



TEST REPORT



DETERMINATION OF DIMENSIONS AND COMPRESSIVE STRENGTH OF BLOCKS

Client: Muckish Sand & Gravel
Cresslough
Letterkenney
Donegal

BHP Ref. No.: 25/11/0470-0475
Order No: 1016
Date Received: 04/11/2025
Date Tested: 20/11/2025
Test Specification: EN 771-3:2011
Material: Aggregate Concrete Masonry 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 Strength: 13N

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

EN 772-1:2011 & EN 772-11:2011 & EN 772-16: 2011

BHP Sample #	Dimensions								
	Length 1 (mm)	Length 2 (mm)	Max Variation in Length	Height 1 (mm)	Height 2 (mm)	Max Variation in Height	Thickness1 (mm)	Thickness2 (mm)	Max Variation in Thickness
25/11/0470	437.6	437.9	0.3	213.9	214.3	0.4	96.6	96.8	0.2
25/11/0471	438.1	438.3	0.2	213.9	213.8	0.1	97.1	97.3	0.2
25/11/0472	438.0	438.1	0.1	213.1	213.5	0.4	96.3	96.5	0.2
25/11/0473	438.2	437.9	0.3	213.7	213.6	0.1	96.1	96.2	0.1
25/11/0474	438.1	438.3	0.2	213.8	213.6	0.2	96.2	96.7	0.5
25/11/0475	437.3	437.6	0.3	213.8	213.5	0.3	96.3	96.5	0.2

BHP Sample #	Failure Load (N)	Crushing Strength (N/mm ²)	Normalised Compressive Strength (N/mm ²)
25/11/0470	577200	16.4	24.3
25/11/0471	608300	17.1	25.4
25/11/0472	601600	17.1	25.3
25/11/0473	616200	17.6	26.0
25/11/0474	598800	17.0	25.2
25/11/0475	589800	16.8	24.8

Mean Result (N/mm²)

25.2

Coefficient of Variation (%)

2.31

Remarks:

Sampling has been carried out by the customer
Dimensions have been recorded using vernier callipers.
Masonry units have been conditioned in accordance to clause 7.3.5 (immersion), prior to the determination of crushing strength.
Surface preparation has been carried out in accordance with clause 7.2.5 (cement/sand capping), prior to testing.
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 masonry unit.
The Normalised Compressive Strength refers to the compressive strength values adjusted by the shape factor.

Approved By:

James Purcell

Signature:

Issue Date:

04/02/2026

Laboratory Technical Manager

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

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