

THE STOKEHOUSE RESTAURANT CASE STUDY



Location St Kilda, Victoria
Owner Van Haandel Group
Builder Lanskey Constructions
Engineer Bonnaci Group
Architect Robert Simeoni
Date 2014-2016

Boral helped lift the famed Stokehouse restaurant out of the ashes of a devastating fire in 2014 to become Australia's first 5 Star Green Star building of its kind. The owner's criteria for the new building included that it looked great and construction was as environmentally friendly as possible. It is now home to a refreshed and larger Stokehouse restaurant, casual dining space Pontoon and beachside fish and chip kiosk, Paper Fish.

Concrete Performance*

ENVISIA® 40 MPa

Portland cement reduction**	60%
4-day strength	28 MPa
7-day strength	33 MPa
28-day strength	43 MPa
Drying shrinkage at 56 days	280 microstrain

ENVISIA® 50 MPa

Portland cement reduction**	60%
3-day strength	33 MPa
4-day strength	42 MPa
7-day strength	48 MPa
28-day strength	56 MPa
Drying shrinkage at 56 days	300 microstrain

Outcomes

- The rebuild was at the forefront of low-carbon emission construction as the first Victorian venue to showcase Boral's ENVISIA® lower carbon concrete.
- ENVISIA® was used for the cantilevered slabs and exposed columns of the split level restaurant to reduce the volume of concrete and steel reinforcement required.
- ENVISIA® was chosen for its various characteristics including lower carbon, high early strength, durability, light colour, excellent off form finish and suitability for marine environments.
- ENVISIA® is expected to extend durability of the Stokehouse by more than 100 years.
- ENVISIA's® lower carbon credentials assisted our client to meet Government environmental and sustainability requirements for developing Crown land.

What they said...

“The most exciting thing about the Stokehouse is the fact that we've managed to make it as environmentally friendly as we possibly can.”

Frank Van Haandel
Owner,
Van Haandel Group

“With ENVISIA®, only having half the shrinkage of regular concrete, it was really well-suited to a cantilevered slab design like this.”

Greg Johnston
Foreman,
Lanskey Constructions

“The cantilevered structure was monitored and showed ENVISIA® provided minimal deflection.”

Sam Caruso
Structural Engineer,
Bonacci Group

“Boral has contributed a huge amount to the credibility of the building. What Boral has been able to do with the reduction of portland cement is actually staggering.”

Trent Alexander
Project Manager,
Van Haandel Group