

HOW AMBIENT HUMIDITY AFFECTS YOUR CONSTRUCTION SITE

When you have a tight deadline and budget for a construction project, humidity is one of your worst enemies. It prolongs drying and curing times and can have significant effects on the quality of a finished project. As you plan out and work on a project, you must consider the weather and ambient temperatures, as both affect relative humidity levels. To ensure the timely completion and successful results of a job, contractors look to construction site humidity control to prevent moisture-related problems.

How Humidity Impacts Construction Sites

- Reduced quality of work:** When you don't manage high moisture levels with construction site humidity control, coatings and finishes may never reach their maximum hardness. If the coatings serve as a protective barrier, the covered elements might experience premature rot, corrosion or deterioration. You also run the risk of the finish not bonding to a surface properly.
- Material quality degradation:** Manufacturers have specifications regarding temperatures and relative humidity levels for the successful application or installation of their products. High humidity levels make it difficult to meet these specifications, which could void a warranty if a product experiences problems in the future.
- Reduced productivity:** When relative humidity levels are high, concrete, surface coatings and adhesives take longer to dry and cure, especially when temperatures are low. Prolonged drying times may lead to a lot of worker downtime, rework and the risk of falling behind schedule. Similarly, if building materials, such as wood or concrete, do not have the specified moisture content, flooring or painting contractors may not perform work until the materials are within range.
- Budgetary problems:** Humidity at a construction site has the potential to lead to mold growth, improper cement curing, corroded metalwork, premature deterioration, surface coats that don't dry, and adhesives that don't work properly. These types of problems lead to money spent on re-work, labor and materials.
- Problems with lumber products:** Wood is sensitive to the surrounding environment. When relative humidity levels increase, so does lumber's moisture content. High moisture levels lead to warping, expanding and buckling. These problems occur faster in warmer temperatures.



- Future mold problems:** Mold loves moisture. When relative humidity levels are greater than 60 percent at a construction site, the materials may become a prime home to mold spores. The danger with mold is that a lone spore goes unnoticed when it attaches itself to surfaces. If building materials contain mold and there is no construction site humidity control, the fungus will continue grow and spread, causing potential health problems and expensive repairs.

Take Charge with Construction Site Humidity Control

You can't control the weather, but you can control ambient conditions at a job site. Temporary humidity control solutions that are custom-designed for your project allow you to adjust temperatures, dew points and relative humidity levels to the exact specifications you need. When you control these variables, you also improve conditions for your workers, who will feel more comfortable, be healthier, complete tasks faster and ultimately be more productive because materials will have the correct moisture content.

At Polygon, our experts have deep knowledge of construction materials and climate control, allowing us to provide contractors with tailored construction drying services that accelerate drying times, lower costs and maintain the integrity of building materials. Our solutions are energy efficient and eliminate the dependence on HVAC systems, which may allow a project to earn LEED credits.

Learn how simple it is to gain control over the ambient conditions at your construction sites by talking to a Polygon representative today.



Contact Us for a Complimentary Consultation

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