#### **DIRECT SYSTEM**

Step by Step



DENTISTRY

beautiful innovation you can trust

Bio-Esthetics and function in one appointment



edelweiss dentistry is a dental "think tank" that conceptualizes and produces innovative systematic solutions that are developed together with partners within the dental industry and marketed exclusively via the dental distribution network. The alliance between inspiration and technical know-how is focus. VENEER & OCCLUSIONVD from edelweiss are state of the art for modern and minimally invasive esthetic dentistry. For the first time in the history of dental, it is now possible to work with prefabricated veneers made from Nano-Hybrid composite using modern laser technology.

Never before has it been feasible to directly create the natural shape and youthful luminance of a tooth, so easily and perfectly in only one appointment. Its versatile area of application together with its time and cost saving procedure make edelweiss VENEER & OCCLUSIONVD a sound investment in the future with the best interest of the patient in mind. Convince yourself.



Stephan Lampl CEO, Founder & Inventor of edelweiss dentistry

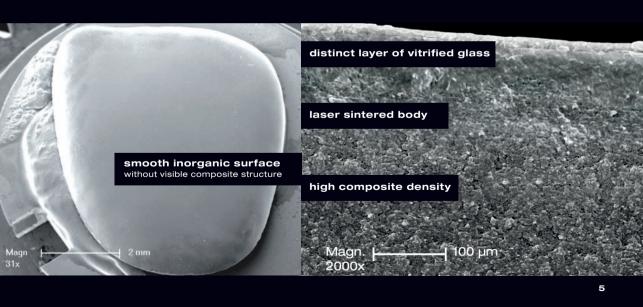
Claudio Novelli Clinical and Scientific Director

# The Progressive Technical Concept

#### edelweiss VENEER

The laser-treated process combines the best of two worlds: a homogenous, inorganic and high-gloss surface fused together with a thermally-tempered and dynamic composite core produces optimal integration between function and esthetics. The difference is in its similarity to nature.

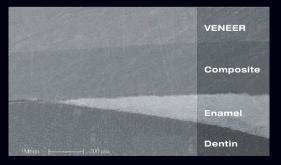




## Fatigue behavior for composite edelweiss VENEERs:

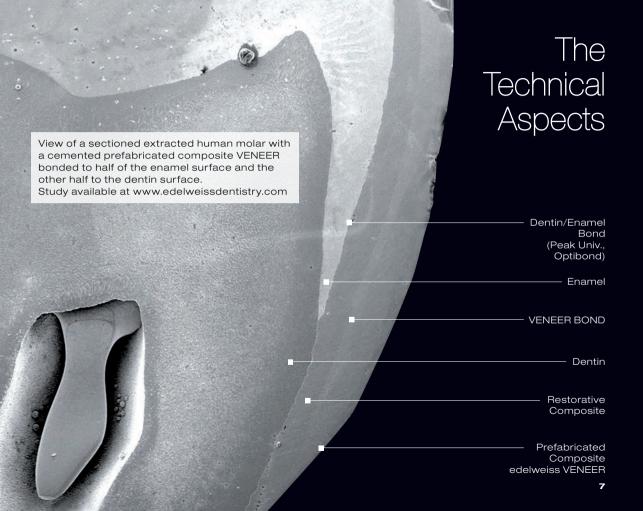
A recent in vitro study demonstrated that prefabricated composite edelweiss VENEERs cemented onto the enamel and dentin surface of molars, effectively resisted simulated functional fatigue and load testing. Virtually no defects were observed at both the enamel and dentin margins, either before or after loading, which typically represents the most vulnerable area of a restoration.

The most relevant observation made was obtained upon the evaluation of the inner adaptation of the restoration. No defects were visible at the interface of the enamel or in between the restorative composite and the edelweiss VENEER, which confirmed the excellent bonding strength and stability at both interfaces (dentin/enamel to composite, composite to edelweiss VENEER).



#### Université de Genève

Prof. Dr. Didier Dietschi D.M.D, PhD, Privat-Docent Specialist SVPR Associate. Professor



## Natural Layering Technique

The concept was proposed in 1995 by Prof. Dr. D. Dietschi and was published for the first time in 1997. It is based on the idea of creating a synthesis between light, material and color in order to mimic the natural tooth structure.

edelweiss COMPOSITE restructures teeth using two toothlike masses that are comparable to dentin and enamel to create restorations with natural looking results.

The optical characteristics of natural dentin and enamel were measured separately. The resulting color codes served as a reference towards the development of the edelweiss COMPOSITE. One shade system that covers the complete range of possible tooth colors.



## 5 DENTIN

Single opacity - same hue, but different chroma levels - fluorescence. From Dentin A0, for the restoration of bleached teeth to Dentin A3.5, for cervical restorations of darker teeth for elderly patients.

Dentin Body shades exhibit high opacity and fluorescence which correspond to natural shades of dentin.

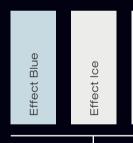
### 1 ENAMEL

The enamel shade intensifies the translucency, which increases the true opalescence for all optical variations found in natural dentition.

Basic Tint: Fnamel







Dpaque White

## 3 EFFECT SHADES

Effect Blue serves to enhance blue-opalescent effects of the incisal edge. Effect Ice helps to simulate widespread enamel opacities. Opaque White is mainly used in combination with other shades to produce "opaquers" of a desired shade to cover either severely discolored tissues or metals. Tint:

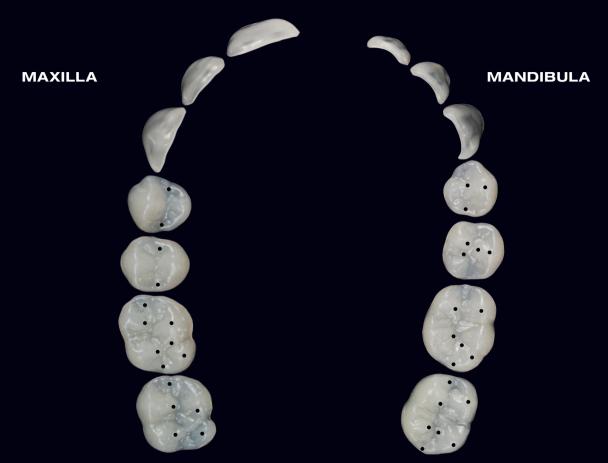
Effect Blue, Effect Ice, Opaque White

## The Technical Aspects & Sizes

#### **MORPHOLOGY**

Ultra-thin, anatomical edelweiss VENEERs and OCCLUSIONVDs in three sizes (S, M & L). The glass component in the composite filler and laser treatment of the surface give the material nature-like mechanical properties (biomechanics), and the material is also biocompatible (biology).

Due to the natural morphology, the prefabricated edelweiss VENEERs and OCCLUSIONVDs are very easy to incorporate into an existing restoration and occlusion.



#### **DIRECT SYSTEM**

## VENEER

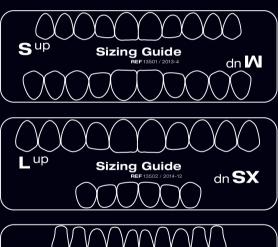
#### SHAPES AND SIZES

Based on a study of all shape and size variations of natural tooth anatomy, prefabricated and contourable universal veneer and occlusion shapes for the upper and lower arches were developed in the following range of sizes:

VENEER: 20 lower S/M, 10 each - 30 upper S/M/L, 10 each - 6 upper XS OCCLUSIONVD: Size S, M, L, upper and lower jaw, 4 per Quadrant.

#### THE SELECTION...

of the tooth shape is made using the available sizing guide (VENEER / OCCLUSIONVD Sizing Guide). The sizing guide is positioned over the teeth to be restored, and the outline allows for proper selection of the best-fitting VENEER and OCCLUSIONVD.

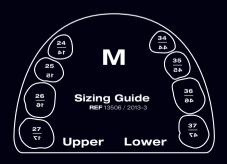


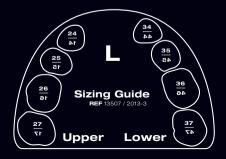


#### **DIRECT SYSTEM**

## OCCLUSIONVD













BEFORE AFTER



Relined and customized OCCLUSIONVD by dental technician.



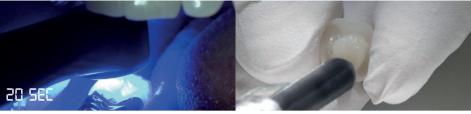
Gently air dry inner surface.

Light cure for 20 sec. with VALO (UPI) at standard power. With other Light cure for 40 sec.



Etching for 30 sec.

Bonding (UPI, Peak Universal Bond) / Floss interproximal areas before light curing.



Light cure for 20 sec. with VALO (UPI) at standard power. With other Light cure for 40 sec.

Application of N.-H. Dentin or Enamel Composite.



Floss interproximal areas then light cure for 20 sec. with VALO (UPI) at standard power. With other Light cure for 40 sec.

Finishing of interproximal area.



Floss interproximal areas then light cure for 20 sec. with VALO (UPI) at standard power. With other Light cure for 40 sec.



Finish and polish margins using fine finishing diamonds and Jiffy polishers.



Adaptation of N.-H.
Dentin/Enamel Composite.

Positioning and removal of surplus material.



Insertion of the OCCLUSIONVD.

Positioning of OCCLUSIONVD and removal of surplus material. Adapt margins.



Relaxed bite position in vertical dimension.

Front view / space for lower VENEERS.



Shade Guide.



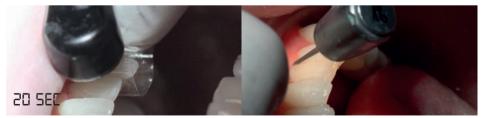
Select the dentin shade at cervical area with dentin Shade Guide.



Apply Ultra-Etch for 20 sec., then rinse and slightly dry, leaving surface slightly damp.



First anterior VENEER in position.



Light cure lingual and facial side of tooth for 20 sec. each (VALO UPI). With other Light cure for 40 sec.

Finish cervical and interproximal margins using fine finishing diamonds.



Placing the enamel VENEER shell over the dentin core (for light refraction place glycerine within enamel shell first).

Select edelweiss VENEER size using edelweiss Sizing Guide (single or combined VENEER Sizes may be used).



Place Mylar Strips both mesial and distal of all teeth to be treated.



Pull Mylar Strips facially to achieve smooth margins and cure through Mylar Strips for 3 sec. (VALO UPI). With other Light cure for 6 sec.



Finish incisal edge using fine finishing diamonds.



Finish interdental areas using Soflex Discs.



Polish VENEER margins using silicone rubber Visual observation. polisher.



Finish interproximal margins using a fine finishing diamond.



Proof of functional movements.



Fit and adapt the composite edelweiss VENEER using the gingival margin as your guide.



Sharpen the marginal edges and roughen inner surface of the edelweiss VENEER.



Visual observation.

Reocclusion.



Trial fit visualization of edelweiss VENEERs.

Prepare tooth using minimally invasive techniques.



Sharpen the marginal edges and roughen inner surface of the edelweiss VENEER.



Trial fit visualization of edelweiss VENEERs.



Insert retraction cord. (00 ultrapak)



Place Mylar Strips both mesial and distal of all teeth to be treated. Apply Ultra-Etch (UPI) for 20 sec., then rinse and slightly dry, leaving surface damp.



With VALO (UPI) cure for 10 sec. at standard power. With other light cure for 20 sec.



Place a puddle coat of VENEER Bond on edelweiss VENEER and gently agitate for 10 sec. Blow air using half pressure to thin and remove solvents.



Dispense strip of edelweiss N.-H.Composite onto inner surface of the VENEER.



Adapt N.-H. Composite into edelweiss VENEER. (Optional: characterize using flowable Enamel Composite or Effect Shades, for higher translucency on incisal area).



Place a puddle coat of Peak Universal Bond (UPI) on tooth and gently agigate for 10 sec.



Blow air using half pressure to thin and remove solvents. Surface will appear shiny.



Light cure for 20 sec. with VALO (UPI) at standard power. With other Light cure for 40 sec.



Gently air dry.



VENEER ready for placement.



Position and press the edelweiss VENEER into place (Tip: reduce operatory light).



Remove excess edelweiss N.-H. Composite from incisal edge.

Tack cure with VALO (UPI) near the incisal edge for 3 sec. using a point cure lens to stabilize VENEER.



Cure through Mylar Strips for 3 sec. (VALO UPI). With other Light cure for 6 sec.

Bend Mylar Strip over interdental area.



Place a puddle coat of Peak Universal Bond (UPI) on tooth and gently agigate for 10 sec.

Blow air using half pressure to thin and remove solvents. Surface will appear shiny.



Remove excess edelweiss N.-H. Composite from the rest of the margins.



Pull Mylar Strips facially to achieve smooth margins.



Light cure with VALO (UPI) lingual and facial side of tooth for 20 sec. each. With other Light cure for 40 sec.



Cemented VENEER.



With VALO (UPI) cure for 10 sec. at standard power. With other light cure for 20 sec.



Position and press the edelweiss VENEER into place (Tip: Reduce operatory light).



After positioning light cure with VALO (UPI) palatal and facial side of edelweiss VENEER for 20 sec. each.

Finish cervical and interproximal margins using fine finishing diamonds.



Finish interproximal areas using finishing Soflex Discs.



Reocclusion.



For high shine polish VENEER margins with KENDA polishers.



Visual observation.



Removal of retraction cords.

Finishing of incisal edges.





Visual observation.

Polish VENEER margings using KENDA silicone rubber polishers.

RECOMMENDATION OF ROTARY INSTRUMENTS







KENDA high-shine & coarse

#### **BEFORE**



#### **AFTER**







#### **BEFORE**



#### **AFTER**







## ADVANCED DIRECT SYSTEM VENEER & OCCLUSIONVD TOOLBOX REF 13700

# Toolb

36	edelweiss VENEERs
1	VENEER SET S up (1 x 14, 13, 12, 11, 21, 22, 23, 24 S)
1	VENEER SET M up (1 x 14, 13, 12, 11, 21, 22, 23, 24 M)
1	VENEER SET L up (1 x 14, 13, 12, 11, 21, 22, 23, 24 L)
1	VENEER SET S low (1 x 43, 42, 41, 31, 32, 33 S)
1	VENEER SET M low (1 x 43, 42, 41, 31, 32, 33 M)
48	edelweiss OCCLUSIONVDs
2	OCCLUSIONVD SETS up (1 x 17, 16, 15, 14 S) (1 x 24, 25, 26, 27 S)
2	OCCLUSIONVD SET M up (1 x 17, 16, 15, 14 M) (1x 24, 25, 26, 27 M)
2	OCCLUSIONVD SET L up (1 x 17, 16, 15, 14 L) (1 x 24, 25, 26, 27 L)
2	OCCLUSIONVD SETS low (1 x 47, 46, 45, 44 S) (1 x 34, 35, 36, 37 S)
2	OCCLUSIONVD SET M low (1 x 47, 46, 45, 44 M) (1 x 34, 35, 36, 37 M)
2	OCCLUSIONVD SET L low (1 x 47, 46, 45, 44 L) (1 x 34, 35, 36, 37 L)
25	edelweiss NANO-HYBRID COMPOSITE DENTIN SHADES
5	Dentin A0 0.3 g Tip
5	Dentin A1 0.3 g Tip
5	Dentin A2 0.3 g Tip



**DIRECT SYSTEM VENEER &** 

## oxes



OCCLUSIONVD TOOLBOX

- 5 Dentin A3 0.3 g Tip
- 5 Dentin A3.5 0.3 g Tip

#### 5 edelweiss NANO-HYBRID COMPOSITE ENAMEL SHADE

5 Enamel 0.3 g Tip

#### 1 edelweiss NANO-HYBRID COMPOSITE FLOW

1 Enamel Flowable 1.5 g Syringe

#### 2 edelweiss EFFECT SHADES

- 1 Opaque White 1.5 g Syringe
- 1 Effect Blue 1.5 g Syringe

#### 1 edelweiss BOND

VENEER Bond 5 ml Bottle

#### **ACCESSORIES**

Dentin & Enamel Shade Guide

VENEER & OCCLUSIONVD Sizing Guide up & low

FLOW Application Tips (10x)

Step by Step Booklet

Instructions for use

#### STARTER DIRECT SYSTEM VENEER TOOLBOX **REF 13710** 20 edelweiss VENEERs 1 VENEER SETS up (1 x 13, 12, 11, 21, 22, 23 S) 1 VENEER SET M up (1 x 14, 13, 12, 11, 21, 22, 23, 24 M) VENEER SET L up 1 (1 x 13, 12, 11, 21, 22, 23 L) 25 edelweiss NANO-HYBRID COMPOSITE **DENTIN SHADES** 5 Dentin AO 0.3 g Tip 5 Dentin A1 0.3 a Tip 5 Dentin A2 0.3 a Tip 5 Dentin A3 0.3 g Tip 5 Dentin A3.5 0.3 g Tip 5 edelweiss NANO-HYBRID COMPOSITE **ENAMEL SHADE** 5 Enamel 0.3 g Tip

# Toolb



**DIRECT SYSTEM V** 

## OXES



**ENEER TOOLBOX** 

## 1 edelweiss NANO-HYBRID COMPOSITE FLOW

1 Enamel Flowable 1.5 g Syringe

#### 2 edelweiss EFFECT SHADES

- 1 Opaque White 1.5 g Syringe
- 1 Effect Blue 1.5 g Syringe

#### 1 edelweiss BOND

1 VENEER Bond 5 ml Bottle

#### **ACCESSORIES**

Dentin & Enamel Shade Guide
VENEER Sizing Guide up & low
FLOW Application Tips (10x)
Step by Step Booklet
Instructions for use

#### STARTER DIRECT SYSTEM OCCLUSIONVD TOOLBOX REF 13720 32 edelweiss OCCLUSIONVD 2 OCCLUSIONVD SETS up $(1 \times 17, 16, 15, 14 \text{ S})$ $(1 \times 24, 25, 26, 27 \text{ S})$ 2 OCCLUSIONVD SET M up (1 x 17, 16, 15, 14 M) (1 x 24, 25, 26, 27 M) 2 OCCLUSIONVD SETS low $(1 \times 47, 46, 45, 44 \, S) (1 \times 34, 35, 36, 37 \, S)$ 2 OCCLUSIONVD SET M low (1 x 47, 46, 45, 44 M) (1 x 34, 35, 36, 37 M) 25 edelweiss NANO-HYBRID COMPOSITE **DENTIN SHADES** Dentin AO 0.3 g Tip 5 5 Dentin A1 0.3 g Tip 5 Dentin A2 0.3 g Tip

Dentin A3 0.3 g Tip

Dentin A3.5 0.3 a Tip

# Toolb



**DIRECT SYSTEM OCC** 

5

5

## oxes



LUSIONVD TOOLBOX

- 5 edelweiss NANO-HYBRID COMPOSITE ENAMEL SHADE
- 5 Enamel 0.3 g Tip
- 1 edelweiss NANO-HYBRID COMPOSITE FLOW
- 1 Enamel Flowable 1.5 g Syringe
- 1 edelweiss BOND
- VENEER Bond 5 ml Bottle

#### **ACCESSORIES**

Dentin & Enamel Shade Guide

OCCLUSIONVD Sizing Guide up & low

FLOW Application Tips (10x)

Step by Step Booklet

Instructions for use



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