



**Flexseal**<sup>®</sup>  
*A Fernco Company*

# Lateral Connections



# The range in brief...

**Flexseal is the market leader in the development of lateral connections, used for securely connecting a lateral pipe into a larger diameter main pipe. We can now provide a lateral connection for virtually any application.**

- No adhesives, sealant or concrete are required.
- Eliminates need to pre-order a factory made junction.
- Reduces costs, whilst increasing installation options.
- Minimises time exposed to live sewers.
- Installation unaffected by weather conditions.
- Lightweight, easy to handle for quick installation.
- Robust and should not be damaged under normal site conditions.



## FA Saddle

For connection of a DN150 or DN200 lateral pipe into a thick walled sewer pipe.



## PA Saddle

To connect a 160mm OD PVC lateral pipe into a Twinwall or ribbed main pipe up to DN600.



## UA Saddle

To connect a DN150 lateral pipe into a Twinwall, Weholite or Ridgiform sewer or storage pipe over DN750.



## TA Saddle

Used to connect a 110mm, 160mm or 200mm diameter lateral pipe into a smooth walled main pipe.

## FA Saddle



Applies to:  
FA150B  
FA200B

Used to connect a DN150/DN200 lateral pipe into a thick walled sewer pipe.

The range consists of three saddles which are suitable for use with all pipe materials: FA150B, FA200B and the FA150ST.

### Performance

- Accepts a deflection on the lateral of 15 degrees.
- Withstands a vertical load of 2 tonnes
- No need to excavate around the pipe and disturb the pipe bedding.
- Withstands 1 bar internal pressure.
- WRc Approved - PT/243/0405 (FA150B) and PT/244/0405 (FA200B)

### Which FA Saddle do I need?

	FA150B	FA200B	FA150ST
Internal Diameter of Main Pipe	375-1500mm	450-1500mm	250-300mm
Wall Thickness of Main Pipe	50-150mm	50-150mm	22-51mm
Lateral Pipe Diameter	DN150	DN200	DN150



Scan here for a demo movie 

## FA Saddle Range

### FA150B

To connect a DN150 lateral pipe into a large diameter DN450-1500\* thick walled sewer or surface water pipe.

Suitable for concrete, vitrified clay, asbestos cement or fibre cement.

Cored hole: 172mm

\*Minimum Wall Thickness of Main Pipe 50mm



Lateral Pipe Material	Pipe OD	Bush Required
DN150 Quantum, Cast Iron (SMU, SML, Ensign), 160mm PVC	160-166mm	BC12/166
DN150 Ductile Iron, Ultra-Rib. Cast Iron (Drain)	170-177mm	BC06/178
DN150 Clay, Supersleve, Twinwall	178-190mm	No Bush

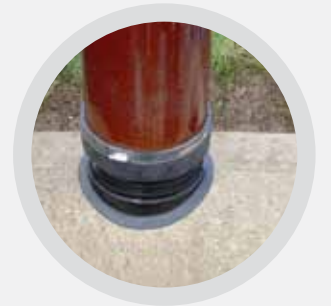
### FA200B

To connect a DN200mm lateral pipe into a large diameter DN450-1500\* thick walled sewer or surface water pipe.

Suitable for concrete, vitrified clay, asbestos cement or fibre cement.

Cored hole: 232mm

\*Minimum Wall Thickness of Main Pipe 50mm



Lateral Pipe Material	Pipe OD	Bush Required
200mm PVC	200-208mm	BC21/205
DN200 Cast Iron (SMU, SML, Ensign)	210-220mm	BC08/232
DN200 Vitrified Clay, Ridgidrain, Ductile Iron, DN225 quantum, Ultra-Rib	222-250mm	No Bush

### FA150ST

To connect a DN150 lateral pipe into a DN250 or DN300 thick walled solid pipe.

Suitable for concrete, vitrified clay, asbestos cement or fibre cement.

Cored hole: 172mm



Lateral Pipe Material	Pipe OD	Bush Required
DN150 Quantum, Cast Iron (SMU, SML, Ensign), 160mm PVC	160-166mm	BC12/190
DN150 Ductile Iron, Ultra-Rib. Cast Iron (Drain)	170-173mm	BC08/170
DN150 Clay, Supersleve, Twinwall	178-190mm	No Bush

For the correct selection to be made, please ensure you inform your supplier of the OD and type of lateral pipe being used.

# PA Saddle



To connect a 160mm OD PVC lateral pipe into a twin wall or ribbed main pipe up to DN600.

There are five models available in this range - PA1530, PA1530UR, PA1540, PA1550 and PA1560. Each saddle is suitable for connection into a pipe of a different internal diameter.

## Performance

- Will withstand 0.5 bar internal pressure.
- No need to excavate around the pipe and disturb the pipe bedding.
- WRc Approved - document PT/290/1009.
- Materials are unaffected by normal ground conditions.



## Usage Details

	PA1530	PA1530UR	PA1540	PA1550	PA1560
<b>Internal Diameter of Sewer Pipe</b>	300mm	300mm	400mm	500mm	600mm
<b>Wall Thickness of Sewer Pipe</b>	Various	Various	Various	Various	Various
<b>Lateral Pipe Type</b>	160mm PVC	160mm PVC	160mm PVC	160mm PVC	160mm PVC
<b>Internal Diameter Of Lateral</b>	150mm	150mm	150mm	150mm	150mm
<b>Drilled Hole Size</b>	177mm	177mm	177mm	177mm	177mm

## Applications

This saddle range will cover sewer pipes from DN300 up to and including DN600. The PA1530UR is designed for DN300 Ultra-Rib pipe. The saddles are generally suitable for the standard range of pipe wall thicknesses used by various pipe manufacturers.

For these saddles to function correctly the model chosen has to follow the pipe contour as closely as possible. Variations in wall thickness and pipe diameter can affect this.

### **For the correct selection to be made the following information is required about the main pipe:**

- Either the pipe brand / manufacturer and nominal diameter.
- Or two of the following three dimensions: wall thickness, inside diameter, outside diameter

# UA Saddle



To connect a DN150 lateral pipe into a Twinwall, Weholite or Ridgiform sewer or storage pipe over DN750.

The UA Saddle can be used with all lateral pipe materials, only in conjunction with a Flexseal coupling. *(Please remember to order a suitable coupling to connect the lateral pipe.)*

## Performance

- No need to excavate around the pipe and disturb the pipe bedding.
- Will withstand 0.5 bar internal pressure.
- Withstands a vertical load of 1 tonne.
- WRc Approved - document PT/266/0707.
- Materials are unaffected by normal ground conditions.



## Usage Details

	UA Saddle
Internal Diameter of Main Pipe	750-3000mm
Wall Thickness of Main Pipe	40-120mm
Drilled Hole Size	177mm

## Applications

This product is suitable for wall thicknesses between 40mm and 120mm. The product is assembled to suit the application.

For these saddles to function correctly the model chosen has to follow the pipe contour as closely as possible. Variations in wall thickness and pipe diameter can affect this.

### **For the correct selection to be made the following information is required.**

- Either the pipe brand / manufacturer and nominal diameter.
- Or two of the following three dimensions: wall thickness, inside diameter, outside diameter

Remember to order a suitable coupling to connect the lateral pipe.

# TA Saddle

Used to connect a lateral pipe into a smooth walled main pipe.

Connect a 110mm, 160mm or 200mm OD lateral pipe into a large diameter smooth wall pipe, including concrete, vitrified clay, asbestos cement, fibre cement and PVC.



## Performance

- Available for both 45° and 90° lateral connections.
- Will withstand 0.5 bar internal pressure.
- Can be applied to pipes of any wall thickness.
- Seal made on the pipe surface, and secured with straps which pass around the outside of the main pipe.

## Usage Details

	TA11090	TA11045	TA16090	TA16045	TA20045
<b>Internal Diameter of Main Pipe</b>	160-400mm	160-400mm	200-400mm	200-400mm	300-600mm
<b>Lateral Pipe</b>	110mm PVC	110mm PVC	160mm PVC	160mm PVC	200mm PVC
<b>Hole Size Into Clay / Concrete Pipe</b>	127mm Core Bit	See Note	172/178mm Core Bit	See Note	
<b>Hole Size Into PVC Pipe</b>	127mm Hole Saw	See Note	177mm Hole Saw	See Note	

**Note:** If a 45° entry into PVC is required, the rubber gasket can be used as a template and the hole cut with a suitable saw. If a 45° entry into clay or concrete is required, a suitable drilling rig should be used.



# Tools

A range of Flexseal Lateral Connection installation tools and drilling equipment is available.



## 8mm Nut Driver

Used for installation of the TA Saddle, and supplied when purchasing the product.



## T-handled Allen key

Used for installation of the PA and UA saddles, and supplied when purchasing the product.



## 8mm Ratchet Spanner

An alternative for use installing the TA Saddle.



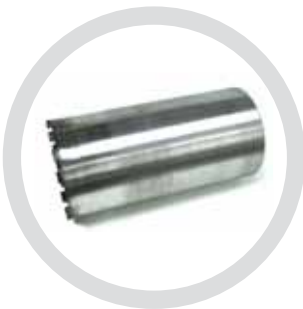
## 127mm Hole Saw kit

For installation of the TA 11090. Contains a hole saw, drill bit & de burring tool.



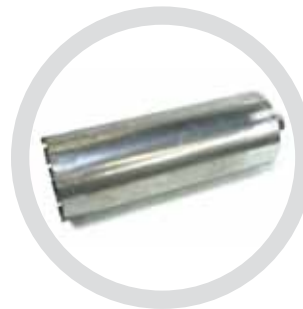
## 177mm Hole Saw kit

For installation of the TA16090. Contains a hole saw, drill bit & de burring tool.



## 232mm Diamond Tipped Core Bit.

Available to buy or hire, for the installation of the FA200B.



## 172mm Diamond Tipped Core Bit.

Available to buy or hire, for the installation of the FA150B, the FA150ST and the TA16090 into a clay/concrete pipe.

# Flexseal Ranges...

## Flexible Couplings



Flexseal manufacture the largest range of flexible drainage couplings in the marketplace, supplying UK and International markets. Standard, Extra Wide, Adaptor, Drain plus other drainage coupling ranges are available up to 3m in diameter.

## Channel Drainage



Flexseal supply a comprehensive range of domestic and commercial channel drainage systems and accessories. A drainage channel system for any application.

## Lateral Connections



Flexseal's range of saddle connections and ancillaries guarantee a secure connection between a lateral pipe and a larger diameter main pipe.

## Plumbing Range



Flexseal manufacture a range of pipe / plumbing couplings in PVC and high performance EPDM plus accessories for replacing and repairing plumbing systems with ease and efficiency.

## Pipe Seals



The Flexseal Pipe Seal range of products ensures a waterproof seal when a pipe passes through the wall of a tank, pipe or other underground structure. All products will guarantee a secure connection, every time.

## Pipe Doctor



The WRC Approved no-dig patch repair kit from Source One Environmental provides a quick and easy solution to repairing damaged drain and sewer systems, without the need for excavation.

Proud to be a



**Drainage Couplings • Plumbing Couplings • Lateral Connections • Pipe Seals • Channel Drainage**

Please contact us if you'd like more information:

Endeavour Works, Newlands Way, Valley Park, Wombwell, Barnsley, S73 0UW England

T: +44 (0)1226 340 888 F: +44 (0)1226 340 999 E: sales@flexseal.co.uk W: www.flexseal.co.uk

 @flexsealuk  /flexseal  /flexsealcouplings  /flexsealcouplings

Issue #1 2013