

Winter protection enclosures help contractors and scaffolding companies reduce downtime

October 29, 2008 - Spotlights

It's often said that 'time waits for no man' the same can be said of winter weather.

Technology now permits us to thaw the ground for excavation of footings. Concrete additives allow for the pouring of concrete in below freezing temperatures. Thermal concrete curing blankets and other heating methods ensure the concrete will set properly. How do you continue the process forward?

Winter protection enclosures can help contractors and scaffolding companies reduce downtime during the cold winter season. A quality tarp system will keep the elements at bay allowing work that would otherwise have to wait until spring to continue, permitting the contractor to deliver the project on-time.

In one example a contractor finally received the notice to proceed on the construction of a new home improvement store building. It was late December by the time all of the permits were in place and the grading and excavation was done. The first phase of construction had to be delivered in 120 days, using standard brick and mortar type construction.

The contractor was already set up to use mobile hydraulic lifts to lay up the block walls because of the speed in which they can be erected and moved. The same contractor had utilized our standard scaffolding tarps on many other projects and asked if we could fabricate a system that would work with the mobile lifts.

Our solution was to wrap each staging platform section of the mobile lifts with a high strength, fire retardant tarp. In addition, two long tarps extended out from either side of the work platform, one from the new roof tarp (front) and one from the bottom edge of the platform (rear) at about a thirty degree angle. Cables were anchored on the ground with heavy concrete blocks and winches were installed at locations all along the mobile lift platforms. The front and rear tarps were hooked to the cable stays at long angles and created a tent effect over the rising walls.

The cables and winches helped to keep the tarp system taught, while also allowing the mobile lift to rise as work progressed. When another lift was necessary, the cables were slackened, the work platform raised and the cables re-tightened.

Portable heaters were installed both on the ground and below the work platforms and maintained a temperature of fifty degrees or more with the outer temperatures below zero.

As with this example, providing a winter enclosure also protects workers from injuries that can result from being exposed to rain, snow, winds and ice. Not to mention the increase in productivity that comes with workers in a warm, dry environment.

For this custom application, the client had zero days of lost production due to weather. This allowed

the contractor to deliver his phase of construction on-time, during a season where work typically would have slowed or stopped many times due to the elements.

When specifying tarps for winter enclosures here are some considerations for a quality tarp. You need something better than the good old blue poly tarps. First the base material should be strong, something with high tear strength and puncture resistance.

The materials should be fire retardant, typically a requirement in most locals when working on open structures. It's equally important in new construction as described above, when using gas or propane heating equipment with open flames. Sewn seams should be double stitched with a high tenacity thread. The best quality tarps also use a heavy binding or webbing along the sewn seams to not only reinforce the seam but also to increase the holding power of the grommets.

Grommets should be closely spaced, one to two feet apart is ideal, so the tarps can be properly secured to the scaffolding or framework. Wind whipping of a tarp can cause damage to the tarp and more importantly can injure workers working under cover. Use all of the grommets provided to keep the tarp taught and reduce wind whip.

Not to be overlooked is the integrity of the scaffolding. When you look at a large tarp system over scaffolding you have essentially created a giant sail. Counter measures must be taken to insure the scaffolding can withstand the added wind load. This includes additional tie-backs to the structure and often additional cross bracing.

There's nothing we can do about the weather. With a proper winter enclosure we can continue to go about our work, throughout the year, without concern of what mother nature throws at us.

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