# **Load Reduction Methods**

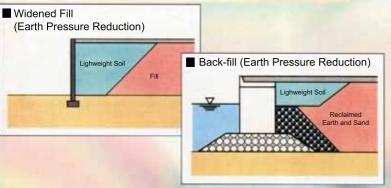
The Load Reduction Methods aim to decrease load/earth pressure working on soft ground and structures by means of light-weight and self-standing material prepared by mixing artificial lightweight material with surplus soil from the construction site.

The Load Reduction Methods include EPS Block Method, Air Bubble Cement Method, Air Bubble Mortar Method and Lightweight Mixed Treatment Soil Earth Method, that are available for selection to meet the requirements of the site.

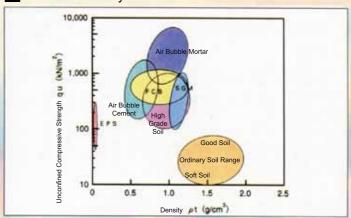
#### Features

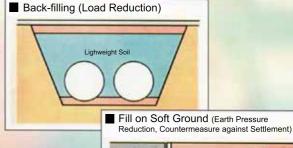
- 1. Density, strength and fluidity can be set at desired levels according to design and execution conditions.
- As EPS blocks are very light in weight, they can be stacked manually.
- 3. Air bubble cement, air bubble mortar and lightweight mixed treatment soil can be transferred by pumping, where compaction is not necessary.
- 4. The lightweight mixed treatment soil method can efficiently use surplus soil from the construction site.

## Application Examples



## Classification by Material Characteristics





Lighweight Soil

Soft Ground

Fill

### Applicable Types of Soil with Specified Solidifier

Method Name			Materials to be Used						
			Soil Displaced by Construction	Purchased Sand	Water	Solidifier (Cement)	Air Bubble	Styrofoam	
								Block	Beads
EPS Block Method								•	
Air Cement Method					•	•	•		
Air Mortar Method				•	•	•	•		
Lightweight Mixed Treatment Soil Method	SGM Lightweight Soil Method	Air Bubble	•		•	•	•		
		Foamed Beads	•		•	•			•
	High Grade Soil	Air Bubble	•		•	•	•		
		Foamed Beads	•		•	•			•
	FCB Method			•	•	•	•		