

# Fernco Puddle Flanges/Radon Barriers

- Prevents water penetration along the exterior of cast-in pipe systems
- Effectively prevents the movement of radon gases along the pipe exterior
- Quick and easy to fit
- Range of sizes available 'off-the-shelf'
- Can be made to bespoke sizes



Fernco Puddle Flanges are installed during construction to seal around the outside of pipes that are required to pass through concrete structures, such as tanks, manhole chambers, shafts, floor slabs and basements.

## Protection against water leakage

When pipes are cast in a concrete structure, a fluid leak path is created as the concrete dries and shrinks away from the pipe surface. Fernco Puddle Flanges act as a barrier to this fluid movement. A watertight seal is established as the rubber body is clamped to the pipe with a steel band and the wet concrete coats the large surface area of the flange. The seal is maintained when the concrete shrinks because the casting process compresses the rubber, allowing it to relax and expand with the structure.

## Protection against radon gases

*Radon is a colourless, odourless radioactive gas. It is formed by the radioactive decay of the small amounts of uranium that occur naturally in all rocks and soils.*

*Radioactive elements decay and emit radiation. Any exposure to this type of radiation is a risk to health – radiation is a form of energy and can cause damage in living tissues increasing the risk of cancer.*

– Public Health England

It is possible for high levels of radon build up in living spaces with bad ventilation and therefore it's important to use radon barriers to reduce the amount of radon emitted into homes/building. Puddle Flanges can be used to reduce the risk of radon gases emitting via gaps on the outside of pipes.



Fit horizontally or vertically

for above or below ground applications



Product Code	PFTXXXX
Description	Fernco Puddle Flanges
Material	EPDM Rubber 1.4404 (316L) Stainless Steel <i>Puddle Flanges with a different material makeup are available on request.</i>
Temperature Range	-50°C to 80°C constant, 100°C intermittent
Tightening Torque	15mm - 515mm: 6Nm / 516mm & above: 13Nm (Torque displayed on product label)

Standard size range		
Product Code	Size Range (mm)	Tightening Torque
PFT025	25-15	6Nm
PFT032	33-26	6Nm
PFT040	42-34	6Nm
PFT050	54-43	6Nm
PFT063	68-55	6Nm
PFT075	83-69	6Nm
PFT090	101-84	6Nm
PFT110	118-102	6Nm
PFT125	133-119	6Nm
PFT140	148-134	6Nm
PFT160	168-149	6Nm
PFT175	190-169	6Nm
PFT200	215-191	6Nm
PFT225	240-216	6Nm
PFT250	265-241	6Nm
PFT275	290-266	6Nm
PFT315	315-291	6Nm
PFT325	340-316	6Nm
PFT350	365-341	6Nm
PFT375	390-366	6Nm

Continued →

Standard size range		
Product Code	Size Range (mm)	Tightening Torque
PFT400	415-391	6Nm
PFT425	440-416	6Nm
PFT450	465-441	6Nm
PFT475	490-466	6Nm
PFT500	515-491	6Nm
PFT525	540-516	13Nm
PFT550	565-541	13Nm
PFT575	590-566	13Nm
PFT600	615-591	13Nm
PFT630	640-616	13Nm

Note: Puddle Flanges are moulded smaller than the maximum pipe size, so in some cases they will need to be stretched onto the pipe.

## Fabricated to bespoke sizes

Puddle Flanges can be fabricated to bespoke sizes above 630mm and are jointed from a rubber extrusion in-house to site requirements. Contact the Fernco team to discuss your requirements and enquire for pricing and lead times.

### Notes:

- Fitted Puddle Flanges have an outside diameter 52mm larger than the pipe onto which they are installed (dependent on size). Concrete cover should be 50mm against every surface around the Puddle Flange. Waterproof concrete should be used.
- Puddle Flanges are, in some cases, supplied with the inside diameter of the seal smaller than the pipe outside diameter and may have to be stretched over the pipe during installation. In some cases it is advised that the clamp band can be removed to aid stretching over the pipe. Pipe Lubricant should be used and can be supplied with your order.
- Puddle Flanges do not provide axial restraint so they should not be used when axial loading on the pipe is present. The pipe has to be fully supported to withstand the concrete pouring process.

# General Information

## Quality, Standards and Approvals

Fernco has been certified by the British Standards Institution (BSI) as a company of assessed capability, with a quality management system which meets the requirements of BS EN ISO 9001:2015

Fernco UK, part of a global group of companies, are the leaders in wastewater connection innovation; utilising the most advanced methods and techniques for precision-manufactured products, all of which comply with or exceed relevant British and European standards to ensure reliability and sustainability.

## Environment

Fernco operate Environmental Management Systems which are certified to ISO 14001: 2015.

## Supply

Fernco are proud members of the Builders Merchants Federation (BMF). All Fernco products are supplied through a national and global network of distribution and merchant partners. For stockist details, contact Fernco.

## Technical Support

Fernco have a team of product experts on hand to support all customers with technical support and advice.

Contact Fernco Technical Department:

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## Enquiries

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