



Factory conditions offer a safe working environment, like this one at Alpha Precast in Sydney.

PRECASTING SAFER INFRASTRUCTURE

NATIONAL PRECAST CEO SARAH BACHMANN DISCUSSES HOW PRECAST CONCRETE ELEMENTS CAN BE USED IN CONSTRUCTION TO FURTHER IMPROVE WORK HEALTH AND SAFETY REQUIREMENTS DURING COVID-19.

Despite many social restrictions as a result of COVID-19, construction is continuing and builders around the country are managing strict social distancing and hygiene requirements.

Alongside builders and construction workers, the supply chains for infrastructure projects are doing everything possible to keep works progressing.

According to National Precast Concrete Association CEO Sarah Bachmann, so too

are precast concrete manufacturers who are members of the association. Many of these members supply factory manufactured, or prefabricated, elements to essential infrastructure projects.

"The continued maintenance, functioning and construction, particularly of essential infrastructure like roads, rail and bridges, and buildings such as hospitals, government facilities and shopping centres, requires the precast concrete industry to stay

operational too," Ms. Bachmann says.

"Fortunately, construction has been deemed essential activity. Not only is it a lower risk industry during the pandemic, but it is a critical driver of economic activity."

When essential infrastructure is being built or maintained, precast concrete is very often used. Using precast elements for a project can benefit in time, cost and quality.

"Much shorter construction times can deliver savings and faster income generation

from earlier completion of projects. Quality is optimised from the controlled environment," Ms. Bachmann says.

"Sites where traditional construction methods are employed are usually a hive of activity, with material deliveries and storage, trades, labourers, waste, noise and dust."

She says using precast elements in construction can deliver increased safety benefits by making social distancing requirements easier to achieve throughout the construction of projects.

Precast concrete elements, whether they be walling, flooring, beams and columns, or stairs, are manufactured off-site in factory-controlled conditions. As well, road and rail

than many other countries in the pandemic, as winter approaches that situation may change. Precast should be used more for essential infrastructure construction, simply because it does make sites safer. As well, it isn't affected by inclement weather conditions," Ms. Bachmann claims.

"We sometimes see head contractors setting up dedicated factories in remote infrastructure locations. That is almost akin to fabricating products on site, as it doesn't necessarily remove works from the actual site," Ms. Bachmann says.

"As a key supplier to the construction industry, the precast manufacturing environment is low risk. In the precast

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infrastructure works are underpinned by drainage systems that incorporate precast elements such as pipes, box culverts and other elements.

Precast is manufactured in factories away from sites and final elements are delivered to site. This can reduce the need for individual trades and labourers and can eliminate formwork.

"Importantly, using precast, construction sites have increased safety with less clutter and activity. Disruption to neighbouring properties is reduced with less deliveries, less noise and less dust. Waste is minimised on site too, because whole elements are delivered," Ms. Bachmann says.

She says continuity of supply of precast elements is key to continued maintenance and construction of transport and building infrastructure.

She goes one step further, saying that the use of precast should be encouraged during COVID-19. As precast is manufactured off-site, it offers safer and more efficient construction.

She says with the improvement to on-site safety, it makes sense that precast manufacturing has been allowed to continue. "While Australia seems to be faring better

and practices. Factories offer a safe manufacturing environment with isolated workstations and appropriate personal protective equipment.

"That becomes even more important when we want industries to be able to continue operating for economic reasons, and when we all need to obey social distancing and strict hygiene requirements," Ms. Bachmann says.

"We know our members have all put in place strict additional requirements to minimise the spread of COVID-19," Ms. Bachmann says.

"They have also rolled out other initiatives to address the threat of virus spread among their workers, including separating shifts of workers, isolating workstations, staggering start and break times, distancing workers during breaks and other measures."

The decision by federal, state and territory governments to allow construction, maintenance and associated manufacturing works to continue is applauded by the precast industry's peak body.

"The next step is to recognise the safety and efficiency of using precast and recommend its use. That'll ensure all workers in the construction and manufacturing supply chain are better protected as they continue to deliver and maintain essential infrastructure." ■

factory, individual workstations are already distanced. Additionally, being a controlled environment, implementation of requirements like social distancing and improved hygiene measures is easy."

Precast manufacturing engages strict work health and safety requirements



National Precast is pushing for more off-site construction because of its safety benefits.