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FUTURE OF FOUNDATIONS ΗE

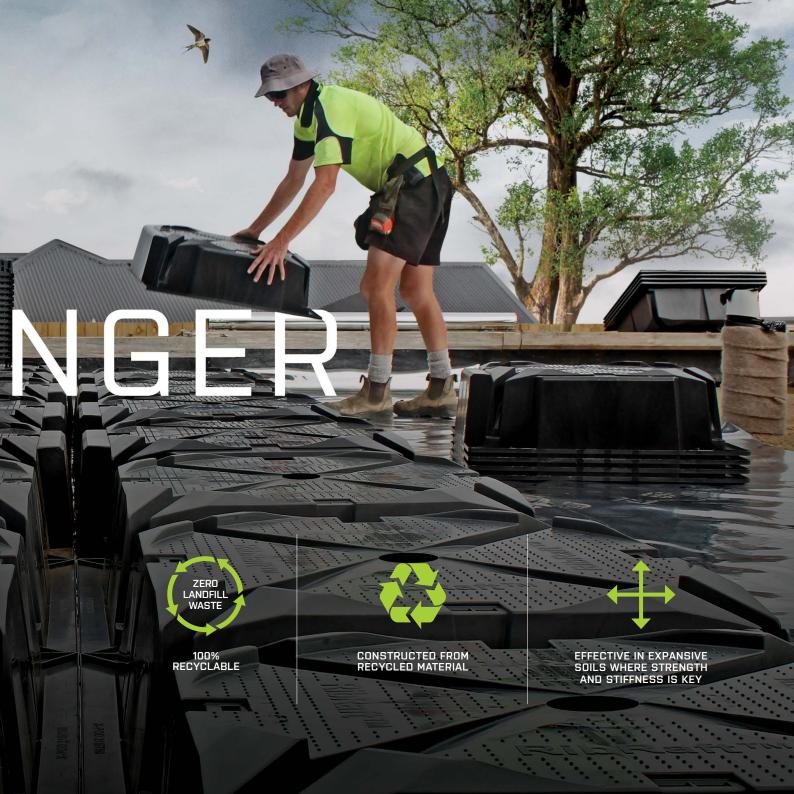


# THE CALLE

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<sup>®</sup>. X-Pod<sup>®</sup> is the next generation of Firth RibRaft<sup>®</sup> 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.





# EASILY TRANSPORTED

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

#### LIGHTWEIGHT + EASY TO HANDLE









#### ADJUSTABLE X-POD\* SYSTEM FITS ANY SIZE FOUNDATION & INTEGRATES AROUND SERVICES WITH EASE



#### RIBRAFT<sup>®</sup> X-POD<sup>®</sup> 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<sup>®</sup> KEYSTONE CLIP

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



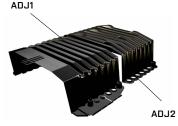
#### RIBRAFT® X-POD® 1500

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.



#### ADJUSTABLE X-POD® EXTENDER

Available in 2 sizes ADJ1 & ADJ2 Adjustable extenders remove the need to cut the X-Pod\*s. Simply by attaching ADJ1, an adjustment of 150-400mm can be made, which can be further extended to 450mm - 700mm by the addition of the ADJ2 extender.



#### X-POD<sup>®</sup> 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.



#### 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



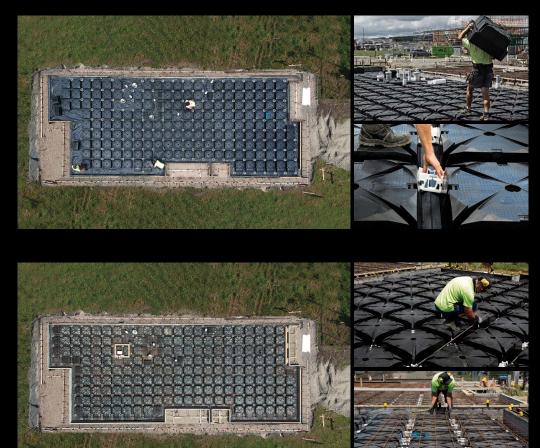
1 SCRAPE AND LEVEL SITE 2 BOXING З PLASTIC SHEETING N



VIEW THE INSTALL VIDEO AT XPOD.CO.NZ







X-PODS, KEYSTONE CLIPS, EXTENDERS INTO PLACE

# 5

STEEL & MESH CONNECT TO KEYSTONE CLIPS





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

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 5-10% more than a standard RibRaft<sup>®</sup>.

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 RibRaft® floor.
- 6 DOES X-POD® USE MORE/LESS CONCRETE?
- > Often slightly less.

#### 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<sup>®</sup> 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<sup>®</sup> HotEdge<sup>®</sup> information visit www.firth.co.nz/residential/foundations/ribraft-hotedge

- 12 DOES THE X-POD° SYSTEM CARRY ENVIRONMENTAL CERTIFICATION?
- Yes the Firth X-Pod<sup>®</sup> (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.)



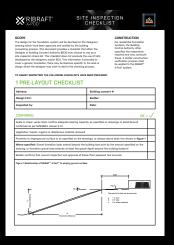
- 14 IS THE X-POD° SYSTEM AVAILABLE THROUGHOUT NEW ZEALAND?
- X-Pod® is available across most of NZ, however in some parts of the county, X-Pod® isn't available including Kaitaia, Wairarapa, Kaikoura, Motueka and Golden Bay, where there is no Firth Plant or a Firth Plant is too far away to make the supply 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.

## +RIBRAFT<sup>®</sup> X-POD<sup>®</sup>

Fifth



X-Pod<sup>®</sup> Designers Guide



X-Pod<sup>®</sup> Site Inspection Checklist

# AVAILABLE AT XPOD.CO.NZ



VIEW THE INSTALL VIDEO AT XPOD.CO.NZ



X-Pod<sup>®</sup> Installation Guide



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