



Enviro Construct

LOW CARBON CONCRETE



**HALLETT
GROUP**

Sustainable Concrete Solutions.

Hallett Group's Enviro Construct range is helping Australia reach its goal of Net Zero Carbon Emissions by 2050.

Enviro Construct has a range of mixes to suit all application of placement.



Low Carbon

At Hallett we have always strived to provide customers a range of different concrete mixes that can meet their technical needs. As Australia and the world become increasingly focused on reducing CO₂ emissions a balance of technical and environmental concerns are becoming increasingly common.

To this end Hallett has provided a range of Enviro Construct for general purpose concrete:

- Level 1 – Typical reduction of CO₂ embedded 26 – 28 %
- Level 2 – Typical reduction of CO₂ embedded 35 – 37 %
- Level 3 – Typical reduction of CO₂ embedded 44 – 47 %

Reductions of up to 252 kg CO₂eq/kg can be achieved on specific mixes low heat & mass concreting.

Hallett also has access to Carbon Cure at particular plants introduces CO₂ into the concrete mixes permanently embedding CO₂ into the concrete.



Green Star

Green Star is industry backed method for assessing the life cycle impacts of concrete and allows the customer and supplier of concrete to assess the impact of concrete on the environment. The system looks at all the concrete provided in the project and provides a simple pathway to assess the impacts which are broke down into 3 key areas:

Portland Cement Reduction

- A maximum of 2 points can be achieved through reduction the amount of Portland Cement in the mix
 - 1 point awarded for a 30 % replacement of Portland Cement
 - 2 points awarded for a 40 % replacement of Portland Cement

Water Reduction

- A maximum of 0.5 points can be achieved through the reduction of water across the project by using a minimum of 50 % of captured or reclaimed water

Aggregate Reduction

- A maximum of 0.5 points can be achieved through the reduction of aggregates used across the project. This can be accomplished through either of the following methods
 - Utilising a minimum of 40 % crushed slag aggregate or other alternative or,
 - Utilising a minimum of 25 % fine aggregate (sand) which is either manufactured sand or other material

Hallett provides a range of materials with either 1, 2 or 3 star alternatives available.



DIT - Department of Infrastructure and Transport

Hallett can provide a range of mixes to meet the conditions for DIT sustainability mixes. While DIT requires 30% replacement of Portland Cement on exposure classifications B1 & B2 Hallett provides 3 different levels which meet or exceed these requirements:

- Level 1 – 30 % Portland Cement replacement
- Level 2 – 40 % Portland Cement replacement
- Level 3 – 50 % Portland Cement replacement



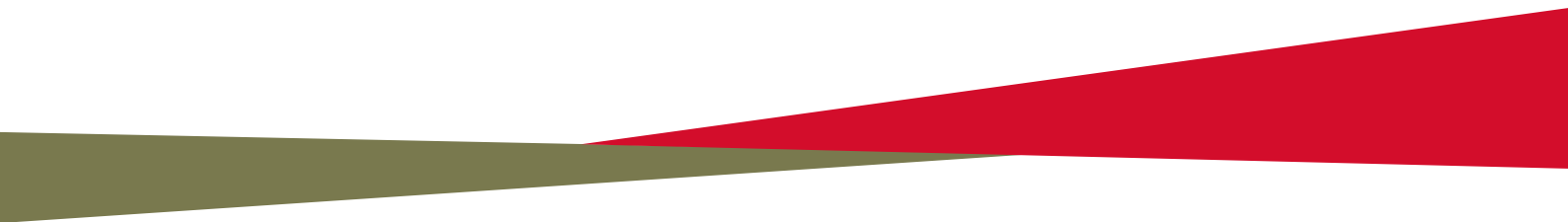
OVINGHAM BRIDGE - LEVEL CROSSING REMOVAL

Carbon Cure

Carbon Cure manufactures carbon dioxide removal technologies for concrete producers of all sizes. The technology injects a precise dosage of captured carbon dioxide into concrete during mixing, where it mineralizes. This improves the concrete's compressive strength, enabling mix optimization and significant carbon footprint reductions as well as cost savings. The mineralized CO₂ is permanently locked away and will never be released back into the atmosphere, even if the concrete is later demolished.

Building with concrete made with Carbon Cure reduces CO₂ by an average of 15 kilograms per cubic metre.





**HALLETT
GROUP**

126 Churchill Road North
Dry Creek SA 5094

hallett.com.au