# CEREC Tessera<sup>™</sup> Advanced Lithium Disilicate



Processing Guide



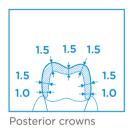
# CEREC Tessera<sup>™</sup> Advanced Lithium Disilicate

CEREC Tessera™ Advanced Lithium Disilicate is a restorative material specifically designed to fabricate restorations using an in-office CAD/CAM workflow. CEREC Tessera™ Restorations are matrix-fired in just 4 minutes 30 seconds using the CEREC SpeedFire Furnace for increased efficiency.

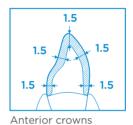
# PREPARATION GUIDELINES

Crowns fabricated from CEREC Tessera™ blocks may be conventionally cemented using resin-modified glass ionomer cements or may be bonded using adhesive resin cements or self-adhesive universal resin cements such as those found within the Dentsply Sirona Calibra® family of cements. To ensure optimal restoration success, follow the tooth preparation guidelines below. In all cases, inlays, onlays or veneers must be placed using a fully adhesive bonding protocol.

# Minimum Wall Thickness (Conventional Cementation with RMGI Cements\*)

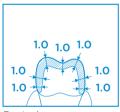


\*Taper between 4° and 8° minimum coronal length: 4.0 mm Round internal line angles

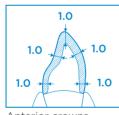


\*Taper between 4° and 8° minimum coronal length: 4.0 mm Round internal line angles

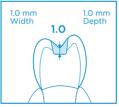
# **Minimum Wall Thickness (Adhesive Bonding)**



Posterior crowns



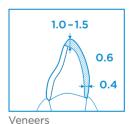
Anterior crowns



Inlays



Onlays



### Crowns

- Axial reduction of 1.0 to 1.5 mm.
- Wall angles 4 8 degrees with the long axis of the tooth.
- · Centric and dynamic occlusion, reduce incisally/occlusally by 1.5 mm.
- Lingual shoulders extended at least 1.0 mm into the proximal contacts surfaces.
- Shoulder preparation without a bevel with all angles rounded.
- · Smooth all surfaces.

### Inlays/Onlays

- Preparation should be free of undercuts, exhibiting a draw.
- · All internal line angles should be rounded.
- · Minimum 1.0 mm preparation depth in the central fossa.
- Ensure margins are placed clear of occlusal contact points.
- Use adhesive bonding.

### Veneers

- Reduce to 0.6 mm for the labial surface and 0.4 mm in the gingival area.
- · Reduce the labiolingual incisal angle by 1.0 to 1.5 mm.
- · Locate margins in enamel.
- Use chamfer or rounded-shoulder preparation.
- Locate proximal extensions proximally to conceal preparation margins and to avoid proximal gingival undercuts.
- · Use adhesive bonding.

# **GLAZING AND FIRING**

- While the restoration is milling, pre-heat the CEREC SpeedFire furnace by pressing the "pre-heat" button (lower left section of the control screen). The oven will begin pre-heating to 400°C (taking approximately 1 minute).
- Prior to glazing, the restoration must be clean and free of oil and other surface contaminants. Clean the surface of the restoration with a steam cleaner or clean thoroughly for 30 seconds with cleaning liquid and water. Any contamination after cleaning must be prevented.



### Spray or Paste Glaze only

- The Dentsply Sirona Universal Spray Glaze or Dentsply Sirona Universal Overglaze are recommended.
- Apply a thin, even coat of glaze to all sides of the restoration.
- Ensure glaze does not get on the intaglio surface by blocking out with moldable silicone or similar material.
- Note that glaze must be applied to the CEREC Tessera restoration prior to firing.
- Air dry for 10 seconds.
- Apply a second coat if needed.

### Stains and Spray Glaze

- Apply stain to restoration as desired.
- Apply a thin, even coat of glaze to all sides of the restoration.
- Ensure glaze does not get on the intaglio surface



by blocking out with moldable silicone or similar material.

- Note that glaze must be applied to the CEREC Tessera restoration prior to firing.
- Air dry for 10 seconds.
- Apply a second coat if needed.

Note: glazes and stains by third-party manufacturers may require other firing temperature and cycles than those recommended for CEREC Tessera CAD/CAM blocks

### Firing Directions:

- Ensure the restoration is centered in the SpeedFire stage.
- Note that only one (1) restoration at a time may be processed in the CEREC SpeedFire.

### For Firing Pad Firing:

- Place the stained and/or glazed restoration on the firing pad, select the job from the control menu of the CEREC SpeedFire and press "Start".
- If processing an anterior restoration, place the restoration with the lingual side down on the firing pad. With premolars, place the restoration with the interproximal in contact with the firing pad.
- If any imperfections exist on the restoration after firing, they can be corrected by polishing.

### For Pin Supported Firing:

- Use only Dentsply Sirona Investment Pins (REF# 5365490111).
- Do not use other support devices or refractory putties or processing failure may occur.
- Do not use investment pins with Dentsply Sirona honeycomb or firing pads.



Correct Placement and Position of CEREC Tessera Restoration





### General firing parameters for third-party ovens:

CEREC Tessera™ firing programs will have to be added to specific oven programs

### Programat CS2, EP 5000/5010

11091411141 602, 21 0000, 0010											
	Standby Temperature B	Closing time S	Heating rate t个	Firing temperature T	Holding time H	Vacuum on/off	Long-term Cooling L				
	°C	min	°C/min	°C	min	Vac 1 (°C), Vac 2 (°C)	°C				
Paint-On Glaze (only)	400	3:30	60	760	1:30	off	0				
2nd & Subsequent Glaze Firing – if needed	400	3:30	60	760	1:30	off	0				
Spray Glaze	400	2:00	60	760	1:30	off	0				
Stain and Spray Glaze	400	3:00	60	760	1:30	off	0				

### **General Firing Recommendation**

	Start Temperature	Closing time	Preheating time	Heating rate	Final temperature	Holding time	VAC				
	°C	min	min	°C/min	°C	min	min				
Paint-On Glaze (only)	400	2:00	2:00	55	760	2:00	_				
2nd & Subsequent Glaze Firing - if needed	400	2:00	2:00	55	760	2:00	_				
Spray Glaze	400	1:00	1:00	55	760	2:00	_				
Stain and Spray Glaze	400	2:00	1:00	55	760	2:00	_				

Note: Please visit www.dentsplysirona.com/CERECTessera for other furnace firing programs

CEREC Tessera™ blocks can be adhesively bonded or conventionally cemented based on the prep guidelines

# ADHESIVE CEMENTATION with Calibra® Ceram Cement and Prime&Bond Adhesive\*



Apply and agitate Prime&Bond adhesive for 20 Seconds, then evaporate solvent.\*\*(Phosphoric Etching is optional) Carefully etch the internal surfaces of the restoration for 30 seconds with 5% hydrofluoric acid, then rinse thoroughly and apply Calibra\* Silane Coupling Agent. Apply Calibra® CeramAdhesive Resin Seat restoration. Briefly light cure cement at the margins by moving the curing light tip in a constant motion around the margins for no more than 5 seconds per surface to initiate the gel phase. Clean up excess cement.

to avoid any movements,

rubber-like consistency.

until the cement reaches a

For final polymerization, light cure all areas of the restoration for 20 seconds total (buccal, lingual, and occlusal).

reached the rubber-like

2 minutes after seating

consistency, approximately

Polish the margins to ensure a smooth surface and impart a high luster.

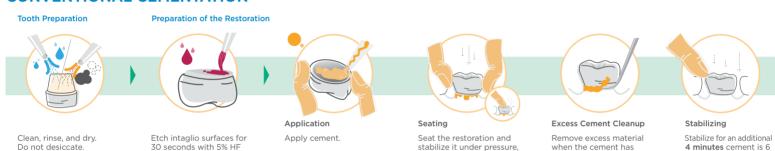
minutes afer insertion.

of mix).

(6-8 minutes from start

- \* Prime&Bond elect\*, Prime&Bond Universal™ or Prime&Bond active\* Adhesive.
- \*\* For restorations thicker than 2.5 mm, cure adhesive prior to seating the restoration.

### **CONVENTIONAL CEMENTATION**



**Note:** Do not use any pre-treatment agents, eg, silanes, primers, or bonding agents when using Calibra® Bio cement. Use of any such pre-treatments will destroy the bond between cement and restoration. Adhesive



Isolate with cotton rolls.



©2021 Dentsply Sirona, Inc. All rights reserved. 50540012 / REV 2021-5

Programat and Indenco are not products of Dentsply Sirona and are trademarks of their respective companies.

