Best Practices

- Prep the PCM (phase change material) panels before use according to one of the described methods provided by VeriCor.
- Ensure all components are clean and free of damage.
- Lay panels flat when turning them solid (to disperse liquid throughout the panel).
- Enable ample air flow around all panel sides.
  - Use spacers (pencils) or racks.
- Freezing/melting times vary depending on number of panels being prepped and equipment being used.
- Assemble using all six panels for maximum hold time.
  - Using less panels does not change the holding temperature, but does decrease the hold time.
- Panels are reusable (10,000+ cycles).
  - End-of-life disposal: Panels are a plastic #2, typically recycled by businesses/communities. PCM is nontoxic and readily biodegradable.
- Use a calibrated data logger or other temperature monitoring device to observe internal temperature.
- Avoid unnecessary opening of the Cool Cube™ after loading payload. Opening of the Cool Cube™ will decrease hold time.
- An infrared temperature thermometer can assist in ensuring the panels reach a safe pack-out temperature (good for finding out the approximate temperature of each panel).
- The farther the ambient temperatures are from the melting point, the quicker PCM will change states (solidify/liquefy).

Various methods based on type of panel, equipment available & purpose.
## Prep Method D: Fridge Prep to prevent freezing

**Panel Prep**

2.1 **Place panels in a fridge between 5° and 8°C** for at least 24 hours before use so the PCM (phase change material inside the panel) is liquid.*

* Panels may be stored in the fridge until needed for assembly or the PCM solidifies. If a refrigerator maintains 5°C or above, the PCM within the panels will not get solid (the solidifying point is 4.5°C), keeping the PCM liquid indefinitely until pack-out. Liquid PCM panels will protect the product from freezing until the PCM becomes completely solid.

2.2 **Shake panels to verify the PCM is liquid.** If solid, restart at step 2.1 to ensure the longest hold time. Liquid PCM will prevent the product from freezing (at refrigerator temps) in extreme cold the longest. Using solid PCM or panels with a solid/liquid combination decreases the hold time.

**DO NOT assemble panels directly from a room temp, as they may be initially above 8°C.**