



Queenstown - ground and polished floor topping

PROJECT DESCRIPTION

Nathan Faave, a well known multi-sport athlete was looking for a reinforcing system for the topping slab in his new residence in Queenstown.

Topping slabs can be very problematic especially when you have under-floor heating installed, cables, ducts and other crack-inducing items. Toppings are thin and not easily reinforced and can crack easily due to reflective cracking caused by items beneath the topping. Usually, to help mitigate cracking, control cuts are done as soon as possible and can be located where walls will be placed for aesthetic reasons. However, any overlay/topping requires a high-performance fibre option to help reduce the risk of uncontrolled cracking.

When looking for a solution, Nathan was recommended by the concrete supplier in Queenstown to give Stratmore a call. A Forta Ferro fibre option was put forward. Forta Ferro, being a macro synthetic fibre, would appear to be unsuitable for a thin, decorative overlay. However, it works especially well in this situation and can be ground and polished.

Forta Ferro reinforces throughout the topping, resists plastic and drying shrinkage cracking, can be ground and polished and with the right placing techniques, successfully used in a thin section of concrete like a topping slab.

Nathan didn't have any expectations regarding the end result and took a risk by not using any control cuts in the thin overlay. A couple of cracks did occur but the overall look is superb. About 18m³ concrete was poured, varying between 50mm to 100mm over underfloor heating.

KEY POINTS

- Demanding application
- Enhanced Performance
- Aesthetics

DETAILS

Date: 2018

Location: Queenstown

Fibre: Forta Ferro[®]

Dosage: 3.5kg/m³

Concrete Details: 30MPa

Concrete Supplier: Firth Queenstown

Contractor: Josh Cox

Contact us for more details