



# PRODUCT TECHNICAL STATEMENT

Incorporating BPIR requirements as per Building Product Information Regulations 2022

# Fernco drainage couplings

Supplied by Hydroflow

HYDROFLOW DISTRIBUTORS LTD 221 Bush Road Rosedale, Albany, North Shore Auckland Tel: +64 9 415 6151

Established in 1964, Fernco began in a Master Plumber's garage with a patent of the 'Donut.' Fernco began to work closely with wholesale distributors to ensure products were manufactured and delivered quickly to meet customer demand. After more experimentation, Fernco introduced the first Fernco flexible coupling to the market in 1973 with a bid from Dallas, TX. Fernco has continued to manufacturer and innovate in Davison, MI, employing team members who became apart of the Fernco Family throughout the last 55 years. As the company continues to grow into the future, it looks forward to continue manufacturing the industry's largest and most innovative product line proven reliable by professionals in the field. By setting standards for performance, availability and support, Fernco remains committed to a single goal: our

customer's complete and total satisfaction.

#### Fernco and Hydroflow

This PTS covers all of the products supplied by Hydroflow, on behalf of Fernco, in New Zealand.

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#### Revision control

Revision number	Revision information	Date
v1	New PTS (BPIR)	27 November 2023

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#### Purpose and use

Fernco drainage couplings for use in plumbing (drainage) applications.

#### Product description

Fernco drainage couplings complies with the NZBC as shown below in the BPIR section.

A full product listing is available on the Hydroflow website, specifically for drainage couplings and associated products: <u>Hydroflow</u>

#### Key advantages

Each Fernco product specification, features and benefits are available on the website as shown above.

#### Technical Information, Installation Instructions, Maintenance Instructions

All Fernco drainage couplings technical information is available for download at the website:

#### <u>Fernco</u>

Information available as follows:

- Technical information
- Product standards certifications

Fernco recommends that all installation is done by a registered plumber.

#### Fernco drainage couplings QA processes

Fernco drainage couplings undertake testing and inspections of all products as part of the QA requirements.

Fernco Australia has an extensive range of products that are WaterMark certified to:

WM 22225: AS/NZS 4327:1995 Metal-banded flexible couplings for low-pressure applications

See Appendix 1

#### Contribution to Compliance

Fernco drainage couplings are in full compliance with the requirements as set out in the New Zealand Building Code, as follows:

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Building	Requirement	Compliance evidence
code		
B2 (Durability)		
	(B2.3.1 Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or: (c) 5 years if: (i) The building elements (including services, linings, renewable protective coatings, and fixtures) are easy to access and replace, and (ii) Failure of those building elements to comply with the building code would be easily detected during normal use of the building.	As part of a plumbing system for supply of cold, hot or mixed water temperatures. These products can be used in residential and/or commercial buildings where cold, hot or mixed water temperatures water is required to be supplied. Not suitable for use in areas which are being permanently concealed such as behind concrete. Maintenance required is shown in the Maintenance and Installation Instructions. Proof of durability – Service history Fernco products have been manufactured and supplied worldwide since 1964. Warranty calls are at a minimum and within the quality principles of Fernco. All Warranty claims are investigated, and corrective/preventive actions are implemented. Products that are WaterMark certified are subject to various performance testing, including endurance.
		Refer warranty statement (Terms and Conditions) as shown

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G13 (Foul water)		
G 13.3.1	<ul> <li>G13.3.1</li> <li>The plumbing system shall be constructed to: <ul> <li>a) convey foul water from buildings to a drainage system,</li> <li>b) avoid the likelihood of blockage and leakage,</li> <li>c) avoid the likelihood of foul air and gases entering buildings, and</li> <li>d) provide reasonable access for maintenance and clearing blockages.</li> </ul> </li> </ul>	Fernco drainage couplings comply with the requirements of AS/NZS 4327:1995 Metal-banded flexible couplings for low- pressure applications (WaterMark Certificate as example can be found in Appendix 1)

#### NOTE Re WaterMark

WaterMark is not compulsory for the New Zealand market. The products listed in these WaterMark certificates, as shown below.

It must be noted that all Fernco products complies with the various requirements as stated above for the NZBC.

Products supplied into the New Zealand market might not be listed on these certificates but can be imported and used within the New Zealand building industry.

#### Refer WaterMark certificate and schedule of products

WM 22225: AS/NZS 4327:1995 Metal-banded flexible couplings for low-pressure applications IAPMO Oceania PLD

See Appendix 1

A list of product standards that Fernco products complies with are shown in Appendix 2.

#### Design, construction and installation instructions

#### Installation Instructions

Fernco drainage couplings installation is to be done by registered plumbers. Installation Instructions are supplied with the product.

For an example of an Installation Instructions, see Appendix 3.

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#### Maintenance requirements

Service/cleaning instructions are available for download as mentioned above for all Fernco drainage couplings – see Fernco - US | Global Leaders in Flexible Couplings, Drainage & Plumbing Systems

#### Warranty

Fernco products has, in general, a 1-year parts replacement, 1-year labour warranty.

Refer Appendix 4.

#### Limitations

Limitations and use are specified in the technical information sheets obtainable from the website and differs by product.

See an example in Appendix 2.

#### Quality assurance

The following certifications has been accredited to the product and/or manufacturer.

Fernco has a variety of certifications including:

• WaterMark certification, which inherently includes Quality Management principles.

#### Product support

Product data available are as shown above in section: Technical Information, Installation Instructions, Maintenance Instructions.

Full product support can be found at:

HYDROFLOW DISTRIBUTORS LTD 221 Bush Road Rosedale, Albany, North Shore Auckland Tel: +64 9 415 6151

#### Manufacturer

All Fernco products are manufactured by Fernco USA: <u>Fernco</u> and imported and distributed by Hydroflow.

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#### Fernco Inc. - USA

300 S. Dayton St. Davison, MI 48423

Fernco, Inc. West - USA

Mountain & West Coast Sales 855 Linda Way Sparks, NV 89431

#### Warnings and Bans

There is no warning or ban applicable on any Fernco products, subject to the Building Act 2004, Section 26.

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## Appendix 1 – WaterMark certificates

WM 22225: AS/NZS 4327:1995 Metal-banded flexible couplings for low-pressure applications



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#### **IAPMO OCEANIA**

7-11 Fullard Road, Narre Warren, Victoria 3805 Australia







IAPMO Oceania is a product certification body which inspects and arranges for the independent laboratory testing of samples taken from the manufacturer's stock or from the market or a combination of both, to verify compliance of the requirements of applicable Standards and Specifications. This activity is coupled with periodic surveillance of the manufacturer's factory and any major subcontractor's site/s as well as the assessment of the manufacturer's Quality Assurance System. This certification is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO R&T Oceana of the product acceptance by Authorities Having Jurisdiction.

# **CERTIFICATEOF CONFORMITY**

## IAPMOOceaniaherebygrantsto:

# Fernco (Australia) Pty Ltd

#### A.B.N.: 86 115 372 480

#### P O Box 887 Mona Vale, NSW 1660 Australia

the right to use the WaterMarkin accordance with the ABCB Manual for the WaterMarkCertification Scheme; Australian StandardsWaterMarkTechnical Specifications and the PlumbingCode of Australia; only in respect of the certified product as described in the WaterMarkCertificate of Conformity–Schedule f Certified Product (Referalso IAPMO ProductListing Directory). The Certificate is granted subject to the rules governing the WaterMarkCertificationSchemend the Terms and Conditions of the Approved UserAgreement and IAPMO Oceana's WaterMarkGovernanc Rules.

#### Evaluatedto:

AS/NZS 4327-1995 Metal-banded flexible couplings for low-pressure applications

Manufacturer:

Refer to Licence Holder

LicenceNo.: WM-022225

FirstCertified: 05 April 2012

CertificatiorDate: 29 October 2020

ExpiryDate: 04 April 2024

EQ. The IAPMO Group

This WaterMark Certificate of Conformity is for the period indicated herein and is void after the date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of IAPMO R&T Oceana, or any evidence of non-compliance with applicable Standards, Specifications or of inferior workmanship, may be deemed sufficient cause for revocation of this certification. This Certificate can only be reproduced in its entirety. Any alteration of this certificate could be grounds for revocation of this certification.

"This certificate is issued by a JAS-ANZ accredited Conformity Assessment Body. The ABCB and JAS-ANZ do not in any way warrant, guarantee or represent that the product the subject of this Certificate conforms to the WaterMark Certification Scheme Rules, nor accepts any liability arising out of the use of the product. The ABCB disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this Certificate."

# Appendix 2 – Product standards



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## **Product Standards**

Products	Standards	Products	Standards
Flexible Couplings	ASTM D 5926	Multi-Tite Pipe Gaskets	ASTM C 564
1001 Series 1002 Series 1003 Series 1004 Series 1006 Series 1055 Series 1056 Series Proflex Shielded Specialty Couplings	ASTM C 1173 CSA B602 ASTM C 1460 ASTM C 1460 CSA B602	1059 Series 1060 Series 1070 Series CMA Debris Traps Dish Washer Connectors Donuts Downspout Connectors Flexible Traps Hose Grips LDC's	ASTM D 5926
Standard No Hub Couplings	ASTM C 564 ASTM C 1277 CISPI 310 CSA B602	LDCX's LDCMA QT's & QL's Tap Saddles Utility Connectors	
Medium Duty No Hub Couplings Heavy Duty No Hub Couplings	ASTM C 564 ASTM C 1540 CISPI 310 CSA B602	Qwik Caps Western Series Couplings Expansion Joints Tubular Connectors	D 5926 CSA B602
Shear Ring Couplings Strong Back Couplings	ASTM D 5926 ASTM C 1173	Drain and Trap Connectors Flexible Toilet Seals	ASTM A 1045
	CSA B602 AIS Compliant - 6000 RC Series only	QwikSeal	ASTM C 923

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Appendix 3 – Example of technical installation and limitations

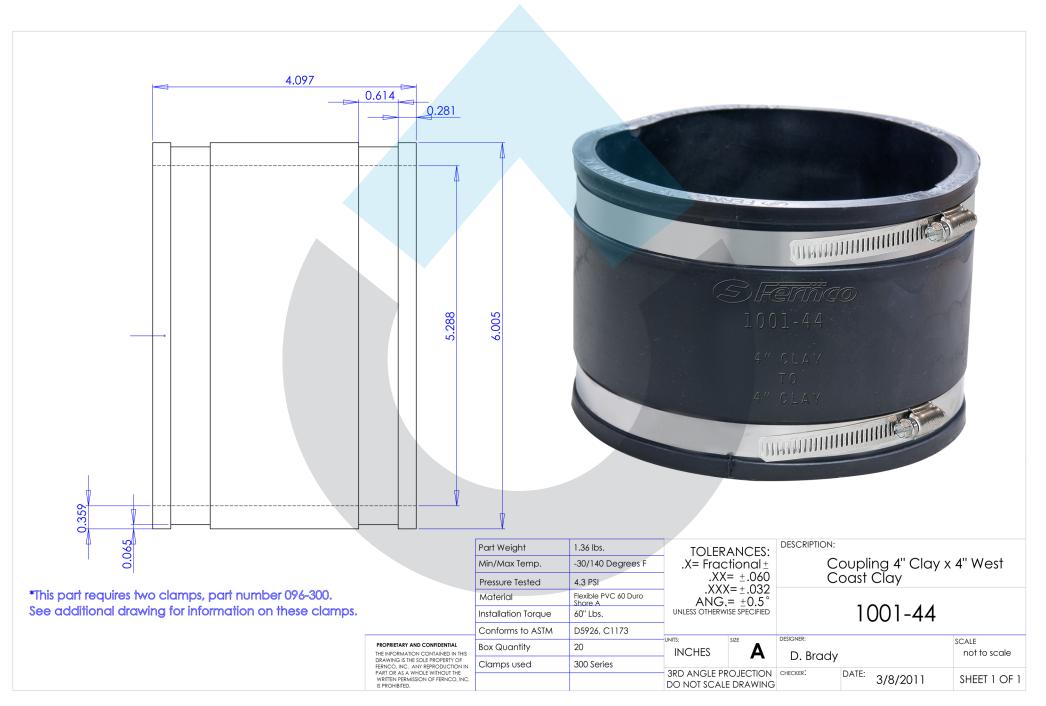


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Davison, MI • PH: 810-653-9626 • FAX: 810-653-8714 • www.Fernco.com



#### NENDOUT DATA DESCRIPTION DESCR

# ACCESS FOR CCTV AND DRAIN CLEARANCE

Fits pipe diameters 80-150 mm
 Quick and Easy
 Withstands up to 1
 Can be removed and refitted
 Pre-assembled for direct insertion into the host pipe.

SHOWS INSTALLATION INTO A CAST IRON PIPE





# WHY OMPROMI



#### MESSY, INACCESSIBLE AND UNPROFESSIONAL

TIDY, EASY, REMOVABLE, WATERTIGHT

# The Fernco Qwik Access

A secure, removable and preassembled point of entry into 80-150mm diameter plastic, ductile and cast iron pipes.

Designed for entry into drainage systems where no inspection point exists, or there is no other means of access. Installation takes less than a minute on plastic pipe.

## **INSTALLATION GUIDELINES**

- 1. Determine the required position of the Qwik Access and mark the centre for the hole.
- 2. Using a core drill, cut a hole of 54mm diameter in the wall of the pipe ensuring that the drill is square to the pipe surface. If cutting into a cast iron pipe, we recommend using a diamond core drill, and that a liberal amount of lubricant is sprayed around the cutting area, keeping the assembly lubricated and at a low temperature.
- 3. Set the core drill at approx. 650rpm whilst cutting, ensuring a smooth cut and minimising damage to the blade.
- 4. Remove any burring from the edges of the hole using a de-burring tool to leave a smooth finish. Wipe clean the inside surface.
- 5. Insert the Qwik Access into the hole so that the curvature of the seal follows the curvature of the main pipe.
- 6. Hold the Qwik Access in position, using a 6mm Allen key, turn the M8 set screw in a clockwise direction. Continue turning the set screw until the cover is secure. It is not necessary to exert much force on the allen key to secure the Qwik Access.
- 7. The installation is now complete.

**NOTE:** the cover can be removed and refitted. Please ensure that when removing the cover, the set screw is still engaged in the Access Point - do not rotate the set screw more than 3-4 times. If rotated more than 3-4 times, the inner flange may be lost into the pipe.











Global leaders in Flexible Couplings, Drainage and Plumbing systems

# Technical Data Sheet

# Durability of Thermoplastic PVC Couplings

Thermoplastic couplings are manufactured for use as a permanent part of a system when jointing pipes in sewerage, drainage and other non-pressure applications.

They consist of a flexible PVC sleeve with clamping bands.

The clamp bands are manufactured from stainless steel.

The product is manufactured to the requirements of ASTM C1173. This standard covers material and performance.

Additionally, the sleeve materials meet the requirements of ASTM D5926.

We have to consider three aspects concerning the durability of the product.

- 1) The life of the elastomeric sleeve.
- 2) The life of the stainless-steel clamp bands.
- 3) The performance of the product.
- The durability of the elastomer is influenced by many factors such as the type of elastomer, the temperature and the environment in which the elastomer is functioning. Thermoplastic has good general resistance to most ground conditions and is suitable for use in below ground drainage pipe couplings.
- 2) Thermoplastic is inherently resistant to ozone attack and additional elements used in the compounds add excellent UV resistance. As such these products can be used in above ground environments. Thermoplastic is not suitable for water contaminated with fats, oils, greases and hydrocarbon solvents.

Thermoplastic has an operating temperature range up to 60°C. We recommend that these couplings should not be used for continuous operating temperatures in excess of 40°C to ensure product longevity.



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- Stainless steel usually has excellent durability. It can be attacked by chloride ions present in soils by the mechanism of crevice corrosion. If this is considered to be a problem, then the clamps should be wrapped in waterproof tape.
- 4) The clamp bands supplied with the products are strong enough to provide good surface contact between the pipe wall and the seal. Flexseal have been producing these products for over 30 years and have no evidence of premature failure.

We are confident that Thermoplastic Couplings if correctly specified and installed, will have excellent longevity in below ground applications.

Encasing in concrete will not be detrimental to the couplings. There are no chemicals within the concrete that can cause long term degradation of either the elastomeric sleeve or the stainless steel.

#### <u>Advantages</u>

Strong, resilient and unaffected by soil conditions

Resistant to a wide range of chemicals

Resistant to the environment normally associated with sewers and drains

Flexible PVC has an operating temperature range is -34 deg C/+60 deg C. We recommend continuous operation at 40 deg C. Intermittent at 60 deg C.

Flexible PVC can be used for above ground installations.

Flexible PVC is naturally UV resistant due to the carbon black filler used within the elastomeric material.

All Flexseal PVC Couplings are Phthalate free.

#### **Limitations**

Flexible PVC has poor resistance to fats, oil, greases and hydrocarbon solvents.

## Appendix 4 – Warranty (refer to Hydroflow)

#### LIMITED WARRANTY

Fernco warrants its product(s) against defects in workmanship or materials for one (1) year from date of original purchase (unless a shorter period is expressly provided with respect to a particular product).

Fernco's total liability under any warranty, or any other claim arising in any way from the product or its use, is limited, at Fernco's option, to refund or replacement of any such product returned to Fernco within the one-year warranty period and determined by Fernco to be defective. To the extent permitted by law, Fernco disclaims and excludes any and all other warranties, express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose, and in no event shall Fernco be liable for special, incidental or consequential damages.

Failure to follow the installation instructions provided by Fernco will void this warranty. To make a warranty claim, purchaser should have the original receipt and contact Fernco, Inc. Customer Service Department, 810 653-9626.

Purchaser is responsible for any shipping charges. If state law preserves implied warranties, including implied warranties of merchantability and fitness for a particular purpose, such warranties are limited to one- year from the date of the original purchase and as otherwise set forth above.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so such limitation(s) or exclusion(s) may not apply to you. This written warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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