

California Bearing Ratio (Soaked & Unsoaked)

Client :
Project :

Sampling Date :
Testing Date :
Testing Method : BS 1377-4:1990
Mean Calib. : kN/div

Specimen No. :

NO.	PENETRATION (MM)	FORCE GAUGE READING DIV.		FORCE ON PLUNGER KN		NO.	PENETRATION (MM)	FORCE GAUGE READING DIV.		FORCE ON PLUNGER KN	
		TOP	BOTTOM	TOP	BOTTOM			TOP	BOTTOM	TOP	BOTTOM
1	0.00					1	5.25				
2	0.25					2	5.50				
3	0.50					3	5.75				
4	0.75					4	6.00				
5	1.00					5	6.25				
6	1.25					6	6.50				
7	1.50					7	6.75				
8	1.75					8	7.00				
9	2.00					9	7.25				
10	2.25					10	7.50				
11	2.50										
12	2.75										
13	3.00										
14	3.25										
15	3.50										
16	3.75										
17	4.00										
18	4.25										
19	4.50										
20	4.75										
21	5.00										

CBR VALUE (KN) (from the graph)	2.5 mm	5.0 mm
TOP		
BOTTOM		

ACCEPTED CBR :

PENETRATION (mm)	LOAD (KN)	STD LOAD (KN)	CBR (%)
2.50			
5.00			

Bulk and Dry Density			
Mass of moulds + Baseplate + soil (m ₁)	g		
Mass of moulds + Baseplate (m ₂)	g		
Mass of soil (m ₁ - m ₂)	g		
Soaking time	day		
Time to appear at top of sample			
Final swell	mm		
Mass of moulds + Baseplate + soil after soaking (m ₄)	g		
Mass of soil after soaking (m ₄ - m ₂)	g		
Volume of moulds	cm ³		
Bulk Density, ρ = $\frac{(m_4 - m_2)}{V}$	g/cm ³		

Moisture content after test			
Mass of wet soil + container (m ₂)	g		
Mass of dry soil + container (m ₃)	g		
Mass of container (m ₁)	g		
Mass of moisture (m ₂ - m ₃)	g		
Mass of dry soil (m ₃ - m ₁)	g		
Moisture Content, w = $\frac{(m_2 - m_3)}{(m_3 - m_1)}$	%		
Average moisture content w,	%		

Dry Density, ρ _d = $\frac{\rho}{1 + w}$	g/cm ³		
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Tested By

Checked By

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