



## **StoDeco Profile** Application guidelines

**General information**

All information and figures have been carefully checked by Sto and are in accordance with current technical standards and practices. They constitute general information and do not take into account the special aspects relating to specific buildings and applications. In particular, the information is provided without any guarantee as to its applicability to any actual application scenario. For information on a specific project, please contact your technical consultant at Sto.

Do not use any materials which do not belong to the system. The presentation of the system applies only to the carefully coordinated system components from Sto. The applicable Technical Data Sheets are to be observed for all products named.

These guidelines will cease to apply upon publication of a new edition.

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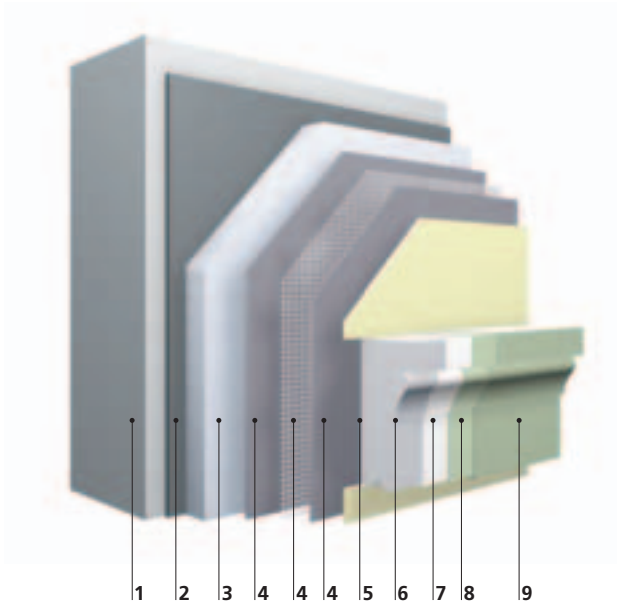


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## System components

## System description



### 1 Masonry:

All solid, load-bearing anchoring substrates

### 2 Adhesive:

Mineral or organic adhesive mortar

### 3 Insulant:

Thermal insulating board in external wall insulation system

### 4 Reinforcement:

Organic, cement-free reinforcing plaster with alkali-resistant reinforcing mesh

### 5 Profile adhesive: StoDeco Coll (not shown):

Mineral adhesive mortar for Sto Deco Profiles

### 6 StoDeco Profile:

Facade profile made of Verofill granular material

### 7 Substrate coating:

**Sto Primer** (sandstone texture):

Filled, pigmented organic priming coat or

**StoColor S fine** (fine, even surface texture):

Matt, filled dispersion paint with the character of a brush plaster or **StoColor Maxicryl** (smooth surface):  
Matt dispersion paint

### 8 Intermediate coating:

**StoColor Maxicryl:** Matt dispersion paint

### 9 Top coat:

**StoColor Maxicryl:** Matt dispersion paint

## StoDeco Profile

### Architectural elements

<b>Application</b>	<ul style="list-style-type: none"> <li>• Area of application: indoors and outdoors</li> <li>• Renovation of existing buildings</li> <li>• Design of new buildings</li> </ul>
<b>Properties</b>	<ul style="list-style-type: none"> <li>• Homogeneous material</li> <li>• Mineral base material</li> <li>• Low weight</li> <li>• Impact and compression resistant</li> <li>• Low thermal expansion</li> <li>• Weather resistant</li> <li>• Durable: no water-soluble components</li> <li>• Limited combustibility</li> </ul>
<b>Appearance</b>	<ul style="list-style-type: none"> <li>• Versatile in use: profiles, rustications, arches, lettering</li> <li>• Individual variants can be produced to customer's specifications</li> <li>• Various surface textures (sandstone look, fine, smooth)</li> <li>• Wide variety of colours, tintable according to the StoColor System</li> <li>• Unusual surface finishes possible (e.g. quarry stone, nidded)</li> </ul>
<b>Installation</b>	<ul style="list-style-type: none"> <li>• Coordinated system components</li> <li>• Simple to work and machine with standard tools: sawing, grinding, bonding</li> </ul>
<b>Approvals</b>	<ul style="list-style-type: none"> <li>• The relevant European and/or national approvals apply.</li> </ul>

## System description

### System components

Outdoor areas



### StoDeco Profile

System components – outdoor areas

Adhesive	StoDeco Coll		
Profile	StoDeco Profiles		
Primer	Sto Primer (stone texture)	StoColor S fine (fine texture)	StoColor Maxicryl (smooth: 800 colours)
Coating	StoColor Maxicryl		

## System description

### System components

Indoor areas



### StoDeco Art

System components – indoor areas

Adhesive	Sto Joint Sealer WF	
Decorative profiles	StoDeco Art custom profiles	
Substrate coating	StoPrep In (sandstone texture)	StoColor Latex 3000 (smooth)
Intermediate coating and top coat	StoColor Latex 3000	

#### StoDeco Art – Interior application

The dispersion and silicate paints of the Sto interior paints range can be used for StoDeco Art. For detailed information on installation of the interior profiles, please call Sto on **+49 9072 990-168**. Please note that the system components differ to those for the outdoor areas.

## Substrate

### Required condition, preparation

#### Required condition of substrate

The substrate must be examined prior to installing StoDeco Profiles. Only an even, load-bearing, clean and dry base will ensure correct installation and maximum durability of the product.

To this end, any loose matter and plaster residues must be removed and absorbent substrates must be primed accordingly. Any damage to the substrate surface is to be filled with smooth intermediate plaster.

When StoDeco Profiles are used in conjunction with external wall insulation systems or ventilated rainscreen cladding systems, the architectural elements are bonded to the reinforcement. When the substrate consists of brickwork or concrete, the Profiles are bonded to the base coat. New base coats must be allowed to set until they attain adequate load-bearing capacity.

## Working the profiles

### Measuring up the profiles

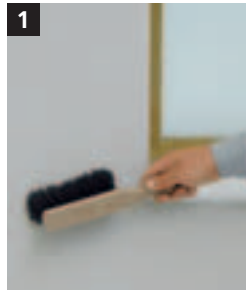
#### Product tip

##### StoDeco Profile Hack Saw

- With special tothing for cutting StoDeco Profiles to size (blade length: 800 mm, overall length: 840 mm)

##### Sto mitre box for StoDeco Profiles

- Dimensions (LxWxH): 475 x 160 x 160 mm.
- Mitre cutting device, for sawing StoDeco Profiles to precise dimensions



1 Check that the substrate possesses adequate load-bearing capacity. The application and substrate temperature must not be below +5 °C. In the case of strongly absorbent substrates, treat the areas concerned with a suitable penetrating primer.



2 Measure out and mark the positions of the profiles.



3 Cut the profiles precisely to size, applying a mitre cut where appropriate.

Note: When using bonded profiles, use stainless steel clamps to fix in place.



4 Remove dust from the entire surfaces of all cut edges using a hand brush (also applying compressed air, if available). This will ensure correct bonding of the adhesive.

## Working the profiles

### Bonding the profiles



#### Practical tip

Create an elastic connection between window frame and window sill with **StoSeal F 505**.

#### Info

- When producing the joint in wet state, do not introduce any additional water into the joint. This will lead to shrinkage of the adhesive.
- Bonding must be carried out wet in wet by floating in.
- Avoid skin formation.



1

Use a toothed trowel to apply StoDeco Coll adhesive to saturation (observe instructions for use on container) to the rear of the profile and the corresponding wall surface in a criss-cross pattern (6 x 6 mm).

Bonding must be carried out wet in wet by floating in. Avoid skin formation. The adhesive must issue evenly from under the profile. Where necessary, choose tooting as appropriate to the unevenness of the substrate (full-surface application).



2

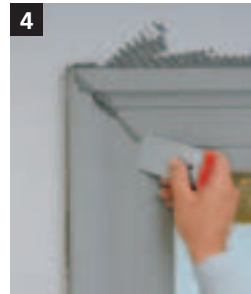
Use a jointing iron to form the adhesive which has issued at the top into a hollow throat (correct water run-off).



3

At profile joints, apply the adhesive liberally in a criss-cross motion to both sides of the joint, using a toothed trowel (6 x 6 mm).

## Working the profiles



4

The adhesive must issue along the entire joint. The pasted seam should be approx. 3 mm thick. After the butt joints have set, knock off the protruding adhesive and grind smooth.



5

The result is a neat, flush pasted seam. The maximum overall jointed length is 25 m.

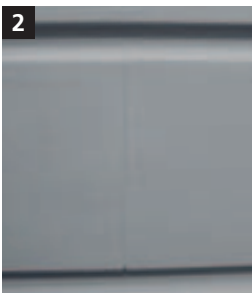
## Working rustications

### Bevelling and joint formation



#### 1 Bevelling

Bevel the elements to be jointed with a profile piece or grinding block. The joint is also to be produced with a bevel when using the profiles as a window frame.



2

Now fill the joint with StoDeco Coll (width approx. 3 mm).

The deliberate aim is to produce a visible recess in the joint. The maximum overall jointed length is 10 m.

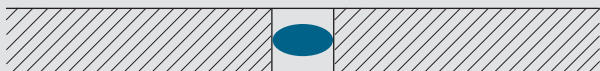
#### Joint formation

##### 1. Open joint with paint system



#### Joint formation

##### 2. Closed joint with Sto Joint Sealing Tape and coat of StoSeal F 505



## Mechanical fixing

### Additional dowelling

#### Info

##### Additional mechanical fixing necessary for:

- Profile pieces with a weight > 5 kg and a projection  $\geq$  50 mm
- Rustications of a thickness of  $\geq$  50 mm



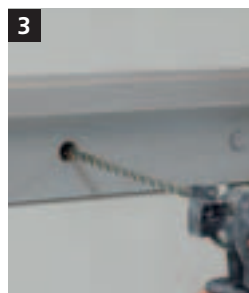
1

Window sills and large custom profiles are to be dowelled in accordance with the current system specifications. Measure out approx. 20 cm from each end of the profile.



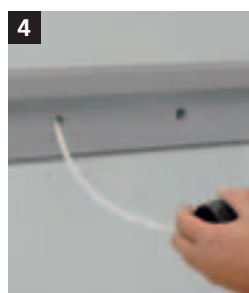
2

Pre-drill a hole of 20 mm in depth using a carbide-tipped multi-spur machine bit.



3

Then drill through the profiles into the load-bearing substrate.



4

Blow out the drilled hole.

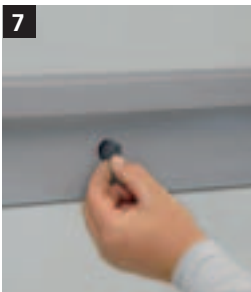
## Mechanical fixing



5 Insert the appropriate dowel through the dowel hole.



6 Screw the dowel tight.

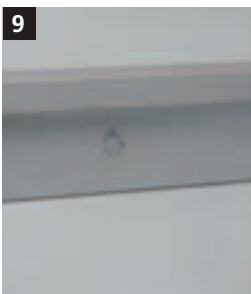


7 Fit a foam cap onto the dowel head.



8 Then fill the dowel hole with StoDeco Coll.

Alternative: place a 5 mm thick StoDeco Profile disc over the hole.



9 Grind smooth.

## Surface design

### Coatings

#### Info

Substrate coating and intermediate coating must be applied prior to applying the top coat on neighbouring surfaces. Top-coating of the profile is carried out as the final item of work.

For a durable, professional system, Sto AG products must be used. Fine hairline cracks may occur. Such cracks do not constitute grounds for filing a guarantee claim.

Please adhere precisely to the procedures described here. No guarantee claims shall be accepted in case of failure to observe the stipulated procedures.



#### Rough, sandstone-like finish:

- Substrate coating: Sto Primer / StoColor S fine
- Intermediate coating: StoColor Maxicryl, 5 % diluted
- Top coat: StoColor Maxicryl, 5 % diluted



#### Smooth finish:

- Substrate coating: StoColor Maxicryl, 10 % diluted
- Intermediate coating: StoColor Maxicryl, 5 % diluted
- Top coat: StoColor Maxicryl, 5 % diluted



Where necessary, surfaces of hollow constructions using StoDeco Flex (e.g. hollow columns, hollow profiles) should be filled with StoDeco Coll to obtain a smooth finish.

## Shoulder piece

### On-site



1 Create 45° saw cut in direction of the contour, beginning from the end of the profile.



2 Place saw against newly produced edge. Produce 45° saw cut in opposite direction.



3 Place the profile pieces against the contour. The residual piece of profile from the 2nd saw cut is no longer required.



4 Join the two profile pieces together as a shoulder piece.

## Shoulder piece



5 Remove dust from profiles. Apply StoDeco Coll adhesive to both cut surfaces. Press profiles together.



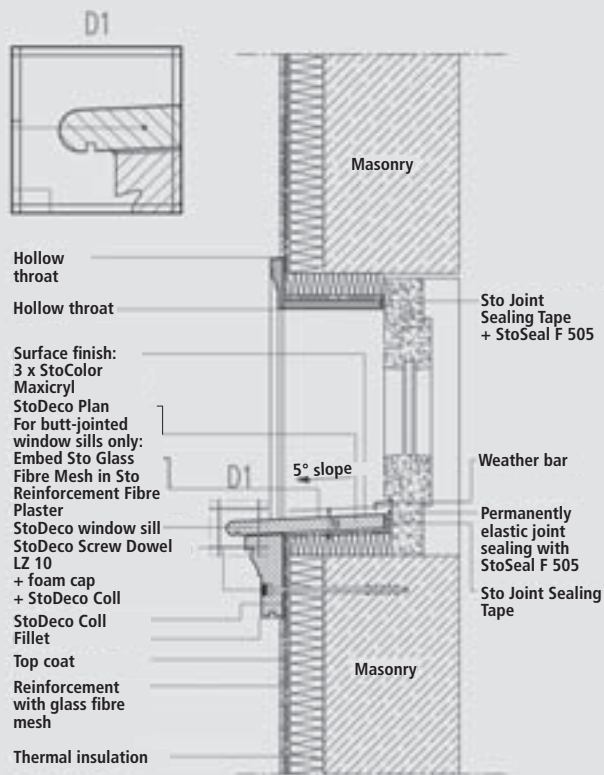
6 The adhesive must issue along the entire joint. A pasted seam of approx. 3 mm in thickness must be produced. Knock off the protruding adhesive after it has set and grind joint smooth.

### Info

Detailed instructions and recommendations on bonding are to be found in the section on bonding on page 7.

## Window sill

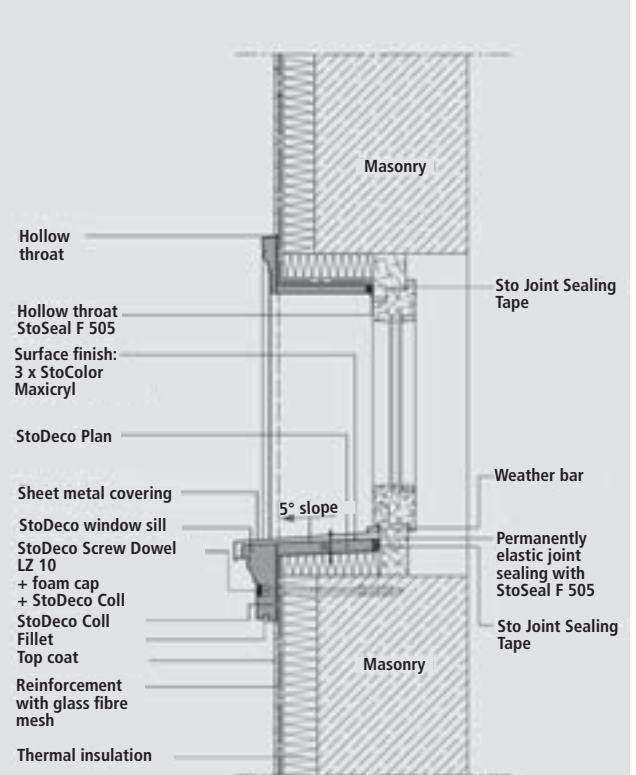
Sto Deco window sill connection



- Connections to existing parts of the building and recesses at window sills are to be separated off using Sto Joint Sealing Tape type 20/4.
- Create the connection joints with a hollow throat.
- Ensure an adequate drip edge is formed towards the wall.
- Drawing not to scale; adjacent structures are shown in schematic form only.

## Window sill

StoDeco window sill connection – sheet metal covering



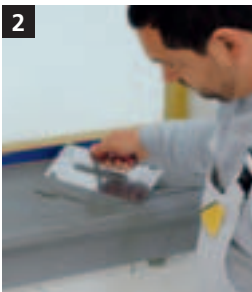
- Connections to existing building parts and recesses at window sills are to be separated off using Sto Joint Sealing Tape type 20/4!
- Produce the connection joints with a hollow throat!
- Ensure an adequate drip edge is formed towards the wall.
- Drawing not to scale; adjacent structures are shown in schematic form only.

## Window sill

In the case of window sills which are butt-jointed only (window sill profile with rustication placed on top), additional measures (filling and smoothing/sheet metal covering) are to be carried out for horizontal surfaces. The following items of work must be performed prior to coating:



1 Produce connections around all edges of the StoDeco rustications with Sto Joint Sealing Tape.



2 Apply Sto Reinforcement Fibre Plaster over the entire horizontal surface.



3 Embed Sto Glass Fibre Mesh (coarse) in the Sto Reinforcement Fibre Plaster.

## Window sill



4 Level smooth.

**Note:**

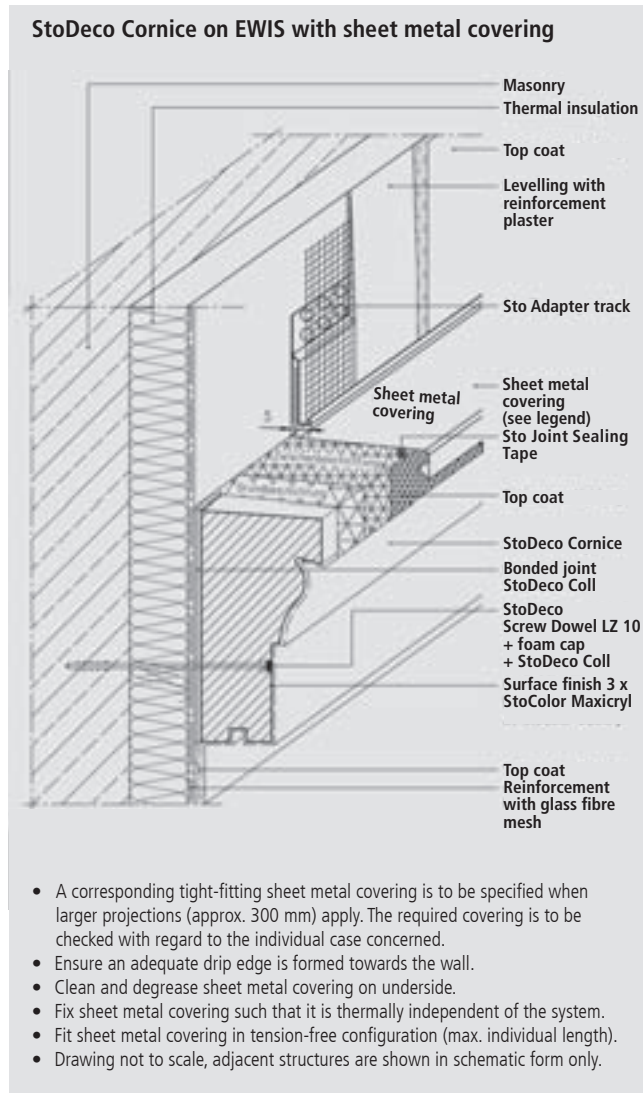
For an elastic finish we recommend smoothing with Sto Reinforcement Fibre Plaster.



5 All reveal connection joints are to be produced with StoSeal F 505. The subsequent coating procedure is carried out with the smooth variant only.

## Window sill

### Sheet metal covering



#### Sto Adapter track

A corresponding tight-fitting sheet metal covering is to be specified when larger projections (approx. 300 mm) apply. The required covering is to be checked with regard to the individual case concerned. The connection to the wall is produced with a Sto Adapter track.

## Fixing hollow bodies

### Dowelling through rear wall

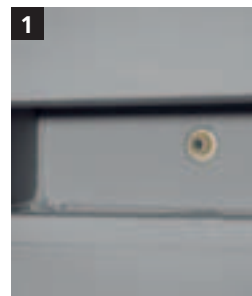
#### Info

Detailed instructions and recommendations on bonding are to be found in the section on bonding on page 7.

#### Special variants of mechanical fixing:

1. Dowelling through the rear wall of the hollow body with subsequent fitting of the cover.
2. Dowelling through a solid part of the hollow body.

In both cases, the required materials are stated in the order.



Dowel the two-part or multi-part hollow body through the rear wall of the profile.



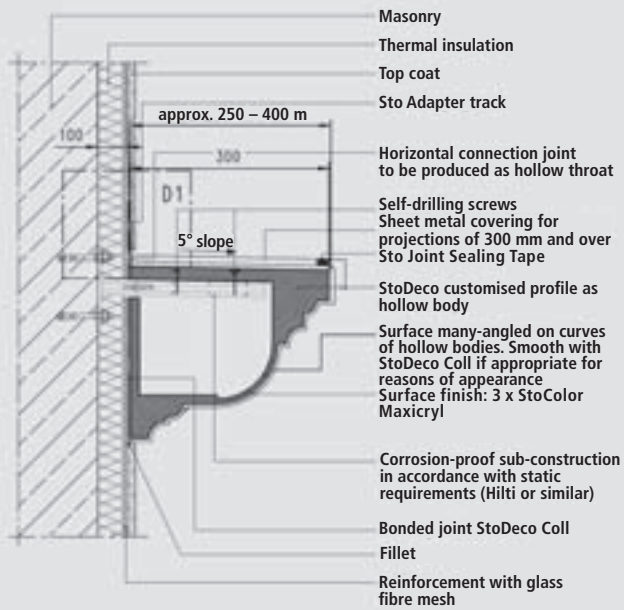
Then close the hollow profile by bonding on the profile cover with StoDeco Coll.

## Fixing hollow bodies

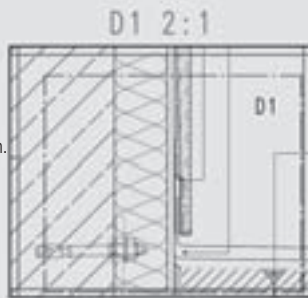
## Fixing hollow bodies

### Consoles

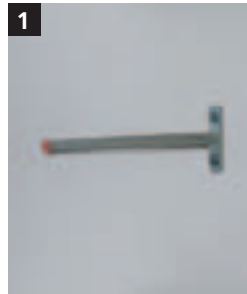
#### Example support construction for StoDeco Profiles (width approx. 250–400 mm)



- Ensure an adequate drip edge is formed towards the wall.
- Clean and degrease sheet metal covering on underside.
- Fix sheet metal covering such that it is thermally independent of the system.
- Fit sheet metal covering in tension-free configuration (max. individual length).
- Drawing not to scale, adjacent structures are shown in schematic form only.



Please contact your Sto sales representative for further information.



1 Fit the console on a load-bearing substrate.

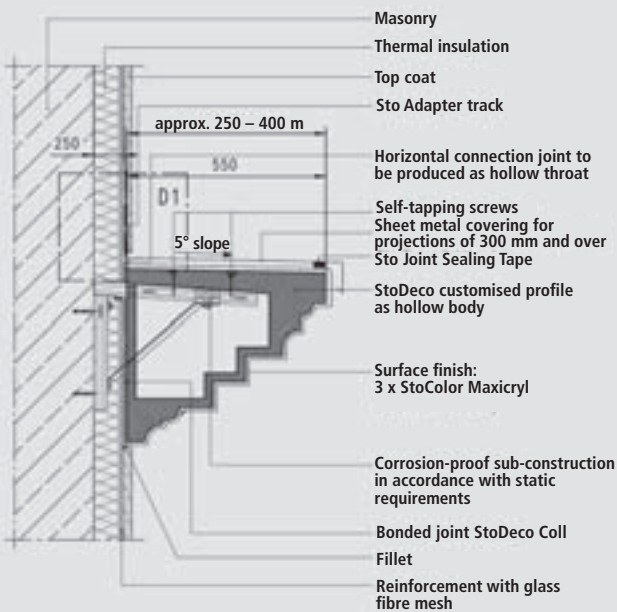


2 Slide the StoDeco hollow body onto the console and bond to the substrate at the rear. The profiles are not walkable.

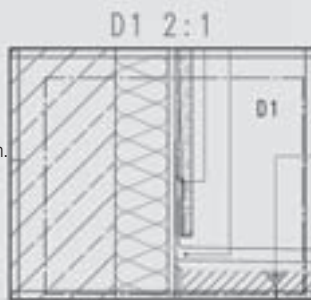
## Fixing hollow bodies

### Consoles

#### Suggested fixing solution for StoDeco Profiles (width approx. 400–800 mm)



- Ensure an adequate drip edge is formed towards the wall.
- Clean and degrease sheet metal covering on underside.
- Fix sheet metal covering such that it is thermally independent of the system.
- Fit sheet metal covering in tension-free configuration (max. individual length).
- Drawing not to scale, adjacent structures are shown in schematic form only.



Please contact your Sto sales representative for further information.

## Fixing hollow bodies



Fit the console on a load-bearing substrate. Ascertain the required number of consoles and spacing beforehand. Fix to the load-bearing substrate with approved dowels. Saw an opening in the rear side of the hollow body.



Slide the StoDeco hollow body onto the console after applying adhesive to both sides (see p. 7). Adhesive must issue all along the joints and connections. The profiles are not walkable.

### Measurements

A drawing in dwg format which clearly shows the arch geometry is required for the purposes of drafting a tender for arches (three-centred, peak arches, etc.).

It is assumed that the ordering party consents to the drawing being used as the basis for producing an offer.

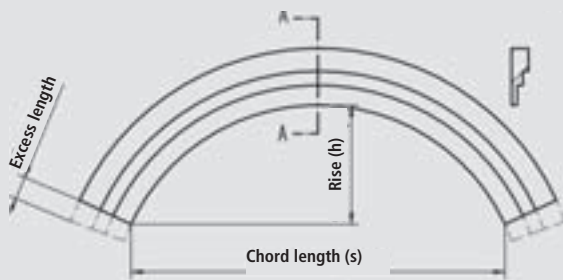
In addition to the details described here by way of example, we can provide you with a number of other detail drawings. Please ask your Sto sales representative.

The installation instructions described in these application guidelines are binding with regard to quality assurance of the StoDeco systems.

Observing these instructions will ensure swift installation. Should any information or procedures not be presented in sufficient detail for your specific purposes or should you require more detailed information on reference projects in your area, the specialists at StoVerotec GmbH will be pleased to assist you. Please call **+49 9072 990-168**.

#### Round arches

In order to draw up an offer for round arches, information is required on the chord length, the rise and the dimensioned profile cross-section.



#### General tip

- Measure chord length (s)
- Measure rise (h)
- Provide dimensions profile cross-section
- Enlist the services of a surveying firm if appropriate







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