## Luting Portfolio from GC

Product Name	Freegenol	Fuji I	Fuji Cem	Fuji Cem Automix	Fuji Plus	G-CEM	G-CEM Automix
			and the second second				as the
Cement Type	Temporary luting cement	Conventional Glass Ionomer	Resin Modified Glass Ionomer		Self-adhesive Resin Cement		
Indications	Temporary luting of prosthetic appliances	For basic routine luting of metal-based work and high strength ceramics	For your most frequent luting procedures of crown and bridge works (Metal, PFM, high strength ceramic Zirconia type), composite inlays and onlays MUST HAVE			Universal luting cement for metal, all ceramic and composite crowns, bridges (max 2 abutments), inlays, onlays Automix: additional long span bridges and post luting indications	
Delivery type	1-1 Pack	Powder/Liquid and capsules	Paste-Pak system	Paste-Pak Automix	Powder/Liquid and capsules	Capsules	Automix
Main Delivery Features	Consistency can be adjusted	<ul> <li>Powder/liquid: package is designed to ease powder and liquid dosage</li> <li>Capsule: exact ratio and perfect consistency</li> </ul>	<ul> <li>Adaptable dosage</li> <li>Delivers exactly the right ratio</li> <li>Reduced waste</li> <li>Easy paste / paste mixing</li> </ul>	<ul> <li>The most versatile RMGIC, choice between Automix and hand-mixing</li> <li>Perfect mixing, no bubbles</li> <li>No contamination, direct dispensing into restoration</li> <li>Reduced dispensing time</li> </ul>	<ul> <li>Powder/liquid available in 3 shades</li> <li>Extended Working Time version available, specially adapted for bridges</li> <li>Capsule: exact ratio and perfect creamy consistency and flow. Available in 2 shades</li> </ul>	<ul> <li>Capsule: exact dosage</li> <li>Perfect creamy consistency and flow</li> <li>Simple direct application into prosthetic elements</li> <li>Available in 4 different shades</li> </ul>	<ul> <li>No contamination, direct dispensing into restoration</li> <li>Reduced dispensing time</li> <li>Endo tip for direct application into canal and post luting</li> <li>Available in 4 different shades</li> </ul>
Main Product Features	<ul> <li>Eugenol free, no negative effect on polymerisation of resin containing materials</li> <li>Short setting time</li> <li>Easy to remove from crowns and cores</li> <li>Special cleaner included</li> </ul>	<ul> <li>No surface preparation or bonding agent</li> <li>Sufficiently strong for most basic needs</li> <li>Low solubility</li> <li>High fluoride release</li> <li>Excellent radiopacity</li> </ul>	<ul> <li>Guaranteed adhes optimal clinical pe</li> <li>Low post-operativ</li> <li>Very Low film thic</li> <li>Easy seating and</li> <li>High Fluoride rele</li> <li>Easy to remove e.</li> </ul>	re sensitivity :kness, only 3µ improved fit ase	<ul> <li>Benchmark for luting on metal and PFM restorations</li> <li>High retention and mechanical properties.</li> <li>Very low solubility</li> <li>Great sealing ability</li> <li>Low post-op sensitivity</li> <li>Simple application</li> <li>Snap set</li> <li>Significant Fluoride release</li> <li>Predictable performance</li> </ul>	<ul> <li>Easy to use, not sensitive to technique</li> <li>Very low hydroscopic expansion, ideal for all ceramics</li> <li>Good bonding strength in both curing mode</li> <li>Easy to remove excess, tack cure possible</li> <li>Short setting time</li> <li>Avoids discoloration</li> <li>Low post-operative sensitivity</li> </ul>	<ul> <li>Stable or increased bond strength to both tooth structure and Zirconia, even after thermocycling</li> <li>Storage at room temperature</li> <li>Highest flexural strength in its category</li> <li>Incredibly accurate and durable</li> <li>No post operative sensitivity</li> <li>Adequate radiopacity</li> </ul>





## Luting Cement Products from GC – Indications Guide









Cement	Fuji I	FujiCem & FujiCem Automix	Fuji Plus	G-CEM	G-CEM Automix
Cement Type	Conventional	Resin Modified	Resin Modified	Self-adhesive	Self-adhesive
	Glass Ionomer	Glass Ionomer	Glass Ionomer	Resin Cement	Resin Cement
		Handmix and			
Delivery Mode	P/L and Capsule	Automix	P/L & Capsule	Capsule	Automix
Metal / PFM					
<ul> <li>Inlays / Onlays</li> </ul>	Υ	Y	Y	Y	Y
Crowns	Υ	Y	Υ	Y	Y
Bridges	Υ	Y	Υ	Y**	Y
Endodontic Posts*	Υ	Υ	Υ	Ν	Y
Ceramics – Low & middle strength <sup>1</sup>					
<ul> <li>Inlays / Onlays</li> </ul>	Ν	Y	Υ	Y	Y
Crowns	Ν	Ν	Ν	Y	Y
Bridges	Ν	Ν	Ν	Y**	Y
Veneers	Ν	Ν	Ν	Ν	Ν
Ceramics – High Strength <sup>2</sup>					
Crowns	Υ	Υ	Υ	Y	Y
Bridges	Υ	Υ	Υ	Y**	Y
Endodontic Posts*	Ν	Y	Υ	Ν	Y
Composite / Reinforced Polymer					
<ul> <li>Inlays / Onlays</li> </ul>	Ν	Υ	Υ	Y	Y
Crowns	Ν	Υ	Υ	Υ	Y
Bridges	Ν	Y	Y	Y**	Y
<ul> <li>Endodontic Posts*</li> </ul>	Ν	Υ	Υ	Ν	Y



## Luting pre-treatment guide with GC luting materials



	· · · · · · · · · · · · · · · · · · ·		Fuji I	FujiCEM & FujiCEM Automix	Fuji PLUS	G-CEM	G-CEM Automix
			Glass Ionomer	Resin Modified Glass I onomer	Resin Modified Glass Ionomer	Self-Adhesive Luting Cement	Self-Adhesive Luting Cement
Surface Type	Example						
Tooth Surface	Dentin and enamel	Pre-treatment	Cleaning	Cleaning & Optional conditioning	Cleaning & Conditioning with Fuji Plus Conditioner	Cleaning	Cleaning
Low & Middle Strength	GC Initial MC /PC; Empress II; E-max Press	Indications	NI	Inlays, onlays	Inlays, Onlays	Inlays, Onlays, Crowns, Bridges(max. 2 abutments)	Inlays, Onlays, Crowns, Bridges, posts
Ceramic based restorations (Flexural Strength less thar 600MPa)		Pre-treatment of Ceramic core material <sup>1</sup>	NI	Silicate/feldspar based: etching & GC Ceramic Primer A	Silicate/feldspar based: etching & GC Ceramic Primer A	Silicate/feldspar based: etching & GC Ceramic Primer A	Silicate/feldspar based: etching & GC Ceramic Primer A
				Others: Sandblasting <sup>1</sup>	Others: Sandblasting <sup>1</sup>	Others: Sandblasting <sup>1</sup>	Others: Sandblasting <sup>1</sup>
High Strength Ceramic based restorations	Procera Alumina & Zirconia ; Lava ; KaVo Everest; ZirCad; InCeram Zirconia	Indications	Crowns, Bridges	Crowns, Bridges, Posts	Crowns, Bridges, Posts	Crowns, Bridges(max. 2 abutments)	Crowns, Bridges, Posts
(Flexural Strength more than 600MPa)		Pre-treatment of Ceramic core material <sup>2</sup>	Sandblasting <sup>1</sup>	Sandblasting <sup>1</sup>	Sandblasting <sup>1</sup>	Sandblasting <sup>1</sup>	Sandblasting <sup>1</sup>
Composite based restorations	GC Gradia,	Indications	NI	Inlay,Onlay,Crowns & bridges (reinforced),Endo posts	Inlay,Onlay,Crowns & bridges (reinforced),Endo posts	Inlay,Onlay,Crowns & Bridges (reinforced, max. 2 abutments)	Inlay,Onlay,Crowns & Bridges, Posts
Indirect Composites (Metal Free)	Composites blocks for Cad/Cam	Pre-treatment of Composite core material <sup>1</sup>	NI	Sandblasting <sup>1</sup> Optional : GC Ceramic primer A	Sandblasting <sup>1</sup> Optional : GC Ceramic primer A	Sandblasting <sup>1</sup> Optional : GC Ceramic primer A	Sandblasting <sup>1</sup> Optional : GC Ceramic primer A
Metal based restorations Porcelain fused to metal,	Dental alloys like Gold , Non-	Indications	Inlays ,Onlays, crowns & bridges, Endo posts	Inlays ,Onlays, crowns & bridges, Endo posts	Inlays ,Onlays, crowns & bridges, Endo posts	Inlays, Onlays, Crowns & Bridges(max. 2 abutments)	Inlays, Onlays, Crowns, Bridges, Posts
Composite veneered on metal, full metal crowns	Precious, Palladium and Titanium	Pre-treatment of Metal core material <sup>1</sup>	Sandblasting <sup>1</sup> Optional : GC Metal Primer II	Sandblasting <sup>1</sup> Optional : GC Metal Primer II	Sandblasting <sup>1</sup> Optional : GC Metal Primer II	Sandblasting <sup>1</sup> Optional : GC Metal Primer II	Sandblasting <sup>1</sup> Optional : GC Metal Primer II

<sup>1</sup> The aim of roughening surface by sandblasting / etching is to increase the surface area, obtain higher surface roughness and/or to purify the material.

<sup>2</sup> Different manufacturers of core ceramic materials have different advice on pre-treatment (Sandblasting). Consult the corresponding IFU! Internal tests shows no significant bonding improvement NI: Not Indicated / Recommended

