

# COMPACTION METHODS

Compaction methods increase the density of soil by sand column piling on the ground or by vibration or compaction.

As the soil density rises, its bearing capacity and shear strength likewise increases improving the stability of the ground.

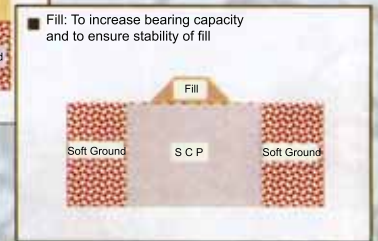
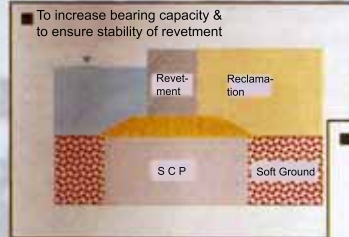
Compaction methods are reliable and widely employed in many projects than other ground improvement methods.

## ■ Features

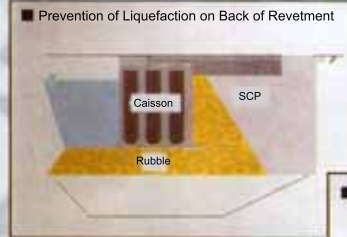
1. In compacting, the density of soil rises improving its shear strength and vulnerability against liquefaction.
2. In case the sand compaction pile method is used for clay ground, sand piles are formed on the ground to reduce the clay consolidation settlement and the bearing capacity increases.
3. The Ram-Drop Compaction Method is applicable to non-homogenous ground due to mixture of refuse or waste material.

## ■ Examples of Application

### Application to Clayey Ground



### Application to Sandy Ground



## ■ Applicable Types of Soil & Improvement Specifications

Method Application	Sand Compaction Pile	Rod Compaction	Vibratory Float	Ram-Drop Compaction
Sandy Ground	○	○	○	○
Clayey Ground	○	×	×	○
Execution on Land	○	○	○	○
Execution at Sea	○	×	×	○
Improvement Depth (on land)	50m	20m	18m	20m
Improvement Depth (at sea)	70m	-	-	-

## ■ Categorization of Methods

