

BUILDING TRUST



AND THE



INSPECTING SITE CONDITIONS BEFORE DELIVERING AND INSTALLING WOOD FLOORING

This document outlines the approach that The Solid Wood Flooring Company takes when producing reports on site conditions in large residential developments. Our Technical Director and a senior representative from Sika will arrange a site visit which is a **free service** if our flooring is being installed.

Subsequent to the site visit a comprehensive report will be produced detailing all the observations and making recommendations regarding, screeds, subfloors and environmental conditions. The procedure and test carried out are listed below and you can also buy your own equipment for future testing for additional floors in the development.

Residential Tower Blocks are normally phased for floor levels and once we complete the first report on site with senior personnel and project managers it is relatively easy to continue testing each floor as it nears completion.

High rise residential towers have their own challenges especially if they remain unoccupied after the flooring is installed. This is due to relative humidity either going below 35% or above 65% depending on the air condition, heating and environmental controls. Human being give off more than 5 litres of water in humidity overnight.

Testing Concrete Screeds either below cradle systems or the actual screeded subfloor on which the wood floor will be installed. If the floor is to be installed on a cradle system the subfloor of this must be tested as well.

Testing for moisture in screeds:

There are of course various different ways of testing the moisture in concrete and calcium sulphate screeds depending upon what you want or need to achieve. For example we will use a Tramex CM4 Moisture Encounter for identifying elevated levels of moisture in a screed or to ascertain that it is dry as it is non destructive and quick.

It provides results in CM (Carbide Method) and / or %H₂O and is more than adequate to interpret whether a screed is dry enough to receive a wood floor.

However, this is not as recommended in BS8201,3 or 4. The BS calls for relative humidity readings. These are achieved by using humidity boxes and/or screed plugs and are left in situ for a minimum of 72 hours before taking the readings. The procedure below is where you drill holes in the screed to produce a test and reading to BS Standards.

Procedure:



Drilling a 16mm hole in the substrate 50mm deep. Most screeds are much deeper than this and if it is a hot water screed confirm with the contractors the depth of the screed above the heating pipes.



Clean out all the debris from the hole to ensure it is clean and smooth with no dust.

Clean the surrounding area



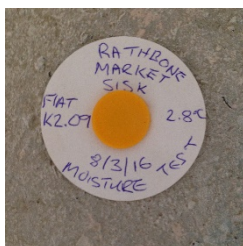
Prepare the plug and Identification disc.

Place the Identification disc and then the plug into the hole.



Place the yellow plug into the hole making sure it is a tight fit.

Identify the location with the following information. Building name, block, floor level, room No, date.





After min 72 hours.
Insert the hygro probe
and allow to stabilise
for 30 mins before
taking reading. Record
Rh & temp.

Replace the plug for
future testing.



Testing for Relative Humidity:

Humidity is the amount of moisture or water vapour in the “air”. “Relative Humidity” is the ratio of water vapour present in a given volume of air at a given temperature to the most water vapour the air can hold, expressed as a percent. So 40% relative humidity means 40% saturation of the air.

Whether we feel warm or cold is determined (among other factors) by the rate at which moisture is evaporated from our bodies. On a humid summer day, we feel “uncomfortable” because there is so much moisture in the air that evaporation from our skin takes place very slowly. When the air is “dry” (for example in very cold climates) we feel colder. In winter our homes tend to be drier, and the further north the drier the air. This means rapid body evaporation and so we feel cold.

Wood likes a comfortable climate as it should “live” at around 35% to 65% relative humidity with a moisture content of 7% to 9%. The seasons and our air controls inside including heating will have an effect on this.

By making sure that wood flooring lives in a comfort zone that we as humans also enjoy at the beginning of its life means you should have no problems with the floor during and after installation. This is why we insist on completing site visits and reports.