

Variable Definitions		Equations	Conversions			
T = Thickness of the soil sample [in]		$F_{soil} [N] = F_{pull} / (A/B)$	$\text{Sigma} = \text{Stress} * 0.224809 \text{ psi}$			
A = Distance of pulling force from the hinge [in]		$\text{Stress} [N/in^2] = F_{soil} / (\pi * D * T)$				
B = Distance of soil sample from the hinge [in]						
Fpull = Pulling force [N]						
Fsoil = Force of the soil sample [N]						
Sigma = Brazilian Tensile Test [psi]						
D = Diameter of the soil sample [in]						
D (in)	T (in)	A (in)	B (in)	Fpull (N)	Fsoil (N)	Sigma (psi)
1	3	18	16	15.7	17.6625	0.421875

