

Z-CAD® *smile* - Esthetic Zirconia

49% translucency combined with optimal flexural strength.
Beauty in CAD/CAM. For selected anterior and posterior restorations.



Pure esthetic

Z-CAD® *smile*

If you are after biocompatible esthetics with high translucency and full-contour Zirconia, you automatically navigate towards our “smile”.

Z-CAD® *smile*, our solution for all such cases. Veneers, inlays, onlays und overlays. Partial crowns, single crowns or bridges from 1-3 units in the anterior and important to point out: also in the posterior region.

You won't be able to neglect these esthetics. Screw or cement retained, your restoration will fulfill all your needs. The finalized Z-CAD® *smile* material is indicated for monolithic restorations, can however be individualized utilizing equivalent veneering materials.

Z-CAD® smile

Esthetic Zirconia

Is a high-performance zirconia which meets the ISO 6872:2019 standard class 4, it is available in white, 3 Bleach or all 16 *Vita classical A1-D4 shades. With a typical strength of more than 610 MPa (biaxial measurement) and a translucency of 49%. It is the esthetic solution for daily business in your dental laboratory. For customization of the white substructures we recommend Z-CAD® Surface liquid. This is extremely well suited for dipping or paint-on methods.



Metoxit Z-CAD® smile pre colored zirconia blanks

Art. No.	Product <i>smile</i> Bleach BL1 - BL3	Geometry Ø 98,5mm*
412332	Z-CAD <i>smile</i> 98.5x10mm BL1	
412334	Z-CAD <i>smile</i> 98.5x14mm BL1	
412336	Z-CAD <i>smile</i> 98.5x18mm BL1	
412339	Z-CAD <i>smile</i> 98.5x25mm BL1	
412342	Z-CAD <i>smile</i> 98.5x10mm BL2	
412344	Z-CAD <i>smile</i> 98.5x14mm BL2	
412346	Z-CAD <i>smile</i> 98.5x18mm BL2	
412349	Z-CAD <i>smile</i> 98.5x25mm BL2	
412352	Z-CAD <i>smile</i> 98.5x10mm BL3	
412354	Z-CAD <i>smile</i> 98.5x14mm BL3	
412356	Z-CAD <i>smile</i> 98.5x18mm BL3	
412359	Z-CAD <i>smile</i> 98.5x25mm BL3	

Metoxit Z-CAD® smile white zirconia blanks

Art. No.	Product <i>smile</i> white	Geometry Ø 98,5mm*
408655	Z-CAD <i>smile</i> 98.5x10mm white	
408656	Z-CAD <i>smile</i> 98.5x12mm white	
408628	Z-CAD <i>smile</i> 98.5x14mm white	
408657	Z-CAD <i>smile</i> 98.5x16mm white	
408658	Z-CAD <i>smile</i> 98.5x18mm white	
408772	Z-CAD <i>smile</i> 98.5x20mm white	
408773	Z-CAD <i>smile</i> 98.5x25mm white	

Metoxit Z-CAD® *smile* pre colored zirconia blanks

Z-CAD® *smile* monolithic
work colored with
Z-CAD® Surface liquid



Nando Aeschlimann, Zürich
daszahnlabor.ch

Regardless if winter,
spring, summer and
autumn or childhood,
teenage, adulthood
or old aged. Mother
Nature is our role
model in many ways.

Art. No.	Product <i>smile</i> A1 - A4
410350	Z-CAD <i>smile</i> 98.5x10mm A1
410352	Z-CAD <i>smile</i> 98.5x14mm A1
410354	Z-CAD <i>smile</i> 98.5x18mm A1
410356	Z-CAD <i>smile</i> 98.5x25mm A1
410357	Z-CAD <i>smile</i> 98.5x10mm A2
410359	Z-CAD <i>smile</i> 98.5x14mm A2
410361	Z-CAD <i>smile</i> 98.5x18mm A2
410363	Z-CAD <i>smile</i> 98.5x25mm A2
410364	Z-CAD <i>smile</i> 98.5x10mm A3
410366	Z-CAD <i>smile</i> 98.5x14mm A3
410368	Z-CAD <i>smile</i> 98.5x18mm A3
410370	Z-CAD <i>smile</i> 98.5x25mm A3
410371	Z-CAD <i>smile</i> 98.5x10mm A3.5
410373	Z-CAD <i>smile</i> 98.5x14mm A3.5
410375	Z-CAD <i>smile</i> 98.5x18mm A3.5
410377	Z-CAD <i>smile</i> 98.5x25mm A3.5
410378	Z-CAD <i>smile</i> 98.5x10mm A4
410380	Z-CAD <i>smile</i> 98.5x14mm A4
410382	Z-CAD <i>smile</i> 98.5x18mm A4
410384	Z-CAD <i>smile</i> 98.5x25mm A4

Geometry Ø 98,5mm *

Art. No.	Product <i>smile</i> B1 - B4
410385	Z-CAD <i>smile</i> 98.5x10mm B1
410387	Z-CAD <i>smile</i> 98.5x14mm B1
410389	Z-CAD <i>smile</i> 98.5x18mm B1
410391	Z-CAD <i>smile</i> 98.5x25mm B1
410392	Z-CAD <i>smile</i> 98.5x10mm B2
410394	Z-CAD <i>smile</i> 98.5x14mm B2
410396	Z-CAD <i>smile</i> 98.5x18mm B2
410398	Z-CAD <i>smile</i> 98.5x25mm B2
410399	Z-CAD <i>smile</i> 98.5x10mm B3
410401	Z-CAD <i>smile</i> 98.5x14mm B3
410403	Z-CAD <i>smile</i> 98.5x18mm B3
410405	Z-CAD <i>smile</i> 98.5x25mm B3
410406	Z-CAD <i>smile</i> 98.5x10mm B4
410408	Z-CAD <i>smile</i> 98.5x14mm B4
410410	Z-CAD <i>smile</i> 98.5x18mm B4
410412	Z-CAD <i>smile</i> 98.5x25mm B4

Geometry Ø 98,5mm *

Art. No.	Product <i>smile</i> C1 - C4
410413	Z-CAD <i>smile</i> 98.5x10mm C1
410415	Z-CAD <i>smile</i> 98.5x14mm C1
410417	Z-CAD <i>smile</i> 98.5x18mm C1
410419	Z-CAD <i>smile</i> 98.5x25mm C1
410420	Z-CAD <i>smile</i> 98.5x10mm C2
410422	Z-CAD <i>smile</i> 98.5x14mm C2
410424	Z-CAD <i>smile</i> 98.5x18mm C2
410426	Z-CAD <i>smile</i> 98.5x25mm C2
410427	Z-CAD <i>smile</i> 98.5x10mm C3
410429	Z-CAD <i>smile</i> 98.5x14mm C3
410431	Z-CAD <i>smile</i> 98.5x18mm C3
410433	Z-CAD <i>smile</i> 98.5x25mm C3
410434	Z-CAD <i>smile</i> 98.5x10mm C4
410436	Z-CAD <i>smile</i> 98.5x14mm C4
410438	Z-CAD <i>smile</i> 98.5x18mm C4
410440	Z-CAD <i>smile</i> 98.5x25mm C4

Geometry Ø 98,5mm *

Art. No.	Product <i>smile</i> D1 - D4
410441	Z-CAD <i>smile</i> 98.5x10mm D2
410443	Z-CAD <i>smile</i> 98.5x14mm D2
410445	Z-CAD <i>smile</i> 98.5x18mm D2
410447	Z-CAD <i>smile</i> 98.5x25mm D2
410448	Z-CAD <i>smile</i> 98.5x10mm D3
410450	Z-CAD <i>smile</i> 98.5x14mm D3
410452	Z-CAD <i>smile</i> 98.5x18mm D3
410454	Z-CAD <i>smile</i> 98.5x25mm D3
410455	Z-CAD <i>smile</i> 98.5x10mm D4
410457	Z-CAD <i>smile</i> 98.5x14mm D4
410459	Z-CAD <i>smile</i> 98.5x18mm D4
410461	Z-CAD <i>smile</i> 98.5x25mm D4

Geometry Ø 98,5mm *

*Additional shapes and sizes
(e.g. cylindrical or Ø 95mm) on request

SWISS MADE

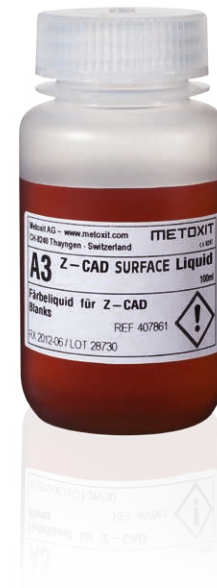
Z-CAD® *smile* Esthetic Zirconia
Bending strength > 610Mpa
ISO 6872:2019 Class 4

Z-CAD® Surface liquid

These ready to use, water soluble, infiltration liquids are specifically produced, to color the Metoxit AG white zirconia substructures. Regardless if dipping or paint-on methods are applied the coloring liquids emerge into the surface of unsintered substructures.

Z-CAD® Surface liquid dentin

Art. No.	Product Surface liquid A1-D4	Content
411976	Z-CAD Surface liquid A1	100 ml
411977	Z-CAD Surface liquid A2	100 ml
411978	Z-CAD Surface liquid A3	100 ml
411979	Z-CAD Surface liquid A3.5	100 ml
411980	Z-CAD Surface liquid A4	100 ml
411981	Z-CAD Surface liquid B1	100 ml
411982	Z-CAD Surface liquid B2	100 ml
411983	Z-CAD Surface liquid B3	100 ml
411984	Z-CAD Surface liquid B4	100 ml
411985	Z-CAD Surface liquid C1	100 ml
411986	Z-CAD Surface liquid C2	100 ml
411988	Z-CAD Surface liquid C3	100 ml
411989	Z-CAD Surface liquid C4	100 ml
411990	Z-CAD Surface liquid D2	100 ml
412002	Z-CAD Surface liquid D3	100 ml
411991	Z-CAD Surface liquid D4	100 ml



Z-CAD® Surface liquid effect

Art. No.	Product Surface liquid effect	Content
411992	Z-CAD Surface liquid blue1	100 ml
411993	Z-CAD Surface liquid blue2	100 ml
411994	Z-CAD Surface liquid grey1	100 ml
411995	Z-CAD Surface liquid grey2	100 ml
411996	Z-CAD Surface liquid yellow	100 ml
411997	Z-CAD Surface liquid orange	100 ml
411998	Z-CAD Surface liquid brown	100 ml
411999	Z-CAD Surface liquid pink	100 ml

This perfectly tuned system of Z-CAD® Surface liquids offers easy handling and a high reproducibility for to be colored restorations.

The Z-CAD® Surface liquid set is comprised of the 16 dentin colors, according to the *Vita classical A1-D4 color system.

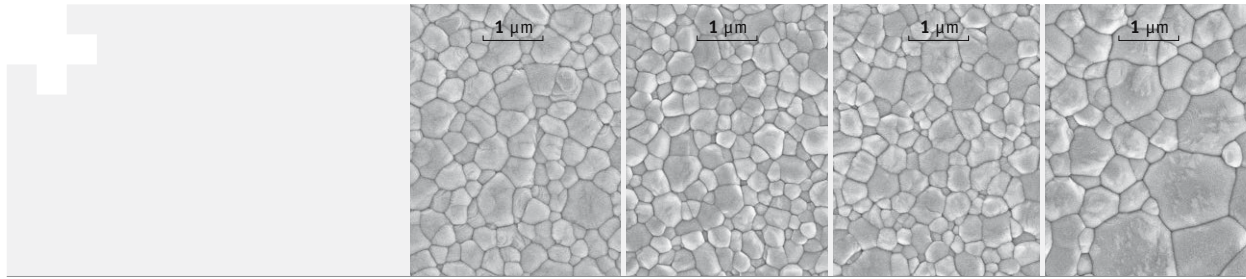
We also offer a Z-CAD® Surface liquid "effect set" which is comprised of eight colors for individualization.

Z-CAD® Surface liquid set

Art. No.	Product Surface liquid set	Content
412000	Z-CAD Surface liquid dentin set	16 x 100 ml
412001	Z-CAD Surface liquid effect set	8 x 100 ml

*VITA classical A1 - D4® is a registered trademark of VITA Zahnfabrik H. Rauter GmbH & Co. KG in Bad Säckingen.

Z-CAD® Materials



	Units	Z-CAD® HD	Z-CAD® HTL	Z-CAD® One4All	Z-CAD® smile
Chemical Composition					
ZrO ₂ + HfO ₂ + Y ₂ O ₃	wt%	> 99.5	> 99.5	> 99.5	> 99.5
Y ₂ O ₃	wt%	5.2	5.2	6.9	9.3
Al ₂ O ₃	wt%	0.25	0.05	0.05	0.05
Sum of all other oxides	wt%	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
Properties					
Density	g/cm ³	6.08	6.08	6.06	6.04
Bending strength (biaxial)	MPa	> 1100	> 1100	> 1000	> 610
Grain size	µm	< 0.4	< 0.4	< 0.5	< 0.6
Fracture Toughness K _{IC}	MPa√m	5	5	5	3.5
Hardness HV ₁₀	-	1250	1250	1250	1250
Translucency (1mm, D65)	%	35	41	45	49
Coefficient of thermal expansion (CTE)	10 ⁻⁶ /K	11.2	11.2	10.8	10.6
Thermal conductivity	W/mK	2.5	2.5	2.5	2.5
Solubility (acetic acid)	µg/cm ²	≤ 100	≤ 100	≤ 100	≤ 100
Radioactivity	Bq/kg	≤ 200	≤ 200	≤ 200	≤ 200
Indications					
		bar constructions, discoloration, abutments, frames...	bar constructions suprastructures, frames, bridges...	inlay, onlay, veneer, crowns, bridges...	inlay, onlay, veneer, crowns, 3-unit bridges...
Normative specification					
		dental restorations according to ISO 6872:2019 class 5	dental restorations according to ISO 6872:2019 class 5	dental restorations according to ISO 6872:2019 class 5	dental restorations according to ISO 6872:2019 class 4

All information and data correspond to the present state of our knowledge concerning properties and applications. For more specific product information, see our instructions for use. If you do not comply with the instructions for use no guarantee for the specified material properties is taken.