

- Ensure the scrub nurse has the correct needle/cannula, minimum 16G, plus one extra.

- Attach blue valve with clear end to the powder-filled syringe
- Remove plug from liquid filled syringe using tool in blister tray bottom
- Attach liquid filled syringe to blue end of valve, transfer liquid to powder filled syringe and start mixing

- Start timer as you begin mixing.

- Stop Mixing
- Lock plunger by turning blue collar clockwise
- Transfer all paste from the mixing syringe to the injection syringe with the numbers facing towards the user
- When full, paste will begin to ooze from under the sleeve. Stop filling when this occurs
- CERAMENT BONE VOID FILLER (BVF) becomes viscous during this time, and will achieve optimum injectability at 3 minutes.

- Remove red plunger stopper from injection syringe
- Inject CERAMENT BVF into the defect
- If any paste is left over or if molding, extrude paste onto a sterile surface for manipulation later.

- Do not manipulate or touch CERAMENT BVF unnecessarily during this time as this can affect setting.

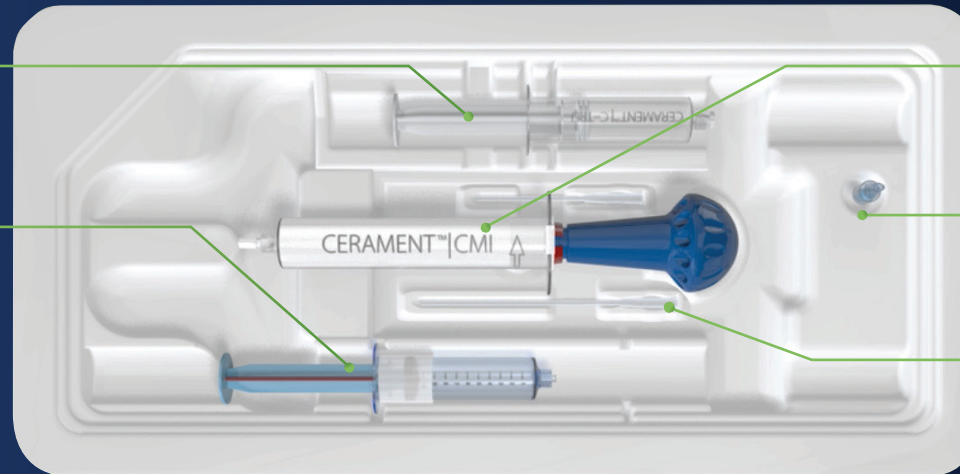
- Molding can be initiated between minute 7 and 9
- If paste is too runny, test again in 30 seconds
- Once molding has started, it can be carried out continuously for maximum 1 minute
- If injected into a cavity, CERAMENT BVF can now be compressed with a gauze to maximise interdigitation into surrounding bone.

- If injecting, after the paste is in situ, allow to set for a few minutes before any adjustments are done or the wound is closed, especially if bleeding occurs.

- You may drill or screw into CERAMENT BVF
- Ensure any metalwork is anchored in bone
- If Drilling & Screw Insertion is not required the wound can be closed anytime after 15 minutes
- Ensure wounds are closed meticulously

**CERAMENT® C-TRU**  
Liquid filled syringe with  
radio-contrast enhancer iohexol

**CERAMENT® ID**  
Syringe allows for easy injection  
with included tip extenders



**CERAMENT® CMI**  
Powder-filled combined mixing  
and injection device - closed system

Valve

Tip Extenders x2  
(100/50mm - 11G)

## SURGICAL TIPS

Before applying CERAMENT BONE VOID FILLER (BVF):

- Remove blood clots and tissue fragments if open surgery and debride sclerotic or necrotic bone. CERAMENT BVF must be in contact with living bone for bone remodeling to occur.
- Ensure the defect is as dry as possible, consider using a tourniquet and gauze.

During application:

- If a dry field is not possible, inject CERAMENT BVF at 4 minutes.
- Start injecting at the distal part of the defect and continue injecting as you withdraw proximally.
- In percutaneous procedures, inject under fluoroscopy. CERAMENT BVF has added iohexol for enhanced visibility.
- Completely fill the defect, but do not overfill.
- Do not use in joints or soft tissues.
- CERAMENT BVF is not intended for load bearing, any load should be borne by remaining cortical bone or metalwork.
- In aneurysmal bone cysts (ABC's) or other cysts prone to producing large volumes of fluid, use CERAMENT BVF in bead form.

After application:

- White wound drainage may occur if CERAMENT BVF is in contact with poor quality bone or close to the skin. This generally resolves on its own without further treatment within 2-3 weeks.

