Print Form | E-mail

TRIAXIAL COMPRESSION TEST

(Specimen Data)

For use of this form, see EM 1110-2-1906; the proponent agency is CECW-EG.

1. DATE *(YYYYMMDD)*

2. PROJECT

3. BORING NUMBER

4. SAMPLE NUMBER

5. TYPE OF TEST

6. CONFINING PRESSURE TONS/SQ. FT.

7. TEST NUMBER

8. CLASSIFICATION

			BEFORE TEST			AFTER TEST	
			(a) SPECIMEN	(b) TRIMMINGS		(c) SPECIMEN	
9. TARE NUMBER							
WEIGHT IN GRAMS a.	(1) TARE PLUS WET SOIL						
	(2) TARE PLUS DRY SOIL						
	(3) WATER	W_w			W_{wo}		W_{wf}
	(4) TARE						
	(5) WET SOIL	W					
	(6) DRY SOIL	W_s					
b. WATER CONTENT		w	%		w_o		w_f %

SECTION I - INITIAL CONDITION OF SPECIMEN

1a. DIAMETER, CM.	D_o	b. TOP	c. CENTER	d. BOTTOM	e. AVERAGE

2. HEIGHT, CM.	H_o		3. VOLUME OF SOLIDS, CC.	V_s	
4. AREA, SQ. CM. = 0.7854 D_o^2	A_o		5. VOID RATIO = $(V_o - V_s) \div V_s$	e_o	
6. VOLUME, CC. =	V_o		7. SATURATION, %	S_o	
8. SPECIFIC GRAVITY OF SOLIDS	G_s		9. DRY DENSITY, LB./CU. FT.	y_d	

SECTION II - CONDITION OF SPECIMEN AFTER CONSOLIDATION *(R and S Tests)*

1. CHANGE IN HEIGHT DURING CONSOLIDATION, IN.	ΔH_o		2. VOLUME, CC. = $A_c H_c$	V_c	
3. HEIGHT, CM. = $H_o - 2.54\ \Delta H_o$	H_c		4. VOID RATIO = $(V_c - V_s) \div V_s$	e_c	
5. AREA, SQ. CM.	A_c		6. SATURATION, %	S_c	

SECTION III - CONDITION OF SPECIMEN AFTER TEST *(R and S Tests)*

1a. DIAMETER, CM.	D_f	b. TOP	c. CENTER	d. BOTTOM	e. AVERAGE

2. CHANGE IN HEIGHT DURING CONSOLIDATION, IN.	ΔH		3. VOLUME, CC. = $A_f H_f$	V_f	
4. HEIGHT, CM. = $H_c - 2.54\ \Delta H$	H_f		5. VOID RATIO = $(V_f - V_s) \div V_s$	e_f	
6. AREA, SQ. CM.	A_f		7. SATURATION, %	S_f	

$$W_s = \frac{W}{w},\quad V_s = \frac{W_s}{G_s},\quad S_o = \frac{\frac{w_o}{100} \times \frac{W_s}{y_w}}{V_o - V_s} \times 100,\quad S_c = \frac{\frac{w_c}{100} \times \frac{W_s}{y_w}}{V_c - V_s} \times 100,$$

$$S_f = \frac{\frac{w_f}{100} \times \frac{W_s}{y_w}}{V_f - V_s} \times 100,\quad y_d = \frac{W_s}{V_o} \times 62.4,\quad \frac{A_c}{} = \frac{A_o}{} \quad \frac{H_o - 2\Delta H_o}{H_o}$$

8. REMARKS		
9a. TECHNICIAN *(Last, First MI)*	b. DATE *(YYYYMMDD)*	c. TECHNICIAN'S SIGNATURE
10a. COMPUTED BY *(Last, First MI)*	b. DATE *(YYYYMMDD)*	c. COMPUTED BY SIGNATURE
11a. CHECKED BY *(Last, First MI)*	b. DATE *(YYYYMMDD)*	c. CHECKED BY SIGNATURE