Strength and Beauty in Unity

Lava™
Crowns and Bridges
Patients want:
- aesthetically pleasing restorations
- natural looking
- value for money
- peace of mind

Lava™ Crown and Bridge System: Accommodating every aspect of your patients

Patients want aesthetic, biocompatible and long lasting restorations. Today, beautiful teeth are important for self-esteem and a sense of well-being. People want aesthetically pleasing, natural looking restorations that offer value for money in terms of the lifespan of the restoration and its biocompatibility. Patients want peace of mind especially when most all-ceramic solutions today are limited to quite specific indications.

The next generation of dental restorations

The 3M™ ESPE™ Lava™ Crown and Bridge System can help you realise the future of dental restorations. The Lava system is an innovative and easy to use CAD/CAM system. Lava crowns and bridges are made from zirconium oxide (zirconia) and are suitable for anterior and posterior applications of up to 4 units in length. The system offers a complete and comprehensive solution for your patients, providing ideal conditions for a consistent aesthetic appearance.

Let us inspire you. Discover the opportunities that the Lava system can offer your practice, your patients and your laboratory.
The Lava™ Crown and Bridge System: A precise match of aesthetics and strength

Zirconium oxide combines natural appearance with high strength. 3M™ ESPE™ Lava™ Crowns and Bridges possess a translucent framework of high strength zirconium oxide. The CAD/CAM manufactured framework can be matched precisely to the colour of the patient’s teeth, its translucency mimicking that of natural dentine.

Excellent aesthetics with individually coloured frameworks. The customised veneer ceramic Lava ceram builds onto this unique framework producing excellent results with a perfectly natural transition between veneer ceramic, framework and preparation margin at the tapered edge of the crown.

The strength to offer high quality bridgework in anterior or posterior regions

Lava™ crowns and bridges offer the highest strength restorations to the dental industry. Its mechanical properties allow the manufacture and placement of bridges of up to 4 units in length without any compromise of the lifespan of the restoration.

![Graph showing biaxial fracture strength of different materials](image)

*3M ESPE
**Wagner et al. J. Prost. Dent. 75 (2) 1995
Overcoming old indication limits

Suitable for anterior and posterior applications. For decades, porcelain fused to metal (PFM) restorations have set the standards for strength, durability and marginal fit. With 3M™ ESPE™ Lava Crowns and Bridges, these standards can now be achieved as easily and more beautifully with an all-ceramic material.

Due to the outstanding properties of the zirconium oxide framework material, Lava crowns and bridges can be prescribed for both anterior and posterior applications.

High strength and durability

The fracture strength of zirconium oxide is many times higher than that of conventional ceramic materials. It far exceeds the stress requirements of the oral environment while allowing delicate shaping of the edges to provide a natural tooth appearance. Its excellent durability is clinically convincing, allowing 3M ESPE to offer you Lava crowns and bridges with security and proven dependability.

**Preparation Guidelines**

**Anterior Crown**
- 1.5 – 2.0 mm incisal reduction
- 1.0 – 1.5 mm labial and lingual reduction
- Round the internal line angles
- Chamfer margin

**Posterior Crown**
- 1.5 – 2.0 mm occlusal/incisal reduction
- 1.0 – 2.0 mm axial reduction
- Round the internal line angles
- Chamfer margin

Clinical studies:

More than 1500 cases, over 150 bridges
(3-unit, 4-unit up to 38mm)
A small step for you, a big step for your patients

**Made to fit your treatment routine**

The 3M™ ESPE™ Lava™ System fits easily into established clinical processes and treatment procedures of most dental practices. Therefore few things will have to change in your normal routine, from the familiar chamfer or shoulder preparation to the impression, making of the model and easy cementation of the finished crowns and bridges.

You can work with your preferred lab and continue to receive reliable veneering quality from your chosen dental technician. The only difference lies in the production of the framework for the restoration, your lab can delegate this work to a Lava milling centre.

**Benefits:**
- fits easily into established work processes
- work with preferred lab

**Together, the dental practice and laboratory can achieve more**

Any long-term relationship between a dental practice and a laboratory tells its own success story. It represents a value which cannot be quantified yet is essential for the success of your practice. Our goal is to increase this value for you by enhancing the range of possible restorations available from your laboratory using the Lava system.

**Utilising technology without the obstacle of new investment**

Without purchasing equipment or assuming other investment risks your laboratory can take advantage of the latest CAD/CAM technology available at Lava milling centres to optimise its own resources.
Inspiring innovations, comprehensive system solutions

The latest innovations from 3M ESPE will set new standards within your practice and will simplify the entire treatment process by offering a comprehensive system solution. We know that for a precise fitting crown or bridge restoration the taking of accurate impressions is critical for all the subsequent work stages.

In many dental practices worldwide the 3M™ ESPE™ Pentamix™ Mixing Unit has become synonymous with optimal impression results at the touch of a button. Because of their excellent reproduction accuracy, our impression materials are regarded very highly within laboratories.

Perfect integration of work processes between the practice and the laboratory

The ability to produce quality work first time around and to allow perfect integration of work processes between the practice and the laboratory has earned 3M ESPE the trust of dental professionals all over the world who are as committed to dental excellence as we are.
Cementation made easy and reliable

For a cement that is strong, versatile and easy to use, we recommend 3M™ ESPE™ RelyX™ Unicem Self Adhesive Resin Cement. This cement was specifically formulated to be self-adhesive and moisture tolerant, eliminating the need for a separate priming, etching or bonding step. It also greatly reduces the potential for patient sensitivity.

Cementation of 3M™ ESPE™ Lava™ restorations can be accomplished with proven, conventional techniques using any of the following cements from 3M ESPE:

- RelyX™ Unicem Self Adhesive Resin Cement
- RelyX™ Luting Cement
- Ketac™ Cem Glass Ionomer Cement

Cementation technique with RelyX™ Unicem Self Adhesive Resin Cement
For further information please contact 3M ESPE on 01509 613361 (UK) or 01280 3555 (Republic of Ireland) or visit our website at www.3MESPE.com/uk or email us at 3MESPEUK@mmm.com

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