

CURING, DENSITY & COMPRESSIVE STRENGTH OF 100mm² CONCRETE CUBES

LINCS

LABORATORY
Lincolnshire County Council

1101

REPORT No.

LABORATORY USE ONLY BS EN 12390-1:2021 (DIMENSIONS) BS EN 12390-2:2019 (CURING) BS EN 12390-7:2019 (DENSITY) BS EN 12390-3:2019 (STRENGTH)

RESULTS VIA JOB NUMBER

CUBES MADE IN UKAS CALIBRATED MOULDS? YES / NO CURRENT MOULD CALIBRATION CERTIFICATE SUPPLIED? YES / NO

ALL SHADED BOXES IN THIS SECTION & AGE OF TEST TO BE COMPLETED BY THE CLIENT / CONTRACTOR BEFORE SUBMISSION TO LAB

CLIENT

SITE

SUPPLIER SOURCE

DATE SAMPLED TIME SAMPLED

TIME CUBES MADE PLACE CUBES MADE

DATE CUBES STRIPPED TIME CUBES STRIPPED

CUBES MADE BY COMPACTION METHOD HAND* / VIBRATING HAMMER

NOMINAL SIZE OF CUBES mm CURING METHOD ON SITE AIR / WATER

DESIGN SLUMP mm MEASURED SLUMP mm

CUBES FROM CONCRETE USED IN

CHARACTERISTIC STRENGTH * TAMPING BLOWS/LAYER

LABORATORY USE ONLY

DATE CUBES RECEIVED IN LAB

DATE CUBES PLACED IN TANKS

STORE ALL CUBES BELOW Mpa @ 28 days

LAB SAMPLE No.		C	/2	C	/2	C	/2	
CLIENT CUBE No.								
CONDITION OF CUBES ON RECEIPT								
APPARENT LEVEL OF COMPACTION								
APPARENT MOISTURE STATE								
STANDARD OF CORNERS AND EDGES								
CONDITION OF FLOATED FACE								
APPEARANCE OF MOULDED FACES								
FLATNESS OF LOAD BEARING FACES (Pass = ± 0.06 mm)		PASS / FAIL		PASS / FAIL		PASS / FAIL		
PERPENDICULARITY OF SIDES wrt BASE (Pass = < 0.5 mm)		PASS / FAIL		PASS / FAIL		PASS / FAIL		
MEAN DIMENSIONS (mm)	H	97 - 103		L	97 - 103		W	97 - 103
		Do cubes meet tolerances? YES / NO (If NO include report comment (2))						
INFORMATION NOTED AT TEST								
DATE OF TEST								
TIME OF TEST								
ROOM TEMPERATURE (20± 5°C)								
AGE OF TEST (DAYS)								
MOISTURE STATE AT TEST		MOIST	SATURATED	MOIST	SATURATED	MOIST	SATURATED	
MASS IN AIR (SATURATED) k g								
SATURATED DENSITY (TO 10kg/m ³) kg/m ³								
FAIL LOAD kN								
COMPRESSIVE STRENGTH (TO 0.1 Mpa) Mpa								
FAILURE MODE (Figure 2 Failure Type)		UNUSUAL / NORMAL ()		UNUSUAL / NORMAL ()		UNUSUAL / NORMAL ()		
TESTED BY								
INTERIM RESULTS GIVEN								
CERTIFIED BY								

NOTES FOR "AS RECEIVED" CONDITION OF CUBES

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- APPARENT LEVEL OF COMPACTION : SATISFACTORY / POOR / SLIGHTLY VOIDED
S P SV

- APPARENT MOISTURE STATE : MOIST / DRY
M D

- STANDARD OF CORNERS AND EDGES : SATISFACTORY / CHIPPED / POORLY COMPACTED
S C PC

- APPEARANCE OF FLOATED FACE : SATISFACTORY / SCORED / CONCAVE / CONVEX / SLOPING / UNEVEN
S SC CC CV SL UE

- APPEARANCE OF MOULDED FACES : SATISFACTORY / EXPOSED AGGREGATE / OTHER – SEE REMARKS
S EA

(THIS IS ONLY A GUIDE, OTHER COMMENTS MAY BE USED)

MEASUREMENT OF CUBES

	1	2	3	4	MEAN
H1					
H2					
L1					
L2					
W					

SAMPLE No. C _____ /2

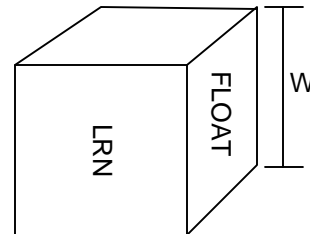
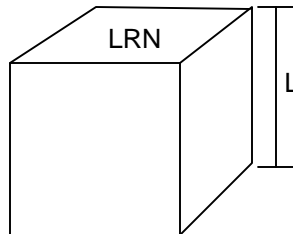
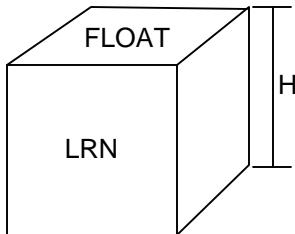
	1	2	3	4	MEAN
H1					
H2					
L1					
L2					
W					

SAMPLE No. C _____ /2

	1	2	3	4	MEAN
H1					
H2					
L1					
L2					
W					

SAMPLE No. C _____ /2

NOTATION



FORMULAE

VOLUME = HEIGHT x LENGTH x WIDTH (m³)

STRENGTH = $\frac{\text{LOAD}}{\text{HEIGHT} \times \text{LENGTH}}$ (N/mm²)

DENSITY = $\frac{\text{MASS}}{\text{VOLUME}}$ (kg/m³)

REMARKS	