

DUAL CURING CORE & RESIN CEMENT



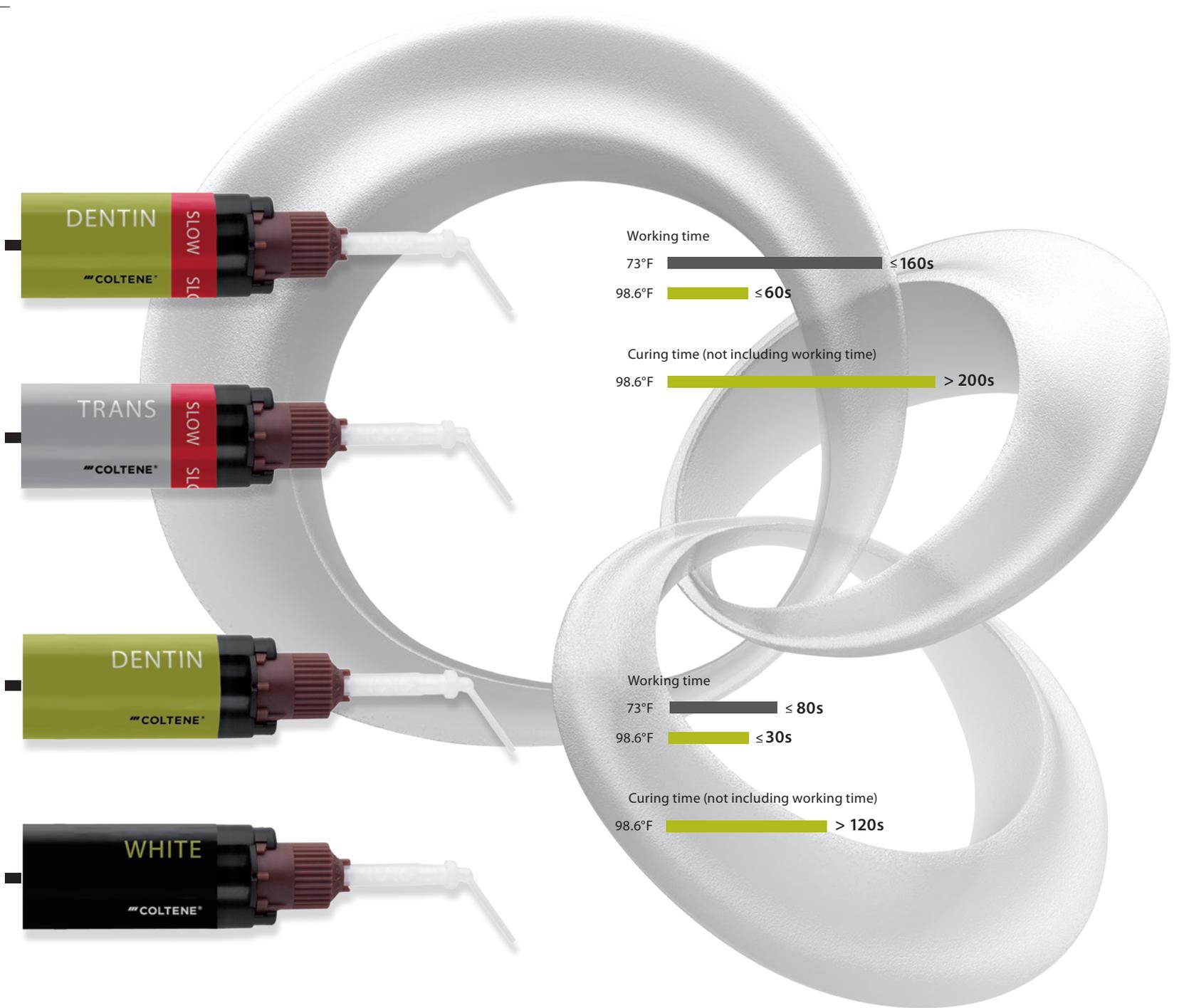
ParaCore[®]

3 Indications – 1 Material

 **COLTENE**



ParaCore® ParaCore dual-cured is a glass-reinforced composite, which is radiopaque and available in three shades—dentin, white and translucent. ParaCore is based on our decades of experience and expertise in the areas of composite, bonding and endodontic posts. This integrated bond & cement system complements a wide array of endodontic post systems for clinically sound, long-lasting post & core restorations.



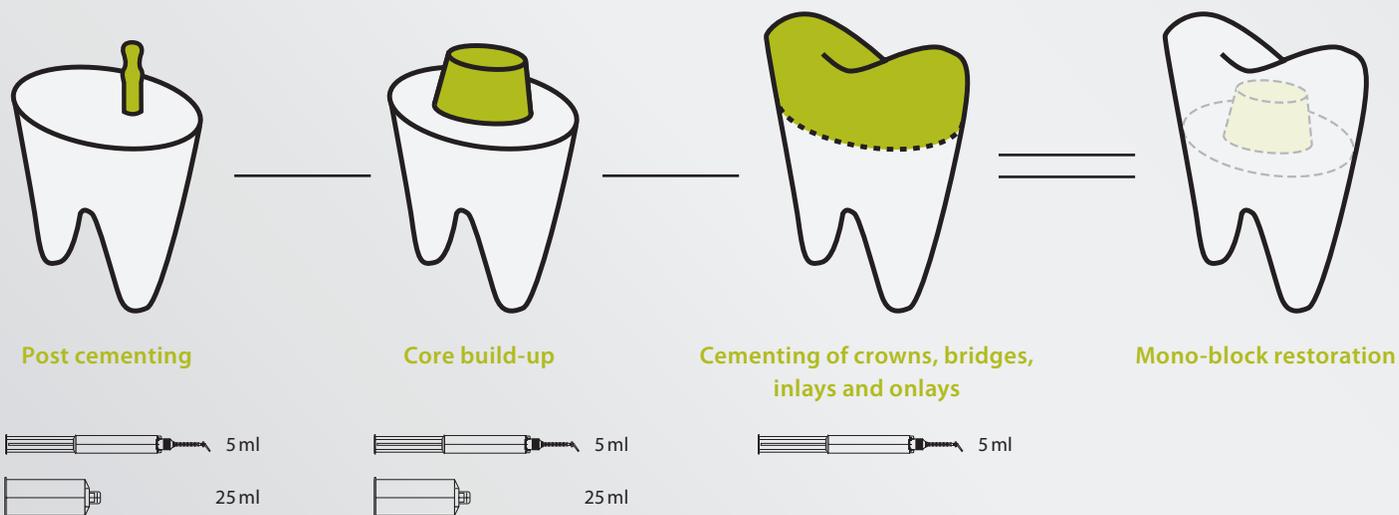
Optimal handling properties

With its creamy, smooth and non-slumping consistency, ParaCore is the ideal all-in-one material. Due to its thixotropic formulation, ParaCore is also eminently suitable for free-hand application. Due to its grindability, similar to natural dentin, there are no grooves or notches.

3 Colors – 2 Timings – 1 Material

Each indication has its own material requirements. Next to a suitable shade and, in specific, its translucency, the working time is crucial. Therefore, ParaCore is not only available in three colors, but also with two different working times. For instance, the standard version with its short processing time is especially suited for core build-ups, whereas the SLOW version demonstrates its strengths in all types of cementation work.

Mono-block bonding



ParaCore simplifies the post & core restorative technique with its ability to be used as a 3-in-1 material for post cementation, core build-ups and crown & bridge cementation. ParaCore can also be used to cement inlays and onlays.

Using one material for cementation and core build-ups provides an optimal "monoblock bond interface" between the dentin-post-crown, resulting in one cohesive restoration with outstanding durability and strength.

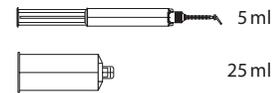
Clinical applications

The mono-block technique: The following clinical photos demonstrate ParaCore being used in combination with ParaBond® and ParaPost® Fiber Posts for post & core therapy.

Clinical photos:
Ass. Prof. Dr.
med. dent.
Stefan J. Paul



Post cementation



Application of the chemical cured ParaBond Adhesive into the post space preparation of the root canal and onto the contact surfaces.

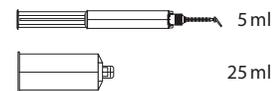
Application of ParaCore directly into the root canal using the root canal tip.

Cementation of the ParaPost Fiber Lux Post into the root canal.

Removal of excess ParaCore.



Core build-ups



Freehand core build-up using ParaCore.

Manual contouring of the core build-up.

Crown preparation using different types of Alpen® diamonds.

Completed crown preparation.



Cementing of crowns, bridges, inlays and onlays



Application of the chemical cured ParaBond Adhesive onto the crown preparation.

Application of ParaCore directly into the all ceramic crown restoration.

Cementation of the final crown with excess ParaCore material being removed afterwards.

Postoperative clinical situation.

Comments from dental practices

“Being able to use one material for post cementation, core build-ups and finally crown cementation saves time and is extremely practical. We strongly recommend the ParaCore System.”

Ass. Prof. Dr. med. dent. Stefan J. Paul

“All-in-one systems for cementing the post, preparing the core and cementing the final restoration, such as ParaCore ... are excellent options for use with these procedures.”

Dr. Enrique Kogan

“The ParaCore material matches closely in shade to dentin and is very strong. It also saves time when used as a cement and core build-up material. The use of an adhesive component insures a predictable bond to tooth structure. The entire system works in harmony to reinforce endodontically treated teeth that require a foundation build-up.”

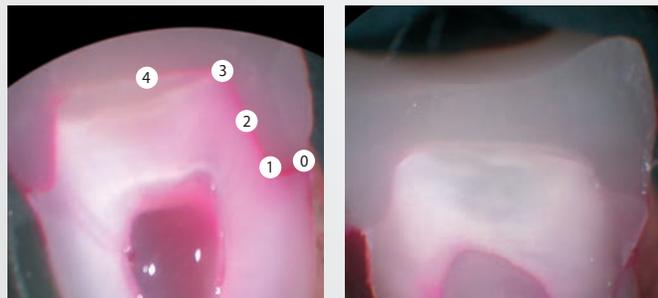
Dr. James Braun

Superior sealing

Applying ParaBond Adhesive prior to cementation with ParaCore effectively seals and protects the restoration against marginal microleakage to minimize the risk of postoperative complications. An independent In-Vitro study¹ compared the amount of microleakage present following cementation of

all-ceramic crowns using different composite luting cements. Cross-sectioned human molars demonstrated significant differences in the amount of dye penetration (marginal microleakage) after thermal cycling.

Dye penetration comparison after thermal cycling¹



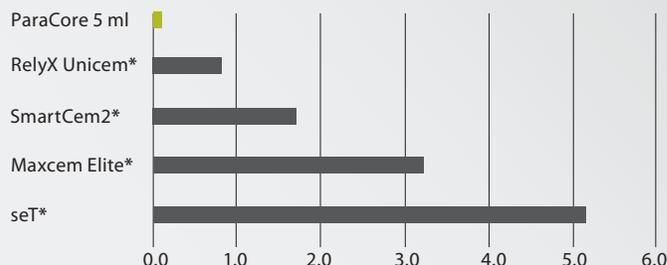
Cementation without bonding application

Cementation with ParaBond application

- 0 no leakage
- 1 leakage from crown margin reaching axial wall
- 2 leakage on axial wall, but not occlusal surface
- 3 leakage as far as occlusal surface
- 4 leakage to mid point of occlusal surface

1) Dr. B. Millar, Dr. S. Deb,
King's College London Dental Institute,
Oct. 2008

Comparison of color penetration¹



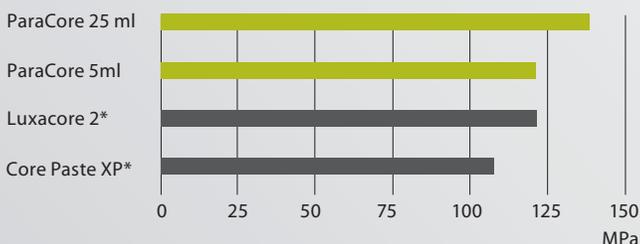
The total score between 0 (no leakage) and 8 (total leakage across preparation) was generated by adding scores from the left & right sides together. The Mann-Whitney non-parametric test showed ParaCore with statistically significant better scores (e.g. less dye leakage) than:

- seT (P < 0.001)
- Maxcem Elite (P = 0.002)

But not statistically significant for:

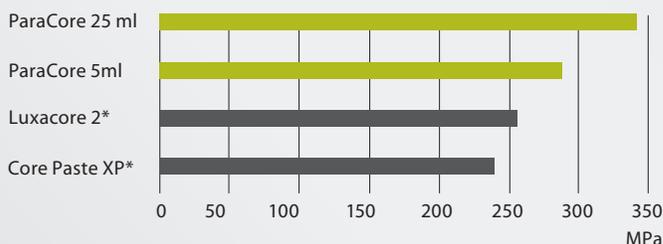
- SmartCem2 (P = 0.170)
- RelyX Unicem (P = 0.170)

Flexural strength



Source: internal data

Compressive strength



Source: internal data

Technical data

- ParaCore complies with **ISO 4049**
- Layer thickness 5 | 25 ml **15 µm**
- Shrinkage 5 | 25 ml **3.5%**
- Water absorption 5 | 25 ml **18 | 16 µg/mm³**
- Solubility in water 5 | 25 ml **0.7 | 0.6 µg/mm³**

Composition

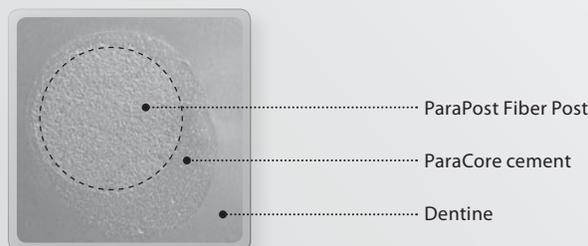
- Methacrylates
- Dental glass
- Amorphous silicic acid

Storage



Optimal bond interface

Applying ParaBond inside the root canal before post cementation creates an optimal bond interface between the dentin-cement-post to enhance the retention of the post inside the root canal.



Source: internal data

*Not a registered trademark of Coltène/Whaledent

Order information

ParaCore 5 ml syringe dual curing core and resin cement



5885	ParaCore 5ml Intro Kit	5886	ParaCore 5ml White Refill	60011392	ParaCore 5ml Trans SLOW Refill
1 × 5 ml	ParaCore Dentin	2 × 5 ml	ParaCore White	2 × 5 ml	ParaCore Trans SLOW
1 × 5 ml	ParaCore White	20 ×	Mixing Tip Brown Short Super Fine	20 ×	Mixing Tip Brown Short Super Fine
1 × 5 ml	ParaCore Dentin SLOW	5887	ParaCore 5ml Dentin Refill	6747	Mixing Tip Brown Short Super Fine
1 × 5 ml	ParaCore Trans SLOW	2 × 5 ml	ParaCore Dentin	40 ×	Mixing Tip, Ø 1 mm
3 × 3 ml	ParaBond Non-Rinse	20 ×	Mixing Tip Brown Short Super Fine	6759	Mixing Tip Brown Short Fine
20 ×	Conditioner + Adhesive A & B	60011391	ParaCore 5ml Dentin SLOW Refill	40 ×	Mixing Tip, Ø 1.8 mm
	Mixing Tip Brown Short Super Fine	2 × 5 ml	ParaCore Dentin SLOW		
60013753	ParaCore SLOW 5ml Intro Kit	20 ×	Mixing Tip Brown Short Super Fine		
2 × 5 ml	ParaCore Dentin SLOW				
2 × 5 ml	ParaCore Trans SLOW				
3 × 3 ml	ParaBond Non-Rinse				
20 ×	Conditioner + Adhesive A & B				
	Mixing Tip Brown Short Super Fine				

ParaCore 25 ml cartridge dual curing core build-up material



1500	ParaCore 25ml Dentin Intro Kit	1502	ParaCore 25ml White Intro Kit	5853	ParaCore 25ml Dentin Refill
1 × 25 ml	ParaCore Dentin	1 × 25 ml	ParaCore White	1 × 25 ml	ParaCore Dentin
1 ×	Coltène® Dispenser 25ml	1 ×	Coltène Dispenser 25ml	20 ×	Mixing Tip Yellow / Oral Tip Yellow
3 × 3 ml	ParaBond Non-Rinse	3 × 3 ml	ParaBond Non-Rinse	5854	ParaCore 25ml White Refill
20 ×	Conditioner + Adhesive A & B	20 ×	Conditioner + Adhesive A & B	1 × 25 ml	ParaCore White
	Mixing Tip Yellow / Oral Tip Yellow		Mixing Tip Yellow / Oral Tip Yellow	20 ×	Mixing Tip Yellow / Oral Tip Yellow
6550	Mixing Tips Yellow	6555	Oral Tips Yellow	4470	Coltène Dispenser 25 ml
40 ×	Mixing Tip Yellow	100 ×	Oral Tip Yellow		

ParaBond chemically curing conditioner / adhesive system



7486	ParaBond Adhesive	7493	ParaBond Adhesive A & B Refill	7494	ParaBond Non-Rinse Conditioner Refill
1 × 3 ml	ParaBond Non-Rinse Conditioner	1 × 3 ml	ParaBond Adhesive A	1 × 3 ml	ParaBond Non-Rinse Conditioner
1 × 3 ml	ParaBond Adhesive A	1 × 3 ml	ParaBond Adhesive B		
1 × 3 ml	ParaBond Adhesive B				

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