Sustainable Housing Environment
Development by Small Enterprise

Daiken Inc.
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UN-Habitat Agenda
Providing Adequate Shelter for All

Technology we can offer

1. NCZ foundation construction method with basement which is disaster resilient and strengthens the community.

2. Rainwater harvesting underground reservoir which can store clean rainwater easily.

We want to contribute!
1. NCZ foundation construction method with basement which is disaster resilient and strengthens the community

(1) Reduces CO2 emissions and disaster resilient reinforced grounds

(2) Larger living space and stronger community ties
1. NCZ foundation construction method with basement which is disaster resilient and strengthens the community

（1）Reduces CO2 emissions and disaster resilient reinforced grounds

Reasons: A large and stable underground structure, regardless of the natural ground conditions

①大きな地下構造物で地耐力、摩擦力が大きいため地震に強い
②左右・上下のバランスの取れた構造体のため、偏心荷重がかかりにくく、不同沈下しにくい
③水を寄せ付けない構造のため液状化に強い
④浮力とバランスするよう埋設の深さが調整できる
The most common method is to transport dirt by heavy trucks to the site.

Issues:
1. Burden on the environment (CO2)
2. High cost
3. Potential issues to transportation and safety

NCZ method can solve these issues!

Construction example: when constructing settlements on low lands, near the river.
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【NCZ Process】①excavation→②filling→③build underground structure→④leveling

①③underground structure②filling④leveling①excavation
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Construction example: when constructing settlements on low lands, near the river

① Because it uses the dirt within the property, it minimizes the use and transportation of dirt transported from elsewhere.
② Because the underground structure plays the role of firming the dirt, it creates a strong foundation even in fragile locations.
③ Because it can raise the height of the property it will be more resilient to floods
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地盤と一体となった強固な人工地盤（「NCZ工法」の施工例）
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