

VITA Rapid Layer Technology

Working Instructions



VITA shade taking

VITA shade communication

VITA shade reproduction

VITA shade control

Date of issue 11.11

VITA shade, VITA made.

VITA

Description	3
Advantages	4
Indication and contraindication	5
Processing requirements	6
Block and shade concept	7
Preparation guidelines and ceramic layer thicknesses	8
Design	9
Fitting and reworking	12
Shade characterization / individualization	13
Adhesive bonding	14
Removal of excess and polishing	17
Clinical fixation	18
Assortments and accessories	19
Literature	22
Safety information	23



Sirona CEREC AC system



Sirona inLab MC XL system

Information about the CEREC and inLab systems is available from:

Sirona Dental Systems GmbH
Fabrikstraße 31 · D-64625 Bensheim

email: contact@sirona.de
www.sirona.com

sirona

VITA Rapid Layer Technology and its advantages

The Rapid Layer Technology ensures extremely efficient and simple fabrication of all-ceramic bridges and crowns by using a sophisticated combination of the innovative Sirona inLab 3D software $\geq V 3.80$ and ceramics from VITA which have proven their clinical reliability a million times over.

Achieving the result in three processing steps

First step

Following a single scanning process, a fully anatomical bridge or crown is fabricated using the Sirona inLab MX XL system or the CEREC 3 or CEREC AC scanner by means of patented Biogenerics. The software automatically separates these fully anatomical restorations into a corresponding framework with defined optimal layer thickness and anatomically reduced geometry, which is free from undercuts, and a veneer structure which also exhibits defined minimum layer thicknesses. Then the framework (primary structure) is milled from VITA In-Ceram YZ zirconium oxide blanks and sintered in the high-temperature sintering furnace VITA Zyrcomat.

Second step

Then the morphological veneer structure (secondary structure) is milled from the VITABLOCS TriLuxe forte blocks which consist of the esthetic, antagonist-friendly and clinically proven VITABLOCS fine-structure feldspar ceramic. As a result, two structures are obtained that are matched and bonded to one another.

Third step

In the final processing step, the veneer structure made of silicate ceramic is firmly and definitively bonded to the framework structure using standard bonding composites. As a result, high-strength and esthetic bridges and crowns are obtained, which enable perfect morphological and functional integration into the residual dentition.



Advantages

- Use of biogeneric occlusal surface design for crowns and bridges which is superior to manual waxing. Occlusal surfaces can also be restored with patient-specific occlusal morphology.
- Integration into the individual residual tooth substance or dentition is achieved.
- By taking patient-specific biomechanics and function into account, proper occlusion/articulation is achieved and time-consuming fitting is avoided during chairside integration.
- Use of ceramics which have proven their clinical reliability a million times over both for the framework and the veneer structure.
- High clinical reliability of the restorations thanks to the use of industrially prefabricated defect-free and homogeneous blanks.
- Very simple and firm bonding of the veneer structure to the framework without the use of special devices such as furnaces, etc.
- The composite eliminates stress between zirconium oxide framework and veneer structure.
- Software ensures that minimum ceramic layer thicknesses of the framework and the veneer structure are always adhered to.
- Highly efficient use of CAD/CAM technology for the veneer. As a result, better utilization of the inLab system is ensured.
- Manual processing time is replaced by machine time. This leads to reduction of production costs per unit.

Indication - general

Highly esthetic single crowns in the anterior and posterior areas and bridge restorations in the posterior area can be fabricated using the VITA Rapid Layer Technology.




Indication - dentist

Single crowns and bridges with up to four units (limited by the scanning range and the block size).

Indication - laboratory

Single crowns and bridges with up to four units (limited by the size of the blocks).

Overview of indications

VITA Rapid Layer Technology			
	Anterior crowns 	Posterior crowns 	Posterior bridges 
Dentist	●	●	●
Laboratory	●	●	●

● recommended

Contraindication:

General

- Insufficient oral hygiene
- Inadequate preparation
- Insufficient hard tooth substance
- Insufficient space available

Hyperfunction

- Restorations with occlusal surfaces made of VITABLOCS fine-structure feldspar ceramic are contraindicated for patients diagnosed with excessive masticatory functions; in particular, teeth grinders and clenchers.

⚠ Important information:

For adequate strength, the VITABLOCS for the fabrication of bridges must not be used for the fabrication of bridges without supporting zirconium oxide framework.

Processing requirements for the VITA Rapid Layer Technology

Hardware requirements:

Veneer structures made of VITABLOCS for the **Rapid Layer Technology** can only be processed with the inLab and CEREC **MC XL milling systems**.

A high-temperature sintering furnace, such as VITA ZYrcomat, is required for sintering the zirconium oxide frameworks.






⚠ Important information:

If a high-temperature furnace is not available in a practice or laboratory, the zirconium oxide framework can also be ordered from a dental laboratory.


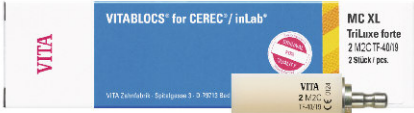

Software requirements:

- Sirona inLab 3D ≥ V3.80 Software

Milling instruments

Required milling instruments		
Framework structure	left	right
VITA In-Ceram YZ	 Step Bur 20 REF 6259597	 Cylinder Pointed Bur 20 REF 6259589
Veneer structure VITABLOCS TriLuxe forte	 Step Bur 12 REF 6260025	 Cylinder Pointed Bur 12S REF 6240159
	 Step Bur 12S REF 6240167	
Dentatec Mixture	75 ml per tank filling	

REF = Sirona Prod. No.

Material	Framework structure with VITA In-Ceram YZ High-performance ceramic	Veneer structure with VITABLOCS Fine-structure feldspar ceramic																																		
	<p>VITA In-Ceram YZ-40/19</p> 	<p>VITABLOCS TriLuxe forte TF-40/19 (multichromatic)</p>  <p>VITABLOCS Mark II I-40/19 (monochromatic)</p> 																																		
Designation and sizes of blanks (in mm)	<p>Bridge:</p> <table border="0"> <tr><td>YZ-40/15</td><td>(14 x 15 x 40)</td></tr> <tr><td>YZ-40/19</td><td>(15.5 x 19 x 39)</td></tr> <tr><td>YZ-55</td><td>(15.5 x 19 x 55)</td></tr> <tr><td>YZ-65/25</td><td>(22 x 25 x 65)</td></tr> <tr><td>YZ-65/40</td><td>(22 x 40 x 65)</td></tr> <tr><td>YZ-65/40s</td><td>(17 x 40 x 65)*</td></tr> <tr><td>YZ-85/40</td><td>(22 x 40 x 85)</td></tr> </table> <p>Crown:</p> <table border="0"> <tr><td>YZ-14</td><td>(13 x 13 x 14)</td></tr> <tr><td>YZ-20/15</td><td>(14 x 15 x 20)</td></tr> <tr><td>YZ-20/19</td><td>(15.5 x 19 x 20)</td></tr> </table>	YZ-40/15	(14 x 15 x 40)	YZ-40/19	(15.5 x 19 x 39)	YZ-55	(15.5 x 19 x 55)	YZ-65/25	(22 x 25 x 65)	YZ-65/40	(22 x 40 x 65)	YZ-65/40s	(17 x 40 x 65)*	YZ-85/40	(22 x 40 x 85)	YZ-14	(13 x 13 x 14)	YZ-20/15	(14 x 15 x 20)	YZ-20/19	(15.5 x 19 x 20)	<p>Bridge:</p> <table border="0"> <tr><td>TF-40/19</td><td>(15.5 x 19 x 39)</td></tr> <tr><td>I-40/19</td><td>(15.5 x 19 x 39)</td></tr> </table> <p>Crown:</p> <table border="0"> <tr><td>TF-12</td><td>(10 x 12 x 15)</td></tr> <tr><td>TF-14</td><td>(12 x 14 x 15)</td></tr> <tr><td>TF-14/14</td><td>(14 x 14 x 18)</td></tr> <tr><td>I-12</td><td>(10 x 12 x 15)</td></tr> <tr><td>I-14</td><td>(12 x 14 x 18)</td></tr> </table>	TF-40/19	(15.5 x 19 x 39)	I-40/19	(15.5 x 19 x 39)	TF-12	(10 x 12 x 15)	TF-14	(12 x 14 x 15)	TF-14/14	(14 x 14 x 18)	I-12	(10 x 12 x 15)	I-14	(12 x 14 x 18)
YZ-40/15	(14 x 15 x 40)																																			
YZ-40/19	(15.5 x 19 x 39)																																			
YZ-55	(15.5 x 19 x 55)																																			
YZ-65/25	(22 x 25 x 65)																																			
YZ-65/40	(22 x 40 x 65)																																			
YZ-65/40s	(17 x 40 x 65)*																																			
YZ-85/40	(22 x 40 x 85)																																			
YZ-14	(13 x 13 x 14)																																			
YZ-20/15	(14 x 15 x 20)																																			
YZ-20/19	(15.5 x 19 x 20)																																			
TF-40/19	(15.5 x 19 x 39)																																			
I-40/19	(15.5 x 19 x 39)																																			
TF-12	(10 x 12 x 15)																																			
TF-14	(12 x 14 x 15)																																			
TF-14/14	(14 x 14 x 18)																																			
I-12	(10 x 12 x 15)																																			
I-14	(12 x 14 x 18)																																			
Available blank shades	<p>– Non-colored</p> <p>– Precolored, LL1p</p>	<p>TriLuxe forte: 1M2C, 2M2C, 3M2C A1C*, A2C*, A3C*</p> <p>Mark II: 1M1C, 1M2C, 2M2C, 3M2C A1C*, A2C*, A3C*</p>																																		
Shade characterization	YZ COLORING LIQUIDS	VITA AKZENT VITA SHADING PASTE																																		
Individualization	–	VITA VM 9																																		

* Crown blocks only



Selection of block shade / coloring of framework

Influence of the framework shade on bridges fabricated using the Rapid Layer Technology

The bridges shown in the picture were all milled from a veneer structure block in the shade 2M2C.

From left to right:
VITA In-Ceram YZ framework, colored with the different COLORING LIQUIDS and non-colored.

Preparation guidelines

- The usual preparation guidelines for all-ceramic restorations are applicable. See also the brochure, "Clinical aspects in the field of all-ceramics", No. 1696.

Ceramic layer thickness

- To ensure lasting clinical success of restorations fabricated using the VITA Rapid Layer Technology, the correct minimum ceramic layer thicknesses of framework structure and veneer structure are included in the inLab software \geq V3.80.

Design - step-by-step

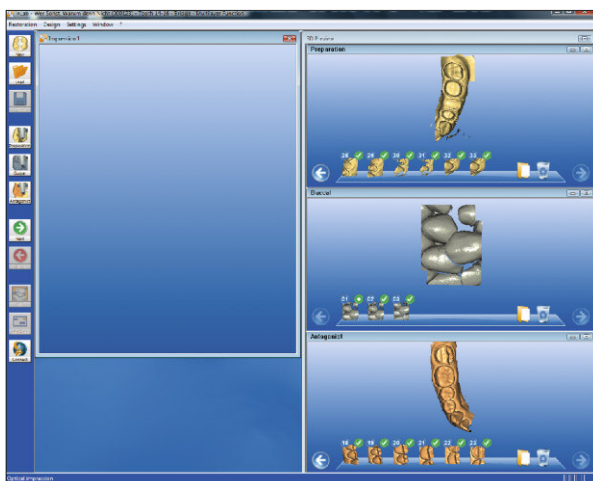
- Fabrication of the restoration using the inLab 3D \geq V3.80 software.

Recommended parameters

Spacer:

Framework structure on the preparation: No change compared to standard framework

Framework structure - veneer structure: + 60 μ m

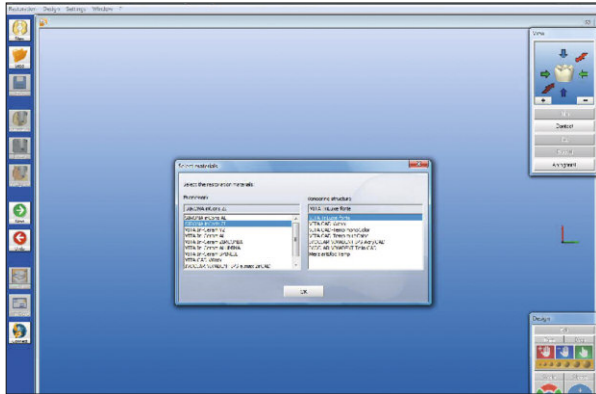


Selecting the restoration type

Select "bridge", for example, as restoration type in the new dialog and select the "Multilayer" design method to obtain a fully anatomical suggestion which is calculated based on the adjacent teeth using the patented method of Biogenerics.

Scan - Preparation

Scan of the preparation (of antagonist, if required) and other scans depending on the selected bite registration technique in the usual way.



Selection of materials

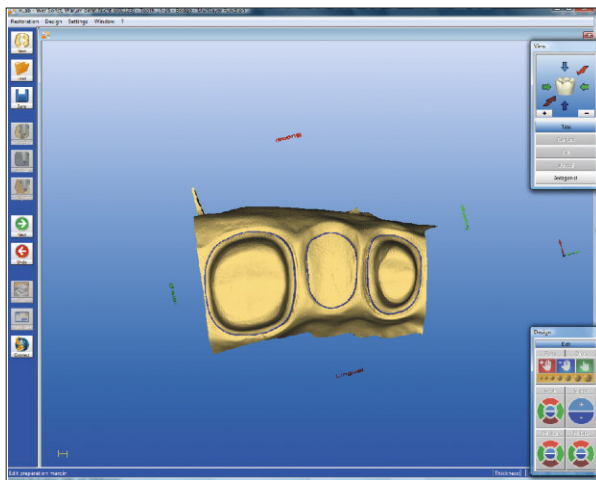
After calculation of the model in the material selection menu, select VITA In-Ceram YZ for the framework structure and TriLuxe forte TF-40/19 or Mark II I-40/19 for the veneer structure.

Checking the material thicknesses

Use the thickness measurement to check all material thicknesses of the reduction. When using the "Cut" tool, the cut surface is displayed in the status bar. Verify the connector thickness.

Trimming the model

Trim the model and, if available, the antagonist.



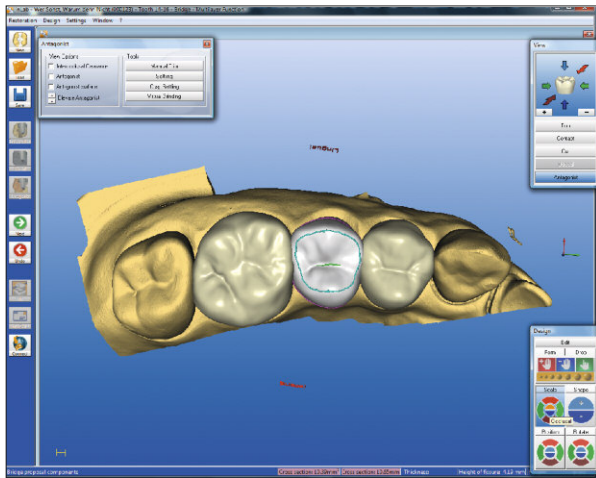
Drawing the preparation margins and base lines

Note:

When using the Rapid Layer Technology, the base line must always be drawn somewhat larger than normally designed for a fully anatomical bridge made of VITA CAD-Temp, for example.

Adjusting the lingual opening angle

The "Lingual opening angle" parameter is used to adjust the lingual side of the pontic to ensure easy access during cleaning. This parameter must be set before the initial suggestion is calculated.



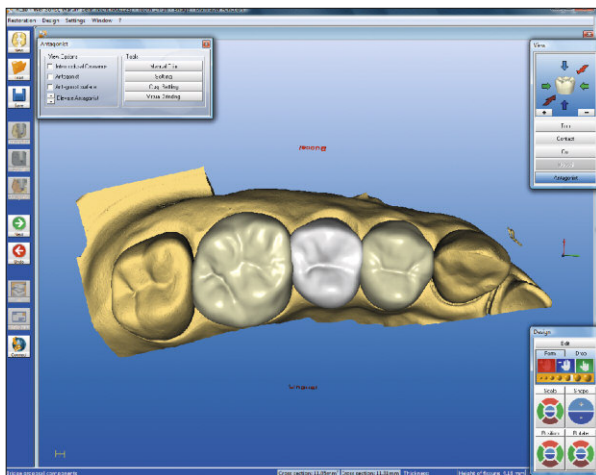
Adjusting the insertion axis

The initial suggestion is calculated after adjusting the insertion axis. The suggestion can be varied individually using the familiar tools.

Note:
A sufficiently large connector cross section must be designed for bridges!

The connector cross sections belonging to each active tooth position are displayed in the status bar.

As soon as a connector cross section is chosen too small, the corresponding field in the status bar is colored red on the lower edge of the picture. Select the "Contact" button for precise control of the connector in the view window.



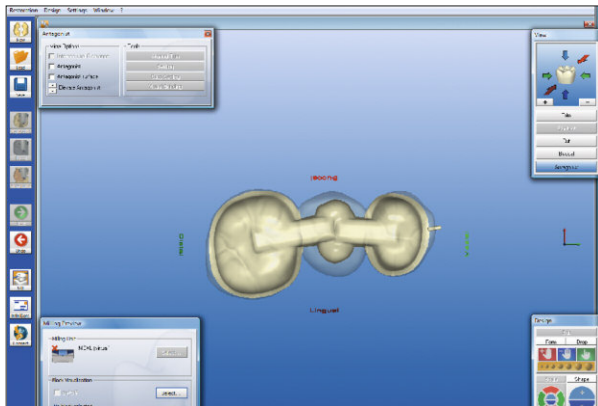
Ceramic layer thicknesses and connector cross-sections

Please note the minimum layer thicknesses and minimum connector cross-sections (in mm or mm²) entered in the software.

Minimum layer thicknesses		Crown	Posterior bridge	
VITA In-Ceram YZ Framework structure	occlusal	0.7	0.7	
	circumferential	0.5	0.5	
VITABLOCS Veneer structure	bottom of the fissure	1.0	1.0	
	circumferential	1.0	1.0	
Minimum connector cross-sections	-		1 pontic	2 pontics
			9	12

As soon as a change is made to the milling preview, the restoration is graphically broken down into a framework structure and a veneer structure situated above it whilst the minimum layer thicknesses and minimum connector cross-sections are being adhered to.

Note:
The proposal of the framework structure generated by the software should not be edited in order to guarantee perfect fit with the veneer structure.



Milling preview with framework substructure free from undercuts and schematic view of veneering structure.

Milling the framework structure

Click the "Mill" icon to start the milling process for the framework.

Milling the veneer structure

In the milling preview select the menu item "Edit veneer structure" in the "Design" menu.

The inLab 3D software is opened again and the veneer structure is loaded in the milling preview.



Completely milled veneer and framework structures before removal of the mandrel.



The pin needs to be removed carefully using a diamond instrument. Make sure to preserve the cervical shoulder; avoid removing too much material and deforming the veneer structure.

Tip:

Use calipers to measure the thickness of the adjacent areas and reduce the thickness below the pin to the level of the adjacent areas.



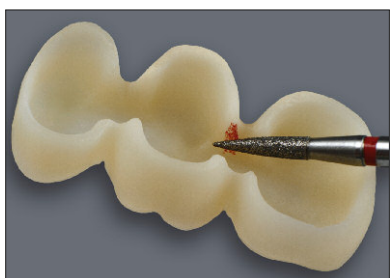
The veneer structure and the framework structure may only come into contact at the cervical margin.

Sintering the zirconium oxide framework structure

Please sinter the framework made of VITA In-Ceram YZ in accordance with the instructions in the working instructions No. 1128.

Coloring the frameworks with VITA In-Ceram YZ COLORING LIQUID

Especially in the framework shoulder it is indicated in many cases to color it in order to achieve a more harmonious color transition between the framework and veneer structure.



Fitting and reworking the veneer structure

- Use lipstick, control pastes or occlusion spray (e.g. Occluspray, Hager & Werken) to ensure careful and accurate positioning of the veneer structure on the framework and **exert little pressure only**.



- Perfect fit must be ensured.
- Use highly flowable silicone (e.g. Fit Checker, GC) to prepare a sample to check the fit.
- Only fine-grit diamond abrasive tools (40 µm) should be used for recontouring.
- In the Rapid Layer Technology, the morphology of the veneer structure is created using Biogenerics and therefore manual reworking is often not required.



- The following must be observed for manual reworking:
Do not use tungsten carbide instruments. Diamond burs are recommended to avoid damaging the ceramic.
- Veneer structure after manual reworking.

⚠ Important information:

Since dust is formed when grinding sintered dental ceramic products, always wear a face mask.

Additionally, it is recommended to work behind a safety shield and use an extraction unit.



Shade control

To check the esthetic result (try-in of the bisque bake) prior to adhesive bonding of both structures, it is recommended to use try-in paste (VITA OXY-PREVENT) to place the veneer structure onto the framework. This can also be done in situ. Then the shade result can be adjusted if necessary.



Shade characterization / individualization of the veneer structure

⚠ Important information:

Since composite is used to bond the veneer structure to the framework, any characterization of the shade (stain and glaze technique) or individualization (layering technique) of the veneer structure must be carried out before bonding the veneer to the zirconium oxide framework!
It is recommended to apply a thin coat of glaze material to the base surfaces of the framework prior to bonding.



Use VITA AKZENT or VITA SHADING PASTE stains for surface characterization (staining technique).

If required, individualization can also be carried out using VITA VM 9 (layering technique).

Please observe the Working Instructions No. 1455 VITABLOCS for CEREC/inLab.

Tip:

A harmonious cervical color transition from the veneer structure towards the framework structure can be achieved by placing the veneer structure onto the framework structure and then painting the cervical margin of the framework.





⚠ Important information:

Remove the veneer structure again prior to firing and fire separately (not together with the framework structure).

Overview of firing programs recommended for characterization (staining technique)

Firing programs	Predr. °C	→ min.	↗ min.	↗ °C/min.	Temp. approx. °C	→ min.	VAC min.
Stains fixation firing with SHADING PASTE / AKZENT	500	4.00	4.45	80	880	1.00	–
Glaze firing SHADING PASTE / SHADING PASTE Glaze / AKZENT / AKZENT Glaze / AKZENT Glaze Spray / AKZENT finishing agent	500	4.00	5.37	80	950	1.00	–

Overview of firing programs recommended for individualization (layering technique)

Firing programs	Predr. °C	 min.	 min.	 °C/min.	Temp. approx. °C	 min.	VAC min.
Stains fixation firing with SHADING PASTE / VITA AKZENT	500	4.00	4.45	80	880	1.00	–
1 st individualization firing VM 9	500	6.00	7.49	55	930	1.00	7.49
2 nd individualization firing VM 9	500	6.00	7.38	55	920	1.00	7.38
Glaze firing SHADING PASTE / SHADING PASTE Glaze / AKZENT / AKZENT Glaze / AKZENT Glaze Spray / AKZENT finishing agent	500	4.00	5.15	80	920	1.00	–
Glaze firing GLAZE LT Powder	500	4.00	3.30	80	780	1.00	–
Glaze firing GLAZE LT Paste	500	6.00	3.30	80	780	1.00	–
Corrective firing with VM 9 COR	500	4.00	4.40	60	780	1.00	4.40

Adhesive bonding of veneer structure and framework

Important information:

The framework and the veneer structure must be bonded outside the mouth before the restorations are inserted in situ.

When working, wear suitable eye/face protection and protective gloves.

Please observe the processing instructions of the manufacturers of the recommended composites.

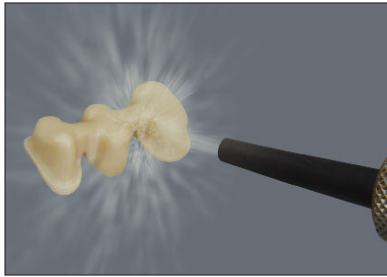


Recommended composites

Adhesive bonding	Phosphate-modified composite	Self-adhesive composite
Product name	PANAVIA 21 PANAVIA F 2.0	RelyX Unicem 2 Clicker
Shade	TC	Transluzent or A2 Universal
Polymerization	– self-curing (anaerob) – dual-curing (anaerob)	– self-curing – dual-curing

PANAVIA® is a registered trademark of KURARAY Medical Inc., Japan

RelyX® Unicem 2 Clicker® is a registered trademark of 3M ESPE Dental AG, Seefeld, Germany



Step-by-step procedure

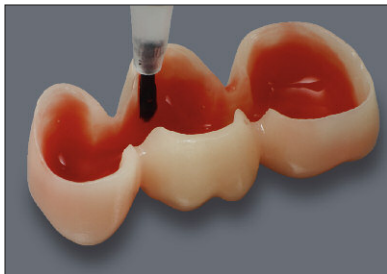
Conditioning - zirconium oxide framework

Sandblast the outer surfaces with Al_2O_3 (max. 50 μm) at a pressure of max. 2.5 bar.

Conditioning - veneer structure

Cleaning

Clean carefully; if required, degrease with alcohol and dry with oil-free air.



Etching with hydrofluoric acid gel

Use a disposable brush to apply VITA CERAMICS ETCH (hydrofluoric acid gel, 5 %) to the inner surfaces. Etching time: 60 sec

Removal of hydrofluoric acid gel

Acid residues may be removed by spraying for 60 sec or by cleaning in the ultrasonic bath.

Dry for 20 seconds.

Do not brush off to avoid the risk of contamination!

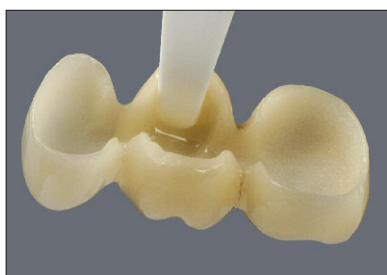
After drying, the etched surfaces appear whitish opaque.



Silanizing

Apply silane (e.g. VITASIL) to the etched surfaces.

Allow to evaporate completely.



Application of composite

Apply a thin coat of composite into the veneer structure using a spatula or a microbrush.



Then exert slight but uniform pressure to insert the zirconium framework into the veneer structure.

⚠ Important information:

Work with excess. The composite must ooze out at the shoulder (circular) and between the veneer and the framework structure (pontic base) to achieve homogeneous, bubble-free and firm bonding between the veneer and the framework structure, which is essential for the permanent strength of the restoration.



Removal of excess

Remove large excesses using a scaler, disposable brush or foam pellet. Leave small excesses to avoid deficits caused by the oxygen inhibition layer on the surface of the composite after curing and reworking.

Alternative procedure for RelyX Unicem2: cover composite with glycerine gel to avoid the formation of an oxygen inhibition layer on the surface.

VITA recommends the following procedure:

	PANAVIA 21	PANAVIA F 2.0	RelyX Unicem 2 Clicker
Type of curing	anaerobic self-curing Application of Oxyguard II is essential	anaerobic dual-curing Without light-curing application of Oxyguard II is essential	Self-curing Application of glycerol gel is recommended
Mixing (at 25°C)	20 - 30 seconds	20 - 30 seconds	20 seconds
Working time (at 25°C)	max. 4 minutes	max. 3 minutes	2 minutes ¹⁾
Curing	> 10 minutes (without ED Primer)	> 10 minutes (without ED Primer II)	Start of curing: 2 minutes after beginning of mixing Curing: > 10 minutes ¹⁾

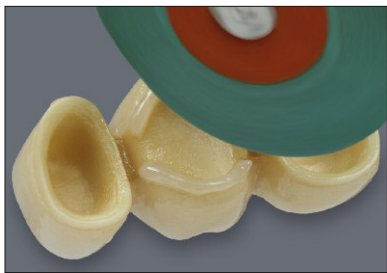
¹⁾ Working and curing times are based on room and intraoral temperature. The stated times are based on normal working conditions in a dental practice. As with all composite cements, the curing process for RelyX Unicem 2 takes significantly longer at room temperature. Working time can be considerably reduced when applying the material under a dental operatory light!

Important!
Keep restoration firmly pressed together during curing time!

Tip: During the curing phase the restoration can also be fixed with a clothes peg.



- Carefully remove excess composite from the shoulders and the base using fine diamond tools (max. 40 μm) and diamond-coated rubber polishers. Smooth transitions must be ensured to avoid irritation of the gingiva in situ.
- Use finishing diamonds (8 μm) for prepolishing.
- Use polishing brushes and diamond polishing paste (e.g. VITA Karat diamond polishing paste) for final polishing.



- A high-luster polish of the pontic base zirconium oxide surfaces of the bridge units is important since they are not covered by the veneer structure unless a glaze layer was fired on prior to adhesive bonding!



Completed and characterized bridge, teeth 15-17, which was fabricated using the VITA Rapid Layer Technology.

Clinical fixation of the restoration

The following fixation materials (cements/composites) are used for clinical fixation of restorations fabricated using the VITA Rapid Layer Technology:

Type of fixation	Conventional	Adhesive*	
Materials	Glass ionomer cements	Phosphate-modified composites	Self-adhesive composite
Examples of products	Ketac Cem (3M ESPE) Fuji I (GC)	PANAVIA 21 PANAVIA F 2.0 (Kuraray)	RelyX Unicem 2 Clicker RelyX Unicem 2 Automix (3M ESPE)
Recommended shades of the fixation material	Standard shade	TC	Translucent or A2 Universal

* Recommended for preparations shorter than 4 mm

We recommend to sandblast the bonding surfaces with Al₂O₃ (max. 50 µm) at a pressure of less than 2.5 bar prior to adhesive bonding.

Note:

Please observe the processing instructions of the manufacturers of the respective products.

PANAVIA® is a registered trademark of KURARAY CO., LTD, Japan
RelyX® Unicem Clicker® and Ketac® Cem are registered trademarks of 3M ESPE Dental AG, Seefeld, Germany

Important information:

After adhesive bonding, the restoration should not be fired any longer (e.g. glaze firing). If the restoration needs to be ground in situ, it must be carefully polished again.



VITABLOCS TriLux forte

for the fabrication of veneer structures with up to four units using the VITA Rapid Layer Technology

Dimensions: 15.5 x 19 x 39 mm

Designation: TF-40/19

Pack cont. 2 pieces

Prod. No. EC41**M2**TF40192

EC42**M2**TF40192

EC43**M2**TF40192



VITABLOCS Mark II

for the fabrication of veneer structures with up to four units using the VITA Rapid Layer Technology

Dimensions: 15.5 x 19 x 39 mm

Designation: I-40/19

Pack cont. 2 pieces

Prod. No. EC41**M1**CI40192

EC41**M2**CI40192

EC42**M2**CI40192

EC43**M2**CI40192



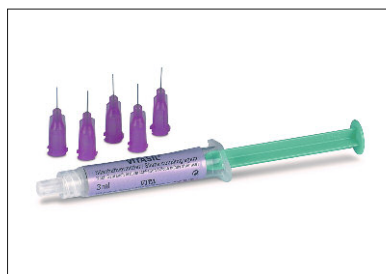
VITA CERAMICS ETCH

(for indirect use only!)

Hydrofluoric acid gel, 5%, for etching silicate ceramic, red color. Syringe cont. 3 ml or bottle cont. 6 ml

Prod. No. FCE3 (syringe)

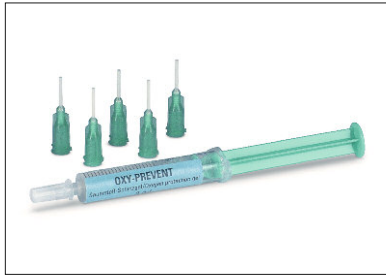
Prod. No. FCE6 (bottle)



VITASIL

Single-component silane bonding agent, syringe cont. 3 ml

Prod. No. FVS3



VITA OXY-PREVENT

Neutral-colored glycerine gel for the prevention of the formation of an oxygen inhibition layer. It is also suitable for use as a try-in paste. Syringe cont. 3 ml

Prod. No. FOP3



VITA SHADING PASTE 3D-MASTER KIT

Assortment including 9 ready-to-use, fine-grained stain pastes for individualizing the shade of veneer structures made of VITABLOCS in particular in dentist practices.

Prod. No. ESPSET3D



VITA AKZENT® Set

Assortment including 20 ceramic stain powders for individualizing veneer structures made of VITABLOCS. The stains have good stability characteristics as well as shade stability and can be mixed with one another.

Prod. No. BATSET



VITA Karat diamond polishing set

Assortment cont. 5 g diamond polishing paste, 20 diamond felt wheels, Ø 12 mm and one nickel-plated mandrel.

Prod. No. B068



Composites recommended for adhesive bonding of the veneer and the framework structure

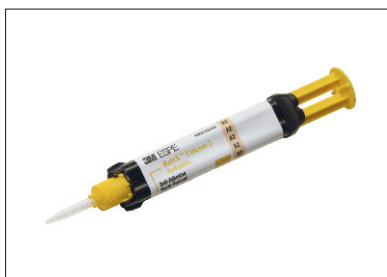
- PANAVIA 21 (Kuraray)



- PANAVIA F2.0 (Kuraray)



- RelyX Unicem 2 Clicker (3M ESPE)



- RelyX Unicem 2 Automix (3M ESPE)

Literature

Baltzer, A.: CAD/CAM gefertigte Verblendschicht; Digital Dental News (2011); 5:58-63

Interview: VITABLOCS TriLuxe forte for Rapid Layer Technology – CAD/CAM-Verblendung von Brückengerüsten; Dental Labor (2010); 10:1256-1260

Interview: Digitale Fertigung vollanatomischer Brücken; Quintessenz Zahntech (2011); 37(1):125-126

Interview: Ein Konzept aus Klassik und Moderne; Quintessenz Zahntech (2010); 36(10):1407-1409

Richter, J.: Hochwertige Vollkeramik-Versorgung effizient gefertigt - Rapid Layer Technology; Dental Labor (2011); 3:482-485

Richter, J.: Aesthetic CAD/CAM restorations without porcelain layering with Vita Rapid Layer Technology; Dent.Tech. US Edition (2011); No° 94,15-20






Tholey, M.: Kombination aus Altbewährtem und Innovativem; Dentalzeitung (2011); 5:54-56

VITA Broschüre Nr. 1766, Konzept und Dokumentation – VITA Rapid Layer Technology for CEREC/inLab MC XL (12.2010)

Werling, G.: Verblendung oxidkeramischer Brückengerüste mittels VITA Rapid Layer Technology; Digital Dental News (2011) 5. Jg.; 6:12-22

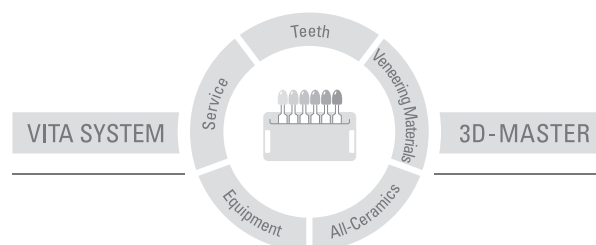
Wiedhahn, K.: Die abdruckfreie CEREC Multilayer Brücke mit dem VITA Rapid Layer Verfahren; VITA BlocTalk Newsletter (Online-Publikation) Juli 2011

Safety information

The following products require hazard labelling:		
<p>VITA CERAMICS ETCH (hydrofluoric ceramic acid etching gel)</p>	<p>Caustic/Toxic Toxic on inhalation, in contact with skin and if swallowed. Causes severe burns. Store container well sealed at an adequately ventilated place. In case of contact with eyes, rinse thoroughly with water and consult a doctor. In case of contact with skin, rinse immediately with copious amount of water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Keep away from living quarters. This material and its container must be disposed of as hazardous waste.</p>	 
<p>Protective clothing</p>	<p>When working with the product, wear suitable protective clothing, gloves and eye/face protection.</p>	  

For detailed information, please refer to respective safety datasheets.

With the unique VITA SYSTEM 3D-MASTER all natural tooth shades are systematically determined and completely reproduced.



Please note: Our products should be used according to the working instructions. We cannot be held liable for damages resulting from incorrect handling or usage. The user is furthermore obliged to check the product before use with regard to its suitability for the intended area of applications. We cannot accept any liability if the product is used in conjunction with porcelains and equipment from other manufacturers which are not compatible or not authorized for use with our product. Furthermore, our liability for the correctness of this information is independent of the legal ground and, in as far as legally permissible, is limited to the invoiced value of the goods supplied excluding turnover tax. In particular, as far as legally permissible, we do not assume any liability for profit loss, for indirect damages, for consequential damages or for claims of third parties against the purchaser. Claims for damages based on fault liability (culpa in contrahendo, breach of contract, unlawful acts, etc.) can only be made in the case of intent or gross negligence. The VITA Modulbox is not necessarily a component of the product.

Date of issue of these working instructions: 11.11

After the publication of these working instructions any previous versions become obsolete. The current version can be found at www.vita-zahnfabrik.com

With the kind support of



VITA Zahnfabrik is certified according to the Medical Device Directive and the following products bear the CE mark  0124:

VITABLOCS® TriLux forte

VITA In-Ceram® YZ

VITASIL®

inLab® and inEos® are registered trademarks of
Sirona Dental Systems GmbH, Bensheim, Germany

US 5498157 A · AU 659964 B2 · EP 0591958 B1

VITA

VITA Zahnfabrik H. Rauter GmbH & Co. KG
Postfach 1338 · D-79704 Bad Säckingen · Germany
Tel. +49(0)7761/562-0 · Fax +49(0)7761/562-299
Hotline: Tel. +49(0)7761/562-222 · Fax +49(0)7761/562-446
www.vita-zahnfabrik.com · info@vita-zahnfabrik.com