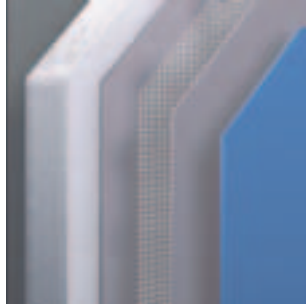


Sto AG | **Facade**

Application
Facade insulation system
StoTherm Classic

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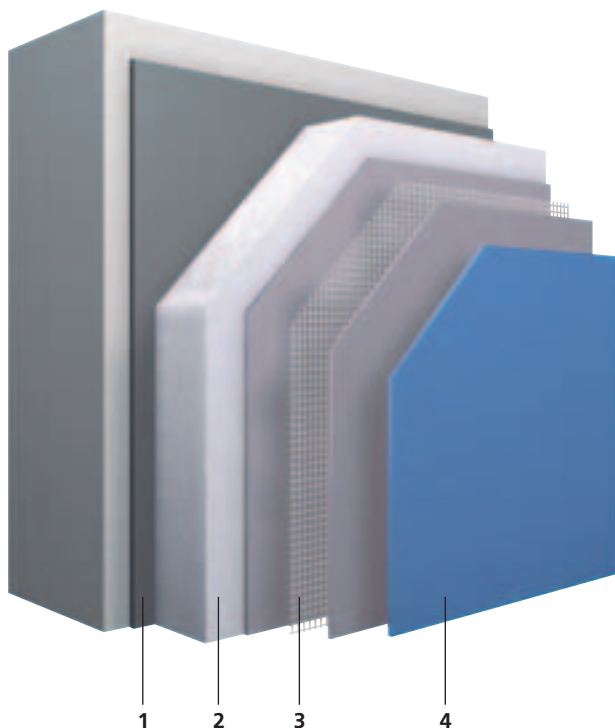
25 StoDeco Profiles

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System structure



1 Bonding – Sto ADH-B
mineral adhesive

2 Insulation – Sto EPS Board
limited combustibility (thermal conductivity group 035 and 040)

3 Reinforcement – StoArmat Classic
organically bound, ready-to-use reinforcing plaster
Sto Glass Fibre Mesh
Alternative:
Sto Shield Mesh AES
Alternative with QS technology:
Fast-drying variant StoArmat Classic QS for the critical weather range from +1 °C.

4 Top coat – Stolit/StoSilco
Organically bound, cement-free, ready-to-use finishing plasters (DIN 18 558) for all substrates. Film-conserved for enhanced resistance to micro-organisms (algae, fungus).
Alternative with QS technology:
Fast-drying variants Stolit QS and StoSilco QS for the critical weather range from +1 °C. (Protective coating: Facade paint StoSilco Color G / StoLotusan Color G)

System description

StoTherm Classic Organic facade insulation system with polystyrene insulation

Scope of application	<ul style="list-style-type: none"> • Old and new buildings • Wall structures: Masonry (concrete, sand-lime block, brick, porous concrete) and timber construction
Features	<ul style="list-style-type: none"> • Highly effective thermal insulant, weather resistant • Resistant to micro-organisms (algae and fungi) • Very high crack resistance • Highly resistant to mechanical stress • Permeable to CO₂ and water vapour • Limited combustibility
Appearance	<ul style="list-style-type: none"> • Organically and silicone resin-bound plasters • Tintable according to StoColor System, lightness value < 20 % possible with special approval • StoDeco Profiles, StoDeco Rustications, Sto Rustication Boards • Sto Brick Slips, brick tiles
Installation	<ul style="list-style-type: none"> • Cement-free, ready-to-use system components • Comprehensive detail solutions • No diagonal reinforcement, intermediate paint coats or equalisation coats necessary • QS-technology • Efficient installation through use of machine technology

Substrate preparation

An External Wall Insulation System can only be installed correctly if the substrate meets certain criteria and its load-bearing capacity has been verified. Pre-treatment is always necessary for soiled, absorbent or uneven substrates. In the case of substrates of inadequate load-bearing capacity, the system must be installed by means of track attachment.

Substrates which are covered with algae, fungi or lichen always require special pre-treatment. This involves cleaning the wall and then treating it with StoPrim Fungal. This treatment agent does not require to be washed off.

Dilution of primers to be adjusted according to the absorbency/condition of the substrate. Primers must not be left in a glossy state after drying.

While substrate pre-treatment is not necessary when employing track attachment, the masonry must nevertheless be dry.

Substrate table

Substrate	Substrate preparation	Primer
Smooth surface	Roughen	-
Efflorescence	Sweep, brush	-
Damp	Eliminate cause, wait for substrate to dry	-
Organically bound plaster	Clean	-
Moss, algae, fungi	Clean, without subsequent washing	StoPrim Fungal StoPrim Fungal C
Dusty, dirty	Sweep, brush, high pressure cleaning	-
Formwork oil	High pressure cleaning using cleaning agents Then wash with water	-
Coating, flaky	Remove with Sto Coatings Stripper and high pressure cleaning	-
Plaster, chalking	Clean and prime	StoPlex W
Coating, chalking	Brush off, clean and prime	StoPlex W
Absorbent	Clean and prime	StoPlex W StoPrim Micro
Sanding surface	Clean and prime	StoPlex W
Mortar burrs	Knock off	-
Sinter skin	Remove by mechanical means	-
Plaster, friable, inadequate load-bearing capacity	Remove by mechanical means	-
Plaster, loose, spalling	Knock off cavities and fill gaps with lime-cement mortar	-
Unevenness ¹⁾	Levelling plaster with lime-cement mortar (minimum setting time 14 days)	-

¹⁾ < 1 cm for bonded systems
 < 2 cm for bonded and dowelled systems
 < 3 cm for track attachment

Method of fixing

Bonding



Substrate of adequate load-bearing capacity and suitable for bonding, with unevenness of up to 1 cm.



The insulation board is bonded in place onto substrates of adequate load-bearing capacity ($> 0.08 \text{ N/mm}^2$) which are suitable for bonding. Uneven substrates with differences of up to approx. 1 cm/m. The adhesive surface must be at least 40 %.

Bonding and dowelling



Substrate suitable for bonding but of inadequate load-bearing capacity and with unevenness of up to 2 cm.



Substrates suitable for bonding but of inadequate load-bearing capacity ($< 0.08 \text{ N/mm}^2$) require fixation with approved dowels on the surface area and in the edge zone.

Track attachment



Substrates unsuitable for bonding and with unevenness of up to 3 cm.



A track attachment system is required for substrates which are not suitable for bonding.

Fixing insulation boards

Bonding

Substrate:

On substrates of adequate load-bearing capacity which are suitable for bonding, the insulation is bonded only.

Modes of bonding:

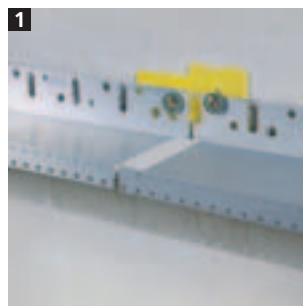
Two methods are possible:

Spot/edge bonding:

On substrates with unevenness of up to 1 cm, manual or machine application to insulation board.

Full-surface bonding:

On even substrates; machine application to substrate or machine application to insulation board.



Starter track attachment

Dowel starter track into place, free of torsion, perpendicular and flush at a spacing of 30 cm. The required size of starter track is dependent on the insulant thickness.



Choice of insulant

Sto EPS Boards are cut to precise angles and dimensions, with straight edges and shrinkage-free. Available as square edge, stepped-edge or tongue and groove variants.

TIP

Protect polystyrene rigid foam boards from UV radiation and damp. Do not use wet boards.



Full-surface bonding

On even substrates, apply Sto ADH-B to the entire surface of the insulation board. Do not hold the toothed trowel at too flat an angle. Use a board stand to fix the insulation board into position. Adhesive must have $> 40 \%$ contact with the surface of the board.

Fixing of the insulation boards

Bonding



Spot/edge bonding

On substrates with an unevenness of up to + 1 cm, apply a bead of adhesive compound along all edges of the boarding and 6 adhering dots onto the surface of the board (minimum bonded surface area 40 %).



Installation

Lay insulation boards from the bottom upwards tightly butt-joined, in a staggered pattern at the corners of the building. Press the boards firmly onto the wall. Remove any adhesive which oozes out, to avoid thermal bridging.

TIP

Avoid thermal bridging:

Remove any adhesive which oozes out from under the boards immediately.

Fixing of the insulation boards

Bonding and dowelling

Substrate:

Additional dowelling is possible on substrates of adequate load-bearing capacity. In the case of substrates of inadequate load-bearing capacity, dowel type must be approved by the building inspector.

Anchorage depth:

The dowels must be anchored to the necessary depth in solid wall materials, as specified in the official approval for the dowel. Tiles and old plaster do not constitute suitable substrates for anchoring.

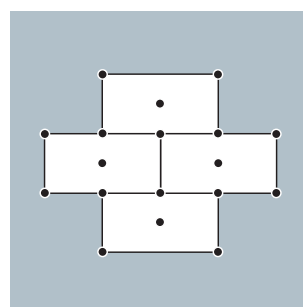
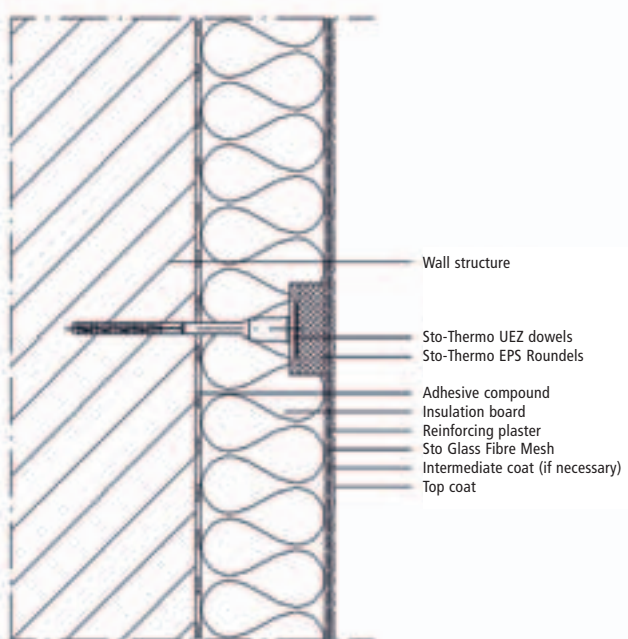
Pull-out test:

In case of doubtful substrates, a pull-pout test must be carried out to confirm dowel type.

Dowel specifications:

Length and diameter of the dowels are dependent on the given wall structure and insulation materials. The number of dowels is dependent on the height and position (main surface area, edge). Dowelling is carried out under the reinforcing coat / reinforcing mesh. Ensure a uniform dowelling pattern.

Facade insulation system, bonded and dowelled

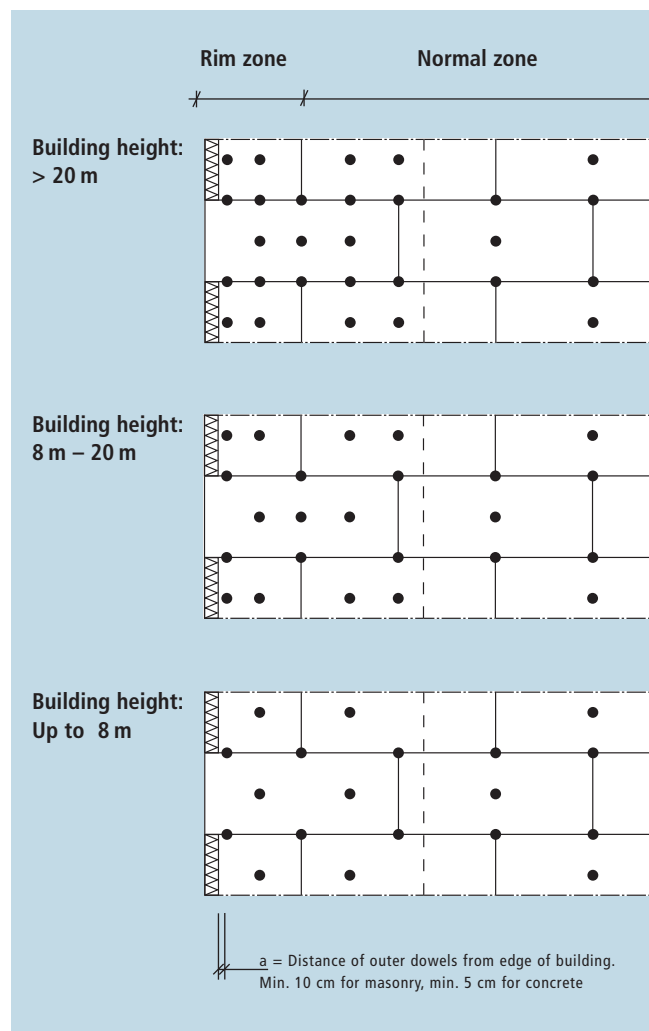


Dowelling pattern over the main surface.

Fixing of the insulation boards

Bonding and dowelling

Dowelling pattern



Building height

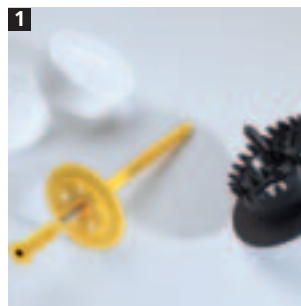
The building height is divided into three height ranges (DIN 1055). The required number of dowels is dependent on the height range and the wall material. More dowels are required in the edge area than in the main surface area.

Dowels required per m ²	Sto recommendation	
	Edge	Surface area
Height range (m)		
0 – 8	8	6
8 – 20	10	6
> 20	14	6

Fixing of the insulation boards

Bonding and dowelling

Variant I



Sto Thermal Dowelling System: System to avoid dowel pattern staining

Reduction of dowel thermal bridges and avoidance of dowel pattern staining when dowelling with countersunk and insulated dowel heads. Comprising insulation board fastener, Sto-Thermo countersink drill and Sto-Thermo Roundels EPS.



Thermo dowelling

Push through the insulation with the countersink drill and drill on contact with the substrate.



Applying Sto Hammer Dowels

Apply the approved Sto Hammer Dowel and seal with Sto Thermo Roundels EPS.



Rasp Sto-Thermo EPS Roundels level. The dowels do not leave any marks on the plastered surface and minimise thermal bridging.

Fixing of the insulation boards

Bonding and dowelling

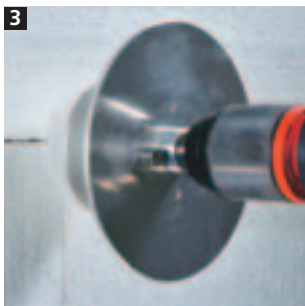
Variant II



1 **Sto-Thermo Dowel / fixing method**
First drill the hole for the dowel in the customary manner.



2 Insert the dowel – Sto-Thermo Dowel UEZ 8/60.



The thermally isolated Sto-Thermo dowel is then countersunk into the insulant by means of a machine. The application tool (Sto-Thermo Dowel MT) determines the exact and uniform drilling depth. No problems with airborne polystyrene beads, as the insulant is compressed.



Finally, the polystyrene rondelle is inserted in the dowel recess. The result is a closed, even insulation layer, with no subsequent marking of the facade by the dowels.

Fixing of the insulation boards

Bonding and dowelling

Variant III



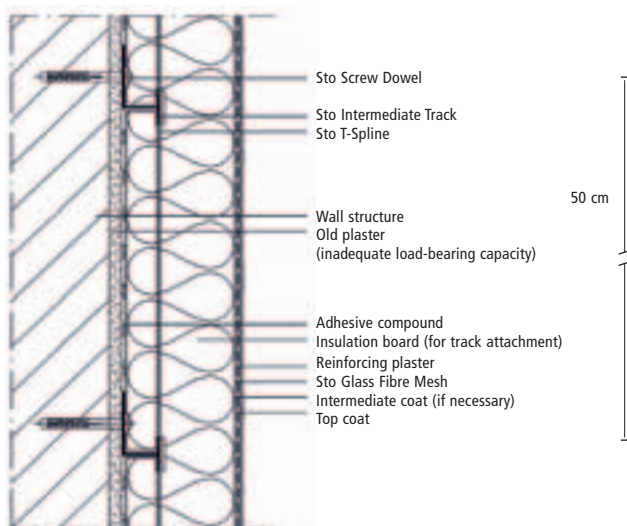
Dowelling
Install dowels level with the insulant surface, if neither variant I or II is applied.

Fixing of the insulation boards

Track attachment

Substrate:

Insulation can be fitted onto substrates which are not suitable for bonding by mechanical means, employing a track system. This is particularly expedient when the substrate requires very extensive pre-treatment (removal of old plaster).



Track attachment

The insulation boards are fitted with the aid of plinth and starter tracks, intermediate tracks, T-splines and dowels with technical approval (spaced at 30 cm).



Insulation

Use type M boards with grooves and rebates. Otherwise produce grooves and rebates with the Sto Grooving Tool.

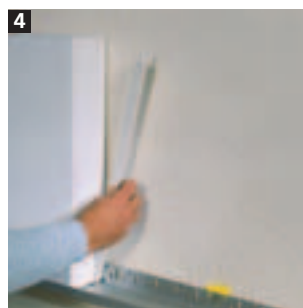


Bonding of insulation boards

Fix with spots of adhesive compound (20 % of boarding surface area) and additionally fix with dowels, irrespective of the height (see fixing diagram).

Fixing of the insulation boards

Track attachment



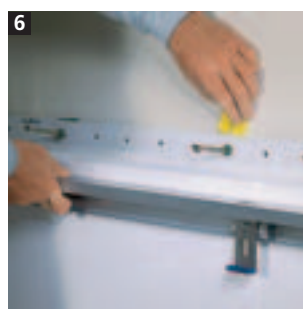
T-splines

The boards must be stabilised with vertical T-splines.



Board rebates

The rebate compensates the thickness of the tracks. The T-splines help to stabilise the insulation boards and produce an even surface.



Dowelling the intermediate track

After installing a row of boards, press the intermediate track into the top groove and fix with dowels. Level out any unevenness with packing shims. Dowel edges of insulation boards in accordance with dowelling diagram.



Forming a groove

When cutting boards to size, cut a groove for the intermediate track or T-spline using a groove tool.

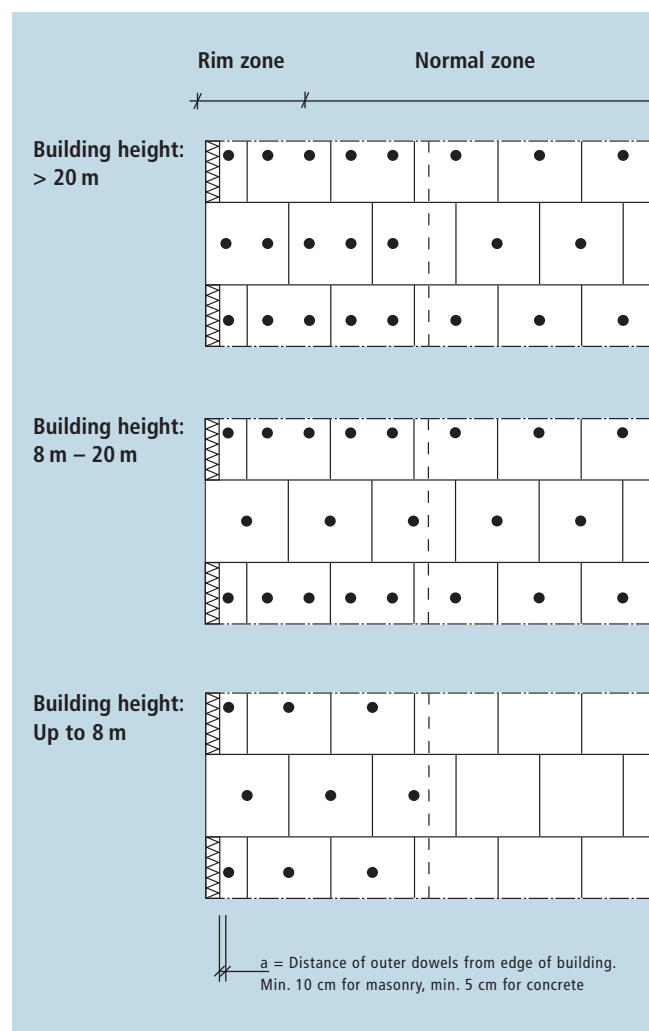
TIP

Track attachment is particularly expedient when removing old plaster is too time consuming.

Fixing of the insulation boards

Track attachment

Dowelling pattern



Building height

The building height is divided into three height ranges (DIN 1055). The required number of dowels is dependent on the height range and the wall material. More dowels are required in the edge area than in the main surface area.

Dowels required per m ²	Sto recommendation	
	Edge	Normal zone
Height range (m)		
0 – 8	4	0
8 – 20	8	4
> 20	12	4

Reinforcement

Preparation for reinforcement

After insulation, the applicator has a final opportunity to carry out a careful check so as to ensure a perfect system. Cracks and marks on joints resulting from thermal bridging can be avoided in this way.



Checking the insulation board

Before applying the reinforcement, ensure that the insulation boards have been jointed and rasped level. Do not apply the reinforcement until the adhesive has hardened – after 24 hours at the earliest.



Closing joint

Close open joints with filling foam or strips of insulation material. This will prevent marks on the top coat, cracks, etc.



Rasping the insulation boards

Rasp offsets on the jointed insulation boards. Remove the rasping dust from the facade.



TIP

Machine rasping of insulation boards

Rasp high spots at insulation boards with Inoplan.

Reinforcement

Cement-free reinforcement



TIP

Diagonal reinforcement:
When StoArmat Classic is used, its exceptional elasticity renders additional diagonal reinforcement at openings in buildings may not be necessary.



1

Reinforcing plaster

Apply StoArmat Classic at a layer thickness of 2.0 to 3.5 mm by trowel or machine application. Apply the reinforcing plaster over a width of 110 to 120 cm, covering this area in full.

Alternative - StoArmat Classic QS:
Fast-drying variant for the critical weather range of +1 °C and below.



2

Reinforcing mesh

Sto Glass Fibre Mesh is flexible and easy to install. The mesh format in a width of 1.10 m corresponds to half a scaffold height when embedded horizontally.



3

Embedding the mesh

Embed the mesh into the StoArmat Classic whilst the material is still wet. The mesh strips must overlap by 10 cm.



4

Silo technology

Materials in paste-form are delivered, ready-to-use, in a silo. This eliminates the need for daily cleaning of hoses and machinery. The attachment enables simple refilling of the StoSilo Comb system.

Top coats

Apply the top coat after the reinforcement has dried thoroughly. Plaster wet in wet and coat the surfaces without leaving any dry joints. Do not apply decorative plasters in heavy winds or direct sunshine, as dry joints and hairline cracks may otherwise occur.



Organically bound plasters

Stolit is a paste-form facade plaster suitable for machine application. It offers a high level of elasticity, crack-proofness and weather resistance.

Alternative – Stolit QS:

Fast-drying variant for the critical weather range of +1 °C.



Silicone resin-bound plasters

StoSilo is a paste-form facade plaster suitable for machine application. It offers high water vapour and CO₂ permeability and good weather resistance.

Alternative – StoSilo QS:

Fast-drying variant for the critical weather range of +1 °C.

Top coats



Stippled structure

A stippled structural plaster is applied in the appropriate grain size and textures with a suitable trowel. (Exception: scratch coat)



Rilled plaster texture

After application, rilled plasters can be produced in a variety of textures (horizontal, vertical and round).



Free-style structural plasters

Fine-grained plasters are applied and then modelled with a brush, spatula, trowel or sponge.



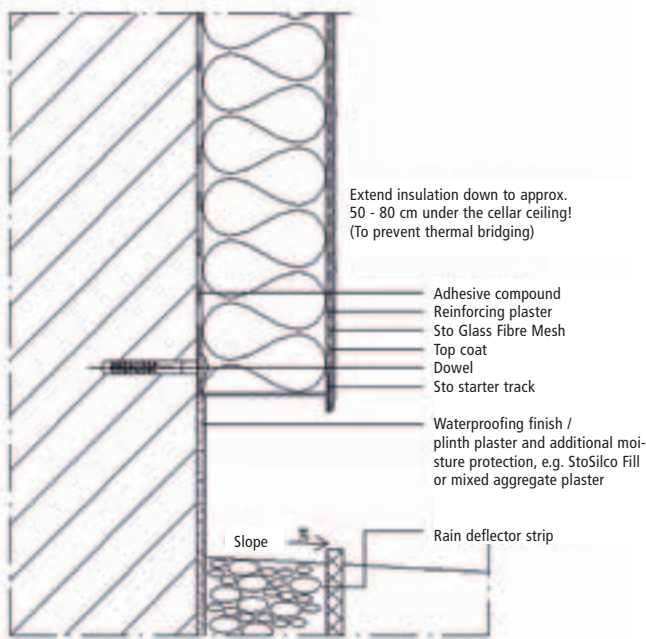
TIP

Lightness value: Only colours with a lightness value higher than 20 % are permissible for facade insulation systems (lightness value < 20 % possibly only by request). The lightness value defines the percentage quantity of light which is reflected by a surface (100 % = white, 0 % = black).

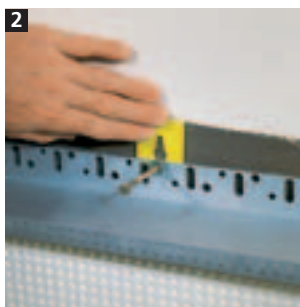
Plinth

Connection with Sto starter track

Uninsulated plinth with unheated cellar area

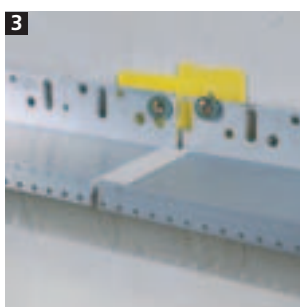


Before beginning installation work, mark the height of the plinth a chalk line. Ensure that you mount the Sto starter tracks horizontally and that the tracks fit snug against the substrate. Level out any unevenness on the wall with Sto Packing Shims.



Fixing

Install the Sto Starter Tracks along the entire elevation with dowels at a spacing of approx. 33 cm. Insert the dowels carefully to avoid twisting the tracks.

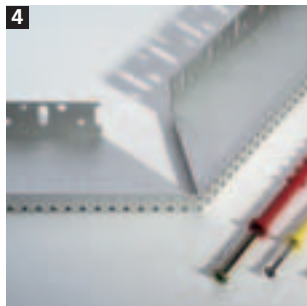


Track junction

Wherever possible, always fix the Sto Starter Tracks at the outermost holes of the track. Use Sto Plinth Profile Connectors to align the plinth profiles and to ensure an expansion joint.

Plinth

Connection with Sto Universal Starter Track



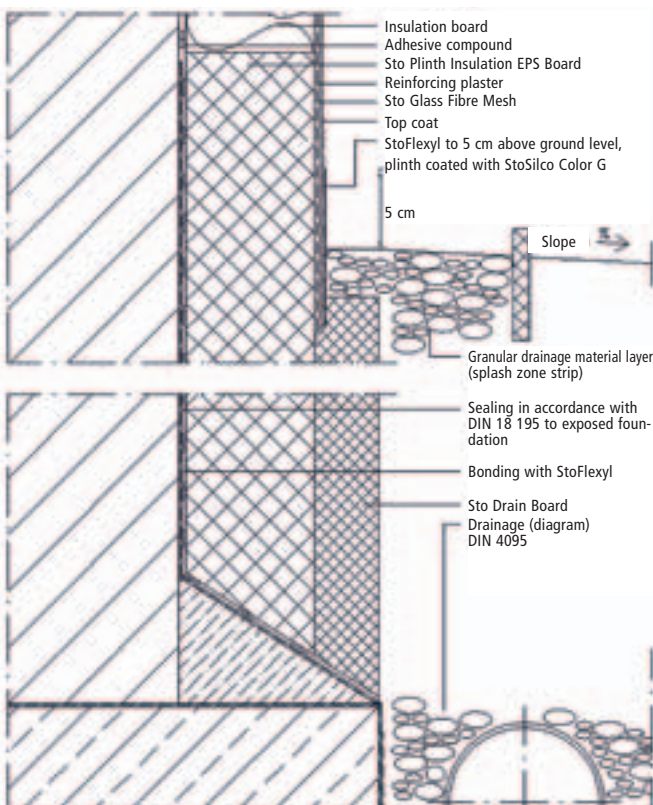
Corner profile
Sto Universal Starter Track Corner Profile with dowels.



Corner of building
Use Sto Universal Starter Track Corner Profiles at external corners of buildings. These profiles adapt to the angle of the corner. The Sto Universal Starter Track Round is used for curved elements on buildings.

Connection in earth and splash zone I

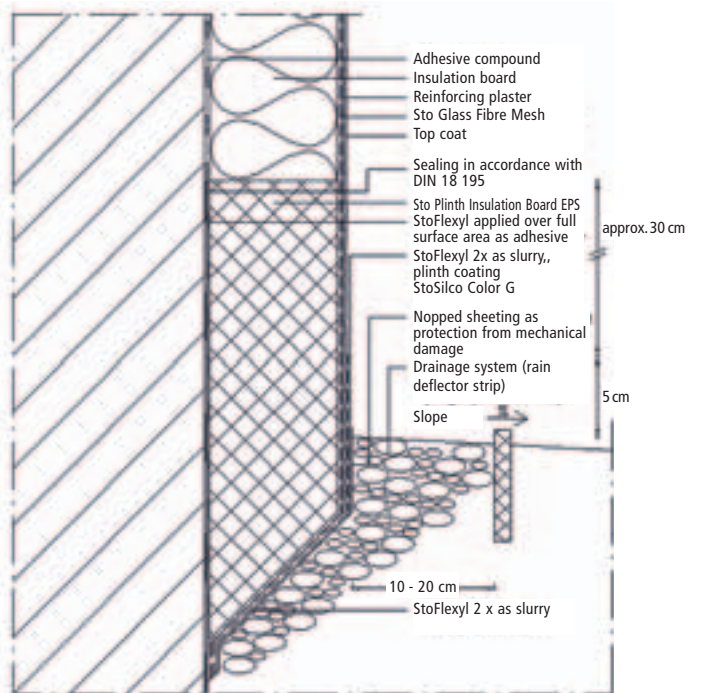
Plinth and perimeter insulation with heated basement



Plinth

Connection in earth and splash zone II

Plinth insulation with minimal incorporation into the ground, cellar not insulated



Plinth insulation in splash water area



Pre-treatment

Mix StoFlexyl with cement at ratio of 1:1. Apply as a priming coat diluted with 10 % water, up to approx. 50 cm above ground level.



Plucking

After drying, apply StoFlexyl (1:1 with cement) undiluted as a bonding agent and stipple the surface.

Plinth

Plinth insulation in splash zone



Bonding

Apply adhesive over entire surface area of Sto Plinth Insulation Board EPS and install with board joints tightly butted.



Reinforcement

Reinforcement with StoArmat Classic continues beyond the Sto Plinth Insulation Board EPS, to approx. 10 – 12 cm below ground level.



Top coat

Prior to applying the top coat, the applied reinforcing coat must be provided with a priming coat of StoFlexyl and an intermediate coat of Sto-Primer.

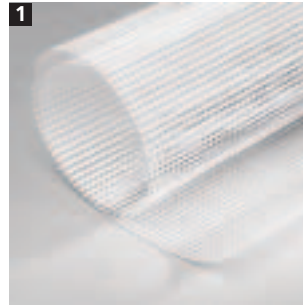


Gravel

In order to reduce exposure to water splashes (to help prevent mechanical damage) and to enable the water to drain, a 20–30 cm wide strip of gravel should be installed.

Outside wall / system junction

Area subject to a impact damage



Sto Armour Mesh

Protect areas subject to impact damage by installing additional reinforcement with Sto Armour Mesh.



Application

Press the Sto Armour Mesh into the reinforcement. Butt join without overlapping. Install under the standard reinforcement.

PRODUCT TIP

Sto Armour Mesh is a reinforced glass fibre mesh. It increases the compressive strength in critical areas and is embedded in StoArmat Classic. Spread the reinforcing plaster evenly at junctions with non-reinforced surfaces to produce a smooth transition.

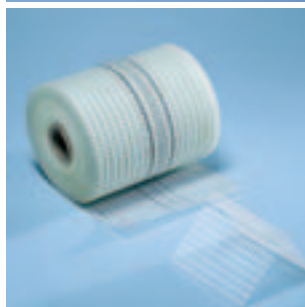
Outside wall / system junction

Corner formation

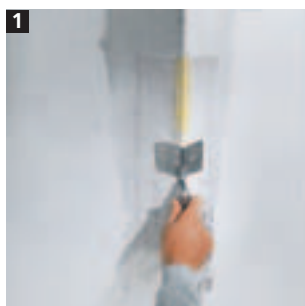


PRODUCT-TIP

For corners, use Sto PVC Mesh Angle Bead, Sto Armour Angle and Sto Corner Angle Roll. The Sto PVC Mesh Angle Bead is an angled strip of mesh reinforced with a plastic rail.



The Sto Armour Angle is an alternative for areas subject to stress. It is cut from the roll to the necessary length. No joint overlaps necessary. Side lengths variable.



1

Application

Press the angle into the reinforcing plaster with a corner trowel.



2

Reinforcement

Install the reinforcing mesh up to the corners to overlap the angle reinforcement.

Outside wall / system junction

Plaster finish



PRODUCT TIP

Sto Render Stop Profile F provides an attractive finish to the plastering.



1

Finishing

After application, clean off any excess material from the Stop Profile.

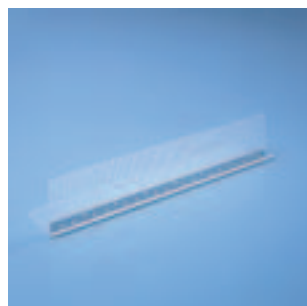
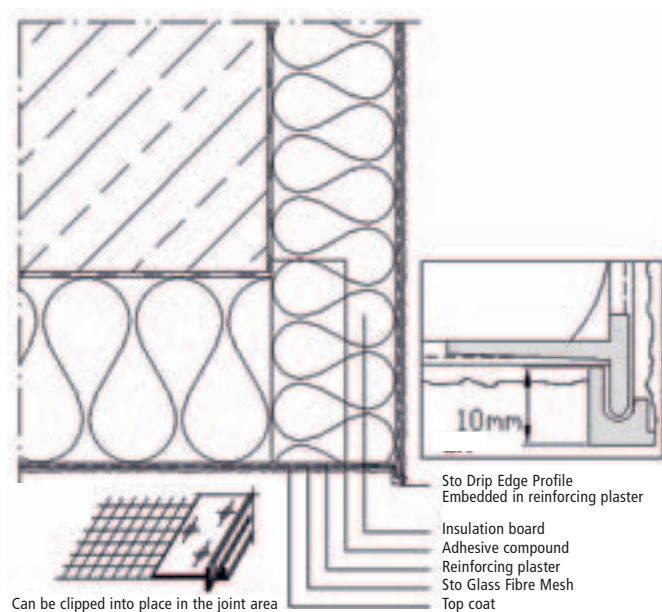


2

Apply StoSuperlit up to Sto Render Stop Profile F.

Outside wall / balcony

Forming a drip edge with Sto Drip Edge Profile



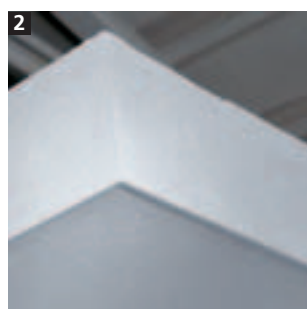
PRODUCT TIP

It is worthwhile using special drip edge profiles to building elements which are exposed to dripping water. Substantial protection for undersides of balconies, window lintels, roller shutter boxes.



Forming the drip edge

Embed the ready-to-fit Sto Drip Edge Profile and corner piece into the reinforcement. Use the 2 cm fixing connector to ensure correct connection and alignment of the plastic tracks.



Dripping water

Sto Drip Edge Profiles should be used not only on cantilever balcony slabs, but also on all parts of buildings which are exposed to dripping water.

Windows and doors

Production of lintels – fire barrier

TIP

Fire barrier recommendation:

When using polystyrene rigid foam boards of more than 10 cm in thickness we recommend installing a mineral lamella fire lintel over windows and doors.



Mineral lamella

Bond mineral lamella strips to the front and underside of the lintel.

Fire penetration

The fire barrier should extend 30 cm beyond the opening in the facade.

Windows and doors

Sto Window Sills

Watertight:

With all-round watertight edge profiles. The bottom of the edge profile is welded to the window sill along its entire length.

Tension-free:

The patented lateral edge profiles feature an expansion strip. This elastic connection compensates thermally induced variations in length.

System connections:

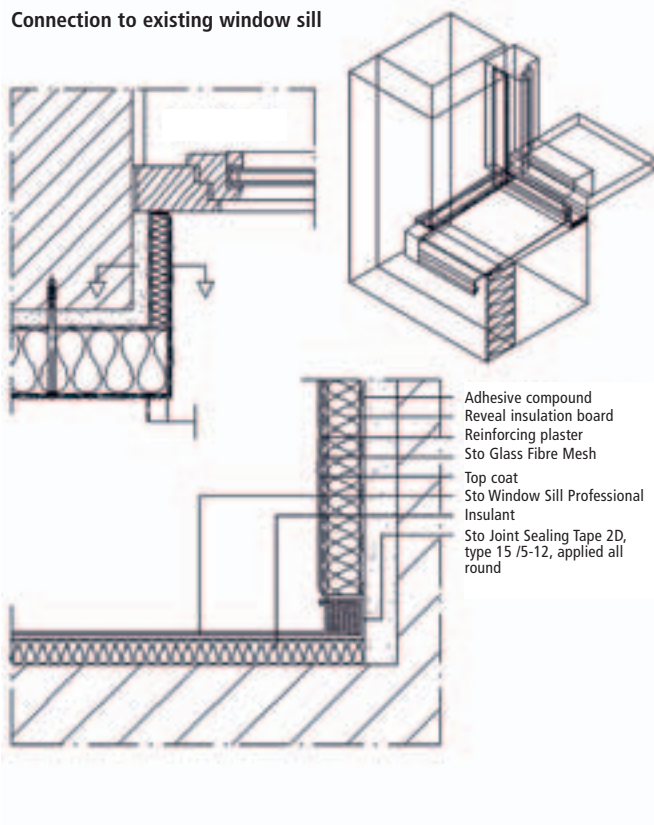
Joints to other parts of the building must be produced using joint sealing tape.



The system

The Sto window sill consists of the window sill profile and the edge profile. The edge profile mounting incorporates an expansion strip which compensates thermally induced variations in length.

Connection to existing window sill



Windows and doors

Sto Window Sills



Window frame connection

Cover screw plate with Sto Window Sill Tape (red) to close the joint.



Fixing the window sill

Place Sto Window Sill in position and fix to window frame with special window sill screws.



Cavity sealant

Seal cavities on the edge profile and under the window sill with filler foam.



Insulation joints

To seal the joints, apply Sto Joint Sealing Tape 2D type 15/5-12 around the edge profile flush with the insulation board joint and the window sill.

Windows and doors

Sto Window Sills



Sealing tape

Do not apply Sto Joint Sealing Tape around the edge profiles under tension, as it must be able to expand further after fitting the cut-to-size insulation board.



Insulation

Measure up the insulation board on the window sill edge profile. The subsequent surface of the window reveal must be flush with the inside of the edge profile.

Windows and doors

Window connection



PRODUCT TIP

Stop beads are employed to seal connecting joints in the area of doors and windows.



Fitting the stop bead

Cut the Sto Stop Bead Profi to size. Apply the sealing tape to the edge profile of the Sto Window Sill, then remove the protective film from the adhesive tape on the bead and place the bead on the sealing tape. Stick Sto Stop Bead Profi firmly to the window frame.



Applying the insulant

Apply the insulant firmly to the Sto Stop Bead Profi.



Covering windows

The film with self-adhesive tape on the Sto Stop Bead Profi facilitates effective covering of the window.

Windows and doors

Window connection



Mesh overlap

Apply the Sto Reinforcing Mesh of the Sto Stop Bead Profi up to the Sto PVC Mesh Angle Bead and work into the reinforcing plaster. Calculate for an overlap of at least 10 cm.



Reinforcement internal reveal corners

The internal reveal corners are reinforced with Sto Glass Fibre Mesh, whereby the reinforcing mesh should overlap by a minimum of 10 cm.



Reinforcement

Attach surface reinforcement at the corner and work into the reinforcing plaster.

Roof joint



Sealing tape

Apply sealing tape around the roof rafters.



Foam filling

Fill the open wedge joints with foam. Measure up the Sto Roof Vent Profile.



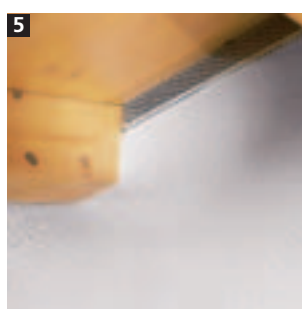
Reinforcing plaster

Application of the reinforcing plaster.



Sto Roof Vent Profile

Embedding of the Sto Roof Vent Profile.



Optimum Sto ventilation

Finished installation of ventilation profiles.

Installation elements

Light loads



Installation elements for light loads

StoFix Spirale facilitate the attachment of signs and other light components.



Opening up the plaster

Opening up the plaster by approx. 1 cm facilitates screwing-in of the StoFix Spirale. Then screw in the StoFix Spirale in accordance with the insulant thickness.

TIP

Create a pilot hole through the top coat and reinforcement using a drill or screwdriver.

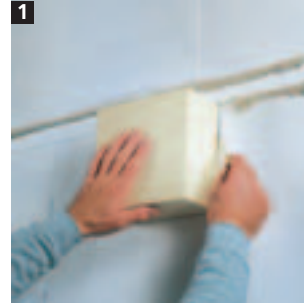


Light loads

Flower boxes, for example, can be fitted perfectly safely using a load support.

Installation elements

Heavy loads

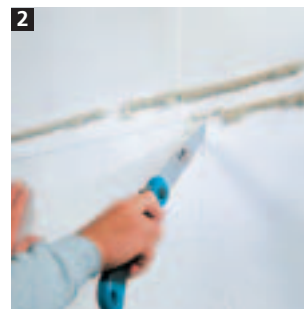


Installation elements for heavy loads

StoFix Quader provides support for heavy installation elements, such as awnings.

Marking

Mark the appropriate position with a pencil.



Cut-outs

Cut out the marked area with a keyhole saw.



Bonding

Apply adhesive to the StoFix Quader and press into the opening.



Closing joints

Close the joints with filling foam. Cut off any foam which oozes out of the joint and rasp level after drying.



Marking

Be sure to mark the appropriate point with a screw before applying the reinforcement and the top coat.

Installation elements

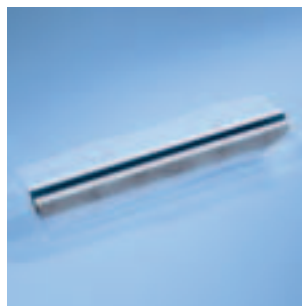
Heavy loads



Fixing

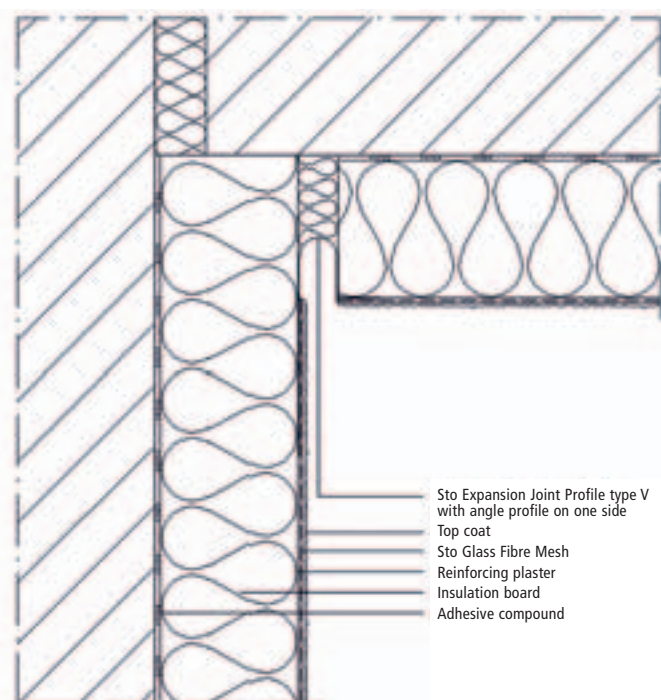
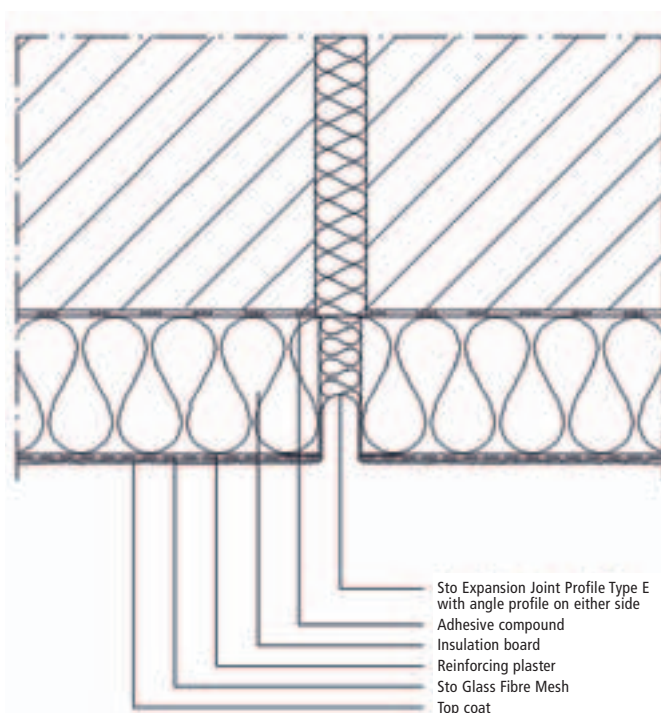
Use an appropriately sized bit to drill a hole through the ashlar and into the substrate, insert dowel and screw in screw.

Structural expansion joints



Expansion joint profiles

Sto Expansion Joint Profile Type E for level wall surfaces, Type V for offset wall surfaces (inner corners). Joint width between 5 and 30 mm.



Structural expansion joints



Installation

Apply coating of reinforcing plaster to the joint sides of the profile and 20 cm of the adjoining surfaces. Install profiles from bottom upwards, overlapping by 2 cm.

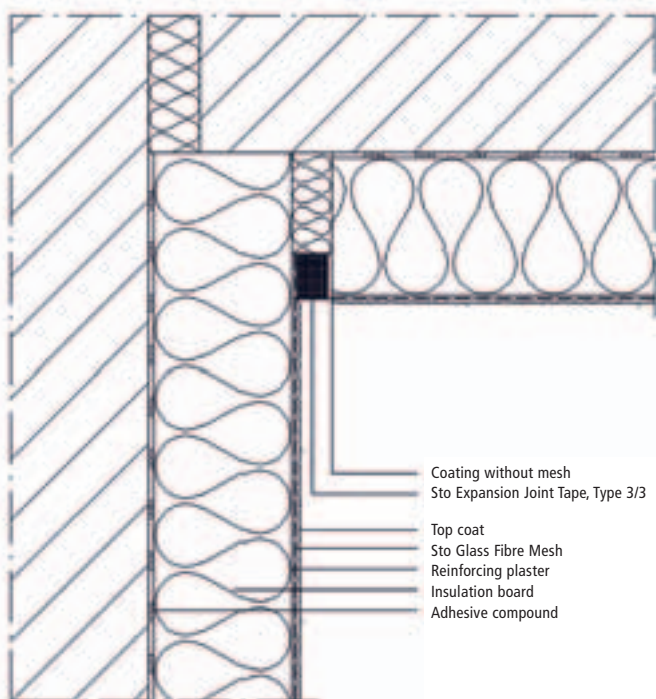
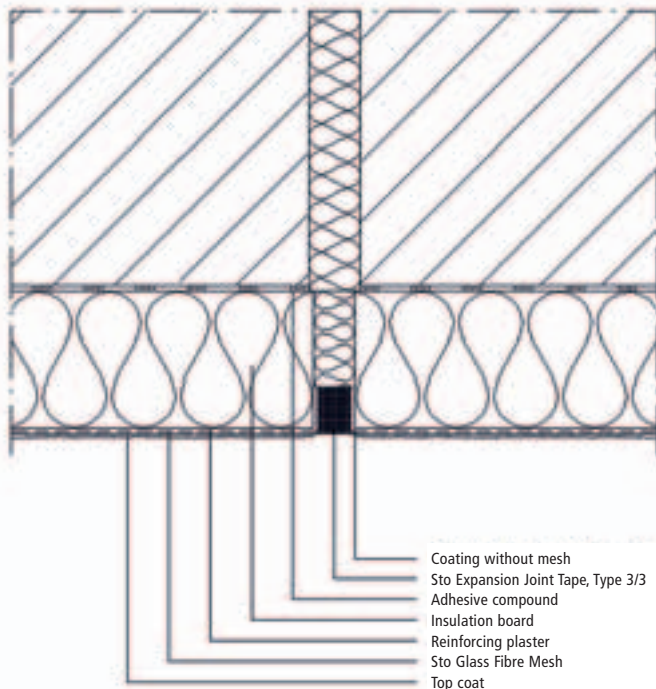


Top coat

Protect the joint profile with a polystyrene strip when plastering. This will enable correct plastering, and the edge can be separated by a groove line made with a trowel.

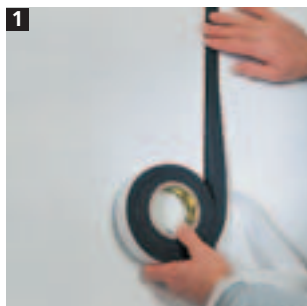
Structural expansion joints

Alternatively, expansion joint tape can be used



Structural expansion joints

Alternatively, expansion joint tape can be used



Alternative – expansion joint tape

Suitable for use at a joint width of 20–30 mm. Do not carry out coating when using Sto Expansion Joint Tape, as any pronounced movement will cause the coating to crack.

Apply expansion joint tape

Work into the sides of the joints when applying reinforcement. Insert the Sto Expansion Joint Tape after applying the reinforcement.



Top coat

Cover the Sto Expansion Joint Tape with masking tape and plaster up to the edge along the side of the joint. After applying the finish coating, remove the adhesive tape.

Plasters

TIP

Never apply decorative plaster in strong winds or direct sunshine. Plaster wet in wet. Do not apply the top coat until the reinforcement is thoroughly dry.



Stippled texture

Apply in the appropriate grain size and texture with a suitable trowel.



Rilled texture

Produced by texturing in a horizontal, vertical or circular motion. Can also be produced in different variations.



Free-style structural plaster

Fine-grained plasters are applied and modelled with a brush, spatula, trowel or sponge.

Sto Brick Slips



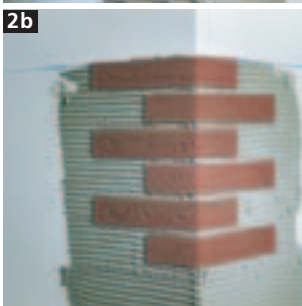
Full area adhesion

The more accurately the application area concerned is measured, the more straightforward installation will be. In order to obtain an exact joint pattern when laying the Slips, the plumb line should be at eye level.



Dimensioning

Begin the application by taking the exact measurements of the application area and dividing it into appropriate levels.



Corner bonding

Use the Sto Toothed Trowel to apply horizontal courses of Sto Adhesive and Joint Mortar at the corners. Press 2–4 staggered layers of corner facing bricks into adhesive bed.



Joint formation

Lay brick slips in the adhesive bed and smooth the joints with a moist brush or pointing trowel.



Lintel formation

An additional design variant to the lintel bond can be achieved using a course of corner facing bricks

TIP

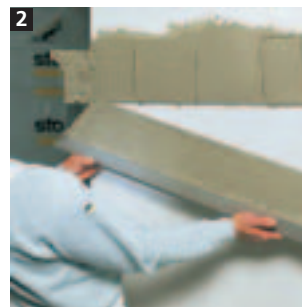
Differences in colour resulting from the production process can be offset by using slips from different boxes.

StoDeco Profiles



Cutting Profiles to size

StoDeco Profiles can be easily cut to size using the StoDeco Profile Bow Saw.



Bonding

Comb StoDeco Coll onto substrate and profile according to the floating-buttering method, using a 6 mm toothed trowel. Hold in place with lintel nails during the drying process. Trim and sand off excess adhesive after drying.



Joint formation

Use a round pointing trowel to form the material oozing out from the top of the profile into a fillet. This will prevent water from entering behind the profile.

Profile joints

Prime fillet and profile joints with StoPrim Micro.



Dowelling

Profile Type F. All profiles in this range must be additionally dowelled. Dowels to be fixed at a distance of 20 cm from each end, 2 dowels per profile. The dowel must be countersunk by 5 mm in the profile. Fill the countersink with StoDeco Coll.



Top coat

In order to obtain a sandstone-like surface texture, apply a preliminary coating of Sto Primer to StoDeco Profiles, followed by 2 finishing coats of StoDeco Color. To obtain a smooth surface, apply 2 coats of StoDeco Color without primer.

StoDeco Rustications



Bonding

Comb StoDeco Coll onto substrate (vertically) and rustications (horizontally), using a 6 mm toothed trowel. Press rustication onto the wall, ensuring full surface bonding. Full-surface bonding is achieved by moving the rustication gently to and fro.

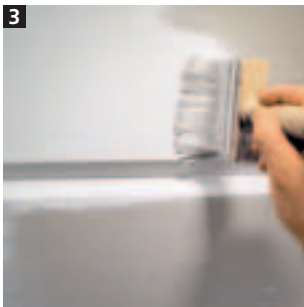
TIP

Produce the butt joint by means of a broken edge with V bevel or an all-round edge, i.e. break edges by grinding lightly.



Installation

Sand off excess adhesive from the butt joints.



Substrate, intermediate and top coat

Depending on the desired surface texture, prime with Sto Primer (rough) or StoDeco Color (smooth). Intermediate and top coat with StoDeco Color.

TIP

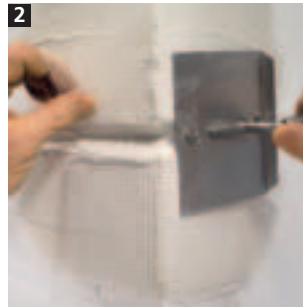
When using StoDeco Profiles and StoDeco Rustications, we recommend subsequent priming of the joints with StoPrim Micro.

Sto Rustication Boards



System components

Sto Rustication Board (50 x 100 cm) with milled groove, rustication mesh (2 m), rustication mesh corner pieces for inner and outer corners.

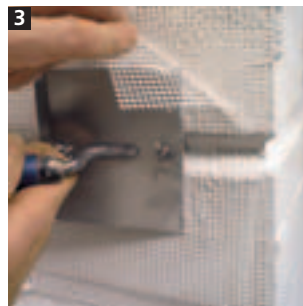


Joints in the corner area

Board is cut at an angle of 45° with Inocut.

Corner reinforcement

Work rustication mesh into StoArmat Classic with a Sto Rustication Trowel.



Joint reinforcement

Reinforce the rustication joints with the mesh rustication rods. Smooth the reinforcing plaster with the Sto Rustication Trowel.

TIP

After applying the joint reinforcement it is recommended to apply a second, thinned layer of StoArmat Classic using a rustication trowel. The entire glass fibre mesh is covered and the rustications acquire a smoother finish.

Sto Rustication Boards



4

Surface reinforcement
Reinforce the surfaces with Sto Glass Fibre Mesh and StoArmat Classic.

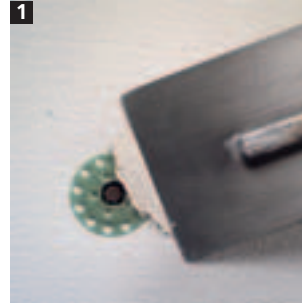


5a

Top coat
When the joints are in a different colour, apply a top coat of Stolit or StoSilco. Then remove the protective strip for the joints.

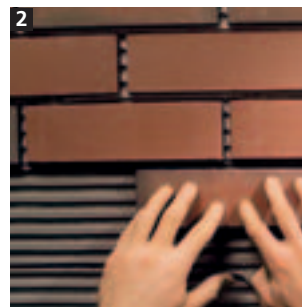


Brick tiles



1

Dowelling
Always insert dowels through the reinforcing mesh when brick tiles are involved. Fill the facade dowels before laying the brick tiles, then apply StoColl KM adhesive mortar.



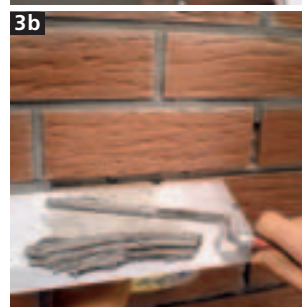
2

Laying
For optimum laying results, it is essential to measure up the surface concerned exactly.



3a

Joint production
Lime-wash smooth surfaces. Joint sanded, rough slips with jointing material and a pointing trowel. StoColl FM-S for smooth brick tiles and tiles.



3b

StoColl FM-K for sanded or grained brick tiles.

TIP

Owing to the high weight of the top coat, the facade insulation system must be dowelled through the mesh.

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