



# TEST REPORT



## DETERMINATION OF DIMENSIONNS AND MOISTURE MOVEMENT COEFFICIENT OF MANSORY BLOCKS

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

**BHP Ref. No.:** 25/11/0476-0481  
**Order No:** 1016  
**Date Received:** 04/11/2025  
**Date Tested:** 08/12/2025  
**Test Specification:** EN 772-14: 2002  
**Material:** Aggregate Concrete Mansory Unit

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

### Sampling Information

<b>Block Description:</b>	Solid	<b>Client Reference:</b>	Danny Morning 12No: 18x9x4 Chased Blocks
<b>Manufacture:</b>	Muckish Sand & Gravel		Danny Morning 12No: 18x9x4 Chased Blocks
<b>Manufacturing Date:</b>	17/10/2025		Danny Morning 12No: 18x9x4 Chased Blocks
<b>Manufacture Dimensions:</b>	440mm X 215mm X 100mm		Danny Morning 12No: 18x9x4 Chased Blocks
<b>Manufacture Strenght:</b>	13N		Danny Morning 12No: 18x9x4 Chased Blocks
			Danny Morning 12No: 18x9x4 Chased Blocks

### Test Information

**EN 772-14:2002 & EN 772-16: 2011**

BHP Sample #	Dimensions			Initial -10i (mm)	Final - 11i (mm)	Expansion/Shrinkage Coefficient (mm/m)
	Length (mm)	Height (mm)	Thickness (mm)			
25/11/0476	437.4	214.0	96.3	300.0	299.941	0.20
25/11/0477	437.5	214.4	96.6	300.0	300.052	0.17
25/11/0478	437.4	214.2	96.3	300.0	299.938	0.21
25/11/0479	437.7	214.2	96.2	300.0	300.050	0.17
25/11/0480	437.4	214.2	96.4	300.0	300.055	0.18
25/11/0481	437.4	214.3	96.3	300.0	299.940	0.20

The mean moisture movement coefficient of the masonry units is 0.38 mm/m  
 The mean drying shrinkage coefficient of the masonry units is 0.20 mm/m  
 The mean expansion coefficient of the masonry units is 0.17 mm/m

**Remarks:**  
 Sampling has been carried out by the customer  
 Dimensions have been recorded using vernier callipers.  
 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.  
 Masonry units have been conditioned in accordance to clause 6.2 & 7.3, prior to the determination of moisture movement. The gauge length of the specimens was set at 300mm

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

**Signature:**

**Issue Date:** 10/12/2025

Tested by BHP Laboratories, New Road, Thomondgate, Limerick. Phone: (061) 455399 Email: jamespurcell@bhp.ie  
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