

Ty Wilson from G-DECK discusses the design and fabrication features that contribute to safer construction decking systems

What makes a safer decking system?



Thanks to their ease and speed of installation and their flexibility on site, construction safety decking has become a popular alternative to traditional birdcage scaffolding for many construction projects.

Far from being a generic, one-size-fits-all solution, however, safety decking systems vary considerably in design, materials and strength; all of which can affect their safety. All decking systems are used to provide access throughout varying stages of the build and fit-out, but safety is also a primary element of their purpose, which is why it's essential to understand what makes a decking system safer and to choose one with safety built in.

STRONGER IS SAFER

Across all kinds of industries, including construction, steel is the go-to material for strength and impact resistance. Traditional scaffolding tubes are made from steel, and, despite the availability of lighter weight alternatives, it is still the material of choice for strength and impact resistance.

For construction safety decking, the strength that steel offers, both as the deck material and in the legs that support it, is a critical safety feature. Not only does it increase the load-bearing capabilities of the deck installation, it also avoids the

risk of the system failing, either from overloading or from the impact of falling materials. It creates a robust platform to break the fall of any operatives working at a higher level too, becoming an important safety feature.

This imperative to build strength into decking systems lay at the heart of the design philosophy when creating G-DECK systems. The core G-DECK system is entirely fabricated from steel, with a zinc coating for corrosion protection, which enables it to support loads of up to 590kg/M2 and retain its integrity following the impact of weights up to 200kg from a height of 3m.

Meanwhile, the G-DECK Lite system uses the same slimline steel decks and has plastic outer legs with a metal web inner support inside the legs for increased strength and rigidity. This unique hybrid of plastic and metal legs means that G-DECK Lite can support loads of up to 200kg/m2 and withstand falling weights of up to 100kg from 2m.

SAFETY FEATURES BUILT IN

The ultimate safety feature for construction decking systems is ease of installation, because correct installation is essential to the safety of the system; that's why G-DECK provides safety training for all installers. Indeed, the G-DECK systems have only five core components per/M2, reducing the potential for installation errors.

Versatility is also important. The easier



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a system is to reconfigure, the more likely the site team is to adjust the decking as the project progresses, rather than 'making do'. G-DECK can be used in three ways – as a working platform, a trestle or tower – encouraging site-based personnel to convert the system to their needs.

Where required, use of a system with options such as handrail, stairs, internal access points can also be an important safety feature, reducing the risk of falls from height.

MAINTAINING SAFETY

It's important to remember that, just because a construction decking system looks sturdy, it doesn't mean the installation is safe. Alongside potential installation errors and the build quality of the system itself, users need to consider how well the decking performs over time.

Overloading is an issue for any decking system, which is why it's important to select a system that matches site requirements. The difficulty is that continuous overloading may not result in



a catastrophic failure immediately, but could lead to cracks in plastic supports over time. If these go unnoticed, the system is not safe because the integrity of the supports has been compromised. Moreover, continuous UV exposure on site can make plastic more brittle and prone to cracks. Only the inclusion of a metal support within the plastic leg of a decking system safeguards against this potential hazard.

TESTING & COMPLIANCE

A key indicator of system quality and safety is proven compliance with industry standards. G-DECK meets BS EN 12811-1:2003 and BS EN 13374:2013 and the materials used throughout the system are BS EN 12811-2:2004 compliant.

Test data is also useful if providing an indication of durability and safety and any testing should have been carried out by an independent third party, rather than the manufacturer, to provide a credible assurance of quality and safety.

DUE DILIGENCE

With projects under pressure to complete, it's important not to lose sight of the need to keep everyone safe on site. Choosing the right construction decking system not only reduces the risk of falls from height but can actually help to speed up construction progress with faster installation and improved loading capabilities.