EPS Block Method

The EPS (Expanded Poly-Styrol) method uses large styrofoam blocks as material for engineering work.

The ultra-light weight, compression resistance and self-standing properties of the EPS block are preferable qualities of lightweight fill material.

Features

- The EPS block with a density ranging from 0.01 to 0.04 g/cm³ is far lighter in weight than common fill materials.
- The compressive strength of the EPS block differs depending on the density but generally ranging from 50 to 300 kN/m², which is fully suitable as fill.
- When a load is applied to an EPS block, its lateral deformation is so slight that it can substantially reduce earth pressure working on a structure.
- * Owing to ultra-light weight, EPS blocks can be moved and stacked without the use of mechanical power.

Working Procedure



1. Stacking of EPS Blocks



2. Slab is placed on EPS block and concrete is cast.



3. Fill is completed upon execution of sub-base course work.

Completed Projects Record

| Project Name | Duration | Project Site | Client | Objective | Execution Volume |
|--|------------|-----------------|---|---|---------------------|
| Shin Zaru River Bridge Improvement Work | 90.7~90.11 | Miyagi | Miyagi Prefecture | To prevent settlement of fill area | 1,580m ³ |
| Aomori Port Okiyakata Quaywall Improvement Work | 91.3~91.7 | Aomori | Aomori Prefecture | To reduce earth pressure on the back of quaywall | 3,430m ³ |
| Tokyo Airport Surrounding Road Construction Work | 96.2~96.12 | Tokyo | Transport Ministry | To reduce earth pressure on the back of revetment | 2,880m ³ |
| Shiomi Canal Clover Bridge Substructure Construction Work | 96.6~97.6 | Tokyo | Housing and Urban Area Promotion Corporation | To reduce earth pressure | 130m ³ |