

This guide is intended to provide the technical information needed to successfully use NuSmile BioFlx. Your success is important to us, questions and comments are always welcome.

INTENDED USE and INDICATIONS: NuSmile BioFlx crowns are designed for full coverage restoration of damaged or decayed teeth.

OCCLUSAL EVALUATION AND SELECTING A CROWN

The occlusal relationship should be evaluated before the application of the rubber dam. Approximate the mesial-distal dimension of the carious tooth to determine the space available between the adjacent teeth, then choose the smallest NuSmile BioFlx crown that will restore the proximal contacts.

PREPARATION OF THE TOOTH AND TRIAL FITTING

Local anesthesia is usually necessary, and the use of a rubber dam or equivalent isolation is strongly recommended. The tooth should be prepared so that the crown fits the tooth with a snug/active fit. As in many cases involving early childhood caries (ECC), the extent of decay may dictate appropriate pulpal therapy before or after tooth preparation.

- 1. Remove all existing caries as indicated.
- 2. Prepare the occlusal surface, with a uniform occlusal reduction of approximately 1.5mm-2.0mm following the natural occlusal contours. Reduction should include the buccal and lingual cusps, the central groove and marginal ridges. Reduce buccal and lingual occlusal third of the clinical crown.
- 3. Using a tapered fissure or tapered diamond bur slice through the mesial proximal surface, reducing or removing the contact by approximately 1.0mm without creating a ledge in the proximal space or damaging the adjacent tooth. Perform the same process to the distal surface. Proximal slices should slightly converge toward the occlusal surface.
- 4. Completely remove buccal and lingual bulges and convexities while maintaining a snug fit.
- 5. Round and smooth all sharp edges, point and line angles.
- 6. When multiple adjacent teeth are being prepared, greater interproximal reduction is required for easier crown placement. Make final check of the preparation.
- 7. Try on the crown by placing from lingual to buccal, then pushing it over the buccal bulge for a snug/active fit. Check margins for close cervical adaptation extending approximately 0.5mm-1.0mm subgingivally. The crown should not bounce back after fully seating.



Continued on reverse side ▶

ADJUSTING A NUSMILE BIOFLX CROWN

Crimping the crown is **NOT** recommended. Slight contouring may be done with Howe Pliers. If the crown is too small, use the next larger size crown or further reduce the tooth circumferentially. If the crown is in hyperocclussion, the tooth preparation may have a ledge, may need more occlusal reduction; or the proximal contact may be too tight with the adjacent tooth. Excessive gingival blanching means that the crown is too long or too bulky. A properly fit crown extends approximately 1.0mm into the sulcus and may be trimmed with C&B scissors or a stone as needed. No other areas of the NuSmile BioFlx crown should be adjusted or crimped.

CEMENTING THE CROWN

The prepared teeth and the crown should be cleaned of any saliva, blood or debris, and any gingival hemorrhage reasonably controlled prior to cementation. Pressure, tissue infiltration or a hemostatic agent may be used for this purpose as necessary. Self-setting RMGI (FujiCEM® 2¹) or GI (Fuji I®1, Ketac™2) may be used to cement the NuSmile BioFlx crown. Fill the crown approximately two-thirds full with cement so that excess cement will flow out from the margins during cementation to minimize any voids. Perform cleanup and allow cement to cure per cement manufacturer's instructions. Run a knotted floss through the contacts to remove any residual interproximal cement. Check occlusion. If a NuSmile BioFlx crown is in hyperocclusion, the opposing teeth may be slightly adjusted as necessary. Do not adjust the occlusal anatomy/height of the NuSmile BioFlx crown as it could lead to perforation. The BioFlx crown should **NEVER** be the first point of contact in occlusion.

CLEANING AND STERILIZATION

NuSmile crowns are provided in non-sterile packaging. Clinician may choose to sterilize before use. Cold sterilization, autoclave or steam sterilization may be used according to the standard instructions of the manufacturer of the sterilant or sterilizer.

CAUTION:



CROWNS CEMENTED FOR INTRAORAL SERVICE should NOT be cleaned and sterilized to use for another patient.

PRECAUTION:

- Crowns that are reprocessed after cementation in another patient may cause infection resulting in possible long term health effects.
- Dental crowns may cause artifacts in MRIs, MRI technician should be notified of any dental crowns.

STORAGE:

Crowns should be stored in a clean storage container.

SUGGESTED ADA CODING:

CDT Code D2932 - Pre-fabricated resin crown







