

GETTING CREATIVE WITH PRECAST

NATIONAL PRECAST CEO SARAH BACHMANN INTRODUCES SOME OF THE LATEST INITIATIVES FROM THE ASSOCIATION'S MEMBERS AND PARTNERS.

National Precast's newest Industry Partner Dulux Acratex has developed two new products which further enable the precast industry to deliver long term protection.

According to National Precast CEO Sarah Bachmann, precast already offers long term sustainable solutions that boast durability, high quality and strength. As such, precast structures require virtually no ongoing maintenance and are flood, termite, vermin and fire safe.

"One of the many sustainability benefits of precast concrete is that it can be manufactured off-site, in a factory-controlled environment. Factories are much safer than construction sites for workers. Additionally, quality is higher, waste is recycled, and state-of-the-art manufacturing processes are used. Waste materials can also be incorporated into the concrete mix designs," she says.

NEW SOLUTIONS FOR PRECAST COATINGS

Ms Bachmann says the industry welcomes the new options from Dulux Acratex – one of which improves adhesion of coatings, and the other, a texture coating that has been specially designed with precast in mind.

"Being manufactured in steel moulds, off-site, in a controlled factory environment, precast elements have a smooth, high quality finish – a finish that is generally much higher in quality than what can be achieved with site-poured, insitu concrete," says Ms Bachmann. "That has prompted Dulux Acratex to fill a gap in the market by developing these new products."

The two new products are Acratex BondFree Concentrate and Acratex AcraTilt. Acratex BondFree Concentrate removes typical barrier-type form release agents. This ensures proper adhesion of all coatings, be they paints, stains or coatings that protect precast from graffiti or pollution.

Acratex AcraTilt is a new texture coat product that offers a textured surface to



Acratex AcraTilt offers a textured surface to precast elements.

precise precast elements. Given precast's extremely smooth off-form (or off-mould) finish quality, AcraTilt has been developed for this smooth surface. It is a medium-build texture coating and promises outstanding results.

The two new products add to an already impressive range of surface finishes in the precast space, according to Ms Bachmann.

"Applied finishes can be achieved in the protected factory environment and can include etching to achieve an exposed aggregate finish, grit blasting for a sandstone style of finish, honing or polishing. Elements can also be painted and stained in the factory and touched up on site if needed, or integral colours using pigments can be incorporated into the concrete mix design," Ms Bachmann says.

Add to what's on offer in the colour and texture space, an infinite array of shapes using custom moulds and patterns that can be created by form-liners, and precast's design possibilities are endless.

AIR PURIFYING COATINGS

There are also new options on the market to protect and self-clean precast, while benefiting the environment.

"One of our Supplier Members, Ecotone, has brought to market an impressive line-up of long-life penetrative colour stains for concrete and environmentally beneficial coatings that preserve and self-clean concrete surfaces while purifying the air," Ms Bachmann says. "Both the stains and environmental coatings are being widely specified, particularly for civil projects which

must remain clean and maintenance-free over their long life."

WHEN BOOMGATES MEET PRECAST

Innovation is what drives many of National Precast's Master Precasters in the pursuit of more sustainable solutions. In Mick Walker's case, that translates into an autonomous boomgate that uses precast as its base.

Together with Luke Frenken of Frenken Group, the owner of the Perth-based Master Precaster Aus-Precast has integrated precast concrete with mechanical, electrical and solar capabilities to develop a boomgate with almost no site interface requirements.

According to Ms Bachmann, the company has designed out traditional requirements that underpin a boomgate's installation, using a precast concrete base as the foundation.

Walker explains that his Solar Traffic



Aus-Precast has developed a boomgate with almost no site interface requirements.

Operation – or STOp boomgate – eliminates any need for in-situ concrete. It also requires no underground power. As well as speeding installation time, on-site risk is reduced with much of the works completed in a factory-controlled environment, with less labour needed on site. The boomgate sits on a stable precast base with cast-in fork tines offering positive retention while off-loading and placement occurs. Beam lengths can span between two to eight metres and the module is solar-powered. ■

For more information, contact: info@nationalprecast.com.au

HERE'S A SNAPSHOT OF SOME OF THE WORKS DELIVERED BY NATIONAL PRECAST'S MASTER PRECASTERS:

Project: Carmichael Rail Network
Location: Gaililee Basin, QLD
Master Precaster: Stresscrete
Construction: Bravus Mining & Resources



Project: St Bedes Catholic College
Location: Chisholm, NSW
Master Precaster: Waeger Constructions
Client: Richard Crookes Constructions



Project: Mitchell Freeway T-Roff Bridge Beams
Location: Perth, WA
Master Precaster: PERMACast
Client: Mains Roads Western Australia



Project: Bells Creek Arterial Road
Contract Award
Location: Sunshine Coast, QLD
Master Precaster: The Reinforced Earth Company Australia
Construction: Shadforth's Civil Engineering Contractors



Project: Australian Maritime College Artificial Reefs
Location: WA
Master Precaster: Hudson Civil Products
Construction: Subcon



Project: Water Corporation Bridges, Young Siding Road
Location: Albany, WA
Master Precaster: MJB Industries
Construction: Fulton Hogan



Project: Geelong Geopolymer Bridges
Location: Geelong, VIC
Master Precaster: CivilMart Rocla
Design: Austeng and Deakin University



Project: Westconnex
Location: Sydney, NSW
Master Precaster: Austral Precast



Project: Colour for Life Services
Master Precaster: Ecotone



Project: Bushfire Safe Poles
Master Precaster: CivilMart Rocla



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