

**DT Light-Post ILLUSION Development Handout
Version 1.1, January 8, 2007:**

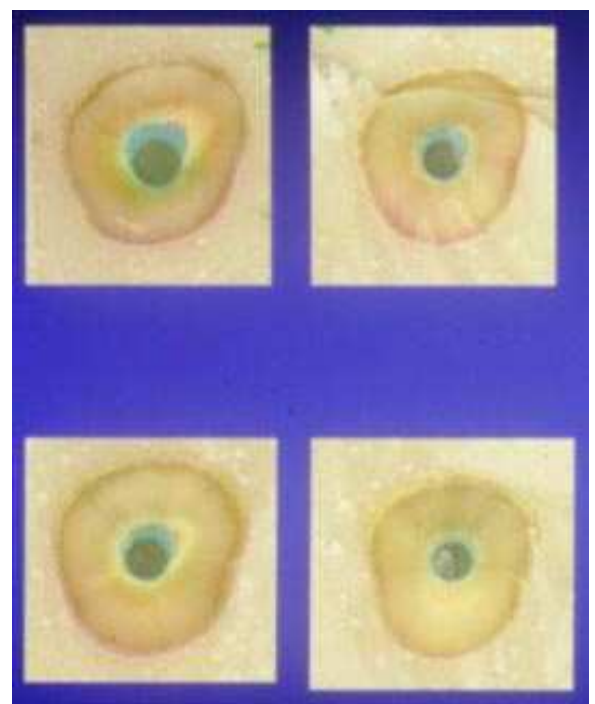
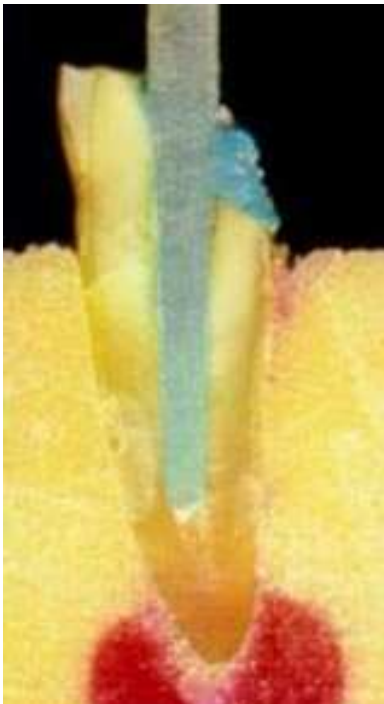
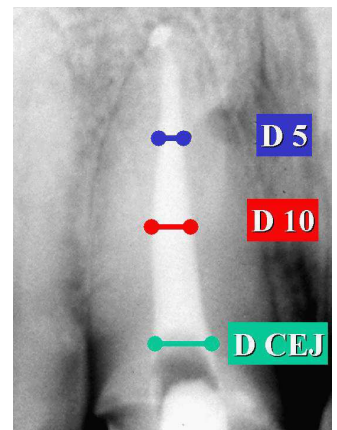
In the late 1990's, a Prosthodontic Professor Dr. Pierre Boudrias and an Endodontic Professor Dr. Salam Sakkal at the University of Montreal decided that it was time for a post that adapts to the realistic contours of the prepared canal, rather than the traditional approach: adapting the canal to fit the post. Collaboration between RTD and these academicians culminated in the introduction of "D.T" or *Double-Taper* Light-Post.

In order to determine what this anatomically-correct shape should be, root canal treatments were done on 967 extracted teeth, including all tooth categories and using several popular endodontic techniques.

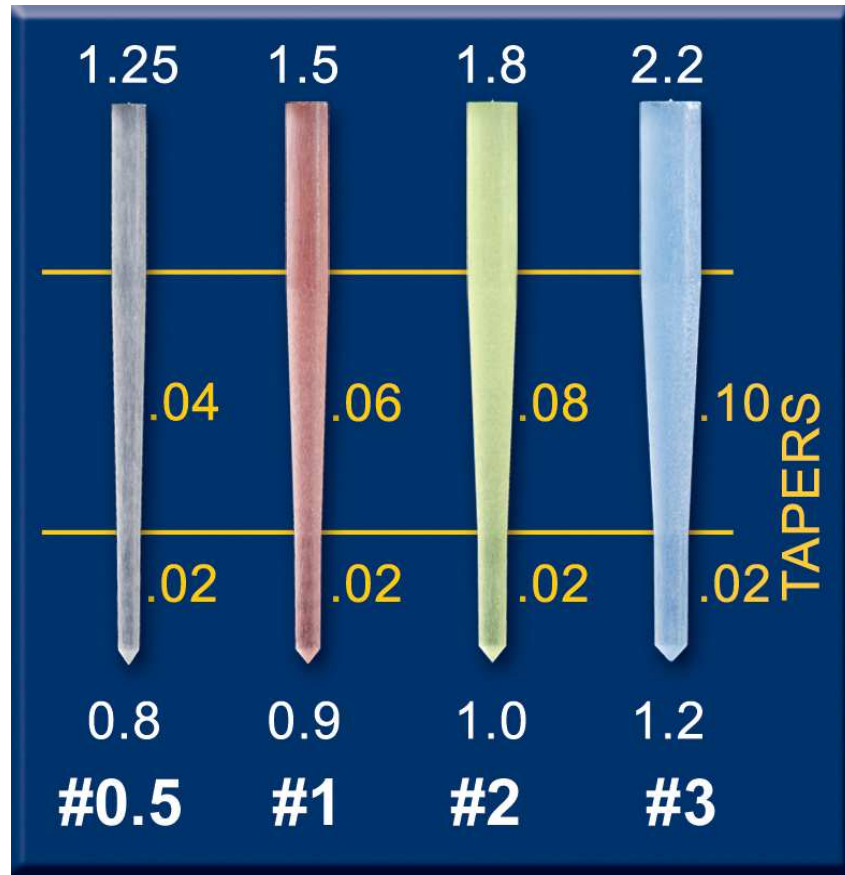
Thousands of measurements were taken at 5mm and 10mm from the apex and at the cemento-enamel junction using the Schick Digital Radiography system. Means, ranges and standard deviations were calculated to define and standardize the diameter and taper for each root of each tooth. This extensive radiological evaluation universally showed a DOUBLE taper; a narrower taper at the apical third, and an increase in taper moving coronally.

Pursuant to these measurements, RTD furnished many different double-tapered prototype posts for evaluation.

These prototypes were placed in nearly 400 extracted teeth. The teeth were then sectioned sagittally and longitudinally and analyzed for optimal adaptation.



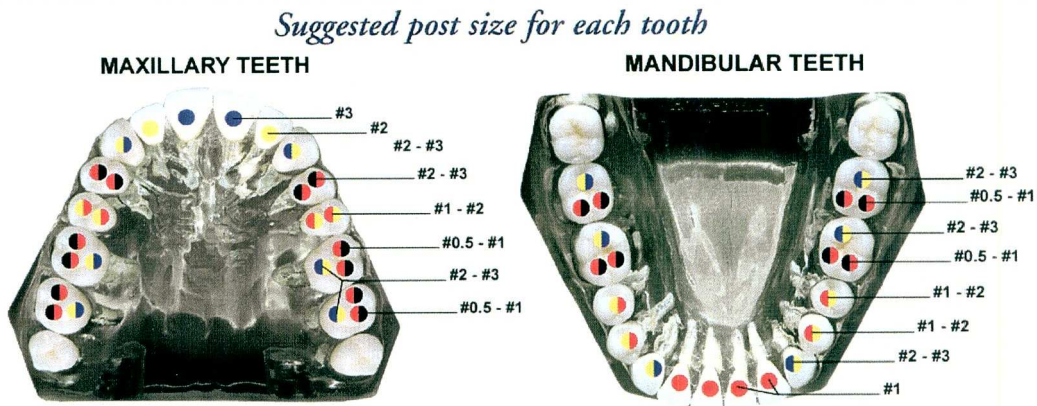
A range of only 4 post sizes are necessary to address the needs of endodontically-treated adult dentition. All 4 D. T. Posts have the predetermined 02 degree taper in the apical 5mm. The middle section of the post increases in taper size from the smallest “*point-five*” post to the largest #3 post.



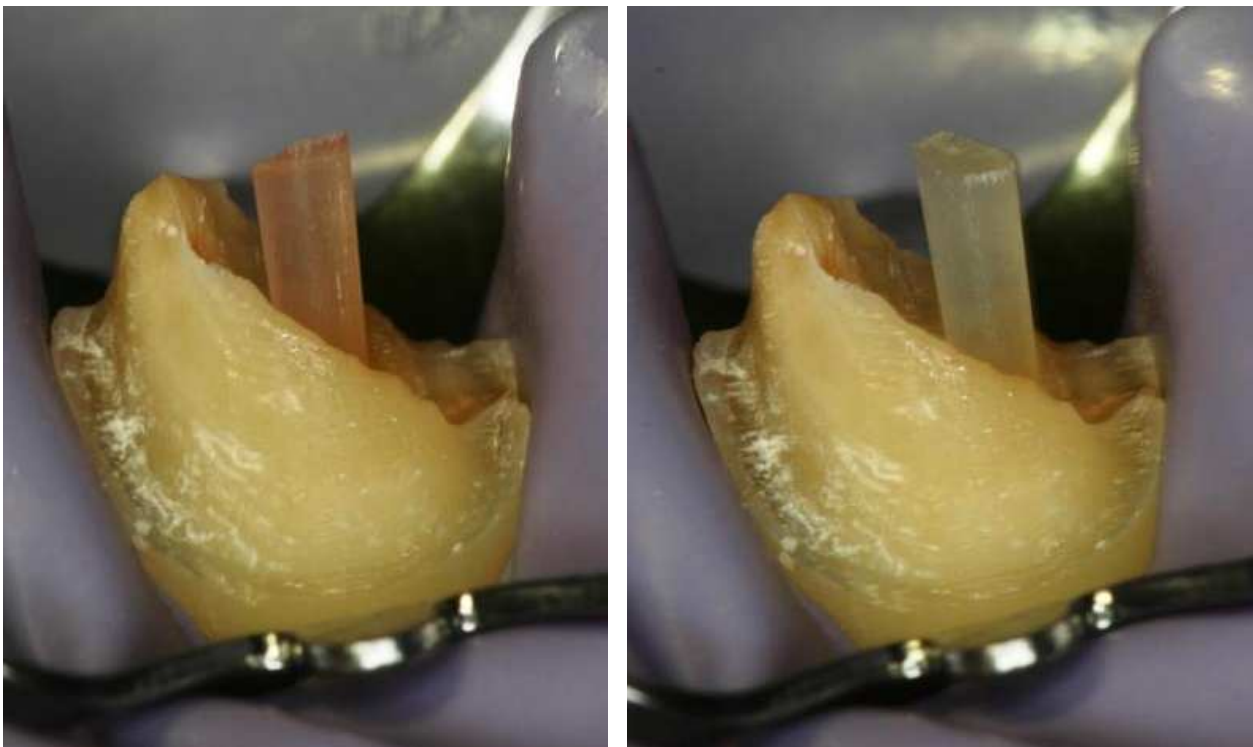
In 2006, the product and technology were upgraded to include intrinsic, on-command color change; the D. T. Light-Post ILLUSION. The posts are furnished in colors that identify their size and correspond to the matching drills.



Because of the way these post dimensions were developed, it is easy to establish guidelines for post selection: D.T. Post size “point-five” and #1 are best suited to smaller canals: premolars, molars and lower incisors. D. T. Post #2 properly fits most maxillary laterals, upper and lower canines. D. T. Post #3 is best used in the palatal root of maxillary molars, distal canals in mandibular molars and in upper centrals and canines. Of course, clinical experience and judgment are of equal importance to these guidelines.



After the post is placed (LEFT), the color disappears, and the post becomes translucent (RIGHT).



In the case of re-access, cold water or air will prompt the return of the color, to facilitate an easier removal process.

The D. T. Post system accommodates the Endodontist’s preference for minimal preparation, and affords the Prosthodontist maximum mass and surface area for core and crown preparation.