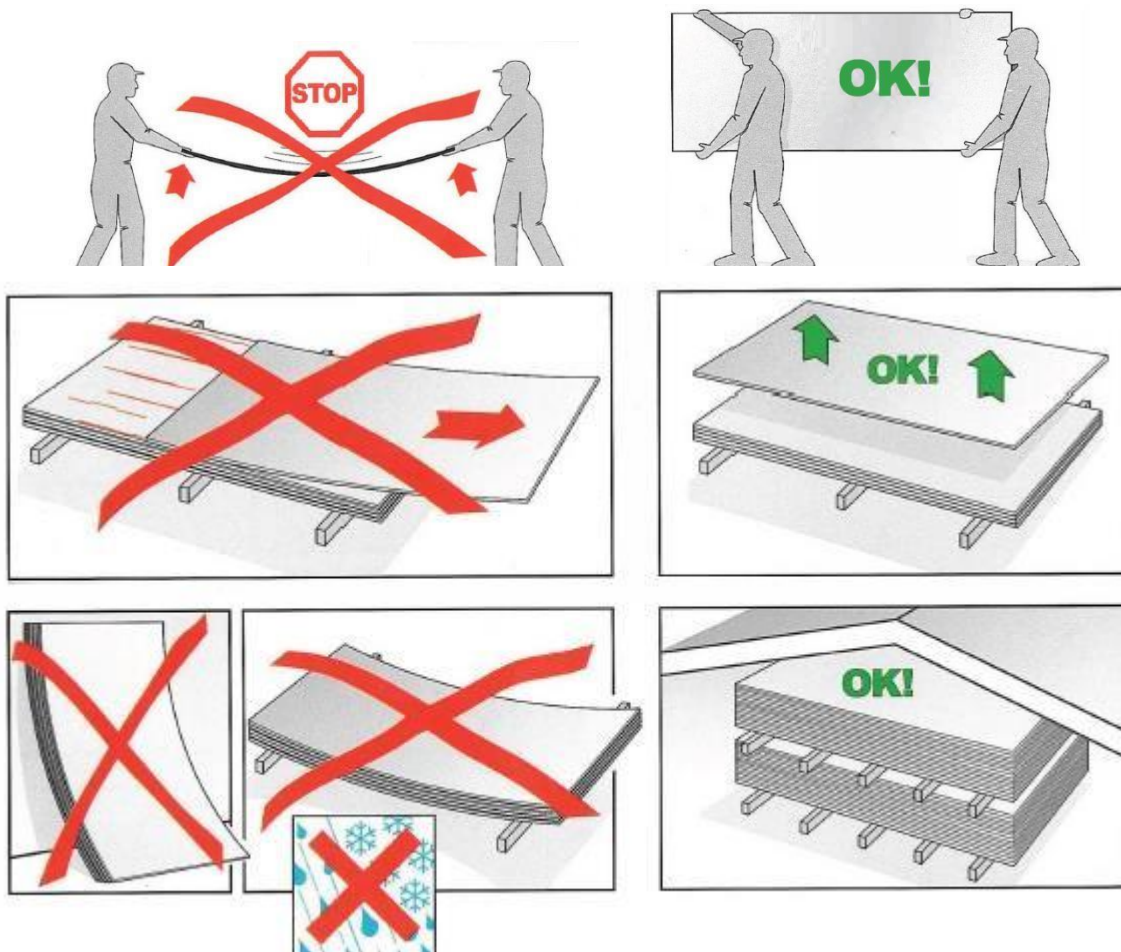
Stored boards must be protected on all sides from rain, moisture, snow and dust.

When removing cushioning material between painted boards (which have been added between the boards in production), the boards must not be stacked back on top of each other without cushioning material.

The use of strong adhesive tape on the top surface of the board should be avoided. Do not keep lighter adhesive tape for more than 24 hours. The tapes can damage the surface of the board.



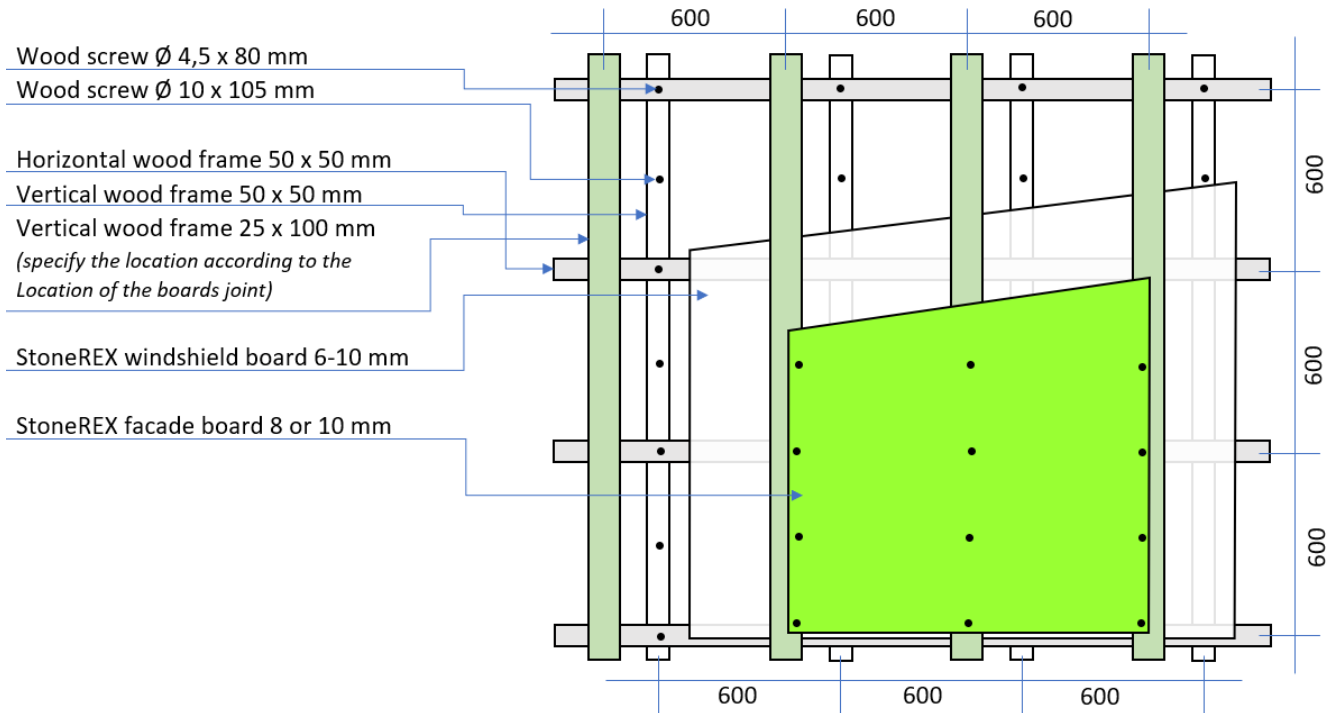
- When transporting the boards one by one, keep the board upright!
- Do not store boards on the edge!
- When removing the top board from the package, do not drag the board along the bottom board!
- A maximum of 2 pallets with the boards can be stacked on top of each other!

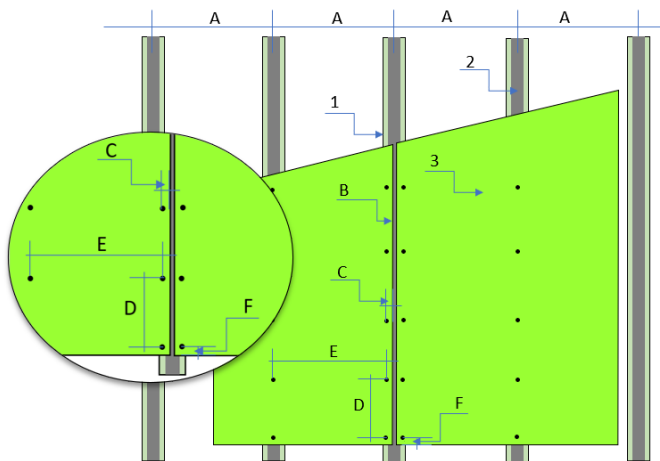




5. Installation of cement fiber boards on a wooden frame

StoneREX cement fiber board base frame / wood base frame

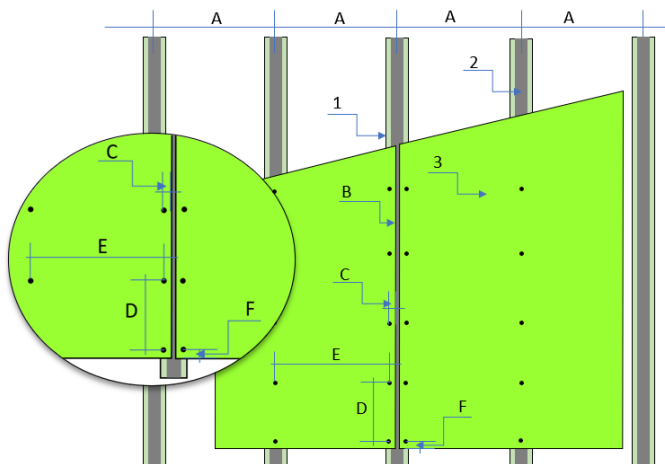




FACADE BOARDS / wood frame

1. Vertical frame min. 25 x 100mm
2. Joint tape
3. StoneREX Premium cement fiber board
- A. Wood frame distance 600mm, specify the location according to the board joint
- B. Deformation joint between the boards min. 8mm
- C. Screw distance from the longest (vertical) edge min. 30mm
- D. Screw distance on the longest (vertical) edge up to 400mm
- E. Screw distance up to 600 mm
- F. Screw distance from the horizontal edge min. 80mm

Impregnated wood with a maximum of 18% moisture must be used for lining. In areas with a higher risk of mechanical damage, a denser base frame may be used. Consult the manufacturer if StoneREX facade boards are to be installed higher than 30 m.



CEILING BOARDS / wood frame

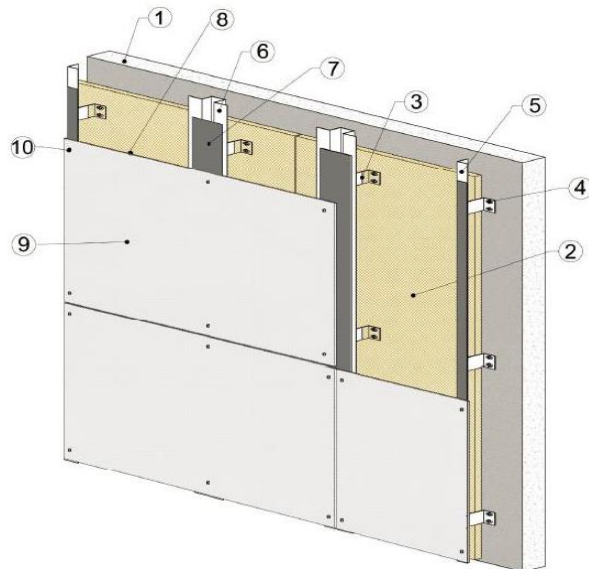
1. Vertical frame min. 25 x 100 mm
2. Joint tape
3. StoneREX Premium cement fiber board
- A. Frame distance up to 400 mm, specify the location according to the board joint
- B. Deformation joint between the ceiling boards min. 8mm
- C. Screw distance from the longest (vertical) edge min. 30mm
- D. Screw distance on the longest (vertical) edge up to 400mm
- E. Screw distance up to 400mm
- F. Screw distance from the shortest (horizontal) edge min. 80mm

Impregnated wood with a maximum of 18% moisture must be used for lining. In areas with a higher risk of mechanical damage, a denser base frame may be used.

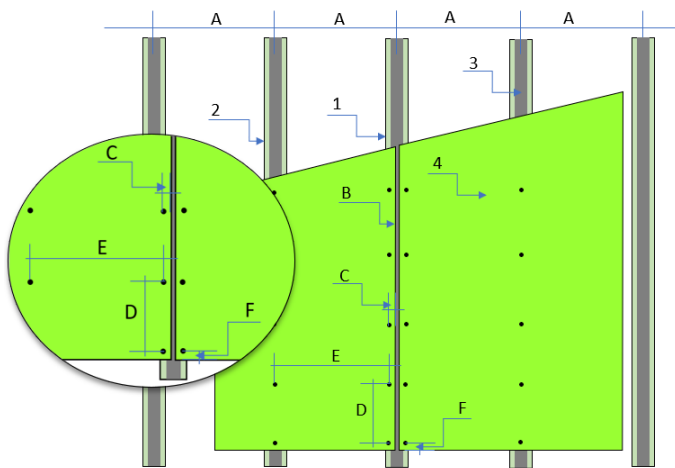


6. Installation of cement fiber boards on a metal frame

METAL FRAME INSTALLATION DETAILS



- 1. Load-bearing wall
- 2. Thermal insulation
- 3. Galvanized steel bracket for profile mounting
- 4. Bracket mounting
- 5. L-profile
- 6. Hat profile
- 7. EPDM tape (recommended)
- 8. Air gap
- 9. Cement fiber board
- 10. Anchorage point

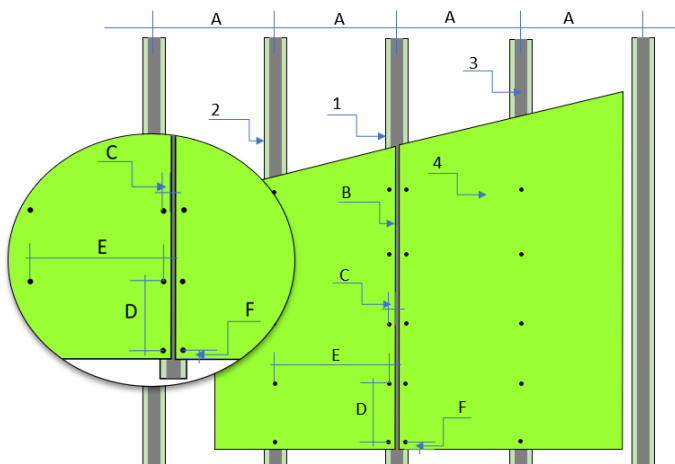
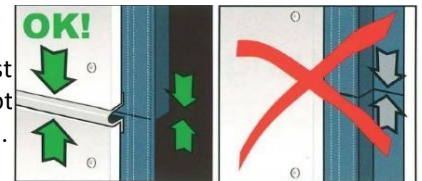


FACADE BOARD/ metal frame

1. Hat profile on the board edge min. 1,2x20/20/100/20/20mm
2. L- profile in the middle of the board min. 1,2x20/20/30/20/20 mm
3. Joint tape (recommended)
4. StoneREX Premium cement fiber board
- A. Metal frame step distance max. 600 mm. Specify the location according to the board joint.
- B. Deformation joint between the ceiling boards min. 8mm
- C. Screw distance from the longest (vertical) edge min. 80mm
- D. Screw distance on the longest (vertical) edge up to 400mm
- E. Screw distance up to 600mm
- F. Screw distance from the shortest (horizontal) edge min. 80mm

In areas with a higher risk of mechanical damage, a denser base frame may be used. Consult the manufacturer if StoneREX facade boards are to be installed higher than 30 m.

Maximum length of the hat profile is 3000 mm. The joints of the facade boards must follow the joints of the metal profiles, in other words the facade board must not exceed the joint of the metal profile and be attached to two different metal profiles.



CEILING BOARDS / metal frame

1. Hat profile on the board edge min. 1,2x20/20/100/20/20mm
2. L- profile in the middle of the board min. 1,2x20/20/30/20/20mm
3. Joint tape
4. StoneREX Premium cement fiber board
- A. Metal frame step distance max. 400 mm. Specify the location according to the board joint.
- B. Deformation joint between the ceiling boards min. 8mm
- C. Screw distance from the longest (vertical) edge min. 30mm
- D. Screw distance on the longest (vertical) edge up to 400mm
- E. Screw distance max. 400mm
- F. Screw distance from the shortest (horizontal) edge min. 80mm

Maximum length of the hat profile is 3000 mm. The joints of the facade boards must follow the joints of the metal profiles, in other words the facade board must not exceed the joint of the metal profile and be attached to two different metal profiles.

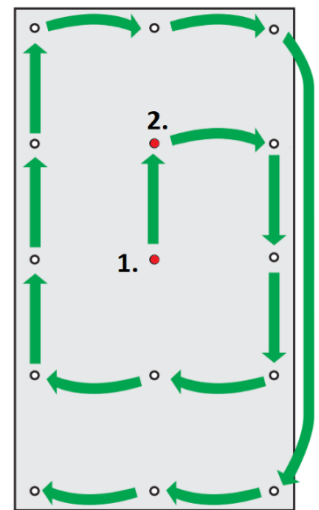
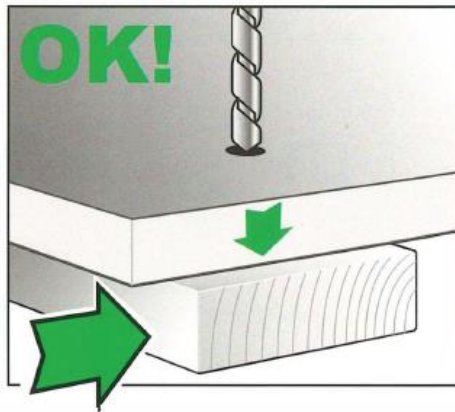
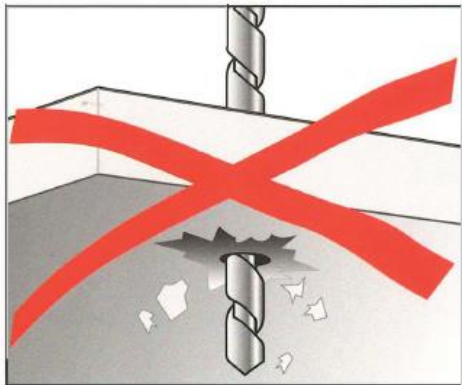


7. Cutting and pre – drilling the holes

- The boards are cut with a hard or diamond tipped disk saw.
- It is recommended to use a circular saw with a guide bar, which has a soft material underneath to avoid any scratches.
- StoneREX Premium Granit and Premium Basic are cut on the unfinished side (back side).
- StoneREX Premium Color board is cut on the colored side (front side).
- The cut surfaces are treated with fine-grained sandpaper and covered with a paint suitable for the concrete surface.
- It is not recommended to cut boards smaller than 300 x 300 mm.



When drilling, carbide tipped drills are used and drilled on the finished side of the board. The hole must be drilled with a fastening screw or rivet of min. 3 mm larger, except for the first two fixed points where the pre-drilled hole must be the same size as the screw.



After cutting the boards to size or drilling screw holes into the board, it is necessary to immediately remove the cement dust from the board with a low-pressure compressor, vacuum cleaner, a soft cloth or brush. When wiping visible dust off the board with a wet cloth or glove, the dust will remain on the surface of the board and damage its appearance. Therefore, avoid cutting too close to already mounted boards, so that dust from cutting the new ones do not get on the already mounted boards. Avoid scratching the boards when cutting and processing them.

NB! Wet or damp boards must be dried and if necessary, also cleaned before installation.

NB! The surfaces of StoneREX boards should not be washed with water when they are exposed to the sun or hot for any other reason.



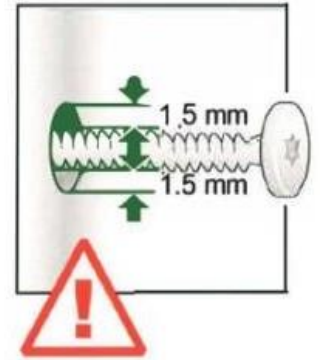
8. Fixing the boards

When installing the boards with screws, avoid tight tightening and screwing the screw into the board. Leave room for movement. Concealed screws are not used to install the boards. For installing the boards use at least class C3 screws or rivets with a diameter of min. 4.8 mm, to which a hole is drilled in front, which is min. 3 mm larger from the screw itself.

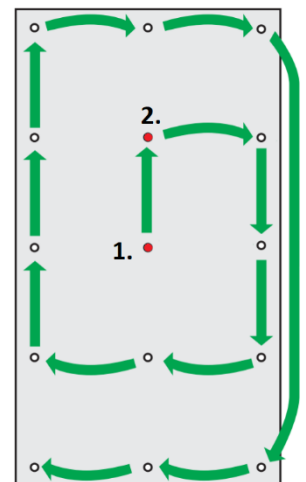
Metal frame: 4,8x32mm, TX20



Wood frame: 4,8x38mm, TX20



StoneREX Premium Granit boards: 4.8x45mm with wings, TX20



The pre-drilled holes in points 1 and 2 must be the same size as the screw. The installation of the fixing screws starts from the center of the board (see the figure on the right) and the angle screws are installed last. The screw may only be installed perpendicular to the board. Joint and corner strips are fastened with nails.

To ensure enough ventilation, we recommend leaving the width of the lowest and upper horizontal ventilation gap of the facade at least 20 mm.

NB! When installing the boards, make sure that the board is not wet or damp.

9. Appearance and color of the board

Different batches of StoneREX Premium Granit and Premium Color (Profile) boards may have color differences and StoneREX Premium Granit may also have structural differences in the stone chip finish that do not affect the life or strength of the boards. We recommend using the same batch of boards when building one facade. The appearance of already installed boards may change slightly over a long period of time due to UV radiation and the surrounding environment.