



Drying Room Air Treatment, Vreten Preschool

Sundsvall Municipality, Sweden



Vreten Preschool outside Sundsvall opened its doors in November 2022 and comprises five departments with children. The preschool is close to both the forest and the public outdoor pool and offers many possibilities for outdoor activities.

Time spent outdoors mean enjoyable learning, which is why most days are spent outside. This means lots of wet gloves, hats, shoes and clothes that need to be dried before it's time to head out again. When building the kindergarten, the designers quickly realised that the traditional drying cabinets would not suffice.

A long-term solution

Munters has long had a good and well-established relationship with Sundsvall Municipality and its subcontractors. Sundsvall Municipality has a service agreement with Munters to ensure operation and functionality. During the planning stage of the Vreten Preschool, the decision was made to build drying rooms based on Munters dehumidifiers. The main advantages were the energy savings, effective drying of the children's clothes and shoes and a good climate in the drying room.

Case study

- Drying room air treatment, Vreten Preschool, Sundsvall Municipality.

Facts in brief:

- Efficient drying of clothes and shoes
- Easy to hang clothes to dry
- Energy-efficient solution with big savings
- Gentle drying method
- Easy installation
- Also protects the building from moisture damage



One drying room or eight drying cabinets

Tens of thousands of drying cabinets are installed at preschools and schools all over Sweden, which together consume millions of kilowatt hours a year. A 10 m² drying room with a dehumidifier and fans consumes only 1–2 kWh. The capacity is equivalent to 8 conventional drying cabinets, which together consume somewhere between 5–12 kWh. Unlike a drying cabinet, the dehumidifier only runs as long as the clothes are damp, so the preschool can expect big savings. The secret is that no heat needs to be added because Munters desiccant dehumidifiers operate efficiently even at low temperatures and in unheated areas. To further reduce drying time, a duct heater can be installed.

Gentle drying

Drying cabinets can be harsh on certain materials that cannot withstand such high temperatures, such as GoreTex. The heat in drying cabinets also often leaves garments in the dry and hot in the middle, while drying slower on the sides. In drying rooms with Munters dehumidifiers, this is a thing of the past, as air circulation in the room distributes heat and facilitates dehumidification. This method is also gentler on the clothes, because drying takes place without mechanical impact and at low temperatures. Since the drying process is fast, there are no bad odors in the drying room either.



Munters drying rooms make it easy

The new drying room can accommodate the clothes and shoes of the entire preschool. When all the clothes are in place, the staff switches on the fans, which quickly draw the water out of the clothes. The humidity in the air is then effectively absorbed by the dehumidifier, which uses a humidity sensor to start automatically when the humidity exceeds 45% RH. The hot, humid air is led out of the premises. The fans and dehumidifiers are started and stopped by a timer. "It's easy to hang everything up together and start the drying with a timer," says Susanne Richter, the preschool principal.

Munters Drying Room Solution

- Dehumidifier MH270
- Humidistat (RH4000 or RH98 to 2x MH270)
- Circulation fan Ø300 mm – 1-4 units depending on size of drying room
- Timer for fans
- Capacity: 30–40 liters/day
- Efficiency: Approx. 1kWh/kg water (tested by the Danish Armed Forces as "best concept for varying moisture loads in unheated areas")

Munters offers a complete drying room solution and adapts solutions depending on the size of the specific drying room. Munters dehumidifiers are available in different sizes and work in both new builds and existing premises that are adapted.

By equipping the drying room with Munters dehumidifiers, Vreten Preschool saves energy and time, and all the children can go home for the day in dry boots and overalls. An investment for both finances and well-being!

Want to know more about Munters climate solutions for your business? Please visit our website, www.munters.com, where we will guide you further.

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