

JCA

Japan Cement Association

< Translated by SEISHIN Trading Co., Ltd. >

Certificate

Reference Material for
“Determination of strength of cement”

401K

Ordinary Portland cement

Lab.	Age	Compressive Strength (JIS R 5201-2015) (N/mm ²)		
		3 days	7 days	28 days
1		31.0	44.5	59.6
2		31.2	45.2	62.0
3		30.4	44.2	59.0
4		31.7	44.8	59.7
5		31.4	45.7	61.3
6		30.5	44.3	59.6
7		31.9	44.6	59.0
8		30.2	44.0	59.0
9		30.6	44.1	59.9
Reference Value (Average)		31.0	44.6	59.9
Standard Deviation		0.60	0.56	1.06

[Notes] 1. All values were determined in accordance with JIS R 5201:2015

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Information Values

1. Age 1 day and 2 day

Lab. \ Age	Compressive Strength (JIS R 5201-2015) (N/mm ²)	
	1 day	2 day
1	14.1	23.8
2	13.8	24.5
3	13.6	22.7
4	13.1	23.9
5	13.8	24.3
6	14.1	23.4
7	15.8	25.0
8	13.2	23.1
9	14.3	23.8
Reference Value (Average)	14.0	23.8
Standard Deviation	0.79	0.71

[Notes] 1. All values were determined in accordance with JIS R 5201:2015

2. Confirm the homogeneity of sample

10 samples were extracted randomly. One laboratory prepared 3 samples for each extracted sample with repeatability condition, and carried out compressive strength test (JIS R 5201) at the age of 28 days for total 30 batches.

As the results of the evaluation, there was no significant difference at 95% confidence level between extracted samples; therefore, the sample is homogeneous.

(Unit: N/mm²)

繰返し	A	B	C	D	E	F	G	H	I	J
1	59.8	59.9	61.9	60.4	61.5	59.3	59.9	60.6	60.3	59.4
2	57.8	58.9	60.2	60.1	59.1	57.6	58.9	58.7	59.6	60.0
3	57.9	58.3	60.5	59.0	59.4	57.9	57.8	58.8	58.3	58.8

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