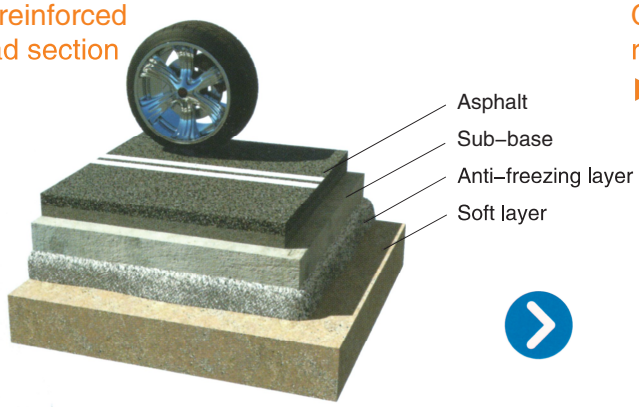
Soft ground reinforcement using GEOCELL

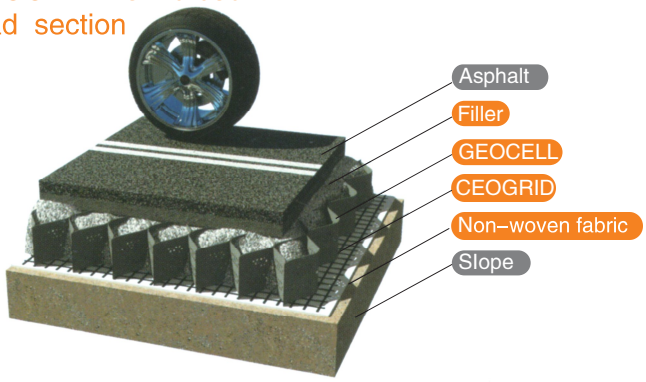
–GEOCELL is manufactured in 3D honeycomb shape and the cell is filled with filler which increase tensile and bonding strength resulting in increased pullout resistance and friction coefficient and as soil and gravel are used as filler,instead of concrete or artificial material，it has stable properties and structure which is durable，effective in installation and cost.

–Soft ground reinforcement using GEOCELL is achieved with soil(filler)，friction resistance，passive resistance of neighboring cells and circular stress of the cell.

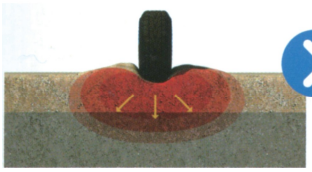
Unreinforced road section



GEOCELL–reinforced road section

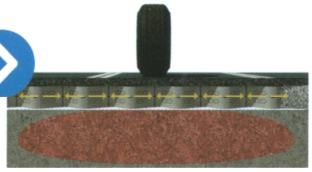


Unreinforced ground's behavior



When load is applied to unreinforced ground, ground is collapsed by ground settlement.

GEOCELL–reinforced ground's behavior



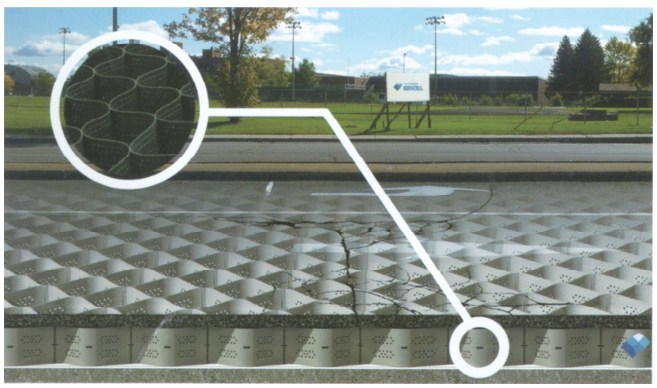
GEOCELL–reinforced ground reduces contact pressure and minimizes the settlement by confining the pressure of cell structure as it serves as semi–rigid slab.

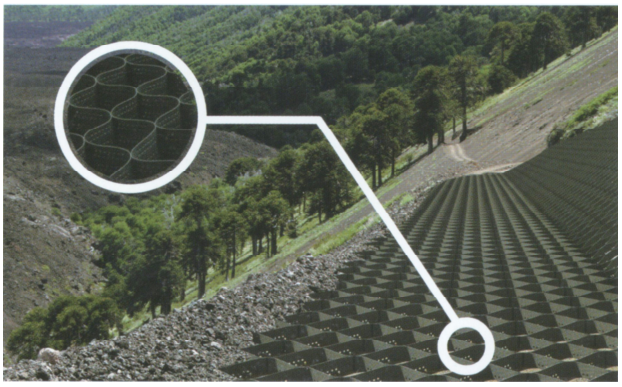
Sinkhole in unreinforced ground

・Soil layer is washed out due to groundwater layer and voidance.
・Sinkhole is generated

Sinkhole in GEOCELL–reinforced ground

・Sinkhole due to groundwater layer and voidance
・GEOCELL+GEOGRID prevent initial damage

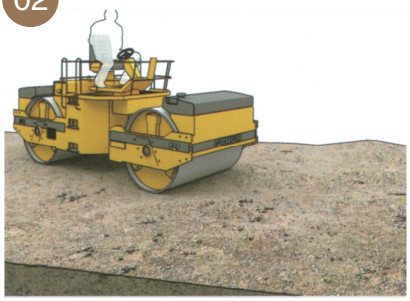




01

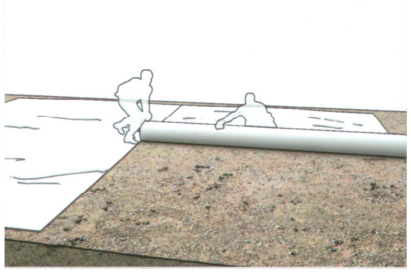
After grading the ground，remove the plant roots and stones.

02



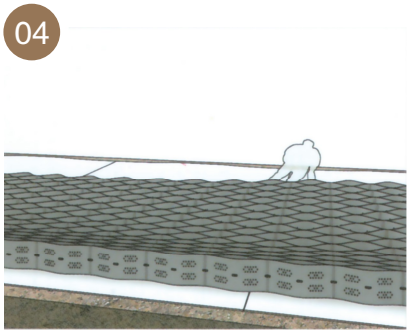
Compact the ground using roller or compactor.

03



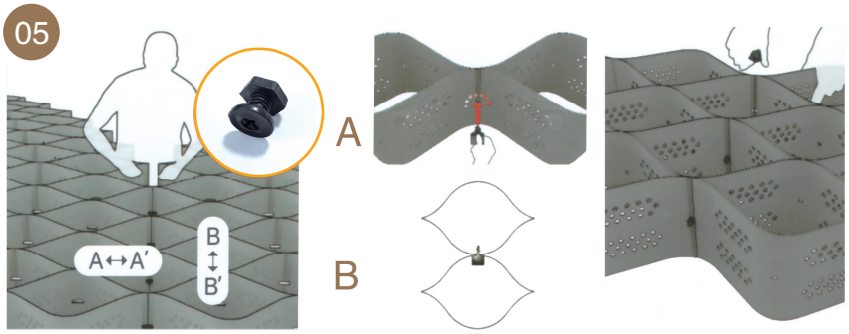
Install the Non–woven fabric

04



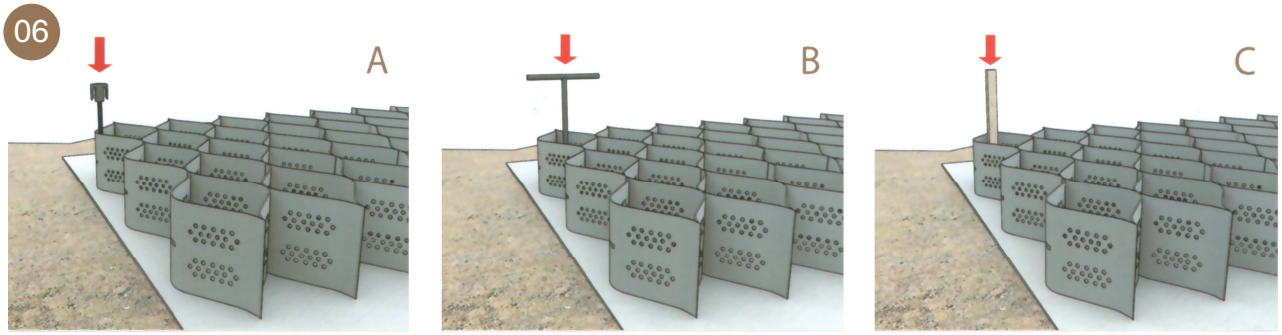
Unfold and install the GEOCELL.

05



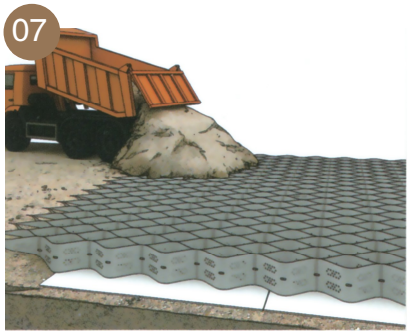
Connects GEOCELL side with GEOCELL key horizontally(A–A')and vertically(B–B')

06



Selects one from A，B or C for installation.

07



Fill GEOCELL with the filler.

08

Spread soil and filler evenly using the equipment

09

Compact GEOCELL filled with the filler using roller or compactor