

Independent Guide

How does humidity in the workplace affect people?



Independent workplace compliance

What are some of the problems caused by humidity?

There are certain periods of the year when humidity can fall to very low levels. This can occur during winter periods when we experience cold, dry spells. The situation is exacerbated in today's office by the amount of electronic equipment present and by heating the incoming fresh air as part of the building's HVAC system. This heating process causes humidity levels to be reduced even further. The problems experienced from low humidity include:

- Sore eyes, dry throat, itchy or dry skin and a stuffy nose. All of these symptoms have been associated with attacks of 'flu and even Sick Building Syndrome. However, one of the most likely causes for these symptoms would be low humidity levels.
- Sometimes, people working in offices find itchy red marks on their ankles, which they assume are flea bites. However, these marks are more probably a result of static electricity (caused by synthetic carpet fibres which become charged), which is increased as a result of low humidity in the area. This phenomenon is known as the phantom flea effect or illusory parasitosis.
- Static can also increase the potential for computer equipment failure.

What are the guidelines for humidity?

The guidance that HSE produce to accompany the Health and Safety (Display Screen Equipment) Regulations 1992 states, 'electronic equipment can be a source of dry heat which can modify the thermal environment at the workstation. Ventilation and humidity should be maintained at levels which prevent discomfort and problems of sore eyes'. The Chartered Institution of Building Services Engineers therefore recommend that relative humidity levels in offices should be between 40% and 70% to maintain appropriate levels of comfort. Relative humidity is the amount of water vapour in the air, expressed as a percentage, of the maximum amount that the air could hold at the given temperature. However, in our experience, most people only start to experience the problems described above when humidity levels fall below 30%.

How can the problems associated with low humidity be overcome?

In an ideal world, all workplaces would be fitted with some type of humidification control. However, in circumstances where this is not practical (i.e. due to constraints in the building design or financial resources), there are certain cost effective measures which can be taken to ensure that humidity in the workplace can be maintained at an appropriate level:

- People should be encouraged to drink more fluids, especially water, during periods when humidity is low.
- In cases of prolonged low humidity, it may be beneficial for the carpets to be lightly sprayed with water in the morning, before the staff start work.

How can I monitor humidity levels within the workplace?

Personal comfort is a subjective area. In an environment where the majority of people are comfortable there will always be at least one person who claims to be dissatisfied with their working conditions! The cause of their unrest may be deeper rooted than the temperature in the office. However, if several people have similar complaints about the levels of comfort in their workplace, it may be worth investing in an independent audit of the conditions. This will cover areas such as workplace humidity, temperature and airflow, as well as specific gases such as carbon dioxide.

This guide is of a general nature; specific advice can be obtained from Assurity Consulting. Assurity Consulting is the UK's leading independent compliance consultancy specialising in workplace health, safety and environmental solutions. We have over 35 years' experience of helping customers of all sizes, from across all sectors, manage their compliance responsibilities, making sure that their organisation is compliant, their employees are safe, their processes are cost effective and their management team is in control.



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