

Stacking of Gyprock on Dindas I-Joists

On occasion, the question arises regarding how many sheets of Gyprock can be temporarily stacked on a floor system during the course of construction.

Unless the actual layout of the floor system is known, the conservative answer is that the stack of Gyprock should not exceed the allowable live load on the floor, which is generally 1.5kPa / 1.8kN for residential construction. On this basis, a stack of Gyprock (laid flat) should not exceed approximately 100mm in height (example: 10 sheets of 10mm Gyprock or 8 sheets of 13mm Gyprock).

In some areas, it is common practice to temporarily 'prop' up the floor system in order to stack more than 100mm of Gyprock. This 'propping' is generally placed at mid-span of the floor joist and carries the load to the concrete floor slab or foundation. It is advised to always use an appropriately tested and tagged 'Acro-Prop' as the propping member. This prop **MUST** be installed before the Gyprock is stacked. Holes in the I-Joist near the propping member should be avoided. The Gyprock is centred over the temporary prop. The allowable height of the Gyprock stack depends on variables such as joist span, series, depth and on-centre spacing. It is impractical to calculate how much Gyprock could be stacked on a floor system on a job-by-job basis. However, a rule of thumb for this propped condition would be to limit the height of the Gyprock stack to approximately 200mm (example: 20 sheets of 10mm Gyprock or 14 sheets of 13mm Gyprock).

It is important to remember that floor joists can be overloaded by stacking too much weight on them in one location. Following these recommendations and spreading the load out will greatly reduce the risk of damaging the joists by overloading them.

In either case, with or without propping, it may be possible to stack more Gyprock than is indicated above depending on the actual framing conditions (i.e. joist span, series, depth and on-centre spacing). For guidance in these cases please contact the Dindas National Design Centre. Our Engineered Wood Products Designers can provide safe work limits and joist computation checks.

Dindas Australia recognises that overloading of floor joists can lead to system performance problems such as floor squeaks, ceiling cracks, excessive deflection, nail pops and vibration issues. These items can be expensive to repair and result in warranty issues with the future homeowner. By following these guidelines and employing some reasonable caution these potential problems can be avoided.

Thank you for your attention to this subject. Dindas Australia strives to provide quality building products and advice to the building industry that result in satisfied builders, contractors and ultimately, homeowners. We appreciate your business and look forward to being an integral part of your building solutions.