

MUNTERS HELPS MEET HOSPITAL CONSTRUCTION DEADLINES.

Whenever, moisture is the problem and time is of the essence, Munters is the answer. Construction moisture problems can be as simple as drying rain water after a storm or as complex as bringing a concrete slab to specific moisture content. Whatever your situation, Munters has a cost-effective solution that can save you valuable time.

Concrete/Masonry

The problem may be poured concrete walls and slabs unable to dry under ambient conditions. Masonry block full of rain water. Gypcrete™ subfloors too wet to apply floor coverings. Munters can dry them all fast, saving you weeks of delays. No matter whether you're in the middle of the humid Southeast summer or a damp Northwest winter. Munters is the answer.

Drywalling and Painting

The key to meeting finishing schedules is quick drying. Only with Munters help will joint compound dry the same day applied. Paint will dry in hours. Imagine a crew spackling in the morning and sanding the same afternoon! You can improve your finishing work schedules, saving thousands of dollars.

Fireproofing

Sprayed fireproofing compounds are tough to dry. They have substantial water content when applied. When relative humidity inside closed structures prevents drying, Munters is the answer. Using our dehumidifiers, sprayed fireproofing can be dried in as little as one week. This allows interiors to be closed off without the danger of moisture related problems such as the formation of mold or falling patches of material.

Materials Preservation

Moisture sensitive material such as wood flooring, plywood, drywall and masonry powders can gain moisture when staged in outdoor areas or humid interior spaces. Munters can dry the storage area so materials do not take on unwanted moisture while awaiting use.

Wood Floors and Moldings

In humid conditions, wood flooring and fine finishes can absorb moisture directly from the air causing warping, cupping and expansion. These factors play havoc with installations. After the building heat is turned on and winter comes, finishes and floor boards will contract as moisture is given off, creating spaces and cracks unacceptable to the customer. Working in humidity free environments with "stabilized" wood materials makes installations accurate and prevents moisture problems from arising later.



Using Munters dehumidifiers to dry work environments allows construction work to be completed faster. Painting and drywall finishing can be done quickly, sometimes allowing "mud" to be sanded the same day it is applied.

Carpet and Tile

Floor covering subcontractors won't guarantee their work if sub-flooring does not meet the manufacturer's standard for moisture content. Why risk buckling, delamination and adhesive failures? Munters can dry your subfloors to manufacturer's specs in record time.

Water Damage Reversal

Buildings under construction can be particularly susceptible to storm damage, water main breaks or leaks in unfinished roofs. Once inside the building, moisture is absorbed by structural materials, only to cause problems throughout construction and later. If your building has had severe water damage, call Munters. In days, Munters will create optimum conditions for finishing work, by deeply drying water locked inside walls, floors and masonry.

Professional Organizations Recommend Drying!

Today, more and more construction professionals are adopting desiccant drying as the proper means to end moisture problems. For example: The Northwest Wall and Ceiling Bureau, a professional organization with chapters in 8 US states and Canadian provinces, states in its Technical Bulletin #303: "Cold damp weather contributes to joint bond failure, delayed shrinkage, ridging, nail pops, joint flashing and board sagging. Proper temperature and humidity levels are important factors in achieving satisfactory results. Some sources of temporary heat will cause high humidity. The NWCB recommends a desiccant dehumidification system for best results in joint finishing and final decoration of gypsum wallboard."



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CONSTRUCTION DRYING: meet deadlines | prevent mold | ensure quality

Temporary Climate Control for Hospital Construction Projects



Munters helps hospital construction projects stay on schedule!

USE MUNTERS TO:

- Meet scheduled deadlines
- Avoid mold growth
- Restore water damage
- Protect installed HVAC equipment
- Protect stored materials
- Heat or cool during construction
- Meet flooring specs
- Control working conditions

HOW MUNTERS HELPS:

- Joint compound dries in hours; sand the same day
- Water content in slabs will meet spec
- Wood floor and trim won't swell or warp
- Fireproofing dries quickly
- No need to start up HVAC
- Mold growth prevented
- You finish on schedule



MUNTERS SPEEDS HOSPITAL CONSTRUCTION.

During hospital construction, architects and contractors are faced with:

- **the constant pressure to meet deadlines**
- **the need to avoid mold contamination**
- **the responsibility to deliver the highest quality workmanship**

But excess moisture—trapped in building materials or entering from leaks—can cause a myriad of unexpected problems, resulting in delays or worse, biological contamination. To solve these problems, and to keep projects moving forward on schedule, Munters has developed state-of-the-art construction drying services. Using desiccant technology, Munters offers project managers a comprehensive approach to solving moisture problems, that allows for work to move ahead quickly and assures that building quality expectations can be met.

How Munters Does It!

Munters ends construction site moisture problems with temporary dehumidification and ventilation, instead of dangerous propane heaters or the building's A/C system. Munters dehumidifiers continuously replace humid air inside the building with air which has been dehumidified. This extremely dry air has a low vapor pressure. As a result, it attracts moisture molecules from wet surfaces — such as recently poured concrete, joint compound, freshly painted walls, stored building materials, etc. — allowing them to dry at an accelerated rate. Surface materials, like paint and “mud” dry in hours instead of days. Concrete slabs can meet specifications for coating or floor covering applications twice as fast than normally would be expected. Likewise, staged materials such as millwork or wood flooring don't absorb moisture.

The Leader in Hospital Construction Drying World-wide.

Munters is the oldest and largest construction drying company in the world. Munters began construction drying in Europe in the 1970s and has provided services to building sites in North America since 1984. Our nationwide fleet of drying equipment is available on a 24-hour basis from offices in 30 cities. We work on hospital construction projects across the US and Canada every day.

Above and Right: On-time completion at the new Regional Hospital in Abbotsford, British Columbia, was made possible by Munters climate control services. During periods of record breaking rainfall, windstorms and snow, with daytime humidity levels reaching 95%RH, Munters kept inside conditions warm and dry. Munters built a temporary roof top system combining desiccant dehumidification and heat, which allowed work to move at record pace with comfortable working conditions inside.

Expertise in Engineering.

Munters' experience and expertise is unmatched. We have “written the book” on construction drying by working with hundreds of architectural firms and contractors to solve moisture problems for nearly four decades. Our company is the first of its kind to earn ISO 9000 Certification. All of our technicians undergo rigorous technical training in:

- **Psychrometrics**
- **Desiccant dehumidification**
- **Refrigeration and heating equipment**
- **Construction drying**

In serving our customers, we engineer a system based on the job site requirements. The system may be desiccant dehumidification alone, or an integrated system of heating, cooling, air moving and dehumidification equipment. We pride ourselves in engineering a cost-effective solution for your unique project needs.

Preventing Mold and Biological Hazards.

Today, there is great concern about mold and other microbiological hazards developing during a hospital construction project. Condensation, high humidity and water leaks can all lead to the growth of dangerous microbes. With Munters on your job, moisture and humidity levels inside the building are kept under control. No hazardous biological growth will occur, because the moisture necessary for these organisms to prosper has been eliminated.

Avoid Using the Building HVAC System.

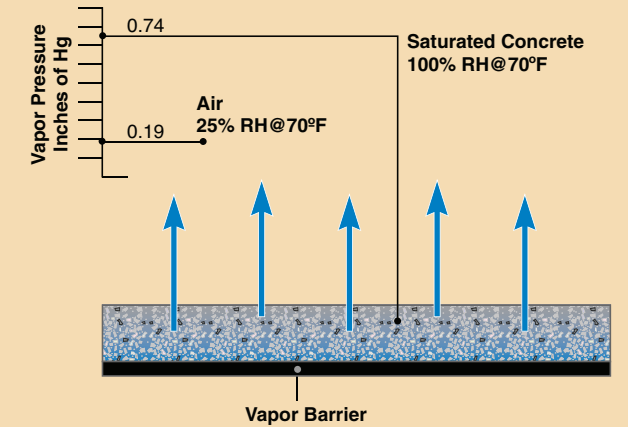
Using the building's HVAC system to end moisture problems is ineffective, as the system is designed for temperature control, not moisture removal. Likewise, if operated during construction activity, the HVAC system can be infiltrated with dust and mold spores. There can be damage to coil and filters and operation before commissioning the building may lead to warranty issue with the equipment. For these reasons, many building owners no longer allow use of the system during construction. Munters can both eliminate moisture and create comfortable conditions for workers. So, there will be no need to activate the HVAC system or open windows until the building is completed.

Emergency Service for Hospital Construction.

Munters offers service around-the-clock. We have construction specialists on call and equipment at the ready to meet your needs at any time. For a project evaluation or emergency service, call: 1-800-MUNTERS.



Moisture moves from concrete and other materials into the air to equalize vapor pressure.



Dehumidification lowers the vapor pressure above the concrete slab, drawing water vapor out. The greater the vapor pressure difference, the faster the drying.

ENDING A MISCONCEPTION Heating vs. Desiccant Drying

Contractors have often attempted to dry damp building interiors using heat. But the physics of drying show that, while heating may temporarily reduce relative humidity inside the building, it will not remove moisture trapped in materials, such as concrete, sheet rock, fireproofing and wood flooring. Nor can it quickly and effectively reverse water damage from storms or leaks.

To effectively dry water laden materials inside a closed building, the vapor pressure of the inside air must be reduced. Munters accomplishes this by deeply drying outside air with industrial dehumidification equipment, and then filling the inside construction areas with the treated air. Because the vapor pressure of the dry incoming air is well below the vapor pressure of the construction material at risk, the moisture vapor naturally moves to the surface of the material and are absorbed into the air. As the inside air becomes laden with moisture from the surrounding materials, it is evacuated from the building and replaced with more dry air. Unlike heating, this cycle can dry joint compound in hours after being applied. Concrete slabs give off moisture in time to reach proper manufacturer's specs for flooring installation. Wood floors and moldings don't cup or warp.

Besides being ineffective, the use of heat for drying construction environments has other disadvantages. For example, direct fired heaters may add moisture to the inside air through the process of combustion. They have a high cost of fuel and labor, and in some environments they are too dangerous to use.

