# Cold Weather Operation

CyberLock cylinders are designed to operate in a variety of environments. The cylinders have been tested to meet operating temperatures ranging from -40° to 160° F, -40° to 70° C. In cold weather environments, one condition that can cause disruption is the formation of ice on the face of the lock cylinder. Ice can prevent the key from making electrical contact with the lock and can prevent the key from being fully inserted into the lock. If the key is not fully inserted, it will not turn the lock.

This guide provides an overview on how to optimize your CyberLocks for cold weather environments.

## Preparing for Cold Weather

Before it gets cold make sure all of the lock faces are clean and in good working condition. Use the CyberLock cleaning brush to clean the face of the lock per CyberLock's cleaning instructions.

If possible, keep locks dry to minimize ice build up.

## Operating in Cold Weather

If the lock face remains dry and there is no ice build up, it should operate normally.

If there are any operational issues, inspect the lock for ice build up.

If ice has formed on the face of the lock, the following corrective actions (in recommended order) can be taken:

- Remove ice from the face of the lock with the CyberLock cleaning brush. Ensure ice is also removed from around the lock face so the key can be fully inserted before turning the lock.
- Spray warm water onto the face of the lock to melt the ice and then blow it out with compressed air so ice will not reform.
- Apply a microwaveable heat pouch or similar product to the face of the lock.

If the CyberLock is in a padlock, and the shackle is frozen in place, de-icing procedures are similar to those used with a mechanical padlock (in recommended order):

- Shake and twist the padlock body.
- Tap the padlock body to loosen the ice.

## A Note About Contact Cleaner

CyberLock has tested a variety of products ranging from contact cleaners with silicone to de-icers; the results are inconclusive. Some customers report that certain contact cleaners have been effective; however, our laboratory tests have not been able to substantiate these results.

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## Things to Avoid

- Don't scrape the lock face with a sharp tool, as this may cause damage.
- Don't use lubricants such as WD-40. CyberLocks are manufactured with a specific amount of grease for lasting performance. Introduction of lubricants or cleaners into the CyberLock can change the characteristics of the factory applied grease, shorten life, or cause failures. Because of this, no penetrating lubricants should be used with CyberLocks.
- Don't use a contact cleaner not approved by CyberLock.