

### Port Talbot - September 2022

Combinations of Regen GGBS supplied from Hanson Cement in combination with the CEM I Portland Cements and CEM II Portland Limestone Cements (PLC) listed below conform with the requirements of BS 8500-2:2015 over the indicated range of proportions. The compressive strength results are for tests carried out in accordance with BS EN 197-1 with 50% Regen GGBS in combination with the indicated CEM I Portland Cement and 20% Regen GGBS in combination with the indicated CEM II Portland Limestone Cements (PLC)

Portland Cement Source	Compressive Strength N/mm <sup>2</sup>		Regen GGBS Percentage Range					
			42.5L		32.5L		22.5	
	7 day	28 day	Min	Max	Min	Max	Min	Max
LAGAN	30.3	53.9	6	71	55	80	78	80
ABERTHAW	34.5	56.9	20	68	54	80	77	80
METAPORQUERA PLC	42.6	56.7	1	30	n/a	n/a	n/a	n/a
ABERTHAW PLC	42.0	57.0	1	30	n/a	n/a	n/a	n/a
KETTON	32.5	52.7	6	65	49	79	73	80
CAULDON 52.5N	36.0	57.2	6	64	54	78	71	80
PADESWOOD	32.7	49.1	6	64	47	79	73	80
TUNSTEAD	33.9	54.4	24	67	54	80	75	80
RIBBLESDALE	34.0	53.3	32	67	54	80	76	80
RUGBY	32.0	54.6	6	66	56	80	73	80
LEMONA	33.5	55.3	6	66	55	80	74	80
DUNBAR	22.9	52.2	36	49	48	80	78	80
CHATHAM LAGERDORF	36.4	58.9	6	73	65	80	79	80
PLATIN	29.0	53.0	6	68	48	80	76	80
COOKSTOWN	No	Sample	n/a	n/a	n/a	n/a	n/a	n/a
ALHANDRA 52.5R	30.7	55.1	34	65	54	80	74	80
HOPE	32.2	55.2	6	66	53	80	74	80
LIMERICK	31.5	56.4	6	63	51	80	72	80
MONJOS	No	Sample	n/a	n/a	n/a	n/a	n/a	n/a
METAPORQUERA	37.3	59.8	6	65	52	79	73	80
ST. EGREVE	20.2	49.7	6	41	39	58	58	80
ALCANAR	32.9	57.7	29	69	57	80	78	80
OUTAO	32.0	55.5	6	69	54	80	76	80
KETTON PLC	42.4	56.2	1	30	n/a	n/a	n/a	n/a
PADESWOOD PLC	43.9	59.1	1	30	n/a	n/a	n/a	n/a
CEMENTOS MOLINS	No	Sample	n/a	n/a	n/a	n/a	n/a	n/a
HOPE PLC	42.3	56.4	1	30	n/a	n/a	n/a	n/a
OGGAZ	37.7	58.7	31	68	57	80	76	80

Combination Designation (Table 1 BS 8500-2)	Percentage Regen GGBS	
	Not Less Than	Not More Than
CIIA (With CEM I)	6	20
CIIA (With PLC)	Depends on limestone content in cement	
CIIB-M	Depends on limestone content in cement	
CIIB-S	21	35
CIIIA	36	65
CIIBB	66	80

The Regen GGBS contained no additional materials others than those permitted according to BS EN 15167-1.

Hanson Cement has used all reasonable care to ensure the information herein contained is accurate but to the extent permitted in law, no liability can be accepted by Hanson Cement for any loss, damage, cost or expense arising from any inaccuracy, whether due to negligence or otherwise.

Signed:



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