

# PROTOCOL

## ON PRODUCT TYPE TESTING



Czech

Registration No. 1017 – CPR – 05.686.914, Revision No. 2

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC, this protocol is issued for the construction product:

### Domestic Wastewater Treatment Plant

Type range: Marsh Uni Ensign; Marsh Uni Ensign Shallow

Types: 6PE, 10PE, 12PE, 16PE, 20PE, 25PE, 30PE, 35PE, 40PE, 45PE, 50PE

### MARSH INDUSTRIES LIMITED

Units 3-13 Little Addington Business Park, Irthlingborough Road,  
Little Addington, Kettering NN14 4AS United Kingdom  
VAT Ident. No.: GB866868943

Place of production: See above

TÜV SÜD Czech s.r.o. performed the initial testing of the respective product characteristics described in Annex ZA of the standard

### EN 12566-3:2005+A1:2009

The results of the tests are given in the Evaluation Report Reg. No. 05.686.242 from 20 April 2012 and in the Inspection Report No. 06.431.719 from 1 February 2013, which are integral parts of this Protocol on product type testing.

Evaluation of tests:

| Essential characteristics   | Performance |        |                  | Harmonised TS                   |
|---|-------------|--------|------------------|---------------------------------|
| Treatment efficiency on organic daily loading $BOD_5 = 0,49$ kg/day | $BOD_5$     | 97,4 % | 11,5 mg $O_2$ /l | EN 12566-3.2005+A1:2009 Annex B |
|   | $COD_{CR}$  | 91,0 % | 71,5 mg $O_2$ /l |                                 |
|   | SS          | 94,1 % | 19,2 mg/l        |                                 |
|   | $N-NH_4^+$  | 81,0 % | 8,4 mg/l         |                                 |
|   | $P_{Total}$ | 42,0 % | 5,7 mg/l         |                                 |
| Watertightness (water test)   | Passed      |        |                  | EN 12566-3.2005+A1:2009         |
| Structural behaviour (calculation)                                  | Passed      |        |                  | EN 12566-3.2005+A1:2009         |
| Durability  | Passed      |        |                  | EN 12566-3.2005+A1:2009         |

This Protocol was first issued on 3 May 2012 as the Protocol according to CPD.

Prague, 11 July 2013

