



Protecting Your Garden Sculpture From Inclement Weather

A Sculpture from Colorado Garden Art is made to live outdoors in your garden, on your patio, or on your deck. Although a hand-cast concrete garden water sculpture can resist most outdoor weather conditions, they must be protected from the harsh extremes of the seasons and the weather. It is a given that inclement and extreme weather is part of the experience of living in Colorado. At Colorado Garden Art we cannot and do not warrant or guarantee our sculptures against the affects of seasons and weather.

There are certain common-sense steps that should be taken to protect your sculpture and ensure its longevity.

Our sculptures for the garden are constructed from concrete formulas, otherwise known as cast stone. This concrete must withstand the expansion and contraction that occurs as materials are exposed to heat and cold. This expanding and contracting is what can eventually lead to small fissures that eventually develop into cracks in your sculpture if it is not cared for appropriately, especially if the temperature extremes are sudden. This sudden change in temperature can be caused by freezing weather, but it can also be caused by filling the fountain with cold water during the daytime while it is in direct sunlight and the concrete is hot to the touch. In Colorado the freezing and thawing cycle can break the most hardened rocks (and deposit them on our mountains highways), so it should be no surprise that cast concrete stone can be damaged by the

effects of temperature extremes on water. We don't recommend filling the sculpture with cold water whenever the sculpture has been in hot sunshine for any period of time.

If your sculpture contains a glass or crystal element, the glass element is particularly subject to cracking if you subject it to quick temperature changes. Water bowls with glass elements should be kept filled with water to ameliorate temperature changes. If you clean and fill the bowl it should be done with warmer water, or early in the morning when the concrete and glass are cool to the touch and the water is a similar temperature.

Shielding An Outdoor Sculpture From Hail

Unfortunately, in Colorado hail is a normal risk during the spring and summer (and occasionally fall). While our sculptures are strong, waterproof, and resistant to most weather, they can be chipped or broken by large hailstones (particularly the narrower edges and any glass features or elements of the sculpture). Colorado hail has been known to break even hardened concrete roof tiles. We recommend that whenever a thunderstorm is approaching and hail is a risk, you cover your sculpture until the danger is passed. The easiest way to do that is with a tarp, rubber mat, or even a small comforter, towel, or padded blanket. The best protection is a comforter, beach towel, small piece of carpet, carpet pad, or rubber mat under a tarp that you can secure around your sculpture. A tarp by itself without any padding does not provide the ideal protection from hail. Some padding is essential to protecting your sculpture in the event of large hailstones. (Please do not risk your own safety by running out into hail to cover your sculpture... better a chipped sculpture than a chipped head.)

Shielding An Outdoor Fountain From Freezing

Freezing is a temperature extreme that can cause your outdoor water sculpture to crack if not cared for properly. When freezing weather approaches, your sculpture should be drained and all the water removed from the sculpture. In Colorado it is hard to know when really cold weather is arriving. The first few snow falls may not be accompanied by hard freezing, and it may be possible to use your sculpture for several more weeks. Use your own judgment, but please be cautious about the cold weather. You can always drain the sculpture and refill it after a storm. This is pretty easy to do for passive water sculpture. Even an active water

sculpture can be refilled and restarted for a time if the weather stays warm. Remember that the water should also be removed from any basin or reservoir that holds water to be pumped through your sculpture, and the pump taken inside for the winter. The easiest way to drain your water basin or reservoir (and your sculpture itself) is with a small wet-dry vacuum... just vacuum the water out of the basin and dump it into your garden.

Freezing temperatures will solidify the water if it is left within the sculpture. It can also freeze the water within the small cracks and gaps that are part of any concrete sculpture on the outside and even within the base or column of the water feature, particularly if the sculpture is in a freezing rain or wet snow before the temperature drops below freezing. This ice can exert pressure on the concrete causing it to crack, with the highest risk when the ice melts and expands (the normal pattern during the winter in Colorado when the sun comes out). We recommend bailing out your sculpture when freezing weather approaches, using a plastic tub, cup or small bucket, then mopping out any remaining water with a towel. Or, you can use a small wet-dry vac to “vacuum” the water out of your basin or reservoir and remove your pump for the winter.

Covering The Fountain

After the water has been drained and as freezing weather approaches with winter your sculpture should be ideally covered with a heavy duty tarp or canvas covering. There are outdoor fountain covers specifically available if you want to purchase one. Better yet, as winter approaches large heavy vinyl or nylon barbecue grill covers become relatively inexpensive and will work great to protect your sculpture all winter. Covers come in many different sizes and are made to keep water out and warmth in to protect your fountain. Many people keep it simple and “double-bag” their sculptures with heavy-duty garbage bags for the winter. If you take this inexpensive route, it is best to use a piece of board, carpet pad, old carpet or some other material to pad the sculpture and to keep the bags from sagging into the bowl and filling with snow or water in the depression. Many people find it easier to leave the fountain covered during the winter months since it is difficult to know exactly when the weather may change and repeatedly draining, filling and removing the cover can be a chore.

Running the Fountain through the Winter

We have had customers who run their fountains through the winter. They do so by using a simple horse/livestock tank heater in the reservoir, to keep the water from freezing as it runs through the fountain and to keep the pump thawed. The heater has a built in thermostat so that it comes on when temperatures of the water fall to close to freezing. This requires running the pump through the winter. This can work, but ice will still build up on the outside of the fountain during really cold weather because of the overspray from the fountain, and sudden massive snowfalls can overflow the sculpture. Such heaters require a pretty hefty circuit, and work best with minimal (and larger) extension cords. This is done at your own risk, and we do not recommend it unless the fountain is close to your home where you see it during the winter (and can still enjoy the sound/sights of running water. Remember, you still must make sure the water reservoir is filled during the winter to avoid damaging your pump. The real danger of doing this is if there is a power outage... in that case you will need to drain the water feature as well as the basin before it freezes.

In most cases, you are better off simply bowing to the inevitable in Colorado, and enjoying the winter while keeping your water sculpture preserved until spring. Like your garden plants, it is turned on in the spring as the harbinger of warm weather in your garden.

Filling Outdoor Garden Water Sculptures

When warmer weather returns to Colorado in the Spring, your water sculpture can once again be filled and put into operation. The best practice when adding water to any outdoor water feature is that you should do so either the early morning or in the evening (or whenever the sculpture has been in shade for a while). The water feature should never be filled in direct and bright Colorado sunlight. This is because concrete (and glass) absorbs and stores heat from direct sunlight very efficiently. Your concrete sculpture may become so warm in direct sunlight that it feels hot to the touch. When cold water is added during the daytime it can cause a sudden contraction of the concrete because of the difference in temperature between the cool water and the warm concrete. This situation causes a stress on the material which might lead to stress fissures in the concrete that can get bigger and eventually lead to water leakage or even breakage. If the temperature differentials are significant enough and enough cold water is added this occurrence can even lead to a sudden cracking of the feature. If

your sculpture features a glass inlay or part, it is especially vital to keep it full of water during hot weather, and to fill it only in the evening or morning to avoid temperature shifts that can crack the glass. Be careful... these elements are beautiful, but remember, it is glass!

Summary

Our hand-crafted water sculptures are made for outdoor use and will be exposed to harsh weather conditions here in Colorado. Although the concrete material used is robust and strong, care still needs to be taken to protect the sculpture from extreme weather conditions so that you will continue to enjoy it for many years. Water features need to be drained of water when the temperature approaches freezing to protect them from stress on the concrete. The sculptures should also be covered when there is risk of hail and during the winter months. With such care we know that you will be able to enjoy your water feature for a long time without any issues.

