VINYL SHEET PILES

ESC Vinyl Sheet Piles also known as PVC Sheet Pile are a modern alternative for your project. It offers a lower cost that steel, wood or concrete alternatives. ESC Vinyl Sheet Pile is a strong, light-weight,UV and impact resistant product. The product is inert does not rust, corrode or crack.

50+ year design life - Due to its superior corrosion resistance, ESC Vinyl Sheet Piles can be installed with the confidence of structural integrity and appearance even after 50 years

Cost Efficiency - both from installation and long term cost savings due to superior corrosion resistance and lower price per unit metre material

UV Resistance - The PVC material is engineered with special compounds for resistance to the harmful ultraviolet rays.

No toxic coatings - No coatings are required, which may be detrimental to the environment.

Not Affected by Marine Borers - Small mollusks or crustaceans in the ocean can cause devastating effects over a period of time to traditional timber piling. Vinyl Sheet Piling offers an attractive alternative that is unaffected by these organisms.

Easy Installation - Compared to steel sheet piles, vinyl sheet pilescan be up to 40 times lighter per square meter making it much easier to handle. Driving can also be completed under certain conditions by pressing down with an excavator or a compact vibrohammer.

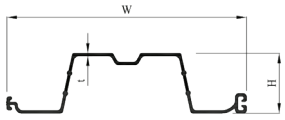
COMPARISON TO OTHER MATERIALS

	VINYL (PVC)	STEEL	CONCRETE	WOOD
Cost	Low	High	Medium	Low
Weight	Light	Heavy	Very Heavy	Medium
Ressistance to Corrosion	High	Low	N/A	N/A
Ressistance to Chemicals & Sea Water Environment	High	Low	High	Low
Resistance to Cracking & Spalling	High	High	Medium	N/A
Environmentally Friendly	Yes	Yes	No	No
Aesthetics	High	Low	Medium	Medium
Installation	Easy	Easy	Difficult	Moderate
Design Flexibility	High	High	Moderate	High

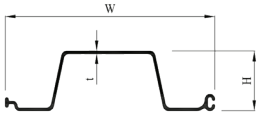
MATERIAL STANDARDS (TO ASTM/GB STD)

	ASTM	ISO	Min. Value/ Range
Density		ISO 1183-3	1400-1480kg/m^3
Flexural Strength	ASTM D790	ISO 178	66MPa
Shore Durometer		ISO 868	75 Shore AD
Modulus of Elasticity	ASTM D638	ISO 178/527-2	2.62GPa
Tensile Strength	ASTM D638		44MPa
Izod Impact Strength	ASTM D638		9kJ/m^2
Charpy Impact Strength		ISO 179-1	30kJ/m^2
Vicat Softening Temperature	ASTM D648	ISO 306	77°C

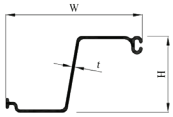
STANDARD PROFILES



ESC-VU SERIES



ESC-UGW SERIES



ESC-ZGW SERIES

SECTION	WIDTH (w) mm	HEIGHT (h) mm	THICKNESS (t) mm	ELASTIC SECTION MODULUS cm^3	MOMENT OF INERTIA cm^4	ULTIMATE BENDING MOMENT kN.m	ALLOWABLE BENDING MOMENT kN.m
ESC-VU718-7.5	718	180	7.5	476.0	4,524.4	19.6	9.8
ESC-VU718-8.0	718	180	8.0	498.1	4,838.3	20.9	10.5
ESC-VU718-9.0	718	180	9.0	551.5	5,294.5	23.2	11.6
ESC-VU718-10.0	718	180	10.0	695.2	5,756.2	24.9	12.4
ESC-VU718-11.0	718	180	11.0	648.4	6,159.4	27.2	13.6
ESC-VU760-6.0	760	180	6.0	405.3	4,043.8	17.0	8.5
ESC-VU760-7.0	760	180	7.0	446.6	4,466.3	18.8	9.4
ESC-UGW525-8.0	525	150	8.0	282.5	2,420.0	10.0	5.0
ESC-UGW610-9.0	622	230	9.0	658.1	7,736.1	29.0	14.5
ESC-ZGW270-5.5	270	150	5.5	99.8	869.9	4.4	2.2
ESC-ZGW460-10.5	458	254	10.5	669.6	8,812.4	31.1	15.6
ESC-ZGW460-11.18	457	254	11.18	651.1	8,280.2	29.1	14.6

ENGINEERED SYNTHETIC SHEET PILE SOLUTIONS

ESC STEEL ENGINEERING SDN BHD

A A-3-35A Third Floor, IOI Boulevard, Jalan Kenari 5, Pusat Bandar Puchong Jaya, 47160 Puchong Selangor, Malaysia

Contact: Chan Hon Kit
E chanhonkit@escpile.com
T +6012 428 5759

DOWNLOAD THE ESC GROUP APP