

## SYNCA

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For professional use only. Caution:  
Federal (U.S.A.) law restricts this device  
to sale by or on the order of a dentist.

## Description

FIBER FORCE® CST® TEMP is a series of glass fiber pre-impregnated with light-curing methacrylate-resin (prepreg). CST® TEMP can be custom shaped and then polymerized by light curing. Designed for a dental office or a dental lab, easy-to-use CST® TEMP is incorporated into a TEMPORARY denture to provide a solid and esthetic reinforcement. CST® TEMP is compatible with all types of methacrylate resins (self-cure, heat-cure, pressure-cure and microwaveable).

## Indications

CST® TEMP is used for reinforcement of a denture to be converted from removable to TEMPORARY screw retained (stage 1).

- A corresponding pink resin (FIBER FORCE® CST® Flow) can be used in conjunction with the CST® TEMP fibers.
- A corresponding bonding resin (FIBER FORCE® CST® Bond) can be used in conjunction with the CST® TEMP fibers.
- Corresponding temporary support pillars (FIBER FORCE® CST®) can be used in conjunction with the CST® TEMP fibers.

## Contraindications

Allergies to methacrylates.

## Side effects

With the current state of knowledge, there are no known side effects.

## Precautions

- Always wear gloves to avoid handling CST® TEMP with fingers: non-cured resin may irritate fingers and eyes.
- Sensitization from long-term exposure to the resin should not be ruled out as a possible hazard.
- Non-cured CST® TEMP should not come into contact with mucous tissues.
- Follow instructions in order to completely cure CST® TEMP.
- When cutting or grinding cured splints, wear protective glasses, masks, gloves, and use appropriate air evacuation: fiberglass particles may irritate skin. In case of irritation, discomfort may be relieved with mild soap and water (light rubbing).
- Once the package is opened, CST® TEMP must be used quickly without exposure to light (sunlight for instance): risk of premature curing.

## Composition (% by weight)

Glass fiber:  
Urethane dimethacrylate:  
Triethylene glycol dimethacrylate:  
Inorganic elements and pigments:  
Catalysts/stabilizers:

## CST® TEMP fibers

45-55%  
30-40%  
3-4%  
4-5%  
<1%

## Production of a non-removable TEMPORARY denture with FIBER FORCE® CST® TEMP

### TECHNIQUE WITHOUT DISTAL EXTENSIONS

- 1) **Optional:**
  - Install the selected titanium temporary cylinders onto the final working model using the procedures recommended by the cylinder supplier. Ensure the cylinders are sandblasted using aluminum oxide before they are installed; 110 microns or Rokatec are recommended.
  - Apply silane onto the temporary cylinders following the procedures recommended by the silane supplier.
  - Apply one coat of FIBER FORCE® CST® Bond to the temporary cylinders, light curing each cylinder for 30 seconds after application, or light curing all cylinders at once by placing the model into a light curing oven for 30 to 90 seconds depending on the light curing oven being used.
- 2) **Cable Run #1 - Horizontal cable:** The fiber rope is laid across the buccal surface of the first implant, circle around the implant cylinder in a mesio-lingual direction completing with a full wrap around the first cylinder which places the fiber rope in a stacked position over the buccal aspect of the initial fiber rope. Continue in this manner until all of the implant cylinders have been wrapped with one run of fiber rope, maintain the slight tension of the fiber rope throughout the procedure. Ensure the first cable run is at a low position on the implant cylinders 1 to 1.5mm.
- 3) **Cable Run #2 - Mid-horizontal cable:** Repeat the Cable #1 technique by wrapping the last cylinder in a 540° (360° + 180°) turn to continue back around the arch, maintaining a lingual position of the fiber rope. The fiber rope is oriented against the lingual surface of the implant cylinder and wrapped around each cylinder in the same manner, until reaching the first cylinder in which the procedure was started.
- 4) **Cable Run #3 - Upper-horizontal cable:** Wrap the first cylinder with 180° turn, wrap all the implant cylinders with the technique used in step 2. Wrap the last implant cylinder and spot cure the loop (if it didn't bond properly, tack the rope to the cylinder with a drop of FIBER FORCE® CST® Flow and secure with the curing light). This horizontal structure can be considered as the "bridge" for the framework.
- 5) **Note:** *The three "runs" of horizontal fiber rope are made in one continuous run, maintaining an equal tension on all three runs. The fiber rope may be compressed with tweezers or a similar instrument as the runs are being placed to minimize the physical space that the CST® TEMP framework will occupy.*
- 6) The working model is now placed into a light curing unit to polymerize the CST® TEMP fiber cable implant framework. Curing time will vary depending on the power of the light curing unit, usually from 2 to 6 minutes. It is not possible to over-cure the CST® TEMP fibers, so when in doubt, extend the curing time.
- 7) Once the fit is confirmed, the finished CST® framework is now ready to be incorporated into the set-up of the TEMPORARY appliance. Cured CST® TEMP fibers can be boiled out with water or steam without causing any damage to

the framework. Applying a thin layer of silane to the fibers after boil out is recommended.

- 8) The preferred processing technique can be used by the technician to complete fabrication of the appliance.
- 9) When light curing CST® TEMP fibers, FIBER FORCE® CST® Flow composite, and FIBER FORCE® CST® Bond resin, please note that any VLC (Visible light curing) or LED unit can be used.

### TECHNIQUE WITH DISTAL EXTENSIONS

#### (NEED FIBER FORCE® CST® FLOW and CST® PILLARS - SOLD SEPARATELY)

- A) Step 1 from previous technique is still optional.
- B) **Support Pillars:** Place two glass fiber pillars into the model approximately 5mm distally each from the most distal implant position on both sides of the arch. These can be glued into position using the FIBER FORCE® CST® Flow pink light cure composite, after a small retention hole is drilled into the model using an appropriate drill. These pillars will permit tension to be maintained while the cable runs described below are being made.
- C) **Cable Run #1 - Horizontal cable:** Apply a drop of FIBER FORCE® CST® Flow pink resin on the lingual surface of the support pillar, place the rope on the lingual surface of the support pillar, 1 to 1.5mm above the crest of the ridge, secure the rope to the pillar by quickly and carefully spot tacking it with a hand-held curing light. (It is recommended to leave a 8-10mm tail on the end of the rope). The fiber rope is now wrapped around the distal/posterior aspect of the support pillar, and wrapped around the buccal surface in a parallel position to the crest of the ridge. The fiber rope is laid across the buccal surface of the first implant, circle around the implant cylinder in a mesio-lingual direction completing with a full wrap around the first cylinder which places the fiber rope in a stacked position over the buccal aspect of the initial fiber rope. Continue in this manner until all of the implant cylinders and the support pillar on the opposite side of the arch have been wrapped with one run of fiber rope, maintain the slight tension of the fiber rope throughout the procedure. Ensure the first cable run is at a low position on the support pillars and implant cylinders 1 to 1.5mm.
- D) **Cable Run #2 - Mid-horizontal cable:** Repeat the Cable #1 technique by wrapping the support pillar in a 180° turn to continue back around the arch, maintaining a lingual position of the fiber rope. The fiber rope is oriented against the lingual surface of the implant cylinder and wrapped around each cylinder in the same manner, until reaching the support pillar in which the procedure was started.
- E) **Cable Run #3 - Upper-horizontal cable:** Wrap the support pillar with 180° turn, this time, the fiber rope is brought to an approximate 45° from the support pillar back to the buccal surface of the implant cylinder. Wrap all the implant cylinders with the technique used in step "C". Wrap the last implant cylinder and again position the rope at a 45° angle and spot cure the rope to the support pillar (if it didn't bond properly, tack the rope to the pillar with a drop of FIBER FORCE® CST® Flow and secure with the curing light). This horizontal structure can be considered as the "bridge" for the framework.

- F) Do steps 5 and 6.
- G) Using a bur or a disc, the pillars are cut at the base of the model so that the framework can be removed. The portion of the pillars left in the framework can be removed or left in place, at the discretion of the technician.
- H) Do steps 7 through 9.

## Curing Times

Type of lamp	LED SW light	Halogen, 1100mW/cm <sup>2</sup>	Halogen, 550mW/cm <sup>2</sup>	Xenon strobe light, 250mW/cm <sup>2</sup>	Neon, 6800mW/cm <sup>2</sup>	Mercury vapor (Arc)
Required time	30 seconds	40 seconds	2 minutes	4 minutes	10 minutes	20 minutes

## Note

Product reserved exclusively for dental usage. Keep out of the reach of children.

Single use product.

Avoid exposure to light.

See the instructions.

Can cause skin allergies.

54°F (12°C) 86°F (30°C)

Store between 54°F and 86°F (12°C and 30°C), in its original closed packaging.

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