

VITA LUMEX® AC

Instructions for use / Full version



VITA shade determination

VITA shade communication

VITA shade reproduction

VITA shade control

2022-07

VITA – perfect match.

VITA

VITA LUMEX® AC: Ideal shade fidelity. Excellent light dynamics. Precise processing.



Dear Customers,

Congratulations and thank you for choosing VITA LUMEX AC!

With VITA LUMEX AC, you get an all-ceramic veneering system for the veneering of all commonly available ceramic substructure materials and for the fabrication of restorations without a substructure, such as veneers.

To use VITA LUMEX AC safely and efficiently at all times, please read this information fully before first use.

We hope you enjoy VITA LUMEX AC and achieve great results!

Your VITA Product Management Team

Explanation of symbols:



System/technology info



Note



Firing



Please note



Process



Links/Tutorials



Note



Tips

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➤ **1. Material system / processes** 2. Application range of the ceramic materials

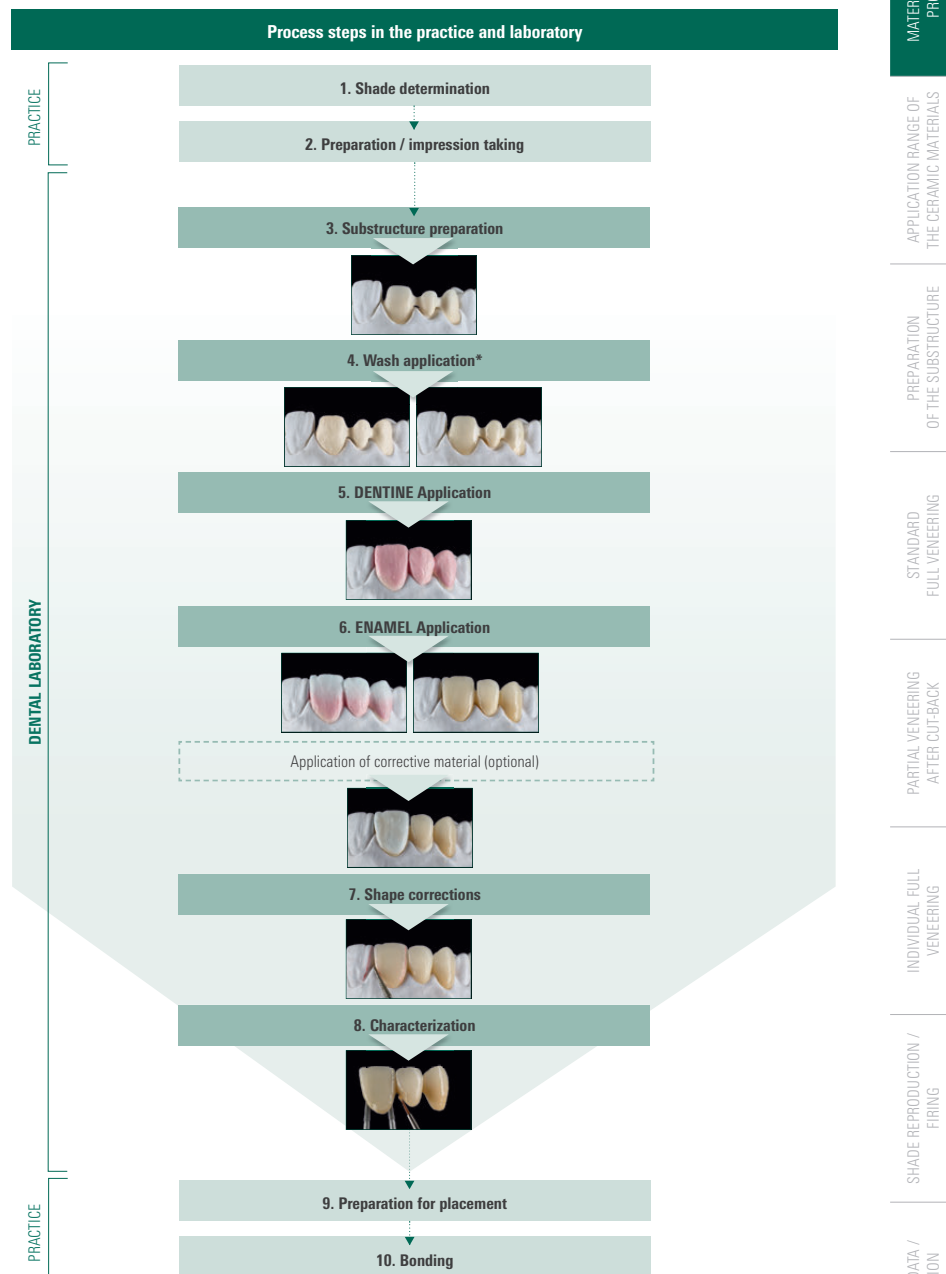
1. Material system/processes

The circular inset displays the VITA LUMEX AC product line, including bottles of DENTINE, ENAMEL, and TRANSLUCENT materials. It also shows the components used in the system: Feldspar, Lithium disilicate, and Zirconia.

Note:



























- What? VITA LUMEX AC is a leucite-reinforced, glass-ceramic veneering system.
- What for? For veneering any common all-ceramic framework material (zirconia, lithium disilicate and feldspar ceramic) and titanium frameworks. For the production of reconstructions without a framework (e. g. veneers).
- With what? VITA LUMEX AC includes: GINGIVA, OPAQUE, OPAQUE DENTINE, DENTINE and ENAMEL materials, as well as a multitude of effect materials (e. g., OPAL TRANSLUCENT, FLUO INTENSE and much more).







































4



*) This process is not necessary for lithium disilicate substructures, but can be performed optionally.

2. Indication range of the ceramic materials

VITA LUMEX™ AC materials overview				
Basic materials				
	For the masking of substructures			
Shades	 opaque-0  opaque-1  opaque-2  opaque-3  opaque-4  opaque-5			
	To support the intensity of the tooth color and control the fluorescent or lightness level.			
Shades	VITA classical A1–D4 and VITA SYSTEM 3D-MASTER lightness level LL0 – LL5			
	For the reproduction of the base shade in the case of minimum wall thicknesses			
Shades	VITA classical A1–D4 and VITA SYSTEM 3D-MASTER			
	For the reproduction of the base shade in the cervical / body area			
Shades	VITA classical A1–D4 and VITA SYSTEM 3D-MASTER			
	For the reproduction of the play of shade and light in the tooth enamel			
Shades	 light  medium  intense  clear  fog			

VITA LUMEX® AC materials overview			
Effect / addition materials DENTINE			
	For the reconstruction of gingival areas		
Shades	 pale-papilla  light-rose  nectarine  grapefruit  rosewood  purple  deep-red  dark-red		
	For the reproduction of effects in the cervical / dentine area		
Shades	 cloudy-white  caramel  honey  copper  brown		
	For the enhancement of chromaticity in the cervical area, especially in cases of thin layers		
Shades	 ivory  almond  hazelnut		
	For the control of fluorescence from the depths		
Shades	 arctic-white  cream  cappuccino  sand  sesame		
	For ceramic shoulders and corrections in the margin area		
Shades	 straw-yellow  corn-yellow		

MATERIAL SYSTEM/
PROCESSES

APPLICATION RANGE OF
THE CERAMIC MATERIALS

PREPARATION
OF THE SUBSTRUCTURE
































STANDARD
FULL VENEERING

PARTIAL VENEERING
AFTER CUT-BACK

INDIVIDUAL FULL
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VITA LUMEX® AC materials overview			
Effect / addition materials ENAMEL			
	For the imitation of mamelons in the incisal area		
Shades	 saffron  honey-melon		
	Universally applicable translucent enamel effect materials for the reproduction of shade effects in the incisal area		
Shades	 smoky-white  light-blonde  misty-rose  sunlight  sun-intense  waterdrop  deep-blue  foggy-grey		
	For the reproduction of opal effects		
Shades	 opal-neutral  opal-sky  opal-azure		
	For the reproduction of mother-of-pearl effects		
Shades	 shell		
	For corrections after the glaze firing with a reduced firing temperature		
Shades	 neutral  desert		

3. Preparation of the substructure

3.1 Implementation of the wash application



To reliably achieve the shade and intensity on all frameworks according to the indication, a wash firing with POWERWASH in the respective tooth shade or lightness level is recommended. The following applies:

- Medium to high translucency of the framework (e.g. high translucent zirconia)
= medium to high light transmission → use POWERWASH
- Low to no translucency of the framework (e.g. titanium)
= little to no light transmission → POWERWASH optional

Note:

- A washbake is recommended for a good bond of VITA LUMEX AC to the ceramic substructure.
 - Mix POWERWASH materials with VITA LUMEX AC MODELLING LIQUID to obtain a thin aqueous mixture.
 - Use a brush to apply thinly, evenly and uniformly to the clean, dry substructure.
 - For more fluorescence or opacity from the depths, other materials such as FLUO INTENSE or OPAQUE DENTINE can also be used as an alternative.
- Use VITA OPAQUE FLUID for the OPAQUE materials and VITA LUMEX AC MODELLING LIQUID for the remaining ceramic materials.
- Mix the Margin powder with VITA LUMEX AC Modelling Liquid. The shoulder can be stabilized using a hair dryer or radiated heat from the opening of the furnace.

Please note:

- This process is not necessary for lithium disilicate substructures, but can be performed optionally.

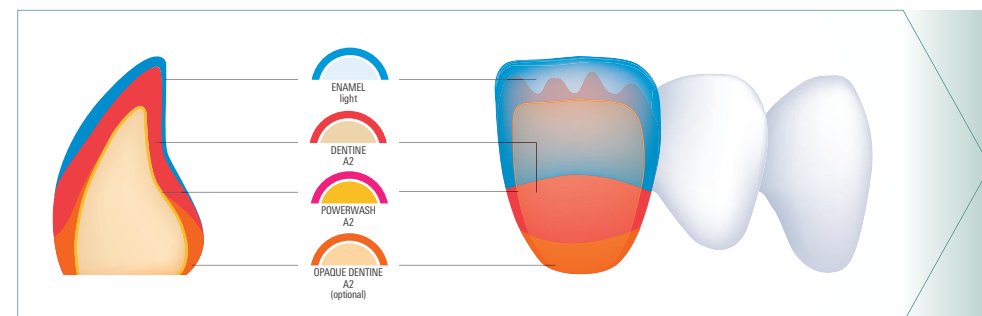
Firing:

Recommended firing for zirconia substructures					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	50	800	1.00	on

Recommended firing for glass ceramic					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	50	760	1.00	on

4. Standard full veneering

4.1 Example of layering pattern A2



Note:

- Generally, standard full veneering is done with DENTINE and ENAMEL materials. However, OPAQUE DENTINE materials can also be used as an option.
- In the following cases, the additional application of OPAQUE DENTINE materials is recommended:
 - to prevent the loss of shade on pontics, especially in the gingival area,
 - for the precise reproduction of shade-intensive spots, such as occlusal surfaces of molars,
 - to support the shade effect in cases of small space relations (< 0.8 mm).

Please note:

- The relationship of the layer thicknesses of DENTINE and ENAMEL can impact the shade intensity of the restoration. Shade intensive results are achieved with thicker layers of OPAQUE DENTINE and DENTINE materials – the thicker the layer of ENAMEL, the more pallid the end result.
- ENAMEL light was designed to create a translucent effect in the incisal area. If a higher opacity is required, e. g. TRANSLUCENT light-blonde can be used for lighter tooth shades and TRANSLUCENT smoky-white for bleach shades.



4.2 Application of DENTINE



1 Prepared substructure.



2 Insulate the model.



3 Application of OPAQUE DENTINE.



4 Application of DENTINE Step 1 ...



5 ... Step 2



6 ... Step 3.

Note:

- For easier removal of the restoration, insulate the model beforehand with VITA Modisol.
- To avoid differences in the shade of abutment crowns and pontics, OPAQUE DENTINE materials are applied to the basal surface and the cervical area of the pontic.
- In cases of insufficient space relationships (just at the cuspids), apply a thin layer of OPAQUE DENTINE before applying the dentine and enamel. This guarantees a precise reproduction of shade, especially in cases of layer thicknesses of less than 0.8 mm.
- For a good orientation with regard to size, shape and position of the teeth, apply the dentine fully anatomically.

4.3 Application of ENAMEL, first dentine firing



- Note:**
- For an optimal enamel application, reduce the DENTINE in the upper third.
 - For a uniform level of moisture, the material should be carefully wetted with a brush in the interproximal areas from the palatal side before the enamel material is applied.
 - To complete the crown shape, ENAMEL is applied in several small quantities.
 - To compensate for firing shrinkage, the size of the mould should be prepared somewhat larger.
 - Before the first dentine firing, using a slightly moist separating knife, separate each of the individual bridge units interdentally up to the substructure.
 - After removing the bridge from the model, complete the contact points with DENTINE and ENAMEL.
 - Finally, the bridge is placed on a firing tray for the subsequent firing process.
 - ENAMEL light was designed to create a translucent effect in the incisal area. If a higher opacity is required, e.g. TRANSLUCENT light-blonde can be used for lighter tooth shades and TRANSLUCENT smoky-white for bleach shades.

Firing:

Recommended firing, first dentine firing*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	6.00	50	760	1.00	on

*) Applies for both zirconia and glass-ceramic substructures.

MATERIAL SYSTEM/
PROCESSES

APPLICATION RANGE OF
THE CERAMIC MATERIALS

PREPARATION
OF THE SUBSTRUCTURE

STANDARD
FULL VENEERING

PARTIAL VENEERING
AFTER CUT-BACK

INDIVIDUAL FULL
VENEERING

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4.4 Shape correction, second dentine firing



Note:

- Insulate with VITA Modisol again before placing on the model. This way, any material applied in the basal area will not stick to the model.
- Make corrections of the shape starting from the cervical area with OPAQUE DENTINE / DENTINE and ENAMEL.

Firing:

Recommended firing second dentine firing*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	6.00	50	755	1.00	on

*) Applies for both zirconia and glass ceramic substructures.

4.5 Finishing of the restoration



Note:

- After firing, place on the model and grind the contact points.
- Make smaller shape corrections with a diamond tool; separate the interdental spaces using a diamond disk.
- Then incorporate natural surface structures (e. g., growth grooves or convex / concave surfaces).

Please note:

- Before the glaze / stain firing, clean the restoration thoroughly of grinding dust with a toothbrush under running water or with a steam jet.

MATERIAL SYSTEM/
PROCESSES

APPLICATION RANGE OF
THE CERAMIC MATERIALS

PREPARATION
OF THE SUBSTRUCTURE

STANDARD
FULL VENEERING

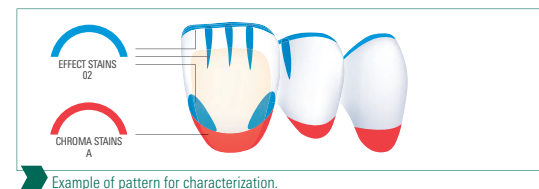
PARTIAL VENEERING
AFTER CUT-BACK

INDIVIDUAL FULL
VENEERING

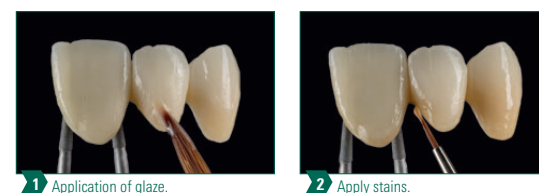
SHADE REPRODUCTION /
FIRING

TECHNICAL DATA /
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4.6 Characterization / glazing of the restoration



Example of pattern for characterization.



Note:

- Glaze the entire restoration with VITA AKZENT PLUS GLAZE LT as needed.
- To intensify the shade in the cervical area, for example, apply VITA AKZENT PLUS CHROMA STAINS.
- For the reproduction of individual shade characteristics, for example, apply VITA AKZENT PLUS EFFECT STAINS.

Firing:

Recommended firing - glaze firing with VITA AKZENT PLUS GLAZE LT Powder*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	80	750	1.00	—

*) Applies for both zirconia and glass ceramic substructures.



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PREPARATION
OF THE SUBSTRUCTURE

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FULL VENEERING

PARTIAL VENEERING
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INDIVIDUAL FULL
VENEERING

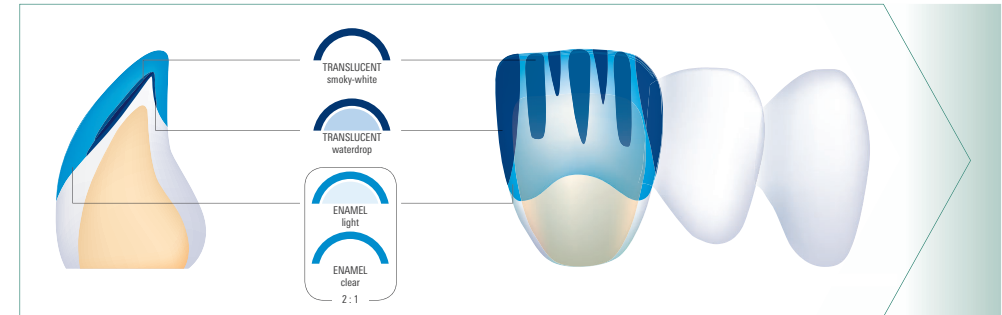
SHADE REPRODUCTION /
FIRING

TECHNICAL DATA /
INFORMATION

4. Standard full veneering > 5. Partial veneering after cut-back 6. Individual full veneering

5. Partial veneering after cut-back

5.1 Example of layering pattern



Note:

- The dentine shade is formed by the cut-back substructure; the individual incisal characterization is done with ENAMEL and TRANSLUCENT ceramic materials.

Please note:

- When reducing the substructure in the incisal area, the manufacturer's specifications on minimum wall thickness must be observed!



5.2 Washbake plus characterization



1 Anatomically reduced restoration.



2 Application of wash material ...



3 ... Step 2.



4 Then glaze / characterize the restoration.



5 Result after the firing.

Note:

- Use ENAMEL for the washbake; in cases of thin layers, VITA AKZENT PLUS GLAZE LT is also possible as an alternative for the washbake.
- Use VITA AKZENT PLUS CHROMA STAINS for intensifying the shade in the cervical area, for example.
- Use VITA AKZENT PLUS EFFECT STAINS for the reproduction of individual shade characteristics, for example.

Please note:

- This process is not necessary for lithium disilicate substructures, but can be performed optionally.

Firing:

Recommended firing for zirconia substructures					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	50	800	1.00	on

Recommended firing for glass ceramic					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	50	760	1.00	on

Links/Tutorials:

- Learn more in tutorial videos: vita-zahnfabrik.com/tutorial/lumexac/all/cutback

5.3 Application of ENAMEL



1 Result after layering with enamel.



2 Restoration after finishing.

Note:

- Apply several small portions of ENAMEL to complete the crown mould, beginning from the middle third of the crown. To compensate for firing shrinkage, the size of the mould should be prepared somewhat larger.

Firing

Recommended firing first dentine firing*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	6.00	50	760	1.00	on

*) Applies for both zirconia and glass ceramic substrates.

MATERIAL SYSTEM/
PROCESSES

APPLICATION RANGE OF
THE CERAMIC MATERIALS

PREPARATION
OF THE SUBSTRUCTURE

STANDARD
FULL VENEERING

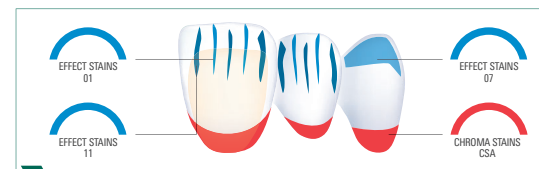
PARTIAL VENEERING
AFTER CUT-BACK

INDIVIDUAL FULL
VENEERING

SHADE REPRODUCTION /
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5.4 Characterization / glazing of the restoration



Example of pattern for characterization.



1 Result after glaze application.



2 Result after stain application.

Note:

- Glaze the entire restoration with VITA AKZENT PLUS GLAZE LT as needed.
- To intensify the shade in the cervical area, for example, apply VITA AKZENT PLUS CHROMA STAINS.
- For the reproduction of individual shade characteristics, for example, apply VITA AKZENT PLUS EFFECT STAINS.

Please note:

- The use of glazing materials is optional; see Firing, Glaze Firing, chapter entitled "Shade reproduction / firing."

Firing:

Recommended firing - glaze firing with VITA AKZENT PLUS GLAZE LT Powder*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	80	750	1.00	—

*) Applies for both zirconia and glass ceramic substrates.

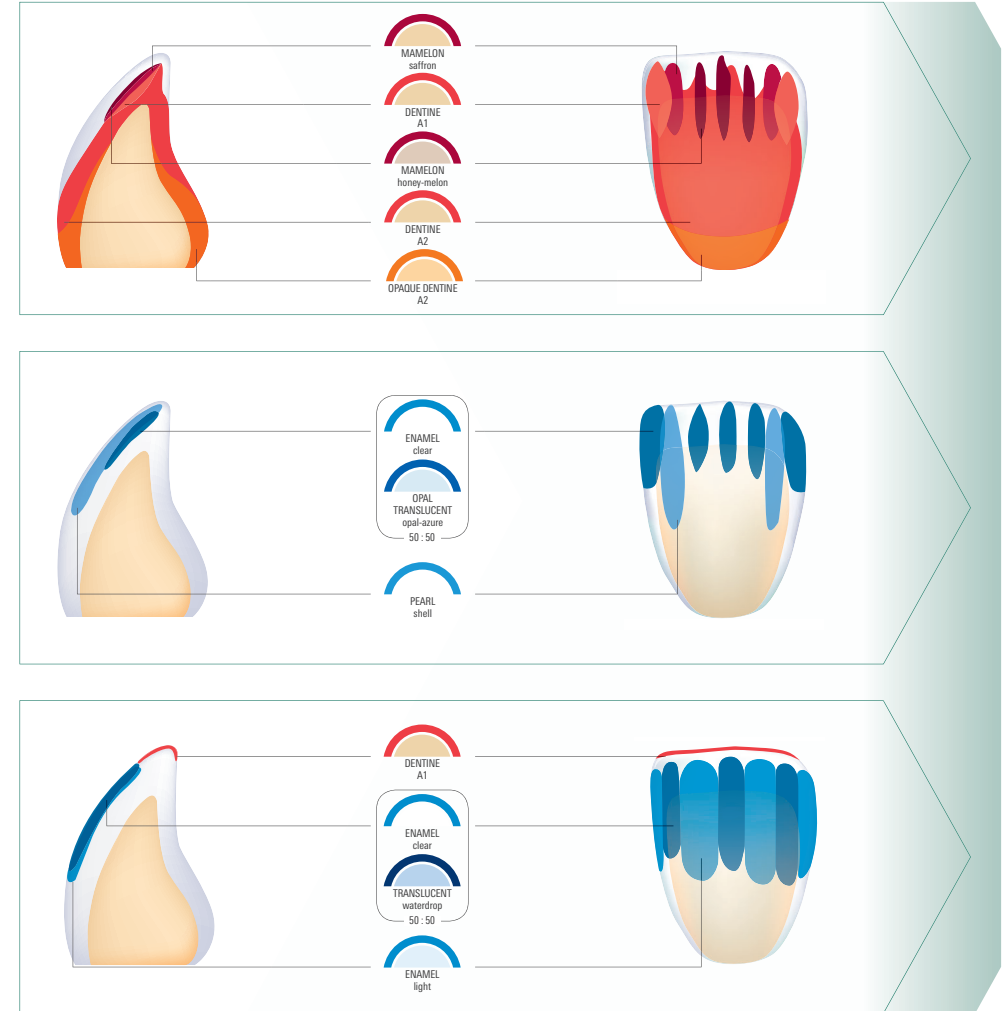


TECHNICAL DATA / INFORMATION	SHADE REPRODUCTION / FIRING	INDIVIDUAL FULL VENEERING	PARTIAL VENEERING AFTER CUT-BACK	STANDARD FULL VENEERING	PREPARATION OF THE SUBSTRUCTURE	APPLICATION RANGE OF THE CERAMIC MATERIALS	MATERIAL SYSTEM/ PROCESSES
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5. Partial veneering after cut-back > **6. Individual full veneering** 7. Shade reproduction / firing

6. Individual full veneering

6.1 Layering patterns: example of young anterior tooth in A2





6.2 Individual veneering of young anterior tooth



1 Prepared substructure on model.



2 Result after the washbake with DENTINE A1.



3 Result after OPAQUE DENTINE application.



4 Apply DENTINE.



5 Perform cut-back.



6 Result after cut-back.



7 Apply MAMELON materials.



8 Apply EFFECT materials.



9 Apply ENAMEL.



10 Restoration after completion of layering.



11 Restoration after firing.



12 Restoration after finishing.



13 Restoration characterized with VITA AKZENT PLUS



Tip

- In the present example, the cervical area was intensified with CHROMA STAINS and also dusted with FLUO INTENSE materials.
- The advantage of dusting the surfaces with FLUO INTENSE is that it provides a porous surface, where the light penetrating the restoration breaks down naturally.



Firing:

Recommended firing first dentine firing*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	6.00	50	760	1.00	on

*) Applies for both zirconia and glass ceramic substructures.

Recommended firing - glaze firing with VITA AKZENT PLUS GLAZE LT Powder*					
Pre-dry °C	→ min.	↗ °C/min.	approx. temp. °C	→ min.	VAC
400	4.00	80	750	1.00	–

*) Applies for both zirconia and glass ceramic substructures.



Links/Tutorials:

- Learn more in tutorial videos: vita-zahnfabrik.com/tutorial/lumexac/all/young

MATERIAL SYSTEM/
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STANDARD
FULL VENEERING

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AFTER CUT-BACK

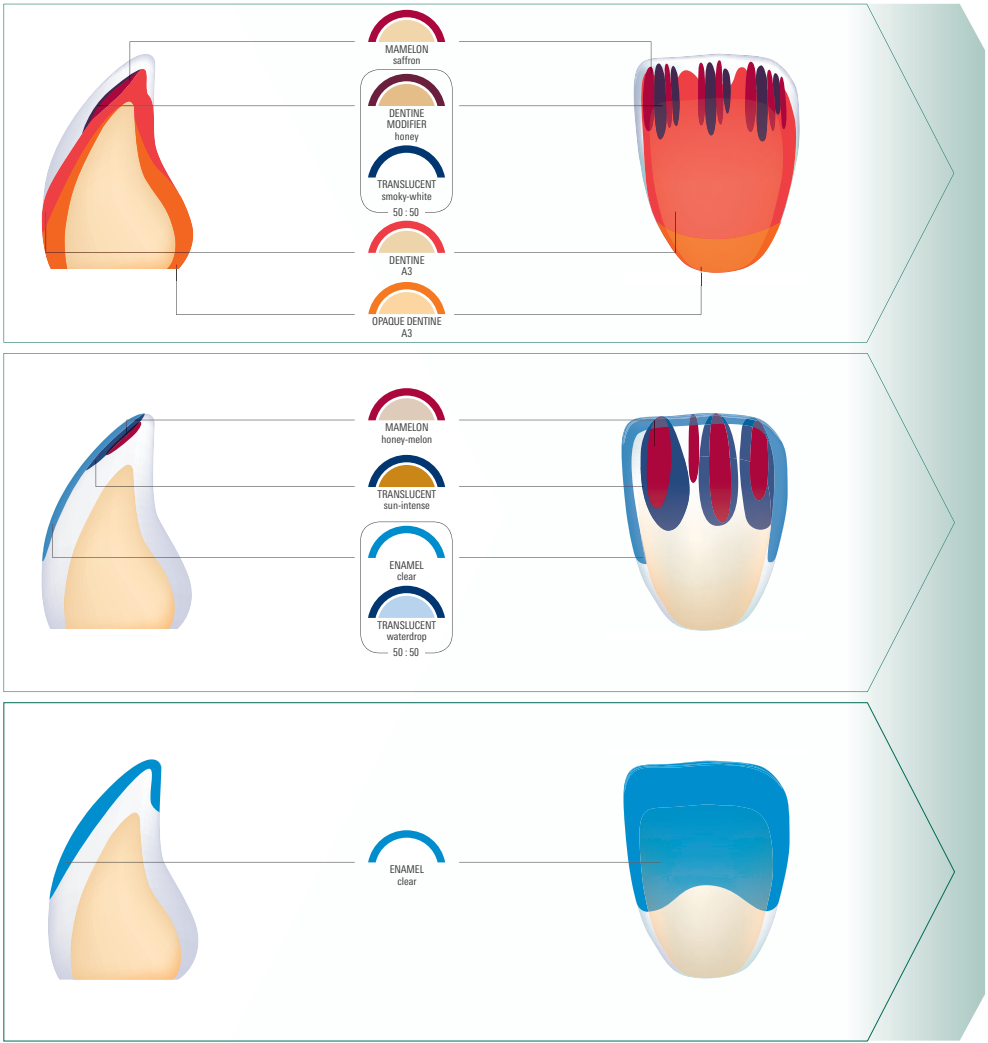
INDIVIDUAL FULL
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6.3 Layering patterns: example of older anterior tooth in A3





6.4 Individual veneering of older anterior tooth



1 Applying wash material.



2 Result after washbake.



3 Apply OPAQUE DENTINE.



4 Build up the tooth shape using DENTINE.



5 Perform cut-back.



6 Apply effect materials ...



7 ... Second step.



8 Apply ENAMEL.



9 Result after the firing.



10 Result after glaze application.



11 Result after characterization.

Firing:

- For information on the dentine and glaze firings, see 6.2.

Links/Tutorials:

- Learn more in tutorial videos: vita-zahnfabrik.com/tutorial/lumexac/all/middle



MATERIAL SYSTEM/
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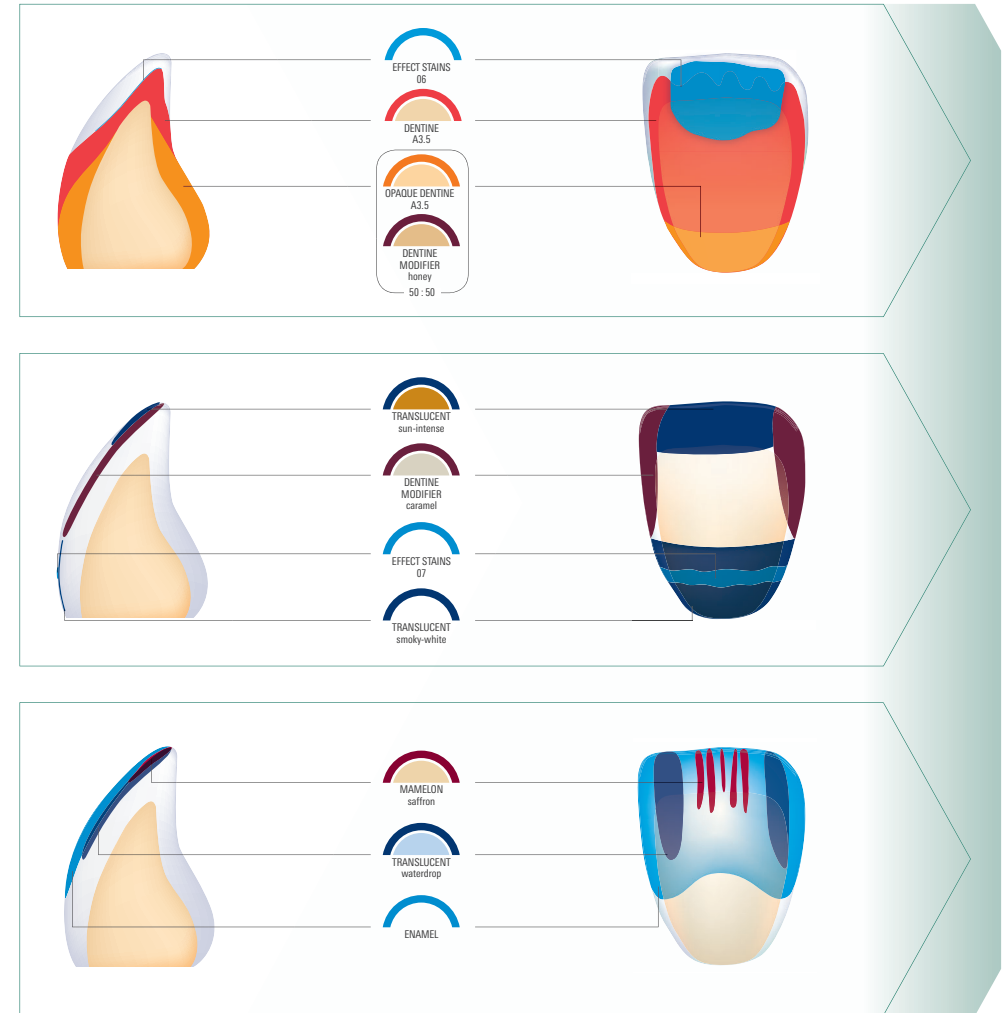
INDIVIDUAL FULL
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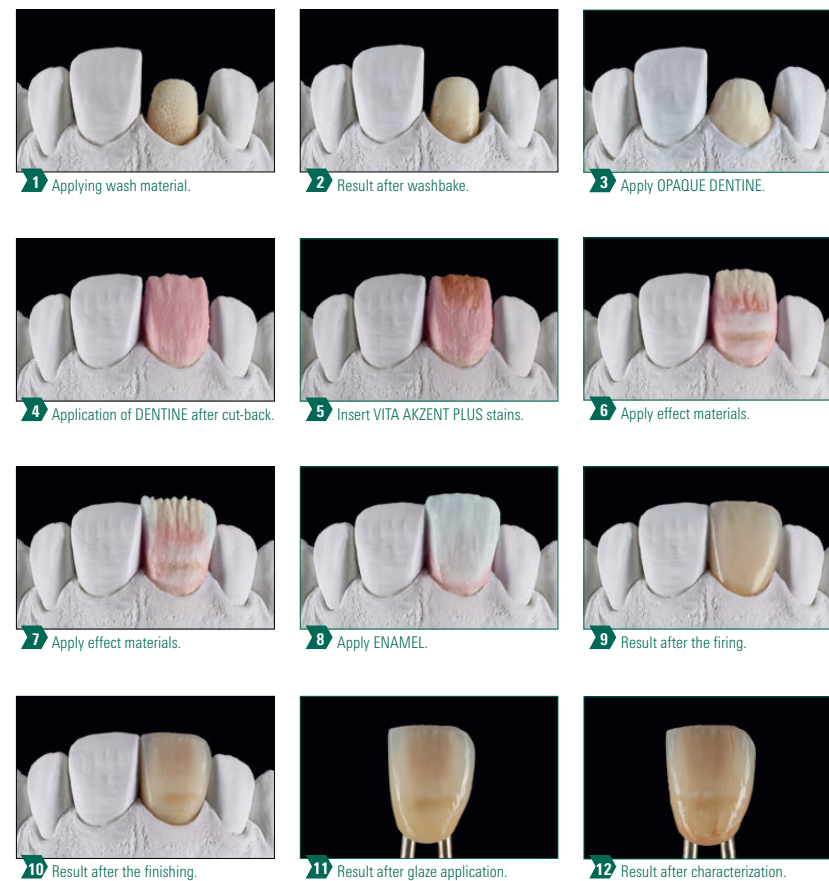
5. Partial veneering after cut-back > **6. Individual full veneering** 7. Shade reproduction / firing

6.5 Layering patterns: example of old anterior tooth in A3.5





6.6 Individual veneering of old anterior tooth



Tip:

- VITA AKZENT PLUS stains are ideal for insertion during layering in order to achieve natural effects from the depths.

Firing:

- For information on dentine and glaze firings, see 6.2.



MATERIAL SYSTEM/
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VENEERING

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7. Shade reproduction/firing

7.1 Overview of ceramic / stain firings

Firing parameters								
Programs	Predry. °C	→ min.	↗ °C/min.	approx. temp °C	→ min.	↗ °C	→ min.	Vac.
Cleaning firing YZ-T	500	03:00	33	700	05:00	–	–	–
Cleaning firing YZ-HT	290	10:00	10	600	05:00	–	–	–
Zirconia washbake with POWERWASH	400	04:00	50	800	01:00	–	–	on
Glass-ceramic washbake	400	04:00	50	760	01:00	–	–	on
Opaque firing with OPAQUE (on ZrO2 and titanium)	400	04:00	50	800	01:00	–	–	on
Shoulder firing with MARGIN	400	06:00	50	770	01:00	–	–	on
First dentine firing	400	06:00	50	760	01:00	500*	–	on
Second dentine firing	400	06:00	50	755	01:00	500*	–	on
Glaze firing	400	00:00	80	750	01:00	500*	–	–
Stains fixation firing with VITA AKZENT PLUS	400	04:00	80	700	01:00	500*	–	–
Glaze firing with VITA AKZENT PLUS GLAZE LT Powder	400	04:00	50	750	01:00	500*	–	–
Glaze firing with VITA AKZENT PLUS GLAZE LT Paste	400	08:00	50	750	01:00	500*	–	–
Glaze firing with VITA AKZENT PLUS FLUOGLAZE LT Spray	400	06:00	50	750	01:00	500*	–	–
Corrective firing with CORRECTIVE	400	04:00	50	725	01:00	500*	–	on

*) Long-term cooling down to the appropriate temperature is recommended for the last planned veneering ceramic firing.
The lift position for VITA VACUMAT furnaces should be > 75%. Firing object must be protected against direct supply of air.

Note:

- Based on the poor thermal conductivity of both materials (YTZP and veneering ceramic), higher residual stress can occur in this compound system than is known to typically occur in metal ceramics. This residual thermal stress in the veneering ceramic can be counteracted by means of slow cooling during the last firing cycle to below the transformation temperature of the veneering ceramic (for VITA LUMEX AC, approx. 550 °C).

! Please note:

- The user should consider this information only as a reference. If the surface quality or the degree of transparency or glaze does not correspond to the firing result that is achieved under optimum conditions, the firing procedure must be adjusted accordingly.
- The critical factors for the firing procedure are not the firing temperature indicated on the furnace display, but rather the appearance and the surface quality of the firing object after firing.
- Low-melting ceramics are generally more susceptible to residual moisture during the firing process. Too much residual moisture after pre-drying may, for example, affect the shade effects of the subsequent restoration. Depending on the size of the restoration and the individual work habits, extending the preheating time may lead to an improvement in the firing results.
- To achieve ideal firing results on multi-unit bridge frameworks (especially with voluminous bridge units), it is recommended to extend the heating time.

Explanation of Symbols	
Pre-dry °C	Start temperature
→ min.	Predrying time in minutes, closing time
↗ °C/min.	Heating time in minutes, temperature rise rate in degrees Celsius per minute
approx. temp °C	End temperature
→ min.	Holding time for end temperature
↘ °C	Long-term cooling
→ min.	Hold time for long-term cooling
Vac. min	Vacuum holding time in minutes

7.2 Shade reproduction according to VITA classical A1–D4

	OPAQUE	POWER WASH	OPAQUE DENTINE	DENTINE	ENAMEL**		FLUO INTENSE	DENTINE MODIFIER
A1	opaque-1	A1	A1	A1	light		cream	
A2	opaque-2	A2	A2	A2	light		arctic-white cappuccino*	
A3	opaque-2	A3	A3	A3	light		sand sesame*	
A3.5	opaque-3	A3.5	A3.5	A3.5	medium		sesame	
A4	opaque-3	A4	A4	A4	medium		arctic-white sand*	
B1	opaque-1	B1	B1	B1	medium		arctic-white cream*	
B2	opaque-1	B2	B2	B2	medium		arctic-white cappuccino*	
B3	opaque-3	B3	B3	B3	medium	intense	cream sand*	cloudy-white caramel
B4	opaque-3	B4	B4	B4	medium	clear	sand sesame*	honey copper
C1	opaque-3	C1	C1	C1	medium	fog	arctic-white sesame*	brown
C2	opaque-2	C2	C2	C2	medium		cream sesame*	
C3	opaque-3	C3	C3	C3	light		sesame	
C4	opaque-4	C4	C4	C4	light		cappuccino sesame	
D2	opaque-2	D2	D2	D2	medium		cream sesame*	
D3	opaque-3	D3	D3	D3	medium		cream cappuccino*	
D4	opaque-3	D4	D4	D4	medium		cream sesame*	

CHROMA INTENSE	MARGIN	MAMELON	TRANS- LUCENT	OPAL TRANS- LUCENT	PEARL	GINGIVA	CORREC- TIVE
<div><div></div><div></div><div></div></div> <div>ivory</div> <div>almond</div> <div>hazelnut</div>	<div><div></div><div></div><div></div></div> <div>straw-yellow</div> <div>corn-yellow</div>	<div><div></div><div></div><div></div></div> <div>saffron</div> <div>honey-melon</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>smoky-white</div> <div>light-blonde</div> <div>misty-rose</div> <div>sunlight</div> <div>sun-intense</div> <div>deep-blue</div> <div>waterdrop</div> <div>foggy-grey</div>	<div><div></div><div></div><div></div></div> <div>opal-neutral</div> <div>opal-sky</div> <div>opal-azure</div>	<div><div></div><div></div><div></div></div> <div>shell</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>pale-papilla</div> <div>light-rose</div> <div>nectarine</div> <div>grapefruit</div> <div>rosewood</div> <div>purple</div> <div>deep-red</div> <div>dark-red</div>	<div><div></div><div></div><div></div></div> <div>neutral</div> <div>desert</div>

*) Mixing ratio 1:1

*) ENAMEL light was designed to create a translucent effect in the incisal area. If a higher opacity is required, e.g. TRANSLUCENT light-blonde can be used for lighter tooth shades and TRANSLUCENT smoky-white for bleach shades.

7.3 Shade reproduction according to VITA SYSTEM 3D-MASTER

	 OPAQUE	 POWER WASH	 OPAQUE DENTINE	 DENTINE	 ENAMEL**	 FLUO INTENSE	 DENTINE MODIFIER	
0M1	 opaque-0	LL0	0M1	0M1	 light	 arctic-white	 cloudy-white  caramel  honey  copper  brown	
0M2	 opaque-0		0M2	0M2	 light			 arctic-white
0M3	 opaque-0		0M3	0M3	 light			 arctic-white
1M1	 opaque-1	LL1	1M1	1M1	 light	 arctic-white  cream*		
1M2	 opaque-1		1M2	1M2	 light	 cream		
2L1.5	 opaque-2	LL2	2L1.5	2L1.5	 light	 arctic-white  cream*		
2L2.5	 opaque-2		2L2.5	2L2.5	 light	 arctic-white  cappuccino*		
2M1	 opaque-2		2M1	2M1	 light	 sand  sesame*		
2M2	 opaque-2		2M2	2M2	 light	 arctic-white  cappuccino*		
2M3	 opaque-2		2M3	2M3	 light	 cream  sand*		
2R1.5	 opaque-2		2R1.5	2R1.5	 light	 arctic-white  sesame*		
2R2.5	 opaque-2		2R2.5	2R2.5	 light	 cream  sand*		
3L1.5	 opaque-3		LL3	3L1.5	3L1.5	 medium	 cream  sesame*	
3L2.5	 opaque-3	3L2.5		3L2.5	 medium	 sand  sesame*		
3M1	 opaque-3	3M1		3M1	 light	 arctic-white  sesame*		
3M2	 opaque-3	3M2		3M2	 light	 cream  sesame*		

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Note: The material classifications are only intended to provide reference values!

APPLICATION OF THE CERAMIC MATERIALS

PARTIAL VENEERING AFTER CUT-BACK

SHADE REPRODUCTION /
FIRING

CHROMA INTENSE	MARGIN	MAMELON	TRANS-LUCENT	OPAL TRANS-LUCENT	PEARL	GINGIVA	CORRECTIVE
ivory almond hazelnut	straw-yellow corn-yellow	safron honey-melon	smoky-white light-blonde misty-rose sunlight sun-intense deep-blue waterdrop foggy-grey	opal-neutral opal-sky opal-azure	shell	pale-papilla light-rose nectarine grapefruit rosewood purple deep-red dark-red	neutral desert

*) Mixing ratio 1:1

**) ENAMEL light was designed to create a translucent effect in the incisal area. If a higher opacity is required, e.g. TRANSLUCENT light-blonde can be used for lighter tooth shades and TRANSLUCENT smoky-white for bleach shades.

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


















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7.3 Shade reproduction according to VITA SYSTEM 3D-MASTER

	OPAQUE	POWER WASH	OPAQUE DENTINE	DENTINE	ENAMEL**	FLUO INTENSE	DENTINE MODIFIER
3M3	opaque-3	LL3	3M3	3M3	light	sand sesame*	
3R1.5	opaque-3		3R1.5	3R1.5	light	cream cappuccino*	
3R2.5	opaque-3		3R2.5	3R2.5	medium	sesame	
4L1.5	opaque-4	LL4	4L1.5	4L1.5	light	sesame	
4L2.5	opaque-4		4L2.5	4L2.5	light	cappuccino sand*	
4M1	opaque-4		4M1	4M1	light	sesame	cloudy-white caramel
4M2	opaque-4		4M2	4M2	intense	cream cappuccino*	honey
4M3	opaque-4		4M3	4M3	intense	sesame	copper
4R1.5	opaque-4		4R1.5	4R1.5	light	cream cappuccino*	brown
4R2.5	opaque-4		4R2.5	4R2.5	intense	cappuccino sand*	
5M1	opaque-5		5M1	5M1	light	cappuccino sesame*	
5M2	opaque-5	LL5	5M2	5M2	intense	sesame	
5M3	opaque-5		5M3	5M3	intense	cappuccino sand*	

Note: The material classifications are only intended to provide reference values!

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CHROMA INTENSE	MARGIN	MAMELON	TRANS-LUCENT	OPAL TRANS-LUCENT	PEARL	GINGIVA	CORRECTIVE
 ivory  almond  hazelnut	 straw-yellow  corn-yellow	 saffron  honey-melon	 smoky-white  light-blonde  misty-rose  sunlight  sun-intense  deep-blue  waterdrop  foggy-grey	 opal-neutral  opal-sky  opal-azure	 shell	 pale-papilla  light-rose  nectarine  grapefruit  rosewood  purple  deep-red  dark-red	 neutral  desert

*) Mixing ratio 1:1

*) ENAMEL light was designed to create a translucent effect in the incisal area. If a higher opacity is required, e.g. TRANSLUCENT light-blonde can be used for lighter tooth shades and TRANSLUCENT smoky-white for bleach shades.

8. Technical data/information

8.1 Technical / physical data

VITA LUMEX AC		
Physical properties	Unit of measure	Value
CTE (25– 400 °C)	10 ⁻⁶ K ⁻¹	approx. 8.8
Solubility in acids	µg/cm ²	approx. 10
3-point flexural strength	MPa	approx. 110

8.2 Chemical composition

VITA LUMEX AC	Wt%
SiO ₂	60–75
Al ₂ O ₃	3–10
K ₂ O	5–12
Na ₂ O	4–11
B ₂ O ₃	5–12
CaO	< 3
Li ₂ O	< 3
pigments	< 10

 Note:

- The technical/physical values given are typical measurement results and refer to in-house manufactured samples and measuring instruments in the company.
- If samples are prepared using different methods and measurement equipment, other measuring results may be obtained.

8.3 Intended purpose

- Note:**
- VITA LUMEX products are ceramic materials for dental treatments.

8.4 Patient target group

- Note:**
- No restrictions

8.5 Intended user

- Note:**
- Professional user only
 - Dental Technician and Dentists

8.6 Indications

- Note:**
- Indication range:**
- Full and partial veneering of zirconia
 - Full and partial veneering of lithium disilicate
 - Partial veneering of feldspar ceramic
 - Reconstruction without a substructure
 - Full and partial veneering of titanium grade 1-5

Materials:

- Zirconia substructures (CTE approx. 10.0 to $10.5 \times 10^{-6} \text{ K}^{-1}$)
- Glass-ceramic substructures (CTE approx. 9.0 to $10.5 \times 10^{-6} \text{ K}^{-1}$)
- Titanium framework constructions (CTE approx. 9.0 to $10.5 \times 10^{-6} \text{ K}^{-1}$)

8.7 Contraindications

- Note:**
- Substructures with unsuitable CTE values and material properties
 - In patients with allergies or sensitivities to the ingredients
 - In cases of insufficient space available









- Please note:**
- The veneering ceramic VITA VM 11 must be used for the product VITA SUPRINITY PC (zirconia reinforced lithium silicate ceramic).

8.8 Notes on layer thicknesses

- Note:**
- When preparing a ceramic veneer, a uniform layer thickness across the entire surface to be veneered must be ensured.
 - The entire thickness of the ceramic layer, however, should not exceed 2 mm (the optimal layer thickness ranges from 0.7 to 1.2 mm).


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8.9 Symbol explanations

Manufacturer VITA Zahnfabrik		Manufacturing date	
Medical device		Shelf life	
For professionals only	Rx only	Product number	
See Instructions for Use		Lot number (batch)	
Recycling symbol			

- Note:**
- For information on reporting serious incidents related to medical devices, general risks associated with dental treatments, residual risks and (when applicable) summary of clinical safety and performance reports (SCCPs), please visit www.vita-zahnfabrik.com/product_safety
 - Corresponding safety data sheets can be downloaded at www.vita-zahnfabrik.com/SDS
 - The products labelled with a pictogram for hazardous substances are to be disposed of as hazardous waste. Recyclable waste (such as attachments, paper and plastics) must be disposed of using appropriate recycling systems. If necessary, contaminated product residues should be pretreated in accordance with regional regulations and disposed of separately.

8.10 Safety at work / health protection

Safety at work and health protection	<ul style="list-style-type: none"> When working with the product, wear suitable safety goggles/ face protection, gloves and safety clothing. 	
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8.11 VITA System Solutions



- For digital shade determination, use **VITA Easyshade V**, and for traditional shade determination, use a **VITA shade guide**.



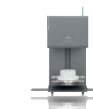
- Manufacture substructures using CAD/CAM from **VITA YZ SOLUTIONS** zirconia and **VITABLOCS** feldspar ceramic or by the pressing technique from **VITA AMBRIA** lithium disilicate ceramic.



- Veneer all common substructure ceramics with the highly esthetic veneering ceramic **VITA LUMEX AC**.



- Characterize and glaze restorations with the **VITA AKZENT PLUS** stains/glazing materials.



- For veneer and stain firings, use the **VITA VACUMAT 6000 M** firing unit.



- Polish restorations with the recommended **VITA Karat Diamond Polishing Set**.



- VITA LUMEX AC**-veneered restorations are bonded with full or self-adhesive bonding protocol with **VITA ADIVA LUTING SOLUTIONS**.

WE ARE HAPPY TO HELP

More information about the products and processing is also available at www.vita-zahnfabrik.com



Hotline Sales Support

Mrs. Carmen Holsten and her team (Internal Sales Department) will be glad to assist you with orders or questions about delivery, product data and marketing materials.

► Phone +49 (0) 7761 / 56 28 84
Fax +49 (0) 7761 / 56 22 99
8:00 a.m. to 5:00 p.m. CET
Email info@vita-zahnfabrik.com



Technical hotline

If you have technical questions concerning the VITA product solutions, you can contact our technical specialist Mr. Ralf Mehlh

► Phone +49 (0) 7761 / 56 22 22
Fax +49 (0) 7761 / 56 24 46
8:00 a.m. to 5:00 p.m. CET
E-mail: info@vita-zahnfabrik.com



NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

The diagram illustrates the Vita System 3D-Master process. At the center is a 3D printer with a row of colored teeth being printed. Surrounding the printer is a circular flow of components: Teeth, Veneering, Machines, Equipment, Pressables, and Pressables. The process is labeled VITA SYSTEM on the left and 3D-MASTER on the right.

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