



BRANDS

NEW ZEALANDS LEADING SUPPLIER OF
QUALITY PIPING & PLUMBING PRODUCTS



KEMPEX PE-Xa
CONNECTION SYSTEMS
FOR HOT, COLD, RAIN
& RECYCLED WATER



KEMBLA

KemPex™

Crimp | Slide

DESIGN & INSTALLATION GUIDE

KemPex Connection Systems

CONTENTS

03. Introduction

04. KemPex Connection Solutions

05. KEMPEX CRIMP

- 06. Crimp System Installation Advantages
- 07. PE-XGUARD Technology
- 09. Crimp - Product Range
- 14. Crimp - Pressure Loss
(PE-Xa PN20 Rated Pipe)
- 15. Crimp - Pipe Supports
- 16. Crimp - Pressure Test
- 17. Crimp - Pressure Logs (Water Test)
- 18. Crimp - Installation Guide
- 20. Crimp - Installation Record

21. KEMPEX SLIDE

- 22. Crimp System Installation Advantages
- 23. PE-XGuard Technology
- 25. Slide - Product Range
- 30. Slide - Pressure Loss
(PE-Xa PN20 Rated Pipe)

31. Slide - Pipe Supports

32. Slide - Pressure Test

33. Slide - Pressure Logs (Water Test)

34. Slide - Installation Guide

36. Slide - Installation Record

37. KemPex - Tools & Calibration

38. KemPex - Training & Support

39. KemPex - Technical Data

42. KemPex - Underground Fittings

43. KemPex - Fire Protection

44. KemPex - Warranty & Certification

45. Kembla - One Brand. One System. One Warranty

46. KemPex - Case Studies



KemPex Connection Systems

KEMBLA KEMPEX HAS BEEN TRUSTED BY NEW ZEALAND PLUMBERS FOR OVER 20 YEARS. WE OFFER TWO CONNECTION SOLUTIONS WITH PE-XGUARD TECHNOLOGY, ALL BACKED BY A 25 YEAR WARRANTY.

Combining over a century of Australian copper tube manufacturing expertise with PE-XGUARD Technology. Kembla KemPex Crimp & Slide systems support - One Brand. One System. One Warranty when installed with MM Brands' integrated piping systems. Backed by a 25 year warranty and 50 year design life. KemPex offers you peace of mind and the simplicity that you need to make savings in time, labour and material costs.

**ONE BRAND.
ONE SYSTEM.
ONE WARRANTY.**



**PE-XGUARD
TECHNOLOGY**



KemPex Connection Systems

KEMBLA KEMPEX OFFERS TWO CONNECTION SOLUTIONS



ONE BRAND.
ONE SYSTEM.
ONE WARRANTY.

KemPex Crimp



A CRIMP CONNECTION SYSTEM

Piping, Coils, Fittings, Tools & Accessories.

PE-XGUARD
TECHNOLOGY



ONE BRAND.
ONE SYSTEM.
ONE WARRANTY.

KemPex Slide



A SLIDE CONNECTION SYSTEM

Piping, Coils, Fittings, Tools & Accessories.

PE-XGUARD
TECHNOLOGY





KemPex Crimp

DESIGN & INSTALLATION GUIDE

A CRIMP CONNECTION SYSTEM
FOR HOT & COLD POTABLE WATER
AND RAIN & RECYCLED WATER.



KemPex Crimp

KEMPEX CRIMP SYSTEM INSTALLATION ADVANTAGES

Faster and easier to use

- The KemPex Crimp connection system offers you the peace of mind and the simplicity that you need to make saving in time, labour and material costs.

No O-Rings

- KemPex Crimp has no O-Rings which results in increased bore size and better flow.

KemPex PE-XGUARD fittings technology

- Lead-Free.
- No O-Rings.
- Machined Shoulder.
- Bluetooth Kempress Tools.
- Trusted by NZ Plumbers for over 20 years.
- Onsite Training & Support.
- 25 Year Warranty.
- 50 Year design life.
- One Brand. One System. One Warranty.

A robust and reliable piping system

- The KemPex Crimp connection system has been designed and developed for New Zealand. It fully complies with Australian Standards AS/NZS 2537.2 & AS2492 and is certified WaterMark (Licence No.s WMK 75171 & WMK 2662).
- This product complies with the lead free requirements of the NCC Volume 3" and includes the Lead Free Watermark
- PE-Xa is a robust and reliable piping system rated for normal operation at 1000kPa and 70°C, however the short term maximum operating temperature is 95°C.
- KemPex Crimp DZR fittings meet the building code regulations on drinking water safety. They are made from lead-free, forged brass resulting in superior mechanical properties with greater fatigue resistance.
- All KemPex Crimp fittings are compatible with recognised press-fit tools such as, KemPress®, Novopress & REMS, with NZ sized KP or K compatible jaws, making it a truly universal system.

High quality, lightweight KemPress® tools

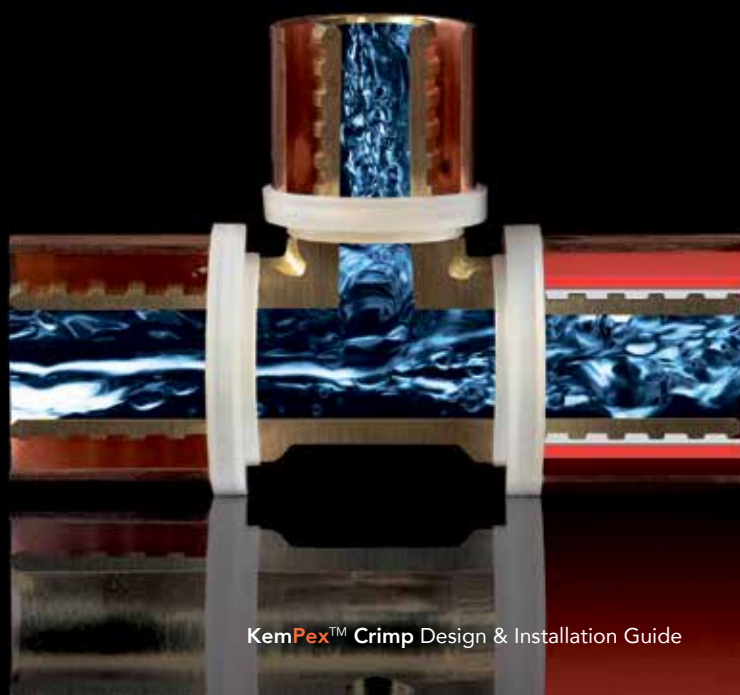
- Slim lightweight and ergonomic design.
- One hand operation. Once the jaws are inserted the weight is balanced.
- Smart Electronic Controls and Bluetooth technology for use with the Novocheck App.
- Longest interval between servicing.
- Loan tool provided while servicing.
- Small tool (KPS2) handles tube up to DN32.
- Brushless Motor Technology for more presses per battery charge.
- Press area illumination.
- 180° Rotatable head on KPS2 small tool.

KemPex Warranty

- With a warranty of 25 years, and a design life of over 50 years, KemPex offers you peace of mind.
- KemPex is covered by MM Brand's comprehensive insurance cover.

One Brand. One System. One Warranty.

- Reduce the risk with an MM Kembla Integrated Piping System. A complete range of high quality products for plumbing, HVAC, refrigeration services and medical gas. One brand, one system backed by one warranty from an Australian company with a reputation for quality, reliability and service for over 100 years.



KemPex Crimp

WHAT IS PE-XGUARD TECHNOLOGY?

KemPex Crimp fittings incorporate **PE-XGUARD** Technology a unique set of features designed into the connection system:

- Improves installation quality
- Minimises risks during and after installation
- Provides identifiable cues for incorrect installation
- The ability to manage and monitor on-site performance
- One Brand. One System. One Warranty.



PE-XGUARD TECHNOLOGY



LEAD-FREE

Made from Lead-Free
DZR brass material



NO O-RINGS

Increases bore
size and better
flow rate



MACHINED SHOULDER

Allows maximum contact
with compression tool



BLUETOOTH KEMPRESS TOOLS

Manage on-site
performance



TRUSTED TECHNOLOGY

Used by New Zealand
plumbers for over
20 years.



ON-SITE TRAINING

Reduce your risk.
On-site training and
demonstrations.



25 YEAR WARRANTY

All KemPex Crimp
fittings conform to
AS3688 & Australian
Watermark Certification



50 YEAR DESIGN LIFE

The KemPex Crimp
connection system is
designed not to leak
for a minimum of
50 years



ONE BRAND.
ONE SYSTEM.
ONE WARRANTY.

MINIMISE YOUR
INSTALLATION RISK
WITH MM KEMBLA.

KemPex Crimp

PE-Xa PIPING & COILS

For hot, cold, rain and recycled water

Availability of Pipe Sizes

KemPex PE-Xa premium quality cross-linked polyethylene pipe is available in a wide range of piping lengths and coil diameters (16-32mm) applications.

Robust & Reliable

KemPex PE-Xa is a robust and reliable piping system rated for maximum operating at 1,000kPa. It has a continuous operating temperature of 70°C and a short term maximum temperature of 95°C.

Energy Efficiency

KemPex PE-Xa pipe has inherently low thermal conductivity helping to reduce heat loss from hot water services. This improves temperature retention within the pipe, supports energy-efficient system performance, and can reduce the need for additional insulation in some applications when designed and installed to AS/NZS 3500.

Water Conservation

Appropriate system design using KemPex PE-Xa pipework may assist in reducing hot water delivery time to fixtures, helping to minimise unnecessary water discharge.

Environmentally Sound

KemPex PE-Xa has been tested to AS/NZS 4020 and is suitable for use in contact with potable water.

Service & Support

We provide end-to-end support from purchase through to installation, including technical training and site visits where required, to support correct installation and on-site best practice.


16mm

20mm

25mm

32mm

KemPex Crimp

CRIMP CONNECTION SYSTEM

Piping, Coils, Fittings, Tools & Accessories

KEMPEX CRIMP - PE-Xa PIPING

Product Description	Diameter (DN)	Wall Thickness	Length (Metres)	Product Code
PE-XA PIPE LENGTH For Hot & Cold Water (Black) 	16mm	2.2mm	5 metres	100116
	20mm	2.8mm	5 metres	100120
	25mm	3.5mm	5 metres	100125
	32mm	4.4mm	5 metres	100132
PE-XA PIPE COIL For Hot & Cold Water (Black) 	16mm	2.2mm	25 metres	101316
	20mm	2.8mm	25 metres	101320
	16mm	2.2mm	100 metres	100216
	20mm	2.8mm	100 metres	100220
	25mm	3.5mm	50 metres	100225
	32mm	4.4mm	50 metres	100232
PE-XA PIPE CONDUIT - COIL ONLY (Black) 	16mm	-	50 metres	100416
	20mm	-	50 metres	100420
	25mm	-	50 metres	100425
	32mm	-	50 metres	100432
PE-XA PIPE LENGTH For Hot Water (Red) 	16mm	2.2mm	5 metres	100365
	20mm	2.8mm	5 metres	100366
PE-XA PIPE COIL For Hot Water (Red) 	16mm	2.2mm	25 metres	101360
	20mm	2.8mm	25 metres	101361
PE-XA PIPE COIL For Rainwater (Green) 	16mm	2.2mm	50 metres	100616
	20mm	2.8mm	50 metres	100620
PE-XA PIPE LENGTH For Recycled Water (Lilac) 	16mm	2.2mm	5 metres	100510
	20mm	2.8mm	5 metres	100511
PE-XA PIPE COIL For Recycled Water (Lilac) 	16mm	2.2mm	50 metres	100516
	20mm	2.8mm	50 metres	100520

KemPex Crimp

KEMPEX CRIMP - FITTINGS RANGE

Product Description	Diameter (DN)	Pack Quantity	Product Code
Connecting Barbs 	16mm	10	280029
	20mm	10	280030
	25mm	10	280031
Connectors 	16mm	10	280012
	20mm	10	280013
	25mm	10	280014
	32mm	10	280015
Connectors - Reducing 	20mm x 16mm	10	280055
	25mm x 16mm	10	280056
	25mm x 20mm	10	280057
	32mm x 25mm	5	280058
Connectors - Female 	16mm x 1/2"	10	280016
	16mm x 3/4"	10	280017
	20mm x 3/4"	10	280018
	20mm x 1/2"	10	280019
	25mm x 3/4"	10	280020
Connectors - Male 	16mm x 1/2"	10	280021
	16mm x 3/4"	10	280022
	20mm x 3/4"	10	280023
	20mm x 1/2"	10	280024
	25mm x 3/4"	5	280026
	25mm x 1"	5	280025
	32mm x 1"	5	280028
	32mm x 1 1/4"	5	280027
Connectors - Crox Swivel Nut 	16mm x 1/2"	10	280032
	20mm x 1/2"	10	280034
	20mm x 3/4"	10	280033
	25mm x 1"	5	280035
	32mm x 1 1/4"	5	280036
Elbows - 45 Degree 	16mm	10	280041
	20mm	10	280042
	25mm	5	280043
	32mm	5	280044
Elbows - 90 Degree 	16mm	10	280037
	20mm	10	280038
	25mm	5	280039
	32mm	5	280040

KemPex Crimp

KEMPEX CRIMP - FITTINGS RANGE

Product Description	Diameter (DN)	Pack Quantity	Product Code
Elbows - 90 Degree Male 	16mm x 1/2"	10	280048
	20mm x 3/4"	10	280049
	20mm x 1/2"	10	280050
	25mm x 1"	5	280051
Elbows - 90 Degree Female 	16mm x 1/2"	10	280045
	20mm x 1/2"	10	280047
	20mm x 3/4"	10	280046
Elbows - Swivel Nut 	16mm x 1/2"	10	280052
	20mm x 1/2"	10	280054
	20mm x 3/4"	10	280053
Wingbacks - Female 	16mm x 1/2"	10	280082
	16mm x 3/4"	5	280083
	20mm x 1/2"	5	280086
	20mm x 3/4"	5	280085
Wingbacks - Male 	16mm x 1/2" - 65mm	10	280089
	16mm x 1/2" - 90mm	10	280090
	16mm x 1/2" - 150mm	10	280087
	16mm x 1/2" - 200mm	10	280088
Double Wingbacks - Female 	16mm x 1/2"	10	280081
	16mm x 3/4"	10	280080
	20mm x 1/2"	10	280079
	20mm x 3/4"	10	280078
Double Wingbacks - Male 	16mm x 1/2" - 65mm	10	280091
	16mm x 1/2" - 90mm	10	280092
	16mm x 1/2" - 150mm	10	280093
	16mm x 1/2" - 200mm	10	280094
Tees - Reducing Branch (EEB) 	20mm x 16mm x 16mm	10	280063
	20mm x 16mm x 20mm	10	280064
	20mm x 20mm x 16mm	10	280065
	25mm x 16mm x 25mm	10	280066
	25mm x 20mm x 20mm	5	280067
	25mm x 20mm x 25mm	5	280068
	25mm x 25mm x 16mm	5	280069
	25mm x 25mm x 20mm	10	280070
	32mm x 25mm x 25mm	5	280071
	32mm x 25mm x 32mm	5	280072

KemPex Crimp

KEMPEX CRIMP - FITTINGS RANGE

Product Description	Diameter (DN)	Pack Quantity	Product Code
Tees - Equal 	16mm	10	280059
	20mm	10	280060
	25mm	5	280061
	32mm	5	280062
Hose Plates 	16mm x 1/2"	10	280076
	20mm x 3/4"	10	280077
Crimp Ring Assemblies 	16mm	20	280096
	20mm	20	280097
	25mm	10	280098
	32mm	10	280099
End Plugs 	16mm	20	280073
	20mm	10	280074
	25mm	10	280075
KemPress® to KemPex™ Crimp Connector 	16mm	10	69833
	20mm	10	69834
	25mm	10	69835
	32mm	10	69836
KemPress® NZ to KemPex™ Crimp Connector 	15/16mm	10	913103 HT 913971
	20mm	10	913104 HT 913972
	25mm	10	913105 HT 913973
Adaptor KemPex Crimp/BUYT 	16mm	10	103030
	20mm	10	103031

KemPex Crimp

KEMPEX CRIMP - TOOLS & ACCESSORIES

Product Description	Diameter (DN)	Pack Quantity	Product Code
Profile Bends 	16mm	10	103916
	20mm	10	103920
	25mm	10	103925
Quick Clips - Black 	16mm Open Clip	100	103016
	20mm Open Clip	100	103020
	25mm Open Clip	100	103025
KEMPEX™ TOOLKIT 	KEMPEX™ TOOLKIT KPS2 Tool, Battery (Including 16mm - 32mm Jaws)		913543
KEMPEX™ Tool Jaw 	KemPex™ Tool Jaw 16mm (NovoPress)		912616
	KemPex™ Tool Jaw 20mm (NovoPress)		912620
	KemPex™ Tool Jaw 25mm (NovoPress)		912625
	KemPex™ Tool Jaw 32mm (NovoPress)		912632
KEMPRESS® KPS2 Toolkit (No Jaws) 	KEMPRESS® KPS2 Toolkit (No Jaws)		69507
PEX MANUAL Crimp Tool Combo 	PEX MANUAL CRIMP TOOL COMBO 16mm - 32mm		912500
Manual Hand Crimpers 	PEX MANUAL CRIMP TOOL 16mm - 32mm		

KemPex Crimp

KEMPEX CRIMP - PRESSURE LOSS (PE-XA PN20 RATED PIPE)

COLD WATER AT 25°C

Peak Flow Rate Qs (l/s) 1.01 to 0.50 (kPa/m)	Ø 16mm 2.2mm wall Head Loss (kPa/m)	Ø 20mm 2.8mm wall Head Loss (kPa/m)	Ø 25mm 3.5mm wall Head Loss (kPa/m)	Ø 32mm 4.4mm wall Head Loss
0.05	0.3467	0.1244	-	-
0.10	1.1655	0.4140	0.1431	0.0428
0.15	2.3941	0.8458	0.2904	0.0866
0.20	4.0088	1.4092	0.4821	0.1432
0.25	5.9970	2.1002	0.7165	0.2123
0.30	8.3508	2.9147	0.9910	0.2929
0.35	11.0641	3.8503	1.3059	0.3847
0.40	14.1323	4.9049	1.6594	0.4877
0.45	-	6.0771	2.0518	0.6021
0.50	-	7.3655	2.4814	0.7267

HOT WATER AT 60°C

Peak Flow Rate Qs (l/s) 1.01 to 0.50 (kPa/m)	Ø 16mm 2.2mm wall Head Loss (kPa/m)	Ø 20mm 2.8mm wall Head Loss (kPa/m)	Ø 25mm 3.5mm wall Head Loss (kPa/m)	Ø 32mm 4.4mm wall Head Loss
0.05	0.2913	0.1034	0.0357	0.0106
0.10	1.0003	0.3522	0.1205	0.0357
0.15	2.0807	0.7272	0.2476	0.0731
0.20	5.5178	1.2224	0.4143	0.1218
0.25	5.3035	1.8346	0.6187	0.1815
0.30	7.4333	2.5608	0.8606	0.2516
0.35	9.9032	3.4002	1.1395	0.3317
0.40	12.713	4.3513	1.4538	0.4223
0.45	-	5.4129	1.8041	0.5229
0.50	-	6.5847	2.1894	0.6330

PIPE SUPPORTS

- Fixing of KemPex must comply with AS/NZS3500.
- Hot water lines must be fixed as to allow for thermal linear expansion.
- Never fix a clip directly onto DZR brass fittings.

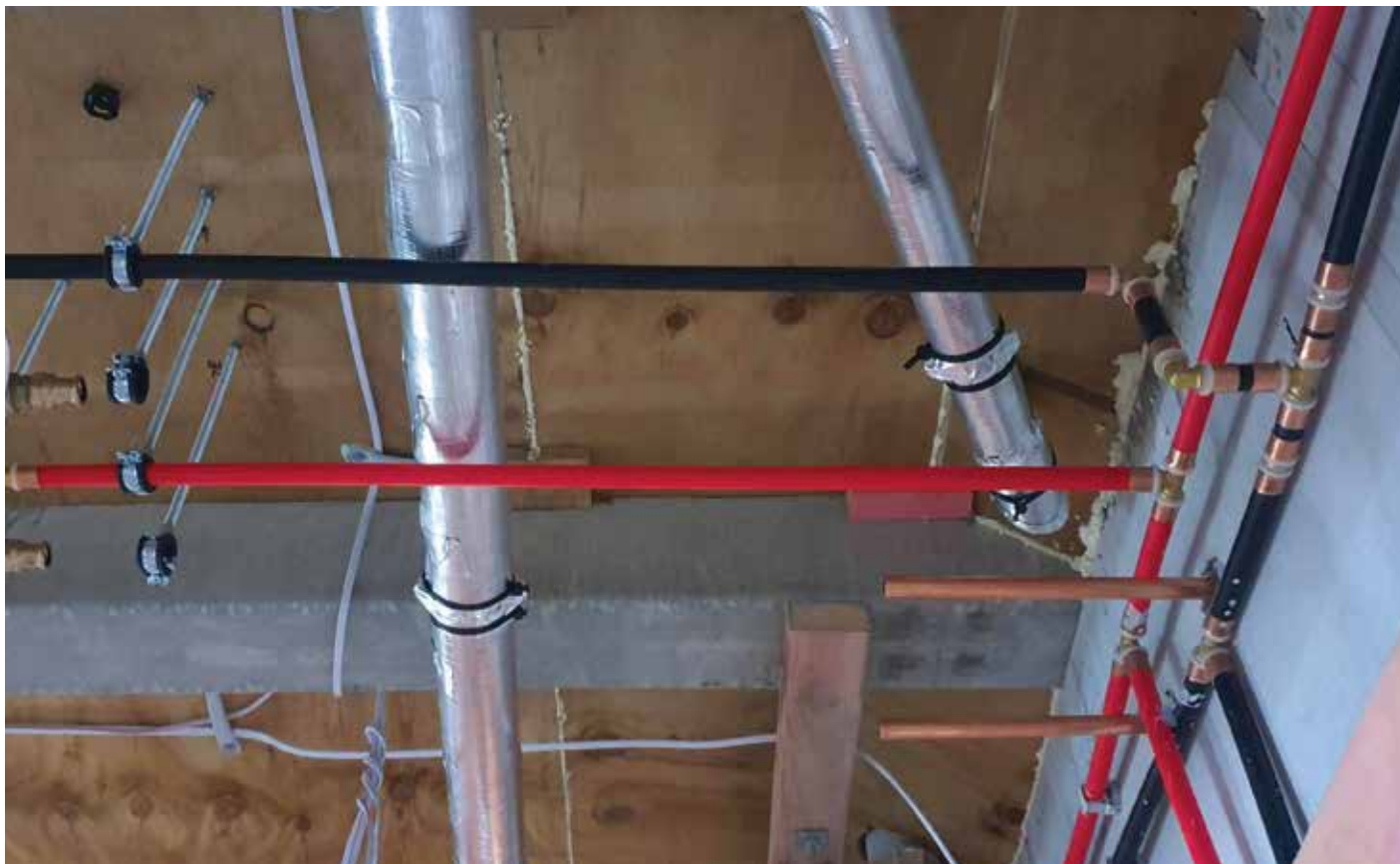
HORIZONTAL PIPES

Clip Spacing		Clip Spacing	
Pipe Ø	(metres)	Pipe Ø	(metres)
16mm	0.60	0.16mm	1.20
20mm	0.70	0.20mm	1.40
25mm	0.75	0.25mm	1.50
32mm	0.80	0.32mm	1.70

VERTICAL PIPES

Horizontal hot water lines may require closer clip spacing to maintain straight lines and avoid sagging.

KEMPEX CRIMP - PIPE SUPPORTS



PIPE SUPPORTS

KemPex PE-Xa Plumbing System

Correct pipe support is essential to maintain alignment, control thermal movement, and ensure long-term performance. KemPex pipework must be supported in accordance with AS/NZS 3500 and KemPex installation guidelines.

Support spacing

- Pipework must be supported at intervals suitable for the pipe size.
- Maximum clip spacing must not exceed AS/NZS 3500 requirements.
- Additional supports may be required at changes of direction and near fittings.

Important notes

- Brass fittings must be independently supported.
- Do not clip directly onto brass fittings.
- Pipework must be free to expand and contract where required.
- Additional supports may be installed to maintain straight alignment.

After installation

- Confirm all pipework is securely supported.
- Check that fixed and sliding points are correctly positioned
- Ensure pipework remains accessible for inspection prior to concealment.

Pipe support installed in accordance with AS/NZS 3500 satisfies the requirements of NZBC G12.

Refer to the KemPex Design & Installation Guide for full pipe support requirements.



KEMPEX CRIMP - PRESSURE TESTING



PRESSURE TESTING

KemPex PE-Xa Plumbing System

To comply with NZBC Clause G12 and AS/NZS 3500, all KemPex pipework must be pressure tested after installation and prior to concealment to confirm leak-tightness.

When to test

- After all pipework and joints are completed.
- Before walls, ceilings, or slabs are closed in.
- Prior to commissioning.

Test method

- Water testing is preferred.
- Air testing is permitted where water testing is impractical.
- Testing to be carried out at ambient temperature.
- Extra care is required when air testing due to stored energy.

Test pressure

- Testing shall be conducted using water where practicable.
- Water pipe work must be pressure tested prior to concealment in accordance with NZBC G12 and AS/NZS 3500 by testing to **1,500kPa for a minimum of 30 minutes**; water is the preferred test medium, with air permitted where water testing is impractical and appropriate safety precautions are applied.
- Do not exceed the KemPex maximum allowable test pressure.

Inspection requirements

- Slowly raise the system to test pressure.
- Visually inspect all joints and connections.
- No visible leaks, drips, or weeping.
- Pressure stability alone is not a substitute for visual inspection.

After testing

- Once confirmed leak-tight, pipework may be insulated and concealed.
- Test results should be recorded where required.

Pressure testing of KemPex pipework in accordance with AS/NZS 3500 satisfies the requirements of NZBC G12.

Refer to the KemPex Design & Installation Guide for full pressure-testing procedures.



KEMPEX CRIMP - PRESSURE LOSS LOGS: WET TEST (WATER SYSTEMS)

Project / Site: _____

Installer / Company: _____

Client / Representative: _____

Date of Test: _____

SYSTEM INFORMATION

Cold Water: ☐ Hot Water: ☐ Combined: ☐

PIPE LENGTH

Total Pipe Length of Water System (m): _____

The system has been tested: Complete system ☐ Section(s) ☐

TEST CONDITIONS

- ☐ Water (preferred).
☐ Air (Where water is impractical).

Water Temperature (°C): _____

PRE-TEST CHECKS

- ☐ All joints completed
☐ Pipework accessible and not concealed
☐ System filled and air purged
☐ Visual inspection completed

PRESSURE TEST DETAILS (AS/NZS 3500)

Operating Pressure (kPa): _____

- ☐ Test Pressure 1,500 kPa
☐ Duration minimum 30 minutes

TEST OBSERVATION

- ☐ No visible leaks or weeping
☐ No pressure loss due to leakage

TEST RESULT

- ☐ PASS - System leak tight
☐ FAIL - Rectification required

Issue / Comments: _____

SIGN OFF

Installer Signature: _____

Client Representative Name: _____

Pressure testing carried out in accordance with AS/NZS 3600 satisfies the requirements of NZBC G12.

KEMPEX CRIMP - INSTALLATION GUIDE

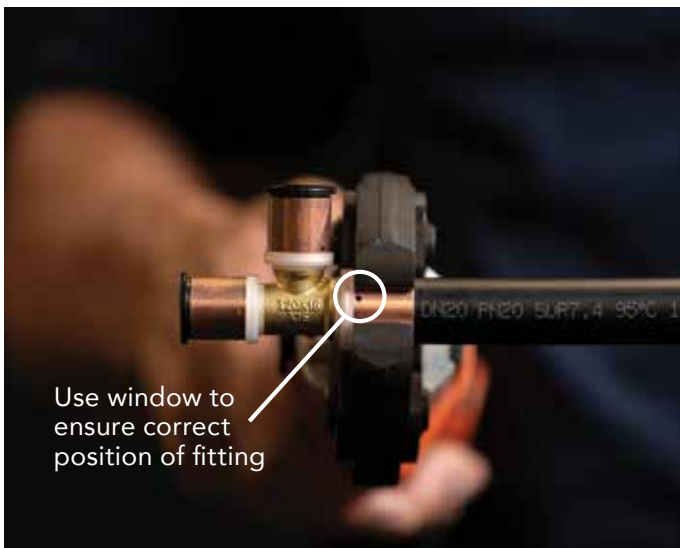
This guide outlines the basic steps for installing the KemPex Crimp Connection System. Use approved, well-maintained tools and ensure installers are trained to achieve a secure, leak-free connection.



1. Cut KemPex pipe at right angle ensuring you have a straight neat cut to start



2. Fully insert KemPex Crimp fitting.



3. Observe window for correct position of KemPex Crimp fitting to ensure it is fully inserted.



4. Position KemPex crimping tool over the copper sleeve making sure they are square and alongside the shoulder.

KEMPEX CRIMP - INSTALLATION GUIDE



5. Crimp the KemPex Crimp fitting using battery or manual tool.



6. Test with KemPex Go-Nogo gauge, once system is complete. Use testing protocol as per AS/NZS 3500.



7. KemPex Manual Crimping Tool Ensure tools are clean and free from debris and fully calibrated before each use.



8. Kembla KemPress Battery Crimping Tool. Ensure tools and jaws are clean and free from debris and have current service stickers before each use.

TOOL WARRANTY

If tools are not regularly serviced, calibrated, and checked insufficient crimps may occur, and any resulting failures will void the warranty.

Please contact MM Brands for any questions.

KemPex Crimp Installation Record

KEMPEX - INSTALLATION PRESSURE VERIFICATION RECORD

INSTALLATION INFORMATION

Project / Installation Description:

Site Address:

Client / Owner:

Plumbing Contractor:

PRESSURE VERIFICATION DETAILS

Test Medium: ☐ Water (preferred). ☐ Air (Where Permitted).

Applied Pressure Test (kPa):

Test Start Time:

Test Finish Time:

Total Test Duration(Minutes):

Ambient Temperature (°C):

OBSERVATION RESULTS

INSTALLER DECLARATION

I confirm that the KemPex™ PE-Xa system has been installed and pressure verified in accordance with KemPex™ installation instructions and relevant New Zealand plumbing requirements.

Installer Name:

Registration / Licence Number:

Signature / Company Stamp & Date:

This record should be retained as part of the installation documentation. Local authorities or Building Consent Authorities may require a copy for compliance purposes. Retention of installation records forms part of KemPex Warranty requirements.



KemPex Slide

DESIGN & INSTALLATION GUIDE

A SLIDE CONNECTION SYSTEM
FOR HOT & COLD POTABLE WATER
AND RAIN & RECYCLED WATER.



KemPex Slide

KEMPEX SLIDE SYSTEM INSTALLATION ADVANTAGES

Faster and easier to use

- KemPex PEX-a Slide delivers fast, secure, and visually verifiable joints, reducing installation time and cost while providing confidence on commercial projects.
- Its proven slide sleeve technology creates a permanent connection without O-rings, making it a reliable choice for demanding New Zealand installations.

No O-Rings

- O-Rings are not required with KemPex Slide, reducing the chance of installer error.

KemPex PE-XGUARD fittings technology

- Lead-Free.
- No O-Rings.
- Machined Shoulder.
- Bluetooth Kempres Tools.
- Trusted by NZ Plumbers for over 20 years.
- Onsite Training & Support.
- 25 Year Warranty.
- 50 Year design life.
- One Brand. One System. One Warranty.

A robust and reliable piping system

- The KemPex Slide sleeve connection system has been designed and developed for New Zealand. It fully complies with Australian Standards AS2537 & AS2492 and is certified WaterMark (Licence No.s WMK 75171 & WMK 2662).
- This product complies with the lead free requirements of the NCC Volume 3" and includes the Lead Free Watermark.
- KemPex PE-Xa is a robust and reliable piping system rated to a maximum operating pressure to 1,000kPa. It has a continuous operating temperature of 70°C and a short term maximum temperature of 95°C.
- KemPex Slide DZR fittings meet the building code regulations on drinking water safety. They are made from lead-free, forged brass resulting in superior mechanical properties with greater fatigue resistance.
- All KemPex Slide fittings are compatible with recognised BATTERY tools such as, KemPress®, Novopress, and RAUTOOL, making it a truly universal system.

High quality, lightweight KemPress® tools

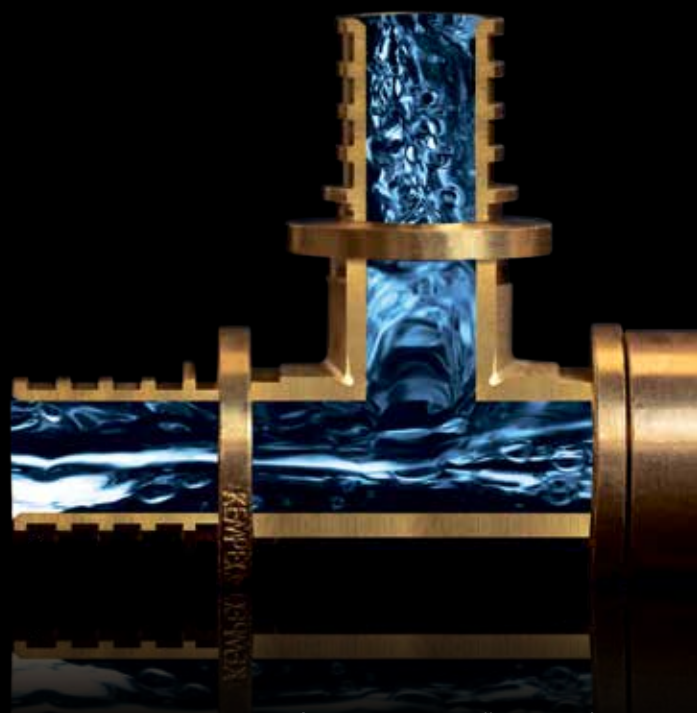
- Slim lightweight and ergonomic design.
- One hand operation. Once the jaws are inserted the weight is balanced.
- Smart Electronic Controls and Bluetooth technology for use with the Novocheck App.
- Longest interval between servicing.
- Loan tool provided while servicing.
- Small tool (KPS2) handles tube up to DN32.
- Brushless Motor Technology for more presses per battery charge.
- Press area illumination.
- 180° Rotatable head on KPS2 small tool.

KemPex Warranty

- With a warranty of 25 years, and a design life of over 50 years, KemPex offers you peace of mind.
- KemPex is covered by MM Brand's comprehensive insurance cover.

One Brand. One System. One Warranty.

- Reduce the risk with an MM Kembla Integrated Piping System. A complete range of high quality products for plumbing, HVAC, refrigeration services and medical gas. One brand, one system backed by one warranty from an Australian company with a reputation for quality, reliability and service for over 100 years.



KemPex Slide

WHAT IS PE-XGUARD TECHNOLOGY?

KemPex Slide fittings incorporate **PE-XGUARD** Technology a unique set of features designed into the connection system:

- Improves installation quality
- Minimises risks during and after installation
- Provides identifiable cues for incorrect installation
- The ability to manage and monitor on-site performance
- One Brand. One System. One Warranty.



PE-XGUARD TECHNOLOGY



LEAD-FREE

Made from Lead-Free
DZR brass material



NO O-RINGS

Increases bore
size and better
flow rate



MACHINED SHOULDER

Allows maximum contact
with compression tool



BLUETOOTH KEMPRESS TOOLS

Manage on-site
performance



TRUSTED TECHNOLOGY

Used by New Zealand
plumbers for over
20 years.



ON-SITE TRAINING

Reduce your risk.
On-site training and
demonstrations.



25 YEAR WARRANTY

All KemPex Crimp
fittings conform to
AS3688 & Australian
Watermark Certification



50 YEAR DESIGN LIFE

The KemPex Crimp
connection system is
designed not to leak
for a minimum of
50 years



ONE BRAND.
ONE SYSTEM.
ONE WARRANTY.

MINIMISE YOUR
INSTALLATION RISK
WITH MM KEMBLA.

KemPex Slide

PE-Xa PIPING & COILS

For hot, cold, rain and recycled water

Availability of Pipe Sizes

KemPex PE-Xa premium quality cross-linked polyethylene pipe is available in a wide range of piping lengths and coil diameters (16-32mm) applications.

Robust & Reliable

KemPex PE-Xa is a robust and reliable piping system rated for maximum operating at 1,000kPa. It has a continuous operating temperature of 70°C and a short term maximum temperature of 95°C.

Energy Efficiency

KemPex PE-Xa pipe has inherently low thermal conductivity helping to reduce heat loss from hot water services. This improves temperature retention within the pipe, supports energy-efficient system performance, and can reduce the need for additional insulation in some applications when designed and installed to AS/NZS 3500.

Water Conservation

Appropriate system design using KemPex PE-Xa pipework may assist in reducing hot water delivery time to fixtures, helping to minimise unnecessary water discharge.

Environmentally Sound

KemPex PE-Xa has been tested to AS/NZS 4020 and is suitable for use in contact with potable water.

Service & Support

We provide end-to-end support from purchase through to installation, including technical training and site visits where required, to support correct installation and on-site best practice.

16mm

20mm

25mm

32mm

KemPex Slide

SLIDE CONNECTION SYSTEM

Piping, Coils, Fittings, Tools & Accessories

KEMPEX SLIDE - PE-Xa PIPING				
Product Description	Diameter (DN)	Wall Thickness	Length (Metres)	Product Code
PE-XA PIPE LENGTH For Hot & Cold Water (Black) 	16mm	2.2mm	5 metres	100116
	20mm	2.8mm	5 metres	100120
	25mm	3.5mm	5 metres	100125
	32mm	4.4mm	5 metres	100132
PE-XA PIPE COIL For Hot & Cold Water (Black) 	16mm	2.2mm	25 metres	101316
	20mm	2.8mm	25 metres	101320
	16mm	2.2mm	100 metres	100216
	20mm	2.8mm	100 metres	100220
	25mm	3.5mm	50 metres	100225
	32mm	4.4mm	50 metres	100232
PE-XA PIPE CONDUIT - COIL ONLY (Black) 	16mm	-	50 metres	100416
	20mm	-	50 metres	100420
	25mm	-	50 metres	100425
	32mm	-	50 metres	100432
PE-XA PIPE LENGTH For Hot Water (Red) 	16mm	2.2mm	5 metres	100365
	20mm	2.8mm	5 metres	100366
PE-XA PIPE COIL For Hot Water (Red) 	16mm	2.2mm	25 metres	101360
	20mm	2.8mm	25 metres	101361
PE-XA PIPE COIL For Rainwater (Green) 	16mm	2.2mm	50 metres	100616
	20mm	2.8mm	50 metres	100620
PE-XA PIPE LENGTH For Recycled Water (Lilac) 	16mm	2.2mm	5 metres	100510
	20mm	2.8mm	5 metres	100511
PE-XA PIPE COIL For Recycled Water (Lilac) 	16mm	2.2mm	50 metres	100516
	20mm	2.8mm	50 metres	100520

KemPex Slide

KEMPEX SLIDE - FITTINGS RANGE

Product Description	Diameter (DN)	Pack Quantity	Product Code
Sliding Sleeves 	16mm	100	160016
	20mm	100	160020
	25mm	50	160025
	32mm	50	160032
Connecting Barbs 	16mm	10	280118
	20mm	10	280119
Connectors 	16mm	10	280104
	20mm	10	280105
	25mm	10	280106
	32mm	5	280107
Connectors - Reducing 	20mm x 16mm	10	280138
	25mm x 16mm	10	280139
	25mm x 20mm	10	280140
	32mm x 25mm	10	280141
Connectors - Female 	16mm x 1/2"	10	280108
	20mm x 3/4"	10	280109
	25mm x 3/4"	10	280110
	32mm x 1"	5	280111
Connectors - Male 	16mm x 1/2"	10	280112
	20mm x 1/2"	10	280114
	20mm x 3/4"	10	280113
	25mm x 3/4"	10	280116
	25mm x 1"	10	280115
	32mm x 1"	10	280117
Connectors - Crox Swivel Nut 	16mm x 1/2"	10	280120
	20mm x 3/4"	10	280121
	25mm x 1"	10	280122
Elbows - 90 Degree 	16mm	10	280123
	20mm	10	280124
	25mm	5	280125
	32mm	5	280126
Elbows - 90 Degree Male 	16mm x 1/2"	10	280133
	16mm x 3/4"	10	280134
	20mm x 3/4"	10	280135

KemPex Slide

KEMPEX SLIDE - FITTINGS RANGE

Product Description	Diameter (DN)	Pack Quantity	Product Codes
Elbows - 90 Degree Female 	16mm x 1/2"	10	280131
	20mm x 3/4"	10	280132
Elbows - 45 Degree 	16mm	10	280127
	20mm	10	280128
	25mm	10	280129
	32mm	10	280130
Elbows - 90 Degree Swivel Nut 	16mm x 1/2"	10	280136
	20mm x 3/4"	10	280137
Wingbacks - Female 	16mm x 1/2"	10	280161
	20mm x 3/4"	5	280162
Double Wingbacks - Female 	16mm x 1/2"	10	280992
	20mm x 1/2"	5	280993
	20mm x 3/4"	5	280994
Wingbacks - Male 	16mm x 1/2" - 65mm	10	280164
	16mm x 1/2" - 90mm	5	280165
	20mm x 1/2" - 150mm	5	280163
	20mm x 1/2" - 90mm	5	280166
Double Wingbacks - Male 	16mm x 1/2" - 150mm	5	280995
	16mm x 1/2" - 65mm	10	280996
	16mm x 1/2" - 90mm	5	280997
	20mm x 1/2" - 90mm	5	280998
Hose Plates 	16mm x 1/2"	10	280160
Tees - Equal 	16mm	10	280142
	20mm	10	280143
	25mm	5	280144
	32mm	3	280145

KemPex Slide

KEMPEX SLIDE - FITTINGS RANGE

Product Description	Diameter (DN)	Pack Quantity	Product Code
Tees - Reducing Branch (E-E-B) 	20mm x 16mm x 16mm	10	280146
	20mm x 16mm x 20mm	10	280147
	20mm x 20mm x 16mm	10	280148
	25mm x 16mm x 25mm	5	280149
	25mm x 20mm x 20mm	10	280150
	25mm x 20mm x 25mm	5	280151
	25mm x 25mm x 16mm	5	280152
	25mm x 25mm x 20mm	5	280153
	32mm x 25mm x 32mm	5	280155
End Plugs 	16mm	10	280156
	20mm	10	280157
	25mm	10	280158
	25mm	10	280159
KemPress® AU Copper to KemPex Slide Connector 	15mm/16mm	?	69816
	20mm	?	69820
	25mm	?	69825
	32mm	?	69825
KemPress® NZ Copper to KemPex™ Slide Connector 	15mm/16mm	10	913100 HT 913968
	20mm	10	913101 HT 913969
	25mm	10	913102 HT 913970

KEMPEX SLIDE - TOOLS & ACCESSORIES

Product Description	Diameter (DN)	Pack Quantity	Product Code
Profile Bends 	16mm	10	103916
	20mm	10	103920
	25mm	10	103925
Quick Clips - Black 	16mm Open Clip	100	103016
	20mm Open Clip	100	103020
	25mm Open Clip	100	103025
KemPex™ Slide Toolkit 	97695	KEMPEX™ SLIDE TOOLKIT PEX Slide Tool, Battery (Including 16mm - 32mm Jaws)	
KemPex™ Slide Manual Toolkit 	913052	KEMPEX™ SLIDE MANUAL TOOLKIT 16mm - 32mm	

KemPex Slide

KEMPEX SLIDE - PRESSURE LOSS: PE-XA PN20 RATED PIPE

COLD WATER AT 25°C

Peak Flow Rate Qs (l/s) 1.01 to 0.50 (kPa/m)	Ø 16mm 2.2mm wall Head Loss (kPa/m)	Ø 20mm 2.8mm wall Head Loss (kPa/m)	Ø 25mm 3.5mm wall Head Loss (kPa/m)	Ø 32mm 4.4mm wall Head Loss
0.05	0.3467	0.1244	-	-
0.10	1.1655	0.4140	0.1431	0.0428
0.15	2.3941	0.8458	0.2904	0.0866
0.20	4.0088	1.4092	0.4821	0.1432
0.25	5.9970	2.1002	0.7165	0.2123
0.30	8.3508	2.9147	0.9910	0.2929
0.35	11.0641	3.8503	1.3059	0.3847
0.40	14.1323	4.9049	1.6594	0.4877
0.45	-	6.0771	2.0518	0.6021
0.50	-	7.3655	2.4814	0.7267

HOT WATER AT 60°C

Peak Flow Rate Qs (l/s) 1.01 to 0.50 (kPa/m)	Ø 16mm 2.2mm wall Head Loss (kPa/m)	Ø 20mm 2.8mm wall Head Loss (kPa/m)	Ø 25mm 3.5mm wall Head Loss (kPa/m)	Ø 32mm 4.4mm wall Head Loss
0.05	0.2913	0.1034	0.0357	0.0106
0.10	1.0003	0.3522	0.1205	0.0357
0.15	2.0807	0.7272	0.2476	0.0731
0.20	5.5178	1.2224	0.4143	0.1218
0.25	5.3035	1.8346	0.6187	0.1815
0.30	7.4333	2.5608	0.8606	0.2516
0.35	9.9032	3.4002	1.1395	0.3317
0.40	12.713	4.3513	1.4538	0.4223
0.45	-	5.4129	1.8041	0.5229
0.50	-	6.5847	2.1894	0.6330

PIPE SUPPORTS

- Fixing of KemPex must comply with AS/NZS3500.
- Hot water lines must be fixed as to allow for thermal linear expansion.
- Never fix a clip directly onto DZR brass fittings.

HORIZONTAL PIPES

Clip Spacing		Clip Spacing	
Pipe Ø	(metres)	Pipe Ø	(metres)
16mm	0.60	0.16mm	1.20
20mm	0.70	0.20mm	1.40
25mm	0.75	0.25mm	1.50
32mm	0.80	0.32mm	1.70

VERTICAL PIPES

Horizontal hot water lines may require closer clip spacing to maintain straight lines and avoid sagging.

KEMPEX SLIDE - PIPE SUPPORTS



PIPE SUPPORTS

KemPex PE-Xa Plumbing System

Correct pipe support is essential to maintain alignment, control thermal movement, and ensure long-term performance. KemPex pipework must be supported in accordance with AS/NZS 3500 and KemPex installation guidelines.

Support spacing

- Pipework must be supported at intervals suitable for the pipe size.
- Maximum clip spacing must not exceed AS/NZS 3500 requirements.
- Additional supports may be required at changes of direction and near fittings.

Important notes

- Brass fittings must be independently supported.
- Do not clip directly onto brass fittings.
- Pipework must be free to expand and contract where required.
- Additional supports may be installed to maintain straight alignment.

After installation

- Confirm all pipework is securely supported.
- Check that fixed and sliding points are correctly positioned
- Ensure pipework remains accessible for inspection prior to concealment.

Pipe support installed in accordance with AS/NZS 3500 satisfies the requirements of NZBC G12.

Refer to the KemPex Design & Installation Guide for full pipe support requirements.



KEMPEX SLIDE - PRESSURE LOSS LOGS



PRESSURE TESTING

KemPex PE-Xa Plumbing System

To comply with NZBC Clause G12 and AS/NZS 3500, all KemPex pipework must be pressure tested after installation and prior to concealment to confirm leak-tightness.

When to test

- After all pipework and joints are completed.
- Before walls, ceilings, or slabs are closed in.
- Prior to commissioning.

Test method

- Water testing is preferred.
- Air testing is permitted where water testing is impractical.
- Testing to be carried out at ambient temperature.
- Extra care is required when air testing due to stored energy.

Test pressure

- Testing shall be conducted using water where practicable.
- Water pipe work must be pressure tested prior to concealment in accordance with NZBC G12 and AS/NZS 3500 by testing to **1,500kPa for a minimum of 30 minutes**; water is the preferred test medium, with air permitted where water testing is impractical and appropriate safety precautions are applied.
- Do not exceed the KemPex maximum allowable test pressure.



Inspection requirements

- Slowly raise the system to test pressure.
- Visually inspect all joints and connections.
- No visible leaks, drips, or weeping.
- Pressure stability alone is not a substitute for visual inspection.

After testing

- Once confirmed leak-tight, pipework may be insulated and concealed.
- Test results should be recorded where required.

Pressure testing of KemPex pipework in accordance with AS/NZS 3500 satisfies the requirements of NZBC G12.

Refer to the KemPex Design & Installation Guide for full pressure-testing procedures.

KEMPEX SLIDE - PRESSURE LOSS LOGS: WET TEST (WATER SYSTEMS)

Project / Site: _____

Installer / Company: _____

Client / Representative: _____

Date of Test: _____

SYSTEM INFORMATION

Cold Water: ☐ Hot Water: ☐ Combined: ☐

PIPE LENGTH

Total Pipe Length of Water System (m): _____

The system has been tested: Complete system ☐ Section(s) ☐

TEST CONDITIONS

- ☐ Water (preferred).
☐ Air (Where water is impractical).

Water Temperature (°C): _____

PRE-TEST CHECKS

- ☐ All joints completed
☐ Pipework accessible and not concealed
☐ System filled and air purged
☐ Visual inspection completed

PRESSURE TEST DETAILS (AS/NZS 3500)

Operating Pressure (kPa): _____

- ☐ Test Pressure 1,500 kPa
☐ Duration minimum 30 minutes

TEST OBSERVATION

- ☐ No visible leaks or weeping
☐ No pressure loss due to leakage

TEST RESULT

- ☐ PASS - System leak tight
☐ FAIL - Rectification required

Issue / Comments: _____

SIGN OFF

Installer Signature: _____

Client Representative Name: _____

Pressure testing carried out in accordance with AS/NZS 3600 satisfies the requirements of NZBC G12.

KEMPEX SLIDE - INSTALLATION GUIDE

This guide outlines the basic steps for installing the KemPex Slide Connection System. Use approved, well-maintained tools and ensure installers are trained to achieve a secure, leak-free connection.



1. Cut KemPex pipe at right angle ensuring you have a straight neat cut to start.



2. Slide on brass sleeve with chamber facing fitting. Ensure there is a minimum distance between the pipe and the compression sleeve of 2 x the compression sleeve length.



3. Expand pipe with the correct and appropriate expander head.



4. Open expander and rotate 30°.



5. Expand again in new position.

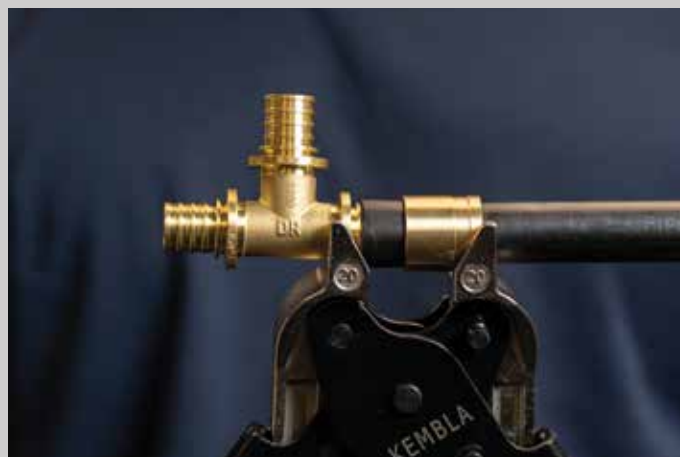


6. Immediately after expansion insert KemPex Slide fitting into tube.

KEMPEX SLIDE - INSTALLATION GUIDE



7. Ensure fitting is inserted into shoulder stop and all fitting ribs are covered by the pipe.



8. Compress the sleeve fully closed to fitting shoulder.



9. Finished leak proof join. Once system is complete proceed to testing protocol as per AS/NZS 3500



10. KemPex Chain Tool Kit 16 - 32mm



11. KemPex Battery Slide Tool with compression jaws 16mm – 32mm.

Tooling

KemPex Slide requires an axial compression tool to complete joints. Two approved tooling options are available, including a battery-powered tool. Other axial compression tools and expanders may be compatible; consult MM Brands for validation before use.

TOOL WARRANTY

If tools are not regularly serviced, calibrated, and checked insufficient joint may occur, and any resulting failures will void the warranty.

Please contact MM Brands for any questions.

KemPex Slide Installation Record

KEMPEX - INSTALLATION PRESSURE VERIFICATION RECORD

INSTALLATION INFORMATION

Project / Installation Description:

Site Address:

Client / Owner:

Plumbing Contractor:

PRESSURE VERIFICATION DETAILS

Test Medium: ☐ Water (preferred). ☐ Air (Where Permitted).

Applied Pressure Test (kPa):

Test Start Time:

Test Finish Time:

Total Test Duration(Minutes):

Ambient Temperature (°C):

OBSERVATION RESULTS

INSTALLER DECLARATION

I confirm that the KemPex™ PE-Xa system has been installed and pressure verified in accordance with KemPex™ installation instructions and relevant New Zealand plumbing requirements.

Installer Name:

Registration / Licence Number:

Signature / Company Stamp & Date:

This record should be retained as part of the installation documentation. Local authorities or Building Consent Authorities may require a copy for compliance purposes. Retention of installation records forms part of KemPex Warranty requirements.

KemPex Connection Systems

Tools & Calibration

INSTALLATION TOOLS

KemPex systems must be installed using approved manual or battery tools suited to the pipe size and connection method.

Good tool condition is critical for clean, reliable joints and long-term performance.

- Correct for the KemPex system being installed.
- Used only as intended.
- In good working order.

Do not use tools that are damaged, modified, or incorrect.

TOOL CHECKS & CALIBRATION

- Inspect tools before use for wear or damage.
- Check jaws, heads, and moving parts.
- Ensure servicing or calibration is current.
- Remove any tools outside tolerance from use.

Calibration and servicing records should be kept with job documentation.



KemPex Connection Systems

Training & Quality Assurance Support

INSTALLER TRAINING

KemPex training is delivered by MM Brands' trained territory managers and may be provided as initial installation training or refresher training, depending on installer experience and project requirements.

Training focuses on:

- Correct installation in accordance with KemPex installation guides.
- Key installation tolerances and jointing requirements.
- Tool selection, servicing expectations, and QA hold points.
- Practical jointing of the slide or crimp system.
- Theory questionnaire.

Training attendance is recorded and forms part of the project quality documentation.

QA SITE VISITS

As part of our quality assurance process, QA site visits may be undertaken during installation to verify work is being completed in line with KemPex installation guides and project requirements.

Site visits support:

- Early identification of installation issues.
- On-site guidance where required.
- Reinforcement of correct installation practices.

Training & QA oversight help ensure consistent installation quality and long-term system performance.



KemPex Connection Systems

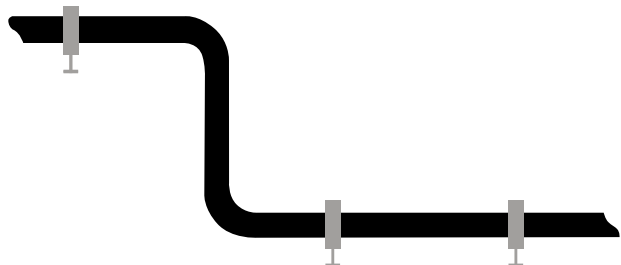
Technical Data

Expansion

KemPex will expand with heat so allowance must be made for expansion in the system. The use of anchor points can ensure the expansion occurs in the desired direction. By securely clipping to one side of a fitting, expansion will occur in the opposite direction.

All other clips and holes through which KemPex passes should allow the pipe to slide longitudinally. For long runs on the hot water service an 'offset bend' Fig. 1 or 'U bend' Fig. 2 may be required.

Fig. 1
Expansion absorption through an offset bend



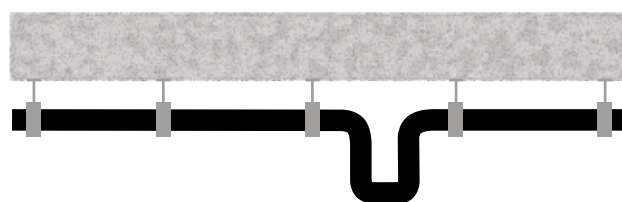
Disassembly of KemPex Slide

KemPex Slide connections are designed as permanent mechanical joints and are not intended to be disassembled as part of normal installation or maintenance.

Where alteration or repair is required, the fitting must be cut out completely from the system and replaced with new KemPex components in accordance with KemPex installation instructions.

Heated disassembly of sliding sleeves must not be carried out on site. Removed components must not be reused.

Fig. 2
Expansion absorption through U Bend



Water Heaters & Uncontrolled Heating Sources

Application Limitations

KemPex PE-Xa systems must not be used in hot water reticulation ring main systems, solar water heating systems, or systems exposed to uncontrolled or unregulated heat sources. KemPex systems must only be installed within the operating limits specified and in accordance with AS/NZS 3500.

Connection of KemPex to a water heater must comply with AS3500 and connect via a minimum 1 metre of copper pipe.

In Ground Installation

KemPex PE-Xa is suitable for in-ground potable water services when installed in accordance with AS/NZS 3500 and local authority requirements. Pipework must be protected from UV exposure, freezing, uncontrolled heat sources, and mechanical damage. Where freezing is a risk, a minimum cover of 300mm is recommended.

Thermal Insulation

Although KemPex has excellent insulating properties local authorities may require further insulation to reduce heat loss. KemPex should be insulated against freezing conditions to reduce the chances of damage to the pipe work. In extreme conditions it is not possible to prevent static water freezing, so if not in use the complete system should be drained.

Pressure Testing Installations

- Pressure testing of KemPex installed systems must comply with AS/NZS 3500 and local authority requirements.
- Pressure testing shall be carried out after installation and prior to concealment.
- Testing shall be conducted using water where practicable. Water pipe work must be pressure tested prior to concealment in accordance with NZBC G12 and AS/NZS 3500 by testing to 1,500kPa for a minimum of 30 minutes; water is the preferred test medium, with air permitted where water testing is impractical and appropriate safety precautions are applied.
- Without exceeding the KemPex maximum allowable test pressure.
- The test pressure shall be maintained for a minimum period of 30 minutes, during which time no leakage shall be evident.
- All joints must remain visible and be visually inspected throughout the test period.
- Any leaks detected must be rectified and the system re-tested.
- Upon successful completion of the pressure test, the system shall be thoroughly flushed.

KemPex Connection Systems

Technical Data

KEMPEX CRIMP & SLIDE PE-Xa	Potable Water PE-Xa – Black PN20	Recycled Water PE-Xa – Lilac PN20	Rain Water PE-Xa – Green PN20
Operating Pressure	1,000 kPa	1,000 kPa	1,000 kPa
Operating Temperature	70°C Continuous 95°C Short-term	70°C Continuous 95°C Short-term	70°C Continuous 95°C Short-term
Material	PE-Xa	PE-Xa	PE-Xa
Linear Thermal Expansion Co-Efficient	0.15mm	0.15mm	0.15mm
Thermal Conductivity	0.35 W	0.35 W	0.35 W
Pipe Roughness	0.007mm	0.007mm	0.007mm
Maximum Bending Radius (pre-formed)	4 x Ø	4 x Ø	4 x Ø
Maximum Bending Radius (un-formed)	8 x Ø	8 x Ø	8 x Ø

PN20 pressure rating applies at 20 °C. Operating pressure decreases as temperature increases. Continuous operating temperature is 70 °C, with 95 °C permitted for short-term exposure only. Refer to the KemPex Design & Installation Guide for full details.

Water Quality

KemPex Crimp PE-Xa fittings are manufactured from high-quality DZR lead free brass, providing good resistance to corrosion under normal potable water conditions. Water conveyed through KemPex systems must comply with the Drinking-water Standards for New Zealand. Where water quality is aggressive, corrosive, or outside normal potable supply parameters (including bore, volcanic, or chemically treated water), KemPex PE-Xa DZR lead free fittings must not be used without consulting MM Brands prior to installation.

Minimum Bending Radius

A profile bend holds KemPex in a secure 4 x diameter (Ø) bend. Where profile bends are not used, the minimum bending radius is 8 x pipe diameter (Ø). Profile bends are recommended, particularly on hot water services, to maintain pipe alignment and prevent kinking.

Fittings Protection

Protect DZR brass fittings from corrosive environments and chemical exposure prior to installation. Damaged or contaminated fittings must not be installed.

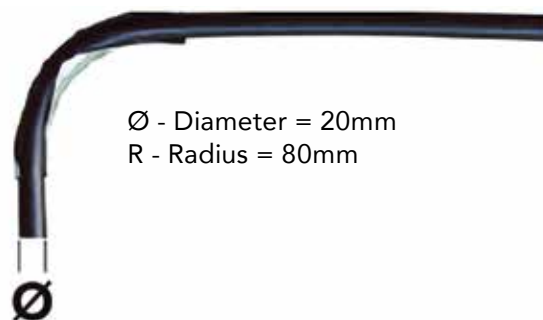
Technical Support

If there is any uncertainty regarding application suitability, water quality, operating conditions, or installation environment, MM Brands must be consulted prior to installation.

Handling & Storage

- UV radiation can damage PE-Xa pipe. KemPex pipe must be protected from direct sunlight during storage and installation.
- Avoid damage to the pipe surface from dragging pipes across rough surfaces or sharp edges.
- Protect uninstalled pipes from ingress of dirt, moisture, and harmful liquids.
- Avoid contact with solvents, oils, fuels, adhesives, or corrosive substances during storage and installation.

MINIMUM BENDING RADIUS

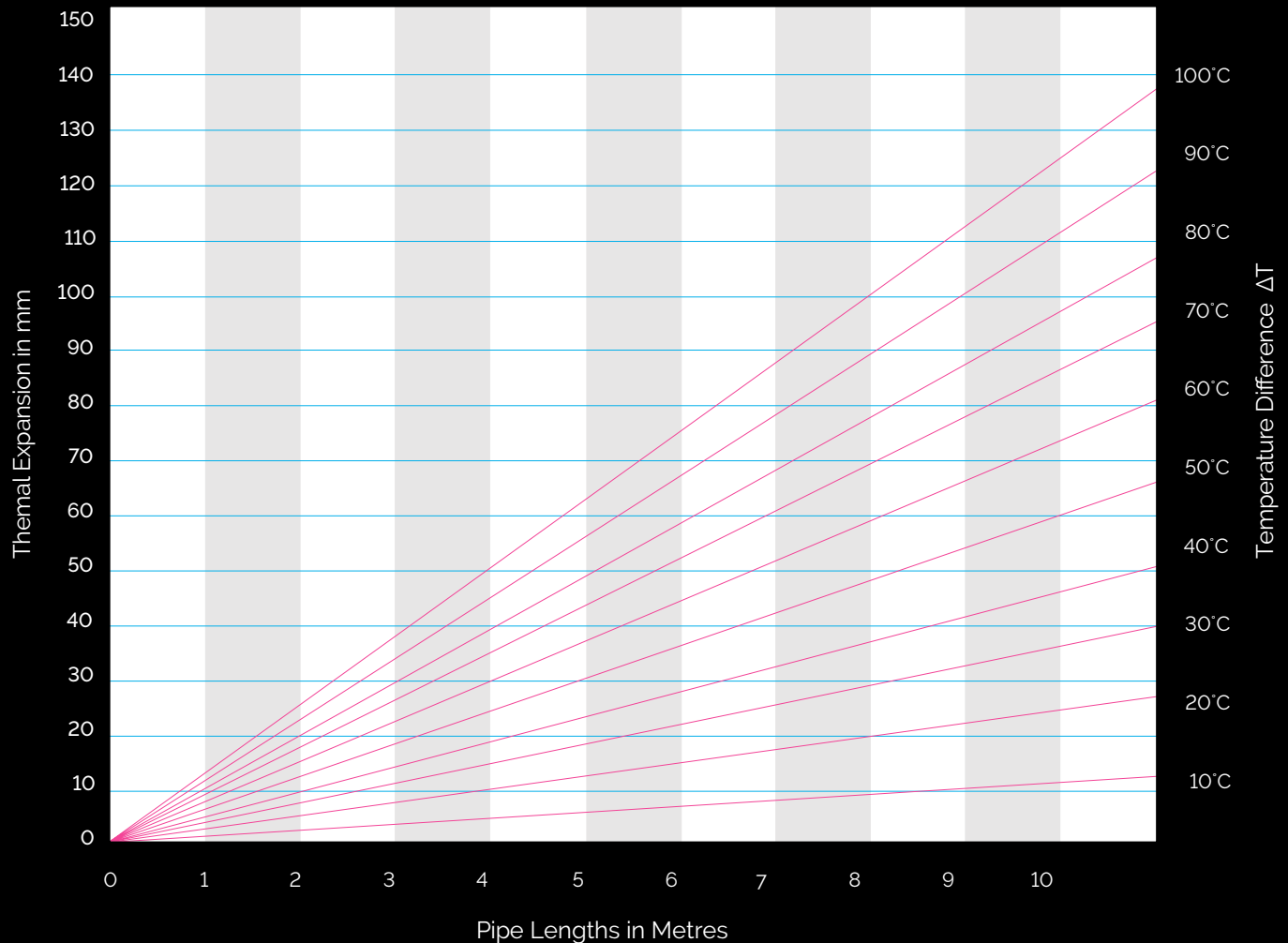


Ø - Diameter = 20mm
R - Radius = 80mm

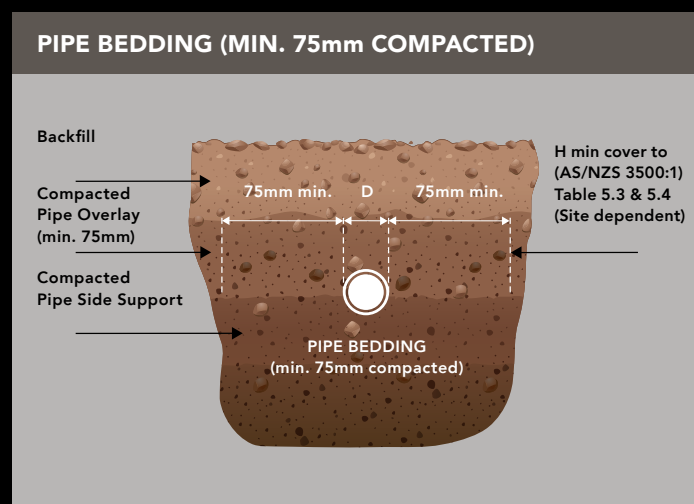
KemPex Connection Systems

Technical Data

EXPANSION & CONTRACTION GUIDE



IN-GROUND INSTALLATION



MINIMUM DEPTH OF COVER FOR BURIED PIPES

LOADING CONDITIONS	Maximum Cover (mm)
Under slabs and footings (concrete).	75
Not subject to vehicular loading (excluding fire services).	300
Fire services not subject to vehicular loading.	600
Subject to vehicular loading:	
(a) no carriageway	450
(b) carriageway	600
(c) unsealed carriageway.	750
Pipes in embankments or subject to construction equipment loads.	750

KemPex Connection Systems

Underground Fittings

INSTALLER CORROSION PROTECTION GUIDE

IMPORTANT: All metallic KemPex fittings installed underground must be protected against corrosion. Failure to protect fittings will lead to premature corrosion, leaks, and system failure.

Where KemPex fittings are buried in corrosive conditions—such as high-moisture, acidic (pH < 6), or highly alkaline (pH > 8) soil—they must be protected by an impervious barrier.

When protection is required

- Fittings buried in soil or backfill.
- Trench installations and slab penetrations.
- Damp or aggressive soil environments.

Approved protection method

Use a recognised petrolatum-based corrosion protection system (e.g. Denso™) installed strictly in accordance with manufacturer instructions (Fig 3).

Backfilling

- Ensure protection is not damaged during backfill.
- Use clean backfill free from sharp stones.
- Compact carefully around fittings.

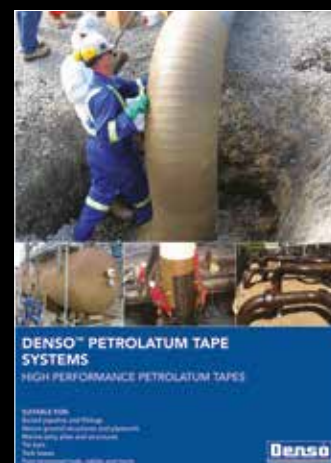
Standards alignment

AS/NZS 3500.1 – Plumbing and Drainage (Water Services).

AS 2832.1 – Corrosion protection of buried metals.

WARNING

Unprotected underground fittings will corrode and fail early. Corrosion-related failures are installation-related and may not be covered by warranty.



For more information on Denso Underground Protection Systems for PE-X Plumbing:
www.densoaustralia.com.au

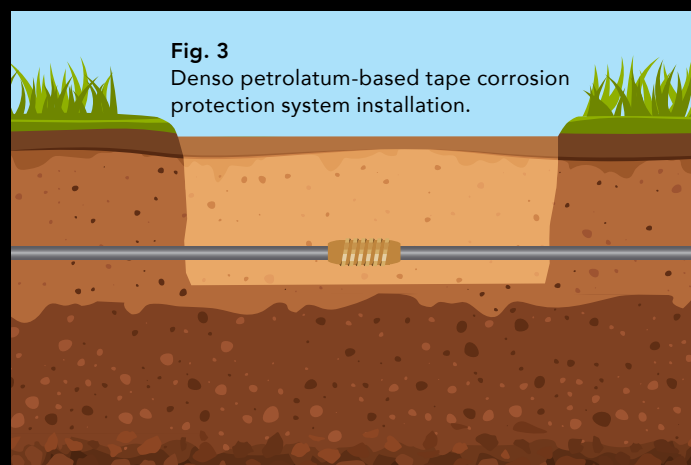


Fig. 3
Denso petrolatum-based tape corrosion protection system installation.

KemPex Connection Systems

Fire Protection

KEMPEX PE-XA FIRE PROTECTION

KemPex PE-Xa pipe is suitable for use in fire-rated construction when installed with independently tested passive fire protection systems.

Where KemPex pipe penetrates fire-rated walls or floors, the fire resistance of the building element must be maintained using approved passive fire stopping solutions, such as Allproof or Ryanfire collars, sealants, wraps, or cast-in systems.

Compliant solutions include:

- Fire collars for floor and wall penetrations.
- Fire wraps for space-restricted or retrofit applications.
- Cast-in fire collars for new concrete slabs.

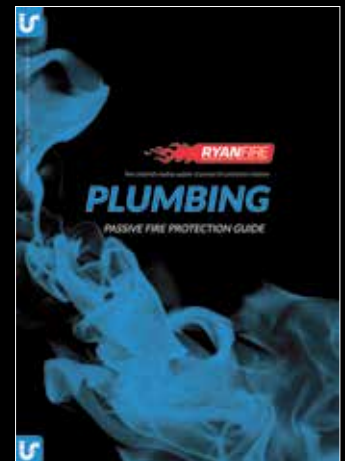
These systems are tested to AS 1530.4 for penetrations containing plastic pipes, including PEX-a, and are supported by BRANZ appraisal where applicable.

IMPORTANT

KemPex pipe itself is not fire-rated.
Fire performance is achieved by the passive fire system, not the pipe.



For more information on
Allproof Passive Fire Protection
Systems for PE-X Plumbing:
www.allproof.co.nz



For more information on
RyanFire Passive Fire Protection
Systems for PE-X Plumbing:
www.ryanfire.co.nz



KemPex Connection Systems

Warranty & Certification

25 YEAR PRODUCT WARRANTY

KemPex PE-Xa pipe and both Crimp & Slide fittings are backed by a comprehensive 25 Year Product Warranty, providing long-term confidence for installers, merchants and specifiers across New Zealand.

Warranty Benefits

- 25-Year Product Warranty when KemPex pipe and fittings are used together as a complete system.
- System coverage including pipe and fittings.
- Designed with a 50 year system design life for long-term performance.
- System coverage including pipe and fittings.
- Complies with relevant AS/NZS Standards & Australian WaterMark Certification.
- Backed locally by MM Brands NZ Ltd and comprehensive insurance cover.



Warranty Conditions

- Installation by a licensed plumbing professional.
- Installed in accordance with KemPex Design & Installation Guidelines.
- Compliance with applicable AS/NZS Standards & NZ Building Code requirements.
- Use of approved KemPex-compatible tooling.
- Operation within rated temperature and pressure limits.
- Must not be installed on hot water reticulation ring mains.

Peace of Mind

KemPex systems are engineered for durability, reliability and long service life. When installed correctly, KemPex delivers proven performance on residential and commercial projects, supported by a 25-Year Product Warranty and a 50-Year design life.

ONE BRAND.
ONE SYSTEM.
ONE WARRANTY.

MINIMISE YOUR
INSTALLATION RISK
WITH MM KEMBLA.

CERTIFICATIONS



ENVIRONMENTAL & QUALITY MANAGEMENT SYSTEMS



INDUSTRY PARTNERS



KemPex Design & Installation Guide
Version: V2 | Date: April 2026

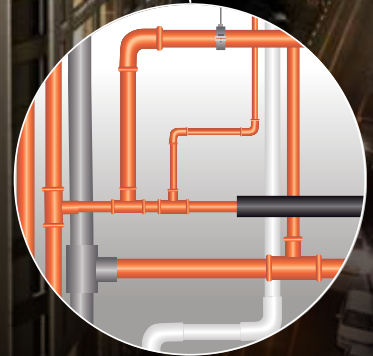
Products, specifications, standards references and installation requirements are subject to change without notice. This document is provided as general guidance only and must be read in conjunction with current product literature, installation instructions, and applicable standards. MM Brands reserves the right to modify products and documentation at any time.

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SPECIFY MM KEMBLA. BECAUSE HIGH RISE. DEMANDS LOW RISK.

The Cordis Hotel, A 5 Star Experience, \$170m, 17,000sqm, 640 Rooms, Auckland.



MINIMISE YOUR INSTALLATION RISK WITH MM BRANDS.

In New Zealand the construction industry is worth an estimated 40 billion dollars per year.

With so much at stake, designers, developers and installers must have complete confidence in the piping systems that seamlessly deliver the plumbing, HVAC, refrigeration services and medical gas to these developments.

Systems that lie hidden, often behind expensive finishes where the risk and cost of any failure increases.

Reduce the risk with an MM Brands Integrated Piping System. A complete range of high quality products for plumbing, HVAC, refrigeration services and medical gas.

One brand, one system backed by one warranty from an Australian company with a reputation for quality, reliability and service for over 100 years.

Make your next project an MM Brands Integrated Piping System.

For further information or to request an MM Brands system warranty for your next project:

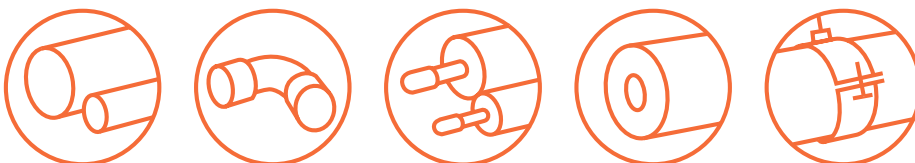
Call: 0800 536 252

Email: sales@mmbrands.co.nz

Visit: www.mmbrands.co.nz

 **BRANDS**

**ONE BRAND
ONE SYSTEM
ONE WARRANTY**



KEMPEX - CASE STUDIES

KEMPEX HAS BEEN TRUSTED BY DEVELOPERS & INSTALLERS FOR OVER 20 YEARS.

The KemPex connection system has been designed and developed for New Zealand.



SUMMERSET RETIREMENT VILLAGES (NORTH ISLAND)

The KemPex Slide connection system has been chosen for the hot and cold water at a number of Summerset Retirement Villages across New Zealand.

Summerset is one of the leading operators and developers of retirement villages in New Zealand, with 40 villages completed or in development nationwide.

Developments

\$140m, 11,000sqm, 200 homes, Tikipunga, Whangārei.
\$150m, 8,000sqm, 200 homes, Cambridge, Waikato.
\$150m, 25,500sqm, 300 homes, Waikanae, Wellington.
\$150m, 8,000sqm, 280 homes, Papamoa, Bay of Plenty.



SIMPLICITY LIVING

The KemPex Slide connection system has been chosen for the construction of a \$285 million, 330 home "Build to Rent" development on 1.4 hectares of land at Ellerslie Racecourse in Auckland.

Simplicity Living started in Auckland and its long-term aim is to build, own and operate over 10,000 quality rental homes across New Zealand.

Development

\$285m, 14,000sqm, 330 homes, Waiatarua, Auckland.



SUMMERSET RETIREMENT VILLAGES (SOUTH ISLAND)

The KemPex Crimp connection systems has been chosen for the hot and cold water at a number of Summerset Retirement Villages across the South Island.

Developments

\$100m, 9,700sqm, 237+ homes, Case Brook, Christchurch.
\$100m, 9,500sqm, 240 homes, Avonhead, Christchurch.



QUEST - TAKAPUNA

The KemPex Slide connection system has been chosen for the construction of the new Quest Takapuna project development, located in Milford, Auckland.

Development

51 Quest serviced hotel rooms.
6 high-end residential apartments.
Cafe and two retail outlets.
\$18.5m, 3,485sqm, Milford, Auckland.

KemPex Connection Systems

KEMPEX - CASE STUDIES

The KemPex connection system fully complies with New Zealand & Australian Standards AS2537 & AS2492 and is certified by WaterMark (Licence No.s WMK 75171 & WMK 2662).



CORDIS HOTEL

The KemPex Slide connection system has been chosen for the construction of the Cordis, Auckland. Part of a collection of 5 star timeless hotels by Langham Hospitality Group.

The Cordis Hotel, located right in the heart of the city, the new 17-storey tower houses 244 premium rooms and signature Cordis Pinnacle Tower suites. This addition brings the total number of rooms to 640, making Cordis, Auckland the largest hotel in terms of room count in New Zealand..

Development

\$170m, 17,000sqm, 640 rooms, Cordis, Auckland.



RYMAN - KEITH PARK RETIREMENT VILLAGE

The KemPex Slide connection system has been chosen for the construction of the Keith Park Retirement Village a thriving community perfectly located next to Te Kori Scott Point Park in Hobsonville, Auckland.

Keith Park Village offers a range of care options including rest home care, hospital care, specialist dementia care, and respite care in our state-of-the-art care centre.

Development

\$200m, 40,000sqm, 500 units, Waiatarua, Auckland.



FLETCHER LIVING - BEACHLANDS

The KemPex Crimp connection system has been chosen for the construction of the Fletcher Living's Beachlands development. The neighbourhood is a master-planned community set across more than 13ha, with up to 259 homes planned.

Development

259+ homes, 30,700sqm, Beachlands, Auckland.
This project is currently under construction.



AUCKLAND UNIVERSITY - STUDENT VILLAGE

The KemPex Slide connection system was chosen for the University of Auckland's Carlaw Park Student Village. Currently contains over 1,600 bedrooms across the entire complex. The village has been developed in three distinct stages to reach its capacity

Development

\$250m, 28,000sqm facility, Parnell, Auckland.
Stages 1 & 2: These initial phases provide 698-700 bedrooms with 213 apartments. Stage 3: The most recent major expansion, completed 2023, added 907 bedrooms and 416 apartments.



BRANDS

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QUALITY PIPING & PLUMBING PRODUCTS



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