



# TEST REPORT



## DETERMINATION OF NET DRY DENSITY

**Client:** Muckish Sand & Gravel  
 Cresslough  
 Letterkenny  
 Donegal

**BHP Ref. No.:** 25/11/0470-0475  
**Order No:** 1016  
**Date Received:** 04/11/2025  
**Date Tested:** 15/11/2025  
**Test Specification:** EN 771-3:2011  
**Material:** Aggregate Concrete Mansory Unit

**F.A.O.:** Bernard McGinley  
**Project:** Carrownamaddy

### Sampling Information

**Block Description:** Solid  
**Manufacture:** Muckish Sand & Gravel  
**Manufacturing Date:** 17/10/2025  
**Manufacture Dimensions:** 440mm X 215mm X 100mm  
**Manufacture Strenght:** 13N

**Client Reference:** Danny Morning 12No: 18x9x4 Chased Blocks  
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### Test Information

**EN 772-11:2011 & EN 772-16: 2011**

| BHP Sample #                          | Dimensions  |             |                | Mass-m (grms) | Gross Dry Density-p (Kg/m <sup>3</sup> ) |
|---------------------------------------|-------------|-------------|----------------|---------------|--|
|                                       | Length (mm) | Height (mm) | Thickness (mm) |               |  |
| 25/11/0470                            | 437.8       | 214.1       | 96.7           | 18500         | 2040                                     |
| 25/11/0471                            | 438.2       | 213.9       | 97.2           | 18880         | 2070                                     |
| 25/11/0472                            | 434.1       | 213.3       | 96.4           | 18440         | 2070                                     |
| 25/11/0473                            | 438.1       | 213.7       | 96.2           | 18310         | 2030                                     |
| 25/11/0474                            | 438.2       | 213.7       | 96.5           | 18660         | 2070                                     |
| 25/11/0475                            | 437.5       | 213.7       | 96.4           | 18410         | 2040                                     |
| <b>Mean Result (N/mm<sup>2</sup>)</b> |             |             |                |               | <b>2050</b>                              |

**Remarks:**

Sampling has been carried out by the customer  
 Dimensions have been recorded using vernier callipers.  
 Mansory units have been conditioned in accordance to clause 7.1.1, prior to the determination of density.  
 Dimensions have been recorded as the mean value of two individual measurements, at the positions detailed in clause 7.1 (a)-Fig. 1a. The thickness measurement recorded equates to the width of an aggregate concrete mansory unit.

**Approved By:**  
 James Purcell  
 Laboratory Technical Manager

**Signature:**

**Issue Date:** 21/11/2025

Tested by BHP Laboratories, New Road, Thomondgate, Limerick. Phone: (061) 455399 Email: jamespurcell@bhp.ie  
 This test report shall not be duplicated in full without the permission of the test laboratory. Information identifying the 'Client', 'FAO', 'Project', 'Location Reference', 'Item', 'Test Specification' and 'Order No' has been provided by the customer. Results apply only to the sample tested and where the laboratory is not responsible for sampling, result apply to the sample as received. Sampling is outside the scope of accreditation.