

Case Study: Custom Hand Washing Stations for Philadelphia Zoo



When you see the almost instant change from apprehension to joy on a child's face when meeting a goat for the first time, you can immediately appreciate the value of a petting zoo.

But petting zoos have risk. The CDC reports "many people become sick every year because of a visit to an animal exhibit" due to harmful germs.

Many states have enacted laws that require hand washing stations with running water and soap be made available at the exits of these petting zoos.

When SMP Architects based in Philadelphia was tasked with the design of KidZooU at the Philadelphia Zoo, hand washing stations had to be in their plan.

This outdoor area would be open all year long and because it's located in the Northeast, the stations would have to work in freezing temperatures. It was that specification that, at first, appeared difficult to overcome.

SMP Architects reached out to Jeff Showalter, National Sales Manger at Neo-Metro to see if he might have a solution. Neo-Metro manufacturers hand washing stations typically used in hotels, restaurants and nightclubs. This was the first request for one that could operate in freezing conditions.

Showalter immediately turned to Bob Murdock, CEO of Murdock Manufacturing, another division of Morris Group International and manufacturer of outdoor drinking fountains.

Murdock has a line of freeze resistant fountains, and Bob Murdock was able to guide Jeff through what they would need to do to create customized hand washing stations with freeze resistant valves.

Typically with a water fountain you press a button and water comes out. When you release that button, the water stops. The station would need to be on a timer allowing water to flow freely while the zoo visitor washes their hands.

Enter Acorn Engineering, yet another division of Morris Group International. They

customized the timer system so that once the water stops flowing, the water in the line automatically drains down into a gravel pit six feet below the ground's surface. Thus, there is no freezing in the lines themselves.

By now the engineers were getting more excited about this custom project, and they began to think ahead to how the units would be serviced. Each hand washing unit has eight individual stations. There are four stations connected to each valve resulting in two valves per hand washing unit.

Showalter, Murdock and the engineers thought, what if there is a problem with one of the spray heads? How can we make it easy for maintenance to trace the problem? Their proactive solution was to color code each individual spray head line so they could easily trace it back to the right valve should service be needed.

This wasn't just an in-house collaboration. There was constant interaction with the architect, the zoo director and the local reps to make sure the hand washing stations would work well in the natural and built environment.

On a recent visit to the Philadelphia Zoo, one of the docents stationed in the petting zoo area told us that kids love the hand washing units. Parents are using the stations as a teachable moment on the importance of washing hands. Some of the kids are even enjoying the hand washing stations as much as they are the petting zoo.

There are eight stations in all. Four stations are at adult ADA height, and four stations are at children's height.

Showalter said, "I don't like to say no when I see a project like this come to us. I like to see what resources we have available and how can we bring the different Morris Group International divisions together to do something no one has ever done before."

It's been a cold winter in Philadelphia, but the petting zoo remains open and the hand washing units are keeping hands clean and providing entertainment.

If you find yourself in a situation where you can't find a product that fits your specifications, give us a call. We'll pull all our Morris Group International resources together and come up with a custom product perfect for your job.

