

# CSG Sand Lab Dry Screened Test: (a) Grading

**Supplier :** Cardigan Sand & Gravel Co. Ltd.  
Cnwc-y-Saeson Production Plant  
Penparc, Cardigan, Ceredigion SA43 1RB

**Material Description:** 0/4 Brown Lime Mortar Sand for General Building works using Natural Hydraulic Lime NHL5 (BLM Brown)

**Material Tested:** 0/4 Plastering and Rendering Mortar Sand MP Cat 1  
**Fines Content:** Category 1  
**BSI Published Document:** PD 6682-3 : 2003 Tb1 B1  
**European Standard:** BS EN 13139 : 2013(E)

**Tel. No. :** (01239) 612342 / 612560  
**Fax. No. :** (01239) 615238  
**E-Mail :** quarry@cardigansand.co.uk  
**Web :** www.cardigansand.co.uk

**Material Source:** TGG ESG NHL5 0/4

**Aggregate Type:** Glacial  
**Sampling Point:** Cnwc-y-Saeson  
**Age:** Pleistocene

**Grid Ref.:** SN 200E 485N

**Sampled by:** DGK

The results of the sieve analysis are as shown on those of the following sieves which have the retained weight recorded against them

Sieve Size (mm)	Weight Retained (g)	% Retained	% Passing	Target Grading	Tolerance
14.000		0.0	100.0	100.0	
10.000	0.0	0.0	100.0	100.0	
8.000		0.0	100.0	100.0	100/100
6.300	0.0	0.0	100.0	100.0	98/100
5.000		0.0	100.0	98.0	
4.000	11.6	7.0	93.0	96.0	89/99
3.350 *	0.0	0.0	93.0	92.0	
2.360	11.6	7.0	86.0	90.0	
2.000	8.5	5.1	80.9	86.0	
1.180	11.8	7.1	73.8	76.0	
1.000	3.6	2.2	71.6	71.0	± 20 45/85
0.600	12.9	7.8	63.8	50.0	
0.500	9.4	5.7	58.2	45.0	MP 30/70
0.425					
0.300	48.6	29.3	28.9	20.0	
0.250	10.3	6.2	22.7	15.0	± 20 10/50
0.212	12.6	7.6	15.1		
0.150	16.7	10.1	5.0	5.0	
0.125	2.8	1.7	3.3	3.0	0/3
0.075	4.7	2.8	0.5	0.0	
0.063	0.4	0.2	0.2	0.0	0/3
0.000	0.4	0.2	0.0	0.0	
Total	165.9	100.0			

## For your information

Cardigan Sand & Gravel Co. quarries a deposit that was laid down by an ancient lake fed by rivers flowing off the tip of the Teifi glacier. Our sands and aggregates are the result of disintegration of rock during transportation by the glacier. Our products, therefore, contain negligible amounts of shell and salt.

Our extracted materials pass through a rigorous system of scrubbers, screens, over-spill weirs, cyclones (prewash and dewatering) and classifiers. This allows us to carefully select particle sizes for optimum performance and also removes organic materials, clay, silt and mineral salts from the product.

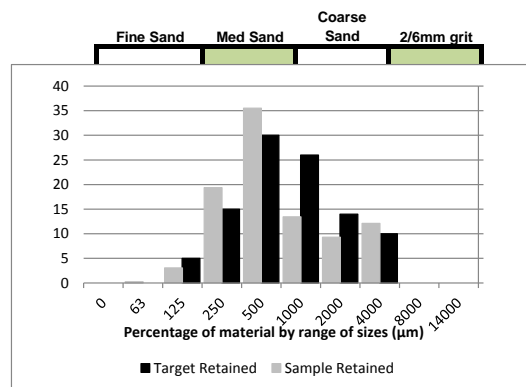
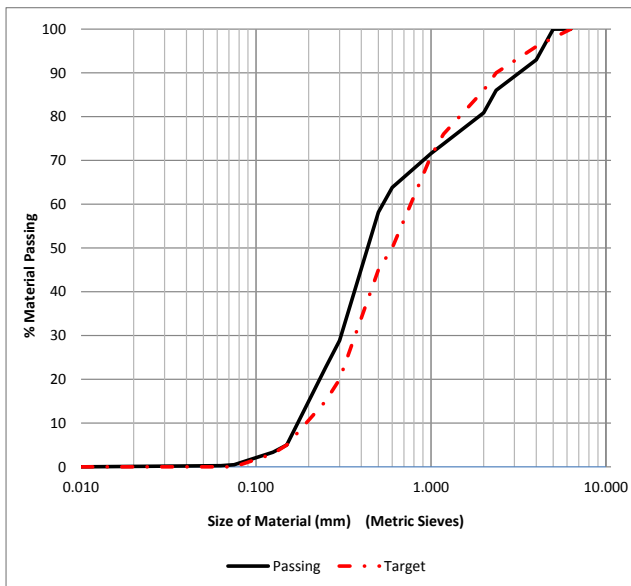
NHL5 is the name we give to our Sand for General Building using Natural Hydraulic Lime.

The maximum particle size should be approximately one third of the height of the smallest joint. Depending on the size of the joint, sand from 6.3mm down to 0.063mm can be used with the proportion passing 250 microns comprising about 15% and no more than 3% passing the 125 micron sieve, and 0% passing the 63 micron sieve.

Adapted from St Astier Natural Hydraulic Lime "Practical Guide to choosing Sands". E. & O.E.

\* - Interpolated

Material microns	Clay		Silt		Sand		
	0-2		Fine 2-6	Coarse 6-20 20-60	Fine 60-200	Med Sand 200-600	Coarse Sand 600-2000



NOTE:- The % material larger than 0.063mm but smaller than 0.125mm is recorded between the 0.063 and 0.125 grid lines, etc.  
 5 Grey columns exceeding 10% = very well graded  
 4 Grey columns exceeding 10% = well graded  
 3 Grey columns exceeding 10% = less well graded  
 2 Grey columns exceeding 10% = poorly graded  
 1 Grey column exceeding 10% = monogranular.

This information is a guide only and does not constitute a specification. There are a vast number of sands differing in grading and qualities. To be sure that a well graded sand is being used it is necessary that at least four grades form a substantial part of over 10% of the proposed sand. This sand has 4 grey columns in the size range above 10% indicating a well graded sand.

Ref: Dry Screening Test Result - 0-4 BROWN BLM NHL5 TGG