• **TRANSCEND**<sup>™</sup> • UNIVERSAL COMPOSITE

# Restorations with **Just One Shade**







## RESIN PARTICLE MATCH

Transcend composite and its Universal Body shade has been designed with Ultradent's Resin Particle Match<sup>™</sup> technology. The balanced refractive indices between the resin and filler particles, combined with a carefully optimized tuning between translucency and opacity, allow Transcend composite to blend with most surrounding dentition with just one shade and without the use of a blocker.<sup>1</sup>



Before

Refore

Before

After

Patient presented with a failing composite restoration. Filling was removed, which revealed tattooing and mesial crack. The mesial crack was still a small, manageable size and therefore a direct bonded restoration could be done instead of an indirect crown restoration. Products used: Ultra-Etch<sup>™</sup> etchant, Consepsis<sup>™</sup> solution, and Peak<sup>™</sup> Universal Bond adhesive. A very thin layer of A3 PermaFlo<sup>™</sup> flowable composite was used for the initial layer. Transcend composite Universal Body shade was used to restore the tooth. Composite was adjusted according to occlusion and polished up beautifully.

Courtesy of Dr. Jaleena Fischer-Jessop

Patient presented with recurrent decay on amalgam restoration on tooth #28. Tooth was restored using Transcend composite Universal Body shade. No opaquer was used as Transcend composite Universal Body shade had enough opacity to cover amalgam tattooing while blending in with the natural tooth color.

Courtesy of Dr. Jaleena Fischer-Jessop

Patient presented with discolored and defective distal buccal tooth color restoration on tooth #11 and mesial buccal on #12. Secondary caries beneath #12. Gingival recession caused the black triangle space seen.

Defective restoration and caries were removed. Darker yellowish dentin can be seen at the cervical area. Translucent enamel present.

The preparation was etched and bonded per manufacturers' instructions, then Transcend composite Universal Body shade was placed to reduce interdental space. Transcend composite is able to mimic surrounding tooth color. No staining or layering was needed.

Courtesy of Dr. Adrian Goh





## **One-Shade Restorations**

In the cases shown below, only the Transcend composite Universal Body shade was used.

UB TRANSCEND



••• TRANSCEND



















UB TRANSCEND™



















After





















UB TRANSCEND"



Transcend Composite UB Shade – Images Courtesy of Dr. Jose Carlos Garofalo



















Transcend Composite UB Shade – Images Courtesy of Dr. Jaleena Fischer-Jessop

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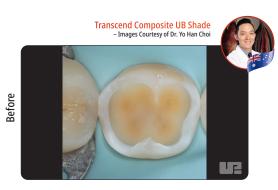
Bel

After

UB TRANSCEND™



















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••• UNIVERSAL COMPOSITE





UB TRANSCEND"













UB TRANSCEND





After





Transcend Composite UB Shade – Images Courtesy of Dr. Mia Vukelic

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## **Layered Restorations**

In the cases shown below, multiple shades were layered.



















## DR. RAFAEL BEOLCHI

Dr. Rafael Beolchi graduated from the University of São Paulo, Brazil, in 2000. He has maintained a private practice since 2001, working mainly in esthetic dentistry and oral rehabilitation. In 2009, he received a master's degree in Biomaterials. He lectures around the world, mainly on the advanced handling of dental materials with an easy step-by-step approach. He now lives in Portugal where he is pursuing his second master's degree.





Before: Failed composite restorations on both lower molars.

Jltra-Etch<sup>™</sup> etchant selectively

placed on the enamel margins.

Peak<sup>™</sup> SE Primer was used as

he self-etching primer on

dentin and Peak<sup>™</sup> Universal

onding agent.

Bond adhesive was used as the

PermaFlo<sup>™</sup> flowable composite

(A2 shade) was applied

on the proximal boxes

o reduce stress during

total and complete seal

of the restoration margins, respectively. It also helps in

avoiding air bubbles.

polymerization and to ensure

over the cavity angles and



5.

DermaDam<sup>™</sup> rubber dam solation after removal of the old restorations.

Scrubbing motion of Peak

Peak SE Primer application.

Universal Bond adhesive after



6.

Triodent<sup>®</sup> V3 sectional matrix system being placed along with the anatomical wedges and rings.



Peak Universal Bond adhesive Grand curing light.

being light cured by VALO<sup>™</sup>



ranscend composite Universal Body shade applied over the lingual side of the first lower molar, already sculpted and light cured.



oth restorations finalized. Note the integration of the ingle Universal Body shade ised with the surrounding tooth structure.



After curing PermaFlo flowable composite, Transcend<sup>™</sup> composite Universal Body shade was used to create the missing mesial and distal walls.

Final aspect of the restorations

after occlusal adjustments

and polishing. Note how the

composite blends with the

and gives an esthetic and

natural appearance on the proximal boxes without the use of any blocker shades.

surrounding tooth structures



Buccal view of the finalized restorations. Note the integration of the Transcend composite Universal Body shade and tooth structure on the buccal wall of the first lower molar.



## DR. BRETT RICHINS

After earning his bachelor's degree in biomedical engineering from the University of Utah in 2008, Dr. Richins received his doctorate from the University of Pittsburgh School of Dental Medicine in 2012. He is a member of the Academy of General Dentistry, the American Dental Association, and the Utah Dental Association. He continues to pursue his education and frequently attends advanced courses that cover topics such as Endodontics, Implantology, Cosmetic Dentistry, Oral Pathology, TMJ, Sleep Apnea, and much more. He has also done humanitarian dentistry in underserved areas of Jamaica, Vanuatu, and Appalachia.



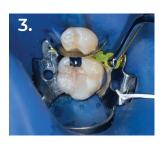




DO preparation on tooth #29 (mandibular right second premolar) with caries removed.



4.5 mm Halo<sup>™</sup> band placed using Halo tweezers to hold the occlusal tab.



Small Halo wedge placed from the buccal using Halo tweezers.



Halo universal ring in place. Ready to begin restoration.



Check adaptation of band. Burnishing is typically not required but can be done if needed in challenging cases to ensure an adequate proximal contact.



Ultra-Etch<sup>™</sup> etchant applied for 15 seconds on dentin and cut enamel.



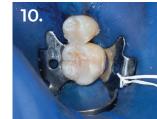
Peak<sup>™</sup> Universal Bond adhesive scrubbed into dentin and painted onto enamel for 10 seconds using [nspiral<sup>™</sup> Brush tip.



Thinned/dried for 10 seconds using 1/4 to ½ air pressure. Preparation appeared shiny, and air thinning no longer produced visible movement of the resin. Cured for 10 seconds using the VALO<sup>™</sup> X curing light.



Placed Transcend<sup>™</sup> composite Universal Body shade in lavers 2 mm or less.



Minimal finishing required after immediate removal of Halo matrix system.



nished with the Jiffy<sup>™</sup> Natural polishing line.



Completed restoration with anatomical contact and sole use of Transcend composite's Universal Body shade.









## DR. RAFAEL CALIXTO

Professor Rafael Calixto holds a master's of science (MSc) and doctorate of philosophy (PhD) in restorative dentistry from UNESP in São Paulo, Brazil. He has authored the book *Direct–Composite Veneers* and runs a private practice in São Paulo, Brazil. Dr. Calixto is an international speaker, teaches the Dentistry Specialization course at FAEPO in São Paulo, and coordinates the Specialization Course in Dentistry at the Brazil Association of Dentistry in Alagoas, Brazil. Dr. Calixto also teaches the Master of Rehabilitation course at ADA in Madrid/Spain and coordinates the Specialization Course in Dentistry at ECO-Academy in São Paulo.





Central incisors presenting stains and loss of gloss. Composite resin veneers will be replaced to obtain better esthetic appearance.



After placement of Peak<sup>™</sup> Universal Bond adhesive, lingual shell was created with Transcend<sup>™</sup> composite Enamel Neutral shade.



Ultrapak<sup>™</sup> 000 retraction cord is placed to provide optimal tissue displacement and control sulcular fluid.



In order to balance the different substrate colors, a lighter dentin shade (B1D) was placed on the darker tooth (#8), and a darker dentin shade (A2D) was placed on tooth #9.



PVS matrix is fitted to tooth preparation.



Transcend composite Enamel White was placed as the final layer, at first on the facial surface of tooth #9, and cured with VALO<sup>™</sup> curing light.



After isolation, Ultra-Etch<sup>™</sup> 35% phosphoric acid etchant is applied for 15 seconds on cut enamel.



Transcend composite Enamel White was placed as the final layer on tooth #8, the proximal contacts were reproduced with the same composite, then cured.



Ultrapak cord removed and teeth polished with Jiffy<sup>™</sup> Natural Medium spiral polishing wheel.



Teeth then polished with Jiffy Natural Fine Final polish with Jiffy<sup>™</sup> HiShine cup to spiral polishing wheel.



create a highly polished finish on the cervical buccal area.



Final restoration results.





## DR. JOSÉ CARLOS GARÓFALO

and esthetic dentistry and has a master's of science in dentistry from the University of São Paulo FOUSP. He is the former Director of the Department of Dentistry of the School of Professional Development of the São Paulo Association of Dental Surgeons and Dr. Garófalo has also lectured as a professor at International Congresses and Symposiums in Brazil and Latin America. Previously the Scientific Editor of the Revista Estética-APCD of São Paulo, he has also written articles. co-authored books, and contributed chapters in publications such as: Laminated Veneers, Inlays-Onlays, Atlas of Laminated Veneers, and Dental Sculpture Using the Geometric Method.







Dr. Garófalo is a specialist in restorative





Previous restoration failed and fell out of patient's mouth.



Tooth is isolated using a rubber dam, tooth is prepared, Halo<sup>™</sup> sectional matrix band is placed, and Halo<sup>™</sup> disposable anatomical large wedge is placed.



Halo<sup>™</sup> universal matrix ring is placed.



Ultra-Etch<sup>™</sup> 35% phosphoric acid etchant is used with a selective etch technique for 15 seconds on cut enamel. Peak<sup>™</sup> SE Primer is used to etch dentin for 20 seconds.



Application of universal adhesive.



Adhesive is cured for 10 seconds with VALO<sup>™</sup> Grand curing light.



Tooth is restored in 2 mm layers using Transcend<sup>™</sup> composite Universal Body shade.



Before removal of rubber dam, finishing and polishing completed with Jiffy<sup>™</sup> points and Jiffy<sup>™</sup> Natural composite polishers.





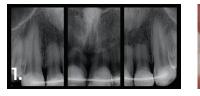




### Dr. Jaleena Fischer-Jessop

Dr. Jaleena Fischer-Jessop graduated with honors in Oral Surgery from Loma Linda University School of Dentistry in 2002. She later completed a two-year certification for straight wire orthodontics from the American Orthodontic Society. She served on the Utah Dental Association board for two years and has served on the national advisory board at the University of Utah Dental School for several years. She also currently works as an adjunct professor at the University of Utah Dental School. Dr. Fischer-Jessop owns a private dental practice where she has worked for 20 years with an emphasis on esthetic and minimally invasive dentistry.





Female patient in her 20s, history of trauma. Opted to not move forward with implants as teeth were stable.



Patient had esthetic concerns and was financially challenged. Because of the history of trauma, we opted to do no-prep direct-bonded composite veneers.

Used a fine mosquito needle diamond bur for

Air thinned Peak Universal Bond adhesive with

air and suction. Light cured with the VALO<sup>™</sup> X

curing light for 3 seconds on Xtra Power mode.

Cemented with PermaShade<sup>™</sup> LC luting resin,

Translucent shade.

contouring of the margins.



Placed Transcend composite B1D shade 2/3 up from incisal edge, thinning towards the gingival. Universal Body (UB) shade was placed against the gingival 1/3 and final layers were completed with Enamel White (EW) shade and a small amount of UB at gingival margin for blending.

Composite veneers contoured and polished

to-cement procedure.

gingival sulcus.

using the liffy<sup>™</sup> Natural polishing kit and ready-

Packed Ultrapak<sup>™</sup> knitted cord Size #0 into the



Used a #12 blade and separating saw to separate the veneers.







Careful removal of the composite veneers.

Coated internal surface with Peak<sup>™</sup> Universal Bond adhesive.



Applied Peak Universal Bond adhesive and thinned with air and suction.

"Patient originally had thick enamel with rounded tooth contours. Her upper anterior teeth showed discoloration due to trauma. I wanted to mask the underlying color so the teeth more closely matched her lower anteriors. Shades B1D and Enamel White (EW) were used to lighten the appearance of the teeth. The Universal Body (UB) shade was then used to ensure the margin blended naturally into the cervical areas." –Dr. Jaleena Fischer-Jessop





Final cementation results.



Air abrasion of the internal surface of the also be used).



Performed a 30-second etch using Ultra-Etch 35% phosphoric acid on uncut enamel.



To develop the facial anatomy, football diamond and long, thin diamond burs were used. A lobed diamond bur was used to create the lines of Retzius (SR lines). The initial polishing was completed with Jiffy<sup>™</sup> Natural polishers, then the final luster was achieved with Ultradent<sup>™</sup> Diamond Polish Mint and the Jiffy<sup>™</sup> Goat Hair Brush to not remove the tertiary anatomy





veneer (Ultra-Etch<sup>™</sup> 35% phosphoric acid can

## **Ordering** Information

## Universal Body Shade



4733 - Transcend UB Syringe 1pk 1 x 4 g syringe Universal Body shade

4734 - Transcend UB Syringe 4pk 4 x 4 q syringes Universal Body shade

4757 - Transcend UB Singles 1pk 10 x 0.2 q singles Universal Body shade

4817 - Transcend UB Singles 4pk 40 x 0.2 g singles Universal Body shade

**Complementary Shades** 

Transcend Syringe 1pk 4 g syringe

Dentin	1pk	Enamel	1pk
A1D	4727	EN	4731
A2D	4728	EW	4732
A3D	4729		
B1D	4730		

Transcend Singles 1pk 10 x 0.2 q singles

Dentin	1pk	Enamel	1pk
A1D	4744	EN	4748
A2D	4745	EW	4749
A3D	4746		
B1D	4747		



4726 - Transcend Syringe Intro Kit 1 x 4 g syringe of each shade: A1D, A2D, A3D, B1D, EN, EW, UB



4814 - Transcend Singles Intro Kit 10 x 0.2 g singles of each shade: A1D, A2D, A3D, B1D, EN, EW, UB



"Transcend composite redefines the efficacy of newgeneration dental composites; offering excellent ease of use, predictable outcomes, and an optimized selection of masses, enabling clinicians to achieve high-quality esthetic restorations with greater efficiency."

Dr. Tommaso Mascetti



"Transcend aims to redefine the supercomposite market with a remarkable composite that in itself exudes beauty and simplicity with a profound chameleon effect, in many cases obviating the need for an underlying shade opaquer, even in stained amalgam replacement cases. The compressive strength is top tier and is rated at 450 MPa, which incidentally exceeds that of lithium disilicate. The flexural strength is similar to dentin and is rated at 156 MPa, with a similar modulus of elasticity. This supercomposite is geared well for biomimetic dentistry." to Top

Dr. Clarence Tam

"Transcend composite delivers what it promises: a truly universal body shade that does not require a blocker on deeper restorations. More than that, it provides a lot of help in our everyday practice. It's like color matching on auto-mode."

Dr. Rafael Beolchi

"Transcend composite has quickly become a go-to product in our office. Its Universal Body shade is so versatile. I love the chameleon effect that matches beautifully for posteriors, Class IIIs, and Class Vs. For more esthetically demanding anterior cases like Class IVs, I utilize the dentin and enamel shades and do a simple layering technique with starburst beveling and get invisible restorations. The polish is amazing too...so fast with a high gloss that lasts."

Dr. Susan McMahon



"The Universal Body shade has amazing chameleon-like properties and doesn't require a blocker. I use it for the vast majority of my fillings. For those demanding cosmetic situations, the simple dentin and enamel shades allow for layering and give incredible results. Another home run product for Ultradent."

**Dr. Gary Findley** 

"Transcend is a high-quality, no-compromise material that is a true universal shade-matching composite resin. It will become the workhorse product for your posterior composites, Class Vs, and many anterior restorations. It provides a high-quality result in a timely and cost-effective manner with excellent shade matching."

**Dr. Mark Petti** 

"The clinicians who know me, know I am a faithful Vit-l-escence<sup>™</sup> user. I like to place multiple layers for great esthetics whether I am restoring anterior or posterior teeth. However, there are times when I have felt it would be great to be able to just place one shade and not feel as though I have compromised the case. Transcend has accomplished this for me. I have been amazed at the beautiful case outcomes with just a single shade. I like having the simple 6 additional shade offerings for those cases where layering may be able to improve the result. With the Universal Body shade plus the dentin and enamel shades, I can cover about 90 percent of my cases."

Dr. Jaleena Fischer-Jessop





"Transcend has been an exciting addition to my daily clinical practice. We all want our dentistry to look as natural and as esthetic as possible while providing high-quality, long-lasting results. Transcend makes it quick and easy to match the shade for my patients. Transcend not only improves the final result but it also saves time and reduces stress because I can feel confident my shade match is going to be great!"

**Dr. Brett Richins** 

"Direct composite veneers are a challenge to match the color of natural teeth. Several restorative techniques have been proposed for stratification in the anterior sector. A simplified stratification can be applied with very satisfactory results, but to do this, it is necessary to know the translucency concept of the materials and layer's thickness. Furthermore, a composite resin with excellent optical characteristics is required. Transcend composite is a simplified system in terms of the number of shades available, but those shades and polishing properties allow for excellent results through fast and efficient layering."

Dr. Rafael Calixto

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