

# Zirlux 16+ Zirconia Sintering Guidelines



Sintering is a critical step to achieve best esthetics and physical properties of the zirconia. Follow the steps below to ensure Zirlux 16+ Zirconia restorations are processed correctly and that you are providing the patient with the best possible restoration.

#### It is essential to follow these steps and the instructions for the specific sintering furnace you are using:

- 1. Remove any dust from the milled green state restoration(s) with oil-free, dry compressed air before sintering.
- 2. Follow with a firm brush to remove all debris from the crown
  - If after sintering you notice a white spotted finish, the green state zirconia cleaning was incomplete.
- 3. Position the restoration on the sintering crucible leaving space between each unit
- 4. Program your furnace according to the instructions for use.
- 5. Run the sintering cycle.
- 6. Wait until cool-down is completed before removing the sintered restoration.
- 7. Inspect the restoration for flaws such as chips, seating, occlusion, interproximal contacts, and marginal integrity.
- 8. If necessary, make small adjustments with a water-cooled diamond bur using a high-speed handpiece.
- 9. Once all grinding is complete, steam clean the Zirlux 16+ Zirconia restoration and allow to dry.
- 10. Polish all occlusal contacts with a rubber wheel prior to stain and glaze.
- 11. Follow the IFU of the stain and glaze system of choice for application and firing parameters.





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# **Pre-Shaded**

# 4 Step Sintering for Zirlux 16+

| Program Steps | Starting Temperature (°C/Min) | Final Temperature (°C/Min) | Retention Time Min. | Heating Rate (°C/Min) |
|---------------|-------------------------------|----------------------------|---------------------|-----------------------|
| 1             | Room Temperature              | 1200                       | 30                  | 5                     |
| 2             | 1200                          | 1530                       | 0                   | 2                     |
| 3             | 1530                          | 1530                       | 120                 | 0                     |
| 4             | 1530                          | 100                        | Furnace Cooling     |                       |

# 7 Step Sintering for Zirlux 16+

| Program Steps | Starting Temperature (°C/Min) | Final Temperature (°C/Min) | Time Min.       | Heating Rate (°C/Min) |
|---------------|-------------------------------|----------------------------|-----------------|-----------------------|
| 1             | Room Temperature              | 1200                       | 137.5           | 8                     |
| 2             | 1200                          | 1200                       | 30              | 0                     |
| 3             | 1200                          | 1400                       | 100             | 2                     |
| 4             | 1400                          | 1530                       | 32.5            | 4                     |
| 5             | 1530                          | 1530                       | 120             | 0                     |
| 6             | 1530                          | 800                        | 91.25           | -8                    |
| 7             | 800                           | 150                        | Natural Cooling |                       |

# White

# 6 Step Sintering for Zirlux 16+

| Program Steps | Starting Tempurature (°C/Min) | Final Tempurature (°C/Min) | Time Min.       | Heating Rate (°C/Min) |
|---------------|-------------------------------|----------------------------|-----------------|-----------------------|
| 1             | 100                           | 500                        | 160             | 2.5                   |
| 2             | 500                           | 1000                       | 62.5            | 8                     |
| 3             | 1000                          | 1530                       | 132.5           | 4                     |
| 4             | 1530                          | 1530                       | 120             | 0                     |
| 5             | 1530                          | 800                        | 91.25           | -8                    |
| 6             | 800                           | 150                        | Natural Cooling |                       |

Always refer to the manufacturer's instructions for proper use and placement of the material.

