# (Zirlux Transitions



# Transitional Layered Zirconia

that mimics nature and lifelike esthetics without compromising strength



Dental technicians need a zirconia that offers full flexibility and usability without interrupting production and milling workflow. Zirlux Transitions delivers for dental labs who put a high demand on using one premium zirconia for both anterior and posterior restorations.



## Smart Incisal™ Technology provides higher chroma

in the cervical area and decreasing chroma toward the incisal area.

Available in all

16 classic VITA\* shades
plus OM2 bleach shade.

- ✓ 98.5 x 14mm
- ✓ 98.5 x 18mm
- ✓ 98.5 x 22mm

Perfect balance between strength and translucency.

- ✓ 1200 MPa
- √ 48% Translucency

Optimal balance of **strength and translucency** provides total versatility for in-house production.

Save time by nesting and milling anterior and posterior using the same disc for all indications.



"I've been using Zirlux Transitions for about 5 months and loving it. The most esthetic high strength zirconia I've used in my lab. Period"

Kris Schermerhorn, CDT Northern Virginia Dental Lab, Owner





"Instead of having separate discs for high translucency and different discs for strength, with Zirlux Transitions we now have 1 disc that covers both, so we've lowered our inventory by 30%."

Ben Topaz Golden Ceramic Dental Lab, Owner

### **Indications**

- $\checkmark$  Full Contour anterior and posterior crowns, bridges, inlays & onlays
- ✓ Single tooth and bridge frameworks in the anterior and posterior (up to 14 units)



#### **TECHNICAL DATA**†

Coefficient of Thermal Expansion (25-500°C)	10.5 x 10 <sup>-6</sup> /°C
Flexural Strength	1200 MPa
Vickers Hardness (HV10)	< 0.2%
Chemical Solubility	< 1%

† As per ISO 6872:2015



#### **COMPOSITION** (in wt%)

ZrO2	(+HfO2): > 90%
Y2O3	> 7%
Al2O3	< 1%



"The control of the shade change with temperature at the high temp gives technicians more control of the material. The blend from cervical to incisal gives it the lifelike esthetics. Once the temperature of the oven is calibrated the shade of the disc matches the shade guide really well.

The strength gives technicians the option to use the disc from single unit to full hybrid."

Edwin Kee, MCDT, TE Associate Professor at LSU School of Dentistry

## **Sintering Guidelines**

Zirlux® Transitions is a high-performance zirconia with much smaller particle sizes compared to other zirconia discs. This provides many unique benefits such as a higher strength/translucency ratio, higher strength integrity when finishing margins and a smoother, polished-like finish.

To achieve optimal performance and an accurate shade match, you should perform an initial calibration with this material to your oven.

- ✓ Use a ceramic temperature test ring to calibrate your furnace.
  - Measure the ring for actual temperature and adjust your setting (ex. 1500°C).
- ✓ The recommended sintering temperature for a 4:15 minute cycle is 1500° C.
- ✓ If your restoration comes out light after sintering, lower the temperature incrementally by 30 50 °C.

#### The Sintering Temperature Determines Chroma and Value









1400°C 1450°C 1500°C 1550°C

- With higher temperature, chroma will be decreased.
  - Decreased chroma will make white L\* value go up, making the restoration look whitish.
- Different ovens have different temperature profiles, meaning the actual temperature performance inside the heating chamber is different.
  - Temperature adjustment may be needed if the restoration comes out lighter than the shade tab.
- Once you have found the right temperature for your oven for any shade (ex: A2 shade), the remaining shades will be automatically coordinated due to the Zirlux® Transition shade system.







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