Building with conscience.

StoCleyer W

Application guideline

Holzfertigbau

Facade

Facade coverings

StoCleyer W facade panels can be used to create an authentic timber appearance on external wall insulation systems.
The panels are quick and easy to apply. They are more cost-effective and durable than real wood and can be painted in many colours.

View this guideline as a film:
Simply scan the QR code or go to the YouTube channel.

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General information

Approvals / standards
StoCleyer W facade panels are used in timber frame construction in accordance with the national technical approval. The approval is to be observed in conjunction with the applicable standards and regulations.

In accordance with the system approval and DIN 55699 (application of EWIS), all system components must be purchased from Sto.

Upon completion of the system, the client must receive confirmation that the EWIS has been executed correctly in accordance with the national technical approval.

Preliminary work
Details, such as plinth formation, connections to adjacent building elements (window / door frame, window sill, roof, sheet metal, etc.), structural expansion joints, projections, must be planned in advance and coordinated between the relevant parties. The application instructions of Sto are to be observed.

The party responsible for creating the wall structure must ensure sufficient moisture protection in the wall and plinth area.
The building physical function of the overall wall structure must be checked in advance by means of a building physical calculation. We recommend taking into account future coatings, such as those involved in renovation work, during this process.

It is important to bear in mind the application temperature and weather conditions (≥ + 5 °C).

Interior work with high humidity (e.g. screed, plaster) must be completed before executing the facade insulation system.

All metal parts are subject to deformation, e.g. due to thermal stress. Plan or carry out plumbing work in such a way that possible movements cannot be transferred to the plaster.

Facade surfaces must be protected from excessive UV / solar radiation, which can be caused, for example, by glass surfaces on balcony railings. The burning lens effect may occur particularly in summer and when glass is exposed to direct sunlight, e.g. in the case of balcony railings made of glass. Temperatures can heat up considerably behind the glass and cause irreversible damage to the facade surface.

The light reflectance value of the finish must be at least 20 % for a mineral base coat and at least 15 % for an organic base coat.

The StoCleyer W panels are to be stored in dry conditions and must not be stored under 15 °C before installation.

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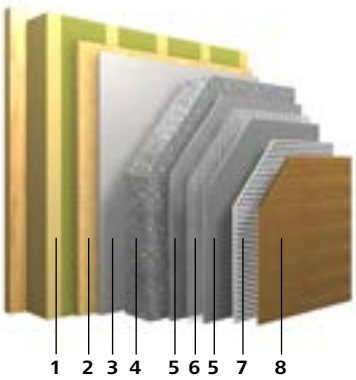
The system

System build-up



1 — Timber frame*

2 — Boarding

3 — Bonding
StoPrefa Coll
Alternative: StoColl Mineral HP

4 — Insulation
Sto-Insulation Board Top32
Alternative: Sto-Speed Lamella or Sto-Stone Wool Insulation Board

5 — Base coat
StoPrefa Armat
Alternative: StoLevell Uni

6 — Reinforcement
Sto-Glass Fibre Mesh F

7 — Bonding
Sto-RFP

8 — Facade embellishment
StoCleyer W
with second StoAqua Top Satin top paint coat

* As wall structure also solid wood board elements or cross laminated timber.

Note
Alternative products are defined in the approval.

System description

Insulant	· Polystyrene · Stone wool insulation board/lamella
Application	· New and existing buildings up to building class 3 · Suitable for low energy houses
Substrate	· Board materials (≥ 12 mm) are standardised or in accordance with building inspection requirements · On standardised or approved solid wood board elements or cross laminated timber
Adhesive	· Mineral or organic
Base coat	· Mineral or organic
Surface	· StoCleyer W with StoAqua Top Satin · Lasure with a light reflectance value ≥ 15 % for organic base coats · Lasure with a light reflectance value ≥ 20 % for mineral base coats
Fire protection	· B2 (normal combustibility)
Thermal protection	· Insulation boards made of polystyrene, up to 400 mm: design thermal conductivity of thermal conductivity group 032 – 040 depending on insulation board · Insulation boards made of non-combustible stone wool insulation board, up to 200 mm: design thermal conductivity of thermal conductivity group 035 – 040 depending on insulation board · Insulation boards made of non-combustible stone wool insulation lamella, up to 200 mm: design thermal conductivity of thermal conductivity group 041
Properties	· Mechanically resistant · Highly crack-proof · Organic and mineral can be combined
Approval	· Z-33.47-1705

Application

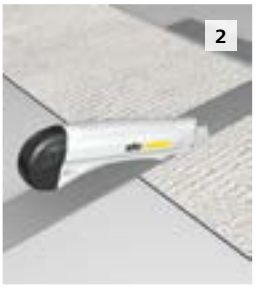
Substrate / moisture barrier

Note
The application steps for a suitable external wall insulation system with StoCleyer W differ only in the finish. The system build-ups up to and including the reinforcing coat are identical.

An additional moisture barrier is recommended in areas with increased moisture levels, e. g. plinths, balconies, terraces, or other areas with increased exposure to splash water.
Mix StoFlexyl and StoFlexyl Cement at a ratio of 1 : 1 and dilute with 10 % water. Then apply two full coats of the substrate.

Bonding / installation

Apply Sto-RFP with a notched trowel (6 x 6 mm) onto the substrate. Only decant as much reinforcing compound as you can immediately cover. Do not allow a skin to form.



Cut the StoCleyer W panels to size with a utility knife. Cut on the rear side of the panels.

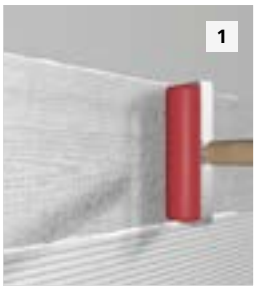
Application

Corner formation

When installing StoCleyer W panels, start with the corner formation.

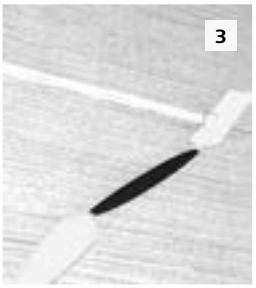
Press the panels with the rubber roller so that Sto-RFP flows out at the sides. This ensures that the joints are completely closed and protected against moisture ingress.

Bonding / installation



Cut the panel for the surface to size ensuring that the outer edge projects sufficiently (approx. 1 cm) and bond the panel. Press with a rubber roller.

Apply the next layer of Sto-RFP to the surface and corners. Install repeating the same process as for the first row.
Place the panels about 3 – 5 mm from the joint and push them together.



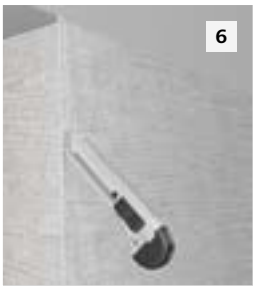
Allow the excess Sto-RFP to briefly harden and remove with a spatula.

Remove adhesive residues from the recesses with a damp paint brush.

Wipe off any remaining Sto-RFP with a moist sponge.

 Note: The detailed technical specifications and information on the products contained in the Technical Data Sheets and approvals must be observed.

Bonding / installation

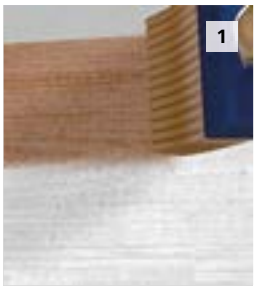


After a sufficient amount of drying time (at least 24 hours), cut off the projections flush with a sharp utility knife.

Sand any remaining projections with a sanding block (P 100 or P 120) or with a straight grindstone.

Note
This application cycle must not be carried out with an EWIS sanding board as this will raise the fibres of the panels. This can lead to moisture ingress.

Paint coat



After a sufficient amount of drying time, apply two coats of StoAqua Top Satin using a Sto-Wide Brush M3.
Observe the drying time after the first paint coat.

Colour shades as required

Lasure
StoCleyer W can be glazed in various colour shades with StoAqua Top Satin. Featuring 40 colour shades, the StoLasuren range has been developed specifically for application on many different substrates, including StoCleyer facade panels.

Covering paint coat
StoCleyer W can be coated not only with lasures but also with Sto facade paints. The shades from the “Architectural Colours” fan are available for this purpose.

Always observe light reflectance values:
Colour shades with a light reflectance value of up to 15 % are possible for organic base coats and up to 20 % for mineral base coats.

The StoLasuren range and the “Architectural Colours” fan can be ordered from your sales representative.

Application

Plaster joint

The lasure must be completely dry before it is overcoated. Cover the edges of the panels with adhesive tape and protect the surface with masking film.

Apply and texture the finishing render. Immediately after applying, remove the adhesive tapes before the finishing render is dry to the touch.
Observe the drying time before applying further coatings.

Optional paint coat

Mask the panels again before coating and protect them from soiling.

Apply two coats of the relevant facade paint. Immediately after applying, remove the adhesive tapes before the paint coat is dry to the touch.

 Note: The detailed technical specifications and information on the products contained in the Technical Data Sheets and approvals must be observed.

Notes

Notes

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