

C-TECH RUBBER PIPE PRODUCTS



PUSH-IN MANHOLE SEALS

C-TECH RUBBER P/L

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PUSH-IN MANHOLE SEALS

Application:

For the connection of pipes to cored or cast in hole to a Manhole or Headwall

Specification:

Material meets AS 1646, ASTM C443

1. *C-Tech Rubber's Push-In Manhole Seal Benefits:*

- *C-Tech Rubber's Push-In Seal* is for the connection of pipes that are produced from various materials (such as PVC, PE, cast iron, fibre-reinforced cement, concrete) to manhole base units or concrete and steel-reinforced concrete pipes.
- *C-Tech Rubber's Push-In Manhole Seal* is used for various connecting pipes. The tolerance of the gap for the push-in seal profile to take account of is $\pm 1.7\text{mm}$.
- *C-Tech Rubber's Push-In Manhole Seal* complies with the following standards:

DIN4060	Pipe joint assemblies with elastomeric seals for use in drains and sewers.
AS1645	Elastomeric seals for waterworks purposes.
ASTM C443	Standard specification for joints for concrete pipe and manholes using rubber gaskets.
- *C-Tech Rubber's Push-In Manhole Seal* is a compression slip ring seal. The seal is pushed into the cored hole and fixed in place by the shoulder section on the seal. The seal is compressed slightly when fitted, giving it a "pre-load" against the cored hole.
- *C-Tech Rubber's Push-In Manhole Seal* is a resilient, high quality seal, able to stand high shear forces.
- *C-Tech Rubber's Push-In Manhole Seal* will centre pipes due to its unique design.
- *C-Tech Rubber's Push-In Manhole Seal* permits water-tight connection of pipes to concrete components through a cored hole in a dependable, flexible and cost-effective manner.

2. **Material:**

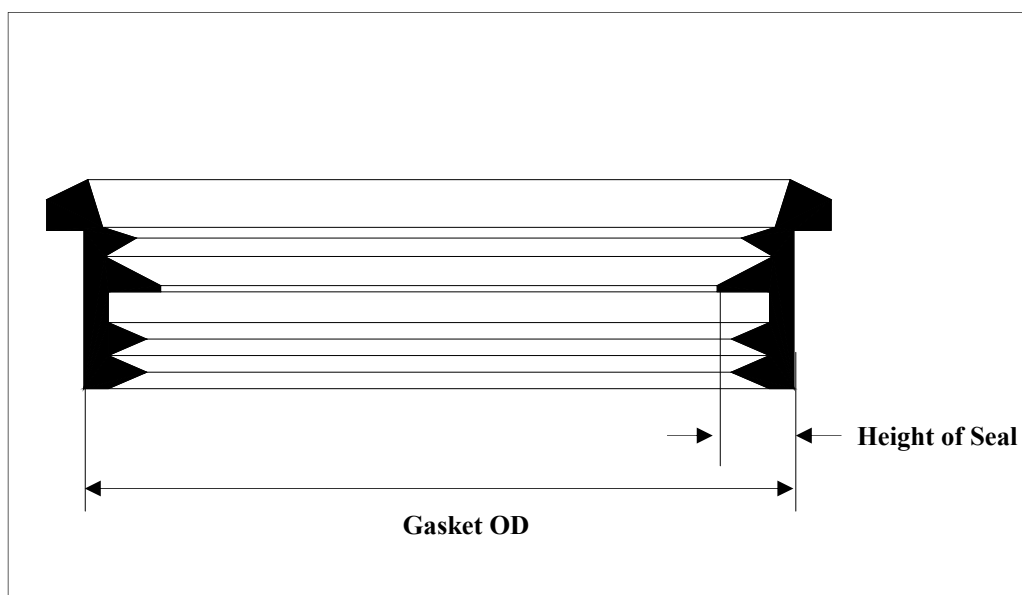
C-Tech Rubber's Push-In Manhole Seal is normally manufactured from "natural rubber to AS1646", as this material is suitable for the usual stresses in a sewerage application. If sewerage contains light fuels (such as oils, petrol and fuels), then it is recommended that *C-Tech Rubber's Push-In Manhole Seal* be made from nitrile rubber (NBR) due to its ability to withstand these light fuels.



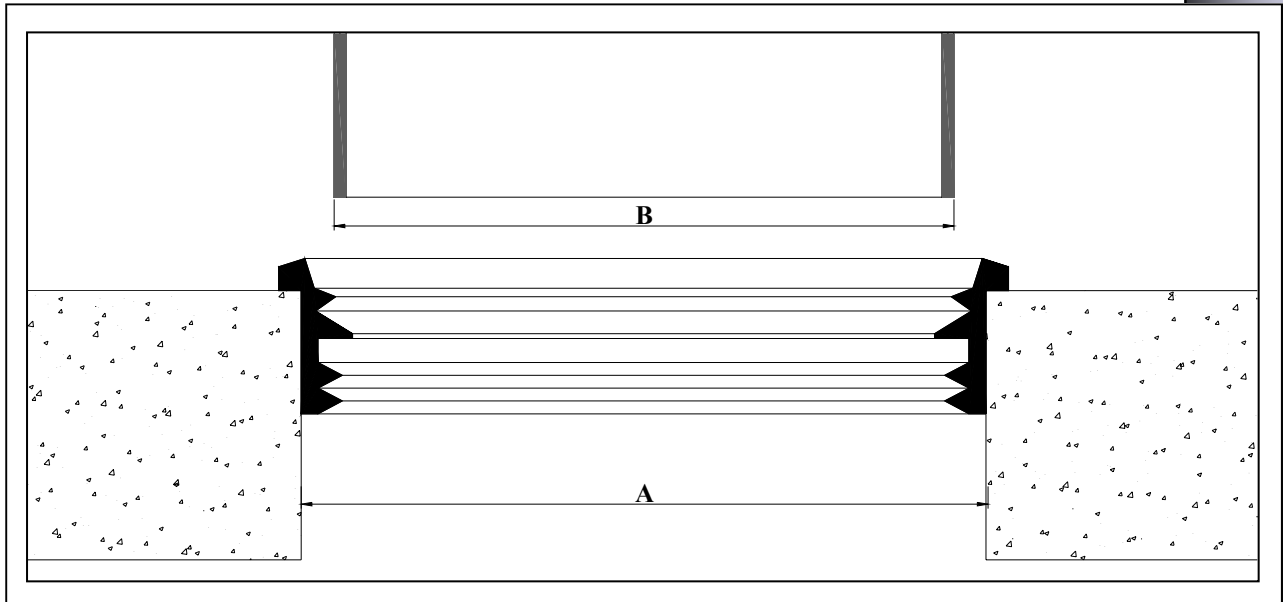
3. Dimensioning the sealing ring and cored hole:

The pipe sizes, height of seal, hole diameter and OD for *C-Tech Rubber's Push-In Manhole Seal* are as follows:

<u>Pipe Size (mm)</u>	<u>Height of Seal (mm)</u>	<u>OD Gasket (mm)</u>	<u>Cored / Hole Diameter (mm)</u>	<u>Size Stamped</u>
110	20	142	138	110/138/20
125	20	154	150	125/150/20
160	20	192	186	160/186/20
160	26	202	195	160/195/26
200	20	233	225	200/225/20
200	32	255	246	200/246/32
250	20	287	273	250/273/20
315	26	365	350	315/350/26
315	20	351	343	315/343/20
400	26	458	438	400/438/26
500	20	544	525	500/525/20
630	26	690	671	630/671/26



General Assembly of Sealing Ring



[A = Gasket OD]
[B = Pipe]

4. Installation:

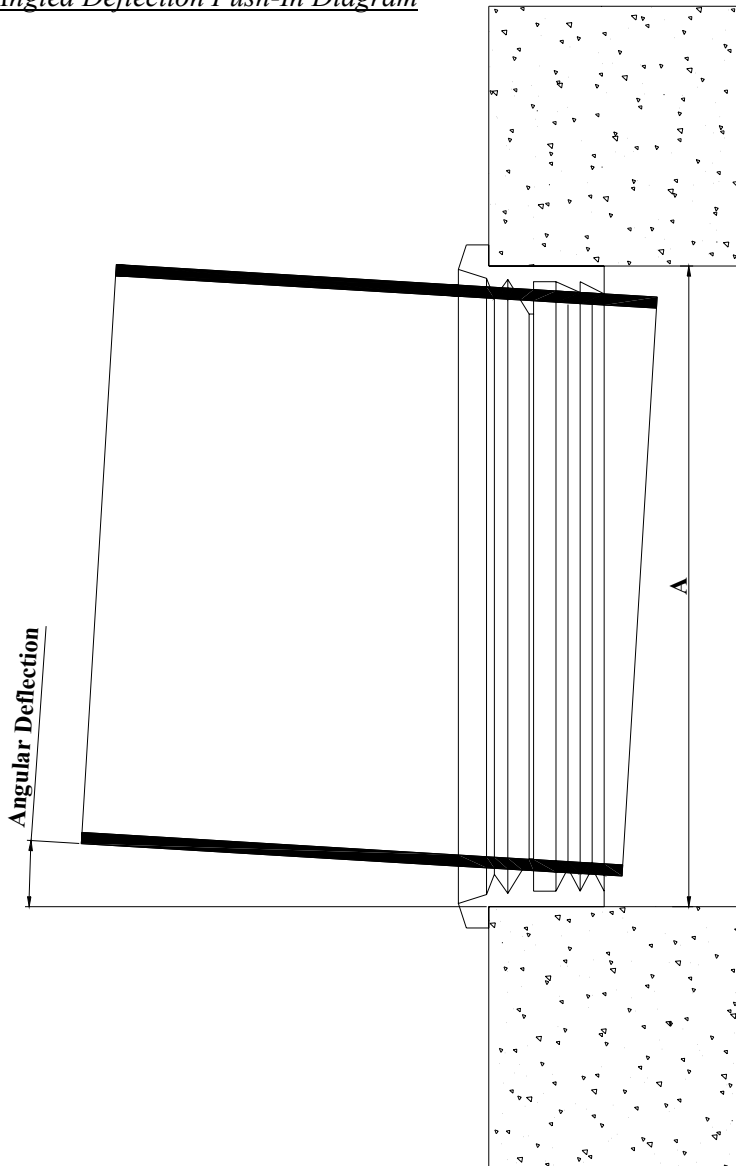
- Clean the cored hole.
- Press *C-Tech Rubber's Push-In Manhole Seal* into the existing cored hole all the way to the shoulder (do not use lubricant at this particular stage of the installation).
- Bevel end of connecting pipe.
- Apply Lubricant to end of pipe and seal.
- Centre pipe and push in.



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PUSH-IN MANHOLE SEALS

Angled Deflection Push-In Diagram



[A = Cored Hole]

Maximum Angular Deflection for
Various Wall Thicknesses

4" Push-In Seal	
<u>Wall Thickness</u>	<u>Maximum Degrees Deflection</u>
50	15
100	10
150	6
200	4.5
250	4
300	3.5
6" Push-In Seal	
<u>Wall Thickness</u>	<u>Maximum Degrees Deflection</u>
50	10
100	7.5
150	5.5
200	4
250	3.5
300	3