

# Concrete Slab Drying



## Overview

The success or failure of an installed floor on a new construction project is often dependent upon how dry the concrete slab was prior to installation. Whether the specified floor is hardwood, rubber, ceramic or terrazzo, moisture trapped in the concrete slab can cause unsightly and costly floor damage. In the end, moisture issues can negatively impact the overall work schedule and final completion dates creating potential financial penalties.

Polygon recognises that new building construction is often subject to tight deadlines with possible financial penalties being imposed on failure to complete the projects on time. The ability to dry the slab quickly and efficiently is key to maintaining a schedule for all the other trade activities on the project.

## Application

For over 30 years Polygon has been at the forefront of construction drying around the world. During this time, Polygon has developed temporary dehumidification equipment specifically designed for the construction environment. Rugged, compact, easily transported and quick to set up, Polygon has been providing solutions for moisture problems in slabs that is dependable and cost efficient for every construction need.

By utilising temporary desiccant dehumidification units and high volume fans to lower the vapour pressure in the structure, the free moisture vapour in the slab can be quickly and easily extracted. Polygon can provide the testing and engineering that will ensure the concrete slab is ready for the installation of the flooring.

## Procedure

In order to ensure that the equipment is tailored specifically to each slab drying project, a number of calculations are necessary:

- Size of the room
- Location and number of envelope openings
- Flooring and adhesive specifications
- Current moisture readings of the slab
- Concrete mix details
- Weather conditions
- Electrical source and location
- Site logistics

Only when this information is compiled and analysed can the suitable equipment be selected. Polygon personnel then engineer the equipment for specific applications to meet desired specifications and avoid contamination.

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## Procedure (cont.)

Polygon technicians then service and check the equipment, ducting and ancillary items prior to site delivery. It is vital that the dehumidification equipment and ducting is clean to eliminate the threat of contamination.

The equipment is then placed in a designated area, positioned close to a power supply and set up to maximise the safe operation of the unit.

Polygon state-of-the-art desiccant dehumidification systems are utilised to dehumidify the ambient air in the structure which ensures that the materials are protected, the workers are safe and the project stays on schedule. Polygon provides a turnkey solution with well engineered equipment, offering around the clock service that is unmatched in the industry.

## Results

Polygon experienced and highly trained staff can consult customers on the best solutions for their specific needs. By utilising Polygon's state-of-the-art climate control equipment, conditions are closely controlled to maintain relative humidity, dew point and temperature through out the facility. Polygon advanced solutions eliminates the risks of problems caused by excess moisture at the job site. Construction schedules can be maintained while protecting the overall project.

## Benefits

- Cost effective solution
- Maintains tight construction schedules
- Reduced warranty issues due to failed floors
- Improved productivity by providing comfortable working conditions
- Improved productivity for drywall and painting applications
- Around the clock technical services