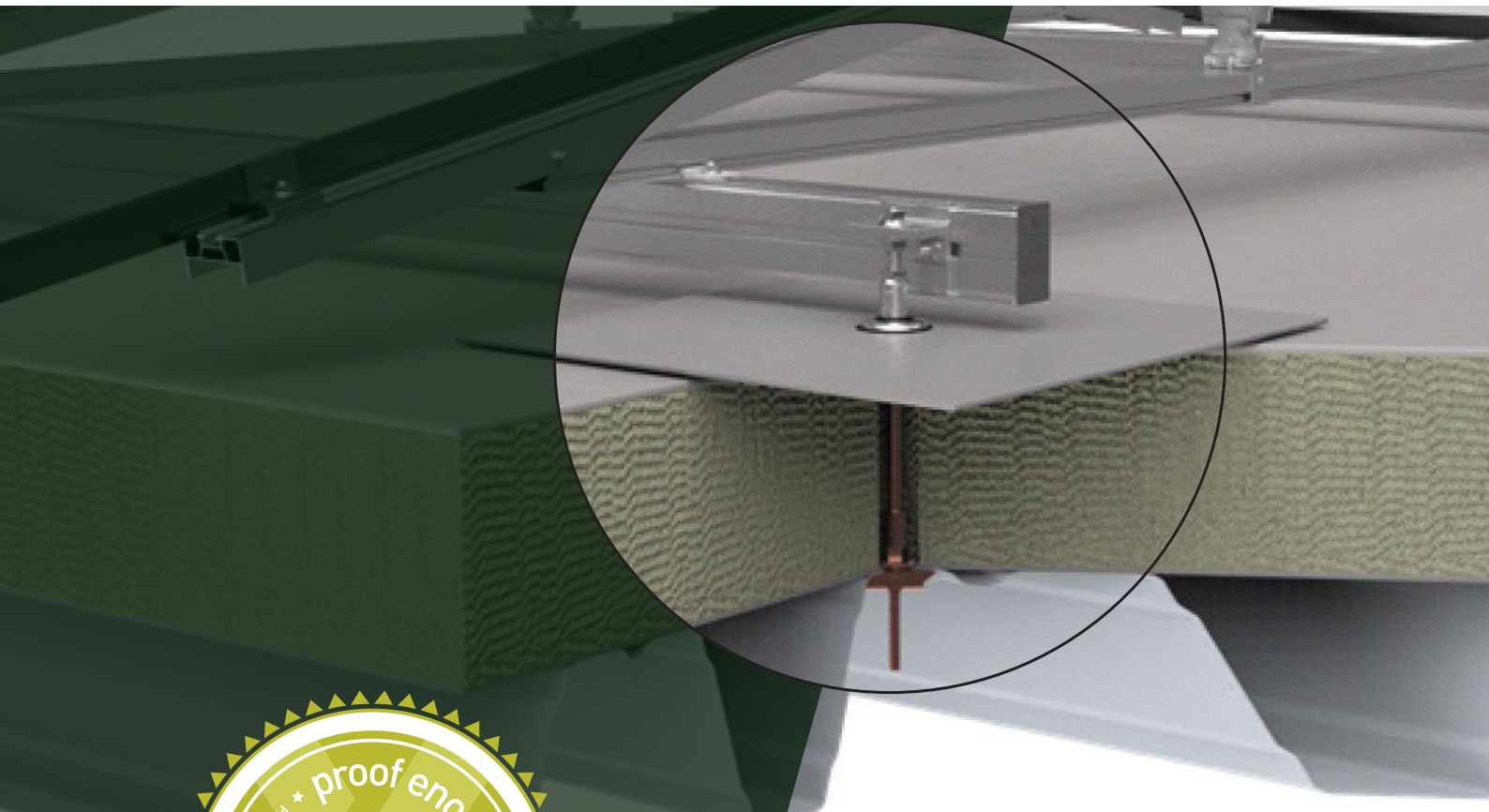




FIXNORDIC.DK

# Installation Guideline

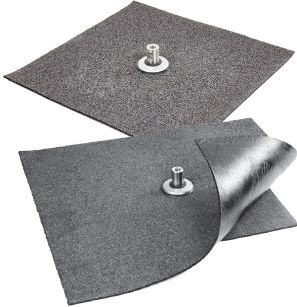


## DirectFix Roof Console on Steel Deck

**FIXNORDIC**  
proof enough.



## Current Anchor/Product Overview



### Tagkonsol DirectFix

- #220062-1xx 1 layer of bitumen
- #230062-1xx 2 layers of bitumen
- #220062-2xx folie (pvc, fpo, tpo etc.)



### Trapez Anchor DirectFix

- #210074-250 Trapez Anchor
- #210074-500 Trapez Anchor
- #210074-700 Trapez Anchor
- #210074-1000 Trapez Anchor



### Wood Anchor DirectFix

- #210073-250 Wood Anchor
- #210073-500 Wood Anchor
- #210073-700 Wood Anchor
- #210073-1000 Wood Anchor



### Concrete Anchor DirectFix

- #210072-250 Concrete Anchor
- #210072-500 Concrete Anchor
- #210072-700 Concrete Anchor
- #210072-1000 Concrete Anchor



### Light Concrete Anchor DirectFix

- #210075-250 Light Concrete Anchor
- #210075-500 Light Concrete Anchor
- #210075-700 Light Concrete Anchor
- #210075-1000 Light Concrete Anchor



### Seal For Levelled Vapor Barrier

- #250053

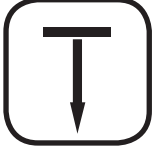


# Tools and symbol overview

The following list presents the necessary tools for performing an efficient and correct installation of the Roof Console on warm trapezoidal roof



**Drilling Machine**



**Insulation Cutter**

(Ø40x200 #250103, Ø40x300 #250094)



**Position Spear**

(Ø8x1000 #250092)



**Trapez Drill**

(Ø25/Ø40x400 #250096)



**Ruler or similar**



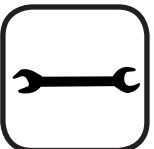
**Rofer knife or similar**



**19 mm Socket on drilling machine**



**Manual handling**



**19 mm Wrench**



**Tightening operation  
(clock wise rotation)**



**Grinder**



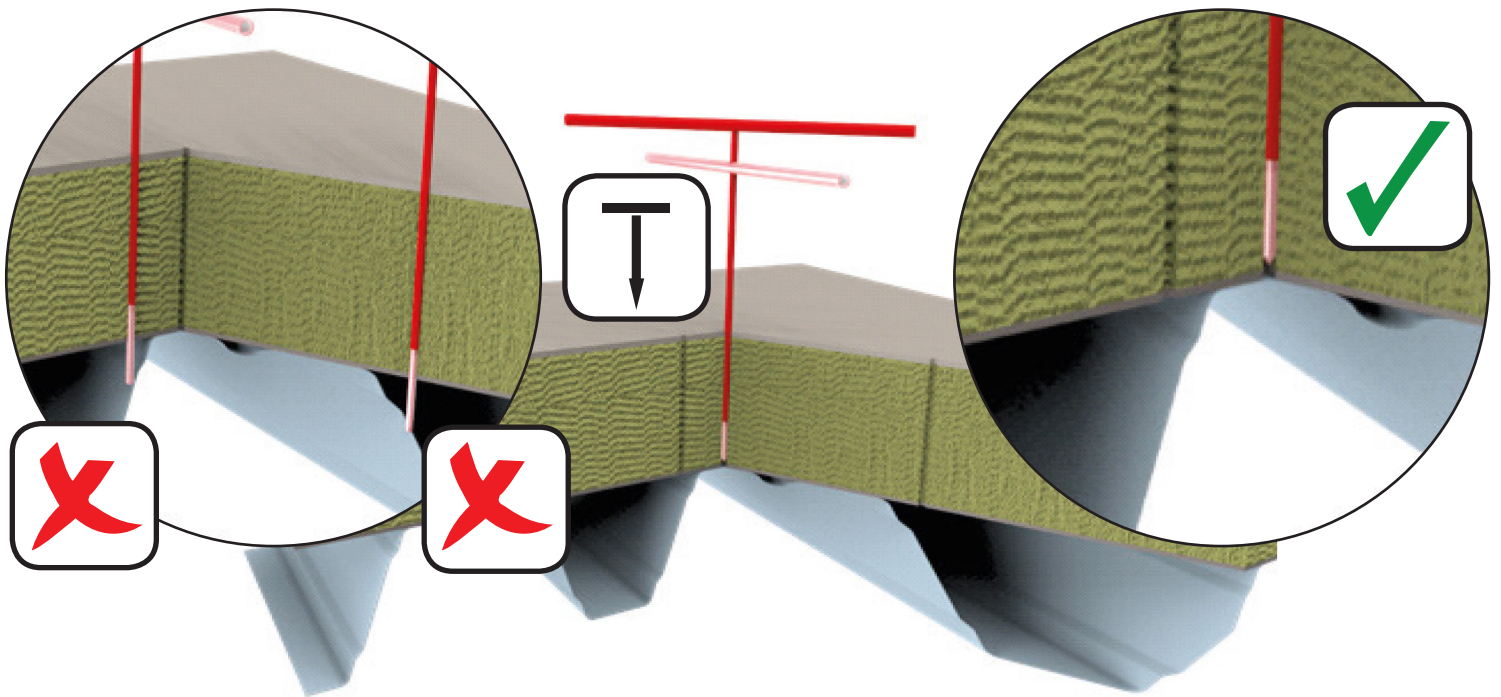
**Loosening operation  
(anti clock wise rotation)**



**Bitumen: Gas Torch**



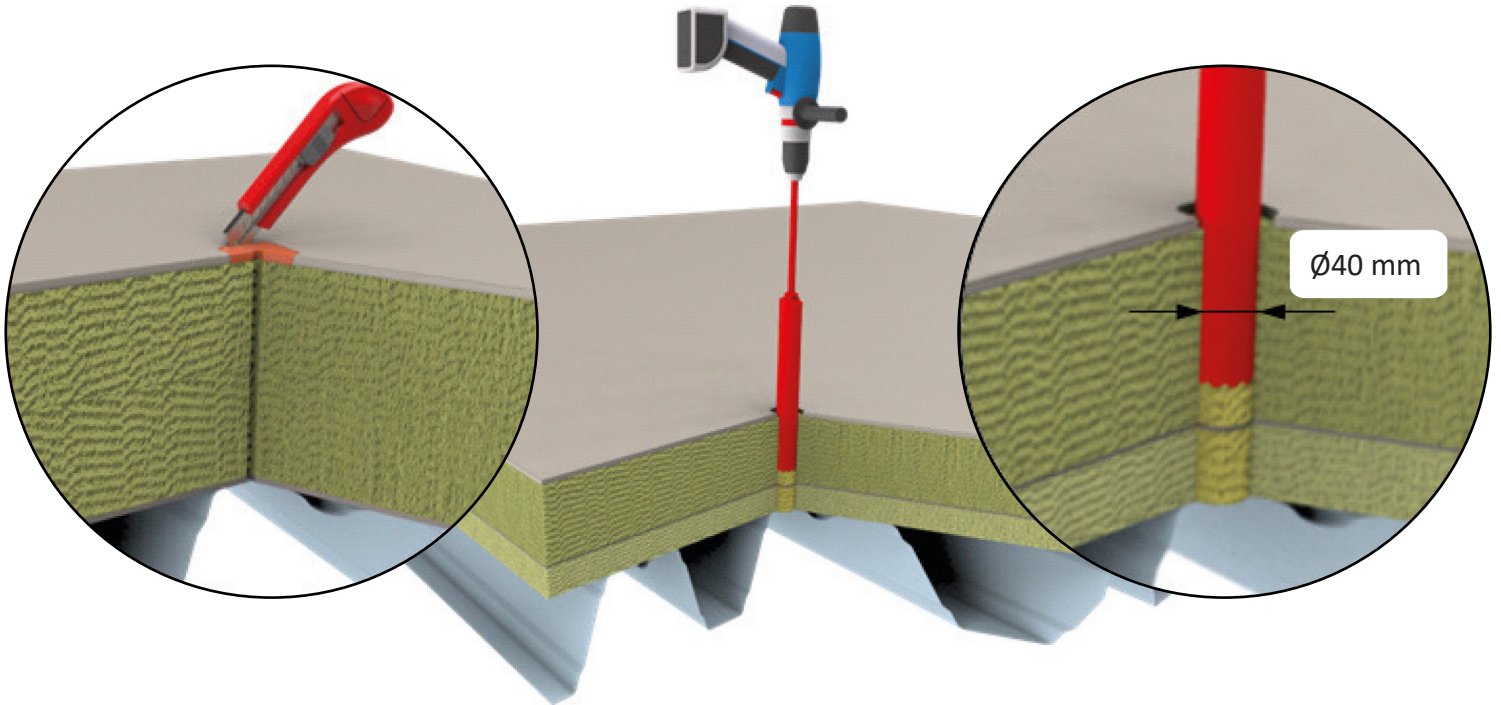
## 1. Anchor Positioning



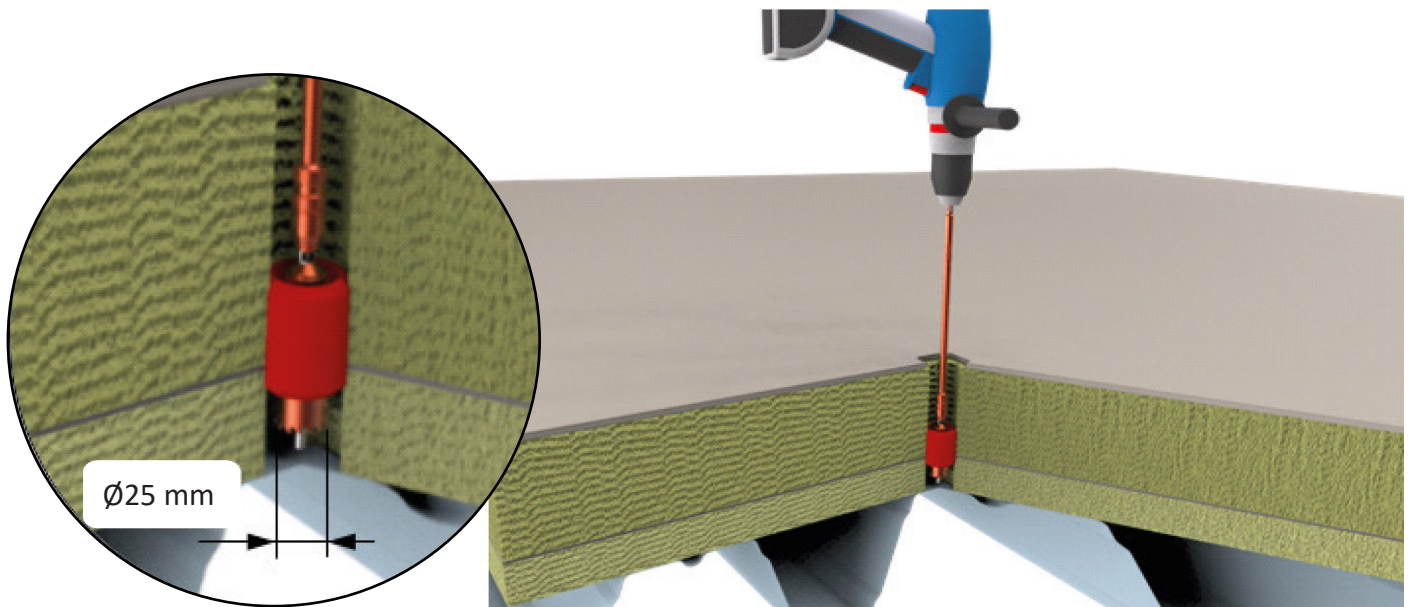
To reach a correct anchor position relative to the steel deck corrugation, the specific location for the top flanges must be pinpointed. The precondition is that the lines of the corrugation is known and the process is therefore about locating the middle of the top flange. The method is to pierce a Position Spear through the membrane until it reaches the steel deck. The specific depth is noted and the process is repeated until the middle position of the top flange is clear.

Notice!! that each of the position piercings are located underneath the integrated membrane on the Roof Console and will therefore be sealed once the membrane is torched or welded.

## 2. Insulation Core Drilling



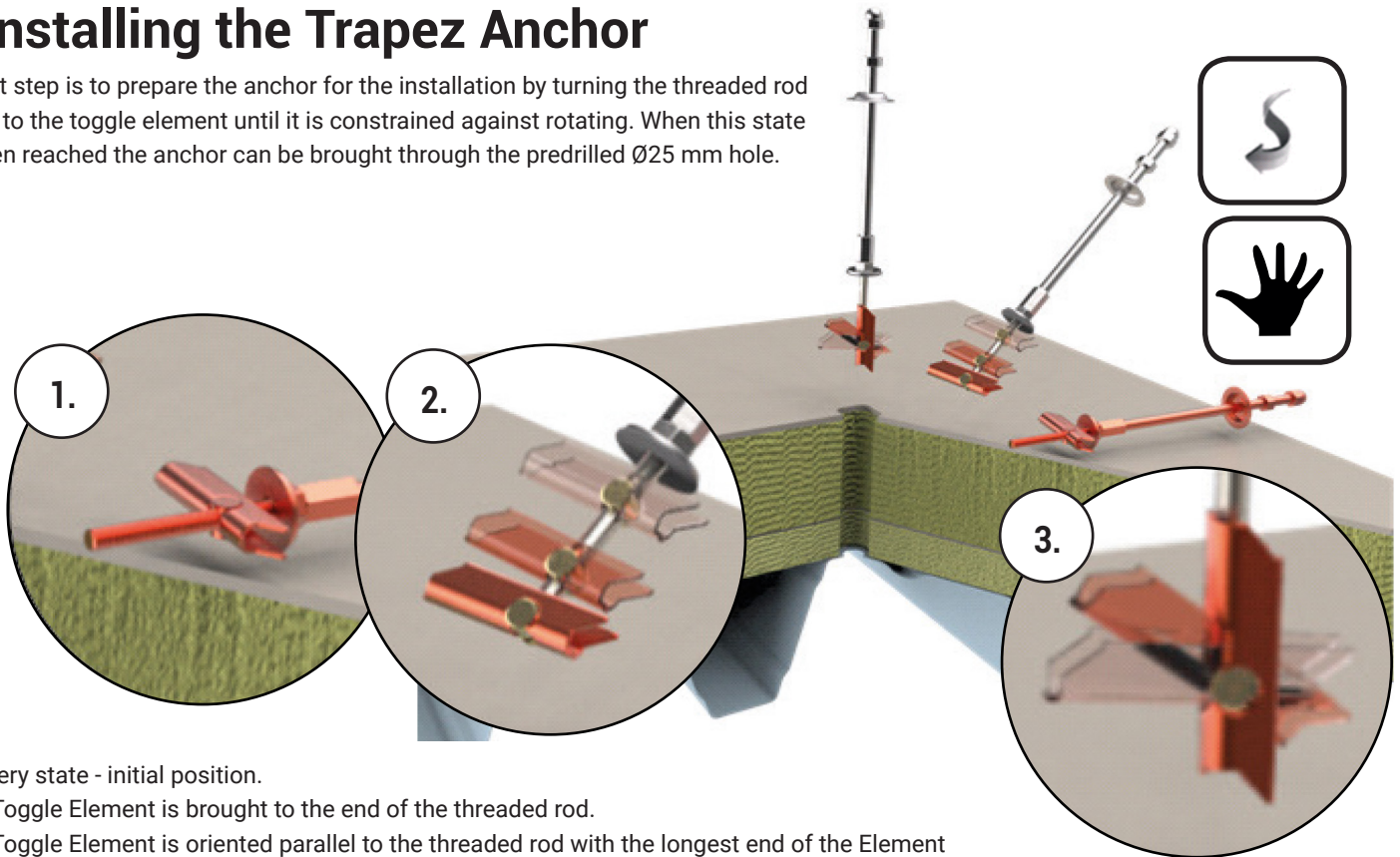
## 3. $\varnothing 25 \text{ mm}$ Trapez Anchor Hole Drilling



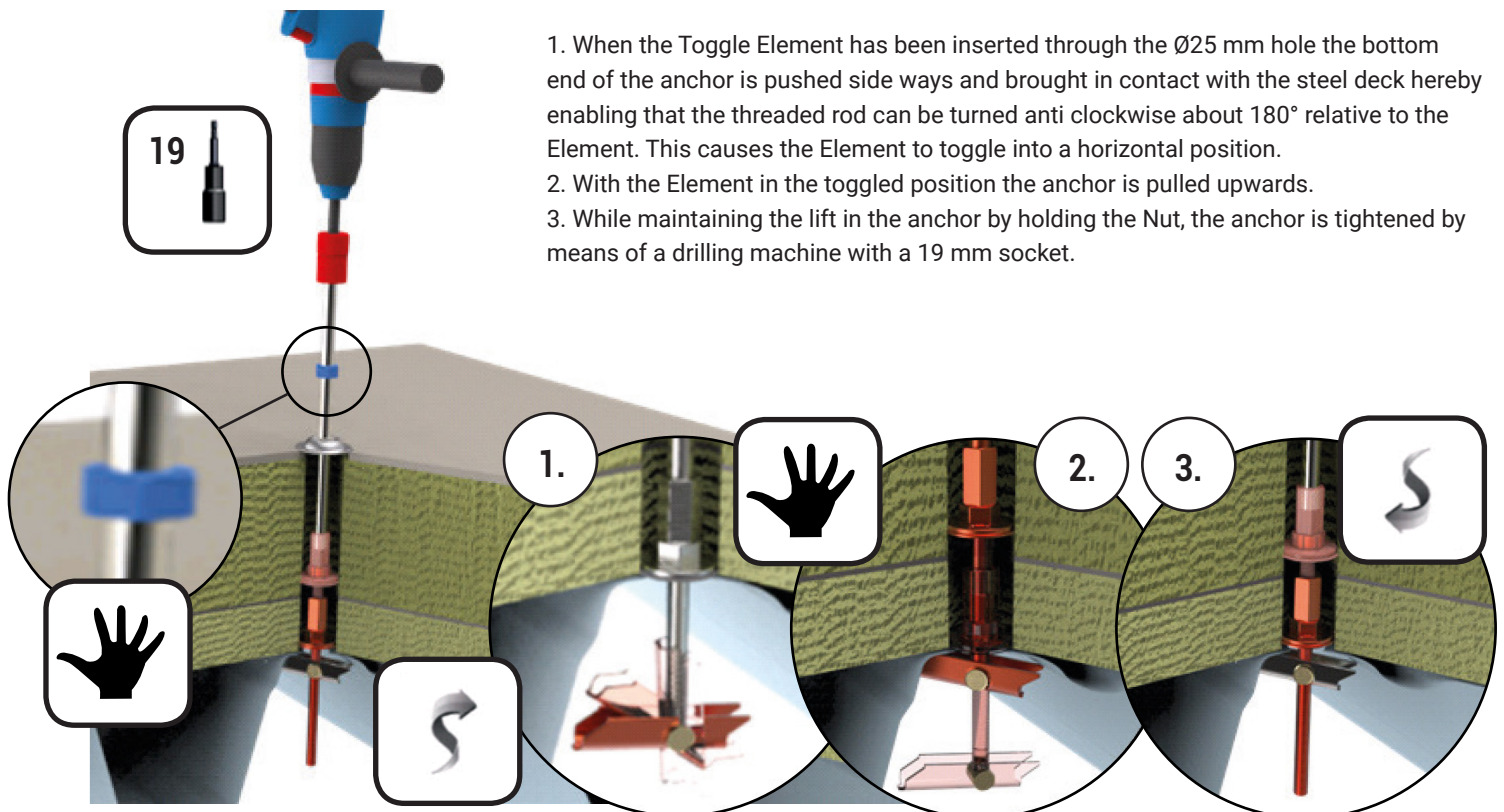
After the  $\varnothing 40 \text{ mm}$  insulation core has been removed the steel deck can be seen and the  $\varnothing 25 \text{ mm}$  hole necessary for the installation of the Trapez Anchor can be drilled while paying attention to ensuring a concentric positioning relative to the  $\varnothing 40 \text{ mm}$  hole.

## 4. Installing the Trapez Anchor

The first step is to prepare the anchor for the installation by turning the threaded rod relative to the toggle element until it is constrained against rotating. When this state has been reached the anchor can be brought through the predrilled  $\varnothing 25$  mm hole.



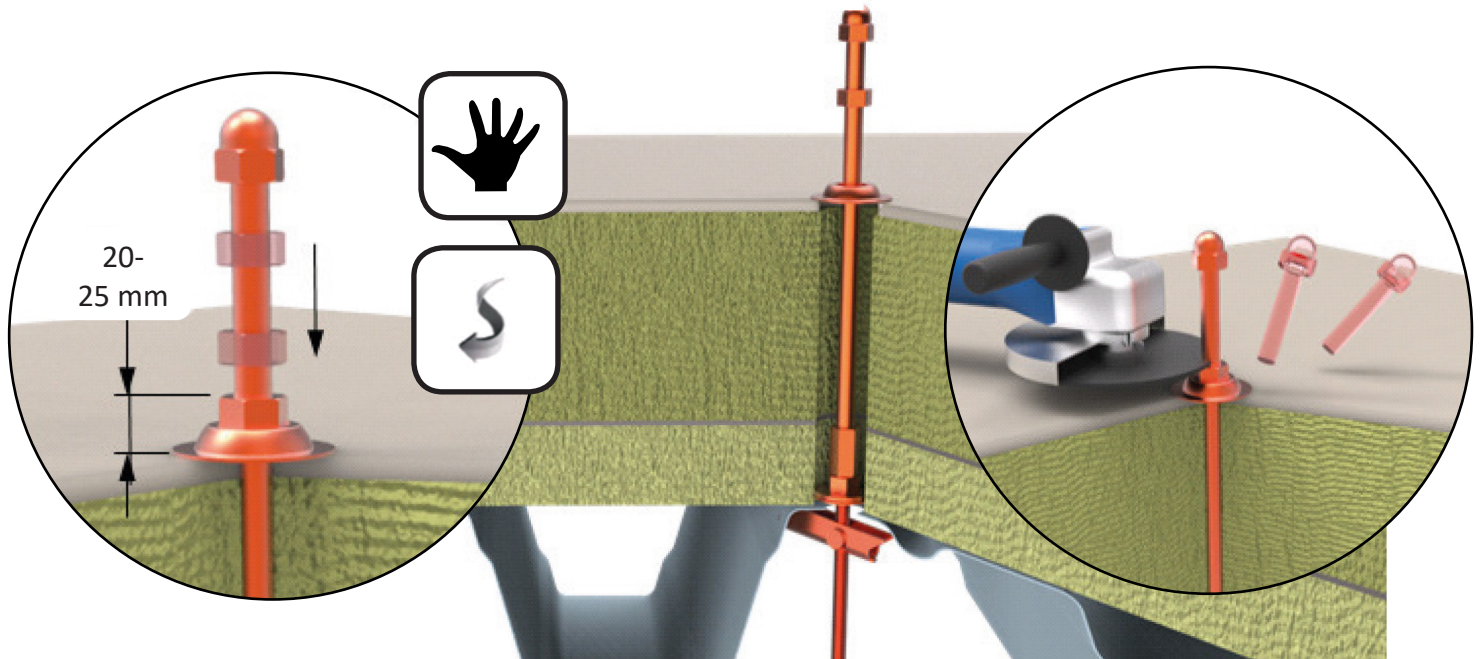
1. Delivery state - initial position.
2. The Toggle Element is brought to the end of the threaded rod.
3. The Toggle Element is oriented parallel to the threaded rod with the longest end of the Element pointing upwards and finally the threaded rod is tightend about  $180^\circ$  and hereby fixing the Element for the following insertion of the anchor.



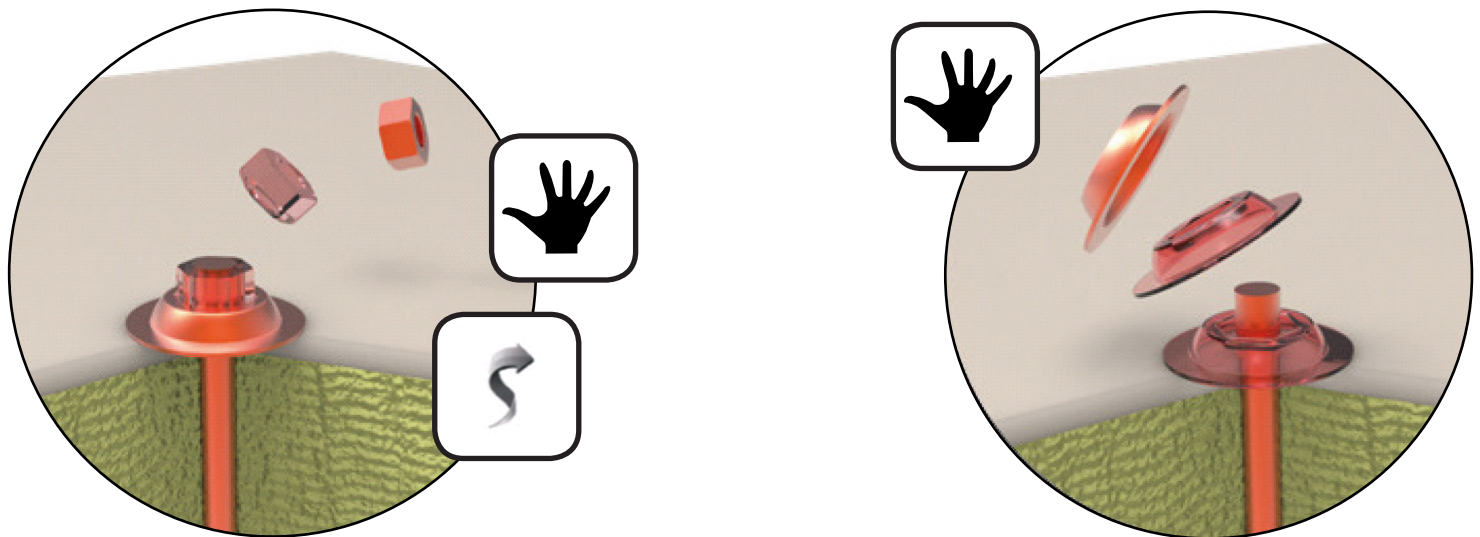
1. When the Toggle Element has been inserted through the  $\varnothing 25$  mm hole the bottom end of the anchor is pushed side ways and brought in contact with the steel deck hereby enabling that the threaded rod can be turned anti clockwise about  $180^\circ$  relative to the Element. This causes the Element to toggle into a horizontal position.
2. With the Element in the toggled position the anchor is pulled upwards.
3. While maintaining the lift in the anchor by holding the Nut, the anchor is tightened by means of a drilling machine with a 19 mm socket.



## 5. Anchor Cutting

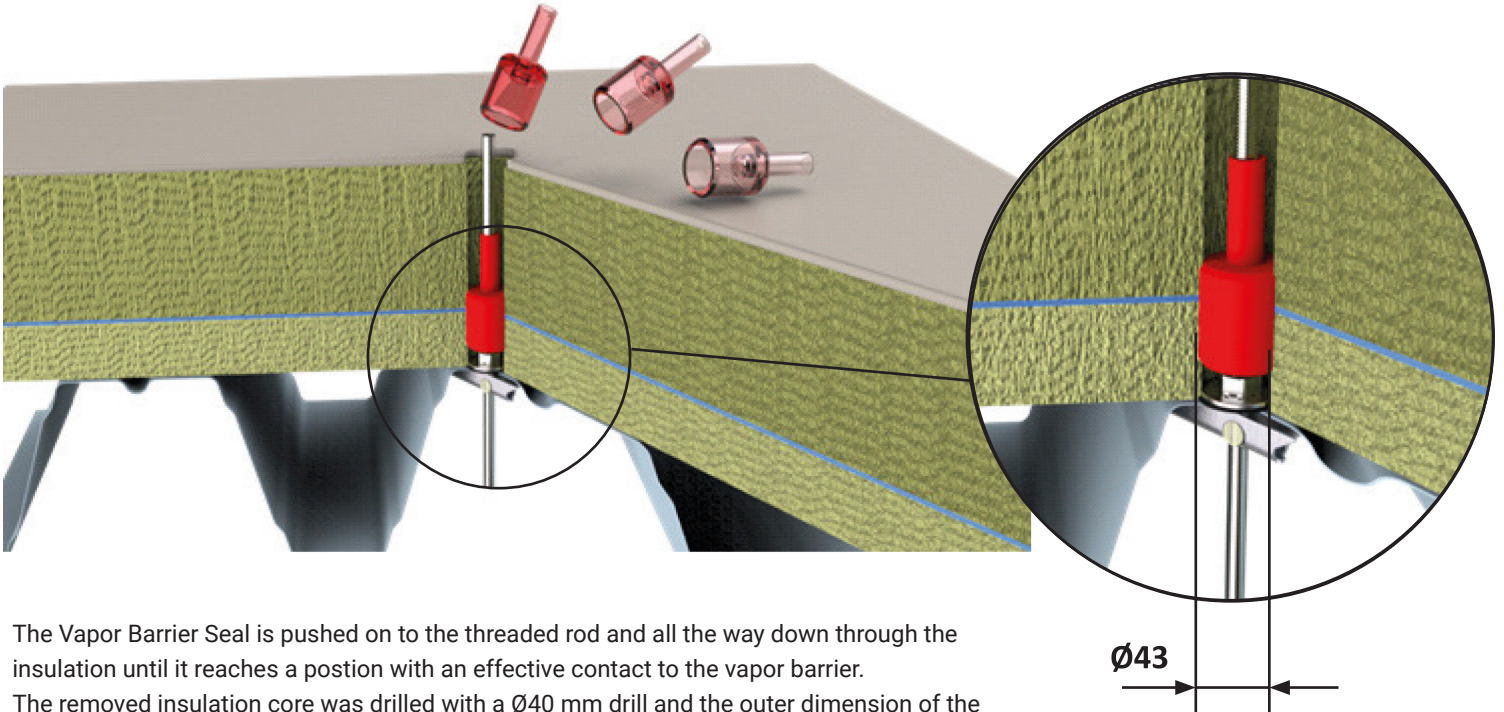


The Nut is turned downwards until it engages and aligns with the hex form of the distance washer, and the top surface of the Nut is used as the cutting surface when cutting the threaded rod.



At this point the Nut and the Distance Washer is removed and the anchor is now ready for the following installation of the vapor barrier seal (Only in case of construction with leveled vapor barrier).

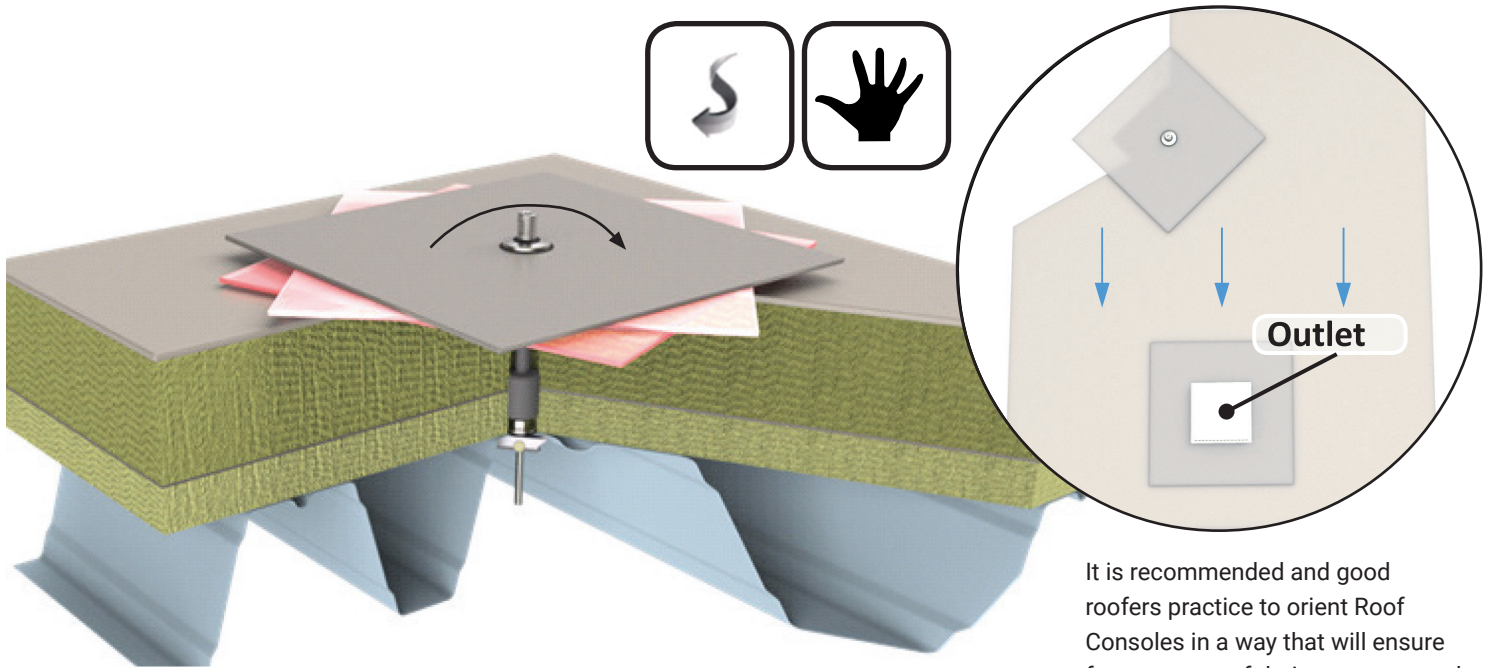
## 6. Installation of the Seal for Levelled VCL



The Vapor Barrier Seal is pushed on to the threaded rod and all the way down through the insulation until it reaches a position with an effective contact to the vapor barrier. The removed insulation core was drilled with a  $\text{Ø}40$  mm drill and the outer dimension of the Vapor Barrier Seal is  $\text{Ø}43$  mm, and this negative play towards the vapor barrier will ensure the integrity and necessary tightness of the vapor barrier.



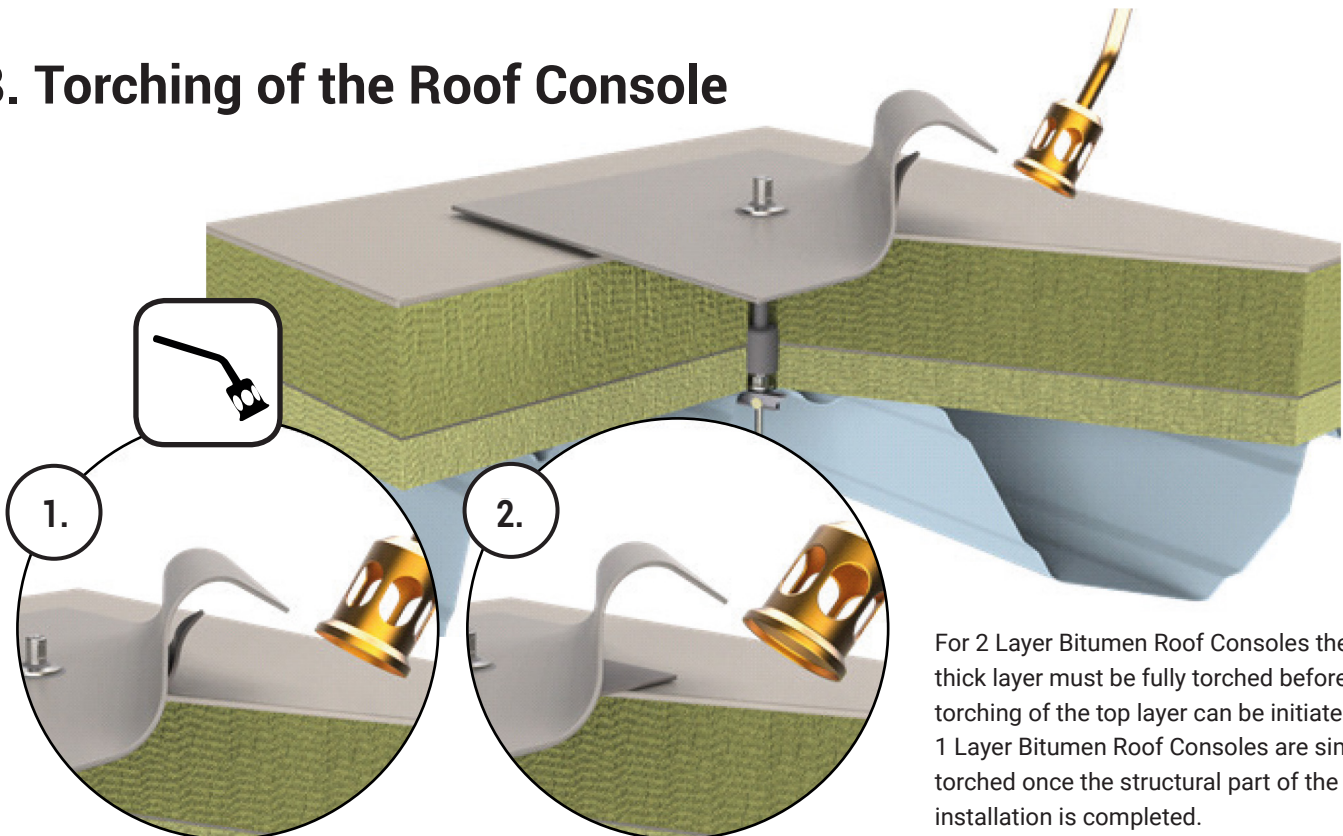
## 7. Installation of the Roof Console



The M12 thread hole on the Roof Console sub side is engaged with the threaded rod of the Trapez Anchor and the Roof Console is turned until a good contact to the existing roof surface is reached and until the intended orientation of the Console is obtained.

It is recommended and good roofers practice to orient Roof Consoles in a way that will ensure free passage of drainage water and water in general.

## 8. Torching of the Roof Console



For 2 Layer Bitumen Roof Consoles the first thick layer must be fully torched before the torching of the top layer can be initiated. 1 Layer Bitumen Roof Consoles are simply torched once the structural part of the installation is completed.

## DirectFix Installation Guideline

With the completed installation of the Roof Consoles they are ready for the following installation of various equipment like; solar cells, solar collectors, heat pumps, roof terraces and so on.

Should the situation, after reading the installation guideline, arise with questions or uncertainties about the general application or specific installation processes FIXNORDIC or any of the FIXNORDIC agents should be contacted.

General comments are also always most welcome and will be considered in the continuous development of the FIXNORDIC Console System.

