

ECO-RAFT

Environmentally Friendly **Slab Solution**



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Introduction to Eco-Raft

Eco-Raft is a residential raft floor utilising factory cut recycled pods and Eco-Max concrete, resulting in an embodied carbon saving up to 50% over other raft floor systems.

Our Eco-Raft Slab Solution involves pre-cutting all pods in a controlled environment. All pods are made from 40% recycled material and they are 100% recyclable. This system eliminates waste, prevents surplus pods and off cuts left on site, and no cutting on site, so airborne poly beads are very minimal.

The eco-Max Concrete will save up to 50% embodied carbon over standard concrete. Eco-Max concrete have other benefits like durability, less shrinkage, superior finish. Not only does Eco-Raft prioritise environmental sustainability, but it also enhances durability and extends the design life of the floor.



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 East Coast
Concrete

Key Benefits



High Performance

The Eco-Raft slab solution uses Eco-Max concrete. Eco-Max concrete have a list of high performance attributes over standard concrete, and this makes it perfect for architectural and standard floors.



Durability

Eco-Max is a finer material that produces a denser and smoother finish. This results in a more durable surface that also has better stain and chemical resistance.



Reduced Shrinkage

Eco-Max concrete has a lower shrinkage performance, reducing cracking.



Cost Competitive

Eco-Raft is a cost competitive system to a standard raft system, with all the added benefits.



Architectural Finish

Eco-Max creates a smoother/denser surface, as it is much finer product than cement. Eco-Max also provides a much whiter appearance, which is perfect for polished floor finishes.



Lower Embodied Carbon

Eco-Raft uses a very low carbon Eco-Cem cement. The GP cement (**812kgs of embodied carbon per tonne of cement**) is replaced with Eco-Cem (**149kgs of embodied carbon per tonne**). This is a true replacement of GP cement to a very low carbon cement. The carbon saving will be up to 50% of embodied carbon using the Eco-Raft system.



Proven
performance
worldwide



Embodied Carbon Reduction

We have developed the ratings in the graph below to give you an indication of our Embodied Carbon reductions across various products.

	20 MPa	25 MPa	30 MPa	35 MPa	40 MPa	45 MPa	50 MPa	
ISC 2020 Baseline	284	313	347	391	441	495	550	Global Warming Potential (GWP) (Embodied carbon per m ³)
ECO-MAX - 15% Replacement CO₂ Reduction	207 27%	232 26%	258 25%	288 26%	317 28%	345 30%	373 32%	
ECO-MAX - 25% Replacement CO₂ Reduction	190 33%	211 33%	234 33%	262 33%	288 34%	313 36%	337 39%	
ECO-MAX - 35% Replacement CO₂ Reduction	171 40%	191 39%	211 39%	235 40%	258 41%	280 43%	302 45%	
ECO-MAX - 45% Replacement CO₂ Reduction	154 46%	170 46%	188 46%	209 46%	229 48%	248 50%	267 51%	
ECO-MAX - 55% Replacement CO₂ Reduction	135 52%	150 52%	165 52%	182 53%	199 55%	215 56%	232 58%	
ECO-MAX - 65% Replacement CO₂ Reduction	118 58%	129 59%	141 59%	156 60%	170 61%	183 63%	196 64%	

ISC 2020 Baseline is from the Infrastructure Sustainability Council 2020 Baseline.

CO₂ Reduction % is calculated from the ISC 2020 Baseline.

Percentage replacement values have been calculated from our inhouse LCA Mix calculator.

Above values are calculated on 19mm Standard mixes for Gisbourne, other regions and mixes will vary slightly.

For technical information please refer to HR Cement Ltd product data sheet for Eco-Cem.

For more information on suitability and achievable CO₂ reductions please contact your local representative.



Get in Touch

Derek Watson / *Director*

M: 027 455 6260

E: dw@ecc.net.nz



Environmental Product Declaration

An Environmental Product Declaration (EPD) is an independently produced report of the effects across a wide variety of criteria. The EPD for our GP Cement Xtra-cem was produced by Thinkstep, a well known and very reputable NZ based company, and published in February 2022.



Eco-Raft Slab Solution
replaces up to 50% of GP
cement with recyclable
materials, ensuring that
Eco-Raft itself is 100%
recyclable.

