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BRITISH BOARD OF AGRÉMENT

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Endorsement of TUV Rheinland Test Report No 60201117-001

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On behalf of the British Board of Agrément

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1 INTRODUCTION

This is an endorsement of TUV Rheinland LGA Products GmbH (accredited laboratory), Test Report No 60201117-001, dated 10 July 2018, commissioned by Geberit International AG for *Hydraulic examination of a special fitting via system comparison*.

The requirements met are as detailed in BS EN 12056-2 : 2000 *Gravity drainage systems inside buildings — Sanitary pipework, layout and calculation*. Though, there is no Standard available for this specific test.

The fittings are part of the Geberit PE Above Ground Drainage System as detailed in British Board of Agrément, Certificate 92/2796.

The special fittings for the SuperTube drainage system are:

- Sovent DN 110, product code 367.614.16.1
- BottomTurn bend DN 110, product code 367.615.16.1
- BackFlip bend DN 110, product code 367.616.16.1.

The test was carried out at Geberit International AG (Jona, Switzerland) experimental tower.

2 TEST

The purpose of the test is to confirm maximum capacity of the special fittings to be 12 l/s. This is done by comparison with two ventilation systems, used as references, as per BS EN 12056-2 : 2000:

System 1: Secondary with angle branch DN150/DN90 – 12.4 l/s
System 2: Main with angle branch DN150 – 9.5 l/s.

The measurement parameter of comparison is the loss of seal water at each level of the 30-metre high (12-floor) test set-up.

The SuperTube drainage system demonstrates similar loss of the seal water to reference system 1, with similar flow rate. Though, meaningfully lower than the loss of seal water to system 2.

Results:

The SuperTube drainage system has a maximum flow capacity of 12.0 l/s, which conforms to the discharge value of $K=0.5$ and to the connecting value of 576 DU.

3 CONCLUSION

As there is no appropriate Standard against which to test the manufacturer's flow rate of 12.0 l/s for the SuperTube drainage system, comparative tests (as detailed above) were used.

For each test, the loss of water seal was determined by the arithmetic mean of five individual flushes each lasting 45 seconds. The tests proved that the SuperTube drainage system exhibited a lower water seal loss, at a flow rate of 12 l/s, than the standard main stack with angle branch DN150 at a flow rate of 9.5 l/s.

It is confirmed that the SuperTube drainage system is acceptable for flow rates up to maximum of 12.0 l/s as specified by the manufacturer, Geberit International AG.