

For each type of SIMPLANT Guide different guidelines are provided for the positioning and the fixation of the SIMPLANT Guide.

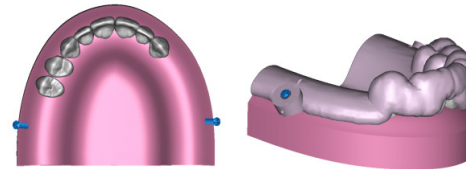
With the SIMPLANT software, fixation screws (or pins) can be planned just like implants by selecting the preferred fixation screws in the implant library. Fixation screws are preferably positioned vertically. Vertical positioning prevents positional changes and increases accessibility.

## Tooth-supported SIMPLANT Guide

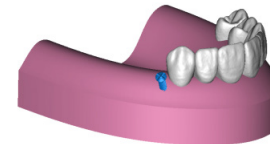
A tooth-supported SIMPLANT Guide is fitted on the remaining teeth and on the mucosa in areas where teeth are missing.

### PREFERRED POSITION DISTAL TEETH MISSING

Fixation of the SIMPLANT Guide is always recommended and the fixation screws are planned as distally as possible.

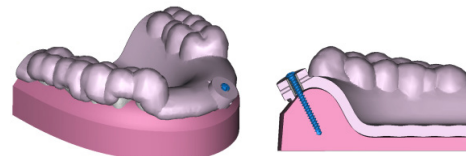


It is of no use to position fixation screws directly distal to the most distal remaining tooth.



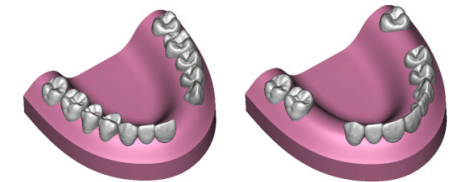
To correctly know the length of the fixation screw, plan the head of the fixation screw in SIMPLANT approximately 5 mm above mucosa level.

After the guide preview is calculated, it can be verified whether the head of the fixation screw was planned at the correct position, i.e. above the guiding cylinder.

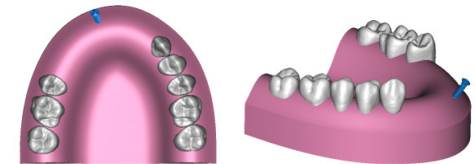


### PREFERRED POSITION IN BETWEEN TEETH MISSING

If less than three adjacent teeth are missing, fixation of the SIMPLANT Guide is not necessary.



If more than three adjacent teeth are missing, fixation of the SIMPLANT Guide is advised. The fixation screw should be positioned approximately in the middle of the edentulous area.



### POSITIONING IN PATIENT'S MOUTH

Position the guide on the patient's teeth and make sure to press the guide fully down. A stable fit must be obtained.

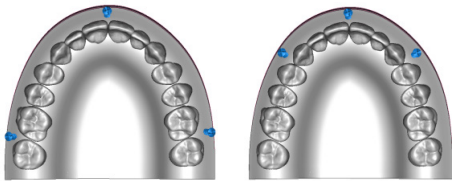
Press the guide on the patient's teeth during placement of the fixation screws.

## Mucosa-supported SIMPLANT Guide

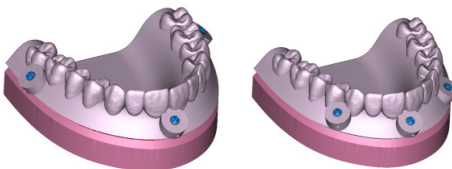
A mucosa-supported SIMPLANT Guide is fitted mainly on the mucosa. In case only a few teeth are remaining, the guide can also be supported by these teeth. It is always advised to fix the SIMPLANT Guide.

### PREFERRED POSITION

It is preferred to use at least 3 fixation screws: one in the middle of the implant range and the other two at the distal end of the implant range. If the distal end of the implant range is not accessible (nerve, too distal in the mouth...) then the fixation screws should be positioned as distally as possible (at least in the canine region).

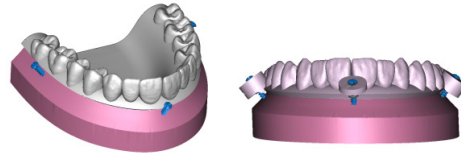


Since the design of a mucosa-supported SIMPLANT Guide is based on the scan prosthesis, the scan prosthesis must be built out at the labial/buccal sides where fixation screws will be planned.

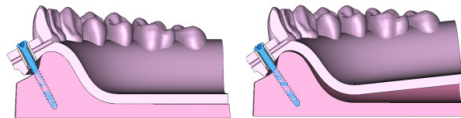


Planning of fixation screws at the border of or next to the scan prosthesis will result in a bad or even no connection of the guiding tubes to the surgical guide. Moreover, since the guiding tubes are not

supported by the mucosa, screwing down the guide will result in tilting of the guide.

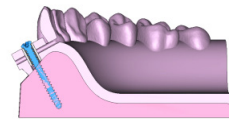


Due to undercut areas in the bone and mucosa, tightening the fixation screw may cause tilting of the guide. It is important to avoid these (concave) areas when planning fixation screws.



To correctly know the length of the fixation screw, plan the head of the fixation screw in SIMPLANT approximately 5 mm above mucosa level.

After the guide preview is calculated, it can be verified whether the head of the fixation screw was planned at the correct position, i.e. above the guiding cylinder.



### POSITIONING IN PATIENT'S MOUTH

It is advised to use a bite registration referenced to the antagonist jaw to help position the SIMPLANT Guide correctly in the patient's mouth. A stable fit must be obtained.

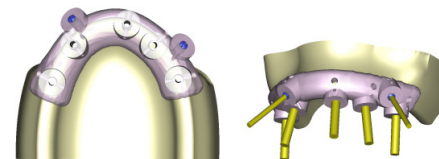
Press the guide on the patient's mucosa during placement of the fixation screws.

## Bone-supported SIMPLANT Guide

A bone-supported SIMPLANT Guide is fitted only on the bone. It is advised to fix the SIMPLANT Guide, especially in cases with a sharp bone ridge.

### PREFERRED POSITION EDENTULOUS CASES

The use of 2 fixation screws is sufficient since the guide is supported by bone, i.e. a rigid uncompressible body. It is preferred to place one fixation screw at the left side and one at the right side, both approximately in the middle of the implant range at that side. If this is not possible, then place both fixation screws distally from the implant range.



### PREFERRED POSITION PARTIALLY EDENTULOUS CASES

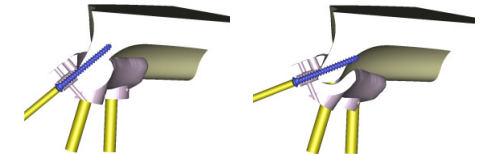
The use of one or two fixation screws is preferred.

In case of a small edentulous area one fixation screw is placed approximately in the middle of the implant range.

In case of a larger edentulous area two fixation screws are placed, one at each end of the implant range.

For both cases, edentulous and partially edentulous, undercuts relative to the insert direction of the guide are removed from the supporting surface. Therefore, it is possible that the guide does not make contact with the bone

at the position of the guiding tube for the fixation screw. In these cases, tightening of the fixation screw may result in tilting of the guide. It should be avoided to place fixation screws in these areas.



To correctly know the length of the fixation screw, plan the head of the fixation screw in SIMPLANT approximately 5 mm above the bone surface.

After the guide preview is calculated, it can be verified whether the head of the fixation screw was planned at the correct position, i.e. above the guiding cylinder

### POSITIONING IN PATIENT'S MOUTH

Make a crestal incision and raise the mucoperiosteal flaps on the vestibular and lingual/palatal side. Be careful to remove all remaining soft tissue on the bone surface that will make contact with the SIMPLANT Guide.

Position the guide on the patient's jaw bone and make sure that the SIMPLANT Guide is completely seating on the bony surface.

Press the guide on the patient's jaw bone during placement of the fixation screws.