

Green Productivity in Construction

Innoverde introduces 100% waterproof & lightweight building panel to Singapore, increasing productivity, manpower savings and environmental benefits.

The Singapore Construction Productivity Week (SCPW), since its launch in 2011, has made significant progress in promoting the adoption of more productive construction methods. With the Building and Construction Authority (BCA) introducing a S\$250-million Construction Productivity and Capability Fund (CPCF) as part of the Government's efforts to help the construction industry improve productivity and strengthen its capability, there's no reason why construction companies shouldn't adopt these new methods.

With a greater focus on environmental sustainability and the pressure to build responsibly, how do we combine the two to push for green productivity? How can we champion clean, sustainable construction methods and transform a work space from this (left) to this (right)..



...reduce manpower, get the job done faster while promoting sustainable and environmentally friendly building practices at the same time?

This goal mirrors Minister for National Development [Khaw Boon Wan's](#) and the government's aim to strive for the “construction industry to be cleaner, quieter and faster..” by adopting game-changing technologies in construction.

Sounds like an impossible challenge? Not quite, and it's in motion.

Achieving green productivity in construction

We gained some valuable tips from our Australian principal company, MultiPanel, who has introduced these green productivity solutions since its incorporation in 2000. With the high and increasing manpower costs in Australia, especially for skilled workers, it left builders in Australia no choice but to implement these manpower saving solutions to help reduce their costs. Facing a similar trend in Singapore, it now has become the right time for us to look at these solutions to overcome our own rising manpower costs.

To illustrate - When building a balcony, traditional methods of construction would be to use concrete, which is extremely heavy. Not only does concrete take a long time to cure, require water ponding, and waterproofing, there is also a high risk of error if the concrete isn't set properly, which leads to the possibility of re-work. Working with cement is also very messy. Using a slightly lighter fibre cement board as a substrate, several waterproofing precautions still need to be taken as well, especially on the joints.



With MultiPanel, a 100% waterproof, strong and lightweight material with eco-friendly properties, this panel can be used as a substrate together with a frame made of steel, aluminium or Cross Laminated Timber (CLT). CLT, which has just been approved to use in Singapore for structural components in buildings, enables manpower and time savings of up to 35 per cent compared to conventional construction methods. When used with MultiPanel, becomes 100% waterproof.

MultiPanel on its own also has its own strengths.

Being lightweight, not only are transportation costs and emissions reduced as less fuel is needed for transportation, but less manpower is needed to carry and install the panels on site. There is less installation time as there is no need for water ponding, waterproofing, and the panel can be easily installed using traditional wood working tools. Without deteriorating and rotting due to water damage, It is



long lasting and there is no need to change the panels over many years.



Also having insulation properties, it acts as a natural coolant and lowers the temperature of the building. In terms of scale, not only does this affect new buildings, but also a large number of existing buildings which require A&A works or conservation. It is a quick and clean method of building & waterproofing with little downtime.

Eco-friendly, 100% Waterproof & lightweight panels

MultiPanel is a lightweight and 100% waterproof building panel that will not absorb any moisture and can be used without a membrane coating. MultiPanel is used in many building applications including facades, bulkheads, eaves, external cladding, waterproof flooring substrate, waterproof wall lining for wet areas and more. Thinner panels are flexible allowing for creativity in designing curved elements within the building. The ease in which this can be achieved makes on-site installation extremely efficient.

MultiPanel has been used as substrates in many showers and balconies and has proven to save labour for onsite installation but more importantly is a solution to moisture related problems in wet areas.

Innoverde Pte Ltd is a company dedicated to providing green, innovative solutions that increase productivity, fuel by the belief that being environmentally driven can benefit both society and also be economical to companies. MultiPanel is one of the many products Innoverde hopes to achieve this with.

Green Innovation. Green Productivity. Green Solutions.