SURPASS®

General Instructions

Although it is not critical to the success of **SURPASS®**, it is recommended that the preparation be cleaned with isopropyl alcohol on a cotton pellet and rinsed with water prior to beginning the bonding protocol. Pumicing or gentle particle abrasion of enamel is also recommended.

1. Rinse the preparation thoroughly and remove all visible water by drying the surface for approximately 5 seconds with dried compressed air.

2. Dispense a drop of **SURPASS®1** into one cavity of the enclosed mixing well. Using the proper color-coded brush, apply **SURPASS®1** to the entire cavity preparation and the surrounding tooth structure, agitating briskly for at least 10 seconds. DO NOT DRY **SURPASS®1**

3. Dispense a drop of **SURPASS®2** into another cavity of the mixing well. Using the proper color-coded brush apply three brushfuls of **SURPASS®2** to the entire cavity preparation, dabbing each brushful to help distribute as much of the primer as possible.

4. Dry the primed surface with dried compressed air for at least 10 seconds with the air syringe tip as close as possible to the surface. DRY**SURPASS®2** THOROUGHLY

5. Dispense a drop of **SURPASS®3** into another cavity of the mixing well. Using the proper color-coded brush apply a thin layer of **SURPASS®3**to the entire cavity surface.

6. Light-activate for 10 seconds. **SURPASS®** can be activated with any dental activation light.

7. Continue restorative procedure with material of choice. Follow manufacturer's instructions for all restorative materials.

NOTE: For indirect restorations, air-thin **SURPASS®3** sufficiently to allow seating of the restoration and light-activate.

NOTE: Deciduous teeth are treated in the same manner as permanent teeth.

NOTE: **SURPASS®1** should be agitated for 20 seconds on uncut enamel.

NOTE: **SURPASS®** is always light-cured before placing veneers and bonded crowns.

Protocol for Delivering Indirect Restorations

1. Rinse the preparation thoroughly and remove all visible water by drying the surface for approximately 5 seconds with dried compressed air.

2. Dispense a drop of **SURPASS®1** into one cavity of the enclosed mixing well. Using the proper color-coded brush, apply **SURPASS®1** to the entire cavity preparation and the surrounding tooth structure, agitating briskly for at least 10 seconds. DO NOT DRY **SURPASS®1**

3. Dispense a drop of **SURPASS®2** into another cavity of the mixing well. Using the proper color-coded brush apply three brushfuls of **SURPASS®2** to the entire cavity preparation, dabbing each brushful to help distribute as much of the primer as possible.

4. Dry the primed surface with dried compressed air for at least 10 seconds with the air syringe tip as close as possible to the surface. DRY **SURPASS®2**THOROUGHLY

5. Dispense a drop of **SURPASS®3** into another cavity of the mixing well. Using the proper color-coded brush apply a thin layer of **SURPASS®3** to the entire cavity surface. Air-thin the **SURPASS®3** aggressively. Final film thickness will be around 10 – 12 microns.

6. Light-activate for 10 seconds. **SURPASS®** can be activated with any dental activation light.

7. Continue restorative procedure with material of choice. Follow manufacturer's instructions for all restorative materials.

Protocol for Metal Bonding

1. Roughen the metal surface to be bonded. Ideal the surface should be micro-etched with 27 micron aluminum oxide powder. If micro-etching is not available the surface should be roughened with a burr.

2. Rinse and dry the surface.

3. Dispense a drop of **SURPASS®2** into a cavity of the mixing well. Using the proper color-coded brush apply two brushfuls of **SURPASS®2** to the metal surface.

4. Dry the primed surface with dried compressed air for at least 10 seconds with the air syringe tip as close as possible to the surface. DRY **SURPASS®2**THOROUGHLY

5. Dispense a drop of **SURPASS®3** into another cavity of the mixing well. Using the proper color-coded brush apply a thin layer of **SURPASS®3** to the entire cavity surface.

6. Light-activate for 10 seconds. **SURPASS®** can be activated with any dental activation light.

7. Continue restorative procedure with material of choice. Follow manufacturer's instructions for all restorative materials.

Protocol for Bonding to Existing Composite

1. Roughen the composite surface to be bonded. Ideal the surface should be micro-etched with 27 micron aluminum oxide powder. If micro-etching is not available the surface should be roughened with a burr.

2. Rinse and dry the surface.

3. Dispense a drop of **SURPASS®2** into a cavity of the mixing well. Using the proper color-coded brush apply two brushfuls of **SURPASS®2** to the metal surface.

4. Dry the primed surface with dried compressed air for at least 10 seconds with the air syringe tip as close as possible to the surface. DRY **SURPASS®2**THOROUGHLY

5. Dispense a drop of **SURPASS®3** into another cavity of the mixing well. Using the proper color-coded brush apply a thin layer of **SURPASS®3** to the entire cavity surface.

6. Light-activate for 10 seconds. **SURPASS®** can be activated with any dental activation light.

7. Continue restorative procedure with material of choice. Follow manufacturer's instructions for all restorative materials.

Protocol for the Delivery of a CAD/CAM (or Ceramic) Restoration

Preparing the Tooth:

1. Rinse the preparation thoroughly and remove all visible water by drying the surface for approximately 5 seconds with dried compressed air.

2. Dispense a drop of **SURPASS®1** into one cavity of the enclosed mixing well. Using the proper color-coded brush, apply **SURPASS®1** to the entire cavity preparation and the surrounding tooth structure, agitating briskly for at least 10 seconds. DO NOT DRY **SURPASS®1**

3. Dispense a drop of **SURPASS®2** into another cavity of the mixing well. Using the proper color-coded brush apply three brushfuls of **SURPASS®2** to the entire cavity preparation, dabbing each brushful to help distribute as much of the primer as possible.

4. Dry the primed surface with dried compressed air for at least 10 seconds with the air syringe tip as close as possible to the surface. DRY **SURPASS®2**THOROUGHLY

5. Dispense a drop of **SURPASS®3** into another cavity of the mixing well. Using the proper color-coded brush apply a thin layer of **SURPASS®3** to the entire cavity surface. Air-thin the **SURPASS®3** aggressively. Final film thickness will be around 10 – 12 microns.

6. Light-activate for 10 seconds. **SURPASS®** can be activated with any dental activation light.

Imaging for CEREC® Restorations:

1. Wipe off the oxygen-inhibited layer with a cotton pellet soaked in either isopropyl or ethyl alcohol, rinse and dry.

2. Apply the scanning powder and scan the restoration.

3. Rinse the powder off with an air-water spray. If any powder remains it may be removed with a cotton pellet soaked with **SURPASS®1**, rinsed and dried.

4. Isolation may be removed at this time if desired or may be left in place depending on clinician's preference.

Preparing the Restoration:

It is highly recommended the restoration is lightly micro-etched (27micron aluminum oxide), rinsed and dried prior to silanation and delivery. The micro-etching not only provides additional mechanical retention but also ensure the surface is completely free from milling oils and other contaminants.

1. Clean the restoration thoroughly to be sure all milling oil and other contaminates are removed. This can be done with steam or very thorough cleansing with isopropyl alcohol. Water and air will not provide a sufficiently clean surface.

2. Using a Microtip® applicator, apply an even coating of the prepared ***Interface*** solution to the ceramic surface and allow to dwell for 10 seconds

3. Dry the ***Interface*** solution thoroughly (approximately 5 seconds)

4. Apply 2 coats of **SURPASS®2** to the surface, dry and light activate for 10 seconds.

Delivering the Restoration:

1. If isolation has been maintained, apply 2 coats of **SURPASS®2** to the sealed prep, dry and light activate for 10 seconds.

2. If isolation has not been maintained or the sealed prep has become contaminated, the sealed prep should be cleaned with a cotton pellet soaked in alcohol, rinsed and dried. Then apply 2 coats of **SURPASS®2** to the sealed prep, dry and light activate for 10 seconds.

3. **Anchor®** luting cement is then inserted either into the prep or onto the fitting surface of the restoration and the restoration is seated. As the **Anchor®** resin gels, the excess may be removed. Once the excess cement is removed, each restoration surface is light-activated for 10 seconds and the process is complete.

Protocol for Sealing and Imaging for a CEREC® Restoration

The following technique seals the tooth prior to introducing imaging powder which can be difficult to completely remove from the dentin tubules. By following this technique sensitivity and bonding issues will be eliminated.

1. Prepare the tooth for the CEREC® restoration
2. Apply **SURPASS**® as per manufacturer's instructions
3. Wipe off the oxygen-inhibited layer with a cotton pellet soaked in either isopropyl or ethyl alcohol, rinse and dry
4. Apply the scanning powder and scan the restoration
5. Rinse the powder off with an air-water spray. If any powder remains it may be removed with a cotton pellet soaked with **SURPASS**®**1**, rinsed and dried.
6. Isolation may be removed at this time if desired or may be left in place depending on clinician choice.
7. Once the restoration is fabricated and cleaned, the inner bonded surface may be sandblasted lightly with 27 micron aluminum oxide, rinsed and dried. Then ***Interface*** and **SURPASS**®**2** are applied, dried and light-cured.
8. If isolation has been maintained, **SURPASS**®**2** only need be applied to the sealed prep, dried and light-cured
9. If isolation has not been maintained, the sealed prep should be cleaned with a cotton pellet soaked in alcohol, rinsed and dried. Then **SURPASS**®**2** may be applied as above.

Anchor® luting cement is then inserted either into the prep or onto the fitting surface of the restoration and the restoration is seated. As the **Anchor**® resin gels, the excess may be removed. Once the excess cement is removed, each restoration surface is light-activated for 10 seconds and the process is complete.