

DUAL CURING CORE & RESIN CEMENT



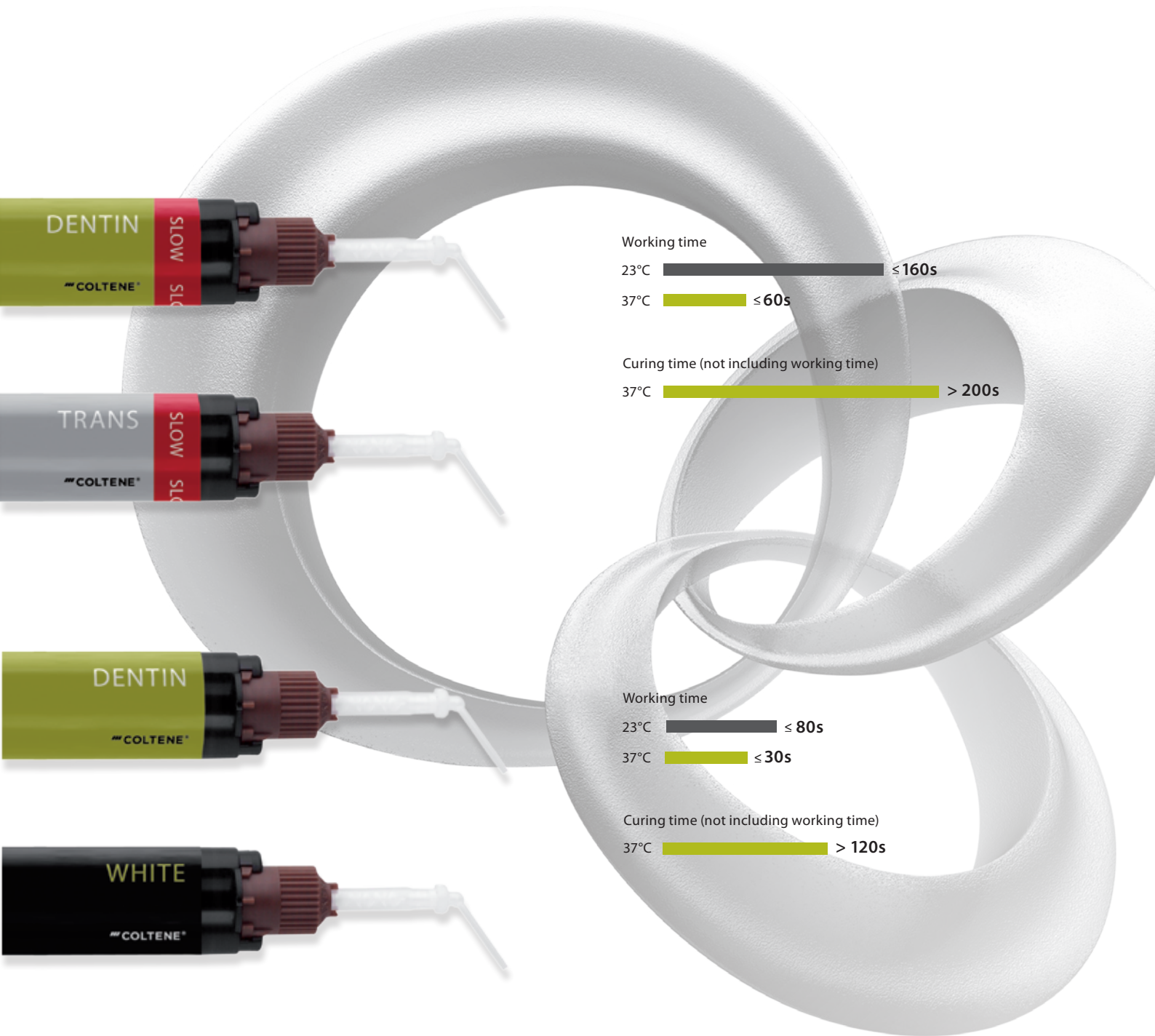
ParaCore[®]

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.



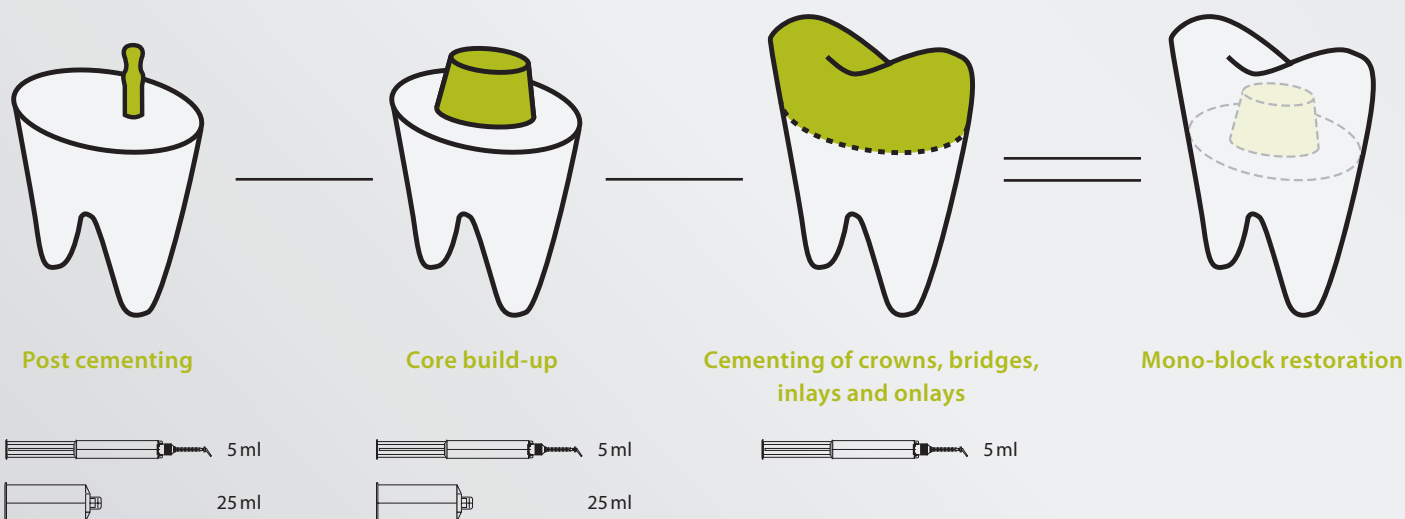
Optimal handling properties

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 Colours – 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 colours, 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.

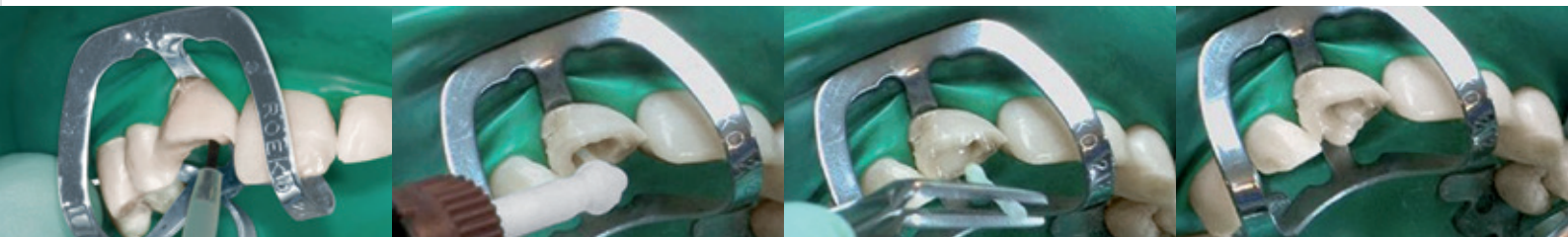
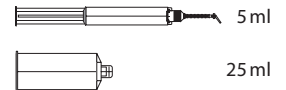
Clinical applications

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.

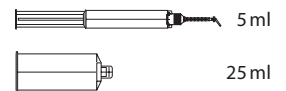
Application of ParaCore directly into the root canal using the root canal tip.

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

Removal of excess ParaCore.



Core build-ups



Freehand core build-up using ParaCore.

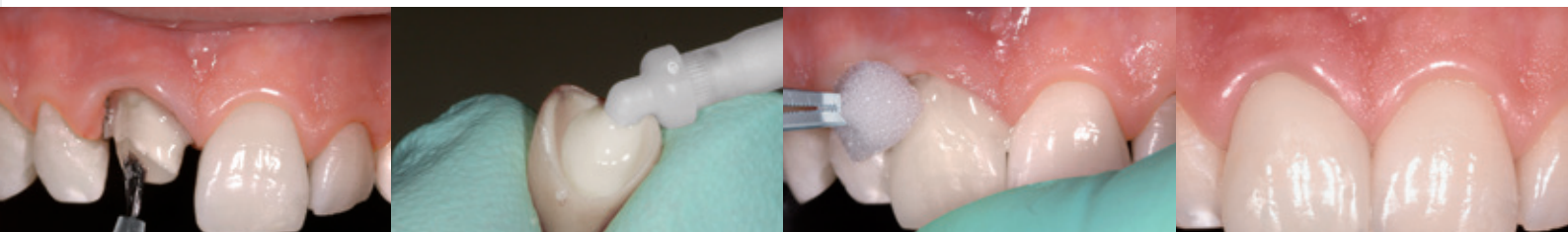
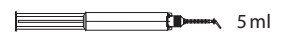
Manual contouring of the core build-up.

Crown preparation using different types of DIATECH 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 allceramic crown restoration.

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

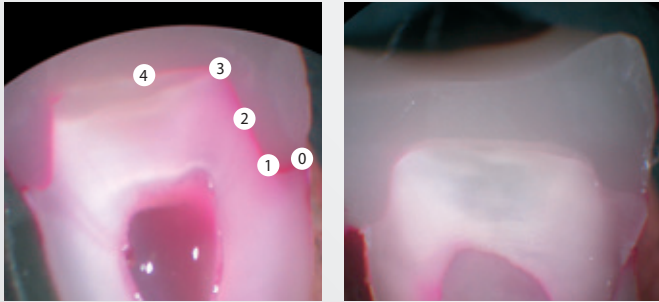
Postoperative clinical situation.

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



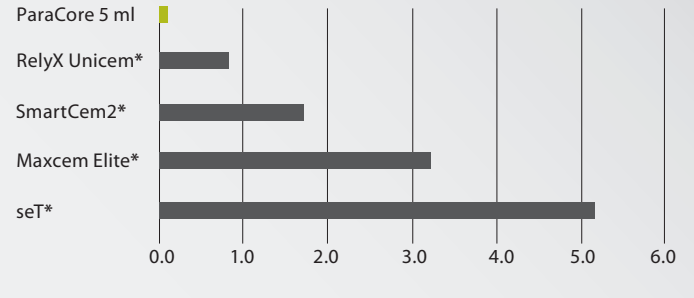
Cementation without bonding application

Cementation with ParaBond

- 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 colour penetration¹



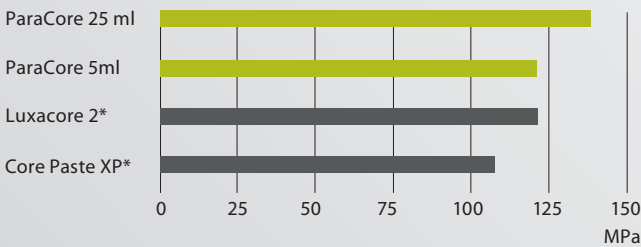
The total score between 0 (no leakage) and 8 (total leakage across preparation) was generated by adding scores from the left & right sides together. The Mann-Whitney non-parametric test showed ParaCore with statistically significant better scores (e.g. less dye leakage) than:

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

But not statistically significant for:

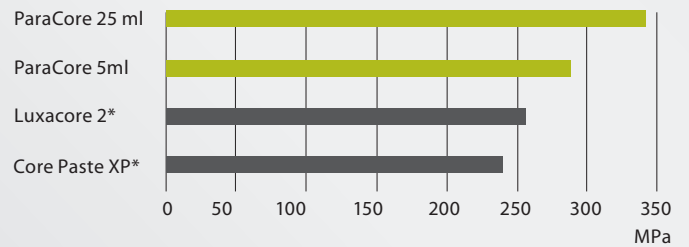
- SmartCem2 (P = 0.170)
- RelyX Unicem (P = 0.170)

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

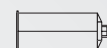
Order information

ParaCore 5 ml syringe dual curing core and resin cement



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

ParaCore 25 ml cartridge dual curing core build-up material



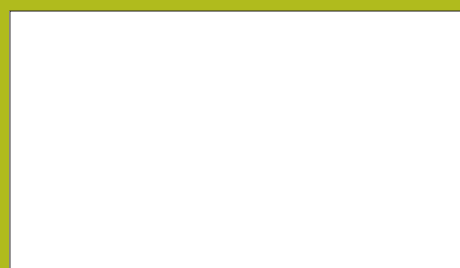
1500	ParaCore 25 ml Dentin Intro Kit	1502	ParaCore 25 ml White Intro Kit	5853	ParaCore 25 ml Dentin Refill
1 × 25 ml	ParaCore Dentin	1 × 25 ml	ParaCore White	1 × 25 ml	ParaCore Dentin
1 ×	Coltène Dispenser 25 ml	1 ×	Coltène Dispenser 25 ml	20 ×	Mixing Tip Yellow /
3 × 3 ml	ParaBond Non-Rinse	3 × 3 ml	ParaBond Non-Rinse		Oral Tip Yellow
	Conditioner + Adhesive A & B		Conditioner + Adhesive A & B	5854	ParaCore 25 ml White Refill
20 ×	Mixing Tip Yellow /	20 ×	Mixing Tip Yellow /	1 × 25 ml	ParaCore White
	Oral Tip Yellow		Oral Tip Yellow	20 ×	Mixing Tip Yellow /
1501	ParaCore 25 ml Dentin Kit	1503	ParaCore 25 ml White Kit		Oral Tip Yellow
1 × 25 ml	ParaCore Dentin	1 × 25 ml	ParaCore White	6550	Mixing Tips Yellow
3 × 3 ml	ParaBond Non-Rinse	3 × 3 ml	ParaBond Non-Rinse	40 ×	Mixing Tip Yellow
	Conditioner + Adhesive A & B		Conditioner + Adhesive A & B	6555	Oral Tips Yellow
20 ×	Mixing Tip Yellow /	20 ×	Mixing Tip Yellow /	100 ×	Oral Tip Yellow
	Oral Tip Yellow		Oral Tip Yellow	4470	Coltène Dispenser 25 ml

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	1 × 3 ml	ParaBond Adhesive A	1 × 3 ml	ParaBond Non-Rinse
	Conditioner	1 × 3 ml	ParaBond Adhesive B		Conditioner
1 × 3 ml	ParaBond Adhesive A				
1 × 3 ml	ParaBond Adhesive B				

© 2016 Coltène/Whaledent AG – www.coltene.com



Coltène/Whaledent AG
Feldwiesenstr. 20
9450 Altstätten/Switzerland
T +41 71 757 53 00
F +41 71 757 53 01
info.ch@coltene.com

Coltène/Whaledent Inc.
235 Ascot Parkway
Cuyahoga Falls, Ohio 44223/USA
T +1 330 916 8800
F +1 330 916 7077
info.us@coltene.com

Coltène/Whaledent Ltd.
The President Suite
Kendal House, Victoria Way
Burgess Hill, West Sussex
RH15 9NF / UK
T +44 1444 235486
F +44 1444 870640
info.uk@coltene.com

 **COLTENE**