

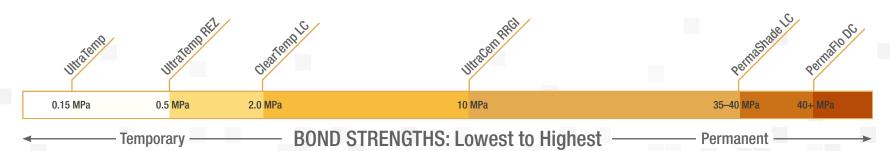
## **ULTRADENT CEMENTS**





# QUALITY SEAL. SUPERIOR HOLD. ULTRADENT CEMENTS

	Temporary		Permanent			
<b>Indications for Use</b>	UltraTemp®	UltraTemp® REZ	ClearTemp® LC	PermaFlo® DC	UltraCem®	PermaShade® LC
	Self Cure	Self Cure	Light Cure	Dual Cure	Self Cure	Light Cure
Crown	Χ	Χ		X	Х	
Bridge	Χ	Χ		Χ	Χ	
Veneer			Χ			X
Post Cementation				Χ		
Core Buildup				Χ		
Walking Bleach	Χ					
Crown & Bridge for Implants		X		X		
Endo Access Opening	Χ	Χ				
Orthodontic Bands					Х	
Pedodontics					Х	
Inlays/Onlays	Χ	Χ		X	Х	





DUAL-CURE COMPOSITE LUTING/RESTORATIVE RESIN

PermaFlo DC resin is the most versatile product within Ultradent's family of cements. It is ideal as a luting material for crowns, bridges, inlays, and onlays and can also be used for endodontic post cementation and fabrication of core buildups. This dual-cure composite luting/restorative resin is highly filled, which ensures maximum strength, durability, and wear resistance.

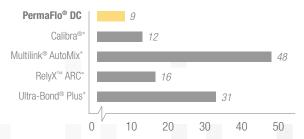


- Compatible with a variety of substrates
- Highly filled (70% by weight)
- Thixotropic with low film thickness (9 μm)

#### Technical Data<sup>1</sup>

Shear Bond Strength to Enamel (Total-Etch)	53.38 MPa	
Shear Bond Strength to Dentin (Total-Etch)	62.07 MPa	
Flexural Strength	128.5 MPa	
Flexural Modulus	9.37 GPa	
Compressive Strength	355.91 MPa	
Compressive Modulus	4.22 GPa	

#### Film Thickness (µm)1



PermaFlo DC resin has the lowest film thickness known for a luting composite resin.

PRODUCT PROFILE			
Chemistry	Highly filled microhybrid composite resin		
Indications for Use	Permanent cementation of crowns, bridges, inlays, onlays, endodontic post cementation, and fabrication of core buildups		
Compatible Substrates	Porcelain, zirconia, lithium disilicate (IPS e.max®*), all-ceramic materials, metals and alloys, PFM, resin		
Delivery	5 ml dual-barrel syringe with mixing tip. Additional Intraoral tip for precise delivery.		
Cure Type	Dual cure		
Working Time/ Set Time	2.5 minutes working time, full set in 5–8 minutes. Light cure with VALO® curing light according to instructions.		
Shades	A2, A3.5, Translucent, Opaque White		



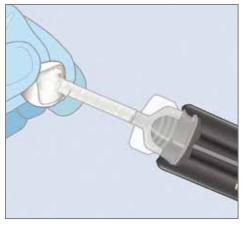
With syringe/tip delivery, a crown is loaded from the depth of the crown to ensure no air entrapment.

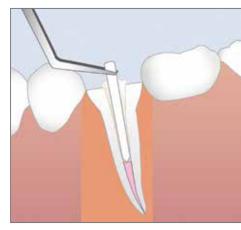
\*Trademark of a company other than Ultradent

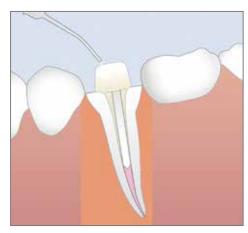
1. Data on file, Ultradent R&D



### **VERSATILITY**







Luting Post Cementation Core Buildup

### **BONDING OPTIONS**



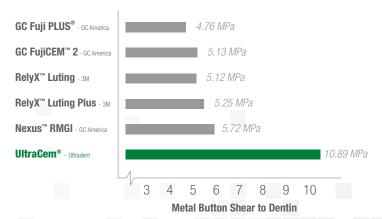


UltraCem cement is the world's first liquid-powder resin-reinforced glass ionomer cement that can be mixed and delivered through a syringe. Its advanced chemistry boasts the highest bond strengths in its category while its unique SpeedMix<sup>TM</sup> syringe ensures the ultimate luting convenience. UltraCem cement is also available in a traditional hand-mix bottle kit, an economical choice that gives clinicians control over the amount of material used.



- No additional tips or parts required
- Consistent mixing ratios every time
- Unit-dose delivery for low risk of contamination

## UltraCem® cement features a significantly higher bond strength than other quality luting cements in its category



PRODUCT PROFILE			
Chemistry	Liquid-powder resin-reinforced glass ionomer		
Indications for Use	Permanent cementation of inlays, onlays, crowns, and bridges made of metal, zirconia, and resin to natural teeth		
Compatible Substrates	Metal, PFM, resin		
Delivery	0.3 g unit-dose SpeedMix syringe and hand-mix bottle kit: 15 g powder/8.6 ml liquid		
Cure Type	Self cure		
Working Time/ Set Time	1–3 minutes working time, full set in 5 minutes		
Shades	Approximately A2		

### Instructions for Zirconia Restorations



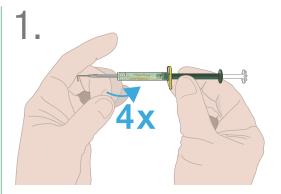
Apply Peak® Universal Bond adhesive to the preparation using a scrubbing motion for 10 seconds. (No etchant required.) Aggressively air thin until surface appears

dull and light cure for 10 seconds with VALO® curing light on standard mode. For best results, sandblast the inside of the prosthesis, clean with an air/water spray, and dry.

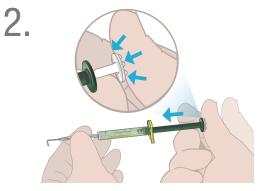
- Never use phosphoric acid to clean zirconia, as it will significantly reduce bond strengths
- Do not use a zirconia primer with UltraCem cement, as it will significantly reduce bond strengths



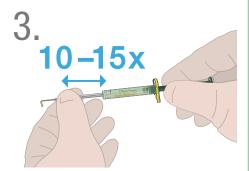
## SpeedMix Syringe Technique



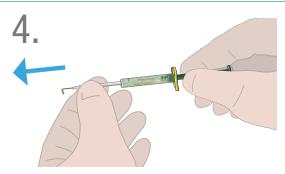
Flick or tap barrel four times to fluff powder



Press white stem completely into green stem in order to push liquid into powder chamber



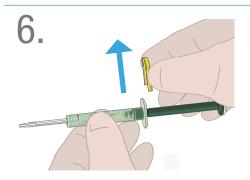
Leave metal rod in place; grasp plastic delivery/mixing tip and mix chemical 10 to 15 times vigorously back and forth



Fully extend delivery/mixing tip



Remove metal rod and discard



Remove yellow clip and discard



Express material into prosthesis

Scan with your smartphone to see a 30-second video of the SpeedMix syringe in action!



or visit ultradent.com/ultracem



LIGHT CURE VENEER LUTING RESIN

PermaShade LC light-cured luting resin is used exclusively for veneers. Its medium viscosity provides ideal handling and keeps veneers from drifting once they're seated. With enduring color stability, low shrinkage, and high bond strengths, PermaShade LC resin is ideal for creating a long-lasting, esthetic smile.



- Ideal viscosity keeps veneers from drifting once seated
- No detectable ΔE shade shift after accelerated aging process (color difference <3)<sup>1</sup>





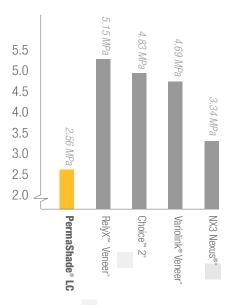
Patient with four existing anterior composites and large diastema. Received six anterior A1 porcelain veneers (#6—#11) cemented with PermaShade LC Translucent shade.



Ergonomic contra-angle delivery aids in precise placement to small, delicate veneers.



PRODUCT PROFILE			
Chemistry	Composite resin		
Indications for Use	Permanent cementation of porcelain, zirconia, composite, and other indirect anterior veneers		
Compatible Substrates	Porcelain, zirconia, lithium disilicate (IPS e.max®*), all-ceramic materials, resin		
Delivery	0.95 g contra-angle syringe		
Cure Type	Light cure		
Curing Instructions	2-second tack cure to avoid shifting. Light cure with VALO® curing light for 10 seconds through veneer.		
Shades	A2, B1, Translucent, Opaque White		



SHRINKAGE STRESS Low shrinkage stress reduces strain on the veneer, minimizing the risk of post-cure breakage.

\*Trademark of a company other than Ultradent

1. Independent university tests confirm PermaShade LC showed no perceptible shade shift after accelerated aging process [Barghi N, Gureckis KM, McAlister T. Color stability of two luting resins. J Dent Res 90(Spec Iss A): 1685, 2011 (www.dentalresearch.org)]. Light-cured resins tend to be more color stable due to the addition of nonaromatic aliphatic amines, which are resistant to oxidation. ΔE shade shift is less than 3 (3 or higher is visible to the human eye).



TEMPORARY VENEER CEMENT

ClearTemp LC cement provides precisely the right amount of strength for luting temporary veneers. Its light-cured resin formula holds strong and provides a quality seal. The translucent shade won't show through the provisional, offering a completely natural look. Because it adheres more to the provisional than to the preparation, ClearTemp LC cement is easy to remove. Any residual material is easy to detect with the aid of a black light.



- Much stronger than traditional temporary cements to ensure retention of provisional veneers
- Translucent shade won't show through the provisional
- Fluoresces under a black light for easy detection and removal

Note: Due to its high bond strength compared to other temporary cements, ClearTemp LC cement should be used for temporary veneers ONLY.

PRODUCT PROFILE	
Chemistry	Composite resin
Indications for Use	Temporary cementation of provisional veneers
Delivery	0.67 g contra-angle syringe
Cure Type	Light cure
Curing Instructions	Light cure with VALO® curing light for 10 seconds through provisional veneer
Shades	Translucent (fluoresces under a black light)



Today's provisionals look more natural than ever. ClearTemp LC cement helps to create a short-term smile that patients will be proud to reveal.



1. Contra-angle delivery aids in precise placement.



2. Light-cured formula provides superior retention.



3. A traditional temporary cement shows through the provisional crown on #8 while ClearTemp LC cement does not show through the provisional veneer on #9.



4. Fluorescent properties of ClearTemp LC cement cause it to glow under a black light, facilitating complete removal.



POLYCARBOXYLATE, NON-EUGENOL TEMPORARY LUTING/FILLING MATERIAL

UltraTemp temporary luting material features a hydrophilic, polycarboxylate chemistry that ensures low irritation to the pulp and a quality seal. It is water soluble until set for easy cleanup and is suggested for two- to four-week temporization of custom or standard provisionals. UltraTemp can also be used to seal the access opening of walking bleach cases. The dual-barrel syringe and mixing tip provide even mixing and convenient delivery.



- Polycarboxylate, non-eugenol formula
- Low to moderate retentive strength
- Quality seal and low irritation to pulp

PRODUCT PROFILE	
Chemistry	Paste-to-paste, non-eugenol polycarboxylate
Indications for Use	Temporary cementation of provisional crowns, bridges, inlays, onlays, and temporary fillings. Seals access opening of walking bleach cases.
Delivery	5 ml dual-barrel syringe with mixing tip
Cure Type	Self cure
Working Time/ Set Time	45 seconds working time, full set in 2 minutes
Shades	Off-White



1. Prior to complete set, remove excess UltraTemp material easily with a moist cotton swab or gauze. Following subgingival set of one to two minutes, remove quickly with explorer.



2. Upon provisional removal, shown here two weeks post-op, cement clings to both provisional and preparation. This is VALUABLE. This is one indicator of a quality sealing cement.



3. Bulk of residual cement is quickly removed. Note well-healed tissues; UltraTemp material is kind to tissue.



4. Use an abrasive (Consepsis® Scrub) with a rubber cup or the STARbrush® to remove residual cement.









UltraTemp material is an ideal temporary cement to use with walking bleach cases. Deliver the material into the access with Intraoral tip from dual-barrel syringe after the bleach is placed. Before the material sets, wipe off excess UltraTemp material with wet gauze or cotton swab, Finish and remove easily,



RESIN-BASED. NON EUGENOL TEMPORARY LUTING/FILLING MATERIAL

UltraTemp REZ temporary luting material is hydrophilic and resin-based. It provides moderate to high strength, making it ideal for cases when longer retention is required. While it is strong enough to withstand normal biting and chewing forces, it still removes easily and will not inadvertently bond to preparations containing resin/composite materials. The dual-barrel syringe and mixing tip provide even mixing and convenient delivery.

UltraTemp® REZ PAST SET	 Ξ
TEMPORARY RESIN CEMENT	
principles ( Street Commo	

- Resin-based, non-eugenol formula
- Moderate to high retentive strength
- Available in Regular and Fast set times

PRODUCT PROFILE	
Chemistry	Paste-to-paste, non-eugenol resin-based
Indications for Use	Temporary cementation of provisional crowns, bridges, inlays, onlays, and temporary fillings
Delivery	5 ml dual-barrel syringe with mixing tip
Cure Type	Self cure
Working Time/ Set Time	Regular Set: 45 seconds working time, full set in 2–3 minutes. Fast Set: 30 seconds working time, full set in 1–2 minutes.
Shades	Off-White



1. Mix and deliver simultaneously. No mess, little waste.



Provisional removal, two weeks post-op. UltraTemp REZ material provides higher retention due to its resin-based chemistry.



3. UltraTemp REZ material is designed to flake off easily from the preparation.



4. The material will not inadvertently bond to other resins.

For more information on Ultradent Cements, contact your local sales representative, call **800.552.5512**, or visit *ultradent.com* 

