You may have noticed us working later than usual over the last month, this is because of the concrete floors we have been installing in the new building.

Concrete is the most versatile of all construction materials. A process called hydration makes concrete pliable when newly mixed and then strong and durable when hardened. Concrete is essentially a mixture of paste and aggregates. Aggregate is a category of coarse particulate material used in construction that includes sand, gravel and crushed stone. The paste composed of water and cement coats both the fine and coarse aggregates and then through hydration the paste hardens and achieves strength and hardness like rock.

We pour about 70-100m3 of concrete in each section of the slab – the sheer volume of concrete involved means this takes quite a few hours during the day to go in. We start pouring the concrete at 8:30am and this is all placed within the slabs by 5pm. We then have to wait for it to mostly dry before we can start walking on it a little and then we use power floats as below to start making it flat and smooth. If we went on it straight away we would just sink!

Between each time we go on the float we have to wait another hour or two for the concrete to get that little bit harder. It’s a bit like painting; you need to wait for the first coat to completely dry before you start the next one or you risk ruining the whole paint job. Power float concrete results in hard wearing finished surfaces that are suitable for high trafficked areas such as the Piazza Learning Centre.

Because of the time involved in this process, even if we start first thing on a morning work often continues into the night, which is what has been happening at the Piazza Learning Centre. These works will be continuing until the end of February, which means you may notice us working on an evening a few more times through the month. Hopefully this will not cause you any disruption but if you do have any queries then please contact our site team, there is always an Interserve representative on site whilst we are working.

Listed below are the provisional dates for concrete pours in February, these are subject to change as weather conditions can affect the works.

Tuesday 7 - Thursday 9 - Tuesday 14 - Thursday 16 - Monday 20 - Wednesday 22 - Tuesday 28

What is a power float?

A power float is a piece of light construction equipment that is used to apply a smooth finish to concrete slabs. Power float machines are fitted with circular pans to help smooth the concrete before metal blades are rotated over the surface adjusting the tilt to achieve a hardened surface.