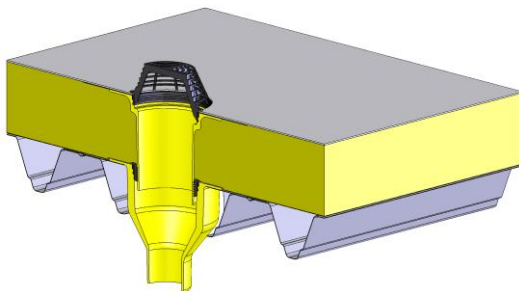


Fitting instructions for all

SitaRoof- and renovation outlets,
extension elements and accessories



Contents

General Information
01. SitaStandard – SitaTrendy - SitaDSS Profi roof outlet
 with extension unit 5
02. SitaTrendy screw-on-flange - SitaDSS Profi screw-on-flange..... 7
03. Sita terrace installation kit 8
04. SitaAirstop for SitaDSS Profi..... 9
05. SitaMulti and SitaDSS Multi with extension unt/ base plate 10
06. SitaMulti grating frame..... 14
07. SitaAirstop for SitaDSS Multi 16
08. SitaRetaining element 17
09. SitaSani® PUR..... 18
10. SitaSani® Spezial 19

Fitting instruction

General instructions

When installing flat roof drainage elements, the following regulations, amongst others, must be observed:

DIN EN 12056-3, DIN 1986-100, DIN 1986-3, DIN 18531, DIN 18195, DIN 18234, flat roof guidelines

Some important points of these systems of rules are listed below:

- Roof outlets are to be fitted at the lowest point of a roof.
- In the case of steel trapeze profile substructures, penetrations are to be reinforced by a strengthening sheet.
- The basic body is to be joined with the substructure.
- A skewing of the extension unit through relative movements of the roof construction must be prevented (e.g. through mechanical fixing of the unit).
- The flanges of the roof outlets and extension units are to be installed
- Roof outlets must be freely accessible for maintenance purposes.
- Roof outlets and the connected pipelines have to be protected against "sweating", where appropriate, with e.g. aluminium-coated rock wool.
- In the case of waterproofing seals of only one layer and/or loosely laid, then screw-on flange joints must be installed with permanently compatible material of the same type as the waterproofing (or a suitable elastomer) fitted on both sides.
- The bolts of screwed-on-flange joints must be checked and tightened at least three times during the course of the fitting work, using a torque wrench.
- Roof outlets have to be serviced at least twice per year.

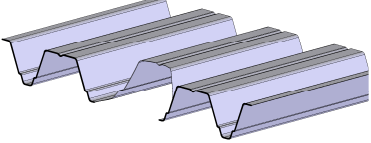
Fitting instruction

Especially with screw-on-flange outlets in general, the following points should be observed and adhered:

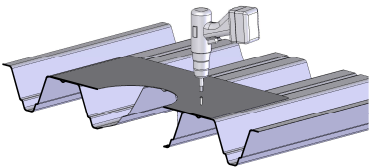
- o In case of a bituminous seal, the sealing sleeves are not to be used.
- o The fixed flange of the outlet body is to be pretreated with bitumen primer.
- o The bitumen pave-track or tracks have to be welded directly on the fixed flange of the outlet body.
- o Seam overlap in the flange area is not allowed.
- o Fleece-clad roof sheets should not be connected by a flange (capillary effect).
- o Before sealing the flange the sealing tracks have to be preheated.
- o Loose-laid waterproofing layers and screw-on-flange connections must be protected on both sides with tolerable supplements or with material compatible elastomers
- o The compatibility of the delivery of roof outlets or extension units with their belonging sealing sleeves to the roofing material should be examined independently.
If necessary the sealing sleeves have to be replaced by the roofing material.
- o Screw-on-flange connections must be attract with a torque wrench during the assembly time at least three times, timing > 24 hours.

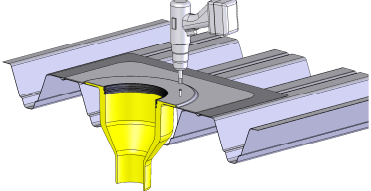
Fitting instruction

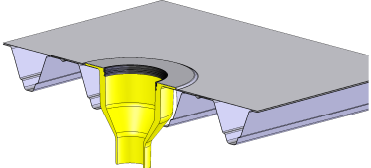
1. SitaStandard – SitaTrendy - SitaDSS Profi roof outlet with extension element

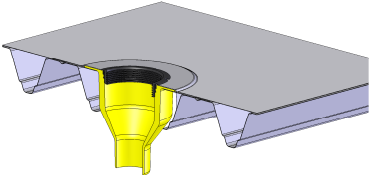
- 1.1 

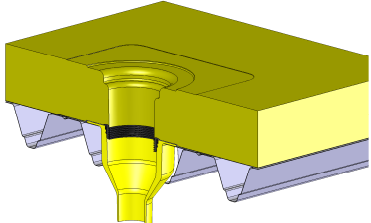
Locate the position for the roof outlet hole (\varnothing 250 mm) at the lowest point of the roof construction.

In the case of steel trapeze profiles, care must be taken that worked area does not later suffer from corrosion.
- 1.2 

In the case of steel trapeze profiles, care must be taken that worked area does not later suffer from corrosion.
- 1.3 

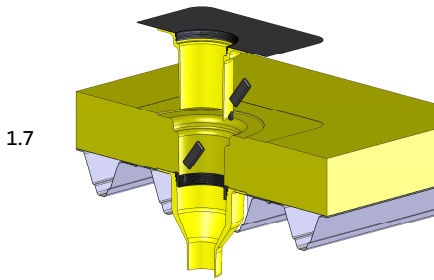
The roof outlet is to be put into the hole in the roof and mechanically fixed.
- 1.4 

The vapour barrier is to be fitted to the flange or connecting sleeve, by means of adhesive or welding.
- 1.5 

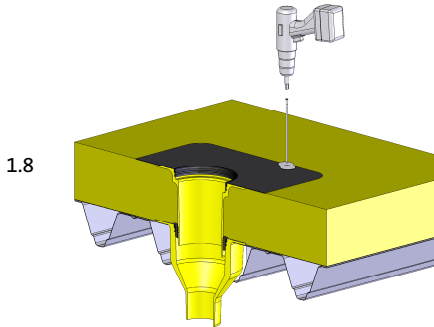
The angled sealing ring for stemmed water safety is to be placed into the outlet so that the upper lip flatly overlaps the collar edge.
- 1.6 

Fit the thermal insulation and cut out the outline of the extension unit.

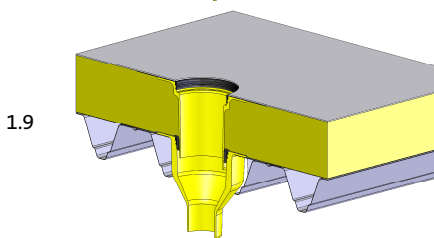
Fitting instruction



Shorten the extension element where appropriate in such a way that the outlet cross-section in the case of angled roof outlets is preserved. Apply attached lubricant medium to the lower parts of the angled sealing ring and the extension unit.



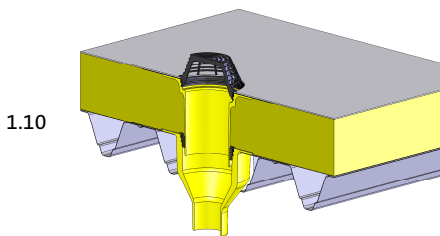
Push the extension element through the angled sealing ring in the roof outlet. The extension element must at least be flush with the lower edge of the angled sealing ring. Fix the extension element mechanically in the substructure.



The roof waterproofing is to be fitted to the flange or connecting sleeve, by means of adhesive or welding.

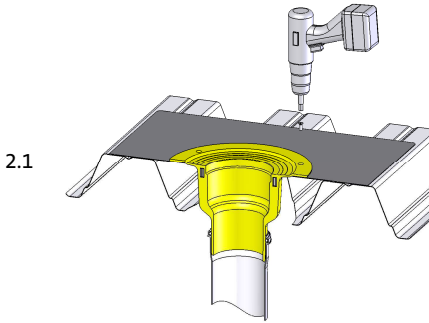
Attention:

The following point 1.10 is valid for the series SitaStandard and SitaTrendy. For SitaDSS Profi and SitaDSS Profi with screw-on flange see „SitaAirstop for SitaDSS Profi“.



Allow the dome grate to engage from above in the fixating ring of the extension unit.

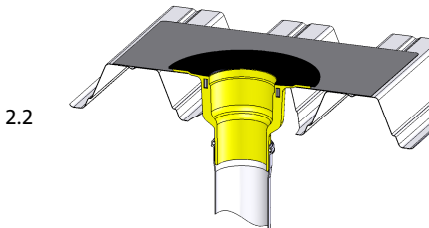
2. SitaTrendy screw-on-flange - SitaDSS Profi screw-on-flange



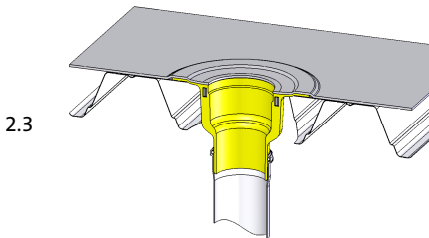
Place the screw-on-flange roof outlet or the extension unit in the existing roof construction, and screw it together with surface in the prepared vertical hole.

Attention:

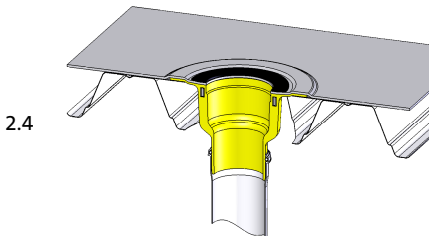
The compatibility of the roofing material with the roof outlet's and/or extension unit's sealing sleeve which may have been delivered with the product, must be checked and if necessary corrected.



Lay the large sealing sleeve centrally on the roof outlet body. In the case of a bituminous waterproofing layer, this is to be welded directly to the outlet body.



Roll out the waterproofing course over the roof outlet, and cut out the middle (\varnothing approx. 150 mm). If a number of courses have to be flanged in, then these are always to be led up to the drain entrance. A covering over of the waterproofing courses in the area of the flange is not allowed.



Lay the small sealing sleeve centrally on the roof outlet body.

Fitting instruction

The sealing sleeve and the roof waterproofing courses are to be warmed before the flanging in. Place the aluminium loose flange in its preferred position.

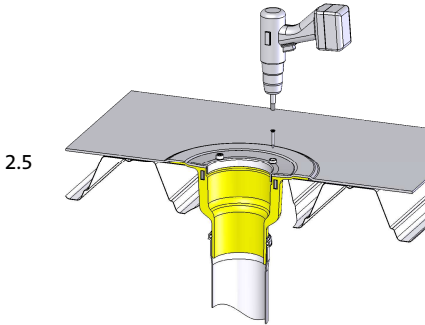
The holes in the drain body are necessary for production purposes. One in the insertion ring which is built into the drain body achieves the impermeability in every position of the loose flange.

Tighten the countersunk head screws which were contained in the set with a power screwdriver in a uniform opposing pattern with a maximum torque of 9 Nm. According to the German standard DIN 18195, the screws of a loose/fixed flange are to be checked and tightened at least three times, after periods of more than 24 hours each.

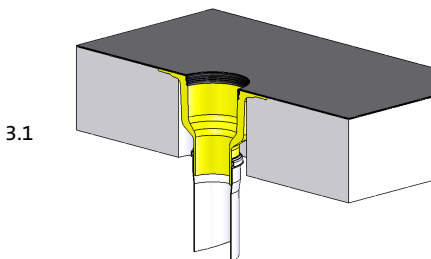
Allow the dome grate to engage from above in the screw flange.

Attention:

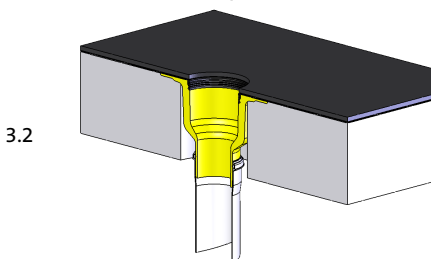
The assembly of the dome grate is valid for the series SitaTrendy screw-on-flange.
For SitaDSS Profi screw-on-flange see „SitaAirstop for SitaDSS Profi“



3. Sita terrace installation kit

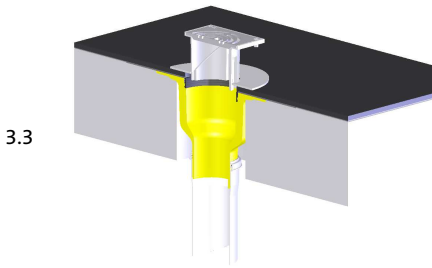


The waterproofed roof area with built-in Sita roof outlet.

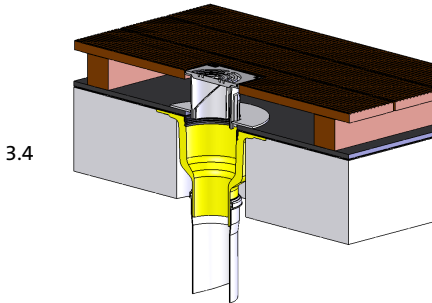


A protective layer should be applied to the waterproofing, up to the drain entrance.

Fitting instruction

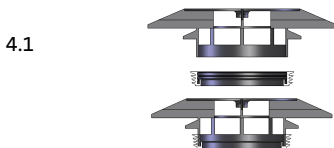


Fit the Sita terrace kit in the roof outlet or the extension element. The height of the terrace kit is adjusted through turns of the height adjustment ring, as well as through moving the housing in the height adjustment ring. The terrace kit may not be tightly connected with the outlet body in order to maintain the mobility of the parts themselves.

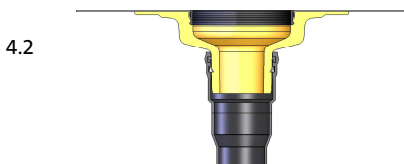


The accessible covering can be fitted to the upper edge of the terrace installation kit or slightly increased.

4. SitaAirstop for SitaDSS Profi



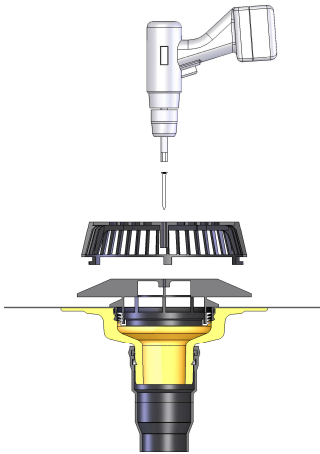
Place the SitaAirstop in the U-shaped groove of the fastening ring. Coat the outside of the ring with lubricant.



Place the SitaAirstop centrally over the SitaDSS Profi roof outlet or place the extension element and push it fully into the drain body.

Fitting instruction

4.3



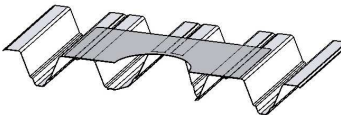
Press the stainless steel screw through the central hole of the dome grate, and screw it into the hole in the middle of the SitaAirstop.

5. SitaMulti and SitaDSS Multi with extension element/base plate

Attention:

The points presented below may be considered as being valid for both the SitaMulti base plate and also for the SitaMulti extension unit.

5.1

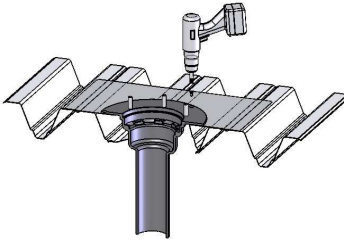


Locate the position for the hole (\varnothing 250 mm) for the roof outlet at the lowest point of the roof and cut it out. In the case of steel trapeze profile roofing, a reinforcement sheet is to be attached to the roofing according to DIN EN 18077.

5.2

Place the SitaMulti roof outlet in reinforced hole and screw it to the subsurface.

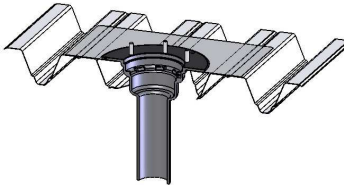
Fitting instruction



Attention:

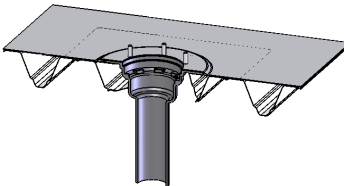
The suitability of the sealing sleeve which is delivered with the roof outlet and/or extension element is to be checked for compatibility with roofing material, and if necessary to be changed.

5.3



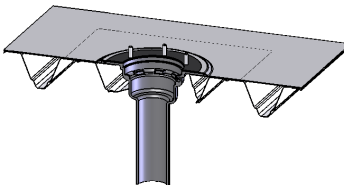
Lay the big sealing sleeve over the threaded pins of the fixed flange of the SitaMulti. Do not use the sealing sleeve in the case of a bituminous roofing material. Weld the roofing material directly to the fixed flange.

5.4



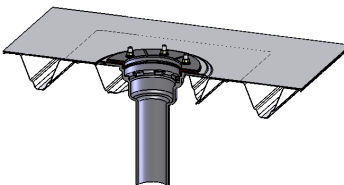
Determine the position of the SitaMulti in the vapour barrier. Use the second sealing sleeve as a template for the hole pattern of the threaded pins of the SitaMulti. Lay it on the roof surface and mark the hole pattern. Punch out the pattern (hollow punch with a diameter of 13mm) and place the vapour barrier over the threaded pins onto the sealing sleeve. Cut out the roofing material inside the diameter of the outlet pot. An overlapping in the area of the flange is not permissible.

5.5



Lay the small sealing sleeve over the threaded pins onto the roofing material. Do not use the sealing sleeve in the case of a bituminous roofing material.

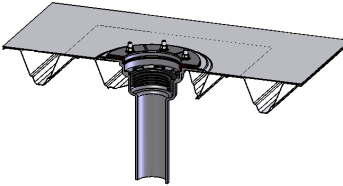
5.6



The sealing sleeve and the vapour barrier are to be warmed before flanging. Lay the loose flange over the threaded pins onto the sealing sleeve. Place the washers and tighten the hexagonal nuts diagonally (max. torque 30 Nm).

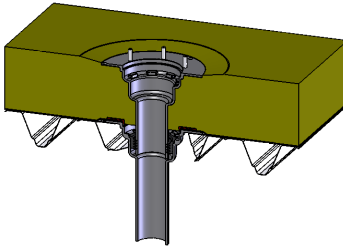
Fitting instruction

5.7



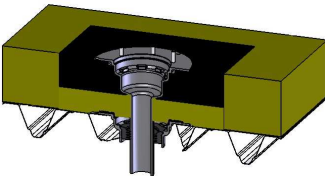
Place the angled sealing ring for backflow prevention within the outlet body, so that the upper protruding lip (between the cams) lies flush over the collar edge. Lubricate the inside of the angled sealing ring and also the extension unit with the provided lubricant.

5.8a



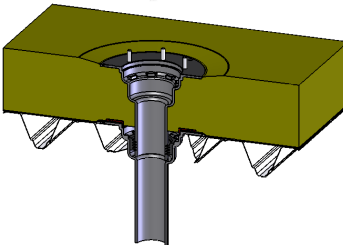
Match the extension unit to the thickness of the insulation material, if necessary by shortening, and then push it through the angled sealing ring into the SitaMulti. The extension unit must be at least flush with the under edge of the angled sealing ring. Secure the extension unit mechanically to the substructure.

5.8b



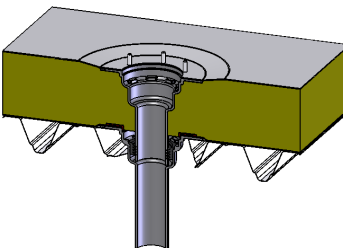
Fit the thermal insulation, and push the SitaMulti roof outlet through the angled sealing ring. Secure the SitaMulti roof outlet mechanically to the substructure.

5.9



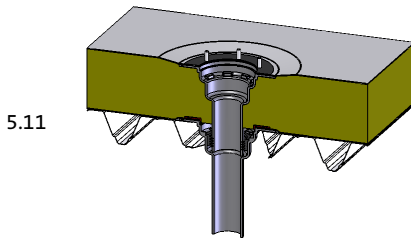
Lay the big sealing sleeve over the threaded pins of the fixed flange of the SitaMulti. Do not use the sealing sleeve in the case of a bituminous roofing material. Weld the roofing material directly to the fixed flange.

5.10

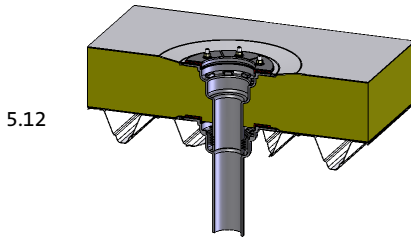


Determine the position of the SitaMulti in the roofing material. Use the second sealing sleeve as a template for the whole pattern of the threaded pins of the SitaMulti. Lay it on the roof surface and mark the hole pattern. Punch out the pattern (hollow punch with a diameter of 13mm) and place the roofing material over the threaded pins onto the first sealing sleeve. Cut out the roofing material inside the diameter of the roof outlet pot. An overlapping in the area of the flange is not permissible.

Fitting instruction



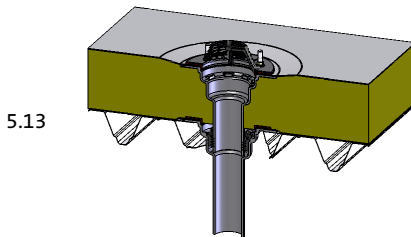
Lay the small sealing sleeve over the threaded pins onto the roofing material.
Do not use the sealing sleeve in the case of a bituminous roofing material.



The sealing sleeve and the roofing material are to be warmed before flanging.
Lay the loose flange over the threaded pins onto the sealing sleeve. Place the washers and tighten the hexagonal nuts diagonally (max. torque 30 Nm).

Attention:

The following points are valid for the series SitaMulti. For SitaDSS Multi, see "SitaAirstop for SitaDSS Multi/Alu"

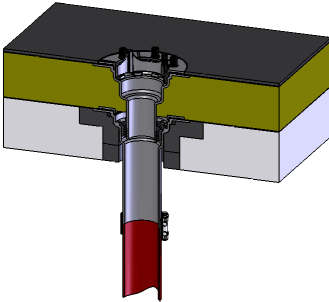


Place the dome grate in the loose flange, for conventional drainage.
Mount the SitaAirstop for syphonic drainage application.

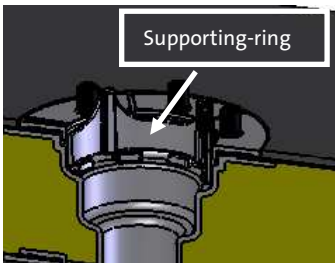
Fitting instruction

6. SitaMulti grating frame

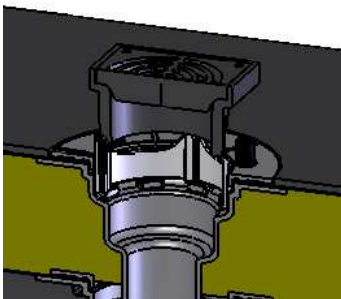
6.1



Place the SitaMulti supporting-ring with the closed side onto the cams of the SitaMulti roof outlet.



6.2



Place the housing with attached top grating of the SitaMulti grating frame onto the supporting-ring and adjust to the height of the top layer with the aid of the locating grooves. Height 90 mm to 130 mm.

6.3

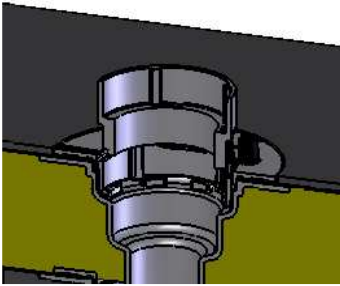
In the case of heights greater than 130 mm, you can use SitaMulti height adjustment unit between the SitaMulti supporting-ring and the

Fitting instruction

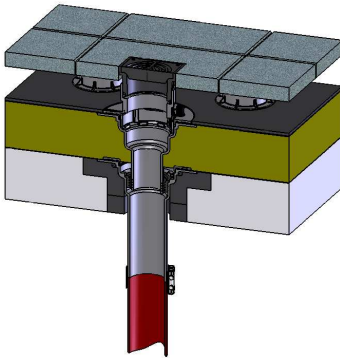
SitaMulti housing as an extension of the grating frame.

Height with **one** height adjustment unit:
140 mm to 220 mm.

Height with **two** height adjustment units:
200 mm to 310 mm.



6.4



Bring a protective layer onto the sealing
and work the top layer onto the grating frame.

8. SitaAirstop for SitaDSS Multi

8.1



Place the SitaAirstop over the threaded pins onto the hexagonal nuts of the syphonic roof outlet.

8.2



Place the washers and the hexagonal nuts onto the threaded pins and tighten them. Place the protective caps onto the hexagonal nuts.

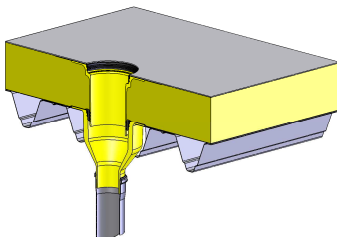
8.3



Push the stainless steel screw through the middle hole of the dome grate and screw it into the centre of the SitaAirstop.

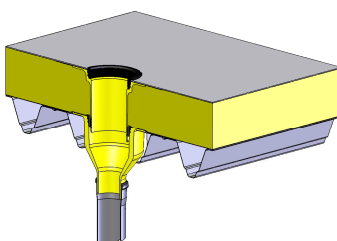
9. SitaRetaining element

9.1



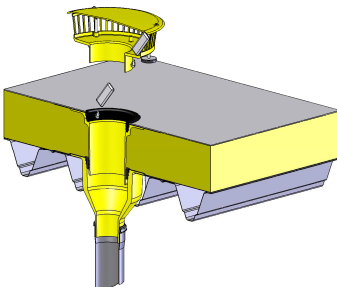
Sealed roof surface with built-in Sita roof outlet for emergency drainage.

9.2



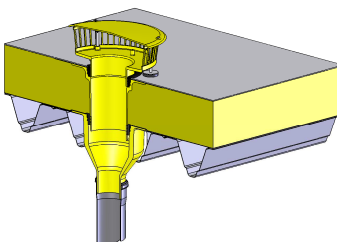
Place the angled sealing ring in the Sita roof outlet or in the Sita extension unit.

9.3



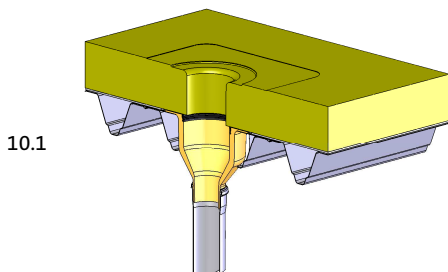
Adjust the height of the retaining element to the calculated level of the stemmed water, using the three rubber feet. If necessary, shorten the retaining element so that the minimum cross section of the roof outlet in the case of angled outlets is preserved.

9.4

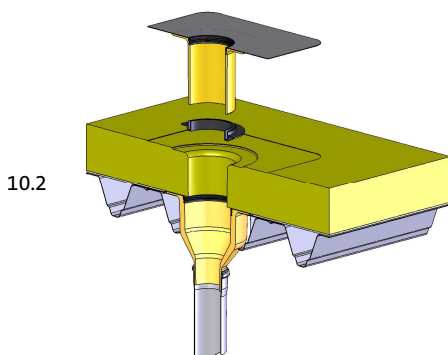


Coat the angled sealing ring and the lower parts of the retaining element with the lubricant provided. Push the retaining element through the angled sealing ring into the drain body, so that the rubber feet stand on the seal.

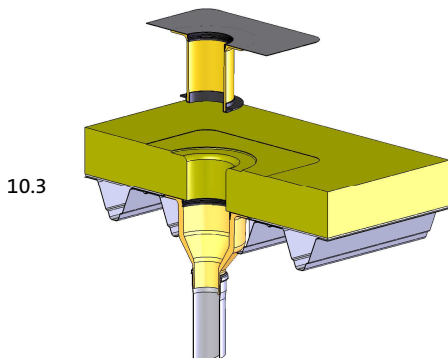
10. SitaSani® PUR



Thoroughly clean the roof outlet, extension unit, or pipe, which is to be renovated, so that a smooth surface is achieved in the area of the sealing ring.

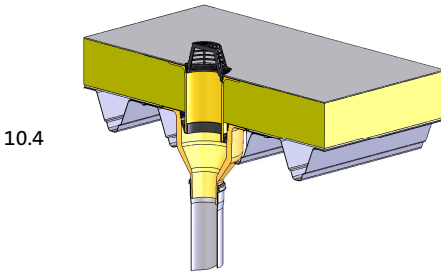


Determine the necessary length of the renovation outlet, and shorten if necessary.



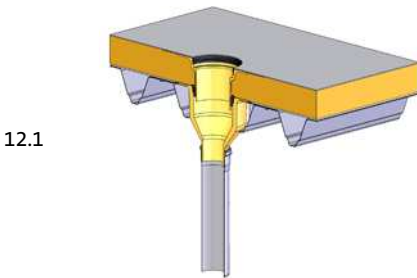
Choose one of the provided sealing rings and place it, without lubricant, over the connection piece of the renovation roof outlet. Coat the outside of the sealing ring, and also the part to be renovated, with lubricant.

Fitting instruction

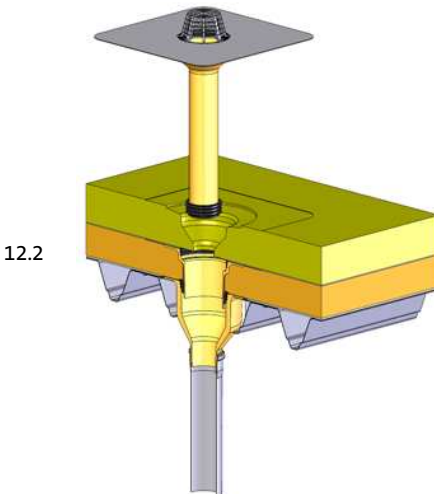


Carefully place the renovation roof outlet centrally into the part which is to be renovated and secure it mechanically. Connect the roofing material and the renovation roof outlet with the connecting sleeve, according to manufacturer's instructions. Set the dome grate in the renovation roof outlet.

12. SitaSani® Spezial

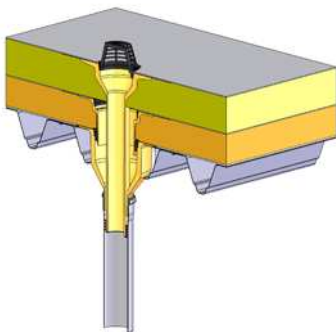


Thoroughly clean the part which needs to be renovated, so that a smooth surface is achieved in the area of the sealing ring of the renovation roof outlet.



Using lubricant, push the provided connection pipe onto the connection piece of the renovation drain. Determine the necessary length of the renovation drain, and shorten if necessary. Place the provided sealing ring, without lubricant, over the connection piece of the outlet. Finally, coat the outer side of the sealing ring, and also the part which is to be renovated, with lubricant.

12.3



Carefully place the renovation roof outlet centrally into the part which is to be renovated and secure it mechanically. Connect the roofing material and the renovation roof outlet with the connecting sleeve, according to manufacturer's instructions. Set the dome grate in the renovation roof outlet.

Fitting instruction

Notes:

Fitting instruction

Notes:



Für gutes Wetter im Bau.

Sita Bauelemente GmbH

Ferdinand-Braun-Straße 1

D-33378 Rheda-Wiedenbrück

Phone +49 (0) 2522-8340-0 • Fax +49 (0) 2522-8340-100

E-Mail: info@sit-bauelemente.de • www.sita-bauelemente.com



Valid: 07.2011

Subject to technical changes, even without notice.