



Let's play colours with your fingers :



Aluminum Composite Panel

Acrylic Solid Surface

PVC/WPC Foam Board

PVC/WPC Doors & Frames

Metal Ceiling



FLEXIBOND®

ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007

UMIYA CARBON PVT. LTD.

E-mail : flexibondpvc@yahoo.com, pvc@flexibond.co.in

Ph : +91 92280 25446 | Web : www.flexibond.co.in



FLEXIBOND®

ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007

PVC/WPC Foam Board | PVC/WPC Door
WPC Solid Door Frame | Acrylic Solid Surface

Innovate not only to create,
the 21st century needs innovation



ABOUT US

We UMIYA CARBON PVT LTD. are a manufacturer of "FLEXIBOND" Brand PVC FOAM BOARD, the exclusive & most diversified range. Flexibond is manufactured using the latest state of the High technology. Research & development is an essential element in Flexibond's success providing an important edge in the technology & Design needed to stay at the fore front of architectural friends.

FLEXIBOND®

ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007

PVC/WPC Foam Board | PVC/WPC Door
WPC Solid Door Frame | Acrylic Solid Surface

QUALITY ASSURANCE

We provide good quality products to customers with respect and faith; we grow through creativity, invention, and innovation. As we are a manufacturer of highly recognized PVC and WPC our products are of the best quality.

OUR MOTTO

Our centric approach towards the clients has enabled us to focus on our business operations and to meet the exact requirements of the customers. We have directed all our expertise in providing customers with a wide range of good quality products.

MISSION STATEMENT

Flexibond will strive to achieve and remain as the most preferred brand by architects, interior designers, engineers, contractors, builders and other construction industry members, whenever they are thriving to create building which are also eco-friendly.



PVC FOAM BOARD



Excellent finish, lightweight, water and moisture proof, termite & pest proof are the basic need for a designer, durable and hygiene kitchen. FLEXIBOND offers you PVC Sheets in various thickness which can be applied according to size and design.

APPLICATIONS

Furniture Industry

- » Interior Furniture
- » Modular Kitchen
- » Crockery Cupboards
- » Bed & Wardrobes
- » Farm-house Furniture
- » Hospital Furniture
- » Office Furniture

False Ceilings

- » Moulded Panels
- » Flat Panels
- » Fabricated Panels

Signage and Display Panels

- » Internal Wall Hung Displays
- » Digitally Printed Posters
- » Vinyl Laminated Pictures

Decorative Panels

- » Exhibition Shell Stands
- » Wall Paneling

Wall Cladding and Partitions

- » Decorative Cladding
- » Temporary Partitioning

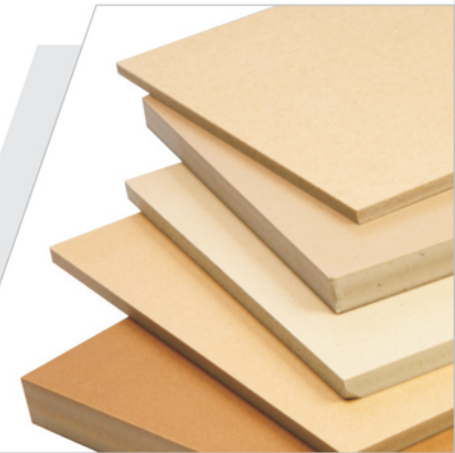
Fabrication in to Ducts

- » Ventilation and Air Conditioning



WPC SHEETS

Excellent exterior can be made from our WPC sheets which are strong and durable in any wether and also light weight. you can shift it from one to other place very easily. FLEXIBOND offers you wpc sheets in various thickness. out door seating, tables, pool garden fencing etc.



APPLICATION

- » House
- » Office & Hotel
- » Building
- » Shuttering
- » Hospitals
- » Bathrooms
- » Modular Kitchen
- » Terrace Rooms
- » Beach Houses
- » Camp Sites
- » Farm Houses

And many more.....



PVC/WPC DOORS

PVC/WPC Doors are foam-boards sized to requirements of door, it comes with all the inherent properties of the material. The most attractive features of this product are

- » Light Weight Structure and High Tensile Strength.
- » Better Machinability.
- » Best to stand with High Moisture and Humidity level and Corrosion Resistant.
- » Non Toxic and Borer Free.
- » High Screw Holding Capacity.
- » Can be processed like Natural Wood, MDF, Plywood on any processing machine.
- » Easy to cut and saves tooling life almost 30% than MDF and Particle Boards.



SURFACE DECORATION OF PVC/WPC DOORS :

- » Can be treated with HPL lamination
- » PU coating and UV coating can be done
- » Best routed with CNC router
- » Printing can be done with High Resolution
- » PVC edge bending can be applied nicely
- » Paper lamination can also be done easily
- » Can be applied with PVC foil lamination on a Vacuum press

STANDARD DIMENSION

PVC/WPC Boards : Size : 1220 mm x 2440 mm
 Thickness : 3 mm to 35 mm
 (Other size of boards can be arrange as per order)

PVC/WPC Doors : Height : 72", 75", 78", 81", 84"
 Width : 26", 28", 30", 32", 34", 36", 38", 40", 42"
 Thickness : 25mm, 28mm, 30mm
 (Other thickness can be arrange as per order)
 Colour : Wooden, Gray, White

TECHNICAL DETAILS

PROPERTY	TEST METHOD (ASTM D)	CONDITION	VALUE	UNIT
Special Gravity	ASTM D 792		0.6	g/cm ³
Water Absorption	ASTM D 570	76.2mm x 25.4mm; Drying : 50°C, 24 hrs; Immersion : 25°C, 24 hrs	0.37	%
Shore D Hardness	ASTM D 2240	Type D	70	D
Mechanical Fastener holding Capacity	ASTM D 1037		170	kg
Screw Holding Capacity	With 1/6 wood screw plate to plate		40	kg
Screw Bonding Capacity	With 1/6 wood screw plate to plate		24	kg
Tensile Strength at Yield	ASTM D 638	Specimen : Type I, Speed : 10 mm/min	10 MPa	1450 psi
Elongation Break		Specimen : Type I, Speed : 10 mm/min	8	%
Tensile Modulus		Specimen : Type V, Speed : 1 mm/min	700	MPa
Flexural Strength	ASTM D 790	127 mm x 12.91 mm x 3.77 mm	20 MPa	2900 psi
Flexural Modulus		Speed : 1.6 mm/min Span : 59 mm	1210 MPa	175450 psi
Impact Strength	ASTM D 6110-06	Width : 6.65 mm; Depth: 12.86 mm; Heating Rate : 120°C/h; Load:0.455 MPa	25	J/m
Dielectric Strength	ASTM D 149		10	kv/mm
Heat Deflection	ASTM D 648-07	Width: 6.65 mm; Depth: 13.07 mm; Heating rate: 120°C/h; Local: 1.82 MPa	61.4	°C
Temperature	Method B	Width: 6.65 mm; Depth: 12.86 mm; Heating rate: 120°C/h; Local: 0.455 MPa	70.9	°C
Heat Distortion Temp. (Under load at 246 psi)	ASTM D 648		120	°C
Co-efficient of Linear Expansion	ASTM D 696		2.9 x 10 ⁻⁵	in/in/°F
Thermal Conductivity	ASTM D 177		0.06	W/m°K
Flamability	GB/T 8624-2006 B1		Passed	
Horizontal Burning	ASTM F635-06	Specimen: 127mm x 12.6mm x 12.74mm	Burning rate: 0 mm/min	

ADVANTAGES



Fire Retardant &
Self-extinguishing



Electrically
Insulated



Chemical
Resistant



Nontoxic Grade



Thermally
Insulated



100%
Waterproof



Hygienic



100% Termite &
Borer Proof



Anti Fungal



High Density



Environmental
Friendly



Recyclable



Lightweight
and Strong



No Shrinking
or Swelling



Easy
Fabrication



Good Mechanical
Strength

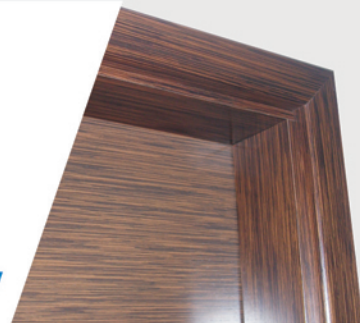


Good
Impact Strength

COMPARISON

PROPERTY	FLEXIBOND	PLYWOOD	MDF	PARTICLE BOARD
Water and Moisture Proof	✓	×	×	×
Termite and Pest Proof	✓	×	×	×
No Shrinking and Swelling	✓	×	×	×
Fire Retardant	✓	×	×	×
Borer Proof	✓	×	×	×
Splinter Free	✓	×	×	×
Maintenance Free	✓	×	×	×
Environment Friendly	✓	×	×	×
Smooth Surface	✓	×	×	×
Outdoor Adaptability	✓	×	×	×
Gluing & lamination	✓	✓	✓	✓
Weather & Ageing Resistant	✓	×	×	×
High Screw & Nail Holding Capacity	✓	✓	×	×
Sawing & Cutting	✓	✓	✓	✓
UV Resistance	✓	×	×	×
Direct Digital Printing	✓	×	×	×
Use Traditional Tools	✓	✓	✓	✓
High Density	✓	✓	×	×
Solvent Based Joinery	✓	×	×	×
Moulding Properties	✓	×	×	×

WPC DOOR FRAMES



Flexibond door frame made of wood polymer composite is known as wpc door frame Door Frames is revolutionary product and will be a need for every builder and door manufacturer.

The best advantage of FLEXIBOND door frames is over conventional wood door frame is that it is 101% waterproof, 100% termite proof Instead of installing Door Frame at a plaster stage.

It is surrounding assembly into which a door fits. Consists of two uprights, jambs and a head over the top. The door frame is most important for a door. The primary purpose of the door frame is to provide a support to the door. Door are incomplete without a FRAME.

FLEXIBOND Door Frames is an engineered product and resolves all problems which come in wood. FLEXIBOND will be surely using this great product in all upcoming projects.

Wpc door frame is the total replacement of timber and this is go green product

JUST
WHAT
YOU'RE
LOOKING
FOR



PRODUCT DESCRIPTION

FLEXIBOND WPC Solid Door Frame

WPC Solid Door Frame looks like wood, it is lifelong durable, high screw holding capacity, all hardware fittings can be tighten by screw.

WPC Solid Door Frame is especially useful for senetary

WPC Door Frame can be fit by Hold Fast during brick work and also fit by Screw/Anchor Bolt after completion of wall plaster.



Revolutionary Door Frames
For Ultra Modern Doors

FEATURES

- » Termite Proof.
- » 101% Water Proof & 100% Moisture Proof.
- » 0% shrinkage
- » No Bending & Crack Issues.
- » Fire Retardant.
- » Durable.
- » Ready to Paint in any colour & Polish.
- » High gloss, Matt, Satin P.U Paint surface can be prepared with less consumption of material.
- » Helps keep door operating and looking great for years

AVAILABILITY

- » It is generally structured with solid extrusion and in more than 800 Kg/Cubic meter density.
- » We provide below sizes in FLEXIBOND
- » It is available in standard ready to fix in sizes of
 - 1) 3" x 2", 4" x 2", 4" x 2.50", 5" x 2.50" in Single Rebates
 - 2) 5" x 2.5", 6" x 2.5" in Double Rebates.
 - 3) In Three Colours Wooden, White & Grey

DOOR STRUCTURE





WHO WILL BUY FLEXIBOND WPC DOOR FRAMES

- » Residential Projects
- » Commercial Projects
- » Govt. Projects
- » Hotel Projects
- » Institute Projects
- » Hospital Projects
- » End Users
- » Builders
- » Contractors
- » Door Frame Makers

THE CONTRAS OF FLEXIBOND WPC AND WOOD DOOR FRAME

No.	CHARACTERISTICS	WPC	WOOD
1	Moisture Resistance	100% Waterproof	Water absorptive
2	Rot Resistance	Antisepsis	Rot except special treating
3	Split Resistance	No Cracked	Cracked by weathering effect
4	Distortion Resistance	Almost no Contraction/Expansion	Distorting effected by change of moisture and temperature
5	UV Resistance	High Grade UV Resistance	Easily effected by UV
6	Fading Resistance	Almost no	Easy to fade
7	Outdoor adaptability	Great	Only few of treated wood adaptive
8	No need painting	No need	Need paint periodically
9	Durable / longevity	>8 – 15 years	< 3 years
10	Various Configuration	Extruded via various mould	Simplex
11	Environment Effect	Recyclable 100%	Consume woods

WHAT ARE DRAW BACKS ASSOCIATED WITH FLEXIBOND DOOR FRAMES

No.	PARTICULARS	DRAWBACKS
1	Wooden Door Frames	Not Water Proof, Termite, Maintenance
2	Aluminium Door Frames	Not Stable, Poor Screw Holding , Maintenance
3	Iron Door Frame	Screws, Rusting, Low Life, Fixing Problem.
4	Hollow PVC Door Frame	Un Stable For Heavy Doors, Low Screw Holding
5	UPVC Door Frame	High Cost, Unstable.
6	Cemented Door Frame	Fixing Problem , Brittle, Heavy, Not Water Proof

TECHNICAL DATA SHEET

PARAMETER	VALUE	ADVANTAGE
Density	0.8~1g/cm3	Little deformation, strong anti-aging
Flexibility	20~30MPa	Low brittleness ,not easily broken
CTE	2~5*10-5/°c	Non-deformation
Moisture absorption	0.3~3% /24h	Not easy to mold , not wrap
Termite – proof	Mass decrement :0.4% yr. , dead bugs rate:20% yr.	Not easy to mold , not wrap
Combustibility	25~26(B)	High flame retardancy
Colourfastness	3~4 Levels/yr. Δ E(2~3)	Not easy oxidation fade



As Japanese Samurai, SAMURAI FOAM BOARDS has Strength of a warrior. With density of 0.65 g/cm³, Samurai Boards offers strength of wood with all the properties of PVC. Samurai boards are primarily made of PVC and Calcium Carbonate along with other performance enhancing additives. And the best part is that they do away with all the disadvantages of Conventional building materials in one stroke.

Samurai Boards are 100 % waterproof, 100% termite proof, Light weight yet very sturdy, Flame resistant and Eco Friendly.

Samurai Boards are available in various different thickness for different purpose. Samurai boards are very versatile product which goes into different application.

Samurai Boards can be used in various applications :

- » Furniture
- » Interior Ceiling
- » Healthcare Application
- » Partitions
- » Modular Carcasses
- » Wall Cladding
- » Laboratory Furniture

Like traditional Boards,
Samurai Boards are Suitable for

- » Cut
- » Shear
- » Drill
- » Screw
- » Carving
- » Saw
- » Punch
- » Rivet
- » Engrave
- » Print



TECHNICAL DETAILS

TEST ITEM	TEST METHOD	RESULT
Chirpy Impact Strength	ASTM D 6110-06-10	10J/m C (Complete Break)
Deflection Temperature Under Load	ASTM D 648-07	51.8°C
Density	ASTM D 792-13	0.65 g/cm ³ 0.70 g/cm ³
Flexural Strength	ASTM D 790-10 Procedure A	18.8 MPa
Flexural Modulus		1660 MPa
Horizontal Burning	ASTM D635-14	HB
Shore D Hardness	ASTM D 2240 - 05(2010)	D/38/1
Falling Weight Impact Strength	ASTM D 5420-10	Mean Failure Height 152.5 mm
		Mean Failure Energy 2.7 J
Tensile Modulus	With reference to ASTM D638-14	821 MPa
Tensile Strength	With reference to ASTM D638-14	5.14 Mpa
Bongation at Break		9.80%
Water Absorption	ASTM D 570-98 (2010)	1.49%
Dielectric Strength	ASTM D 149 (2013) Method A	2.4 kV/mm
Direct Screw Withdrawal	ASTM D1037-12, Section 16	1285 N
Coefficient of Linear Expansion	Ref ASTM D696-08	-30°C-30°C : 41.68x10 ⁻⁴
Thermal Conductivity	ASTM C 177-13	.098 W/(m,K)
Thermal Resistance		0.184 (m ² ,K)/w
Flame Persistence Test	NF P92 504	Did not ignite
Dripping Test	NF P92 505	Passed
Lead Content	CPSC-CH-E 1002-08.1	0.42%