

Bonded attachments with Spectra ST¹ universal composite restorative for SureSmile® Clear Aligners



by: Dr. Amaury de Moraes Silveira

After a thorough examination and discussion of the patient's dental history, Dr. Silveira determined that a SureSmile® Clear Aligner treatment would be the best course of action to gradually move the patient's teeth into the desired position. The main goals of this treatment were to align the upper lateral incisors, improve overall guidance and occlusion.

To prepare for the treatment, Dr. Silveira took digital impressions of the patient's teeth using a PrimeScan® intraoral scanner which allowed him to create a custom treatment plan tailored to the patient's specific needs and goals. Using dental treatment software, it was possible to show the patient a visual representation of how the teeth would gradually move into the desired position throughout the course of the treatment, enabling realistic expectations for the outcome.

Once the treatment plan was finalized, a series of custom SureSmile® Clear Aligners were designed to fit the patient's teeth precisely. Dr. Silveira also placed composite attachments which were made with Spectra ST¹ universal composite restorative to guide the movement of the teeth during the treatment process.

Bonded attachments with Spectra ST¹ composite





SureSmile® Clear Aligners in situ



Dr. Amaury de Moraes Silveira - Dentsply Sirona Certified KOL since 2010
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Amaury de Moraes Silveira is a highly innovative and passionate dentist from Brazil with a strong background in dental prosthesis and orthodontics. In addition to his impressive credentials and career accomplishments, he has a good eye for innovation and is well-known for his ability to inspire and mentor others. Silveira's passion for dentistry is said to be contagious and has inspired countless students over the years. He has mentored and tutored hundreds if not thousands of students, mainly on Prosthetic and Esthetic Dentistry. His expertise and experience in these areas have made him an invaluable resource to his students and colleagues alike.

Bonded attachments with Spectra ST¹ universal composite restorative for SureSmile® Clear Aligners

1. Prepare teeth	2. Apply adhesive	3. Air dry adhesive
 <ul style="list-style-type: none"> • Isolate with cheek retractors • Polish teeth with fluoride free pumice • Rinse and dry teeth • Apply etchant gel² for 30 seconds • Apply suction, rinse and dry 	 <ul style="list-style-type: none"> • Apply Prime&Bond³ adhesive and agitate for 20 seconds. 	 <ul style="list-style-type: none"> • Gently air dry each tooth for at least 5 seconds. Tooth surface should have a uniform, glossy appearance.
4. Light Cure Adhesive	5. Prepare attachment tray	6. Pack composite
 <ul style="list-style-type: none"> • Light cure each treated tooth surface with SmartLite® Pro Modular LED Curing Light for 10 seconds. 	 <ul style="list-style-type: none"> • Fill the attachment template with Spectra ST¹ composite. Compules® Tips are recommended for precise and easy placement. 	 <ul style="list-style-type: none"> • A general IPC composite instrument was used to pack the composite into the attachment well. • The Low Viscosity composite was used because it is easiest to adapt into shape.
7. Clean extra composite	8. Place tray	9. Light cure each attachment
 <ul style="list-style-type: none"> • Use a flocked applicator tip to clean around the attachment well prior to placement. This cleaning step before bonding will save chair time. 	 <ul style="list-style-type: none"> • The tray filled with composite is placed in patient's mouth. Light pressure should be applied each composite attachment to ensure adhesion 	 <ul style="list-style-type: none"> • Each attachment was light cured with the SmartLite® Pro Curing Light for 10 seconds.
10. Check for flash	11. Flash removal	12. Polish attachments
 <ul style="list-style-type: none"> • An ultraviolet or black light was used to easily identify any flash 	 <ul style="list-style-type: none"> • Enhance® finishing points were used to remove the remaining composite flash. 	 <ul style="list-style-type: none"> • Final results after polishing with the Enhance® PoGo Polishing System. • To remove attachment, use esthetic trimming and finishing carbide burs

Start of SureSmile® Clear Aligner treatment with bonded attachments in place



Bonded attachments with Spectra ST¹ composite are natural-looking and durable



Bonded attachments with SureSmile® Clear Aligners in place

Conclusion and references

While the treatment is still ongoing, the patient's teeth have already shown promising movement into the desired position after several months of treatment. As a result, there is a positive prognosis that the malalignment of the anterior teeth will be corrected. The composite attachments were well-bonded to the tooth surface and provide excellent, natural-looking esthetics for the patient.

The patient was impressed by the convenience of the SureSmile® Clear Aligners and delighted with the predictable results, as her smile seems to be improving significantly. The patient was genuinely impressed by the convenience that SureSmile® Clear Aligners offered. Unlike traditional braces, she didn't have to worry about metal brackets or wires causing discomfort or difficulty in maintaining oral hygiene. The ability to remove the aligners for eating, brushing, and flossing made her daily routine much more manageable.

Overall, the clinical case presented by Dr. Amaury de Moraes Silveira is illustrative to the successful use of composite attachments to correct malalignment of the anterior teeth. The use of products from Dentsply Sirona in the treatment highlighted their effectiveness and suitability for dental restorations.

Dentsply Sirona has everything you need for bonded attachments that are durable and look natural.

Spectra ST¹ Universal Composite Restorative



Prime&Bond³ Universal Adhesive



Enhance® & Enhance® PoGo® Finishing & Polishing System



Tooth Conditioner² Phosphoric Acid Gel



SmartLite® Pro Modular LED Curing Light



For more information visit www.dentsplysirona.com/attachments

To get a hands-on demo of bonding attachments with Spectra ST¹ composite,
Contact your Dentsply Sirona sales representative

1. Depending on market location, Spectra ST composites are available as either TPH Spectra® ST, Ceram.x Spectra® ST, or Neo Spectra® ST. 2. Depending on market location, Dentsply Sirona etchant gels are available as either Caulk® 34% Tooth Conditioner Phosphoric Acid Gel or DeTrey® Conditioner 36 Phosphoric Acid Gel. 3. Depending on market location, Prime&Bond adhesives are available as either Prime&Bond active®, or Prime&Bond Universal™