

**X**<sup>®</sup> RIBRAFT<sup>®</sup>  
X-POD<sup>®</sup>



November 2021

T H E F U T U R E O F F O U N D A T I O N S



# THE GAME CHANGER

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.

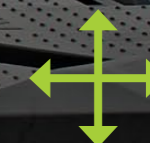


ZERO  
LANDFILL  
WASTE

100%  
RECYCLABLE



CONSTRUCTED FROM 80%  
RECYCLED MATERIAL



EFFECTIVE IN EXPANSIVE  
SOILS WHERE STRENGTH  
AND STIFFNESS IS KEY



BENEFITS



## EASILY TRANSPORTED

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



LIGHTWEIGHT + EASY TO HANDLE

PODS WEIGH LESS THAN

# 3

KG PER UNIT



## ADJUSTABLE

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

CLEAN SITE

X-POD® SYSTEM IS  
**100%**  
POLYSTYRENE FREE





**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.



**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.



**X-POD® KEYSTONE CLIP**

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



**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.



**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.



**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





X-POD® SYSTEM INSTALL

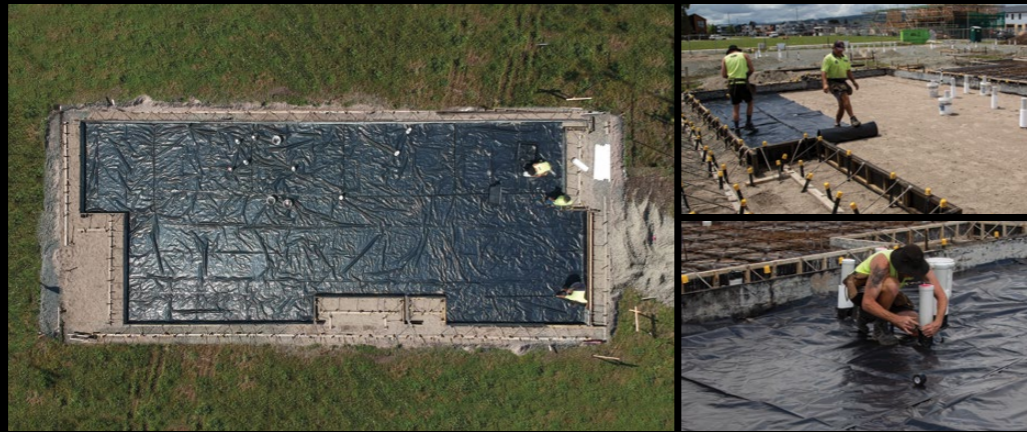
1  
SCRAPE AND  
LEVEL SITE



2  
BOXING



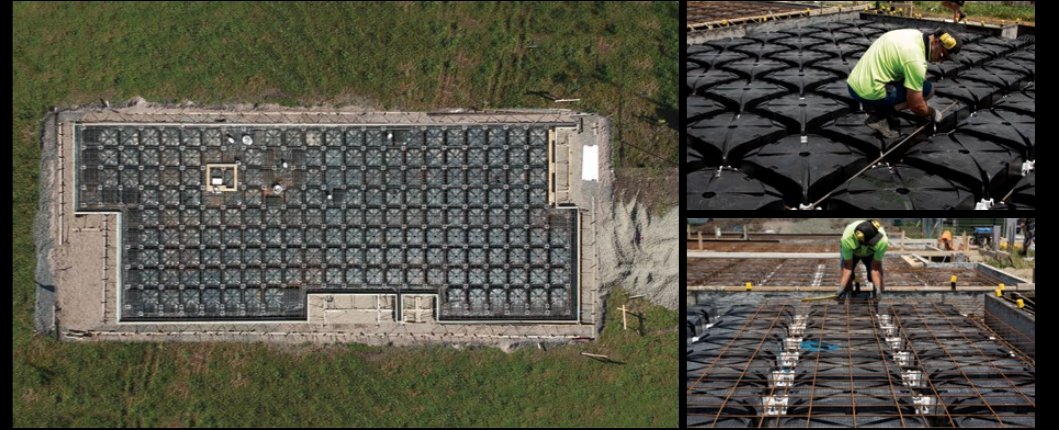
3  
PLASTIC  
SHEETING



4  
X-PODS,  
KEYSTONE CLIPS,  
MINI PODS  
INTO PLACE



5  
STEEL & MESH  
CONNECT TO  
KEYSTONE CLIPS



6  
CONCRETE  
POUR





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](http://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®.

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?

> 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 house lot 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](http://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 (FIRO02 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?

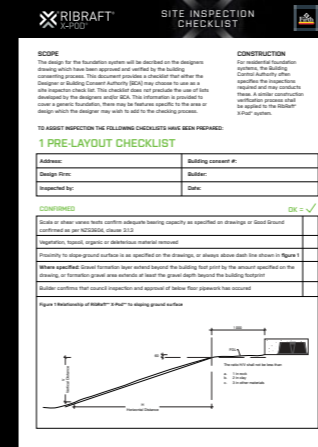
> X-Pod® is available across most of NZ, however in some parts of the county, X-Pod® isn't available including Kaitiā, Wairarapa, Kaikoura, Motueka and Golden Bay, where there is no Firth Plant or a Firth Plant is too far away to make the supply of X-Pod® concrete feasible. In these cases, please talk to your local Firth rep for more information and to discuss a suitable alternative foundation design.



X-Pod® Designers Guide



X-Pod® Installation Guide



X-Pod® Site Inspection Checklist



AVAILABLE AT [FIRTH.CO.NZ](http://FIRTH.CO.NZ)



0800 FIRTH 1  
FIRTH.CO.NZ

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