Revolutionizing Composite Delivery

Therma-Flo Composite Warming Kit

VISTA Dental Products
Easily manipulate composite for exceptionally fast and precise placement.

Reduce incremental layering of composite material in challenging posterior restorations.

Experience superior composite adaptation to cavity walls, improving quality and efficiency of any restoration.

Make tedious procedures simpler, saving time on each patient.

Vista Dental has revolutionized composite delivery with Therma-Flo™ Composite Warming kit, uniquely engineered to utilize heat for optimal performance of any preferred composite material. Vista’s Composite Warming Kit allows you to use highly filled composites in a wide variety of applications and also provides the versatility to enhance virtually all restorations.

**Therma-Flo™ allows you to:**
- Easily manipulate composite for exceptionally fast and precise placement.
- Reduce incremental layering of composite material in challenging posterior restorations.
- Experience superior composite adaptation to cavity walls, improving quality and efficiency of any restoration.
- Make tedious procedures simpler, saving time on each patient.

Designed to enhance the performance of Therma-Flo™, Vista’s new Step Down tips offer extended length for deeper access and greater precision in composite placement. Uniquely designed to adapt to most composite capsules, the Step Down tips represent a major step forward in controlled delivery of composites.

“With Vista’s Therma-Flo™ products, warmed composites can now flow into the preparation and conform to cavity walls like never before. This has revolutionized my direct composite placement!”

Randy Shoup, DDS
Composite Warming Kit

An easy way to increase flowability of highly filled composite material without compromising tensile strength, wear-resistance or aesthetics.

- Includes Step Down tips for precision placement of composite material
- Base unit warms multiple capsules
- Compatible with most standard capsules

Kit Includes:
1. Warming Unit
2. Composite Syringes
3. (20) 2X Step Down Tips
4. (20) 4X Step Down Tips

Step Down Tips

Extended length for deeper access and precision placement.

- 2X and 4X orifice reduction for more precise placement of composite material
- Narrow profile allows for optimal visualization
- Easy extrusion of highly-filled composites

Comparing Composite Extrusions:

(Left to right) Image shows the comparison of extrusions using a standard capsule (without tip) to extrusions made using Vista’s 2X and 4X Step Down tips. Image is approximately 200% actual size.

This system forces paste composite to perform with the same clinical ease of flowable composite, but without flowables mildly inferior strength, hardness, shine retention, and wear resistance.

Dr. David Clark, DDS: Inside Dentistry July 2012
### Science Behind the Heat

The heating technology of Therma-Flo™ significantly increases the flow characteristics of highly filled composites while helping to increase polymerization and improve depth of cure.

Heat lowers the viscosity of composite material, allowing it to better flow and adapt to cavity walls. As a result, voids are reduced, which also reduces the risk of secondary caries. Heating composite material also improves its physical and handling properties without modifying color or stability.

#### FEATURES

- Depth of Cure
- Flowability
- Increased Polymerization
- Decreased Voids
- Color + Stability
- Micro-Hardness
- Viscosity -vs- Temperature
- Heating Safety

#### BENEFITS OF USING HEAT

- Fill restorations faster by increasing the depth of cure and reducing curing time.
- When heated, highly-filled composites flow up to 10X better - now you can avoid using inferior flowables.
- Significantly higher monomer conversion values. Dramatic increase in polymerization rates.
- Heating significantly reduces the chance of secondary caries.
- Heating will not modify color or stability properties of composite material.
- Heating results in shorter curing times and enhances subsequent surface hardness.
- Heating makes it easier to place material and results in better adaptation to cavity walls.
- Heating will not damage pulp tissue or cause discomfort. No other safety concerns.

#### PROOF

- *Trademarks of their respective manufacturers

### Viscosity -vs- Temperature for Highly Filled Composites

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Flow Rate (mg/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>68°F</td>
<td>25</td>
</tr>
<tr>
<td>86°F</td>
<td>20</td>
</tr>
<tr>
<td>104°F</td>
<td>15</td>
</tr>
<tr>
<td>122°F</td>
<td>10</td>
</tr>
<tr>
<td>140°F</td>
<td>5</td>
</tr>
<tr>
<td>160°F</td>
<td>0</td>
</tr>
</tbody>
</table>

**Therma-Flo Heating Range**

- Highly Filled Composites
- Flowable Composites ( Compared at room temperature)

### Depth of Cure

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>68°F (20°C)</td>
<td>6.5</td>
</tr>
<tr>
<td>140°F (60°C)</td>
<td>5.4</td>
</tr>
<tr>
<td>212°F (100°C)</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**Therma-Flo Heating Range**

- Depth of Cure More than 20% increase