



 **ENDO-EZE® AET™**  
endodontic system



# ENDO-EZE® AET™

## Anatomic Endodontic Technology

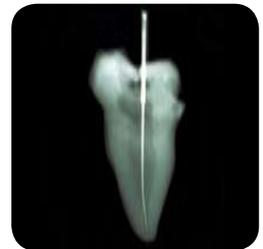
Ultradent provides dentists with more than just an Endodontic product line. Our revolutionary Anatomic Endodontic Technology (AET) is a new philosophy in Endodontic treatment. AET allows dentists to perform Endodontic treatment while maintaining the natural anatomy of individual root canals. Through this conservative, minimally invasive technique, clinicians are able to perform Endodontic treatment with predictable, reproduceable results.

Better yet, AET is minimally invasive and listens to the needs of the tooth. Rather than forcing the tooth to adapt to the instruments used, AET lets the anatomy of the tooth be its guide, resulting in more conservative preparations without compromising the ability to cleanse and obturate the canal.

- **Debrides the canal** while conforming to its original anatomy.
- **Minimally invasive** technique with predictable, reliable results.
- **Clean and shape** in about half the time.
- **Oscillating motion** of system all but eliminates file separation anxiety.
- **More cost-effective than NiTi** - save your expensive NiTi files for the apex.



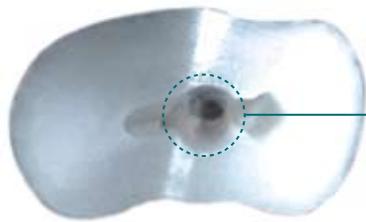
Clinical perception suggests the canal is narrow and conical.



Rotate the tooth 90° to view the bucco-lingual dimensions, and the actual anatomy of the canal is revealed.

## What about 'EZE' of use?

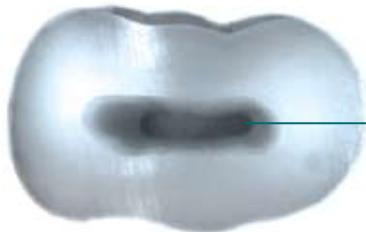
AET files are packaged in handy color-coded Patient Kits that match the color-coded delivery tips used for irrigation and obturation.



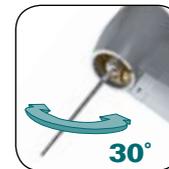
**Rotary files are difficult** to use for cleaning and shaping the entire anatomy of a typical canal. Excess tooth structure must be removed in order for the file to address the entire anatomy, which can compromise the integrity of the tooth and the efficacy of the treatment.



360°



**Endo-Eze AET** addresses the anatomical realities of a canal. Most teeth, with the exception of some maxillary anterior teeth, have canals that are flat, ribbon-shaped, laminar or elliptical in cross section. The oscillating motion of the AET system facilitates equal instrumentation of all the walls in the canal and allows for optimal enlargement of natural canal anatomy.



30°



### Did you Know?

Ultradent's Endo-Eze AET system also includes the Riitano Access Bur Kit, a collection of four uniquely shaped diamond burs. The burs are safe-ended, minimizing the risk of perforating the pulp chamber floor.





# ENDO-EZE<sup>®</sup> AET<sup>™</sup> Files

A key component of the AET system is a new generation of stainless steel files that provide greater strength and cutting efficiency than traditional Endodontic instruments. This strength, when combined with the oscillating motion of the handpiece, greatly reduces the chance of file separation.

Endo-Eze AET files are packaged in sturdy, autoclavable, plastic containers, eliminating the need for an "endo tub." These semi-disposable kits can even be autoclaved prior to use if "sterile" files are desired. The economical Patient Kits contain the instruments needed to perform 90 to 95% of all Endodontic procedures. The kits contain seven files that are color-coded according to length for easy identification. The sponge insert can be soaked with disinfectant to reduce microbes during the procedure.

- **Safe-ended, side-cutting only**
- **Durable construction** and materials reduce file costs and improves cutting efficiency.
- **Mechanical Shaping Files** can be adjusted up to 4mm within the handpiece.
- **Apical Files** cut in the apical portion of the canal only.
- **Auxiliary "C"** files available for curved or calcified canals.



AET Patient Kits contain three Shaping Files and four Apical files packaged in convenient, color-coded, spill-proof modules.

## What if you are a rotary expert?

### No problem!

The AET system is unique in that it actually can be an ideal adjunct to your existing mechanical rotary NiTi system. If you have great skill and finesse using your mechanical rotary system, use it to your advantage in the areas of the tooth that benefit most – the apex.

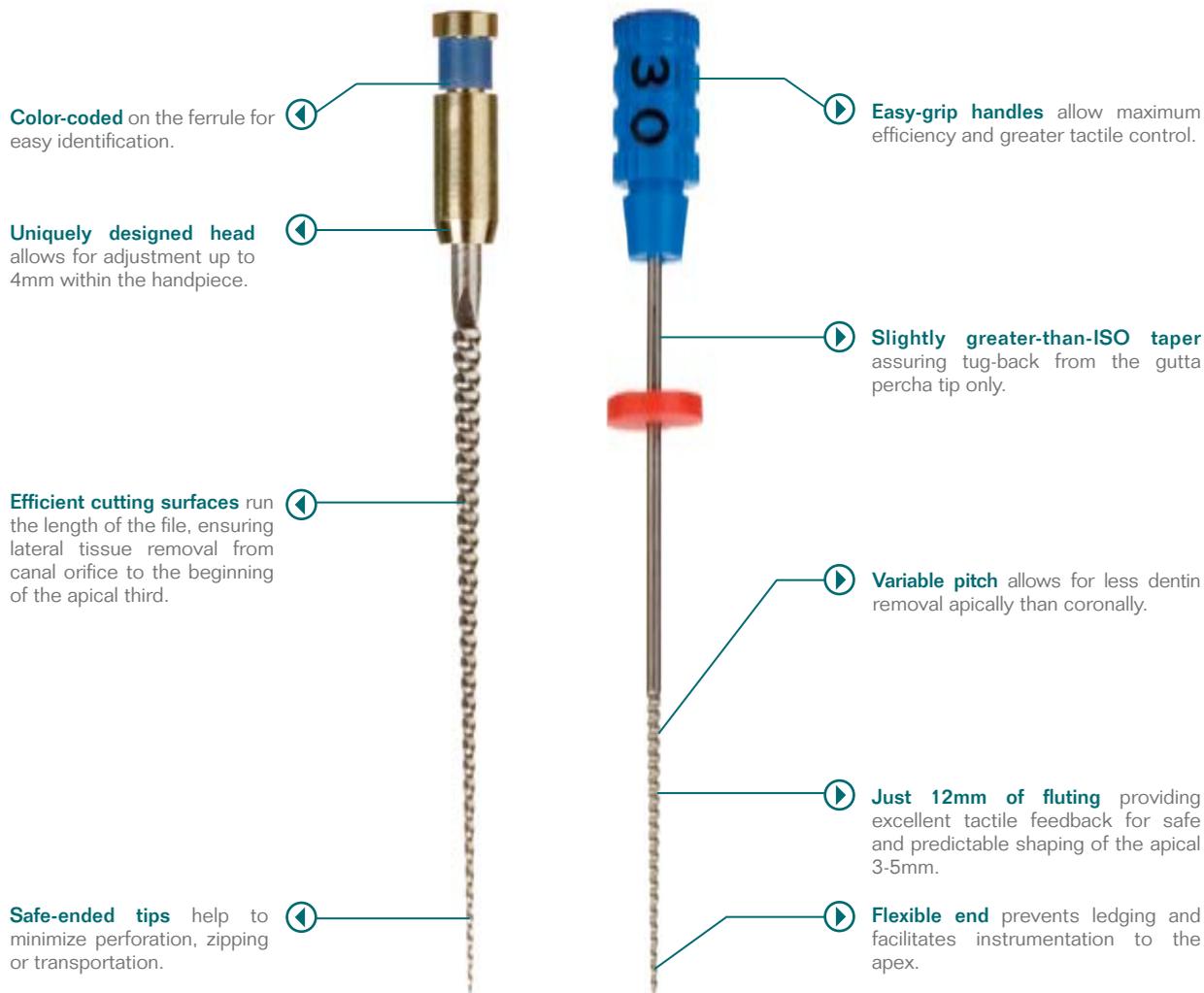
In the bulk middle third, take advantage of the AET system's ability to quickly and thoroughly instrument the bulk middle third of the canal according to its anatomy - and then use your mechanical rotary NiTi system in the apex, where the benefits of rotary instrumentation and your skill set really shine.

Also, you can use aggressively cutting NiTi hand files for flaring both coronal and apical orifices, combining their effect with AET's fluid and elegant shaping results in the middle third.

### The result? A truly hybridized approach to 21st century Endodontics.



Endo-Eze AET Shaping Files are available in standalone Shaping Kit modules.





# ENDO-EZE<sup>®</sup> OBTURATION

Like AET shaping technique, the obturation process for Endo-Eze is simple, logical and listens to the needs of the tooth. The clinician merely delivers the flowable resin-based sealer known as EndoREZ from the apex to the coronal orifice using a highly flexible 29-gauge NaviTip, followed by a gutta percha method of their choice. Obturation is as easy as ever.

EndoREZ is a hydrophilic resin that is based on a biocompatible, bioabsorbable formula used in medicine for years. The methacrylate formula offers the advantage of full ISO-standard radiopacity, and offers versatile dual-cure technology. Additionally, the use of EndoREZ coated gutta percha cones allows the clinician to achieve a strong, contiguous bond between gutta percha, resin and radicular dentin.

EndoREZ provides the ultimate in 21st century obturation technology.

- **The profession's first self-priming sealer.**
- **Same radiopacity as gutta percha.**
- **Superior flow** and wetting characteristics.
- **Dual-cure sealer** ensures rapid set.
- **Adapts well** to canal intricacies of dentin walls.
- **Sets soft** enough to facilitate post preparations.
- **Works best with EndoREZ resin-coated points.**



SEM analysis of EndoREZ penetration demonstrates an affinity for moisture deep in lateral canals and dentinal tubules. SEM at 5000X.



Ultradent's patented NaviTip extrudes EndoREZ into the entire anatomy of the canal in one step.



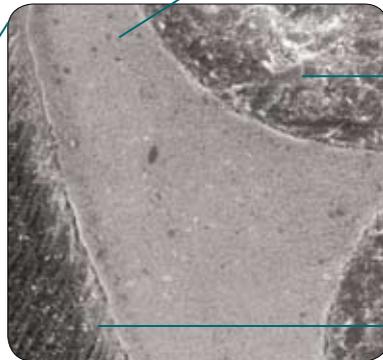
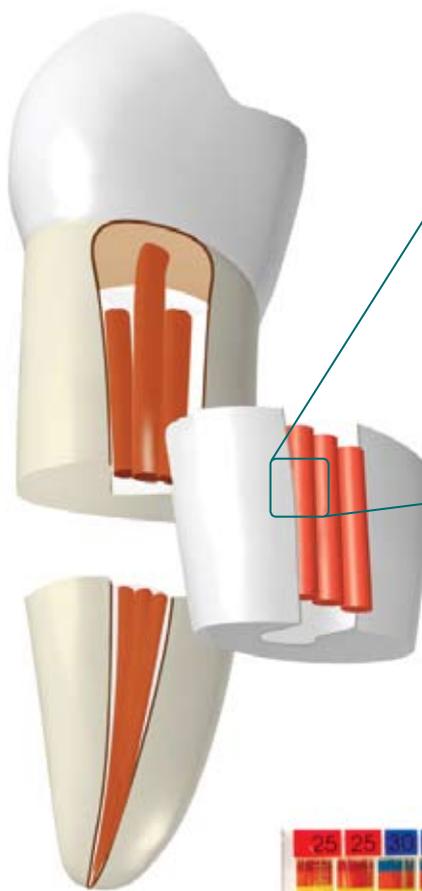
EndoREZ has the same radiopacity as gutta percha.

## Passive Obturation?

Studies have shown that lateral condensation and/or warm GP methods may cause trauma and damage to the root.

EndoREZ and EndoREZ Points are designed to be used passively with a gentle "harpooning" motion. Simply insert a master cone and auxiliary cones as needed, then verify the canal is substantially filled with a radiograph. The results are a unique fusion of GP, resin and radicular dentin.

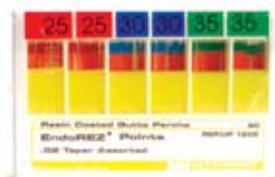
Note: EndoREZ and EndoREZ Points may also be used with traditional gutta percha techniques (lateral compaction, warm GP, etc.)



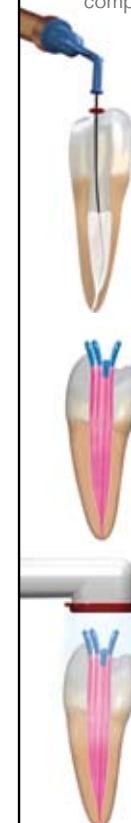
▶ **EndoREZ bonds** to the resin coating on EndoREZ Points creating a contiguous seal between the resin and gutta percha.

▶ **EndoREZ relies on passive insertion** of a gutta percha master cone and auxiliary cones. Although EndoREZ Points work well with traditional techniques, they are just as effective when used passively. Less pressure and heat equals fewer insults to the root.

▶ **The hydrophilic properties** of EndoREZ aid in its penetration deep into dentinal tubules and tiny lateral canals.



▶ EndoREZ Points are traditional gutta percha cones coated with a special EndoREZ coating. The resin coating creates a chemical bond between EndoREZ and the GP cone, resulting in a durable, contiguous seal throughout the obturation infrastructure.



**After shaping and cleaning,** extrude EndoREZ into the canal space using a 30g NaviTip.

**Insert a master cone** and auxiliary cones as needed.

**Light cure for 40 seconds** to create a thin crust to inhibit oxygen and advance the internal cure of EndoREZ in the canal.



# Accessories

The Endo-Eze AET system would not be complete without a family of irrigants, medicaments and materials. Ultradent has created a unique family of products that suit the needs of clinicians across the world.

- **File-Eze EDTA 19%** designed with special viscous consistency.
- **UltraCal XS** proven to be twice as effective as other  $\text{Ca(OH)}_2$  materials.
- **Consepsis V** is the only viscous chlorhexidine mixture available.
- **Citric Acid** available in powerful 20% concentration.
- **ChlorCid** available in unique viscous formulation for controlled delivery.





▶ **File-Eze EDTA 19% Lubricant**

An effective 19% EDTA solution in a water soluble, viscous solution for chelating, lubricating and debriding root canal preparations. (Ideal for use with resin-based obturation systems!)



▶ **ChlorCid & Chlor-Cid V**

Disinfecting solutions available in traditional form or a more viscous solution for more controlled delivery and lubrication. Both contain more than 3% sodium hypochlorite.



▶ **Consepsis V**

Consepsis V is a viscous formulation of the best-selling Consepsis solution. Designed specifically for Endodontic applications, Consepsis V is 2.0% chlorhexidine gluconate with a pH of 5.0 and mild flavoring agent.



▶ **EDTA 18%**

A standard root canal chelating condition and cleanser. Delivered to the canal using NaviTip or NaviTip FX.



**UltraCal XS**

A uniquely formulated calcium hydroxide dressing with 12.5 pH that is both aqueous and radiopaque. Has also been shown to possibly stimulate the healing of bone.



**PermaFlo Purple**

A uniquely purple composite designed by Endodontists to aid in the quick identification of pulp chamber floors during post-Endodontic restorative treatment.



**Citric Acid 20%**

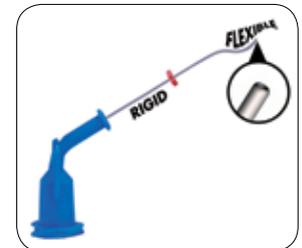
Ideal for dissolving and cleaning calcium hydroxide from canals. Its slight viscous nature and bright orange coloration make it easy to manipulate and identify in the canal.



# Delivery

The Endo-Eze AET system is enhanced with a comprehensive variety of delivery technologies. Whether the clinician is looking for precision and reliability when irrigating to the apex, or delivering resin sealers evenly in the canal, Ultradent has a delivery system or material that suits every clinician's Endodontic needs.

- **NaviTip** features patented cannula that is rigid at the hub and flexible at the tip.
- **Safe-ended tips** minimize interference with tooth structure in the canal.
- **NaviTip FX** is a one-of-a-kind flocked tip for ultimate scrubbing ability.
- **Capillary tips** can greatly reduce need for paper points.
- **Endo-Eze Irrigator tips** greatly enhance irrigation with side-vented delivery.



# UniCore®

## Post and Drill System

UniCore is the first and only post and drill system where a durable, versatile drill has been matched perfectly to an esthetic, dentin-like fiber post. The UniCore Drill is an engineering marvel thanks to its three-in-one versatility. Remove obturation materials—even ThermaFil and fiber posts—while simultaneously preparing the post space. The UniCore Post is a remarkable feat of engineering as well. Sturdy, durable, with natural dentin-like properties. Pre-silanated to reduce the need for chairside treatment prior to bonding. The UniCore Post and Drill System is one of a kind, engineered to perfection.

- **Simple, color-coordinated packaging** streamlines use.
- **Reinforced, pre-stressed fiber** UniCore Post is esthetic, translucent and highly radiopaque.
- **Removes root canal fillers** while simultaneously preparing the post space, saving time and money on unnecessary extra drills.
- **Matching tapered design** of the UniCore Post and Drill requires less removal of dentin.
- **Drill leaves a 60-micron space** for cementation. No special finishing drills are required.



## Other great products!

### Opalescence Endo

35% hydrogen peroxide material ideal for “walking bleach” technique. Available in a convenient, pre-mixed, single-syringe delivery.

### DermaDam & DermaFrame

Patented dam and frame system, with bendable frame that allows total patient comfort while maintaining control of the dam. Available in synthetic or latex-free versions.

### OraSeal

Caulking and sealing material that adheres to rubber dam, wet gingival and mucosal tissues, etc. Use it to seal punctures in rubber dams or to keep rubber dam in place.

### UltraTemp

Temporary luting/filling material that can be mixed and delivered in one step. The first temporary polycarboxylate material.

## And much more!



Call 800.552.5512  
for your complimentary  
Endo-Eze AET catalog!

# Rave reviews

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From Satisfied Customers

**"In my hands, AET works best for these 'out of round' types of cases."**

- Dr. Joseph Dovgan, Endodontist – Arizona

**"I am using the AET more and more to flare canals prior to rotary and in all wide canals to debride the 'out of round' areas."**

- Dr. Fred Barnett, Endodontist – Pennsylvania

**"I cannot believe that canals can be instrumented this quickly with rotary instrumentation. Not just quick and easy, but with nearly zero chance of breakage. I am so pumped I can't wait to do another root canal!"**

- Dr. William Meyer, General Dentist – Wisconsin

**"The preparation with Endo-Eze AET is one of the easiest ways to do endo. There is a very short learning curve and it is practically foolproof. I also think that with this system, instrument breakage will be a thing of the past—whatever I did during the evaluation, I didn't manage to break a single instrument. Nonetheless, these instruments are very flexible. I think the best way to impress someone is to let them try Endo-Eze AET just one time. After that, they will be convinced!"**

- Dr. Ron Fransman, Endodontist- Netherlands

**"Endo-Eze AET offers advantages in curved, hard-to-access canals. The flexibility of the files adds a fantastic option to my instrumentation armamentarium."**

- Dr. Robert Flath, Endodontist – Utah

**"I am really liking EndoREZ. Delivery is fantastic, sets quick enough, and doesn't interfere with resin bonding. This is my current favorite product."**

- Dr. William Meyer, General Dentist – Wisconsin

**"EndoREZ is an excellent product; very flowable, neat delivery system, no primer needed."**

- Dr. Dan Shalkey, General Dentist – Pennsylvania

**"Thank you for the new system. It makes my job really easy. Now I can prepare first and second molars in much less time."**

- Dr. Lela Dekano, General Dentist - California

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**800.552.5512** ULTRADENT.COM

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U.S. Patent Nos: 5,967,778; 6,012,921; 6,042,375; 6,045,362; 6,059,572;  
6,079,979. Other U.S. and International Patents Pending.

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