

ACI  
ALASHRAFY  
CONTRACTING & INTERIORS  
Joinery Division

STÄRKE

Polyvinyl Chloride (WPC)

Doors









Companies:



Partnerships:



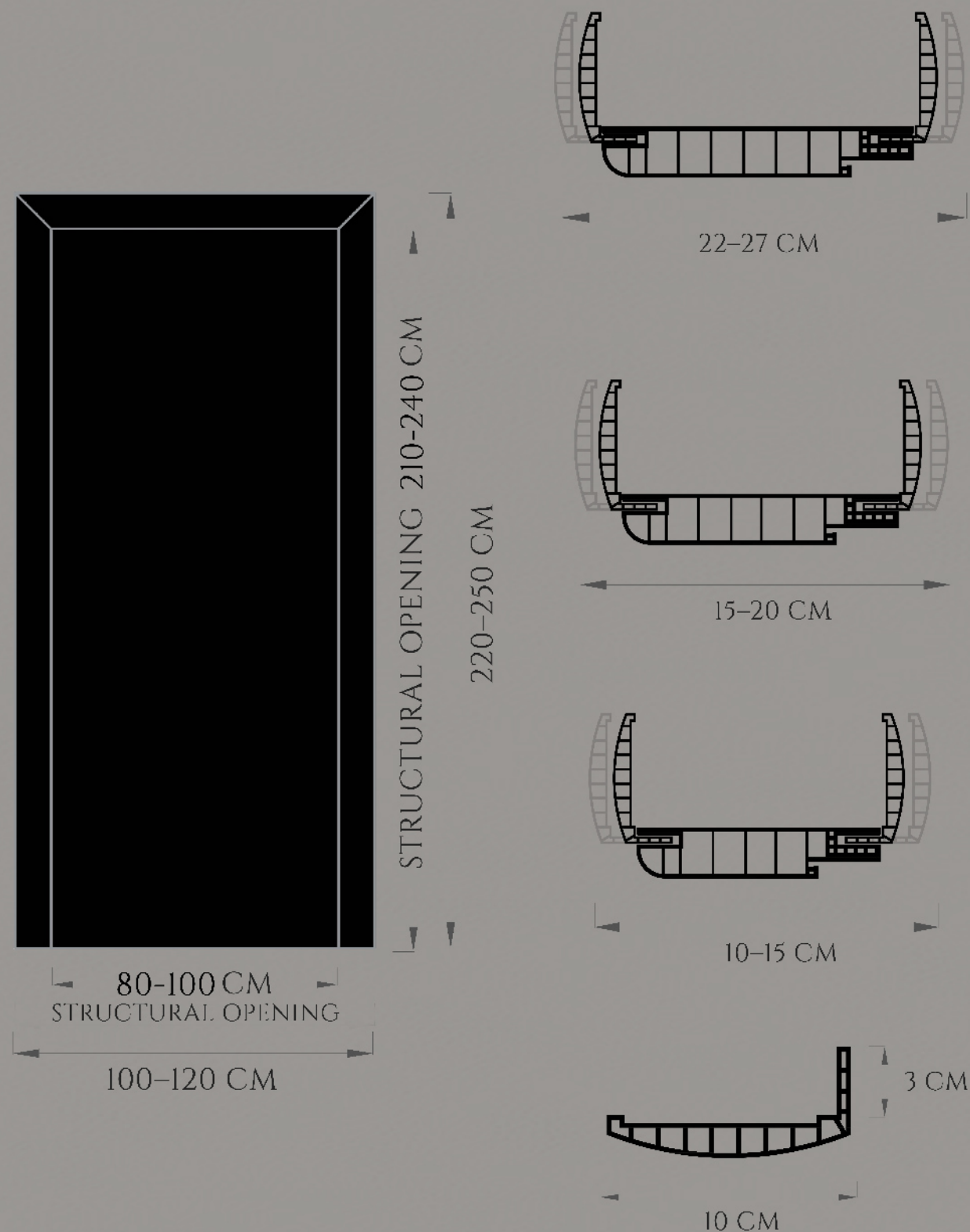
## Contents

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REGIONAL PRESENCE

## SIZES



## SPECIFICATIONS

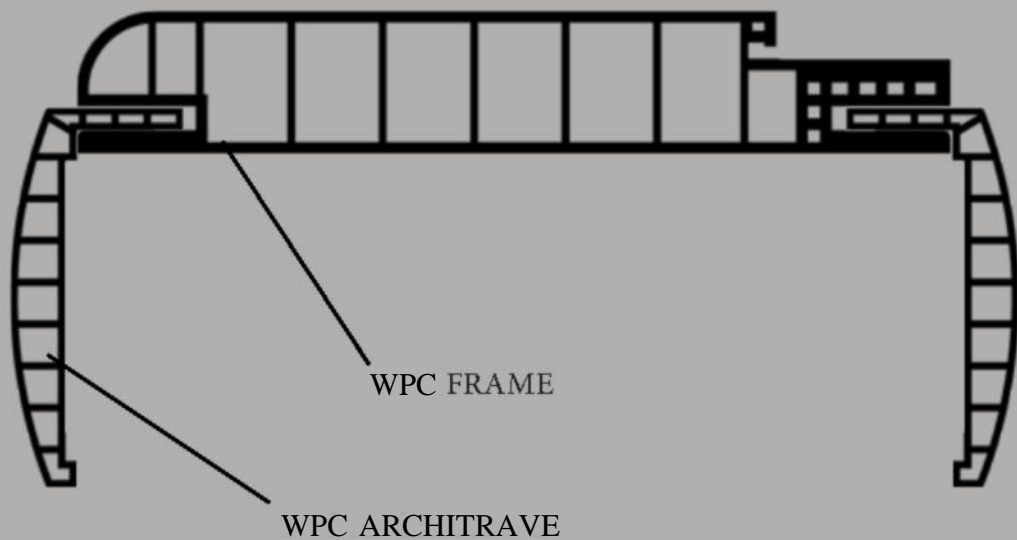
DOOR PANEL	<ul style="list-style-type: none"> <li>-HIGH DENSITY XPS FOAM 32 KG/M3</li> <li>-SOLID WOOD 420 KG/M<sup>3</sup></li> <li>-PUR HOT MELT GLUE</li> <li>-PVC FACE 2.7 MM</li> <li>-1 MM PVC LIPPING</li> <li>-PVC SKIN 0.2mm</li> <li>-DENSITY 1700KG/M<sup>3</sup></li> <li>-TOTAL PANEL THICKNESS 41 MM</li> </ul>
FRAME	<ul style="list-style-type: none"> <li>-SABIC PVC</li> <li>-POLYMERS</li> <li>-PUR HOT MELT GLUE</li> <li>-PVC SKIN 0.2mm</li> </ul>
ARCHITRAVE	<ul style="list-style-type: none"> <li>-SABIC PVC</li> <li>-PUR HOT MELT GLUE</li> <li>-PVC SKIN 0.2mm</li> </ul>



# DOOR STRUCTURE



Frame: Polyvinyl Chloride



Architrave: Polyvinyl Chloride

PVC LIPPING  
(prevent water from penetrating the wood)

PVC SKIN  
(scratch resistance)

PVC FACE  
(impact resistance)

INSULATION XPS FOAM  
(sound and heat insulation)

WOODEN DOOR FRAME  
(holding screws and prevent deformation)



Door Panel: WPC Door

# Material Submittal And Specification





# PVC



## SABIC® SPVC 67S

SUSPENSION POLYVINYL CHLORIDE

### DESCRIPTION

SABIC® PVC 67S is a free flowing vinyl chloride homopolymer resin having medium molecular weight. It is manufactured by suspension polymerization.

### TYPICAL APPLICATIONS

67S is designed to give an easy processing product for extrusion rigid applications since it has moderate melt viscosity. The main applications are: Rigid pipes (pressure and non-pressure), Corrugated tubes and conduits, Rigid profiles

### TYPICAL PROPERTY VALUES

Revision 20210609

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
K-Value	67	-	ASTM D1243
Apparent Bulk Density	570	kg /m³	ASTM D1895
Particle Size distribution <sup>(1)</sup>			
Retained on mesh 60 (250 µ) <sup>(1)</sup>	≤15	%	SABIC method
Passing through mesh 200 (74 µ)	≤4	%	SABIC method
Volatile Content			
-	≤0.3	%	ASTM D3030

(1) Typical values; not to be construed as specification limits.

### CHARACTERISTICS

SABIC® PVC 67S has properties that makes it suitable for rigid PVC processing with high production rates, easy handling and conveying, very low dust-level, high purity, high bulk density and narrow particle size distribution. SABIC® PVC 67S is designed to give an easy-processing product for rigid extruded applications. It can be used with a wide range of heat stabilizers and fillers.

### STORAGE AND HANDLING

PVC is delivered in 25 kg bags. PVC resin should be stored in dry area and prevented from direct exposure to sunlight and storage temperature does not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change and inadequate product performance. It is advisable to process PVC resin within 6 months after delivery.

### DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

# GLUE

# TECHNOMELT®

Technical Data Sheet

## TECHNOMELT® PUR 4663

September 2023

### Product description

TECHNOMELT® PUR 4663 provides the following product characteristics:

Technology	Polyurethane
Product type	Hotmelt
Application	Lamination, Assembly
Appearance	Translucent solid

### Application areas:

- Lamination
- General assembly work
- Assembly bonding of wooden parts
- Gluing of textiles and plastics

### Product properties:

- Reactive hotmelt adhesive system based on polyurethane
- High initial strength
- Chemical cross-linking within few days
- Bond joint turns into a thermoset
- Very high heat resistance (>150 °C) and cold flexibility
- Excellent water resistance
- Fluorescent (UV-light)

### Technical data

Softening Point, Ring & Ball, °C	~65
Viscosity, Brookfield - 130 °C, mPa.s (cP)	~10 000
Heat resistance, °C according to the Henkel method of increasing temperature	>150
Curing time to final strength, days (depending on substrate)	2 to 5

### Direction for use

#### Preliminary statement:

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

#### Working conditions:

Recommended working temperature	
In the melting container, °C	100 to 140
At the application roller, °C	100 to 140
Recommended application amount (depending on substrate), g/m <sup>2</sup>	50 to 400
Recommended room temperature, °C	18 to 35
Recommended humidity, %	30 to 60

#### Cleaning:

Flushing the system with TECHNOMELT® PUR CLEANER 4 periodically or prior to changing to an alternative reactive hot melt will reduce internal build-up of adhesive residue. Application devices such as wheels and rolls that expose reactive adhesive to the air should be thoroughly flushed at the end of a production run or at anytime when there is build-up and gelling. We recommend for the cleaning of the application equipments TECHNOMELT® PUR CLEANER ME or TECHNOMELT® PUR CLEANER ALL-IN-1. When working with the cleaning agents safety instructions must be considered. Follow also strictly the instructions of the machine manufacturer.

#### Safety:

The product contains diphenylmethanediisocyanate. Even if the product is applied within the range of the recommended working temperature, the diisocyanate has a detectable vapour pressure. When the recommended working temperature is exceeded, hazardous decomposition products may be formed in the application unit. Therefore, measures to draw off the vapours need to be taken, e.g., through the provision of extraction equipment. In case of skin contact with the hotmelt, do not try to remove the adhesive from the skin by force. Consult a doctor. Observe the **material safety data sheet**.

#### Storage:

Store in the original tightly closed packaging in a cool, dry place.

#### Shelf life

Shelf-life (in unopened original packaging), months	12
(2 kg container for up to 9 months)	





# INSULATION

**DUBAI CENTRAL LABORATORY DEPARTMENT  
DCLD-CQPS PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION  
FOR CERTIFICATE NO. CL17020463**

**TABLE 1 (EXTRUDED)  
PHYSICAL PROPERTY REQUIREMENTS OF RIGID CELLULAR  
POLYSTYRENE THERMAL INSULATION**

SN	PROPERTIES	TYPE XII	TYPE X	TYPE XIII	TYPE IV	TYPE VI	TYPE VII	TYPE V
1	COMPRESSIVE RESISTANCE @ yield or 10% deformation, which occurs first, min kPa	104	104	138	173	276	414	690
2	THERMAL RESISTANCE of 25.4 mm thickness, @ mean temperature of 35°C and 60% RH min, K-m <sup>2</sup> /W	0.77	0.84	0.65	0.84	0.84	0.84	0.84
3	THERMAL CONDUCTIVITY, max, W/m-°K @ 35°C and 60% RH	0.0330	0.0303	0.0392	0.0303	0.0303	0.0303	0.0303
4	FLEXURAL STRENGTH, min, kPa	276	276	310	345	414	517	690
5	WATER VAPOR PERMEANCE of 25.4 mm thickness, max, perm	1.5	1.5	1.5	1.5	1.1	1.1	1.1
6	WATER ABSORPTION by total immersion, max volume %	0.30	0.30	1.0	0.30	0.30	0.30	0.30
7	DIMENSIONAL STABILITY (change in dimension), max, %	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	OXYGEN INDEX, min, volume %	24	24	24	24	24	24	24
9	DENSITY, min, kg/m <sup>3</sup>	19	21	26	23	29	35	48

NOTE: The above specification values are extracted from Table 1 of ASTM C578: 2018

# WOOD

## The SPF Group | Spruce, Pine, Fir

Colour	White to yellowish, with little or no difference between heartwood and sapwood.	
Texture	Medium to fine. Straight and even grain.	
Common usage	<b>Premium</b>	DIY market, panelling, joinery, musical instruments, etc.
	<b>No. 2 &amp; Better</b>	Carcassing, flooring, scaffold boards, bed-frames, etc.
	<b>No. 3</b>	Pallets, packing cases, barrels, temporary work, etc.

Comparisons based on small clear pieces

		SPF Group	European Whitewood	European Redwood	Southern Yellow Pine	Douglas Fir	Ponderosa Pine	Aspen
Physical Properties	Density (kg/m <sup>3</sup> )	420 <sup>1</sup>	340 <sup>2</sup>	420 <sup>2</sup>	470 <sup>2</sup>	450 <sup>2</sup>	438 <sup>2</sup>	380 <sup>2</sup>
	Bending strength (kN/dm <sup>2</sup> ) MOR (MPa)	78 <sup>2</sup>	67 <sup>2</sup>	84 <sup>2</sup>	90 <sup>2</sup>	88 <sup>2</sup>	73 <sup>2</sup>	63 <sup>2</sup>
	Modulus of elasticity MOE (MPa)	10,500 <sup>2</sup>	9,500 <sup>3</sup>	10,500 <sup>3</sup>	12,000 <sup>3</sup>	13,500 <sup>2</sup>	9,500 <sup>2</sup>	11,200 <sup>2</sup>
	Hardness Janka (N)	2,430 <sup>2</sup>	1,910 <sup>2</sup>	2,780 <sup>2</sup>	3,070 <sup>2</sup>	2,990 <sup>2</sup>	2,640 <sup>2</sup>	2,140 <sup>2</sup>
	Dimensional shrinkage	11% <sup>2</sup>	11% <sup>3</sup>	12% <sup>3</sup>	12% <sup>3</sup>	12% <sup>2</sup>	10.5% <sup>2</sup>	12% <sup>2</sup>
Working Properties	Planing <sup>4</sup>	★★★★	★★★★	★★★	★★★	★★★	★★★	★★
	Stability	★★★	★★★	★★★★	★★	★★★★	★★★★	★★★★
	Gluing <sup>4</sup>	★★★	★★★	★★★★	★★★	★★★	★★★	★★★
	Mortising <sup>4</sup>	★★★	★★★	★★★★	★★★	★★	★★★★	★★
	Turning <sup>4</sup>	★★★	★★★	★★★★	★★★	★★★★	★★★★	★★★★
	Nailability	★★★★	★★★	★★★	★★★	★★★★	★★★★	★★★★

Excellent: ★★★★★ Very good: ★★★ Good: ★★ Fair: ★

Structural Dimensions for KD Lumber – CLS

Nominal sizes (inches)	Net sizes (inches)	Net sizes (mm)
2" x 2"	1 1/2" x 1 1/2"	38 mm x 38 mm
2" x 3"	1 1/2" x 2 1/2"	38 mm x 64 mm
2" x 4"	1 1/2" x 3 1/2"	38 mm x 89 mm
2" x 5"	1 1/2" x 4 1/2"	38 mm x 114 mm
2" x 6"	1 1/2" x 5 1/4"	38 mm x 134 mm
2" x 10"	1 1/2" x 9 1/4"	38 mm x 235 mm

Canadian Rough Green Sizes

Nominal sizes (inches)	Net sizes (inches)	Net sizes (mm)
1" x 3"	7/8" x 2 3/4"	22 mm x 70 mm
1" x 4"	7/8" x 3 3/4"	22 mm x 95 mm
1" x 5"	7/8" x 4 3/4"	22 mm x 120 mm
2" x 4"	1 3/4" x 3 1/2"	44 mm x 89 mm
2" x 5"	1 3/4" x 4 1/2"	44 mm x 114 mm
3" x 3"	2 1/4" x 3"	60 mm x 75 mm

MSR Grades

1650Fb 1.5E / 2100Fb 1.5E / 2400Fb 2.0E / 2700Fb 2.2E

Nominal sizes (inches)	Net sizes (inches)	Net sizes (mm)
2" x 3"	1 1/2" x 2 1/2"	38 mm x 64 mm
2" x 4"	1 1/2" x 3 1/2"	38 mm x 89 mm
2" x 5"	1 1/2" x 4 1/2"	38 mm x 114 mm

Other MSR grades & sizes are available upon request.

Export Sizes Upon Request

Green or Heat Treated or Kiln Dry	
Net sizes (inches)	Net sizes (mm)
7/8" x 3"	22 mm x 75 mm
7/8" x 4"	22 mm x 100 mm
7/8" x 5"	22 mm x 125 mm
7/8" x 6"	22 mm x 150 mm
1 1/8" x 3"	47 mm x 75 mm
1 1/8" x 4"	47 mm x 100 mm
1 1/8" x 5"	47 mm x 125 mm
1 1/8" x 6"	47 mm x 150 mm
1 1/8" x 7"	47 mm x 175 mm
1 1/8" x 8"	47 mm x 200 mm
1 1/8" x 9"	47 mm x 225 mm

1. Canadian Standards Association (CSA), 086.
2. A. P. Jassome, *Strength and Related Properties of Woods Grown in Canada*, Ontario Canada Corp., 1914, 1936.
3. *Woods of the World*, Lee Falk Inc., Burlington, Vt., 1967.



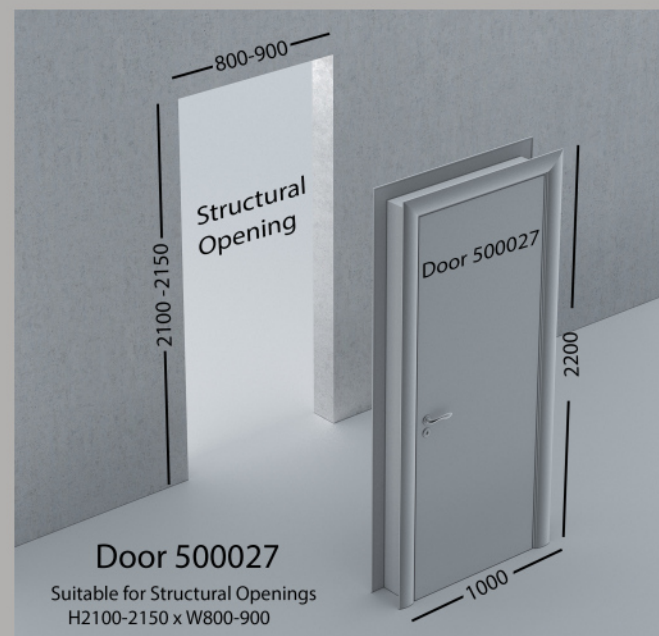
Regular members of the Québec Forestry Industry Council (QFIC) are represented on the overseas market by the Québec Wood Export Bureau (QWLB).



# STRUCTURAL OPENING GUIDE

## Door 500027 2200x1000

Structural Opening 800-900x2100-2150



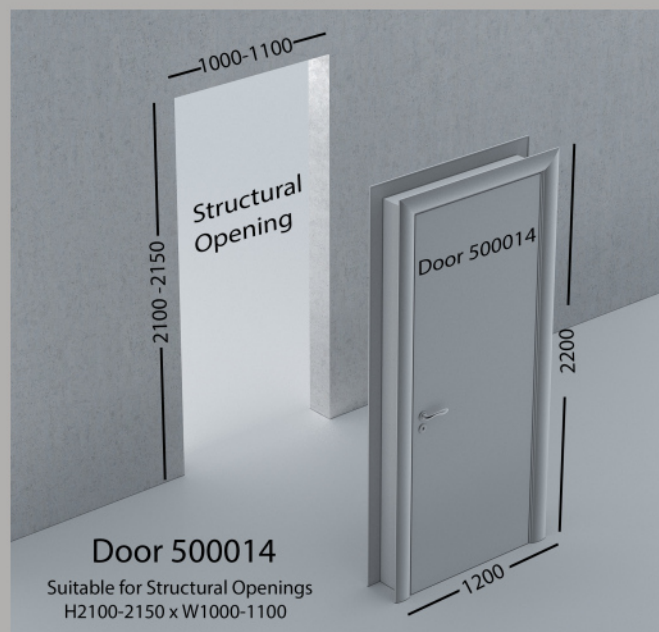
## Door 500023 2200x1100

Structural Opening 900-1000x2100-2150



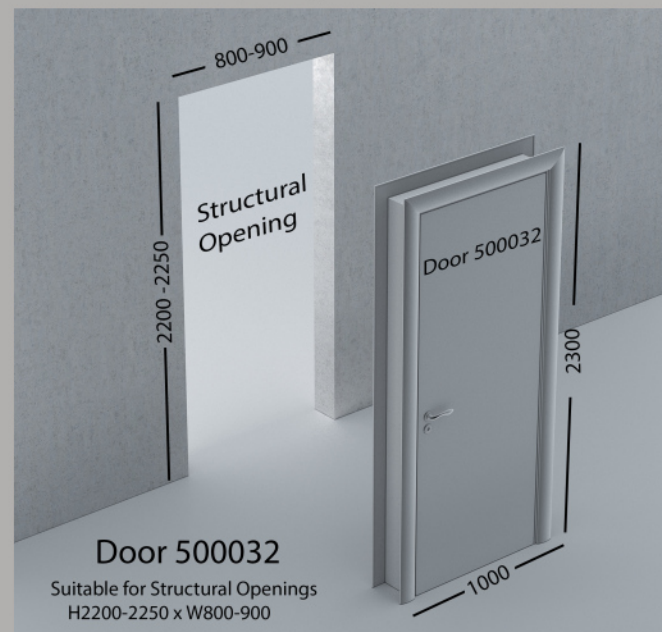
## Door 500014 2200x1200

Structural Opening 1000-1100x2100-2150



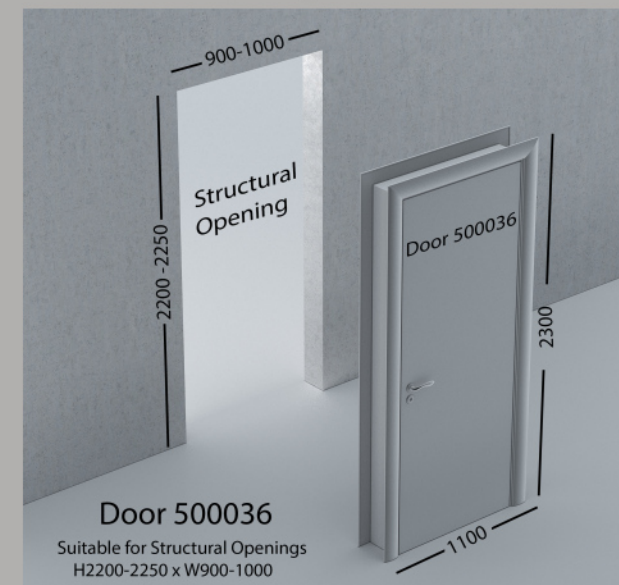
## Door 500032 2300x1000

Structural Opening 800-900x2200-2250



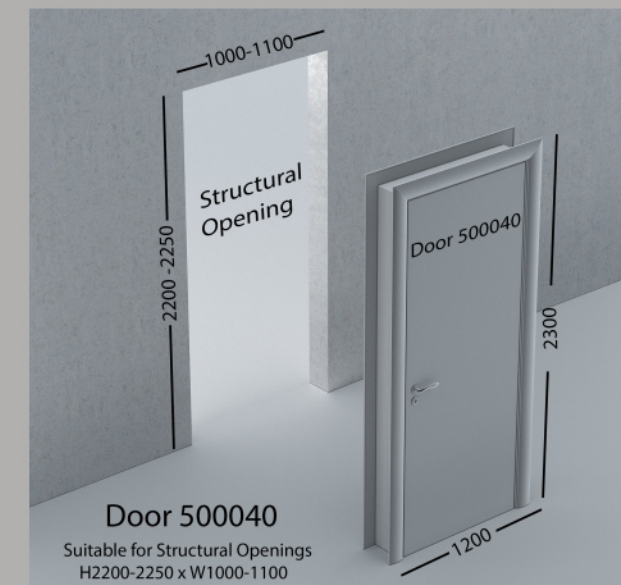
## Door 500036 2300x1100

Structural Opening 900-1000x2200-2250



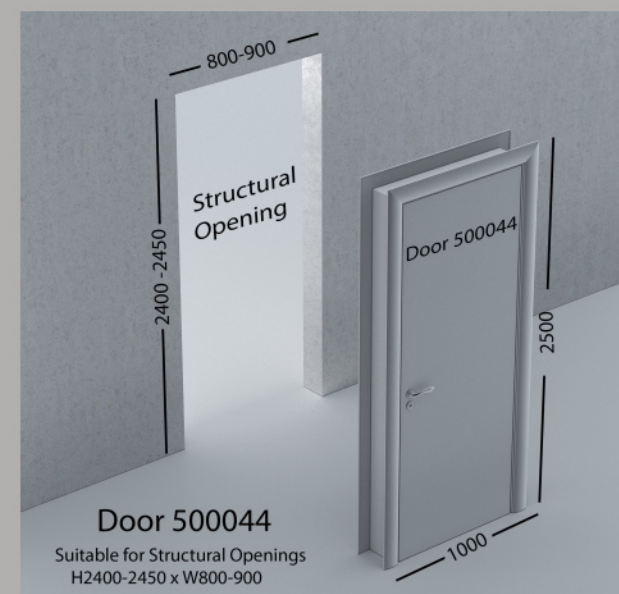
## Door 500040 2300x1200

Structural Opening 1000-1100x2200-2250



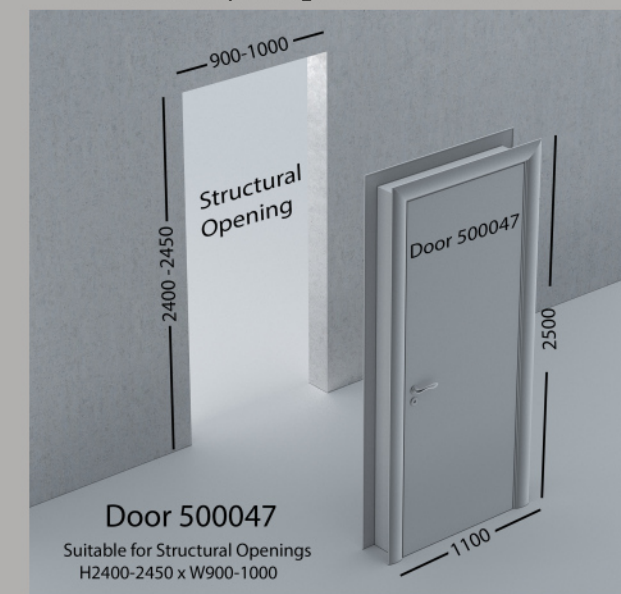
## Door 500044 2500x1000

Structural Opening 800-900x2400-2450



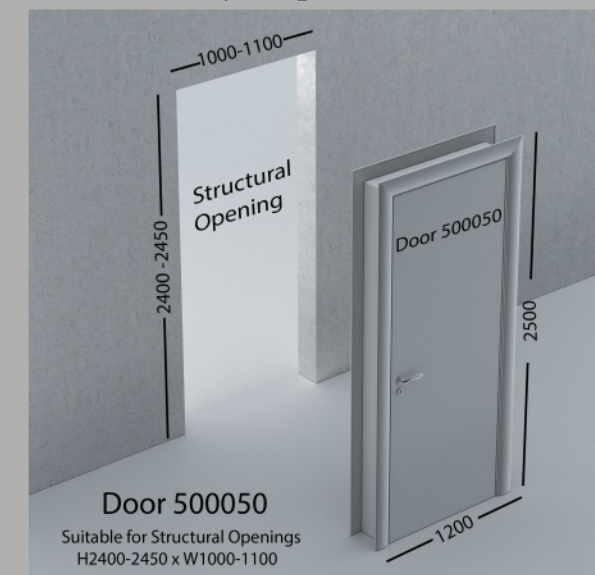
## Door 500047 2500x1100

Structural Opening 900-1000x2400-2450



## Door 500050 2500x1200

Structural Opening 1000-1100x2400-2450





# ALASHRAFY DOORS VS COMPETITORS

## Spec advantages

### Alashrafy Door



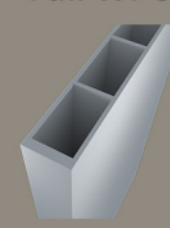
High Quality Sabic grade

### Competitors Door



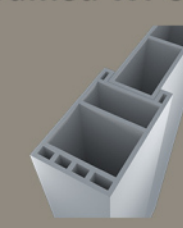
Low grade of pvc and high percentage of recycle

### Full WPC Door



Low grade of pvc and high percentage of recycle

### Framed WPC Door



Low grade of pvc and high percentage of recycle

#### PVC Material

#### Frame and architrave Structure density

#### Door Panel Face

#### Door Panel Structure stability

#### Door Hinge and body lock Stability

#### PVC Skin

#### Glue

High Density for stable and strong product

Low density and high recycle composition , making structure weak and breakable

Low density and high recycle composition , making structure weak and breakable

Low density and high recycle composition , making structure weak and breakable

2.7 mm high density face for higher shock absorption

2.2 mm low density door face , resulting in breaks and cracks in structure

2.2 mm low density door face , resulting in breaks and cracks in structure

2.2 mm low density door face , resulting in breaks and cracks in structure

High density wood frame and XPS foam with 2.7mm High density face,  
1) No bending or warping of door  
2) No breaking or cracking  
3) High Shock absorption

Low density wood frame and Styrofoam with 2.2mm low density face,  
1) More likely to develop breaking or cracking  
2) Low Shock absorption

Low density Panles  
1) High bending or Warping of door  
2) More likely to develop breaking or cracking  
3) Low Shock absorption

Low density Panles  
1) Falling apart of door U- Channel  
2) High bending or Warping of door  
3) More likely to develop breaking or cracking  
4) Low Shock absorption

High density wood for high screw resistance and stability

Low density wood for low screw resistance and stability

Low density PVC for low screw resistance and stability

Low density PVC and weak door panel frame glue resulting in low screw resistance and stability and falling apart of door U- Channel

0.2 mm for high scratch resistance and realistic wood grain affect

0.16 mm , more susceptible to scratches

0.16 mm , more susceptible to scratches

0.16 mm , more susceptible to scratches

PUR hot melt glue used is water and moisture resistant, negates maintenance and prevents peeling of pvc skin and door face

White glue used is not water or moisture resistant causing peeling of pvc skin and falling apart of different parts of the door. In result door, is not water and moisture resistant

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White glue used is not water or moisture resistant causing peeling of pvc skin and falling apart of different parts of the door. In result door, is not water and moisture resistant

## Financial and Lead time advantages

#### Lead time

#### Financial advantage

#### Investment

Immediate delivery for stock

3-4 month shipment

3-4 month shipment

3-4 month shipment

Minimum 12 times stock turnover resulting in higher overall sales turnover per year

Since lead time is 3-4 month, stock turnover is only 3 times a year resulting in a low sales turnover per year

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Since lead time is 3-4 month, stock turnover is only 3 times a year resulting in a low sales turnover per year

Since there is no lead time, buy when required is a major money saver to forget about budgeting and focus on profits

Require large investment and budget plan to pay upfront for several containers and stagnate the investment for 3-4 months until doors arrive to selling destination

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Require large investment and budget plan to pay upfront for several containers and stagnate the investment for 3-4 months until doors arrive to selling destination



# Common wooden door issues



Termite



Water Damage

Cracks and  
Damaged paint



Warped door

# it's time to change

## WPC Door

## Wooden Door

- **Aesthetics**

Wide variety of colors and finishes

Limited to the natural wood species

- **Waterproof**

Does not rot, warp, or require frequent maintenance like wooden doors.

Warps and require regular maintenance to prevent damage from moisture and pests

- **Durability**

1) Resistant to termites, fungi, and other pests.  
2) Easy to clean and do not require regular painting or varnishing.

1) Exposed to termites, fungi, and other pests  
2) Require regular painting or varnishing.

- **Heat Insulation**

WPC doors have excellent insulation properties leading to energy savings

Lower insulation properties

- **Cost-effectiveness**

Zero maintenance cost

High maintenance costs

- **Sustainability**

Recyclable, energy-efficient, and often produced with sustainable practices

Cutting trees harms the environment, not sustainable and difficult to recycle



## From Powder Extruded To Complete Door

Our doors are made completely inside our factory.



سابک  
sabic







# ADVANTAGES

## OF WPC DOORS





STÄRKE

DOORS

HIGH PERFORMANCE | STABILITY | DURABILITY

10 YEARS WARRANTY

100%

Water And Moisture  
Resistance



STÄRKE

DOORS

HIGH PERFORMANCE | STABILITY | DURABILITY

10 YEARS WARRANTY



Fire retardant



Scratch Resistant





Total Termite Resistant

STÄRKE  
DOORS

NORMAL  
DOOR





# STÄRKE

DOORS

HIGH PERFORMANCE | STABILITY | DURABILITY

10 YEARS WARRANTY



Impact Resistant



Environment Friendly Product  
100% Recyclable







STÄRKE

DOORS

HIGH PERFORMANCE | STABILITY | DURABILITY

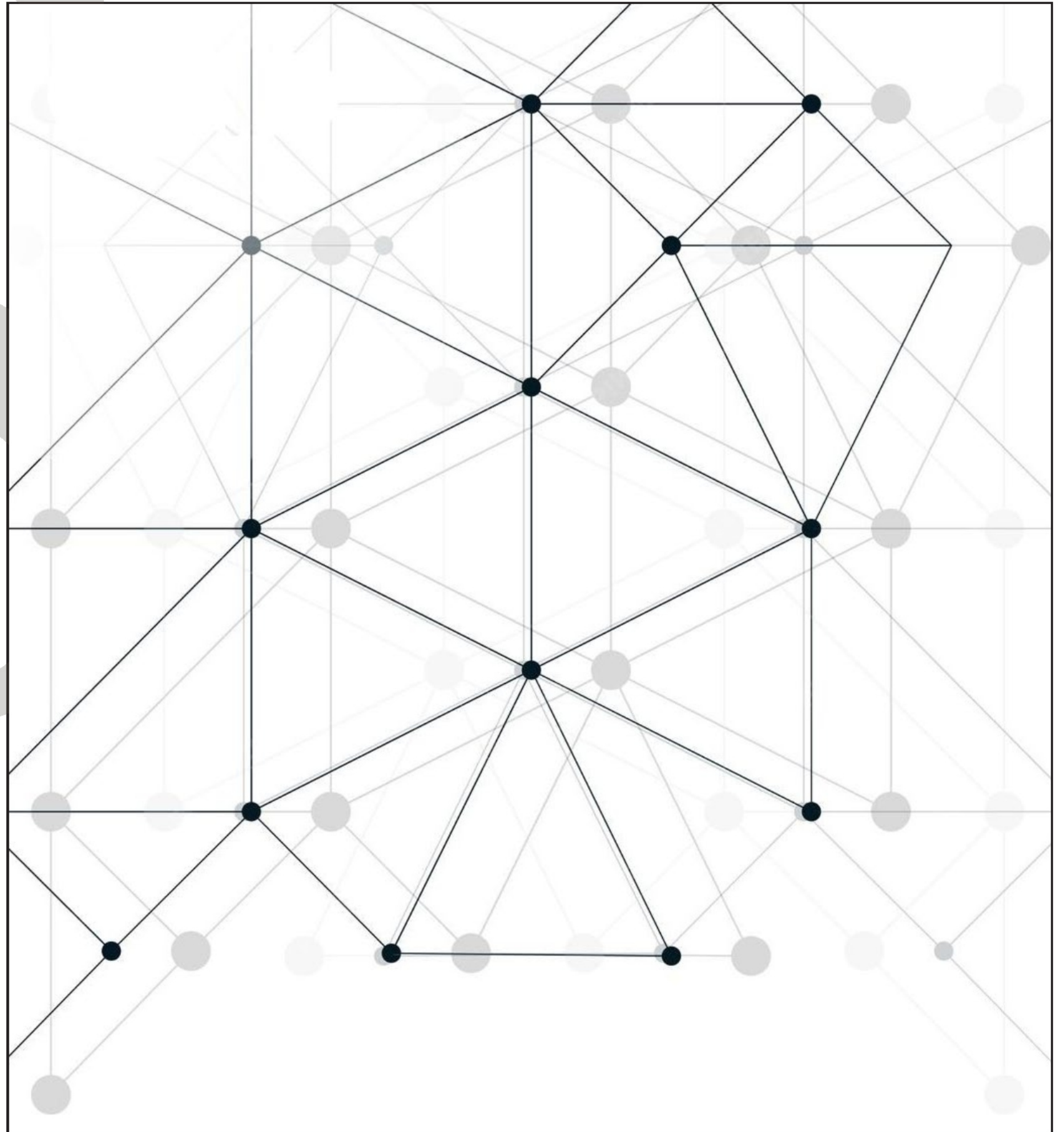
10 YEARS WARRANTY

10  
YEARS WARRANTY

AGAINST WATER - MOISTURE- TERMITE



# TESTING & CERTIFICATIONS





# IMPACT RESISTANCE DEFORMATION NAIL WITHDRAWAL TEST

## TEST REPORT ON WATER ABSORPTION

Client	Picasso Wood Industry LLC Umm Al Quwain, UAE		
Product Name	PVC Frame	Lab Report No.	WD-R-240208-0733/1
Source	Picasso Wood Industry LLC	Sample No.	WD-S-240208-0715
Test Method	EN 15534-4:2014	Request No	WD-Q-240208-0190
Test Temperature	23°C	Date Received	08/02/2024
Relative Humidity	50%	Date Tested	13/02/2024
Wimpey Ref No	24020827	Date Reported	14/02/2024
Duration of Test	24 Hours	Tested By	SU

### Test Results

Test	Unit	Result
Water absorption	%	0.060
		0.040
		0.050
Average		0.050

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C

  
S. Sarath Kumar  
Head of Department

Test results relate only to the samples tested.

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-End of text-







مختبرات ويمبي ش.ذ.م.م.  
WIMPEY LABORATORIES L.L.C.

### TEST REPORT ON THICKNESS SWELLING

Client	Picasso Wood Industry LLC Umm Al Quwain, UAE		
Product Name	PVC Frame	Lab Report No.	WD-R-240208-0733/2
Source	Picasso Wood Industry LLC	Sample No.	WD-S-240208-0715
Test Method	EN 15534-4:2014	Request No	WD-Q-240208-0190
Test Temperature	23°C	Date Received	08/02/2024
Relative Humidity	50%	Date Tested	13/02/2024
Wimpey Ref No	24020827	Date Reported	14/02/2024
Duration of Test	24 Hours	Tested By	SU

#### Test Results

Test	Unit	Result
Thickness Swelling	%	1.41
		1.33
		1.29
		<b>Average</b> 1.34

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C

  
S. Sarath Kumar  
Head of Department  
Test results relate only to the samples tested.  
This report shall not be reproduced except in full, without the written approval of the laboratory.  
-End of text-



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WIMPEY LABORATORIES L.L.C.

### TEST REPORT ON NAIL WITHDRAWAL


Client	Picasso Wood Industry LLC Umm Al Quwain, UAE		
Product Name	PVC Frame	Lab Report No.	WD-R-240208-0733/3
Source	Picasso Wood Industry LLC	Sample No.	WD-S-240208-0715
Test Method	ASTM D1037-12(2020)	Request No	WD-Q-240208-0190
Test Temperature	23°C	Date Received	08/02/2024
Relative Humidity	50%	Date Tested	13/02/2024
Wimpey Ref No	24020827	Date Reported	14/02/2024
Nail Used	6.75mm head diameter	Rate of Speed	1.5mm/min
Tested By	SU		

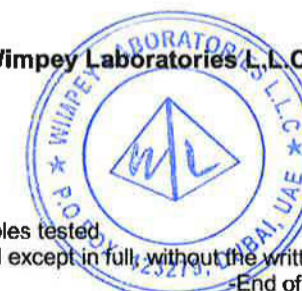
#### Test Results

Test	Test Location	Unit	Result
Nail Withdrawal	Face	N	477
			468
			482
			461
			479
			<b>Average</b> 473

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C

  
S. Sarath Kumar  
Head of Department  
Test results relate only to the samples tested.  
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مختبرات ويمبي ش.ذ.م.م.

## WIMPEY LABORATORIES L.L.C. TEST REPORT ON FLEXURAL STRENGTH

Client	Picasso Wood Industry LLC Umm Al Quwain, UAE		
Product Name	PVC Frame	Lab Report No.	WD-R-240208-0733/4
Source	Picasso Wood Industry LLC	Sample No.	WD-S-240208-0715
Test Reference	EN 15534-4:2014	Request No	WD-Q-240208-0190
Test Method	EN 15534-1:2014	Wimpey Ref No	24020827
Test Temperature	23°C	Date Received	08/02/2024
Relative Humidity	50%	Date Tested	13/02/2024
Tested By	SU	Date Reported	14/02/2024

### Test Results

Specimen No.	Width (mm)	Thickness (mm)	Span (mm)	Max Load at Failure (N)	Flexural Strength (N/mm <sup>2</sup> )
1	10.0	2.81	45.0	82.6	70.6
2	10.0	2.83	45.0	84.1	70.9
3	10.0	2.85	45.0	78.1	64.9
4	10.0	2.83	45.0	86.3	72.7
5	10.0	2.82	45.0	84.4	71.6
Average Flexural Strength (N/mm <sup>2</sup> )					70.1

Remarks: None.

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WIMPEY LABORATORIES L.L.C.



ACCREDITED  
Testing Laboratory  
TL-564

## TEST REPORT ON DENSITY

Client	Picasso Wood Industry LLC Umm Al Quwain, UAE		
Product Name	PVC Frame	Lab Report No.	WD-R-240208-0733/5
Source	Picasso Wood Industry LLC	Sample No.	WD-S-240208-0715
Test Method	ASTM D1037-12(2020)	Request No	WD-Q-240208-0190
Test Temperature	23°C	Date Received	08/02/2024
Relative Humidity	50%	Date Tested	13/02/2024
Wimpey Ref No	24020827	Date Reported	14/02/2024
Tested By	SU		

### Test Results

Test	Unit	Result
Density	Kg/m <sup>3</sup>	1765

Remarks: None.

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S. Sarath Kumar  
Head of Department

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WIMPEY LABORATORIES L.L.C.

### TEST REPORT ON IMPACT RESISTANCE

Client	Picasso Wood Industry LLC Umm Al Quwain, UAE		
Product Name	PVC Frame	Lab Report No.	WD-R-240208-0733/6
Source	Picasso Wood Industry LLC	Sample No.	WD-S-240208-0715
Test Method	EN 15534-4:2014	Request No	WD-Q-240208-0190
Test Temperature	23°C	Date Received	08/02/2024
Relative Humidity	50%	Date Tested	13/02/2024
Wimpey Ref No	24020827	Date Reported	14/02/2024
Test conditions	Height = 700mm Weight = 1000 g	Tested By	SU

#### Test Results

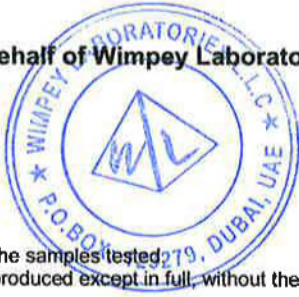
Test	Observation	Result
Impact Resistance	No Cracks observed on the test specimens	Pass

Remarks: None.

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# FIRE RETARDANT

TEST REPORT	
UL 94; 2021 E6 Standard for safety -Tests for Flammability of Plastic Materials for Parts in Devices and Appliances	
Report No.	: WD-R-240208-0733-06-R1
Sample No.	: WD-S-240208-0715
<div>PRELIMINARY REPORT SUBJECT TO VERIFICATION WIMPEY LABORATORIES P.O.Box: 123275, DUBAI-U.A.E.</div>	
Client Name	: Picasso Wood Industry LLC
Address	: Dubai- UAE
Testing Laboratory	:  WIMPEY LABORATORIES L.L.C.
Address	: Al Quoz Ind. Area-01, Dubai - UAE
Test Item Description	: PVC Frame
Manufacturer	: Picasso Wood Industry LLC
Brand / Trade Mark	: Not Given
Model /Type Ref.	: Not Given
Country of Origin	: Not Given
Test Standard / Method	: UL 94; 2021 E6
Report Date	: 17/02/2024
Test Item Received	: 08/02/2024
Date of Test	: 09/02/2024 - 16/02/2024
Tested by	: NU
Summary of Testing	: The below test parameter complies with the specification of UL94: 2021 E6.



**RESULTS****Test Environmental Conditions**

Temperature (°C) : 24.2

Relative Humidity (%) : 56

**Specimens Conditioning: (Table-1)**

Clause	Description	Std. Requirement	Result
6.1	Temperature, Relative humidity & Duration	23 ±2°C, 50±10% & 48 Hours	P
6.2	Air- circulating oven preconditioning Temperature & Duration	70 ±2°C & 168 ±2 Hours	P
	Cooled duration at room temperature, prior to testing	4 Hours	P
6.3	After removed from the pre-conditioning environment specimens shall be tested	<30 minutes	P
6.4	All specimens are to be tested in a laboratory atmosphere condition	Temp. : 15 – 35°C & relative humidity : ≤ 75%	P
6.5	Cotton shall be conditioned duration in the desiccator prior to use	24 Hours	P
6.6	After removed from the desiccator the cotton shall be used time	<30 minutes	P

Clause	Requirement - Test	Result - Remark	Verdict
<b>7</b>	<b>Horizontal Burning Test; HB</b>		
7.1	Test criteria		-
7.1.1	A material shall be classified HB when tested as described in 7.2.1 – 7.5.10.		P
7.1.2	A material classed HB shall		
	a) Not have a burning rate exceeding 40 mm per minute over a 75 mm span for specimens having a thickness of 3.0 to 13 mm, or		N/A
	b) Not have a burning rate exceeding 75 mm per minute over a 75 mm span for specimens having a thickness less than 3.0 mm, or		P
	c) Cease to burn before the 100 mm reference mark		N/A
7.1.3	A material classified HB in the 3.0 +0.2 mm thickness shall automatically be classed HB down to a 1.5 mm minimum thickness without additional testing.	material thickness of the product not < 1.50mm	P
7.1.3A	A material not exceeding the 75 mm/min burning rate or if the burning cannot be determined when tested at any thickness less than 3.0 mm is to be classed HB at the thickness tested (the minimum thickness) and up to a maximum of 2.99 mm without testing additional specimens within this range.	burning rate is <75mm/min.	P

7.1.4	If only one specimen from a set of three specimens does not comply with the requirements, another set of three specimens is to be tested. All specimens from this second set shall comply with the requirements in order for the material in that thickness to be classified HB.	1st set three specimens comply with requirements	N/A
7.2	Test apparatus	comply with standard requirement	P
7.3	Test specimen	3	P
7.3.1	Specimen surface condition		P
7.3.1	Specimen Dimension		-
	Length & Wide (width)	125.00 & 13.00 mm	P
	Thickness	2.74 mm	P
	No. of specimens	3 No's	P
	Burner transverse axis incline	45°	P
	Nominal test flame (as per ASTM D 5207)	50W	P
	Gas flow rate	105 ±5 ml/min	P
	Applied duration for test flame	30 ±1 seconds	P
	Conditioning	see - Table-01	P

**Test Results**

Sample No.	Did Flame Reached 25 mm mark less than 30 seconds (Yes/No)	If 'Yes' duration of the flame (seconds)	If continues to burn after removal of the test flame		Linear burning rate (V)	Result
			Duration of the test flame between 25 to 100mm mark (seconds) (t)	Damaged length (mm) (L)		
1	No	-	0 (Not exceeded 25mm mark)	0	0.0 (HB Rated)	P
2	No	-				
3	No	-				

**Calculations :** Linear burning rate V = (60L/t) mm/min.

V is the linearburning rate in mm/minute

L - damaged length, in millimeters

t - time, in seconds

<b>8</b>	<b>50W (20 mm) Vertical Burning Test; V-0, V-1, or V-2</b>	<b>Result - Remark</b>	<b>Verdict</b>
8.1	Test Criteria		
8.1.1	Materials shall be classified V-0, V-1, or V-2 on the basis of results obtained on small bar specimens	See - Table-02	P
8.1.2	Some materials, due to their thinness distort and/or shrink and/or are consumed up to the holding clamp when subjected to this test		



	Exception No. 1: Test specimens with a thickness less than 0.025 mm may be subjected to the 20 mm Vertical Burning Test; V-0, V-1, or V-2 if the specimens cannot be properly formed for the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2		N/A
	Exception No. 2: A test specimen with a thickness less than or equal to 0.25 mm, but greater than or equal to 0.025 mm that is capable of meeting the physical property requirements of both the 20-mm Vertical Burning Test and the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2 test (Section 11) shall be evaluated by the test of choice.		N/A
8.1.3	Materials with a density less than 250 kg/m <sup>3</sup> may optionally be tested in accordance with the Horizontal Burning Foamed Materials Test; HBF, HF-1, or HF-2		N/A
8.1.4	specifies the material classifications	See - Table-02	P
8.1.5	If only one specimen from a set of five specimens does not comply with the requirements, another set of five specimens is to be tested. In the case of the total number of seconds of flaming, an additional set of five specimens is to be tested if the totals are in the range of 51–55 seconds for V-0 and 251 – 255 seconds for V-1 and V-2.		N/A
	All specimens from this second set shall comply with the appropriate requirements in order for the material in that thickness to be classified V-0, V-1, or V-2.		N/A
8.2	Test apparatus	Comply with standard requirement	P
8.3	Test specimen		P
8.3.1	Specimen surface condition		P
8.3.2	Specimen Dimension		
	Length & Wide (width)	125.00 mm & 13.00 mm	P
	Thickness	2.74 mm	P
	No. of specimens	5 No's	P
	Burner transverse axis incline	45 ±5°	P
	Nominal test flame (as per ASTM D 5207)	50W	P
	Gas flow rate	105 ±5 ml/min	P
	Applied duration for test flame	10 ±0.5 seconds	P
	Conditioning	See - Table-01	P

Table-02 Test Results

Sample No.	t1 (Sec.)	t2 (Sec.)	t3 (Sec.)	(t2+t3) (Sec.)	Whether or not specimens			Result
					Burn up to the holding clamp (Yes/No)	Drip flaming particles (Yes/No)	Particles ignited the cotton indicator (Yes/No)	
	Set 1							
1	3	4	3	7	No	No	No	P
2	2	3	2	5	No	No	No	P
3	4	2	4	6	No	No	No	P
4	2	4	2	6	No	No	No	P
5	2	4	3	7	No	No	No	P

t1 - After flame time after first flame application

t2 - After flame time after second flame application

t3 - After glow time

	Material shall be classified V-0, V-1, or V-2 on the basis of results	V-0	P
13	Marking		
13.1	Material containers shall be marked with the following:		-
	a) The manufacturer's or private labeler's name or identifying symbol.	Not Given	-
	b) A distinctive material designation.	-	N/A
13.2	If a manufacturer produces the material at more than one factory, each material container shall have a distinctive marking to identify it as the product of a particular factory.		N/A
	Points to be included if any;	-	N/A

Remarks : Material classified as V-0.

Signed for and on behalf of Wimpey Laboratories L.L.C

Visakh S Nair  
Laboratory Manager

Test results relate only to the samples tested.

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\*End\*



**Photograph of Test Object**

**Horizontal Burning Test: HB**

**Before Test**



**Under Test**



**After Test**

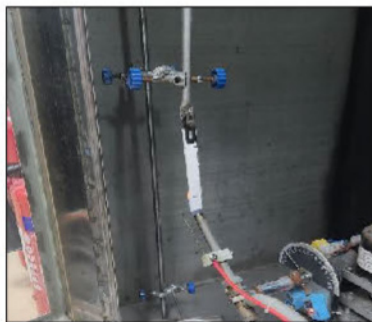


**Vertical Burning Test**

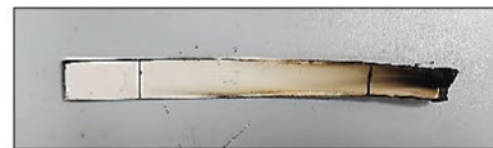
**Before Test**



**Under Test**



**After Test**



PRELIMINARY REPORT  
SUBJECT TO VERIFICATION  
**WIMPEY LABORATORIES**  
P.O.Box: 123279, DUBAI-U.A.E.



## CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality  
hereby attests that the product(s)

**Rigid Cellular Polystyrene Thermal Insulation**  
(Details as per the attached Scope of Certification)

have been assessed in accordance with DCLD Document Ref. No. DM-DCLD-RD-DP21-2001 (IC) "General Rules for DM third party product certification system through factory assessment" and the relevant Specific Rules, and were found in conformity with the standard specification:

**ASTM C 578:18**

Accordingly, DCLD hereby authorizes the above manufacturer  
to affix the DCL Product Conformity Mark on the above-mentioned product(s).



ARIF AL MARZOOQI  
Certification and Quality Control of Products Section Manager  
Dubai Central Laboratory Department-Dubai Municipality



Certificate No: CL17020463  
Valid Until: 31/05/2024



Current Issue Date: 01/06/2023  
Original Issue Date: 01/06/2017



The attached Scope of Certification bearing the same Certificate Number forms an integral part of this Certificate.  
This Certificate is an electronic document subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.

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Picasso Wood Industry LLC, P.O.BOX 283368  
UMM Al Quwain UAE



**DUBAI CENTRAL LABORATORY DEPARTMENT  
DCLD-CQPS PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION  
FOR CERTIFICATE NO. CL17020463**

**Applicable Standard Specification:** ASTM C 578: 2018 – Standard Specification for Cellular Rigid Polystyrene Thermal Insulation.

**Applicable Specific Rules:** DM-DCLD-RD-DP21-2106 (IC) - Certification of Rigid Cellular Polystyrene Thermal Insulation as per ASTM C 578: 2018

S/N	Product Description	Brand Name	Product Details
1.	Rigid Cellular Extruded Polystyrene Thermal Insulation Board CFC Free (See Note 3)	ROOFMASTER XPS	Size: 1250 x 600 mm Thickness: 25 - 100 mm ASTM Type VI (as per Table 1)
2.	Rigid Cellular Extruded Polystyrene Thermal Insulation Board CFC Free (See Note 3)	ROOFMASTER XPS	Size: 1250 x 600 mm Thickness: 25 - 100 mm ASTM Type VII (as per Table 1)

**DUBAI CENTRAL LABORATORY DEPARTMENT  
DCLD-CQPS PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION  
FOR CERTIFICATE NO. CL17020463**

3.	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet (Grey Color) CFC Free (See Note 3)	LAMBDAPOR GREY	Various Sizes Thickness: 100 mm maximum ASTM Type XI (as per Table 2)
4.	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet (White Color) CFC Free (See Note 3)	EPS WHITE	Various Sizes Thickness: 100 mm maximum ASTM Type XI (as per Table 2)
5.	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet (Grey Color) CFC Free (See Note 3)	LAMBDAPOR GREY	Various Sizes Thickness: 100 mm maximum ASTM Type VIII (as per Table 2)
6.	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet (White Color) CFC Free (See Note 3)	EPS WHITE	Various Sizes Thickness: 100 mm maximum ASTM Type VIII (as per Table 2)



**DUBAI CENTRAL LABORATORY DEPARTMENT  
DCLD-CQPS PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION  
FOR CERTIFICATE NO. CL17020463**

7.	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet (White Color) CFC Free (See Note 3)	EPS WHITE	Various Sizes Thickness: 100 mm maximum ASTM Type IX (as per Table 2)
8.	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet (White Color) CFC Free (See Note 3)	EPS WHITE	Various Sizes Thickness: 100 mm maximum ASTM Type XIV (as per Table 2)

**DUBAI CENTRAL LABORATORY DEPARTMENT  
DCLD-CQPS PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION  
FOR CERTIFICATE NO. CL17020463**

**TABLE 1 (EXTRUDED)  
PHYSICAL PROPERTY REQUIREMENTS OF RIGID CELLULAR  
POLYSTYRENE THERMAL INSULATION**

SN	PROPERTIES	TYPE XII	TYPE X	TYPE XIII	TYPE IV	TYPE VI	TYPE VII	TYPE V
1	COMPRESSIVE RESISTANCE @ yield or 10% deformation, which occurs first, min kPa	104	104	138	173	276	414	690
2	THERMAL RESISTANCE of 25.4 mm thickness, @ mean temperature of 35°C and 60% RH min, K-m <sup>2</sup> /W	0.77	0.84	0.65	0.84	0.84	0.84	0.84
3	THERMAL CONDUCTIVITY, max, W/m-°K @ 35°C and 60% RH	0.0330	0.0303	0.0392	0.0303	0.0303	0.0303	0.0303
4	FLEXURAL STRENGTH, min, kPa	276	276	310	345	414	517	690
5	WATER VAPOR PERMEANCE of 25.4 mm thickness, max, perm	1.5	1.5	1.5	1.5	1.1	1.1	1.1
6	WATER ABSORPTION by total immersion, max volume %	0.30	0.30	1.0	0.30	0.30	0.30	0.30
7	DIMENSIONAL STABILITY (change in dimension), max, %	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	OXYGEN INDEX, min, volume %	24	24	24	24	24	24	24
9	DENSITY, min, kg/m <sup>3</sup>	19	21	26	23	29	35	48

NOTE: The above specification values are extracted from Table 1 of ASTM C578: 2018



**DUBAI CENTRAL LABORATORY DEPARTMENT**  
**DCLD-CQPS PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION**  
**FOR CERTIFICATE NO. CL17020463**

**TABLE 2 (EXPANDED)**  
**PHYSICAL PROPERTY REQUIREMENTS OF RIGID CELLULAR**  
**POLYSTYRENE THERMAL INSULATION**

SN	PROPERTIES	TYPE XI	TYPE I	TYPE VIII	TYPE II	TYPE IX	TYPE XIV	TYPE XV
1	<b>COMPRESSIVE RESISTANCE</b> @ yield or 10% deformation, which occurs first, min kPa	35	69	90	104	173	276	414
2	<b>THERMAL RESISTANCE</b> of 25.4 mm thickness, @ mean temperature of @ 35°C and 60% RH min, °K-m <sup>2</sup> /W	0.53	0.60	0.64	0.67	0.71	0.71	0.73
3	<b>THERMAL CONDUCTIVITY</b> , max, W/m-°K @ 35°C and 60% RH	0.0482	0.0419	0.0394	0.0377	0.0356	0.0356	0.0347
4	<b>FLEXURAL STRENGTH</b> , min, kPa	70	173	208	240	345	414	517
5	<b>WATER VAPOR PERMEANCE</b> of 25.4 mm thickness, max, perm	5.0	5.0	3.5	3.5	2.5	2.5	2.5
6	<b>WATER ABSORPTION</b> by total immersion, max volume %	4.0	4.0	3.0	3.0	2.0	2.0	2.0
7	<b>DIMENSIONAL STABILITY</b> (change in dimension), max, %	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	<b>OXYGEN INDEX</b> , min, volume %	24	24	24	24	24	24	24
9	<b>DENSITY</b> , min, kg/m <sup>3</sup>	12	15	18	22	29	38	48

NOTE: The above specification values are extracted from Table 1 of ASTM C578: 2018



