

Doctor's Guide  
to Lumineers  
Placement



LUMINEERS®



## The #1 Patient Requested Veneer

# LUMINEERS®

### The Lumineers Difference

Lumineers, the innovative and industry-leading thin veneer, is now 30% stronger than the original Lumineers and available in three translucencies: high, medium and low. Lumineers are crafted from the next generation of Cerinate porcelain, the only porcelain backed by over 20 years of evidence-based research.

Next-generation Cerinate is pressed feldspathic porcelain reinforced with leucite nano-crystals. Due to its superior strength of 216 MPa, Lumineers can be made as thin as a contact lens, allowing placement without significant removal of enamel and without removal of dentin. This minimally invasive technique produces greater acceptance among patients and instantly enhances smiles.

### Features of next-generation Cerinate

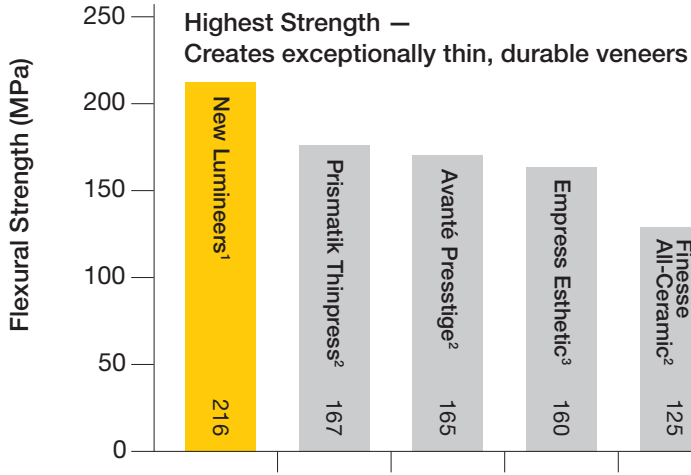
- Next-generation Cerinate is the strongest leucite-reinforced, pressable glass-ceramic on the market today.<sup>1,2,3</sup>
- The reliability of next-generation Cerinate is significantly higher than Empress.<sup>1,5</sup>
- New Cerinate porcelain exhibits low wear rates against opposing enamel when compared to conventional porcelain.<sup>4</sup>
- Next-generation Cerinate is available in top shades, including bleaching shades and three translucencies: high, medium and low.
- The low-viscosity glass of Cerinate allows pressing of restorations as thin as 0.3mm.<sup>6</sup>



#### References

1. M.J. Cattell, T.C. Chadwick, J.C. Knowles, R.L. Clarke, and E.J. Lynch, "Flexural Strength Optimization Of A Leucite Reinforced Glass Ceramic", Dent. Mater. 17 (1), 21-33 (2001).
2. M.J. Cattell, J.C. Knowles, R. L. Clarke, and E. J. Lynch, "The Transverse Strength, Reliability and Microstructural Features of Four Dental Ceramics-Part I", J. Dent. 25 (5), 399- 407 (1997).
3. M.J. Cattell, J.C. Knowles, R. L. Clarke, and E. J. Lynch, "The Biaxial Flexural Strength Of Two Pressable Ceramic Systems", J. Dent. 27 (3), 163-196 (1999).
4. S. Suzuki, Univ. of Alabama, unpublished results.
5. C. Lehner, S. Studer, and P. Schär, "Seven Year Results Of Leucite Reinforced Glass-Ceramic Crowns", J. Dent. Res. 77, 802 (1998), Abstr. No. 1368.
6. M.J. Cattell, "Advantages Of A New Pressable Ceramic System", Unpublished Report Prepared For Den-Mat Corporation, 1 February 1999.

## Leucite-reinforced glass-ceramics



1. Chen X, Cattell MJ. Biaxial Flexural Strength Report. Unpublished report: 12 Feb 2009.

2. Dental lab products, April 2009: forward trends: veneers: veneer venue. Dental Products Report [Internet]. April 2009 [cited 14 Sep 2009]. Available from [http://www.dentalproductsreport.com/articles/show/dlp0409\\_ft\\_veneer-venue](http://www.dentalproductsreport.com/articles/show/dlp0409_ft_veneer-venue)

3. Bühler-Zemp P (Ivoclar Vivadent AG, Research and Development, Scientific Services, Benderstrasse 2, FL - 9494 Schaan, Leichtenstein). IPS Empress Esthetic: Scientific Documentation. Mar 2004.

Empress is a registered trademark of Ivoclar Vivadent, Inc. Finesse is a registered trademark of Dentsply International, Inc.

## You can make **25% more profit** by placing Lumineers instead of traditional veneers

	Veneers Cost to Doctor	Cost of Anesthetic & Temporary	Total Hours in Chair	Chairtime Costs (\$400/Hr with Overhead)	Total Veneer Placement Cost	Cost to Patient (Avg \$1100/Unit)	Net Profit for Office
<b>Lumineers</b>	<b>\$1,314</b>	<b>\$0</b>	<b>2</b>	<b>\$800</b>	<b>\$2,114</b>	<b>\$6,600</b>	<b>\$4,486</b>
Traditional Veneers	\$1,194	\$30	5	\$2,000	\$3,224	\$6,600	\$3,376

## A Lumineers Dentist's Best Friend

### Sapphire® Plus Plasma Arc Curing Light

Sapphire's Power Conversion Technology generates and delivers maximum curing and whitening power to the restoration. The power train forms a coherent beam of light for the fastest curing and hardest composites, no matter what the distance. Or, with its patented Whitening Crystal, gently illuminate both arches for hands-free whitening to whiten teeth in under an hour without the use of harmful UV rays.<sup>1</sup> No other light has the remarkable performance of Sapphire Plus, and independent research proves it.

#### Applications:

- Whitening
- Curing
- Lumineers Placement
- Oral lesion detection (optional)
- Soft tissue management (optional)

#### Highlights:

- Sapphire Professional Whitening Program
- Simple whitening patient set-up
- 3–5 second curing
- Cures all light-cure composites
- Built-in digital light meter
- Sleek handpiece with time controls and display
- No noisy fan in handpiece
- Multiple modes and timers for every procedure
- 9 mm tip included for standard curing needs

#### Finishing & Curing



Ceri-Taper™ 2 mm tip can shorten finishing time by 50%

#### Whitening



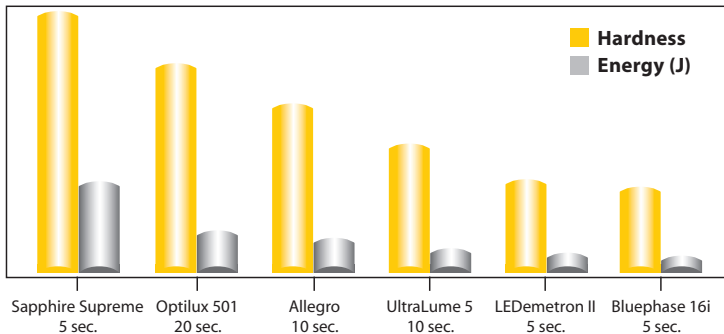
60-minute hands-free, dual-arch whitening



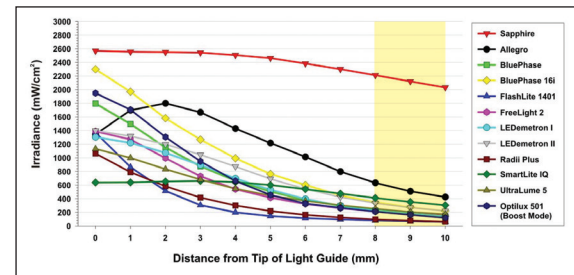
*“The Sapphire is by far the best plasma arc curing light on the market. I wouldn't place veneers without it.”*

–Leading University Researcher and Practitioner

Sapphire delivers more total energy than other lights, providing harder restorations.<sup>1</sup>



Sapphire—the light with the most power production even at 10 mm.<sup>2</sup>



<sup>1</sup>Study available upon request.

<sup>2</sup>Felix CA, Price RB. 2468 Effect of Distance on Power Density from Curing Lights. In: The IADR General Session & Exhibition; 2006 June 28 – July 1; Brisbane, AU; Available from: [http://iadr.confex.com/iadr/2006Brisb/techprogram/abstract\\_801112.htm](http://iadr.confex.com/iadr/2006Brisb/techprogram/abstract_801112.htm)

## Ten Problems solved by Lumineers

- Tetracycline stains
- Worn dentition
- Unesthetic porcelain crowns and bridges
- Adolescent dentition
- Pre-adolescent teeth
- Diastemas
- Misalignment (instant orthodontics)
- Misshaped teeth
- Chips/cracks
- Discoloration (permanent whitening)

FROM CHIPPED & STAINED...



...TO NO CHIPS & WHITER



FROM SMALL...



...TO JUST RIGHT



FROM CROOKED...



...TO A NEW SMILE



FROM AN OLD CROWN...



...TO A REVITALIZED SMILE



*Actual patient photos.  
Results may vary according to each individual's case.*

# TIPS FOR SUCCESS

## TIPS FOR NEW CUSTOMERS:

- **Pre-Training:** Make sure that you have attended a Lumineers course, especially within the past 12 months. While the Lumineers procedure is not complicated, you will likely encounter challenges you haven't experienced before. A course on the placement of Lumineers will help you avoid any initial start-up pitfalls. You will also learn about the most current products and techniques, as these are in a continuous state of improvement.
- **Be Selective:** Selecting a case of 6–8 units on well-aligned maxillary teeth is your best choice for a first case. Avoid extreme cases (severely stained, overly crooked, large diastemas, gingival recession or missing teeth) until you're more experienced in the placement technique.

## TIPS PRIOR TO SENDING IN A CASE:

- **Staff Training:** Your staff is critical to the successful placement of Lumineers. One of your best investments is the training of your assistant in this procedure. Proper preparation of the Lumineers, the right sequence of use of the materials, the prevention of pre-polymerization and the correct mix of the luting agent are all critical parts of your success.
- **Shade:** It is always easier to make a lighter shade darker, but almost impossible to make a darker shade lighter.
- **Single Units:** If at all possible, avoid placing a single Lumineers. These are difficult to color-match and maintain. Natural dentition adjacent to the Lumineers normally will darken over time. If the patient bleaches, then their natural teeth may end up lighter than the Lumineers. It may save the patient an expense early on, but it will cause dissatisfaction for the patient in the future. If the teeth are harmonious in form, the single laminated tooth without reduction will

always be too prominent. Whenever possible, encourage the patient to place multiples of 2 or 4, at a minimum, rather than placing one anterior tooth without any reduction.

- **Good Impressions:** Do you remember how tough your professors were on you in dental school to take good, sharp impressions? It is extremely important that you take a sharp impression because this is what guarantees a successful case, start-to-finish. Always allow trays to remain in the mouth for the full amount of time, according to manufacturer's directions.
- **Materials:** To achieve the highest esthetic value, proper fit, and shade matching, the entire Lumineers System is required. The system includes Ultra-Bond® Plus Try-In Paste, the Custom Shade Modification System, Ultra-Bond® Plus and Tenure®. Attending a Lumineers Procedure presentation is highly recommended to ensure proper use of the system.

## PRELIMINARY RECOMMENDATIONS:

**NOTE:** Day before appointment, dry try Lumineers on stone model to insure fit.

**NOTE:** Always remove **Ultra-Bond® Plus** from the refrigerator about one hour prior to use to allow time for the material to return to room temperature.

**NOTE:** If **Tenure® A** and **Tenure® B** are refrigerated, bring to room temperature and shake vigorously before use.

**NOTE:** **It is imperative that you use magnification**, such as the **PeriOptix®** line of magnification. You will be able to work more effectively and precisely. Your own prescription can be placed in the eyeglass lenses.



# BASIC STEP-BY-STEP

## PREPARATION OF LUMINEERS



1a. Apply Porcelain Conditioner



Rinse and dry



1b. Apply Cerinate Prime



Blow Cerinate Prime thin

## MAGNIFICATION



1c. Shield Lumineers from Light



NOTE: PeriOptix® magnification recommended.

## LUMINEERS TRY-IN



2a. Apply Ultra-Bond Try-In Paste



2b. Place Lumineers



2c. Allow patient to examine smile



2d. Remove Lumineers



2e. Remove Try-In Paste and apply Tenure S

## TOOTH SURFACE PREPARATION



3a. Clean all teeth with Porcelain Laminate Polishing Paste



# BASIC STEP-BY-STEP



3b. Apply Paint-On Dental Dam, light cure



3c. Etch teeth 10-15 seconds, rinse and dry



3d. Apply Tenure A and B teeth



3e. Apply Tenure S to teeth, blow thin

## BONDING LUMINEERS



4a. Apply Ultra-Bond to Lumineers



4b. Place Lumineers



4c. Remove excess Ultra-Bond



4d. Tack cure Lumineers

## FINISHING



4f. Cure all Lumineers



5a. Remove cured cement



5b. Clean up leftover cement



5c. Remove porcelain ledge

## BASIC STEP-BY-STEP



Refine margins



5d. Check bite



Finish incisal wrap



5e. Trim margins



5g. Separate teeth



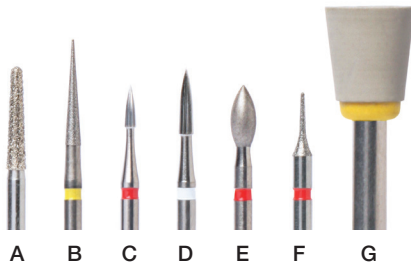
5h. Smooth interproximal surface



5i. Further smooth interproximals



5k. Polish new Lumineers



- A. Porcelain Ledge Diamond
- B. Extra-Fine Smoothing Diamond
- C. 12 Fluted Carbide Bur
- D. 30 Fluted Carbide Bur
- E. Football Diamond
- F. Mosquito Interproximal Diamond
- G. Polishing Cup

# BASIC STEP-BY-STEP

## 1. PREPARATION OF Lumineers TO ENAMEL OR DENTIN SURFACES

- a. After the patient is seated, treat the Lumineers with **Porcelain Conditioner** for 30 seconds. Rinse and dry well (1a).
- b. Apply **Cerinate Prime**® to the Lumineers for 30 seconds and blow thin (1b).
- c. Place Lumineers back into the case box in their proper slots. Close lid (or cover from light). Once **Cerinate Prime** is applied to Lumineers, they need to be shielded from the light until the Lumineers are seated (1c).

## 2. TRY-IN OF Lumineers

- a. Apply the mixture of **Ultra-Bond Plus Try-In Paste** and **Cerinate Shade Modifier/Opaquer** into each of the Lumineers.
- b. Gently place the Lumineers one at a time and use a brush to clean up the excess Ultra-Bond Plus Try-In Paste (2b).

**NOTE:** We recommend the Lumi-Grip to prevent dropping.

**NOTE:** To make shade and opacity modifications, we recommend the **Custom Shade Modification System II**, which contains 4 opaquers and 12 modifiers. **Mix Ultra-Bond Plus Try-In Paste** and the **Shade Modifier/Opaquer** (no catalyst required) until well-blended and apply to the prepared Lumineers. Adjust the ratio of **Ultra-Bond Plus Try-In Paste** to **Shade Modifier/Opaquer** to achieve desired result. Make note of the final mixing ratio and use the same proportions for final cementation using **Ultra-Bond Plus** cement.

- c. Hold a mirror approximately 16 inches away from the patient's face and let the patient examine his/her smile (2c). If the shade is not what you or the patient wants, remove the **Ultra-Bond Plus Try-In Paste** from the Lumineers and tooth surfaces with a **Skubes**® sponge or a clean, dry brush. Reapply a new shade of **Ultra-Bond Plus Try-In Paste** and check the shade again.

**NOTE: DO NOT USE TENURE S.** Only use **Tenure S** to clean up excess **ONCE FINAL ULTRA-BOND PLUS TRY-IN PASTE HAS BEEN SELECTED**. Any residue of **Ultra-Bond Plus Try-In Paste** will be polymerized by **Tenure S**.

- d. Remove Lumineers after try-in by using a **Schure 349** instrument or cotton pliers and gently tease the Lumineers off the tooth surfaces (2d).
- e. After cleaning residual **Ultra-Bond Plus Try-In Paste** from the Lumineers with **Tenure S**, gently thin the **Tenure S** with air. A thin film will be left on both the tooth and porcelain surfaces (2e). Place Lumineers back in the case box, with facial surfacing facing up, in their proper slots. Close lid (or cover from light).

**NOTE:** There is no need to reapply **Porcelain Conditioner** or **Cerinate Prime** if you are cementing directly after try-in.

## 3. PREPARATION OF TOOTH SURFACES

- a. Clean the teeth with a slurry of pumice and water or **Porcelain Laminate Polishing Paste** and floss (3a).
- b. **Paint-On Dental Dam** (optional) is helpful and recommended for Lumineers placement. Before bonding, syringe **Paint-On Dental Dam** on the lingual side of the interproximals, covering gums and teeth thoroughly. Light-cure for 5 seconds per tip width with the **Sapphire**® **Plasma Arc Curing (PAC)** light. This will make your clean-up faster and easier (3b).
- c. Etch teeth for 20 seconds with **Etch 'N' Seal**®. Rinse and dry (3c).
- d. Mix together equal amounts of **Tenure A** and **Tenure B** in a dappen dish. Apply 5 coats of the **Tenure A-B** mixture to each tooth (or until the surface is glossy) and 3 sweeps with a saliva ejector. Let sit for 10-15 seconds, then gently air-dry (3d).
- e. One coat of **Tenure S** to be applied to the teeth (3e).

## 4. BONDING Lumineers TO AN ENAMEL OR DENTIN SURFACE

**NOTE:** If you are bonding Lumineers to a porcelain surface (reference “All Surface Bonding Guide” —visit [denmat.com/downloads](http://denmat.com/downloads)).

- a. Select the appropriate shade of **Ultra-Bond® Plus** resin cement (4a).

**NOTE:** Prior to placing the auto-mixer tip on the **Ultra-Bond Plus** syringe, always extrude a 1/4-inch line of material before using to ensure adequate mixing of the material.

**NOTE:** **Ultra-Bond Plus** has an extended working and set time to permit placement of multiple laminates. We suggest that the clinician dispense a small amount of **Ultra-Bond Plus** onto a mixing pad a minute or two before beginning placement and monitor it for working time to provide warning in the event that the placement takes longer than anticipated.

**NOTE:** If patient has dark stains, such as tetracycline stains, we recommend using the **Cerinate Shade Modification System II**. If shade modification or basic opaque adjustment is necessary, refer back to the SHADE ADJUSTMENT section. If not, proceed to the next step.

- b. Apply **Ultra-Bond Plus** to the prepared Lumineers and put in place (4b).

**NOTE:** We recommend using the **LUMIgrip®** and holding over patient’s bib to avoid dropping.

- c. After placing Lumineers, remove excess **Ultra-Bond Plus** with a soft brush coated with **Tenure S** (4c).
- d. Tack Lumineers in place for 2 seconds using the **Sapphire® PAC** light fitted with a **Ceri-Taper** 2 mm tacking tip (see Fig. 2). Do not touch our press on Lumineers while curing (4d).
  - I. Place and tack cure centrals 8 and 9.
  - II. Place and tack cure cuspids 7 and 10.
  - III. Place and tack cure bicuspids 6 and 11, then tack cure 5 and 12.



### VERY IMPORTANT TOOL!

- e. Continue to remove excess cement with a soft brush coated with **Tenure S**.
- f. Using a 9 mm tip and the **Sapphire PAC** light, completely cure all Lumineers, exposing each surface for 5 seconds.
- g. Remove paint-on dam if placed.

## 5. FINISHING

At the placement appointment, only minimal finishing is suggested to finish the DEJ and to remove any excess resin cement. Do not open the embrasures. Maximum bonding occurs in 24 hours. Final finishing should be performed at next visit. We recommend the Lumineers Finishing Kit which includes all components listed in the following instructions. (See Fig. 3 to reference the burs used during finishing).

- a. Use a **Schure 349** instrument to remove the cured cement along the margins, as well as from the interproximal area along both the facial and the lingual. You may also use the **12 Fluted Carbide Bur (C)**. This bur is an excellent tool for cleaning up residual resin cement and for finishing composites.
- b. Clean up any leftover **Ultra-Bond® Plus** using either the **12 Fluted Carbide Bur (C)**.
- c. Using a **Mosquito Interproximal Diamond (F)**, remove the porcelain ledge, if any.

## BASIC STEP-BY-STEP (CONTINUED)

Using the **Mosquito Interproximal Diamond (F)**, refine the margins along the interproximal area, if necessary.

If necessary, further polish the margins using the **Mosquito Interproximal Diamond (F)** again.

- d. Check the bite with articulating paper. Use the **Football Diamond (E)** on the lingual to finish the incisal wrap and adjust high spots or length.
- e. Trim/polish the margins of the porcelain veneer, if necessary. Use a **Extra-Fine Smoothing Diamond (B)** to smooth out porcelain.
- f. Explore the tooth structure next to the Lumineers to check margins. There should not be a catch (or bump).
- g. Use the **CeriSaw** to separate the teeth using a rocking motion.

h. Use the **CeriSander** (fine grit) to smooth the interproximal surfaces.

i. Use the **CeriSander** (ultra-fine grit) to further smooth the interproximal surfaces. It is important that you use each sanding blade only two or three times per tooth to smooth contacts.

j. Check the interproximal surfaces with dental floss for smoothness.

k. Continue with **Porcelain Laminate Polishing Paste** using the **Polishing Cup (G)**—use side of cup and assistant follows doctor with high speed evacuation tip on.

## LUMINEERS PLACEMENT SYSTEM

Dentists  
are raving  
about the  
Lumineers  
Placement  
System!

PN: LUM1005



All the tools you need for Lumineers placement in one convenient package

Ready to place a Lumineers case but not sure you have what you need? Now everything you need is in one convenient package. This system takes you through pre-treatment, bonding and finishing.

# RECOMMENDED LUMINEERS PLACEMENT MATERIALS



## **SPLASH® VPS MATERIAL**

Super hydrophilic impression material that gives you the precision and speed you need for accurate impressions, time after time. Patients love the wild-berry flavor.



## **VANILLA BITE**

Vanilla Bite is a medium viscosity VPS bite-registration material that features a mousse like consistency with a delicious Vanilla scent and a Shore A hardness of 90. It is engineered to deliver a dimensionally stable, accurate and rigid bite registration and offers a super-fast set of 55 seconds.



## **CERINATE® PRIME & CONDITIONER**

Bonding agent and etchant to bond porcelain to natural tooth structure.



## **PAINT-ON DENTAL DAM**

Paint-On Dental Dam, a light-cure resin paste, will help protect gingival tissue from chemical agents. Ideal for use prior to bonding. Syringe Paint-On Dental Dam on the lingual side of gums and teeth. This will make clean-up faster.



## **ULTRA-BOND® PLUS TRY-IN PASTE**

Ultra-Bond Plus Try-In Paste is formulated to match the shade of the cured Ultra-Bond. Use to try-in restorations to verify shade.



## **ETCH 'N' SEAL®**

Etch 'N' Seal combines a 25% phosphoric acid with 0.5% aluminum oxalate so you can etch enamel and condition dentin at the same time. The combined use of Etch 'N' Seal and the Tenure Multi-Purpose Bonding System results in the formation of a dentin hybrid layer that can reduce dentin permeability, protect against acid attack and decrease sensitivity.

# RECOMMENDED LUMINEERS PLACEMENT MATERIALS



## **PORCELOCK®**

PorceLock is the perfect companion for porcelain, and crown-and-bridge repair. For repair of porcelain surfaces, the use of PorceLock and Cerinate Prime® with Ultra-Bond allows you to achieve strong and reliable intraoral bonds. PorceLock's gel viscosity and needle tip dispensing allow you to place the gel only where you want it. PorceLock is a buffered intraoral and extraoral use hydrofluoric acid gel that is both safe and effective. Its formula contains 2.5% hydrofluoric acid.

PorceLock creates bond strengths three to five times greater than treatments using silane alone. It achieves bond strengths approaching those of etched enamel after a 3–5 minute treatment.



## **TENURE® MULTI-PURPOSE BONDING SYSTEM**

Worry-free bonding! For more than 20 years, the Tenure System has demonstrated a proven clinical record of high bond strengths, excellent retention, and significant reduction of microleakage and post-operative sensitivity. These characteristics can be attributed to the formation of a hybrid zone. In addition, this hybridization process instantly eliminates root sensitivity.



## **CERINATE® SHADE MODIFICATION SYSTEM II**

The Cerinate Shade Modification System II can be used alone or mixed with a light-cure composite resin or resin cement to modify a tint. The tints can be successfully layered. Tooth discolorations are easily masked with the light-cure or dual-cure, patented, masking agent TetraPaque (included in the kit).



## **ULTRA-BOND® PLUS RESTORATIVE RESIN CEMENT**

Ultra-Bond is an ADA Type II Restorative proven to prevent cracking/crazing and pop-offs. Lumineers®, bonded with Ultra-Bond and Tenure®, creates a wear resistant, non-microleaking, highly esthetic restoration that is clinically proven in on-going studies to last over 20 years. Available in Syringeable or Powder-Liquid formulations.



## **LUMINEERS FINISHING KIT**

Tools that make dentistry faster, easier, and better! This all-inclusive finishing system is the only one of its kind available to the dental profession. These simple tools save you time and are more comforting to the patient.



# Thousands of dentists and patients rave about Lumineers!

“After years and years of not believing this can be done, I was wowed! They were the most natural thing I’ve ever seen.”

“Lumineers has changed my life! I’m never going to retire.”

“I seated several Lumineers on my daughter almost 10 years ago and they are still beautiful. She got in a car accident a few years back and broke her jaw, but the Lumineers stayed on. She’s now the office spokesmodel for Lumineers!”

“I and another staff member are going to have our Lumineers done because we are impressed with the results we’ve seen. Our patients have them and we want them too!”

“I placed Lumineers and it was impossible to tell which was the Lumineers. It was the most esthetic case I’d ever done!”

“I have never enjoyed any part of dentistry so much. I now have a dream to just do the cosmetic part of my practice and bring in an associate to do the old drill and fill. I can just live off my Lumineers! Really! I just love the excitement I feel when I give someone a new smile, and also I love the free chairtime.”

“My patient was a first-time patient. He saw Lumineers advertising and came in for a consultation. He had old clunker veneers done previously, over 14 years ago, and they never looked natural. The Lumineers case I placed came out looking great and natural.”

“Lumineers are the most revolutionary advancement in cosmetic dentistry that I’ve incorporated into my practice, and I have been practicing for 30 years.”