

TEST SUMMARY

Product: VIP 110mm Lateral Connector

Test: Maintain 0.5 bar for a period of 15 mins without leakage

Date: 9th June 2022
Location: VIP-Polymers Ltd
Conducted by: Dominic Taylor

Method: Test 1

Fit the VIP 110mm lateral adaptor into a 300mm Double walled corrugated pipe, seal the ends of the pipe using stoppers. Attach a length of 1000mm, 110mm O.D pipe in to the 110mm lateral connector and seal the end of this outlet using a VIP 110mm end cap.

Preparation:

Hole drilled in 300mm corrugated pipe using 127mm Hole saw drill. This resulted in swarf remnants which were removed using a wire brush and a knife blade. It was important to ensure the hole was drilled in a straight vertical plane as if drilled out of true, the corrugations would prevent the seal from engaging. A continuous drill speed will help prevent the hole saw from snaging.



The seal was then inserted into the 127mm hole and lubricant applied to the internal sealing faces. The 110mm pipe leading edges were chamfered to aid insertion into the seal and the seal was inserted to the required 85mm design depth. The final 10mm was only achievable by using a block of wood on the end of the 110mm plastic pipe with a hammer.

Pipe stoppers were fitted at either end of the pipe and to prevent these from dislodging. A 110mm end cap was also held in place using strapping to prevent it being dislodged during the test.

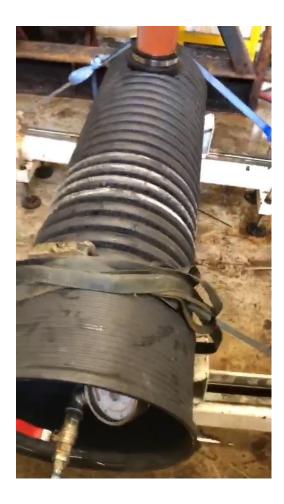
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Test 1:

At 12:35 on 9th June 2022, the unit was pressurised to 0.5 bar and this was maintained until 12:50 with no visible leaks or drop in recorded pressure.

DN300 Twin-wall pipe x 110mm lateral twin-wall adaptor.





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Result: No visible leaks after 15 minutes and no pressure drop on the guage.

Method: Test 2

Fit the VIP 110mm lateral adaptor into a 750mm Double walled corrugated pipe, seal the ends of the pipe using stoppers. Attach a length of 1000mm, 110mm O.D pipe in to the 110mm lateral connector and seal the end of this outlet using a VIP 110mm end cap.

Preparation:

Hole drilled in 750mm corrugated pipe using 127mm Hole saw drill. This resulted in swarf remnants which were removed using a wire brush and a knife blade. It was important to ensure the hole was drilled in a straight vertical plane as if drilled out of true, the corrugations would prevent the seal from engaging. A continuous drill speed will help prevent the hole saw from snaging.

Test 2:

At 13:30 on 9th June 2022, the unit was pressurised to 0.5 bar and this was maintained until 13:30 with no visible leaks or drop in recorded pressure. Pressure test was increased up to 2 bar for a further 15 minutes, with no signs of leakage.



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DN750 Twin-wall pipe x 110mm twin-wall lateral adaptor at 0.5bar.



DN750 Twin-wall pipe x 110mm twin-wall lateral adaptor at 2bar

Result: No visible leaks after 15 minutes and no pressure drop on the guage.

Conclusion:

The 110mm lateral connector seal passed the 0.5bar 15 minute tests, in accordance with EN295 water tightness without any visible drop in pressure or leakage. The outcome of the tests are very much dependent upon correct installation, in particular ensuring the hole is drilled at a straight 90 degree angle, fully de-burred and also that the 110mm outlet pipe is fully inserted (by 85mm) into the seal.

Videos of the above test is available upon request.

Test conducted by: Dominic Taylor (VIP-Polymers Ltd) on 9/6/2022

Test verified by: Jon Crean (VIP-Polymers Ltd) on 9/6/2022

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