## **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
- 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







www.zahndental.com/zirlux-transitions

# (Zirlux Transitions



# Transitional Layered Zirconia

that mimics nature and lifelike esthetics without compromising strength

# **Zirlux Transitions**

# Manufactured different. Performs better.

Zirlux Transitions Zirconia is manufactured with colloidal technology — a premium process not standard in the dental lab industry. The result is zirconia that mills cleaner, fits consistently, and delivers the esthetics today's doctors and patients expect. It provides dental labs with smoother workflows, fewer remakes and restorations you can deliver with confidence.



## 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.



## Fewer dropouts, less waste

Uniformly dense discs eliminate weak spots, reducing chipping and failed units during milling and sintering.

#### Consistent fits, fewer remakes

Even shrinkage across the disc ensures restorations come out the furnace the way they were designed.

## **Premium strength and esthetics**

Smaller, evenly packed particles create crack-resistant zirconia with high translucency and natural beauty.

# Natural esthetics, no visible layers

The colloidal process minimizes lines of demarcation in multilayered restorations, producing smooth shade transitions for lifelike results.



### **Indications**

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



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%

<sup>†</sup> As per ISO 6872:2015



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

′rO2	(+HfO2): > 90%
′2O3	> 7%
AI2O3	< 1%



"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