

DUAL CURING CORE & RESIN CEMENT



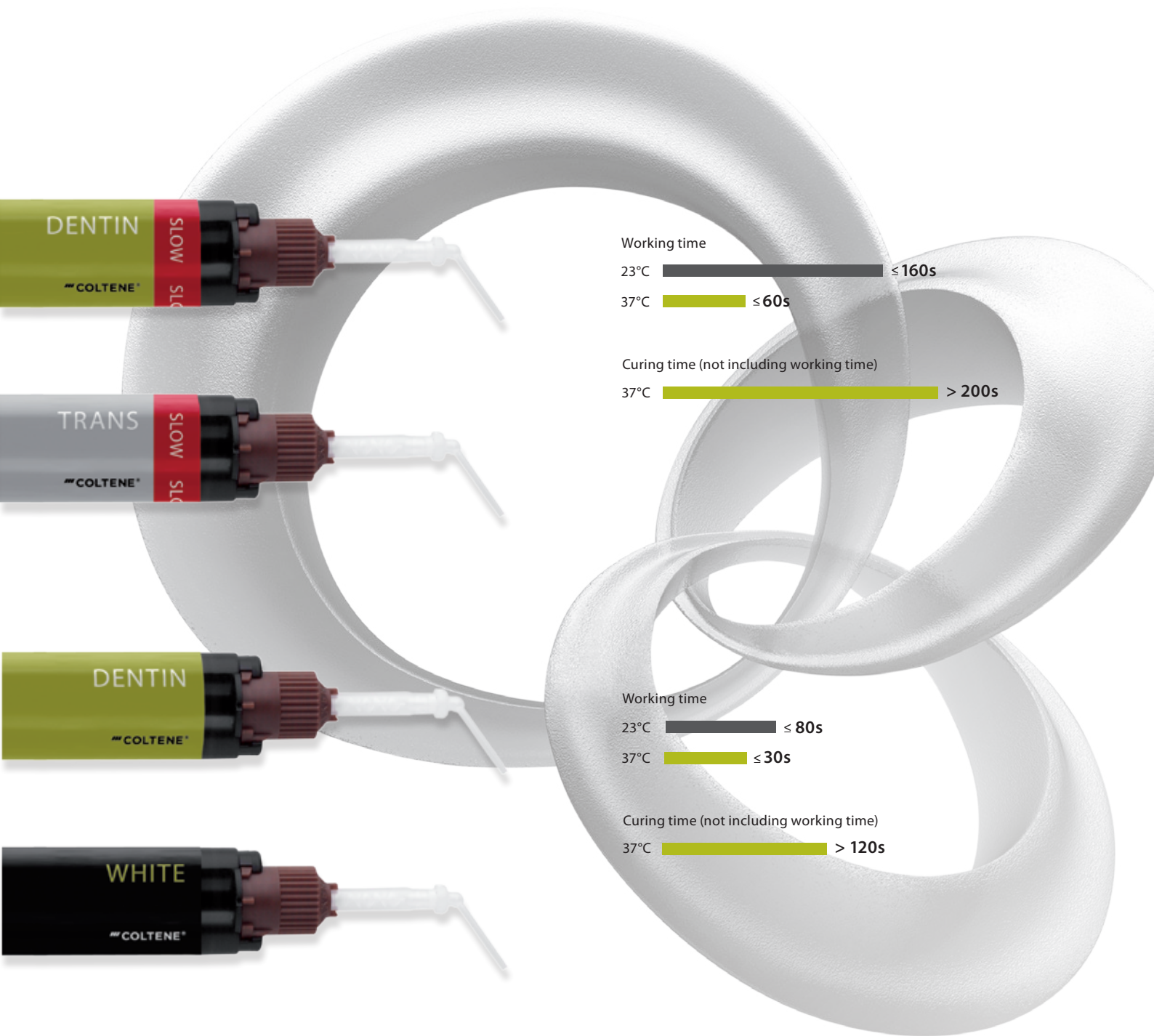
ParaCore[®]

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.



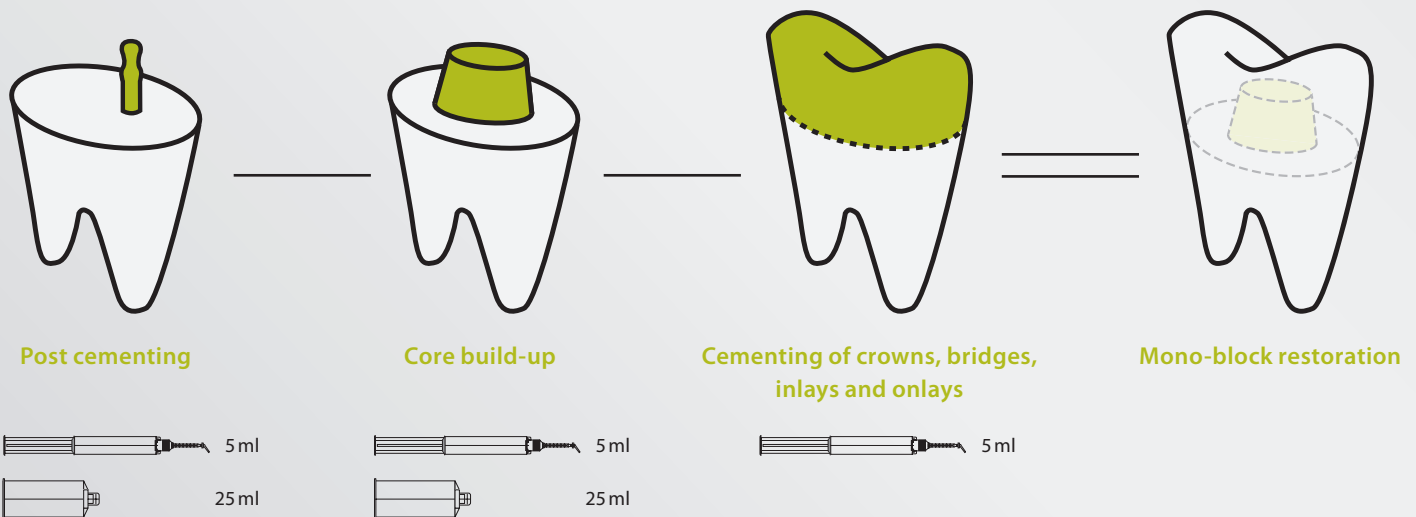
Optimal handling properties

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.

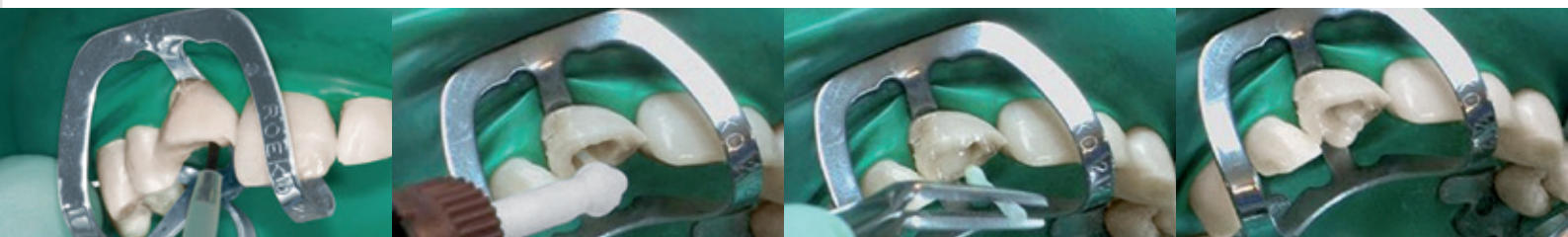
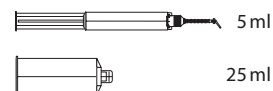
Clinical applications

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.

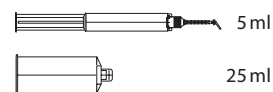
Application of ParaCore directly into the root canal using the root canal tip.

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

Removal of excess ParaCore.



Core build-ups



Freehand core build-up using ParaCore.

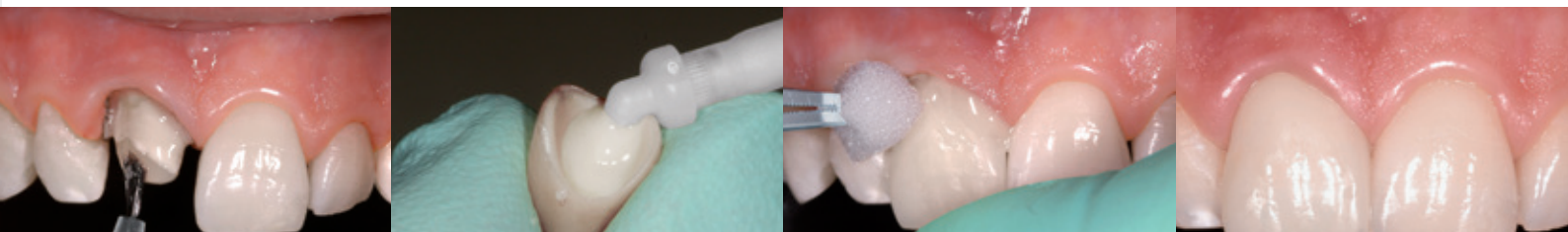
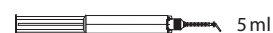
Manual contouring of the core build-up.

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.

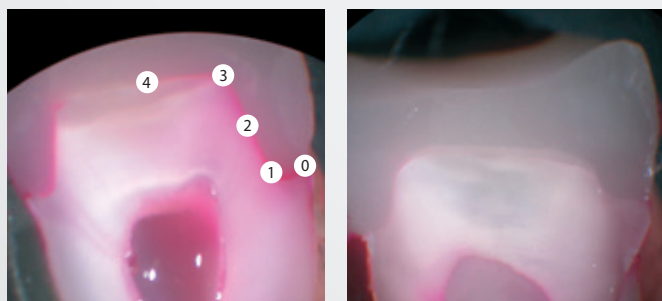
Cementation of the final crown with excess ParaCore material being removed afterwards.

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

Dye penetration comparison after thermal cycling¹



Cementation without bonding application

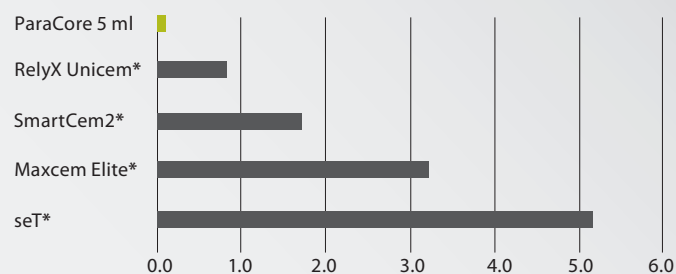
Cementation with ParaBond

- 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

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.

Comparison of colour penetration¹



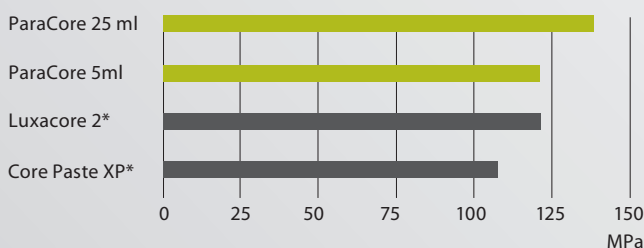
The total score between 0 (no leakage) and 8 (total leakage across preparation) was generated by adding scores from the left & right sides together. The Mann-Whitney non-parametric test showed ParaCore with statistically significant better scores (e.g. less dye leakage) than:

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

But not statistically significant for:

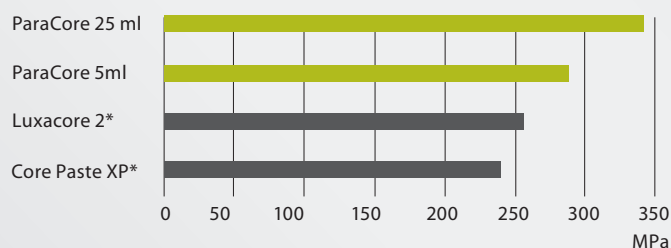
- SmartCem2 (P = 0.170)
- RelyX Unicem (P = 0.170)

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

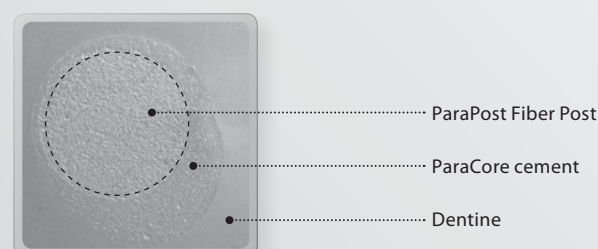
- Methacrylates
- Dental glass
- Amorphous silicic acid

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.

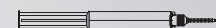


Source: internal data

* Not a registered trademark of Coltène/Whaledent

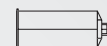
Order information

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 | | |
| 20 × | Mixing Tip Short Super Fine | 60011391 | ParaCore 5 ml Dentin SLOW Refill | 6759 | Mixing Tip Short Super Fine |
| 60013753 | ParaCore SLOW 5 ml Intro Kit | 2 × 5 ml | ParaCore Dentin SLOW | 40 × | Mixing Tip, Ø 1.8 mm |
| 2 × 5 ml | ParaCore Dentin SLOW | 20 × | Mixing Tip Short Super Fine | | |
| 2 × 5 ml | ParaCore Trans SLOW | | | | |
| 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 / |
| | | | | | Oral Tip Yellow |
| 1501 | ParaCore 25 ml Dentin Kit | 1503 | ParaCore 25 ml White Kit | 6550 | Mixing Tips Yellow |
| 1 × 25 ml | ParaCore Dentin | 1 × 25 ml | ParaCore White | 40 × | Mixing Tip Yellow |
| 3 × 3 ml | ParaBond Non-Rinse | 3 × 3 ml | ParaBond Non-Rinse | | |
| | 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 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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