



南亞塑鋼板樁

NAN YA PLASTIC PILING



南亞塑膠工業股份有限公司
NAN YA PLASTICS CORPORATION



Contents

目 錄

前言3

Preface

M型塑鋼板樁4

M type plastic piling

塑鋼板樁主要用途6

Major Purpose of plastic piling

塑鋼板樁使用實例7

Examples of plastic piling

塑鋼板樁應用模擬 10

Simulation drawing for application
of plastic piling

前言

新型塑鋼板樁主要功能為滲流阻斷，防止掏空、護土擋水及擋土功能，具有生態環保、施工方便快捷、佔地少及造型美觀等特點，為景觀水利工程的擋土、擋水結構提供了先進、實用的護坡材料，將可取代或共構現在的混凝土工程。

使用壽命長

塑鋼板樁材料為強化複合塑膠，具有極高的抗壓強度和抗衝擊能力不會腐朽，其使用壽命長達到50年至70年。

節省施工造價

塑鋼板樁與傳統混凝土相比，節省造價近30%，提高施工效率近五倍。

施工機具使用傳統鋼板樁施工機具及夾具無需特別修改避免施工困擾。

環保無汙染

目前針對RC混凝土結構建材的高度汙染，塑鋼板樁是最佳的替代性產品，更多的功能及環保的優點，本產品不含鉛及塑化劑。

Preface

The major function of new type Nan Ya plastic piling includes interdiction of seepage, prevention of washed away, soil conservation, water and soil blockage; also has key features such as environment-friendly, easy and speedy for construction, space saving, and attractive modeling.

It's an innovative and practical revetting material for water and soil blockage structure on landscape hydraulic engineering; which will take the place of, or be co-constructed with the current concrete construction.

Durable & Heavy-duty

Plastic piling is made of reinforced composite plastic, with the nature of excellent compressive strength and impact resistance.

It will not be decayed, and can last for fifty to seventy years long.

Cost-saving

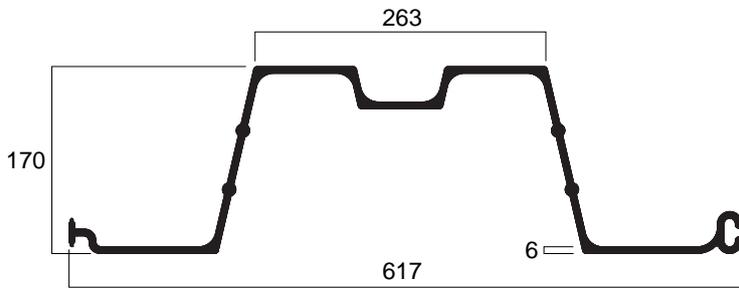
The cost for plastic piling is nearly thirty percent (30%) less, and the efficiency of construction is almost five times higher than traditional concrete.

No construction trouble will be occurred because of traditional steel sheet pile construction equipments and clamping apparatus can still be used without any change.

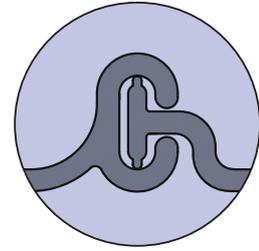
Environment-friendly

The plastic piling is lead and plasticizer free; it has the benefits of multiple functions and environment-friendly, Compared with the serious pollution made by materials of reinforced concrete construction (RC), the plastic piling will be the best substituted product.





(套合有效寬度 Superposition operative width: 600mm)



套接結構 Superposition structure

型號 Model No. : 600M (617mm × 170mm × 6t)

寬度 Width	617 (mm)
深度 Depth	170 (mm)
重量 Weight	9.3 (kg/m)
厚度 Thickness(t)	6.0 (mm)
材質 Material	硬質pvc (Rigid Vinyl)
標準顏色 Standard colors	灰色 Gray
包裝 Standard Packaging	10 (sheets/bundle)

塑鋼板樁物性表

Plastic piling physical properties table

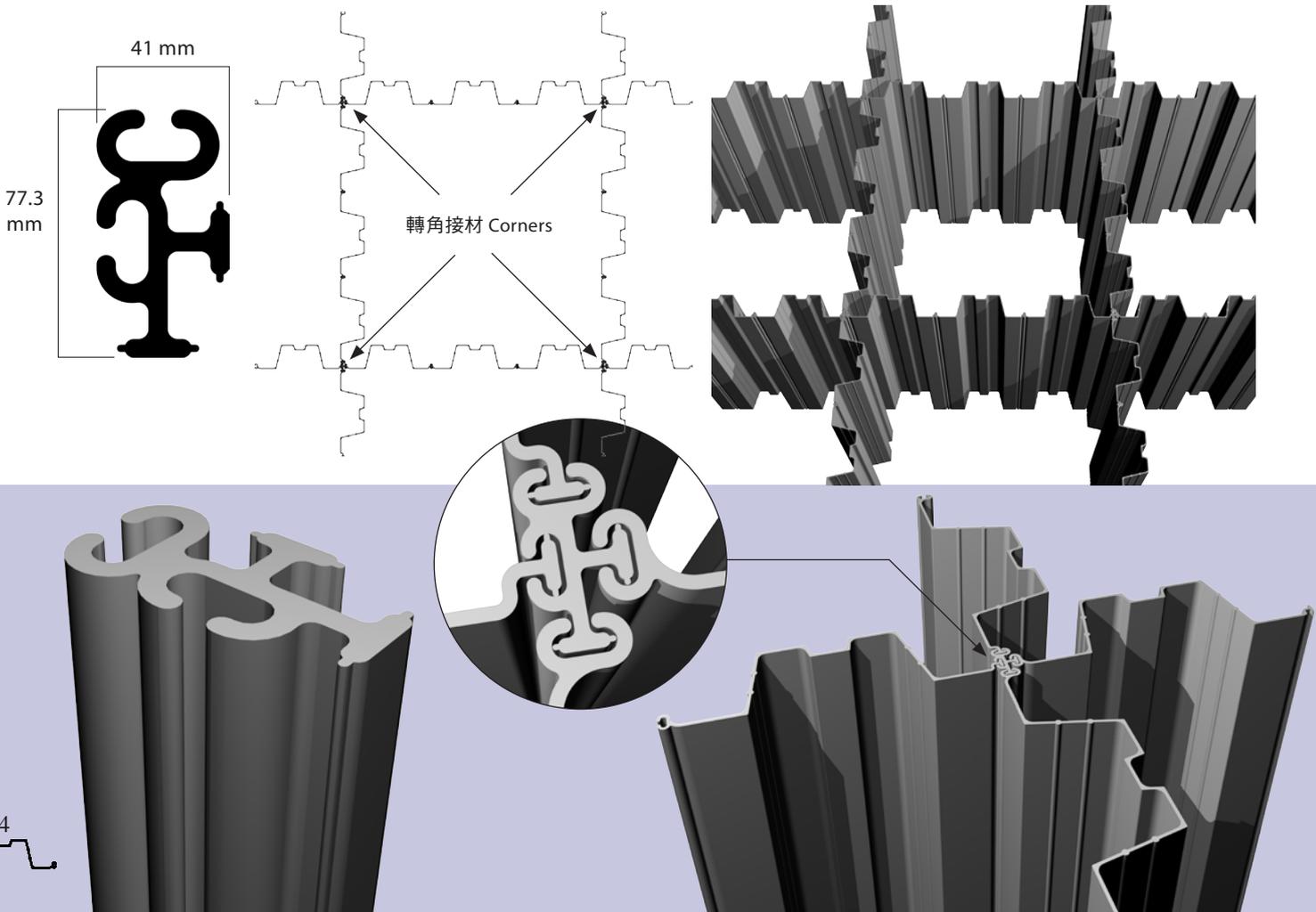
項次	檢驗項目	檢驗標準	檢驗值
1	比重(Density)	ASTM D792-08A	1.39
2	硬度(SHORE D)	ASTM D2240-05	75
3	抗拉強度(kgf/cm ²) Tensile Strength	ASTM D638-08	550
4	抗彎強度(kgf/cm ²) Flexural Strength	ASTM D790-07B	850
5	壓縮強度(kgf/cm ²) Compress Strength	ASTM D695-08a	650

註：以上數據為參考值

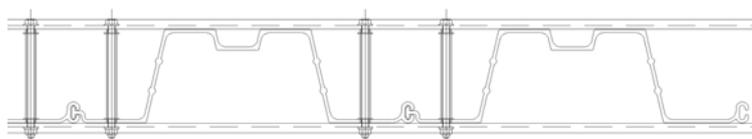
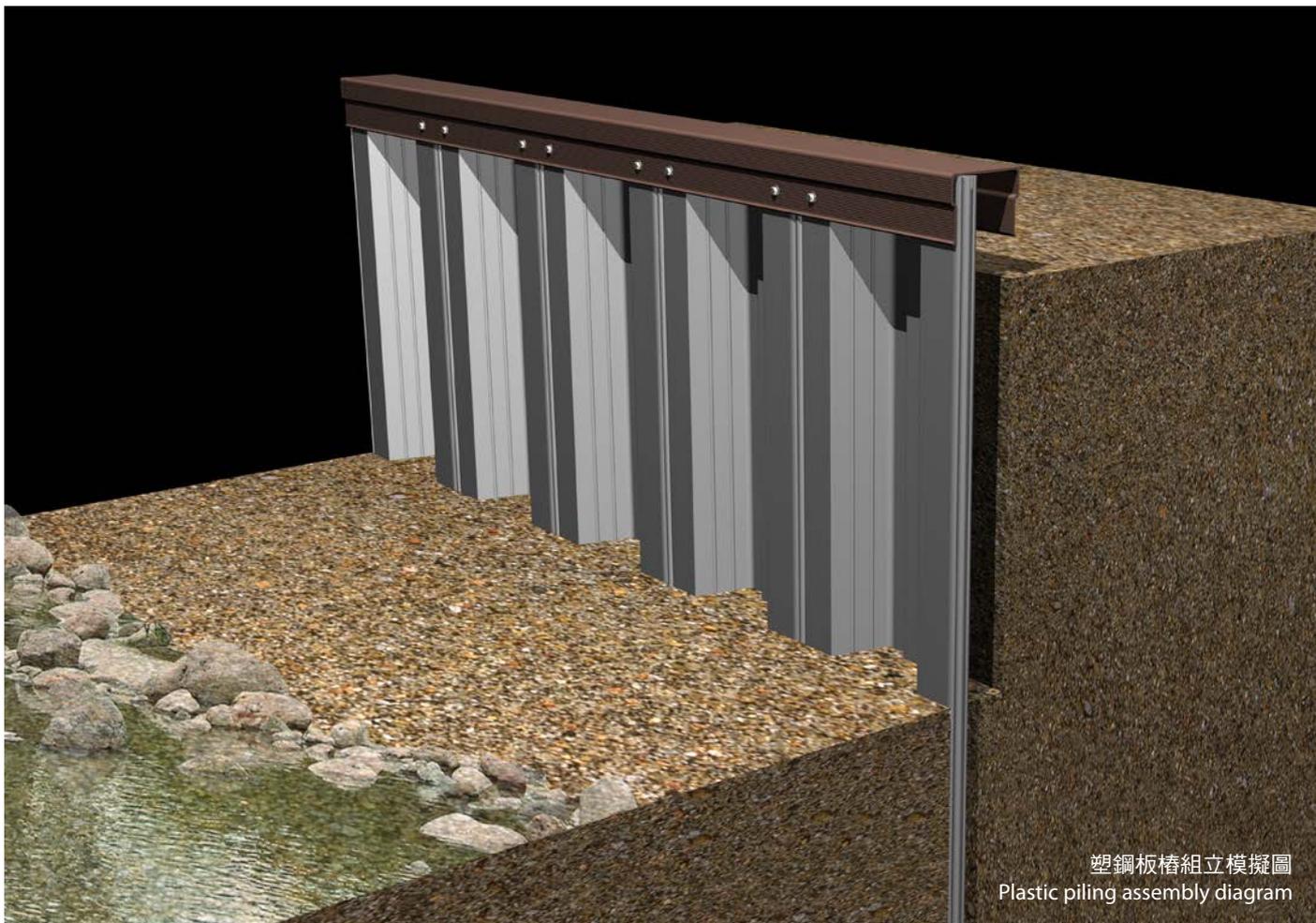
Remark: Figures of physical properties listed above are reference value only.

塑鋼板樁轉角接材

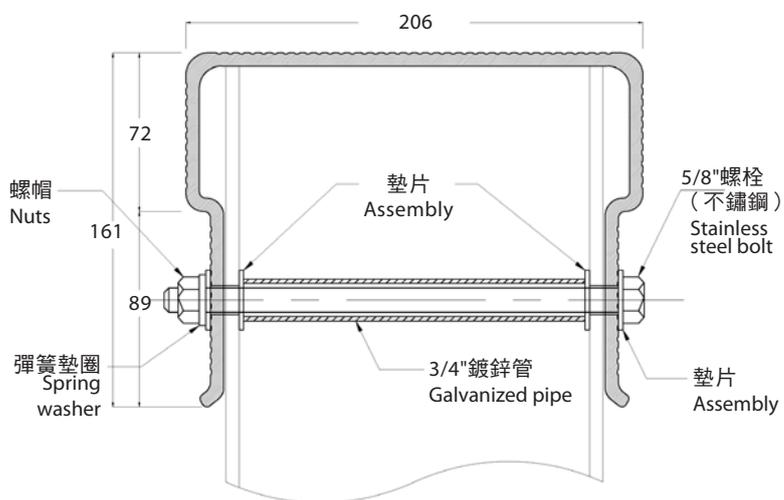
Plastic piling Corner



塑鋼板樁帽蓋補強結構 Plastic piling Cap

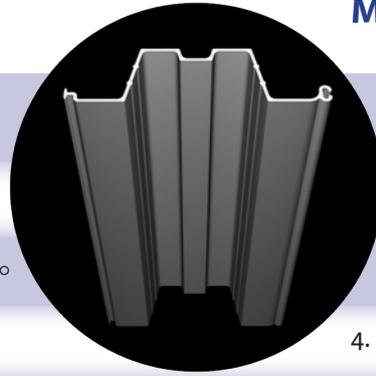


塑鋼板樁帽蓋組立示意圖 Assembly diagram



塑鋼板樁主要用途

Major Purpose of plastic piling



1. 海堤堤岸保護。
 2. 親水護岸、遊艇岸壁。
 3. 漁港碼頭、導流堤、防砂堤。
 4. 休閒漁業魚池景觀護岸。
 5. 防洪堤防、排水箱涵。
 6. 高速公路、林道、道路邊坡。
 7. 保護橋墩、防止沖刷基礎。
 8. 重力擋土牆。
 9. 溪邊、湖邊、海邊護坡、消坡、擋浪。
 10. 湖泊、溪流改變水流方向。
 11. 高爾夫球場沙塘、水池。
 12. 水庫濾水場、深水工程支撐。
 13. 垃圾掩埋場截水牆幕。
 14. 建築工地土方保持及穩固。
 15. 圍堰擋水。
1. To protect the seawall revetment.
 2. Revetment at recreational area or yacht dock.
 3. Fishing port, drainage levee, dust blockage levee.
 4. Landscape revetment at recreational fishing area.
 5. Retaining wall, drainage culvert.
 6. Highway, path in forest, road bank.
 7. To protect bridge pier, to prevent the pier from washed away.
 8. Gravity type retaining wall.
 9. Brook bank, lake bank, seashore slope protection, dissipating waves, blockading tides.
 10. Change the flow direction of lakes and streams.
 11. The sand pool and ponds at golf course.
 12. Support for the reservoir's filter plant, engineering under deep water.
 13. Retaining wall at landfill site.
 14. Maintenance and security of earthworks at construction site.
 15. Cofferdam for blockading water.

南亞塑鋼板樁工程實績

- | | |
|---------------|---------------|
| 曾文溪護岸工程 | 屏東—放索溝整建工程 |
| 雲林—蔦松大排水井橋工程 | 雲林—龍台宮工程 |
| 高雄楠梓區黑橋排水護岸工程 | 雲林養殖區排水護岸工程 |
| 林口長庚球場水池工程 | 宜蘭金車養殖魚池工程... |

Project track record of Nan Ya plastic piling

- | | |
|---|--|
| Revetment project of Zengwun River | Pingtung - Rope ditch reconstruction project in |
| Yunlin - Niaosung drainage well project | Yunlin - LongTai Temple project |
| NanTzu Dist. of Kaohsiung - Black Bridge drainage revetment project | Yunlin culture area - drainage revetment project |
| Linkou - Chang Gung Golf Club pond project | Yilan - King Car farmed fish pond project |



塑鋼板樁使用實例

Living Examples of plastic piling



台南
曾文溪整治工程
Tainan
Zengwun river
Regulation project



屏東
放索溝工程
Pingtung
Rope ditch recon-struction
project



雲林
水井橋工程
Yunlin
drainage well project



高雄
黑橋排水改善工程
Kaohsiung
Black Bridge drainage
improvement project



雲林
龍台宮工程
Yunlin
LongTai Temple project



林口
長庚球場
Linkou
Chang Gung Golf Club



林口
長庚球場
Linkou
Chang Gung Golf Club



林口
長庚球場
Linkou
Chang Gung Golf Club



塑鋼板樁施作搭配景觀植栽模擬圖
Simulation drawing for application of plastic piling

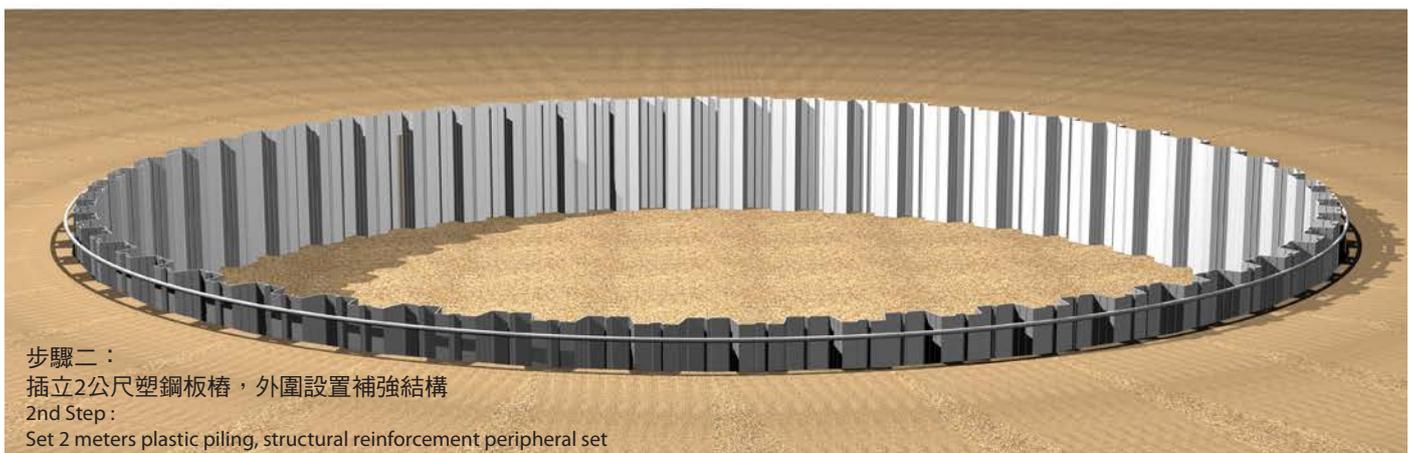
林口
長庚球場
Linkou
Chang Gung Golf Club

塑鋼板樁養殖魚池工程模擬

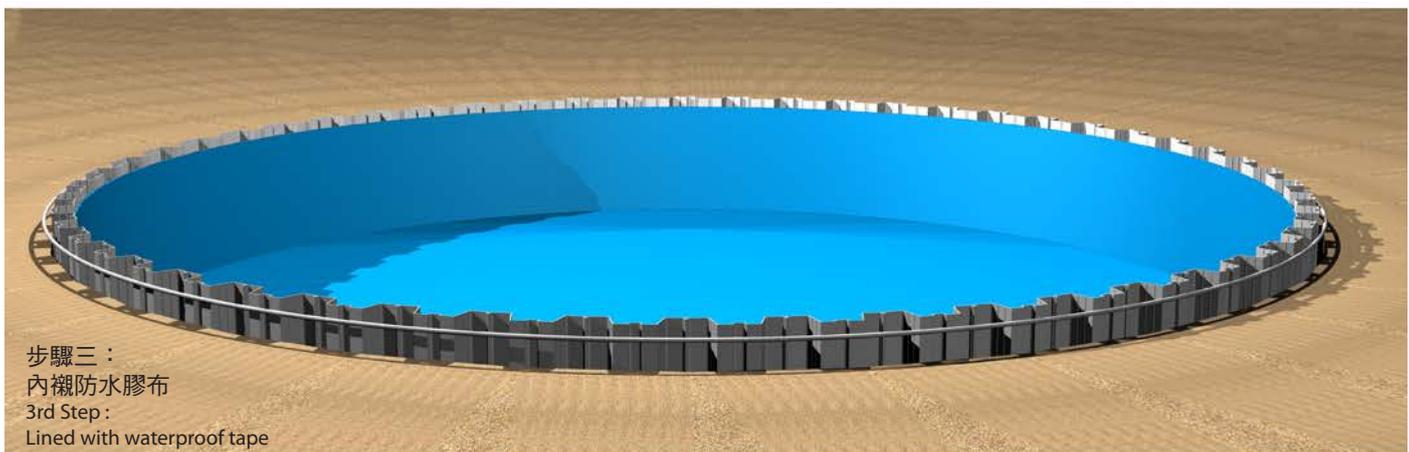
Simulation drawing for application of plastic piling



步驟一：
挖土深約1公尺，直徑10公尺
1st Step：
Excavation depth of about 1 meter, 10 meters in diameter



步驟二：
插立2公尺塑鋼板樁，外圍設置補強結構
2nd Step：
Set 2 meters plastic piling, structural reinforcement peripheral set

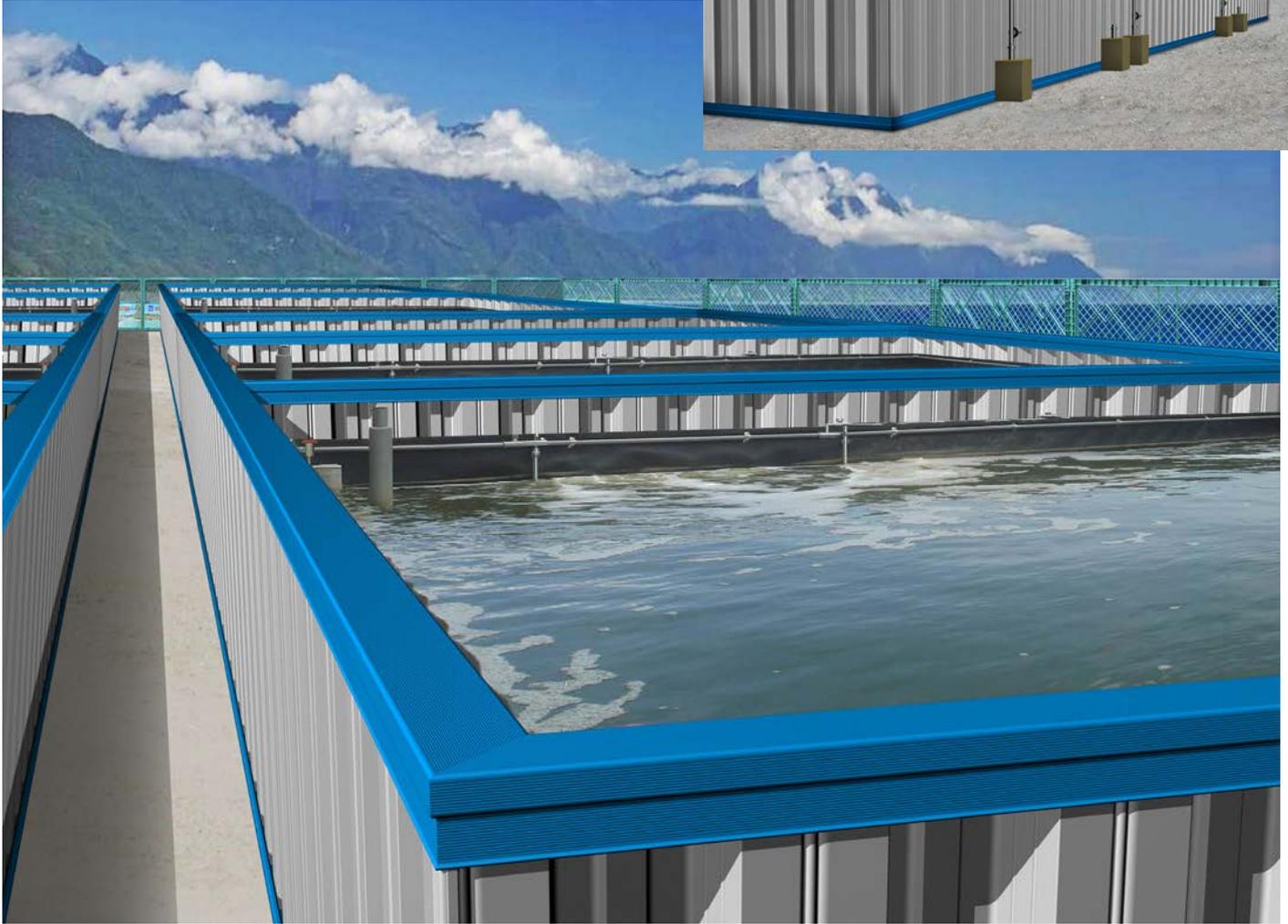


步驟三：
內襯防水膠布
3rd Step：
Lined with waterproof tape

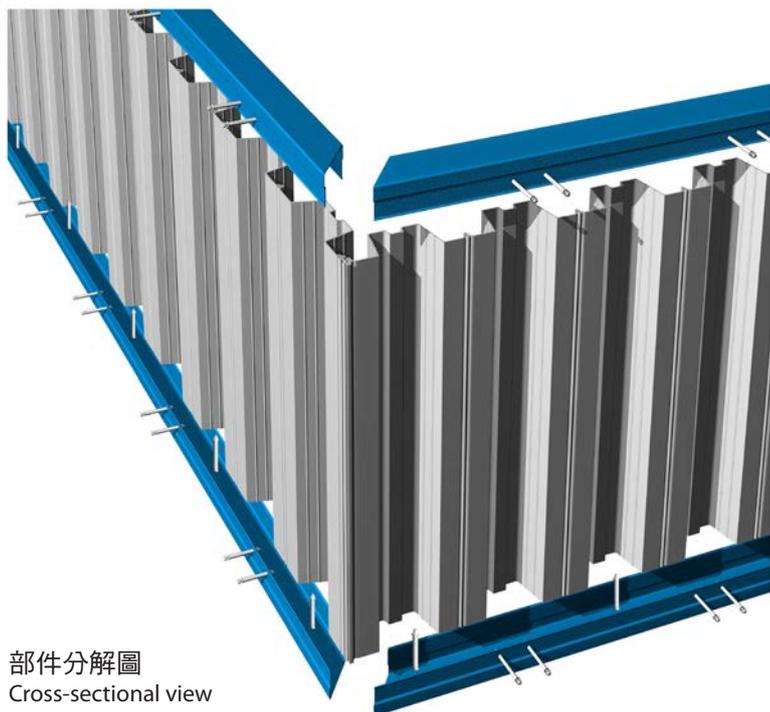


完成：
可套上帽蓋或景觀板材
Finish：
Set caps or other application of plastic piling

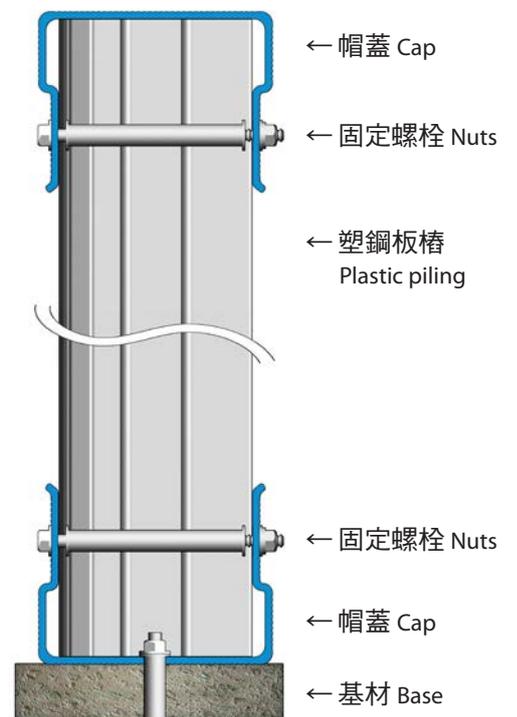
塑鋼板樁立式方型養殖魚池模擬
For vertical square farmed fish pond of plastic piling



塑鋼板樁立式方型養殖魚池組立圖
Assembly diagram for vertical square farmed fish pond of plastic piling



部件分解圖
 Cross-sectional view





www.npc.com.tw



南亞塑膠工業股份有限公司
NAN YA PLASTICS CORPORATION

塑膠第三事業部 · PLASTICS 3rd DIV.

台北市 105 敦化北路 201 號 電話：(02) 2717-8226

201, TUN HWA N. ROAD, TAIPEI, TAIWAN

TEL：(02) 2717-8226

FAX：(02) 2514-0628

<http://www.npc.com.tw>

(2014.05.1500.31)