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Company Registration Number: 10263216 VAT Registration Number: 245 5324 14

13 December 2019

Mr Shaun Henry
Managing Director
South West Screeding Ltd

Re: Calcium Carbide Moisture Test on Retanol Xtreme Screed

Dear Shaun

Please see below the results of the Calcium Carbide Moisture (CM) Test commissioned by yourself and Carl Owen on the Retanol Xtreme screed installed by South West Screeding Ltd at Ham Farm in Winkleigh.

- **Location:** Ham Farm, Winkleigh, Devon
- **Date of the screed installation:** During week commencing 11 November 2019
- **Date of the CM Test:** 11 December 2019
- **Equipment used:** Radtke Messtechnik Carbide Moisture Test Kit



Objective/Methodology of the Test

For any kind of flooring, the final floor finish should not be installed until the screed upon which it is to be laid has dried optimally.

A CM Test offers the most accurate way of assessing the moisture content in floor screeds as it measures the moisture throughout the whole screed, not just at the very top surface. Please note that readings taken from other testing equipment such as Tramex Meters should be used for guidance purposes only as they are less precise and can be misleading. Readings from such equipment can result in DPM work being carried out unnecessarily. This is because a Retanol Xtreme floating screed will never require a DPM provided the screed has been protected from moisture post installation and the minimum drying time has been observed.

The screed analysed was an unheated floating screed approximately 75mm thick.

A CM Test requires a small representative sample (50g) to be taken from the full depth of the screed and crushed into powder form.



The screed sample is then mixed with a calcium carbide reagent, and subjected to orbital rotation in a vacuum flask.

Upon reacting, the mixture releases acetylene gas, the amount of which indicates the level of moisture in the sample. The percentage of concrete moisture within the sample (% CM) is then recorded after 2, 5 and 10 minutes from the commencement of the test.

Prior to the installation of the chosen final floor finish (a laminate wooden floor) on this unheated Retanol Xtreme screed which was installed between 29 and 56 days prior to the moisture test, the final CM reading (at 10 minutes) must be no more than 2.6%. This is indicated by the green coloured dial on the moisture content gauge.

Findings of the CM Test

The CM Test was carried out by Michael Lea of PCT Chemie UK Ltd. The final CM reading was taken at 10 minutes during the course of the test:

Reading at 10 minutes – 2.16% CM



Conclusion

At the end of the CM Test, the gauge reading was 2.16% CM.

As the screed tested was the most recent to be installed, we would now consider the screed to be sufficiently dry and ready to receive the chosen final floor finish.

Important Considerations

Potential water spillage and relative humidity

If there are any areas in the building which have yet to be plastered, please be aware that this could lead to the screed being exposed to further moisture, both through water spillages when mixing the plaster and through an increased relative humidity (RH) in the building. We are highlighting this for your consideration as any water spillages or significant increases in RH can lead to moisture related problems when applying the final floor finish.

If you have any questions, or require any further elaboration with regard to the test results, please do not hesitate to contact me.

I would like to thank you, and Carl Owen for your time and co-operation during my visit to Ham Farm.

Yours sincerely



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PCT Chemie UK Ltd

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