



RESTORATIVE TECHNIQUE MANUAL

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CERAMO-METAL RESTORATIONS



PLACE ABUTMENT



At the time of implant uncovering, place a non-shouldered abutment and allow the soft tissue to heal around the hemispherical base of the abutment for 6 weeks.

Choose the widest non-shouldered abutment that will support the interdental papillae without encroaching upon them.

See chart on page 11

MODIFY ABUTMENT *(Optional)*



Use a sharp #1557 carbide bur to modify the abutment, if necessary.

Use irrigation when preparing the abutments intra-orally to prevent heating and potential damage to the bone.

MAKE IMPRESSION



Make a direct impression of the modified or unmodified abutment with conventional impression materials and pour a conventional stone model.

The laboratory procedures are the same as for the fabrication of crowns or fixed bridges for natural teeth. Use a knife or feathered edge margin.

TRY-IN CASTING



A try-in of the casting prior to the porcelain application is advised to assure a passive seating.

CEMENTATION OF CROWN

CROWN



After any needed occlusal, interproximal, or aesthetic contouring, cement the crown conventionally with minimal cement only at the cervical aspect of the crown to avoid adverse hydraulic forces. Care must be taken to remove all extraneous cement.

RECHECK OCCLUSION



Recheck the occlusion after cementation.

KEYS TO SUCCESS

- Choose the widest abutment to accommodate the edentulous space without encroaching upon the interdental papillae.
- 3.5mm abutments are recommended only for mandibular incisors; 4.0mm abutments are primarily used for maxillary laterals and bicusps; 5.0mm abutments are more universal in their use; 6.5mm and 7.5mm abutments are ideally suited for molars.
- The abutment can rotate 360° to reach a desired position or to achieve parallelism prior to seating.
- Use an abutment preparation holder (260-101-395) when modifying abutments extra-orally.
- Use irrigation when preparing an abutment intra-orally.
- Do not make an impression with the emergence cuff.
- The use of retraction cord is not necessary.
- An emergence cuff can act as a means of gingival retraction.
- The casting may end with a knife or feathered edge margin anywhere along the coronal aspect of the abutment.
- Use minimal amount of cement at the cervical margin to avoid hydraulic forces which may prevent the crown from seating fully.

SNAP ON SLEEVES



Definitively seat the abutment with a gentle tapping force. Snap impression sleeves onto the unmodified abutment. *See chart on page 11*

INJECT IMPRESSION MATERIAL



Inject impression material around the impression sleeves and make impression.

INSERT ABUTMENT TRANSFER DIE



Orientate the external flat(s) of the colored abutment transfer die with the internal flat(s) of the correspondingly colored non-shouldered impression sleeve prior to snapping it into the impression. **It is imperative that the correct abutment transfer die be used.** The diameter and height of the transfer die should match the diameter and height of the abutment.

FABRICATE MODEL



Pour a soft tissue or stone model.

SNAP ON SLEEVES



Snap the appropriate impression sleeve or temporization sleeve onto the colored abutment transfer die and modify as necessary.

WAXING



Incorporate the sleeve into the wax pattern for the metal casting.

INDIRECT ABUTMENT LEVEL IMPRESSION WITH PLASTIC SLEEVE*

TRY-IN CASTING



Try-in metal casting for a passive fit.

PORCELAIN APPLICATION



Apply porcelain following normal layering techniques until the crown is completed.

FINAL CROWNS



Final view of cemented Ceramo-Metal restoration.

KEYS TO SUCCESS

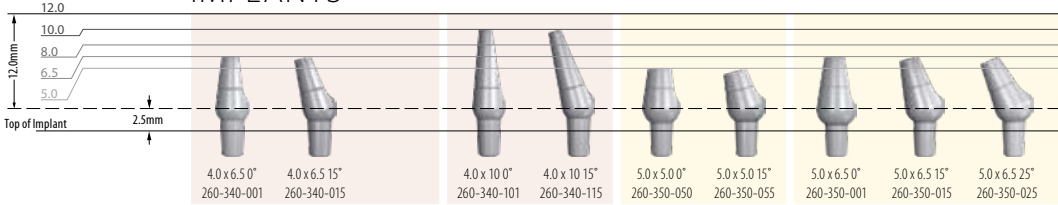
- The diameter and height of the transfer dies are sized to match the diameter and height of the abutments.
- It is paramount that the proper abutment transfer **die height** be chosen to pour the stone model since all transfer dies of the same color will snap into the impression sleeve of that color.
- The temporization sleeves are more retentive than the impression sleeves.

NON-SHOULDERED ABUTMENT SELECTION GUIDE

4.0mm Diameter					5.0mm				
0°	15°	25°	0°	15°	0°	15°	0°	15°	25°

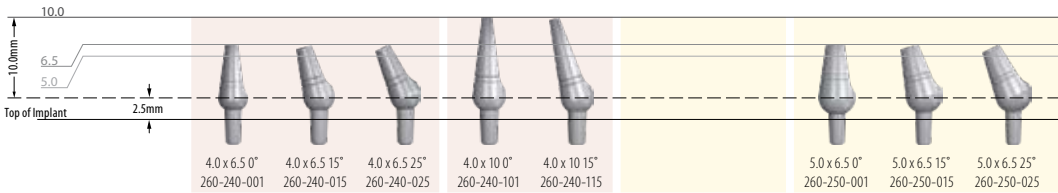
SHORT IMPLANTS

3.0mm Post



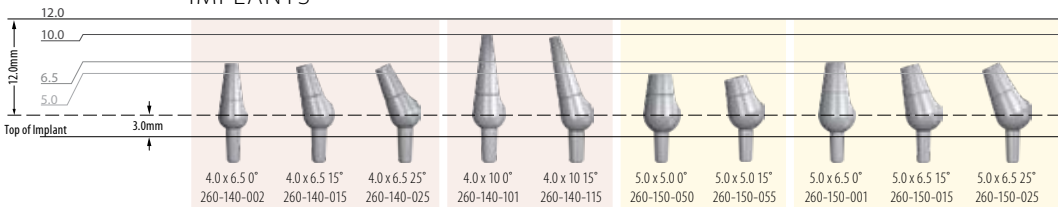
MAX 2.5 MAXILLARY ANTERIOR IMPLANTS

2.5mm Post

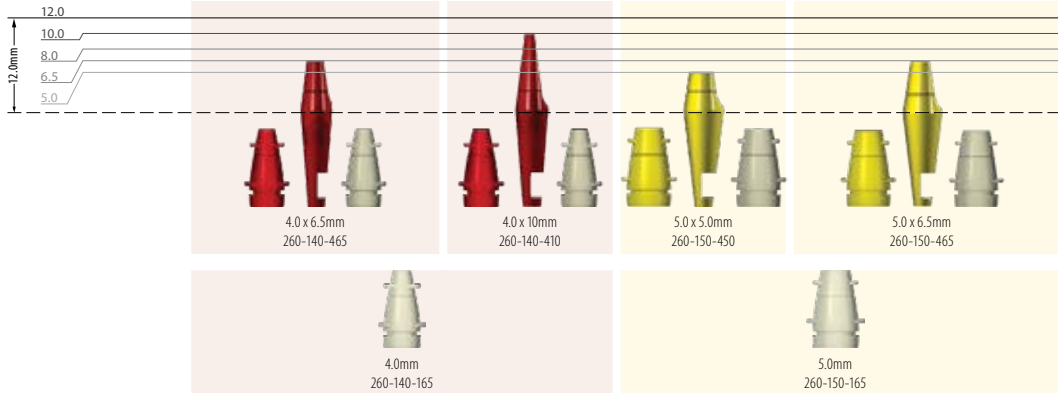


NARROW IMPLANTS

2.0mm Post

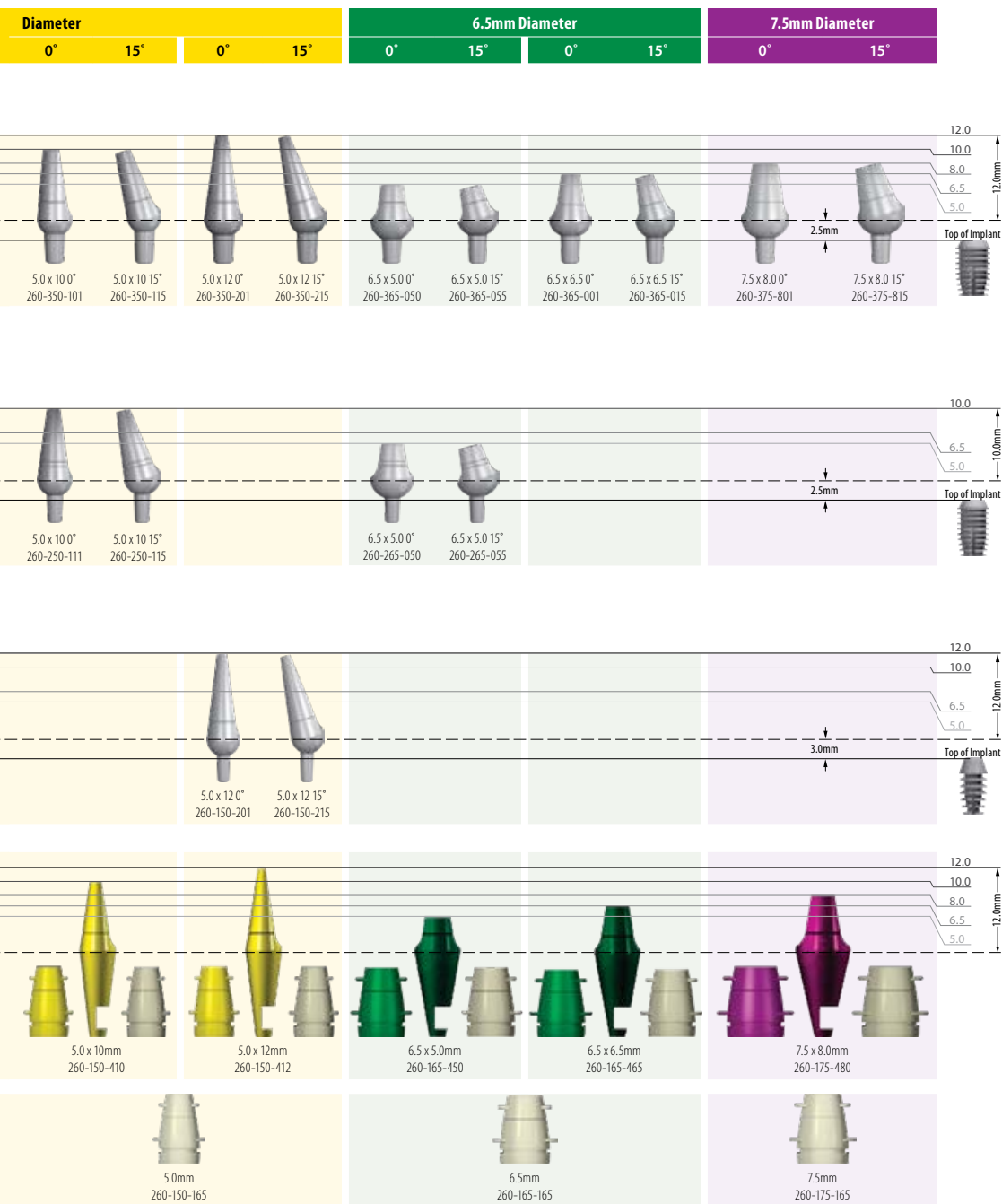


RESTORATIVE/LABORATORY KIT



NOTES

- Snap-on sleeves are only specific for abutment diameter.
- Abutment height is not a criterion for proper selection of snap-on sleeves.



- Transfer dies correspond to exact diameter and height of abutment placed.
- Because of machining tolerances, sleeves may not reach the height of contour for some angled abutments.

OPTION ONE: IMPLANT-LEVEL IMPRESSION



1 Choose the appropriately sized titanium impression post according to the diameter of the implant well.



2 Insert the titanium impression post into the well of the implant with finger pressure only.



3 Snap the appropriate impression sleeve onto the impression post.



4 Inject impression material around the plastic impression sleeve and make impression.



5 After making the impression, plastic impression sleeve should be withdrawn within the impression while titanium post remains in the implant well.



6 Remove titanium impression post from implant. Assemble the post with the appropriate implant with the appropriate implant post. Insert this unit into the plastic sleeve in the impression. Pour soft tissue model. The laboratory technician may now choose the proper abutment for a PFM or IAC® restoration.



OPTION TWO: DIRECT ABUTMENT LEVEL IMPRESSION



1 Choose an appropriately sized abutment and definitively seat the abutment with a gentle tapping force.



2 The abutment may be modified intra-orally with irrigation or extra-orally with a #1557 carbide bur, if necessary.

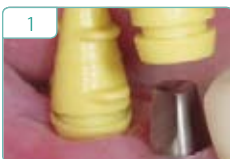


3 Inject impression material around abutment for a direct impression. Pour a stone model.

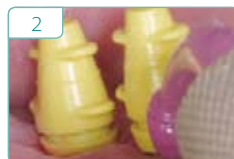


4 Fabricate crown conventionally at laboratory. Insert crown with minimal cement.

OPTION THREE: INDIRECT ABUTMENT LEVEL IMPRESSION



1 Definitively seat the abutment with a gentle tapping force. Snap impression sleeves onto the unmodified abutment.



2 Inject impression material around the impression sleeves and make impression.



3 Withdraw the plastic impression sleeves in the impression. Choose appropriately sized aluminum transfer die and insert the die into the plastic sleeve.



4 Pour a soft tissue model. Fabricate crowns conventionally. See Bicon Technique Manuals for further information on this procedure.

TEMPORIZATION OPTIONS

OPTION ONE: TRANSITIONAL RESTORATION WITH SLEEVE



1
Insert appropriate non-shouldered or stealth shouldered abutment. The diameter of the abutment is dictated by the anatomy of the interdental papillae. The abutment should support the papillae without encroaching upon them.



2
Tap the abutment in the long axis of the abutment post and implant well.



3
Orientate the internal flat(s) of the appropriate temporization sleeve with the external flat(s) of the abutment prior to snapping it onto the abutment.



4
Confirm the appropriateness of the temporization sleeve with a vacuum formed template. Adjust the sleeve as necessary.



5
Insert appropriate non-shouldered or stealth shouldered abutment. The diameter of the abutment is dictated by the anatomy of the interdental papillae. The abutment should support the papillae without encroaching upon them.



6
Tap the abutment in the long axis of the abutment post and implant well.



7
Orientate the internal flat(s) of the appropriate temporization sleeve with the external flat(s) of the abutment prior to snapping it onto the abutment.

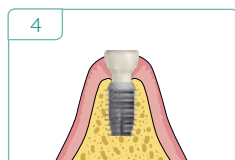
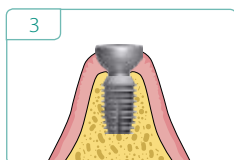


8
Confirm the appropriateness of the temporization sleeve with a vacuum formed template. Adjust the sleeve as necessary.

OPTION TWO: TEMPORIZATION WITH A TEMPORARY ABUTMENT



1
At time of uncovering, place a temporary abutment. The abutment will support the soft tissue and assist in the formation of the gingival sulcus. The abutment may be modified to achieve the desired contour. Transitional crowns should not be placed on temporary abutments. See Bicon catalogs for a complete listing of abutment sizes and shapes that are available.



OPTION THREE: A TRANSITIONAL PROSTHESIS IN THE AESTHETIC ZONE



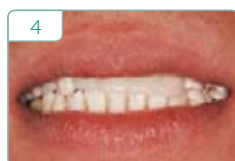
1
Choose appropriately sized temporary abutment. See Option #2 above.



2
Insert temporary abutment into the implant well and gently seat the abutment by tapping on the head of the abutment. Removal of the abutment may be achieved with a variety of extraction forceps.



3
In aesthetic areas, a flipper may be inserted for aesthetics and function while tissue is healing around the temporary abutments.



4
View of inserted provisional restoration.

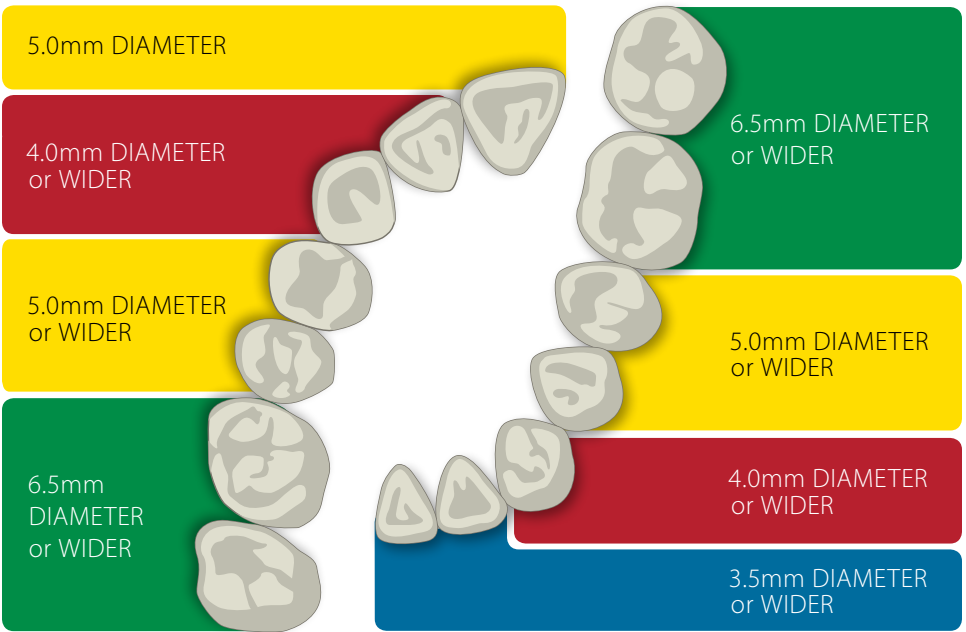
NON-SHOULDERED ABUTMENTS

The chart below contains **recommendations only**.

Actual clinical conditions and the clinician's assessment of the patient should be the main criteria for choosing the size of an abutment for a particular situation.

MAXILLA

MANDIBLE









BREVIS™ OVERDENTURE SYSTEM

BREVIS™









BREVIS™ ABUTMENTS*

2.0mm Post

HEIGHT	ANGLE	PART NUMBER	0°	15°
2.0mm	0°	260-100-404		
2.0mm	15°	260-100-405		
4.0mm	0°	260-100-406		
4.0mm	15°	260-100-407		
6.0mm	0°	260-100-408		
6.0mm	15°	260-100-409		







BREVIS™ ABUTMENTS*

2.5mm Post

HEIGHT	ANGLE	PART NUMBER	0°	15°
2.0mm	0°	260-250-424		
2.0mm	15°	260-250-425		
4.0mm	0°	260-250-426		
4.0mm	15°	260-250-427		
6.0mm	0°	260-250-428		
6.0mm	15°	260-250-429		

BREVIS™ ABUTMENTS*











3.0mm Post

HEIGHT	ANGLE	PART NUMBER	0°	15°
2.0mm	0°	260-300-434		
2.0mm	15°	260-300-435		
4.0mm	0°	260-300-436		
4.0mm	15°	260-300-437		
6.0mm	0°	260-300-438		
6.0mm	15°	260-300-439		

*Each abutment is packaged with one titanium Brevis housing.

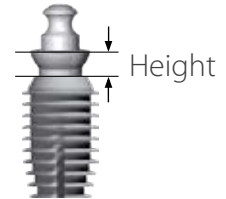
BREVIS™ ABUTMENT SYSTEM

RESTORATIVE COMPONENTS

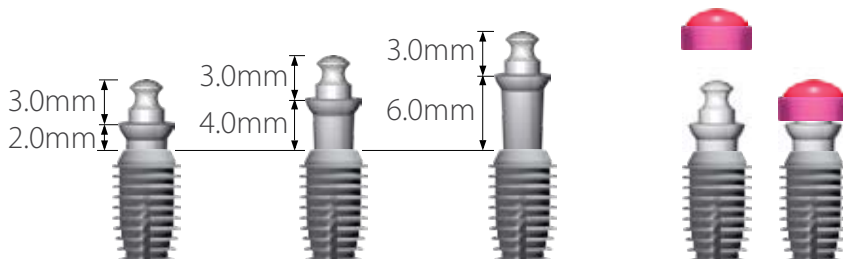
DESCRIPTION	PART NUMBER				
Brevis Abutment Chairside Kit	260-100-212				
Brevis Impression Kit without Housing	260-100-218				
Brevis Abutment Impression Kit	260-100-217				
Brevis Rubber O-Rings: Hard(10)	260-100-013				
Brevis Rubber O-Rings: Soft(10)	260-100-014				

MEASUREMENT GUIDE

The design of the Bicon abutment system is such that the hemispherical base of the abutment does not sit flush with the neck of the implant. By design, there is a space below the abutment post when the abutment is fully seated. When viewing this on a radiograph, it can be seen as a radiolucency. The following diagram depicts the final seating of a Brevis™ abutment as well as the method for measuring each abutment.



The height of the Brevis™ abutment is measured from the top of the implant to the shoulder of the Brevis™ abutment. The available heights are 2.0, 4.0 or 6.0mm. The total height from the top of the implant to the top of the abutment is approximately 5.0, 7.0 or 9.0mm, respectively.



OCCLUSAL REGISTRATION



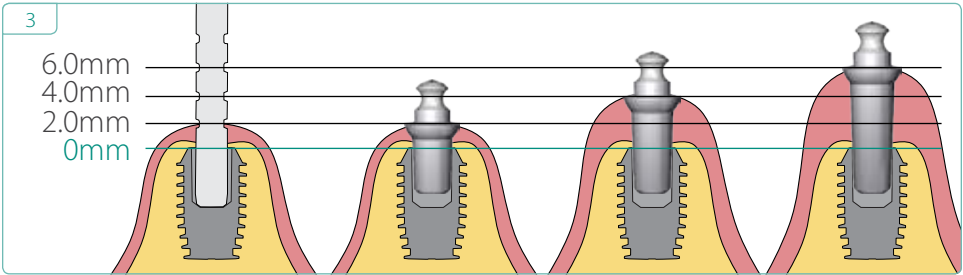
A registration of the denture's occlusal relationship prior to the uncovering of the implants will assure that the denture is not inadvertently displaced by the abutment or its housing.

UNCOVER IMPLANTS



Uncover each implant using a small crestral incision and use the healing plug removal instrument to facilitate the removal of the black healing plug.

USE A SHOULDER DEPTH GAUGE TO DETERMINE ABUTMENT HEIGHT



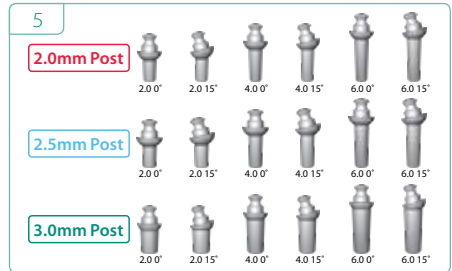
Use a shoulder depth gauge to facilitate the selection of the abutment height.

PLACE GUIDE PINS



Place guide pins into the implants to determine their axial inclinations.

ABUTMENTS



Brevis™ abutments are available in heights of 2.0, 4.0 and 6.0mm.

BREVIS™ CHAIRSIDE TECHNIQUE

PARALLEL ABUTMENTS



Rotate a combination of 0° and/or 15° angled abutments to achieve parallelism prior to their being seated.

PLACE BLUE WAX



Place soft wax in the denture to act as a pressure indicator to determine the relative position of the abutments.

MARK ABUTMENTS



Alternatively, the top of the abutment may be marked with a felt tip pen to indicate the location of the abutment on the denture.

RELIEVE DENTURE



Liberally relieve denture to accommodate the Brevis™ housings. Confirm clearance for housings by placing the denture over the housings.

BREVIS™ HOUSING



Place a Brevis™ housing on each abutment intra-orally.
See #11

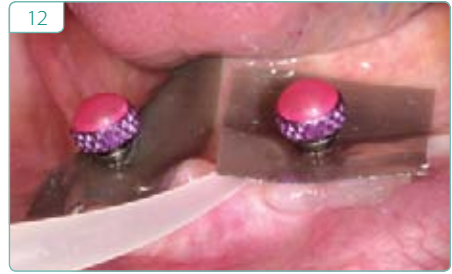
CONTINUED NEXT PAGE

PLACE HOUSINGS



Place the Brevis™ housings and a piece of rubber dam over the abutments to act as an apron to prevent acrylic from locking onto an abutment. **Ensure that the rubber dam protects the undercut of the abutment from acrylic by placing it above the shoulder of the abutment.**

INJECT VASELINE™



Inject Vaseline™ under the rubber dam aprons to serve as an additional precaution to prevent acrylic from locking under the abutments during the chairside pickup of the Brevis™ housings.

INJECT ACRYLIC



Inject flowable acrylic around the Brevis™ housings and into the relieved portions of the existing denture.

ASSURE PROPER SEATING



Place the denture into the mouth and instruct patient to **clench bilaterally on cotton rolls to assure proper seating of the denture.**

BREVIS™ CHAIRSIDE TECHNIQUE

POLISH EXCESS ACRYLIC



Polish the excess acrylic around the Brevis™ housings after the removal of the rubber dam.

RADIOGRAPH



Radiograph of two Bicon implants and Brevis™ abutments.

It is paramount that overdentures be completely tissue borne and only implant retained.

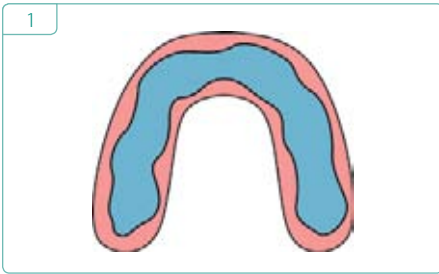
If the acrylic is too viscous or only placed in the denture, it may cause displacement of the housing resulting in a misalignment of the housing and excessive wear of the rubber o-rings.

NOTE

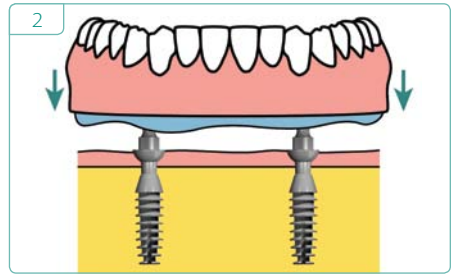
If the denture is inadvertently locked onto the Brevis™ abutment, it is advisable to **tap it off rather than attempting to cut it off**. The denture may be notched to facilitate the placement of a tapping instrument. Either the denture will be removed from the abutment or the abutment will be removed from the implant.

KEYS TO SUCCESS

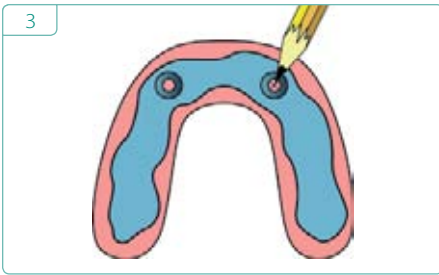
- Use an occlusal registration jig to prevent inadvertent displacement of the denture during the chairside technique.
- Use the 15° Brevis™ abutment to help achieve parallelism for non-parallel implants.
- The denture should NOT rock or pivot on the abutments or the housings.
- Do not make a direct impression of the overdenture abutments.
- Use a rubber dam and Vaseline™ to prevent locking of the denture beneath the undercut of the abutments.
- Place acrylic into a syringe for ease of use and greater control.
- A too viscous mix of acrylic may inappropriately displace the orientation of the Brevis™ housing on the abutment.
- It is essential for the patient to clench bilaterally on cotton rolls to ensure proper seating of the housings in the denture.
- If the denture is too retentive, slightly relieve the inside of the o-ring lumen with a round bur.
- A common cause of accelerated o-ring wear is a Brevis™ housing whose retentive acrylic was polymerized while the Brevis™ housing was not appropriately aligned on the abutment.



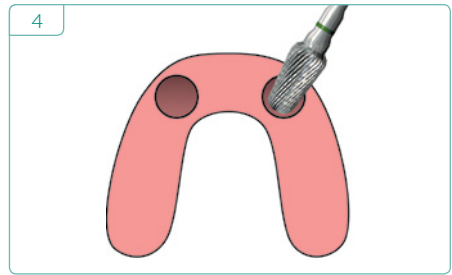
1
Place soft wax to record relative position of abutments.



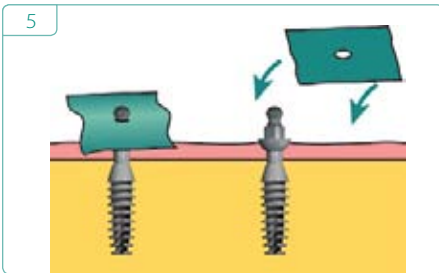
2
Record position of abutments in soft wax. Alternatively, abutments could be marked with a wet ink prior to inserting denture for recording an ink transfer mark.



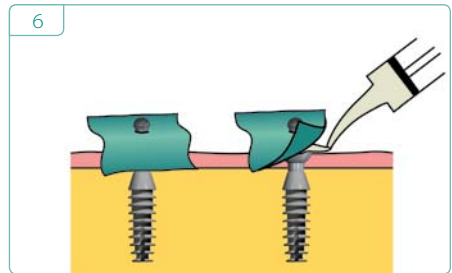
3
Mark position of abutments on denture.



4
Liberalily relieve denture to accommodate Brevis™ housings and confirm position intra-orally.

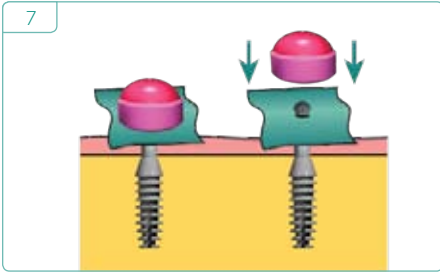


5
Place rubber dam apron over abutments.

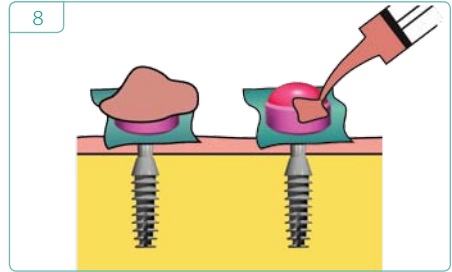


6
Apply Vaseline™ under rubber dam apron.

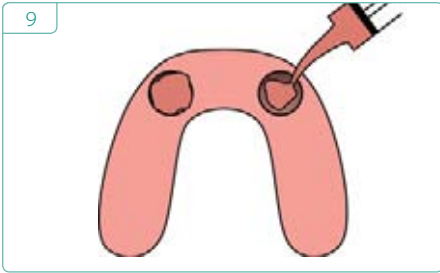
BREVIS™ CHAIRSIDE TECHNIQUE



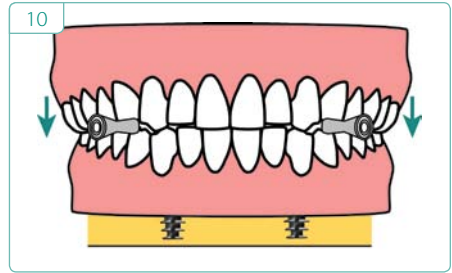
Snap Brevis™ housing onto abutments.



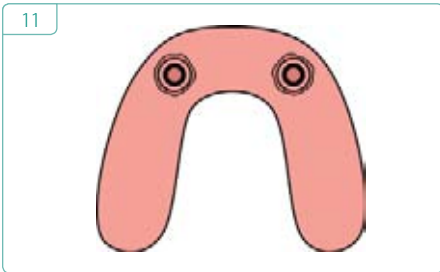
Sufficiently apply fluid acrylic to Brevis™ housing to prevent displacement of housing upon insertion of denture.



Place minimal acrylic into relieved denture.

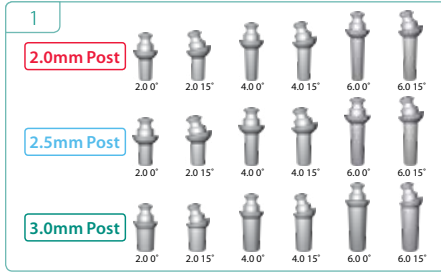


Patient clenches bilaterally on cotton rolls while acrylic sets.



Polish excess acrylic from denture.

ABUTMENTS



Brevis™ abutments are available in heights of 2.0, 4.0 and 6.0mm.

PARALLEL ABUTMENTS



Rotate a combination of 0° and/or 15° angled abutments to achieve parallelism prior to their being seated.

SEAT IMPRESSION CAP



Seat black plastic impression caps onto the Brevis abutments.

MAKE IMPRESSION USING CAPS



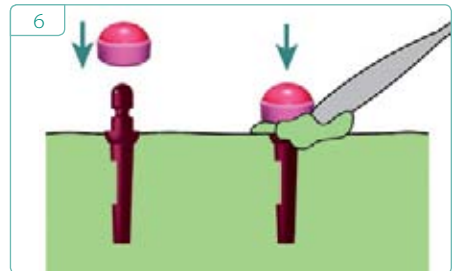
Make impression using Brevis™ impression caps. **Do not make a direct impression of the titanium abutments.**

INSERT TRANSFER DIES



Insert the aluminum transfer dies into the impression caps prior to the pouring of a master stone model.

BLOCK OUT UNDERCUTS



Block out undercuts on the model.

REMOVING/INSERTING RUBBER O-RING INTO BREVIS™ HOUSING

REMOVE HOUSINGS



Remove rubber o-rings with a scaling instrument or explorer.

INSERT EXPLORER



Insert the explorer in between the o-ring and Brevis™ housing and loosen the o-ring from the housing.

SQUEEZE O-RING



Using cotton pliers, squeeze the o-ring into a figure eight and insert it into the housing.

PLACE O-RING



Place the entire o-ring into the retentive groove within the Brevis™ housing.

MOVE O-RING INTO PLACE



If the o-ring is fully inserted, yet not secure in the retention lip of the housing, use an explorer to move the o-ring into place.

KEYS TO SUCCESS

- Each patient maintains and inserts his denture differently. The o-ring should be changed every 6 to 24 months depending upon its wear.
- The o-rings should not be soaked in a solution with high alcohol content. Some cleaning solutions may dry out the rubber o-rings and cause them to lose retention faster than normal.
- An inappropriately aligned housing will result in excessive wear of the rubber o-ring.
- If excessive wear of o-ring is noted, remove and re-align the housing in denture with a sufficiently flowable acrylic injected onto the housing and into the relieved denture.

LOCATOR[®] ABUTMENT SYSTEM



LOCATOR® ABUTMENT SYSTEM

LOCATOR® ABUTMENTS* 2.0mm Post

HEIGHT	DIAMETER	PART NUMBER
1.0mm	4.0mm	260-200-501
2.0mm	4.0mm	260-200-502
3.0mm	4.0mm	260-200-503
4.0mm	4.0mm	260-200-504
5.0mm	4.0mm	260-200-505



LOCATOR® ABUTMENTS* 3.0mm Post

HEIGHT	DIAMETER	PART NUMBER
1.0mm	4.0mm	260-300-501
2.0mm	4.0mm	260-300-502
3.0mm	4.0mm	260-300-503
4.0mm	4.0mm	260-300-504
5.0mm	4.0mm	260-300-505















*Each Locator® abutment is packaged with a male processing kit.

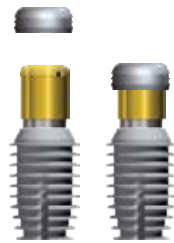
LOCATOR® ABUTMENT CONSIDERATIONS

- **Bicon strongly recommends the use of the Brevis abutment due to its flexibility in achieving parallelism with angled abutments.**
- **Locator® Abutments are not available in the 2.5mm Post.**
- The Locator® Attachment features a denture component with a skirt that easily locates the mating implant abutment.
- The self-aligning ability of the attachment aids the patient in positioning their prosthesis in a similar manner as a guide plane created by a milled bar.
- The implant retained overdenture can be properly seated without damage to the attachment components. This is especially important for a patient lacking anatomical structures necessary to orient their denture due to a severely resorbed mandibular ridge.

LOCATOR[®] ACCESSORIES

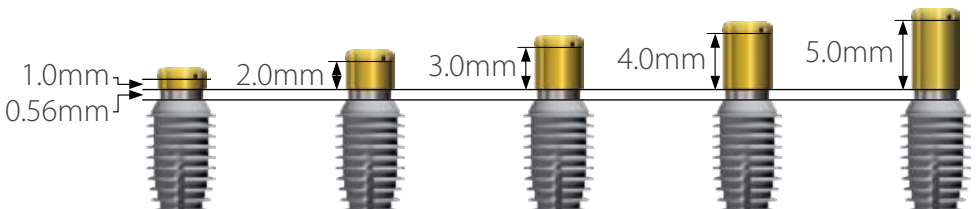
DESCRIPTION	PART NUMBER						
Locator Male Processing Kit (2)	260-100-519						
		2.3 kg (5.0 lb.) Retention Male	1.4 kg (3.0 lb.) Retention Male	0.7 kg (1.5 lb.) Retention Male	Processing Male	Metal Housing Cap	Blockout Spacer
Locator Extended Range Green Cap (4)	260-100-521						
Locator Extended Range Orange Cap (4)	260-100-525			1.4 kg (3.0 lb.) Retention Cap	0.9 kg (2.0 lb.) Retention Cap	0.5 kg (1.0 lb.) Retention Cap	
Locator Extended Range Red Cap (4)	260-100-526						
Locator Impression Kit	260-100-524						
		Locator Impression Cap	Locator Impression Analog				
Locator Core Tool	260-101-839						
		Locator Core Tool					

LOCATOR[®] ABUTMENT WITH HOUSING



MEASUREMENT GUIDE

The height of the Locator[®] abutment is measured from the bottom of the gold portion of the abutment to the shoulder of the Locator[®] abutment. The available heights are 1.0, 2.0, 3.0, 4.0, or 5.0mm.



LOCATOR® CHAIRSIDE TECHNIQUE

REMOVE HEALING PLUG



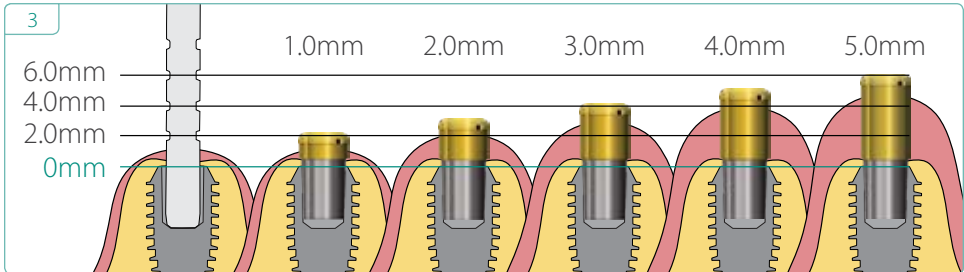
Healing plug being removed with a straight curette.

INSERT GUIDE PINS



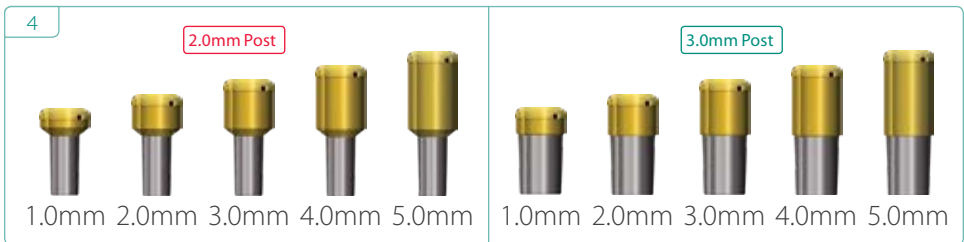
Guide pin inserted into the well of each implant.

USE A SHOULDER DEPTH GAUGE TO DETERMINE ABUTMENT HEIGHT



Use depth gauge to measure and select the appropriate Locator® Abutments.

LOCATOR® ABUTMENTS



INSERT LOCATOR® ABUTMENT



Insert and gently seat abutment.

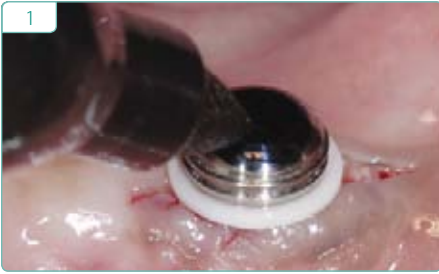
PLACE BLOCKOUT SPACER



Blockout spacer being placed over a Locator® Abutment.

CONTINUED NEXT PAGE

MARK HOUSING



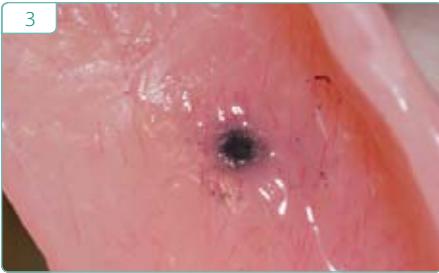
Marker ink being placed on the housing to indicate its location relative to denture.

INSERT DENTURE



Denture being inserted.

LOCATE HOUSING POSITION



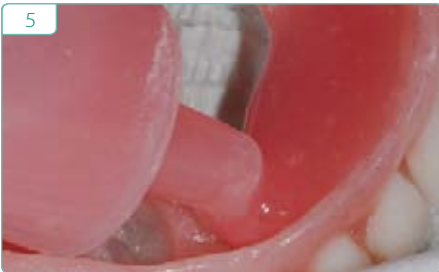
Black ink indicating housing position.

PROVIDE ROOM FOR HOUSING



Acrylic bur being used to provide room for the housing.

INJECT ACRYLIC INTO DENTURE



Flowable acrylic being injected into the denture.

INJECT ACRYLIC AROUND CAPS



Flowable acrylic being injected around the housing caps.

LOCATOR® CHAIRSIDE TECHNIQUE & HOUSING CAP

CLEAN AND POLISH DENTURE



View of denture after being cleaned and polished.

INSERT DENTURE



Denture being inserted. Patient applying occlusal force while metal housing caps are being secured into the denture.

PROCESSING MALE REMOVAL



Removal of the processing male from the metal housing cap with Locator® Core Tool.

HOLD RETENTION MALE



Locator® Core Tool is being used to hold a pink 1.4 kg (3.0 lb) retention male.

INSERT RETENTION MALE



Insertion of a pink 1.4 kg (3.0 lb) retention male into the metal housing cap.

ASSEMBLED CAP



View of housing cap with its retention male.

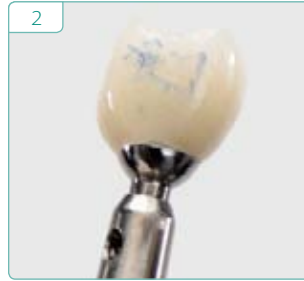
APPENDIX

IAC® POLISHING TECHNIQUE

IAC®



MARK INTER-
PROXIMAL CONTACTS



SILICONE
PRE-POLISHING DISK



PINK CERAMIC
POLISHING DISK



SILICONE
CARBIDE BRUSH



DIAMOND
POLISHING PASTE



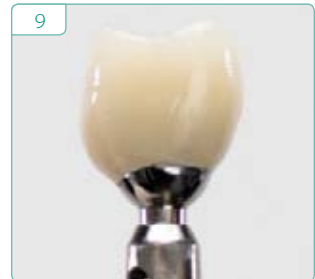
SOFT GOAT HAIR BRUSH



COTTON BUFFING WHEEL



THE POLISHED IAC®



IAC® POLISHING KIT

DESCRIPTION

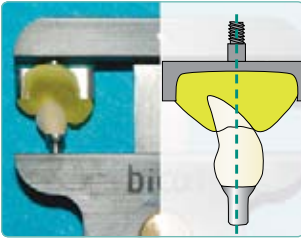
PART NUMBER

IAC® Polishing Kit

260-103-033



FABRICATE SEATING JIG



Using a Crown Alignment Device, mold hydroplastic resin around the abutment/crown and a threaded Crown Seating Tip to facilitate tapping in the long axis of the abutment post and implant well in order to properly engage their locking taper connection.

PRELIMINARY INSERTION



Seat the abutment/crown with only finger pressure for evaluation and removal of any interferences to its passive seating.

REMOVE INTERFERENCES



Remove any excessive interproximal tooth contact by adjusting the abutment/crown. Remove any soft tissue or bony interferences by adjusting the abutment/crown, or by relieving or removing hard or soft tissue.

CONFIRM WITH RADIOGRAPH



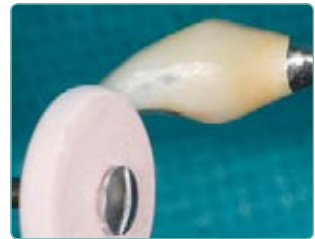
Confirm removal of bony interferences with a radiograph.

ALIGN ABUTMENT/CROWN



Align the abutment/crown prior to confirming passive interproximal contacts with dental floss, if necessary with an incisal orientation jig. When in doubt, always adjust a contact that you think may be too tight, since non-passive interproximal contacts will inhibit the engagement of the abutment's locking taper connection.

ADJUST CONTACTS



Adjust excessive contacts until dental floss can be passed through the contact area with only minimal resistance.

CONTROL BLEEDING & CLEAN COMPONENTS



Eliminate or control bleeding by using a combination of vasoconstrictors, pressure and time. Clean the abutment post with an alcohol wipe and implant well with an appropriately sized cotton-tipped applicator.

CROWN INSERTION



Insert and align abutment/crown using an incisal orientation jig when necessary.

INITIAL SEATING TAP



While digitally supporting the bridge of the patient's nose, apply an initial seating tap using a custom seating jig on a threaded straight handle to assure that the seating forces are being directed in the long axis of the implant.

MAXILLARY ANTERIOR SEATING GUIDE

CONFIRM CONTACTS & RETAP



Confirm passive interproximal contacts with dental floss and, if necessary, remove the prosthesis by tapping on the handle of a grasping forceps to adjust any non-passive interproximal contact area. Alternatively, a thin metal finishing strip may be used without having to remove the restoration.

CHECK OCCLUSION



Establish uniform contacts initially in maximal intercuspation and then in protrusive and retrusive excursions.

CHECK OCCLUSION



ADJUST CONTACTS WHILE CLENCHING



Establish uniformly balanced contacts while the patient is **clenching in all extreme excursions including retrusive movements of the mandible from an extreme protrusive position**, which may indicate the need to adjust the facial aspect of the restoration.

ADJUST CONTACTS WHILE CLENCHING



Markings from the retrusive movement of the mandible while clenching indicate the need to reduce the facial contour of the restorations. Note that there is no contact in maximal intercuspation.

SEATING COMPONENTS

DESCRIPTION	PART NUMBER
Crown Alignment Device	260-101-315
Crown Seating Tip	260-101-015
Hydroplastic Resin (20g)	260-103-031



Crown Alignment Device



Crown Seating Tip



OPEN CONTACT



ROUGHEN SURFACE



CLEAN THE SURFACE WITH ETHYL ALCOHOL



APPLY MODELING LIQUID



LIGHT CURE WITH PLASMA LIGHT



ADD POLYCERAMIC MATERIAL



INSERT IAC[®] FOR FINAL ADJUSTMENTS



LIGHT CURE



REMOVE IAC[®] FOR ADJUSTMENTS



ADDING INTER-PROXIMAL CONTACTS TO AN IAC®

REMOVE EXCESS MATERIAL



USE PINK POLISHING DISK



USE SOFT GOAT HAIR BRUSH



USE COTTON BUFFING WHEEL



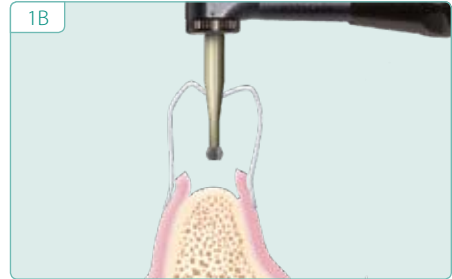
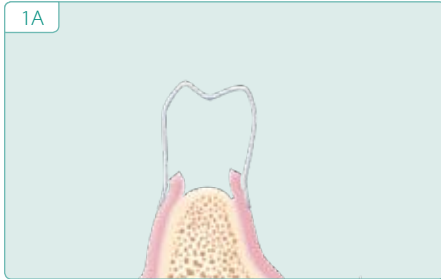
INSERT IAC®



CLOSED CONTACT WITH SEATED IAC®

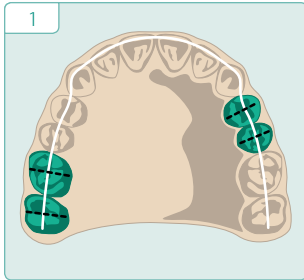


VACUUM-FORMED TEMPLATE

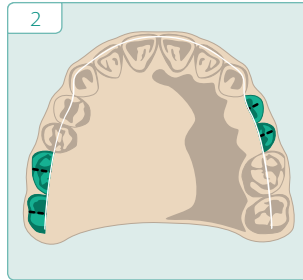


After making an impression and subsequent cast of the diagnostic wax-up of the intended restoration, a vacuum-formed template is prepared on the cast from thin template stock which is commonly used for the chairside fabrication of transitional restorations. A hole is drilled in the middle of the incisal or occlusal surface of the template in the location of the intended tooth. The vacuum-formed template, if possible, is trimmed to include at least one tooth distal and three or four teeth mesial to the area of the intended replacement.

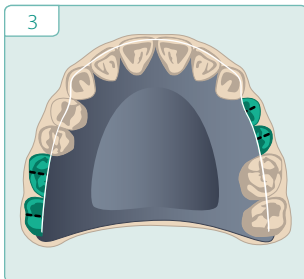
TEMPLATE FROM STONE MODEL



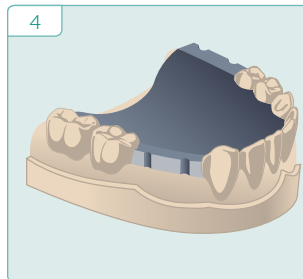
Using a duplicated stone model of the diagnostic wax-up, draw a line through the incisal edge and occlusal surfaces of the teeth and another line in the center of each tooth to be replaced, intersecting the incisal or occlusal line.



Remove the lingual half of the teeth to be replaced.



Mold acrylic onto the lingual aspect of the model up to the level of the central fossa or incisal edge of the teeth to be restored.



Cut a 2.5mm wide groove in the acrylic corresponding to the middle of each intended tooth to be replaced.

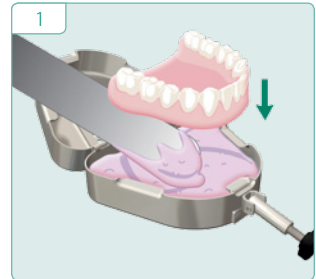
SURGICAL TEMPLATE

Accurate placement of any implant requires the awareness of its intended prosthetic restoration. Mounted study casts and a diagnostic wax-up of the teeth to be replaced are usually necessary for the fabrication of a surgical template that will aid the dentist in the appropriate placement of multiple implants. Although the location and availability of bone will dictate the ultimate trajectory of the pilot drill, clinicians should strive to stay within the center of the intended tooth and within 10° of the trajectory of the intended prosthesis.

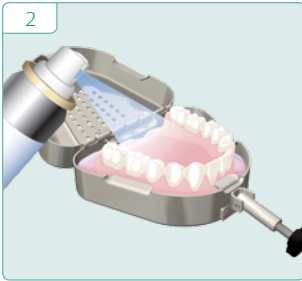
SURGICAL TEMPLATE FABRICATION

FABRICATION OF PALATAL TEMPLATE FROM EXISTING PROSTHESIS

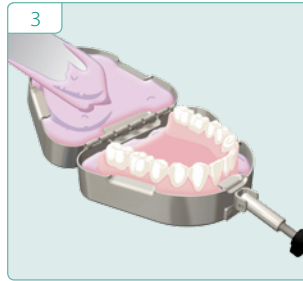
For larger edentulous areas, fabricate a palatal template by using an existing removable prosthesis. When fabricating the palatal template, the buccal aspect is inclined from the incisal edge or central fossa of the proposed teeth back to the crest of the alveolar ridge, which is represented on a duplicated prosthesis as the greatest concavity on the alveolar ridge side of the prosthesis.



1 Insert denture into alginate in denture duplicator.



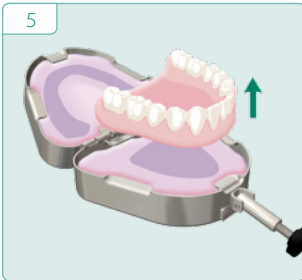
2 Apply separating medium.



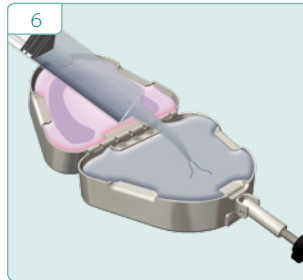
3 Fill other side with alginate.



4 Close and allow alginate to set.



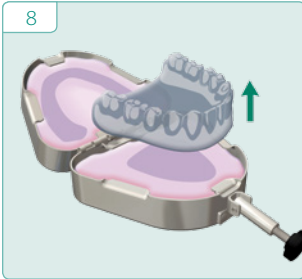
5 Open and remove denture.



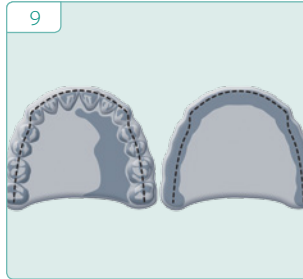
6 Fill alginate mold with acrylic.



7 Close and allow acrylic to set.



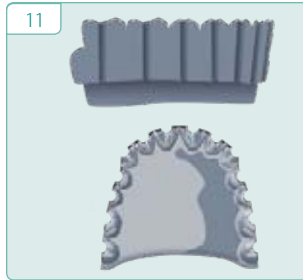
Open and remove duplicated denture.



Draw a line in the middle of each tooth and a line representing greatest concavity on the tissue side.



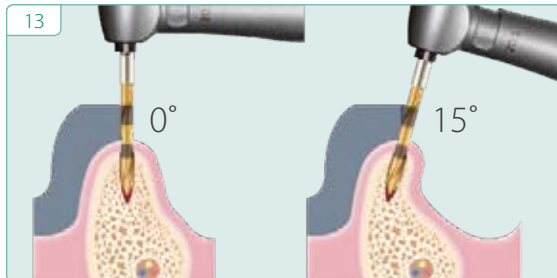
Cut a 2.0mm wide groove in center of each tooth joining the lines representing the middle of each tooth and greatest concavity of the tissue side.



Remove the buccal acrylic along the slope joining the two lines representing the middle of each tooth and greatest concavity of the tissue side.



Trim excess incisal length to prevent interference with head of handpiece.

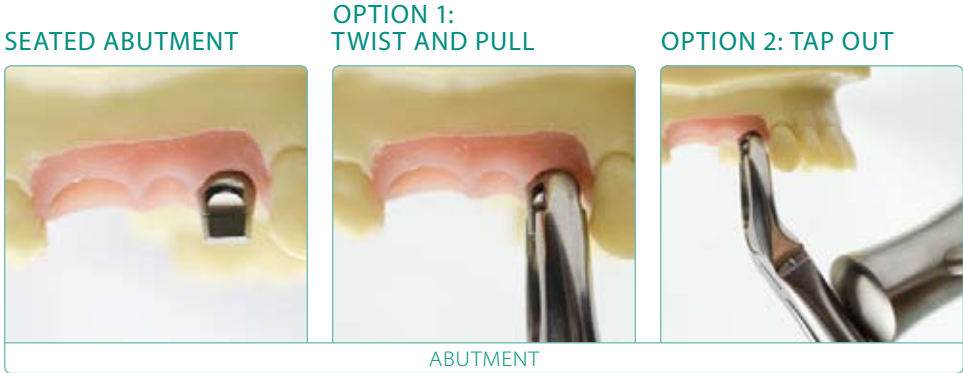


Template determines mesio-distal positioning. Availability of bone determines final bucco-lingual angulation.

KEYS TO SUCCESS

- The trajectory of the pilot bur will be the trajectory of the implant and the trajectory of a straight abutment.
- The final implant osteotomy, to the extent possible, should be centered in the middle of the intended prosthetic tooth.
- An appropriate mesio-distal positioning of a pilot osteotomy is more critical than a slightly off-axis trajectory.
- Both the vacuum-formed and palatal templates are placed in cold sterilization prior to their being used to facilitate achieving an appropriate trajectory for the pilot bur.

ABUTMENT REMOVAL TECHNIQUE



ABUTMENT FORCEPS

DESCRIPTION	PART NUMBER
Abutment Removal Forceps (Upper)	260-801-055
Abutment Removal Forceps (Lower)	260-801-056





bicon[®]
DENTAL IMPLANTS

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