



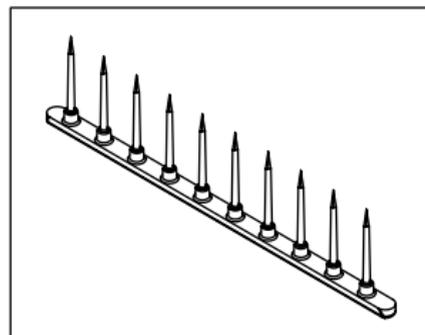
endowel®

TAPERED COLOR-CODED POSTS IN FIVE STANDARDIZED SIZES

Application Procedure

EFFICIENCY IN DENTISTRY®

endowel® POSTS TO RESTORE ENDODONTICALLY-TREATED TEETH



Now, construction of a post and core for both anteriors and posteriors becomes far more precise and successful than ever before. **endowel** plastic posts, available in five sizes, conform in diameter and taper to Standardized Root Canal Instruments Number 80, 90, 100, 120 and 140. Color coded (same color as Standardized Instruments) posts allow for easy identification even when broken from their strips. Exclusive "V"-grove on either side, when reproduced in final casting, allows captive air and excess cement to escape coronally.

SAFER: No rotary instruments are used in canal for **endowel** post preparation - only *hand* instruments - therefore there is less danger of creating a new canal or undercutting the preparation. There are no screw-in posts to induce splitting of weakened canal walls. **endowel** posts are *tapered*, follow nature's configuration of root canals, unlike straight posts that require cutting down into the narrow portion of the canal.

MORE ADAPTABLE: **endowel** posts may be used with equal facility in either *direct* or *indirect* casting techniques. Or, they may be used as *sprues*.

ECONOMICAL: Cost only *pennies* each - far less than that of precious metal posts. May be stocked and used with minimal outlay.

OTHER ADVANTAGES: • Fast. Most post preparations can be accomplished in less than 4 minutes. • May be fitted with equal ease in round or elliptical canals. In fact, an elliptical preparation is most desirable since it counteracts forces of rotation in final casting. Inlay wax, Hydrocolloid, or "DuraLay" will attach to **endowel** posts readily. • Burn out completely leaving no residue, far below casting temperature. • Casting has greater strength because it is all gold, not gold attached to another metal. No special investment required.

TO COMPLETE BY INDIRECT METHOD

1. To create a post which has resistance to forces of rotation, modify orifice of canal with an instrument (such as StarDental 769-1 Im) at high speed, accentuating eccentricities by carrying them a few millimeters deeper into canal. A canal which is elliptical serves the purpose.
2. Coat portion of **endowel** post lightly with a lubricant to facilitate withdrawal.
3. With cotton pliers, insert **endowel** post into canal. If a polysulfide impression material will be used, paint portion of the **endowel** post above canal with adhesive. If hydrocolloid or wax is used, this is unnecessary.
4. Take an impression of the tooth. **endowel** post is removed within the material.
5. To insure removal of **endowel** post from stone cast, a tapered wooden stick is placed in contact with apical end of **endowel** post and luted buccal or labial edge of impression. Another coating of lubricant is then applied to the **endowel** post.
6. Model is poured with stone of choice, **endowel** post removed, and wax applied directly to develop pattern for casting the core.
7. Wax-up completed and invested with any accepted investment. **endowel** post burns out complete, leaving no residue, far below casting temperature.

TO COMPLETE BY DIRECT METHOD

1. Follow steps 1 and 2 of **INDIRECT METHOD**.
2. Inlay wax is applied to remaining tooth structure and **endowel** post, and compressed into orifice.
3. Do not shorten part of the post protruding through wax. This is the part that will be grasped by the pliers following completion of waxing.
4. Investing and casting can now be completed in routine fashion.

REFERRAL SLIPS: are included in this package so that if the patient has been referred, you can alert the referring Dentist to the **endowel** post preparation. Place the used **endowel** post into the slits on the slip and send to the referring Dentist. Additional slips may be obtained in our web-site www.dentalez.com or by calling 1 - 8 6 6 - D T E - I N F O .



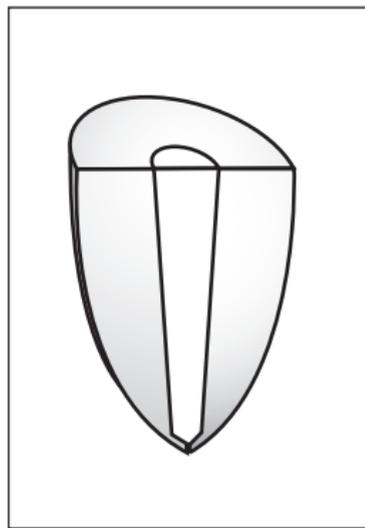
For new products, manuals and technical information call 1-866-DTE-INFO or visit our web site @ www.dentalez.com

HOW TO REORDER: **endowel** posts are available both in packages of assorted sizes (10 posts each in sizes 80 through 140), and in packages of 50 posts of a size listed here:

Description	Item #
SIZE 80 (Pkg. of 50)	205861
SIZE 90 (Pkg. of 50)	205862
SIZE 100 (Pkg. of 50)	205863
SIZE 120 (Pkg. of 50)	205864
SIZE 140 (Pkg. of 50)	205865

ROOT CANAL IS FILLED

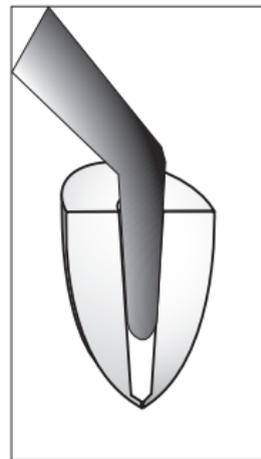
Root canal is sealed by any of the acceptable filling methods. If a silver point is used, confine the point to the apical third of the canal. When gutta percha is the filling material, the entire canal is condensed as shown here. Use of **endowel** posts are not limited to straight canals. In curved canals, it is placed only in the coronal portion which is not curved.



Root canal is filled

INSERT HEATED PLUGGER

If canal has been sealed with gutta percha, a plugger is heated until just before it is cherry red, then place in canal as shown. Let plugger draw itself into canal 2 or 3 millimeters with very moderate pressure. When plugger meets resistance, remove it, wipe away melted gutta percha, and repeat process until plugger reaches desired depth. (Working length of an **endowel** post is 20 millimeters which should be clipped shorter to 1-1½ times length of clinical crown. To calculate, measure inciso-gingival length of coronal portion, if present, or desired length if all or part of crown is missing. When **endowel** post is in place there should be normally 3-5 millimeters of apical filling beneath it.)



Heated plugger inserted

HAND-REAM TO DEPTHS NO ROTARY INSTRUMENT REQUIRED

If there is still gutta percha clinging to the wall of the canal, dip a reamer in solvent such as chloroform or xylol and remove it (do not flood the canal with solvent as this will soften gutta percha in the apical portion). Root canal reamers with pre-set stops for length of preparation are used serially to widen the canal and remove some additional dentin. Retention of the post is determined more by length than diameter, therefore enlargement of most canals to sizes 80-100 is sufficient. Larger sizes are indicated for immature teeth or in canals where sufficient straight post length is unobtainable.

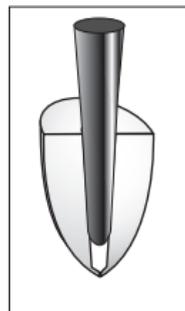


Reamer used serially

FIT STANDARDIZED **endowel** POST

Break off **endowel** post from its track (size should be the same as last reamer used). Insert into canal and test for fit (it should fit snugly with some resistance to removal when grasped with thumb and forefinger, thus providing that there is a snug fit over entire length of post). Because of tolerance of reamers (± 0.02 mm) reamer and **endowel** post of the same number may not correspond exactly, but both have the same taper, and can be made to fit precisely thus; if **endowel** post goes to correct length but is loose, clip 1 mm. segment from tip to retry. If **endowel** post does not go to desired depth, clip 1 mm segment from tip of reamer used, widen canal, and retry **endowel** post, if canal is elliptical, fit **endowel** post to narrowest portion of the ellipse; impression material when forced into canal will fill wider portion, adhere to **endowel** post when withdrawn, thus registering exact dimensions of elliptical canal.

endowel post inserted

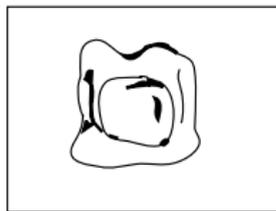
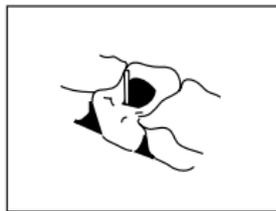


endowel POST EMPLACED

Both endodontic and **endowel** post preparations are completed and **endowel** post is in place. Length of **endowel** post here has been adjusted to approximately 1½ times the length of the clinical crown.

STONE MODEL POURED

endowel post has been removed and the wax applied (for indirect method of casting) to developed pattern of core. The **endowel** post burns out completely above 500° F.



IMPRESSION TAKEN

Impression materials - hydrocolloid, wax, or "DuraLay" - adhere to coronal portion of **endowel** post and when the impression is removed, the apical portion of the post is withdrawn from the canal precisely establishing the size, shape and location of the core.

COMPLETED CAST AND CORE

Core and superstructure resulting are assured of exact fit and, when cemented into place, provide a strengthening influence for non-vital tooth.

