



ECHONTM

... so exquisite, you will get used to it.

PVC Foam Boards, WPC Boards and Mouldings

Signage and Advertising • Furniture • Doors • Pre fabricated structures

A Product of Kumar Archtech Pvt. Ltd.

Message from the Management

We at Echon™, as a global company believe in developing an instinct to know, how a new initiative should progress.

As a leader in PVC foam board and moulding industry, we have set standards to match and adjust to the cutting edge technology in order to be more productive and profitable in your business with a perpetual undercurrent of doing business with social responsibility and make this world environment friendly.

It is with this vision that I started this industry , to preserve wood for humanity and replace it with our products so as to realize my dream of a productive venture which simultaneously aims at making this world a more beautiful place to live in.

Our growth story resembles India's growth story which is about conglomeration of brilliant minds, deserving opportunities and exposure coupled with training, to match yours expectations from us.

I am happy to share my satisfaction that our ability to be flexible and to absorb dynamic changes have been important parameters in forming our vision.

These endeavours have also been instrumental in establishing our global presence and a maze of dealer network across this great nation, India.

It is a known fact that we have played a pioneer role in setting industry standards for innovations and to provide the best cell structure in our boards and sheets and use the additives which are food grade and lead free.

We are always open to hear feedbacks on our product and services from you-our valued customers.

Company Profile

Kumar Arch Tech Pvt. Ltd., established in 2002 is pioneer in manufacturing PVC foam boards/sheets., equipped with state of the art technology. Our experience and a focused managerial philosophy has been instrumental in making us what we are. We find strength in innovative leadership coupled with providing quick solutions to market requirement. We take pride in our accessibility in terms of accomplishing all kinds of needs of our customers.

Each and every Echon™ Product is an outcome of combined and strenuous effort of a technical committee which resembles a galaxy of professionals committed to their respected fields.

We may simply introduce ourselves as leaders in PVC boards/sheets.

After having established our presence across the globe including countries like USA., France, Turkey, U. K. & Ireland, we wish to do our bit to make this world eco. friendly, by replacing wood by our products.



ECHON™ is the most creative, ecofriendly product with incomparable physical properties for a very wide range of applications in both interiors as well as exteriors. Like advertising, construction and industry for instance. ECHON™ wonder properties include light weight, durable and versatile surface most suitable for printing, painting, milling or routing and workable by ordinary carpentry tools and conventional handling methods. This makes it most convenient and cost effective.

UNMATCHED PROPERTIES OF ECHON™

- Resistance to chemical, water, termite etc.
- Rot and sag free
- Excellent sound, thermal and electrical insulators
- Light weight, high flexural strength and impact resistance
- Fire retardant
- Maintenance free
- Dimensionally stable-does not warp or swell
- Easy thermoforming
- Superior finish on both the sides
- Economic and space saving material
- Easy bonding with any material as well as with ECHON™ itself.

BRAND	GRADE	TYPE	THICKNESS	WIDTH	COLOR	APPLICATION
Echon™ Eco Sign	Ecel 100	Free Foam	1mm-5mm	900mm-2050mm	White, Black, Blue, Red, Yellow, Etc	For Signage, , Printing Etc
Echon™ Eco Lite	Ecel 1500	Free Foam	1mm-5mm	900mm-2050mm	White	For Signage, Mounting pictures, Printing Etc
Echon™ Eco cell	Ecel 100	Free Foam	6mm-50mm	900mm-2050mm	White	For Signage, Mounting pictures, Printing,Furniture, Routing Etc
Echon™ Eco star*	Ecel 1520	CelluKa	2mm-50mm	900mm-2050mm	All Colors	For Furniture , Doors,Interior,Partition application, Letter Cutting Etc
Echon™ Eco Blush	Ecel 1540	Celluka	6mm-50mm	900mm-2050mm	White	For Furniture , Partition application, Letter Cutting Etc
Echon™ Eco Elite	Ecel 1600	Co-Ex	6mm-50mm	900mm-2050mm	White All Colors	For Furniture, Cabinates,Trim Etc
Echon™ Eco Solid	Ecel 204	Rigid	1mm-5mm	900mm-2050mm	Grey, White	For Pannel Chemical,Pharma industries Furniture, and Other Industrial Uses
Echon™ Wud Plus	Ecel 1002 /1004	WPC	6mm-30mm	900mm-1560mm	L. Brown, Ivory	For Furniture Cabinates, Prefab Houses,Shuttering panels Etc
Echon™ Eco Blend	Ecel 952	CelluKa	6mm-30mm	900mm-1560mm	Grey	For Furniture and Doors

The main applications of ECHON™ are as follows :

Signage & Advertising

Signs boards, letter displays, decoration of shops, windows, exhibition stands etc.

Building Sector

Shop fitting, interior decoration, zones of high humidity (bathroom etc.) air-conditioning and ventilation systems, heat and sound insulation, shutter ply etc.

Furniture

Benches, doors, windows, tables, counters, cabinets, wardrobes, shelves, cots, dressing tables etc

Prefabricated Huts

Instant solution for your need of Houses, Site Offices, Class Rooms, Bath Rooms, Hospitals, Camp Sites, Terrace Rooms, Beach Houses, Security Rooms, Cellular Phone Shelters, Farm Houses etc.

Electrical Engineering

Switch cabinets, channels for cables & wires, control panels.

Cold Storage

Due to excellent thermal insulation property, resistance to water/moisture and totally non ferrous surface, ECHON™ provides an ultimate material for cold storage and food industry.

Exterior Use

Garden partitions, railings, sidings, letter cuttings etc

Interior Use

Wall cladding, inner partions, flooring, ceiling, wall designs etc.

Miscellaneous

Construction of containers, apparatus, models, equipment for photographic laboratories, electroplating, traffic signs, building site boards, dance floors, computer rooms etc.



Working Directions

Machining

ECHON™ can be easily and quickly worked with standard tools used for wood. It can be cut, turned drilled, planned, milled, screwed, polished and much more.

To prevent breaking and splintering the tools must be sharp. It is not necessary to cool the tools. One generally works at high cutting speed, low forward feed and low rate of cut.

Forming

To some extent the ECHON™ sheets are suitable for easy Vacuum forming, Bending & Folding can be done when heated up.

Welding

ECHON™ can be welded as per normal welding methods. But lot of care should be taken otherwise Foam might collapse.

Bonding

ECHON™ sheets can be bonded to other material and to itself. Depending on the requirement and applications, different types of adhesives can be used. When bonding to itself adhesives containing solvent and solvent-free polyurethane adhesives are suitable.

Printing

Due to its smooth surface. ECHON™ can be easily painted and printed.

The surface is ideal for screen printing for which special inks are used. The surface should be clean for printing purpose.

Fixing Recommendations

ECHON™ sheets are made of thermoplastic PVC and therefore vary more in length than e.g. timber or metal working materials. When installing Screen Printed advertisement boards in e.g. Cricket stadia or when fixing curtain walling or cladding, a possible expansion of the sheets has always to be taken into consideration. The appropriate fixing depends on the type of application.

TECHNICAL SPECIFICATIONS OF ECHON™

Density	: 0.5-0.7 g/cc
Tensile Strength	: 181 kg/cm ²
Elongation	: 15%
Impact Strength	: 32 j/m
Shore Hardness A	: Min 60
Vicat Softening Point	: 72°C
Elastic Modulus	: 1000-1400 N/mm ²
Flexural Strength	: 374 kg/cm ²
Surface Resistant	: 5.103
Dielectric Puncture Strength	: 60 kv/cm
Relative Permittivity Range	: 1.9-2.0
Dielectric Loss Factor	: 2.10 320.103
Thermal Conductivity	: 25mm Section 0.0616 w/m.k.
K-Value	: 25mm Section 1.8w/m2k
Coefficient of Dilation at 20°C	: 0.6-.07
Water Absorption %AGE	: 0.7
Fire Retardency	: Self Extinguishable
Mechanical Strength	: Conforms to C.I.No.5.4 of IS.5133 (Pt-2)-1969
Stability at High Temp.	: Cl. No. 5.6 of IS:5133 (Pt.2) -1969
Resistance to abnormal heat and fire	: C.I. No. 9.15 of IS: 8828-1996



TOLERANCE

Length	: +10mm
Width	: +2.5
Thickness	: +(.08mm + .03 x thickness
Evenness	: max 1.5 mm/m
Rectangularity	: < = 2.0 mm/m
Linearity	: max 1.5 mm/m

S. No.	Thickness	Description	Width			
			1000mm	1220 / 1250mm	1560 / 1600mm	2050mm
1	2mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
2	3mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
3	4mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
4	5mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
5	6mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
6	8mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
7	10mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
8	13mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
9	15mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✓
10	19mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✗
11	19mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✗
12	24mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✓	✗
13	30mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✗	✗
14	35mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✗	✗
15	40mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✗	✗
16	50mm	PVC Rigid / Free Foam / Celluka Sheet	✓	✓	✗	✗

Comparison of ECHON™ with other products in market

	ECHON™	WOODEN	METAL
Water Resistance	Yes	No	No
Fire Resistance	Yes	No	Yes
Dimension Stability	Yes	No	Yes
Moisture Effect	No	Yes	Yes
Workability	Easy	Hard	Hard
Strength	Good	Average	Good
Chemical Effect	No	Yes	Yes
Weight	Light	Average	Heavy
Insulation	Good	Normal	Bad
Ideal Surface for other work	Good	Good	Bad

Nailing



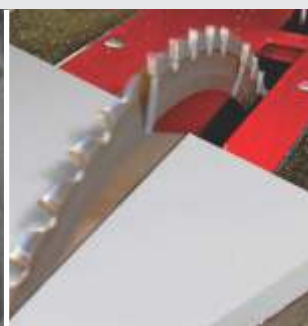
Routing



Drilling



Cutting



Gluing



Echon™ PVC Celuka Foam Boards/Sheets

PRODUCTS

Echon™ EcoStar (Grade 1520) - High quality PVC celuka board for interior and exterior applications. Used in building application trim board, furniture and kitchen applications

Echon™ EcoBlush (Grade 1540) - High quality PVC celuka board with hard and glossy surface on both side. Specially designed for furniture and kitchen.

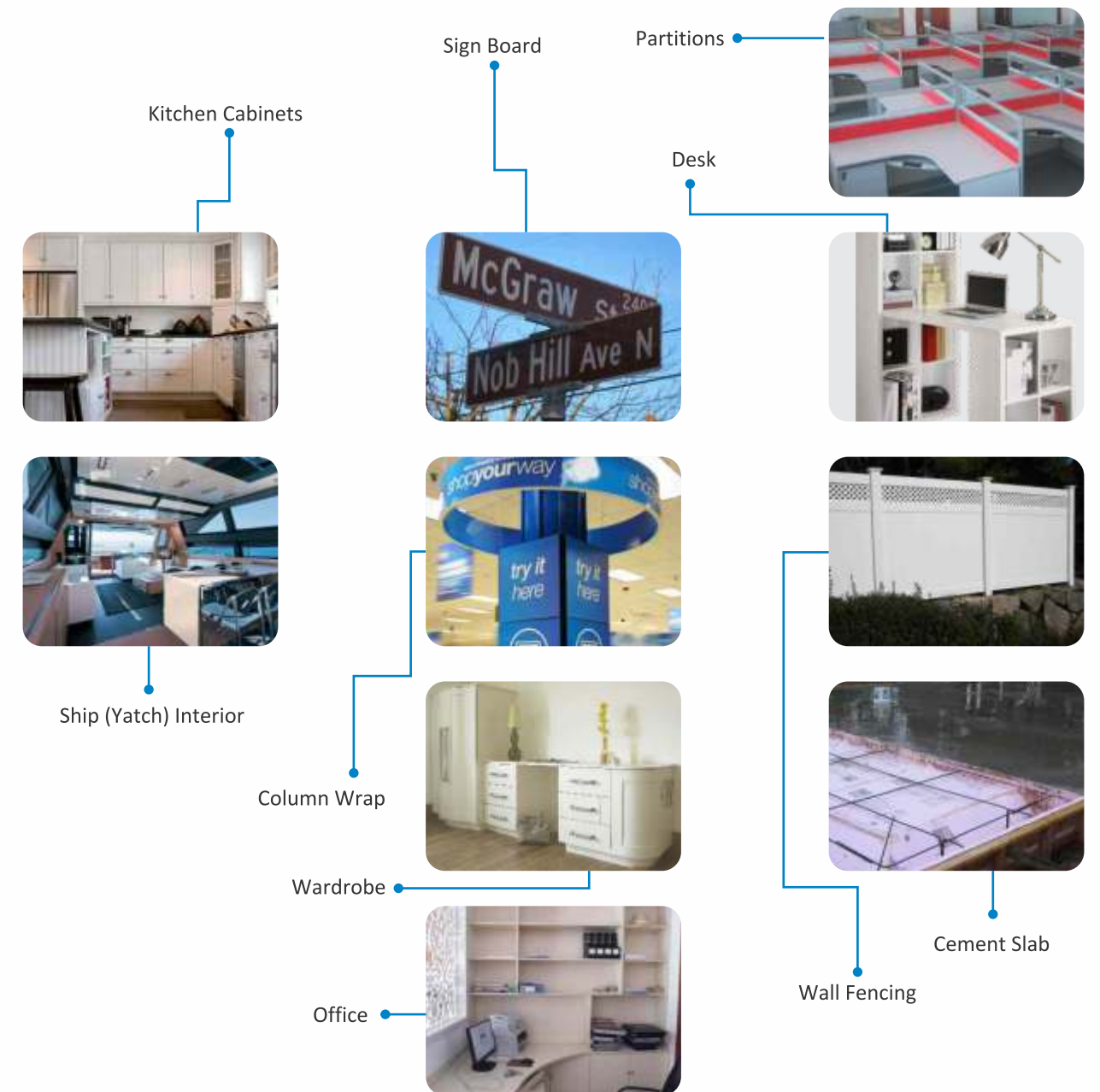
Echon™ EcoElite (Grade 1600) - High quality multilayer PVC sheet with hard and glossy surface on both sides of high density specially designed for furniture, shuttering & other exterior as well as interior uses.

Echon™ Eco-blend (Grade 952)- PVC board with hard surface made out of recycle blend, pvc material in grey and dark color application for furniture

Echon™ WudPlus- (Grade 1002-1004)- WPC board with hard surface used for furniture applications, doors, shuttering and other building products.

Sizes available – 1000mm to 2050mm

Thickness 2mm to 50mm



APPLICATIONS	WHY ECHON™
▪ Furniture	▪ Smooth surface
▪ Wardrobe	▪ Dimensionally stable, no warpage
▪ Cabinates	▪ Lead free / Food Grade
▪ Modular Kitchen	▪ No need of paint, polish, laminates
▪ Shuttering	▪ You can apply polish, paint, lacker, duco, lamination, veneer
▪ Doors	▪ Borer proof
▪ Partitions	▪ Superior cell structure
▪ Decking	▪ Easy to cut

Echon™ PVC Free Foam Boards/Sheets

PRODUCTS

Echon™ EcoLite (Grade 1500) - PVC foam sheet of light weight. Used for signage, graphics application

Echon™ EcoSign (Grade 100) - Premium quality PVC foam Sheet of normal density used for Signage. applicable for cutting printing, pasting.

Echon™ EcoCell (Grade 100) - Premium PVC foamboard used as trim, letter cutting, for building application, doors and other exterior use.

Echon™ Eco-blend (Grade 952) - PVC board with hard surface made out of recycle blend, PVC material in grey and dark color application for furniture

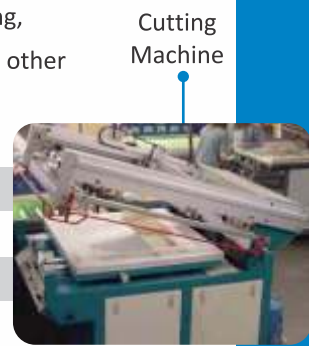
Echon™ Eco (Grade 1204) - Solid - Rigid PVC / Solid PVC sheet / Extruded PVC sheet for application like doors, packaging, chemical plants, pharmaceutical industries and various other industries.

Sizes available 1000mm to 2050mm

Thickness available 2mm to 50mm



Cutter Machine



Cutting Machine



Print on Board



Sign Board

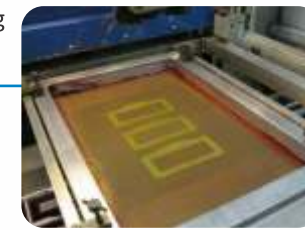


Display Board



Display Board

Screen Printing



Sign Board

Sign Board



UV Printing



APPLICATIONS	WHY ECHON™
▪ Sign boards	▪ Smooth surface
▪ Letter cutting	▪ Superior cell structure
▪ Exhibition stands	▪ Premium printing quality
▪ Trim boards	▪ Multi color digital printing
▪ Flooring	▪ Can print on both sides, pasting, punching
▪ Wall cladding	▪ Lead free / Food grade
▪ Ceiling	▪ Easy Therforming
▪ Industrial use	▪ Excellent sound, Thermal and electrical insulators
▪ Storage	▪ High impact resistance

COLOUR SHADES



VARIOUS SHADES OF ECHON™



ROSEWOOD



WENGE



TEAKWOOD



YELLOW CEDAR



WHITE CEDAR



TEXTURE 1



TEXTURE 2



TEXTURE 3



Standard sizes		Standard Properties	
82" x 32"	81" x 31"	Door Thickness	18mm to 40mm
84" x 38"	78" x 36"	Sheets Thickness	4mm to 10mm
76" x 28"	75" x 33"	Plain Colors	White, Ivory, Grey &
			Plain Colors
75" x 30"	75" x 27"	Laminated	RoseWood, Wenge, TeakWood, White Cedar, Yellow Cedar
Door sizes specification as per bulk order are provided			



The unique & Eco-friendly concept of

Ecozell Doors

ECOCELL DOORS is a result of deep R&D efforts and wide surveys of the market demand for cost effective, easy installation and maintenance free readymade doors.

Ecozell Doors are fabricated by experts with world class Rigid PVC Foam sheets, manufactured by CELUKA process on latest state of the art European plant and machinery while keeping in mind the specific customer needs and expectations for an international quality door.

The main constituents of Ecozell are 20% PVC and 30% different additives to make its work ability better than wood as well as totally weather resistant and maintenance free. The doors are reinforced with high quality of MS frame and the flush doors are given PUF packing so as to provide an extra thermal and insulation properly in addition to other incomparable properties.

Ecozell Doors are classified broadly in two types namely Panel Doors and Flush Doors. These are available in a vast array of colours and finishes.

Prefabricated Houses

Economic model:

designed for site offices, garden house or any temporary and immediate use this model is made of 30 mm wall thickness with GI roofing and beautiful finish.

Semi-deluxe- an improvement in strength and looks this model made in 50 MM thickness and is widely used for site offices ,factories , clinics kiosks and other structures

Deluxe- as The name suggests brings in more sophisticated design and amazing structural hold to the house. Made in 75 mm its best suited for residential, hospitals , schools and other such places.

Super deluxe- finely custom made for higher strength of 100 mm , an unbeatable structure for residential or any other application. It has both aspects of modern and traditional and looks beautiful.

All the models have plumbing and electrical facilities installed. They can be erected upto 2-3 floors

Flexible Layouts

Instant solution for :		Unbeatable Advantages	
▪ Residential	▪ Site Office	Resistance to Earthquake and natural calamities	Weather resistance
▪ Schools	▪ Hospitals	Knock-down system and easy shifting	Fire retardant
▪ Industrial/Factory	▪ Camp Site	100% Water proof	Anti termite
▪ Terrace Rooms	▪ Beach Houses	Anti fungus	Anti corrosion
▪ Security Rooms	▪ Cellular Phone shelter	Easy and fast to fabricate	Maintenance free
▪ Farm Houses	▪ Garden Houses	Resistance to chemicals and free	Aesthetic designs
▪ Labour Colonies	And Much more ...		

Erection

- We will make the knockdown MS steel structure fitted with Echon™ panels /sheets
- The steel structure shall have necessary Bolts/holfast to grip the earth for a firm grip
- The plinth is to be provided by the clients with cement master / barracks structure or other local building material in normal cases

Structure Base

MS Base Frame, rails on outer and support columns and beams MS Tubular square pipe for partition frame and U Channels for sandwich panels.

Walls/Partitions

PUF sandwiched panels made out of PVC / GI Sheets duly reinforced by MS tushar structure filled in by high density PUF Thickness 30mm to 100mm

Roof

CGI sheet/AC sheet/Corrugated PVC sheets/PUF sandwiched panels

Doors

30mm Echon™ doors made out of Tubular structure fasted with Echon™ sheets.

Windows

Echon™ sheets window/Aluminium sliding windows.

Painting

Only on tubular structure. Echon™ sheets does not need any painting.



It has shelf life for over 20 times for repetition or mobility



ECHON

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