

NAME

SHERAZ

ID

7862

SEC

B

Geo

tech

(LAB)

Difference b/w Standard Proctor and penetration test

Pg # 1

There are mainly four - major factors which are given below

Soil type

Moisture Content

Compactive effort

Dry density of the soil

⇒ for the given type of soil and Compactive effort the dry density of soil varies with Moisture Content.

At low Moisture content the 2
internal friction and adhesion b/w
the particle contribute to the
resistance to Compaction.

As the moisture content increases
the particle develop moisture
film around which help in
lubricating the particles thus
increase the ability of the
Soil mass.

Classification of Soil based on free swell index

The free swell index, the increase in volume of soil without any external container when subjected to submerged in water.

Free Swell Index	Degree	L.L	P.L	S.L
< 20	Low	0-50	0-35%	>17%
20-35	Moderate	10-60%	25-50%	8-18%
35-50	High	50-75%	36-65%	6-18%
> 50	very high	>60%	>45%	<10%

Soil permeability

It can be defined as, that why

Soil permeability test is important

because the property of the

Soil to transmit water and air

and is one of the most important

qualities to consider for fish

Clay

Sand : 50

clay loam : 0.8

clay : 0.05

Silty clay : 0.05