

Information about high-energy LED lamps and the GCP CarboLED

It is important that the LED lamp you are using is suitable for heat curing. You can simply test your own lamp with the enclosed thermometer. Please proceed as follows:

Instructions for testing your lamp for command set of GCP GLASS FILL and GCP GLASS SEAL

Goal:

GCP Dental is the developer and manufacturer of the world's first biological alternative for composite restoratives based on Glass Carbomer®, with superior characteristics that far exceed the ADA 27 specifications. The restorative materials are: GCP Glass Fill (for permanent posterior restorations); GCP Glass Seal; GCP Crown Cement; GCP Bridge Cement and GCP Gloss. The GCP Glass Fill and Glass Seal products should be heat-cured using the heat of a high –energy LED lamp of $\geq 1200\text{mW}/\text{cm}^2$ and/or a tip temperature of 60°C (140F). At this temperature it is possible to heat-cure the restorative or sealant during one (1) minute in one layer of up to 8mm. The instructions below describe how you can simply test if your LED lamp meets the criteria.

Testing method:

In order to test if your lamp is suitable for heat curing you will need a thermometer filled with a red fluid (red colored ethanol) and your LED lamp.

- 1) Hold the thermometer in your left hand and warm the thermometer to 30°C with your right thumb and index finger.
- 2) Bring the tip of the lamp in contact with the ball-shaped red tip of the thermometer and heat during 1 minute.
- 3) Read the temperature, this should be between $50\text{-}65^\circ\text{C}$. If your lamp meets these criteria you can start using the GCP Glass Fill and Glass Seal products.
- 4) If the temperature of your lamp does not meet these criteria then your lamp is not suitable for 'command set' heat curing.
- 5) If your lamp is not suitable for 'command set' heat-curing GCP Dental offers the solution with the **GCP CarboLED CL-01** heat-cure lamp. For more information, please contact the GCP Dental sales department or contact our local distributor.