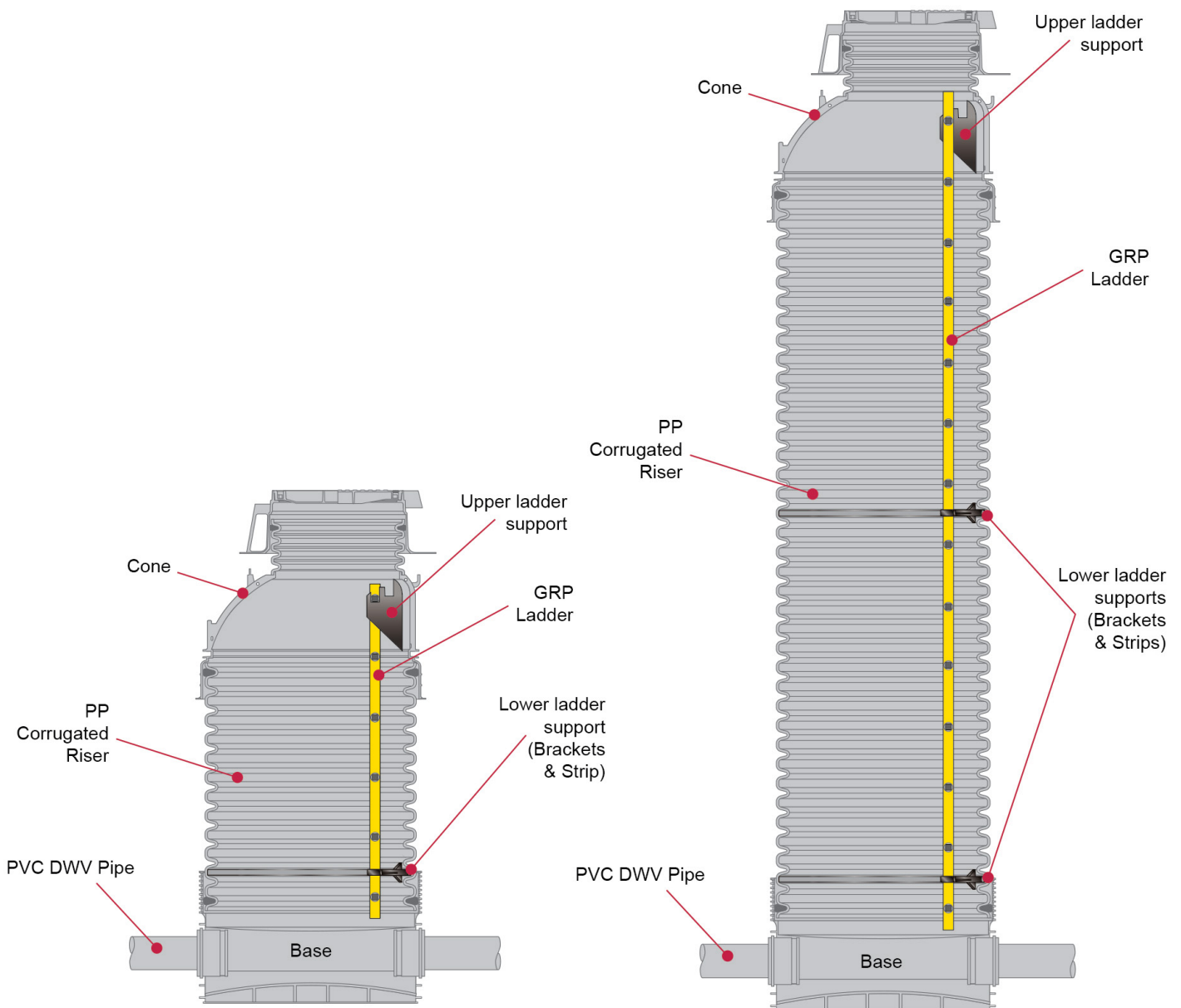


## 5.7 EZIPIT® 1000 NG MH LADDER INSTALLATION

The EZIpit® 1000 MH GRP Ladder is a fixed ladder designed for use with the EZIpit® 1000 MH Cone and corrugated riser.

The purpose of the ladder is for safe access to and exit from the EZIpit® 1000 maintenance hole. The ladder must only be used for its intended purpose.

Before removing the ladder from its packaging, ensure the ladder is the correct length for the Riser. The length of the ladder is clearly marked on the packaging. Table 10 provides details of the ladder lengths vs. installation depth and riser lengths.



**Figure 62: EZIpit® 1000 MH ladder with one lower ladder support.**  
(Maximum installation depth 3.671m)

**Figure 63: EZIpit® 1000 MH ladder with two lower ladder supports.**  
(Maximum installation depth 5.871m)

**Note:** all images are of a general nature only and not to scale. If critical, contact Iplex Pipelines.

- Remove the EZIpit® 1000 GRP Ladder and components from the plastic packaging (bag)
- Check all the components are accounted. Strip(s), PP Brackets, GRP Ladder and installation instructions<sup>1</sup>
- Keep the installation instructions in a safe place for reference
- Check the components for any damage, contamination or missing parts<sup>1</sup>
- Check the Riser for any damage. Surfaces should be free of any contamination. Particularly inside the valleys of the corrugations
- Check the Cone for any damage, particularly the upper ladder supports inside the cone.

**Note: UNDER NO CIRCUMSTANCES should any component be modified. Any damaged or modified components must not be used and should be rejected. If any components are missing contact Iplex for replacement. Do not use any foreign components as a substitute for the missing parts.**

**TABLE 10: EZIPIT® 1000 NG MH LADDER MEASUREMENTS**

Number of rungs	6	10	14	18
Ladder length (F) (mm)	1630	2830	4030	5230
Installation depth (D) (mm)	Up to 2471	2472-3671	3672-4871	4872-5871
Riser length (L) (mm)	Up to 1400	1401-2600	2601-3800	3801-4800
Strip (No)	1	1	2	2
Brackets (2 per pack)	1 Pack	1 Pack	2 Packs	2 Packs

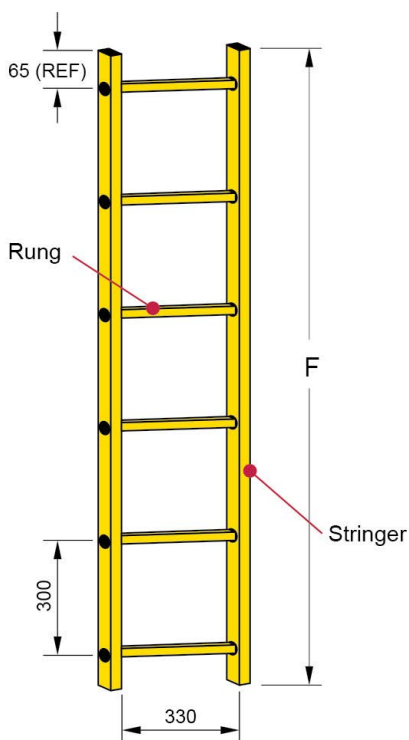


Figure 64 : EZIpit® 1000 GRP Ladder

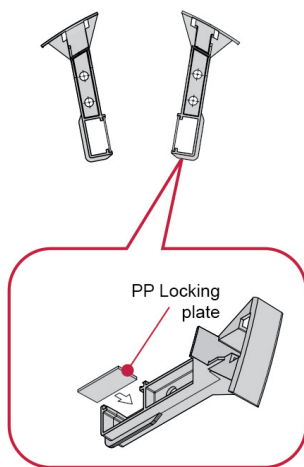


Figure 65: EZIpit® 1000 GRP Brackets

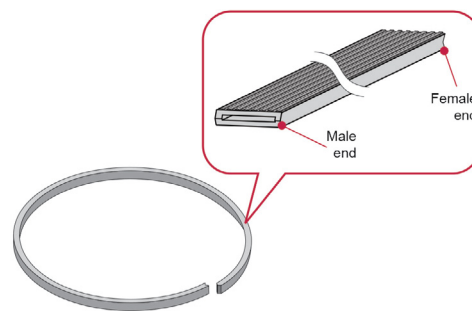


Figure 66: EZIpit® 1000 Strip

<sup>1</sup>If any components are missing, do not install the ladder. Contact Iplex.  
(Do not use any foreign components as a substitute for missing components)

**Note:** all images are of a general nature only and not to scale. If critical, contact Iplex Pipelines.

TABLE 11: LADDER ASSEMBLY IN EZIPIT® 1000 MAINTENANCE HOLE (MH)

Minimum Depth of Installation 'D' (mm)			Length of Riser 'L' (mm)	Number of ladder rungs	Length of ladder 'F' (mm)	Number of lower ladder supports	Position of lowest ladder support in bottom groove
DN150 Base	DN225 or DN300 Base	DN375 Base					
1			2	3	4	5	6
1566	1677	1893	400	3	730	1	3
1666	1777	1993	500	3	730	1	4
1766	1877	2093	600	4	1030	1	2
1866	1977	2193	700	4	1030	1	3
1966	2077	2293	800	4	1030	1	4
2066	2177	2393	900	5	1330	1	2
2166	2277	2493	1000	5	1330	1	3
2266	2377	2593	1100	5	1330	1	4
2366	2477	2693	1200	6	1630	1	2
2466	2577	2793	1300	6	1630	1	3
2566	2677	2893	1400	6	1630	1	4
2666	2777	2993	1500	7	1930	1	2
2766	2877	3093	1600	7	1930	1	3
2866	2977	3193	1700	7	1930	1	4
2966	3077	3293	1800	8	2230	1	2
3066	3177	3393	1900	8	2230	1	3
3166	3277	3493	2000	8	2230	1	4
3266	3377	3593	2100	9	2530	1	2
3366	3477	3693	2200	9	2530	1	3
3466	3577	3793	2300	9	2530	1	4
3566	3677	3893	2400	10	2830	1	2
3666	3777	3993	2500	10	2830	1	3
3766	3877	4093	2600	10	2830	1	4
3866	3977	4193	2700	11	3130	2	2
3966	4077	4293	2800	11	3130	2	3
4066	4177	4393	2900	11	3130	2	4
4166	4277	4493	3000	12	3430	2	2
4266	4377	4593	3100	12	3430	2	3
4366	4477	4693	3200	12	3430	2	4
4466	4577	4793	3300	13	3730	2	2
4566	4677	4893	3400	13	3730	2	3
4666	4777	4993	3500	13	3730	2	4
4766	4877	5093	3600	14	4030	2	2

Minimum Depth of Installation 'D' (mm)			Length of Riser 'L' (mm)	Number of ladder rungs	Length of ladder 'F' (mm)	Number of lower ladder supports	Position of lowest ladder support in bottom groove
DN150 Base	DN225 DN300 Base	DN375 Base					
1			2	3	4	5	6
4866	4977	5193	3700	14	4030	2	3
4966	5077	5293	3800	14	4030	2	4
5066	5177	5393	3900	15	4330	2	2
5166	5277	5493	4000	15	4330	2	3
5266	5377	5593	4100	15	4330	2	4
5366	5477	5693	4200	16	4630	2	2
5466	5577	5793	4300	16	4630	2	3
5566	5677	5893	4400	16	4630	2	4
5666	5777	5993	4500	17	4930	2	2
5766	5877	6093	4600	17	4930	2	3
5866	5977	6193	4700	17	4930	2	4
5966	6077	6293	4800	18	5230	2	2

**Note:** Highlighted cells indicate the EZIpit®1000 MH might exceed maximum allowable depth (6m) after height adjustment with the cover.

Red numbers indicate that the EZIpit®1000 MH will exceed maximum allowable depth (6m) after height adjustment with the cover.

Minimum depth 'D' is calculated without drops.

All dimensions are approximate only. If critical, contact Iplex Pipelines.

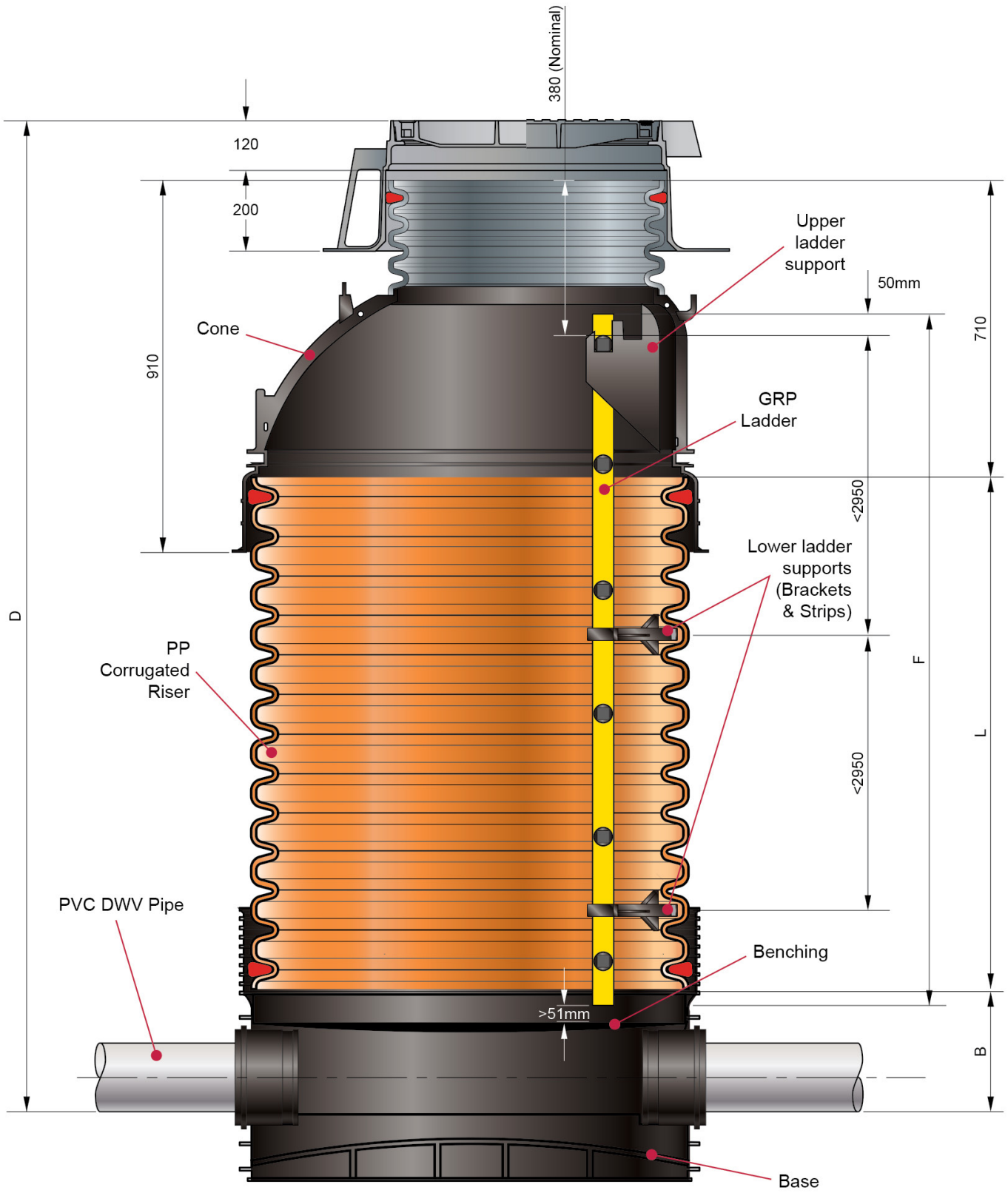


Figure 67: EZIpit® 1000 MH with ladder and critical dimensions

## LADDER INSTALLATION

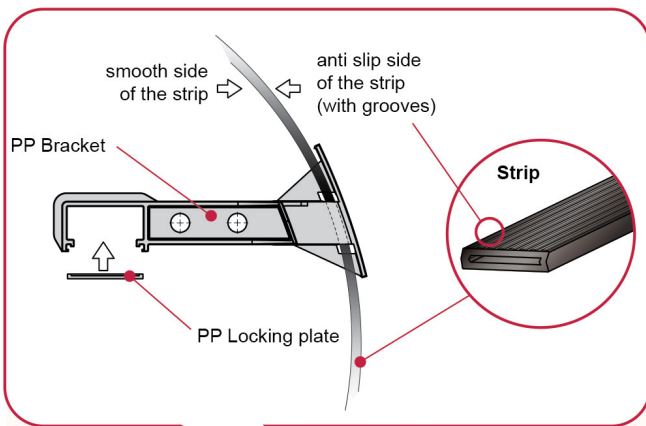
Wear approved Personal Protective Equipment.

Read the 'Ladder assembly' instructions prior to installing the ladder. This will reduce costly mistakes and wastage and lead to a more efficient installation.

Before installing the Riser to the Base and Cone, it is recommended the lower ladder support(s) (strips and brackets) are pre-installed in the Riser.

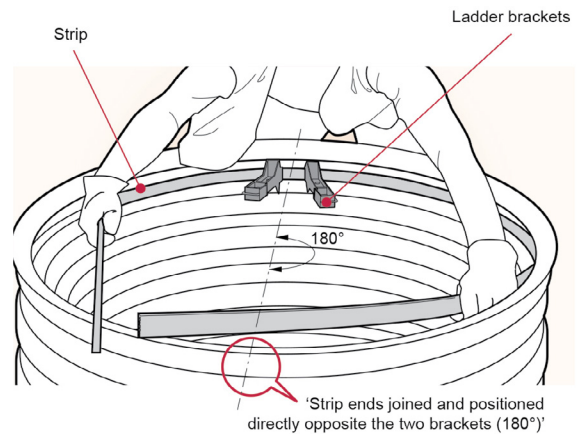
### PROCEDURE

- 01** Assemble the two Brackets on the ladder Strip. Ensure the Brackets are correctly oriented.



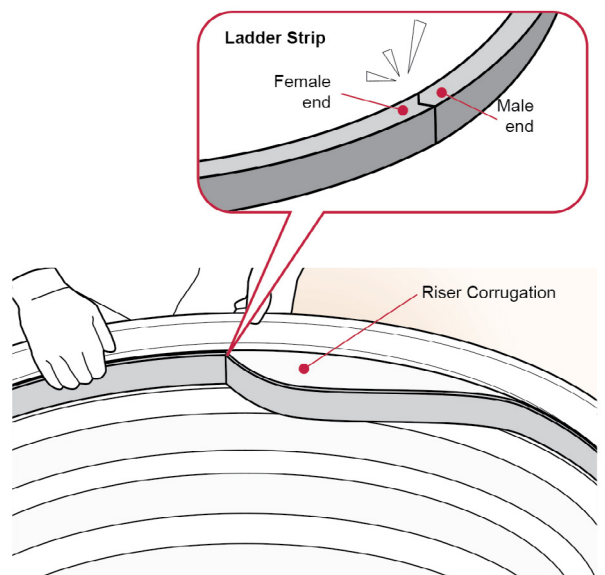
- 02** Position the assembled lower ladder support (assembled strip and brackets) in the groove of the Riser. Refer to Table 11 Column 6 for correct location of the lower ladder support. **Ensure the joint on the Strip is positioned directly opposite the ladder. I.e. at 180° to the ladder**

**Note: for deep installations ('D' > 3.971m) a second 'lower ladder support' should be installed in the Riser. The maximum distance between each support is 2.95m.**



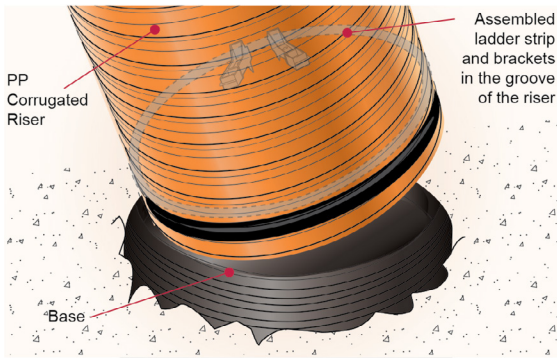
- 03** Bend one leg of the ladder Strip to help locate the two ends of the strip in the riser corrugation. The male and female ends of the strip must engage in the valley of the corrugation. Press down on the bent leg until the strip 'clicks' into position.

**Note: take care to avoid buckling the bent Strip when pressing down and keep fingers clear to avoid injury**



**Note:** all images are of a general nature only and not to scale. If critical, contact Iplex Pipelines.

**04** Assemble the Riser with the base and Cone.

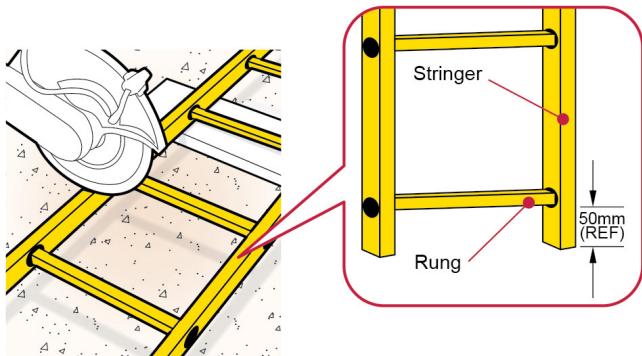


**CUTTING THE LADDER (LENGTH ADJUSTMENT)**

**Safety:** Prior to using the saw, refer to the manufacturers mandatory safety requirements.

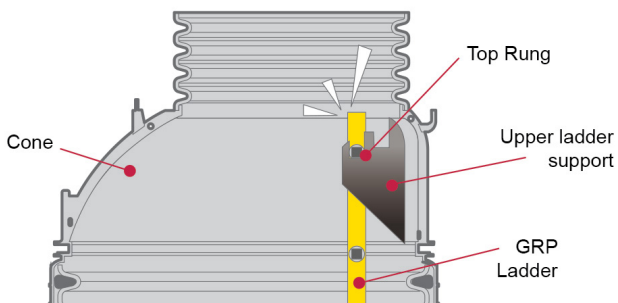
**05** Cut the ladder to the required length 'F'. Allow 50mm (REF) at the top and bottom of each stringer.

**When cutting the ladder, ensure all safety regulations are adhered to at all times.**

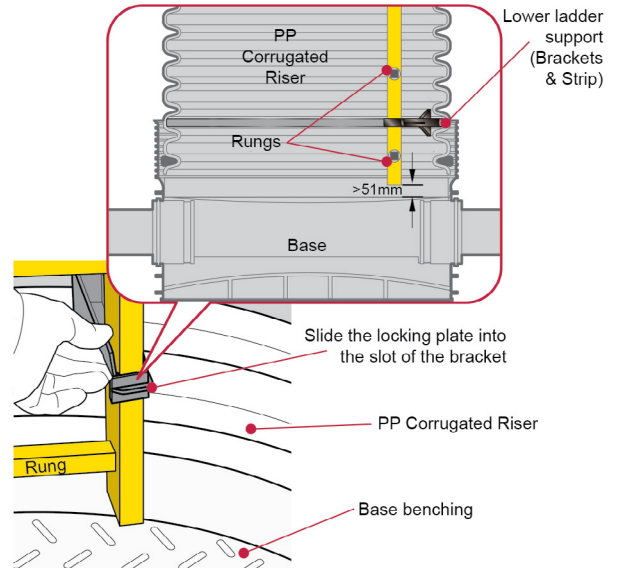


**LADDER INSTALLATION**

**06** Hang the ladder in the maintenance hole by clicking the top rung into the 'Upper ladder support' inside the Cone.



**07** Immediately fix the ladder to the 'lower ladder support' by adjusting the brackets over the ladder stringers. The brackets should be fixed between the lowest and second lowest rungs. Slide the locking plates into the slots of the brackets.



**Notes:**

- To fix the ladder to the brackets, it is necessary to enter the maintenance hole. Exhibit caution when using the ladder, until the lower support brackets have been fixed
- A minimum clearance of 50mm should be allowed between the lower ends of the ladder and the chamber benching
- Ensure any person entering the maintenance hole is trained and competent in confined spaces and all safety precautions are adhered to when entering and exiting the maintenance hole. Maintain 3 points of contact at all times when using the ladder.

**Note:** all images are of a general nature only and not to scale. If critical, contact Iplex Pipelines.