

ECO-ARMOR™

Playworld Systems is proud to have eliminated 99.999% of PVCs from our equipment*. And we will remove the remaining .001% as soon as alternative supplies are available.

How can we do this? With Eco-Armor™, our durable, thermoplastic Polyethylene (PE) coating. PE coatings like Eco-Armor average 38% lower carbon footprint than PVC coatings on playground components. Playworld Systems has joined the ranks of other major corporations like Wal-Mart, Sony, Apple, and Toyota to eliminate PVC from the environment.



Eco-Armor's Features & Benefits:

- Environmentally friendly – Eco-Armor has no PVC, phthalates, lead or cadmium, all of which can be potentially harmful components of PVC and impact our environment and wellness.
 - Eco-Armor meets California, Washington and other state and federal requirements for phthalates and heavy metal content.
- Durable – Eco-Armor is more wear-resistant than PVC. PE coating will last as long as PVC.
- Weather-able – Eco-Armor is unaffected by extreme changes in temperature. Extreme cold (to -20°F) cycle testing indicates no cracking or loss of adhesion to the metal substrate.
- Stays clean – Eco-Armor is less porous than PVC, which makes the surface less conducive to growth of mold and accumulation of dirt.
- Superior finish – Eco-Armor's PE coating process improves the finish as compared to PVC, because it eliminates drips and runs.
- Slip-resistant – Eco-Armor is slip-resistant due to its textured finish.

Eco-Armor Technical Specifications:

Functionalized PE, copolymer-based, thermoplastic powder coating; Eco-Armor is designed for maximum mechanical performance, impact-resistance and UV stability with the following performance properties:

Property	Testing Method	Results
Flexibility (conical mandrel)	ASTM D 522	1/8", no cracks (greater than 32%)
Adhesion	ASTM D 4541	800 psi
Impact-resistance	ASTM D 2794	Greater than 320 in-lbs
Gloss	ASTM D 523	12
Taber abrasion	ASTM D 4060	26 (mg loss, CS 17 wheel)
Tensile strength	ASTM D 638	3482 psi
% Elongation	ASTM D 638	13%
Humidity-resistance	ASTM D 2247	No blistering or loss of gloss after 1000 hours
Salt spray	ASTM B 117	No significant change in color or gloss after 2000 hours
QUV	ASTM G 53	No significant change in color or gloss after 2000 hours



* Based on total weight of products shipped.