



ECO-FORM PANEL

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Eco-Form is a plastic hollow board primarily used as a formwork material for concrete casting. It is composed of polypropylene plastic which gives its high durability, smooth surface, high heat and water resistance properties. As an alternative to traditional wooden formworks, i.e. phenolic boards, Eco-Form saves both on construction cost, through its reusability; and time, through its workability. While this lightweight board can be used multiple times, increasing work productivity, it also has a wide array of applications such as lightweight partitions, modular cabinets and shelves.





TECH SPECS

Technical Characteristics Eco-Form Polypropylene Board

Description	Eco-Form		
Type of Panel	E12	E15	E18
Thickness (mm)	11.9	14.9	17.9
Tolerance (mm)		+0 / -0.1	
Weight (kg/m ²)	7.68	9.6	11.52
Width		1220	
Length		2440	
Module of Elasticity (N/mm ²)	2456	3070	3684
Flexural Strength (N/mm ²)	71	60	56
Shear Resistance (N/mm ²)		> 5.9	

Dimensions

Item	Dimensions	Weight	Thickness	Pick-up price per board (VAT INC)
Ecoboard	2440 mm x 1220 mm	19 kg	12 mm	Contact Us
		24 kg	15 mm	
		28 kg	18 mm	

Cost Savings

Specifications	Ecoboard 18mm		Phenolic board 18mm or 3/4 inch
	Conservative	Maximized	
Cost per piece* (4 x 8 ft)		Contact Us	
No. of times used**	80x	100x	6x
Cost per usage		Contact Us	
Cost per sqm		Contact Us	
Savings vs Phenolic board	26%	56%	-
Approx. # of times use to breakeven with phenolic board	11x		-

* Prices may be subject to change

**Subject to on-site handling, proper usage, and maintenance

Technical Specifications

Specifications	Requirements	Inspection result	Testing basis
Hardness (D)	20 pt	66	GB/T 2411 - 2008
Impact strength (kl / sqm)	> 30	44.5	GB/T 1043.3 - 2008
Bending strength (MPa)	> 30	58.5	GB/T 9341 - 2008
Bending modulus (MPa)	> 3000	3.07 x 10 m ³	GB/T 9341 - 2008
Heating rate crosswise (%)	± 0.2	- 0.11	JG/T 418 - 2014 7.2.7
Heating rate lengthwise (%)	± 0.2	- 0.125	JG/T 418 - 2013 7.2.7
Vicat softening point (dec C)	> 80	82	GB/T 1034 - 2008
Water absorption(%)	< 0.5	0.42	GB/T 1633 - 2000

* Using sample size: 1830 mm x 915 mm x 15 mm

Formworks Comparison

Performance	Ecoboard formwork	PVC plastic formwork	Phenolic board
Water resistance	Good	Good	Poor
Surface abrasion resistance	Good	Good	Poor
Fire/heat resistance	Good	Good	Poor
Impact / drop strength	High	High	Normal
After absorbing water	No deformed	Minimal deformation	Deformed
Warping after use	No	Minimal warping	Yes
Weight (kg/pc)	24 (15 mm)	29 (15 mm)	25 (15 mm)
Recyclability	Yes	Yes	No
Cost of use	Lowest	Low	High
Reusable time	Over 30x	Over 30x	3-4x
Formwork stripping process	Easy	Easy	Difficult
Nailable and screwable	Yes	Yes	Yes
Can be cut / wooden saw	Yes	Yes	Yes
Scrap value	Some	Some	None
Material	Polypropylene (pp)	Polyvinyl chloride (pvc)	Wooden sheets
Size	1220 x 2440 x 12/15/18 mm	1220 x 2440 x 12/15/18 mm	1220 x 2440 x 12/18 mm

ADVANTAGES



Cost efficient & reusable

Can be reused 80 to 100x without difficulty. Cost is effectively lower compared to traditional wooden formworks.



Easy to use & transport

Formwork installation and removal is faster given the workability and lightweight properties of the plastic board, can be easily cut, nailed, screwed and drilled.



Water proof

High water resistance. No water absorption or bubbling even if left under wet conditions.



Surface abrasion resistant

Surface is smooth and can withstand abrasion especially during stripping / dismantling after concrete is dried, thereby allowing a smoother concrete finish.



Heat / chemical resistant

Suitable under a wide range of weather conditions (-10 to 90 deg C). Surface is resistant to chemicals and other substances that would otherwise damage traditional formworks.



Environmental friendly

No toxic substances used to make the plastic board (lead, mercury, cadmium, etc).



Minimal maintenance

Can be stored over a long period of time without preventive maintenance. Surface is easily cleaned by washing in order for multiple use.

N-FORM PANEL "RECYCLED"

The N-Form Panel solid plastic panel is a very long-lived composite sheet – over 1,500 uses with 1 panel are documented. As a result the N-Form Panel is a very economical choice for panelized formwork. The patented layered panel is extremely robust, durable and enables top quality exposed concrete.



NOTES





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