



Centralized  
milling



# 3M™ ESPE™ Lava™ Plus High Translucency Zirconia

High translucent zirconia manufactured by 3M™

Clinically-proven high translucent zirconia for natural-looking full-contour restorations without compromising on strength, translucency or longevity



## TRUE COLORS

Developed specifically for a consistent shade match to a large variety of VITA® Classic shades



## STRENGTH THAT EXCEEDS

Its microstructure gives Lava™ Plus Zirconia not only the inherent high translucency, but also high strength and fracture toughness

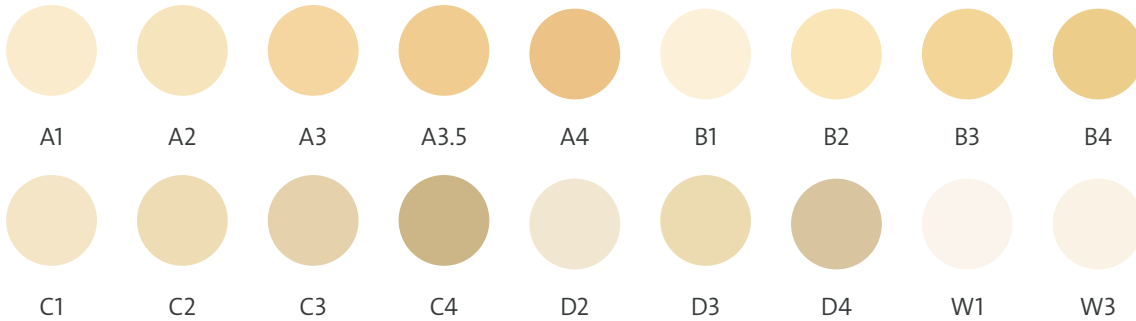


## CLINICALLY PROVEN

Millions of restorations have been produced since the introduction of Lava™ Zirconia with a wealth of scientific data

# Available shades

► 3M™ ESPE™ Lava™ Plus Zirconia restorations (through our CARES® centralized milling solution) are available in 16 high translucent shades (A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3 and D4) and 2 high translucent bleached shades (W1 and W3).



# Available indications

- For final restorations
- For up to full arch

**Recommended indication**  
 Possible indication  
 Not possible indication (n/a)

## TOOTH-BASED

[n/a] Inlay	[n/a] Onlay	[n/a] Veneer	[n/a] Partial crown	 Coping
 Full-contour crown	 Telescopic crown	 Bridge/bar framework	 Full-contour bridge	 Vestibular veneering

## ABUTMENT-BASED (AVAILABLE WITHIN THE CARES® X-STREAM™ SOLUTION)

 Coping on Ti-Base	 Full-contour crown on Ti-Base	 Bridge/bar framework on Ti-Base	 Full-contour bridge on Ti-Base
 Coping on CAD/CAM abutment	 Full-contour crown on CAD/CAM abutment	 Bridge/bar framework on CAD/CAM abutments	 Full-contour bridge on CAD/CAM abutments

# Workflow

STEPS	OPTIONS
Finishing	Polishing <i>Recommendation:</i> <i>Glazing is recommended for best shade match. Use high fusing glazes &gt;900 °C.</i> Layering
Cementing	Adhesive Self-adhesive Conventional <i>Recommendation:</i> - RelyX™ Temp NE or RelyX™ Temp E for temporary cementation - RelyX™ Luting Plus Automix for permanent cementation - RelyX™ Unicem 2 Automix or RelyX™ U200 for permanent self-adhesive cementation

## Chemical composition

ELEMENTS	WEIGHT
ZrO <sub>2</sub> + HfO <sub>2</sub> + Y <sub>2</sub> O <sub>2</sub>	≥ 98.5 %
Y <sub>2</sub> O <sub>2</sub>	> 4.5 to ≤ 6.0 %
HfO <sub>2</sub>	≤ 5 %
Al <sub>2</sub> O <sub>3</sub>	≤ 0.5 %
Other oxides	≤ 1.0 %

## Physical properties

PROPERTIES	VALUE
Material	3Y-TZP
Density [g/cm <sup>3</sup> ]	≥ 6.05
Biaxial flexural strength [MPa]*	> 1000
CTE (25-500 °C) [10 <sup>-6</sup> K <sup>-1</sup> ]	10.5

\*According to ISO 6872

## Preparation guidelines

- ▶ The preparation shall not have angles or sharp edges
- ▶ The shoulder preparation shall be with rounded inner edges and/or chamfer
- ▶ The preparation shall have retentive surfaces for conventional cementation

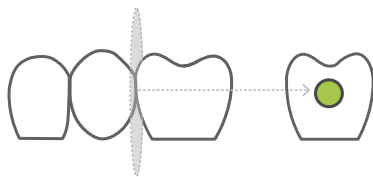
# Wall thickness

## MINIMAL RESTORATION DESIGN



- ≥ 0.5 mm generally
- ≥ 0.3 mm for anterior and primary crowns
- ≥ 0.7 mm when placed on top of abutments

Restoration wall thickness



- ≥ 7 mm<sup>2</sup> up to 2 anterior bridge units
- ≥ 10 mm<sup>2</sup> for more than 2 anterior bridge units
- ≥ 9 mm<sup>2</sup> for posterior bridge units
- ≥ 8 mm<sup>2</sup> for 1 anterior cantilever bridge
- ≥ 12 mm<sup>2</sup> for 1 posterior cantilever bridge

Connector cross-section

## Sterilization

- For restorations bonded to abutments before being placed in the patient's mouth, the product must be sterilized before use. Sterilization according to the following parameters or per instructions for use of the abutment if different.

METHOD	CONDITIONS	DRYING TIME
Moist Heat (Autoclave) Pre-Vacuum Displacement	132 °C / 134 °C (270 °F / 273 °F) for 3 min	Local practice

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