



November 2021



RIBRAFT 🚠

THE

Around 20 years ago Firth was the pioneer of 'Ribraft' floors in NZ - they became the most popular foundations in the country. And now we're doing it again with X-Pod®. X-Pod® is the next generation of Firth RibRaft[®] foundations and just like the original, this one is going to be a game changer.

ECO FRIENDLY + USER FRIENDLY

RibRaft® X-Pod® offer designers, installers and homeowners a more sustainable foundation option.

ZERO LANDFILL WASTE 100% RECYCLABLE

CONSTRUCTED FROM 80% RECYCLED MATERIAL

EFFECTIVE IN EXPANSIVE SOILS WHERE STRENGTH AND STIFFNESS IS KEY





ADJUSTABLE

THE MINI POD SYSTEM REQUIRES NO CUTTING OF PODS & IS CONNECTED TO A FULL POD USING THE STANDARD CONNECTION OF THE KEYSTONE CLIPS

LIGHTWEIGHT + EASY TO HANDLE





Pods for an 180sqm home can be delivered on a single axle trailer



RIBRAFT[®] X-POD[®] 750

Made from 80% recycled polypropylene. Each individual 750 X-Pod® can be arranged in a grid creating concrete ribs at 750mm centres.



X-POD[®] KEYSTONE CLIP

Clicks and locks X-Pod®s together. Clicks and secures reinforcing steel. 170 x 170 x 100mm.



RIBRAFT® X-POD® 1500

Made from 80% recycled polypropylene. Connect 4 x 1500 X-Pod*s together, using the keystone clips, forms a grid that creates concrete ribs at 1500mm centres.



MINI POD SYSTEM

The Mini Pod system requires no cutting of pods. Making the best recycled plastic pod system even better. The mini pod is connected to a full pod using the standard connection of the keystone clips. The Mini Pod can fill a 300mm void. When combined with the mini pod adjustable it can fill voids between 300-600mm.



STEEL REINFORCING / MESH

(not supplied by Firth)



TO ENHANCE THERMAL R-VALUE, THESE COMPONENTS CAN BE INCLUDED IN FOUNDATION DESIGN:



THERMOX TAPE 50m roll (optional) Reflective Thermal DPM tape



THERMOX DPM 90sqm roll (optional) Reflective Thermal DPM

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X-POD[®] CONCRETE

X-Pod[®] foundations require a specific Firth designed concrete. Two mixes are available, Firth 'IP2019X' a 20MPa, 120mm slump mix, or Firth 'IP2519X' a 25MP, 120mm slump mix. Both are available in a 13mm or 19mm aggregate, are suitable for 100mm pump lines and are Declare Label certified, available nationwide at Firth plants.







5 STEEL & MESH CONNECT TO KEYSTONE CLIPS



G CONCRETE POUR



4 PODS, CLIPS.

X-PODS, KEYSTONE CLIPS, MINI PODS INTO PLACE





SCRAPE AND LEVEL SITE







- 1 WHAT IS X-POD®
- > RibRaft® X-Pod® is a unique, patented foundation system from Firth.
- 2 CAN I SWITCH OUT MY EXISTING RIBRAFT[®] FLOOR TO A X-POD[®] FLOOR?
- Yes you can, however you will need to get an engineer to design the floor specifically as a X-Pod[®].

The X-Pod® Structural Designers Guide is available online at www.xpod.co.nz

- 3 HOW DOES X-POD° COMPARE IN COST TO CURRENT RIBRAFT° FLOOR?
- > In good ground it may be 10-15% more than a standard RibRaft $^{\circledast}.$

However as ground conditions deteriorate, ie TC2 / expansive soils or when building loads increase, it is likely to be less expensive than competing systems (eg pile foundations).

- 4 CAN I USE NORMAL CONCRETE OR DOES IT NEED A SPECIAL MIX?
- X-Pod® foundations require a specific Firth designed concrete. Two mixes are available, Firth 'IP2019X' a 20MPa, 120mm slump mix, or Firth 'IP2519X' a 25MPa, 120mm slump mix. Both are available in a 13mm or 19mm aggregate, are suitable for 100mm pump lines and are Declare Label certified, available nationwide at Firth plants.
- 5 IS IT QUICKER AND EASIER TO INSTALL?
- > Yes, it is quicker and easier to install than a standard ${\rm RibRaft}^{\oplus}$ floor.
- 6 DOES X-POD[®] USE MORE/LESS CONCRETE?
- > Uses more.
- 7 CAN X-POD® BE USED ON A SLOPING SITE?
- > X-Pod® can be used on sloping ground with the engineer's approval.

8 CAN YOU STACK THE PODS?

- > Your Pods can be stacked for delivery. An average houselot site will fit on a tandem trailer.
- 9 CAN I HAVE A DECORATIVE CONCRETE FINISH WITH X-POD°?
- > Yes you can, the Firth 'IP2019X' or 'IP2519X' mix can be polished or coloured.

Note: When polished, there will be no problems with polystyrene beads on surface.

- 10 IS THE SYSTEM CODEMARK CERTIFIED?
- > It's likely to be Codemark certified in the next 12-24 months.

11 WHAT IS THE R-VALUE?

R1.3 however in some instances designers may wish to determine the R value as part of the design process. (Refer Page 12 of the X-Pod® Structural Designers Guide to calculate R-value.)

Ribraft HotEdge[®] can be added to increase R-Value, if required under Homestar 6.

Thermo-X DPM can be used to increase the R-Value in accordance with page 12 of the Design Guide.

For RibRaft[®] HotEdge[®] information visit www.firth.co.nz/residential/foundations/ribraft-hotedge

- 12 DOES THE X-POD® SYSTEM CARRY ENVIRONMENTAL CERTIFICATION?
- Yes the Firth X-Pod[®] 'IP2019X' or 'IP2519X' concrete is Declare Label certified (FIR002 Declare Label), which is available nationwide at Firth plants.

Under Homestar (Version 4), Declare concrete receive 0.5 merits when 50% of the concrete is Declare Label Certified.

The X-Pod® plastic pods and components are not currently Declare Label Certified. (Declare Labels are like a nutrition label for the building industry, they clearly state what ingredients make up a product and are designed to help shape a greener, healthier environment.)



- 13 CAN THE PODS BE RECYCLED?
- > The X-Pod® plastic pods are made from 80% recycled plastic and are fully recyclable. (Check with your local council for current recycle regulations.)



- 14 IS THE X-POD° SYSTEM AVAILABLE THROUGHOUT NEW ZEALAND?
- X-Pod[®] is available across most of NZ, however in some parts of the county, X-Pod[®] isn't available including Kaitaia, Wairarapa, Kaikoura, Motueka and Golden Bay, where there is no Firth Plant or a Firth Plant is too far away to make the supply of X-Pod[®] concrete feasible. In these cases, please talk to your local Firth rep for more information and to discuss a suitable alternative foundation design.

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X-Pod[®] Designers Guide

X-Pod[®] Installation Guide

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X-Pod[®] Site Inspection Checklist

AVAILABLE AT FIRTH.CO.NZ

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RESOURCES







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