



## A drier way for drying rooms

Outdoor activities that involve water inevitably mean there will be a lot of wet clothing at the end of each day – clothing that needs to be properly dried out in time for the following day's activities.

Calorex dehumidifiers provide an effective yet low cost alternative to heated drying rooms at outdoor pursuit centres, fire stations/fire training centres, Armed Forces bases and many other similar establishments around the country.

The following examples illustrate some of the diverse drying applications for dehumidifiers:

### Outdoor pursuit centre

Bryntysilio Outdoor Education Centre in Llangollen hosts a range of outdoor activities for parties of children and adults and is open for 50 weeks a year. Even without wet weather, several of the activities (which include canoeing, mountaineering and caving) involve water. When the visitors return to the centre in the afternoon their outdoor clothing



needs to be dried out thoroughly in readiness for the following morning's activities. The new Calorex DH150 dehumidifier installed in the drying room at Bryntysilio does just that, by using heat pump technology to provide a flow of recirculated dry warm air across the wet clothing.

### Armed forces base

RAF St Mawgan, near Newquay in Cornwall, had a similar requirement. The base is used for training air crew in ditching and survival techniques in the sea and at the end of each exercise all gear including dinghies, life rafts and survival suits have to be thoroughly washed to remove all traces of corrosive salt and then completely dried.

Previously everything had to be left outside to dry. This arrangement worked during hot summer weather but when conditions were rainy, especially during the winter, the equipment could rarely be dried completely and this adversely affected course planning. Two DH150 units have transformed the drying operation so that most items are dry and ready for use within 24 hours, even when the room is filled with equipment.

Most recently a third DH150 has now been installed in a separate drying room at the base for 203(R) Squadron Operational Conversion Unit where pilots are trained to fly Sea King helicopters on search and rescue operations.

## Fire service

Practical training for fire fighters also provides plenty of wet clothing at the end of each session, but thanks to two Calorex wall mounted DH60 dehumidifiers the clothing of trainees and instructors at the Greater Manchester County Fire Service's Fire Training Centre is dry and ready for use by the following morning.

Conventional heating and extract fans were previously used at the Centre but when the drying room was enlarged, heat pump dehumidification was chosen as a more efficient and economical



method of drying. The new drying room has the capacity to dry up to 50 uniforms at a time.

All Calorex dehumidifiers are fully packaged, easy to install and can operate efficiently over an ambient air temperature range of between 0 and 40°C.

Unlike heating, which merely increases the amount of moisture the air can hold, Calorex units physically remove the moisture from the air. Moist room air is drawn into the dehumidifier and passes over a cold refrigerated coil onto which the water vapour in the air condenses. The dried air is then heated up as it passes over the refrigeration circuit's hot coil and re-enters the room.

The system is extremely energy efficient because it utilises the latent heat released by the condensation enabling the dehumidifier to produce up to 3kW of heat energy for every 1kW of electricity consumed by the refrigerant compressor. This 'free' heating assists the drying process so that drying times and operating costs are substantially improved compared to the use of a conventional heating system.

Calorex manufactures dehumidifiers for many other types of application. All products are supported by an in-house applications department and nationwide service network.

