TECHNICAL SUBMITTAL / PRODUCT DATA

40 mm WPC Door Set

Hollow multi-chamber WPC leaf, matching WPC frame and architrave

Document	Technical Data Sheet (TDS)
Product	WPC internal door set - nominal 40 mm leaf
Prepared by	AL NOOR - UPVC, Aluminium Windows and Door Solution
Revision / status	REV 00 / For technical review and material approval
Basis	Client-supplied supplier images and stated product data

SUBMITTAL NOTE: This document records the proposed 40 mm WPC door construction from the supplied product images. Supplier-stated performance values are not test certificates. Final approval shall be subject to signed manufacturer data, samples, project door schedule, shop drawings, and applicable third-party test reports.

Product at a glance

Component	Proposed description
Leaf	40 mm nominal hollow multi-chamber WPC profile
Surface	PVC / melamine decorative film; woodgrain or selected RAL solid color
Frame	Extruded multi-cell WPC frame with matching WPC architrave
Use	Interior and humid-area applications, subject to sealing and approved hardware details
Handing	Right/left; inward/outward, as shown on approved door schedule

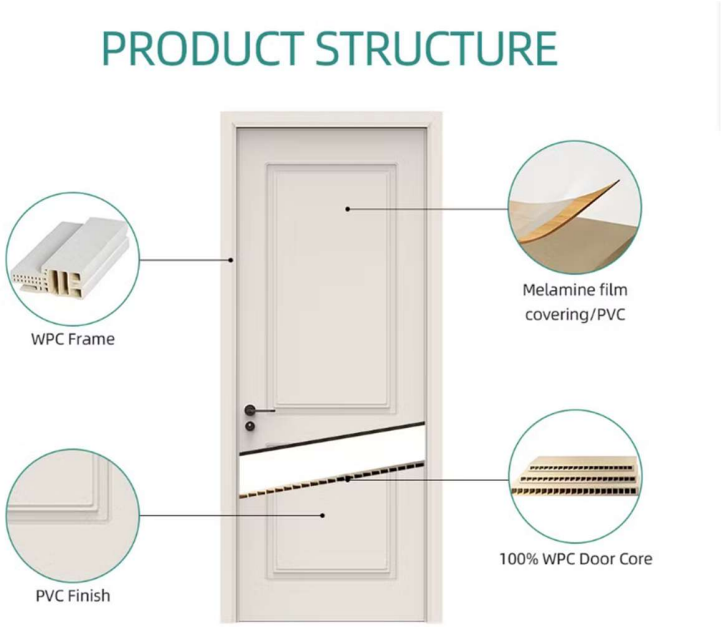

Figure 1 - Supplier reference: WPC frame, decorative surface finish and hollow WPC door core.

1. Door leaf and core construction

The proposed leaf is a **40 mm nominal, factory-extruded WPC hollow multi-chamber section**. The visible faces are factory finished with PVC or melamine decorative film, or a compatible paint system where approved. The profile geometry shown in the supplier images is indicative; chamber count, wall thickness and local reinforcement must be confirmed on the approved sample and shop drawing.

1.1 Layer build-up

Decorative film	WPC outer shell	Hollow multi-chamber WPC core	WPC outer shell	Decorative film

Figure 2 - Proposed 40 mm leaf build-up (schematic only; not to scale).

Element	Proposed construction	Verification / requirement
Overall leaf thickness	40 mm nominal	Client requirement / project basis
Core form	Extruded hollow multi-chamber WPC	Visible in supplied cross-section images
Face / shell	Integral WPC profile with factory-applied finish	Exact WPC formulation and wall thickness: submit manufacturer declaration
Decorative layer	PVC or melamine film; laminated finish	Color, grain and gloss to approved physical sample
Edge construction	Closed/profiled WPC edge	All cut edges and hardware mortises to be sealed where exposed to moisture
Hardware reinforcement	Solid WPC or compatible factory insert at hinges, lock and closer zones	Mandatory detail to be shown on shop drawings; insert size/material to manufacturer design

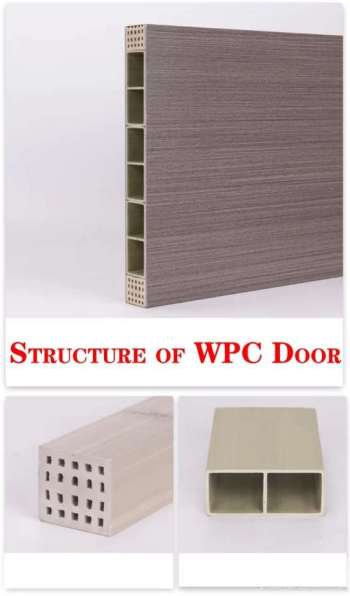

Figure 3 - Supplier reference profiles: hollow door leaf, multi-cell frame and architrave section.

CORE CONTROL: The leaf is specified as hollow multi-chamber WPC, not chipboard, paper honeycomb or XPS infill. Any alternative core requires a separate material submission and written approval.

2. Dimensional and technical data

2.1 Nominal dimensions

Parameter	Proposed / stated value	Status
Leaf thickness	40 mm nominal	Project requirement; overrides product-family images showing other thickness variants
Regular leaf width	600-900 mm	Supplier-stated range; final size to door schedule
Regular leaf height	1450-2800 mm	Supplier-stated range; final size to door schedule
Special size	Up to 1100 x 2800 mm shown for product family	Subject to manufacturer confirmation, reinforcement design and hardware capacity
Frame section	To suit wall thickness and opening detail	Submit section dimensions and wall-interface shop drawing
Manufacturing tolerance	To be declared	Submit leaf thickness, width, height, squareness and bow tolerances

2.2 Supplier-stated physical and performance data

Property	Stated value	Evidence basis	Approval requirement
Material	WPC with PVC lamination	Supplier image	Confirm composition and product code
Density	0.5-0.8 g/cm³	Supplier image	Test method / report required
Nail holding	734 N	Supplier image	Test method, substrate and failure criteria required
Deformation	<= 2.5 mm/m	Supplier image	Definition and conditioning method required
Bending	<= 1.5 mm/m	Supplier image	Test method and load condition required
Sound insulation	Claimed up to 50 dB	Supplier marketing image	Submit laboratory Rw/STC report for complete door set; value is not accepted as certified at this stage
Fire behavior	B1 claimed	Supplier image	Submit report naming the standard, classification, specimen and validity. Not a fire-rated door unless certified as a complete assembly
Formaldehyde release	<= 0.5 mg/L	Supplier image	Submit test method and accredited laboratory report
Water / termite resistance	Claimed suitable for humid areas and resistant to termites	Supplier highlights	Confirm limitations, sealing method and warranty conditions
Warranty	2 years claimed	Supplier highlights	Submit signed warranty scope, exclusions and start date

IMPORTANT: The terms 'B1' and '50 dB' are incomplete without the referenced standard and laboratory report. This TDS does not classify the proposed door as a fire door, smoke-control door or acoustic-rated door.

3. Frame, architrave and wall interface

The door set shall use a matching extruded WPC frame and WPC architrave. **Frame depth and trim arrangement must be selected against the verified finished wall thickness.**

Item	Requirement
Frame	Hollow multi-cell extruded WPC profile; color/finish coordinated with leaf
Architrave	Matching WPC trim; 45° mitred or 90° butt-jointed head/corner detail as approved
Wall conditions	Straight opening, return/T-wall, or double-sided wall condition as applicable
Packing	Non-compressible packers at fixing points; frame to be installed plumb, level and square
Fixing	Approved mechanical fixings compatible with wall substrate and WPC frame; positions and spacing per manufacturer shop drawing
Sealing	Low-expansion compatible foam where required, concealed by architrave; neutral-cure perimeter sealant in humid areas
Threshold	As project detail; wet-area threshold and floor-finish interface to be coordinated before manufacture

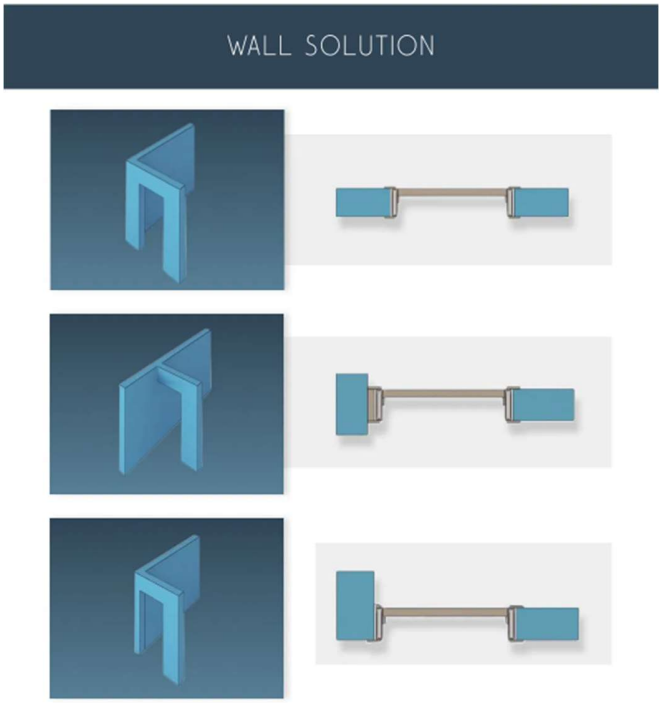

Figure 4 - Wall-interface options. Select one frame solution after confirming finished wall build-up.

SHOP-DRAWING HOLD POINT: Do not release frames for production until opening width/height, finished wall thickness, floor level, frame profile, architrave joint, threshold and handing are approved.

4. Ironmongery and fixing zones

Ironmongery is selectable and shall be finalized through the project hardware schedule. *The supplied image shows representative hardware only; model codes and finishes require confirmation.*

Figure 5 - Representative ironmongery options shown in the supplied product image.

Item	Reference / option	Technical requirement
Lever handle set	HSB-007 shown	Selected finish; spindle and fixing length compatible with 40 mm leaf
Lock	Key lock or passage lock	Select function per room/door schedule; submit lock body, cylinder and strike details
Hinges	Surface/butt/concealed options shown (HJB-020, HFB-021, HJB-021)	Type and quantity to leaf size/weight; confirm corrosion resistance and fixing into reinforced zones
Door viewer	Peephole option shown	Only where scheduled; installation height to approved elevation
Door stop	HXB-008 shown	Wall- or floor-mounted location to suit swing and substrate
Door closer	Optional, listed in supplier accessories	Provide only if scheduled; dedicated top reinforcement required
Fasteners	Manufacturer-approved screws / anchors	No fixing into unsupported hollow chamber; use factory reinforcement or approved insert

4.1 Required reinforcement details

Zone	Required detail
Hinge side	Show full reinforcement location, length and material behind every hinge fixing.
Lock side	Show lock-case cavity, handle through-fixings, cylinder/escutcheon and strike alignment.
Top rail	Provide dedicated closer reinforcement where a door closer is scheduled.
Fasteners	State screw diameter, embedment, pilot-hole requirement and pull-out capacity for the selected profile.

INSTALLATION CAUTION: Do not substitute ordinary short screws directly into thin chamber walls. Hardware fixing strength depends on the reinforced insert and approved fastener arrangement.

5. Opening direction and installation

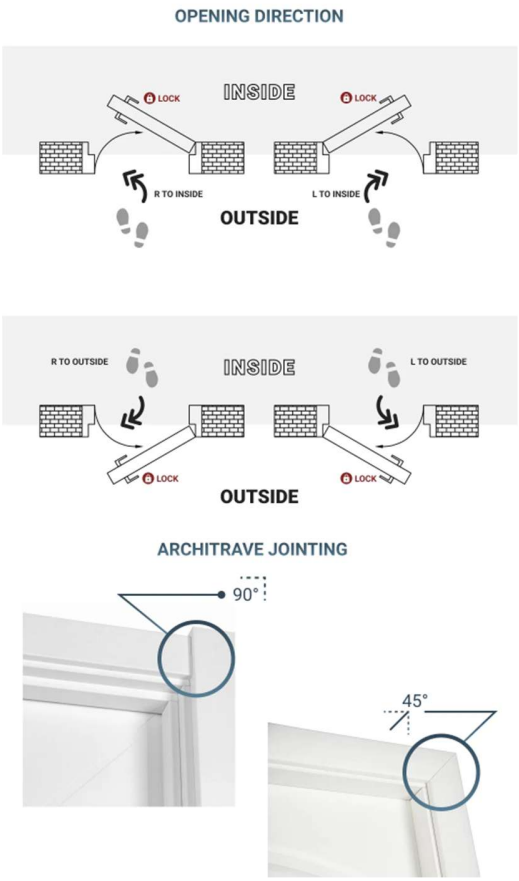

Figure 6 - Handing is determined while standing on the outside/approach side shown in the guide.

5.1 Handing convention

Designation	Description
R to inside	Hinges on right when viewed from outside; leaf swings inward
L to inside	Hinges on left when viewed from outside; leaf swings inward
R to outside	Hinges on right when viewed from outside; leaf swings outward
L to outside	Hinges on left when viewed from outside; leaf swings outward

5.2 Recommended installation sequence

Step	Action
01	Verify the approved door number, rough opening, finished wall thickness, floor level, swing, handing and hardware function.
02	Inspect the leaf and profiles for color match, damage, bow, delamination and correct 40 mm leaf thickness before installation.
03	Assemble the WPC frame square; prepare the selected 45° or 90° architrave joints without opening visible gaps.
04	Position and brace the frame plumb, level and square. Place non-compressible packers at every fixing and load point.
05	Mechanically fix the frame using the manufacturer-approved anchor type and spacing for the actual wall substrate.

Step	Action
06	Hang the leaf using the approved hinge quantity and reinforced fixing zones. Fit lock, handle, strike and scheduled accessories.
07	Adjust to achieve consistent clearances and free movement. Confirm latch engagement, lock operation, closer action (if any) and stop position.
08	Seal perimeter interfaces where required, install architraves, remove debris and retain protective film until handover.

5.3 Simplified handing reference

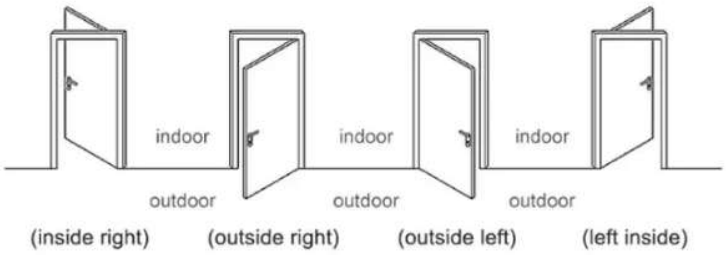

Figure 7 - Simplified handing reference for coordination with the door schedule.

6. Quality control and approval requirements

6.1 Pre-production submittals

Submission	Minimum content
Manufacturer product data	Signed TDS identifying the exact 40 mm leaf and frame profile
Shop drawings	Door schedule, elevations, sections, wall interfaces, handing, clearances, reinforcement and hardware preparation
Physical samples	Leaf/core cut section, frame and architrave corner, color/finish sample and ironmongery finish sample
Performance reports	Fire behavior, acoustic, formaldehyde, density and other claimed properties, each naming the test standard and tested specimen
Hardware data	Lock, handle, hinge, stopper, viewer and closer data sheets, including fixing requirements
Warranty	Signed warranty stating duration, coverage, exclusions, maintenance and claim procedure

6.2 Inspection and acceptance checklist

Check	Acceptance criterion
01	Leaf thickness measures 40 mm nominal and matches the approved core sample.
02	Door number, size, finish, handing and hardware function match the approved schedule.
03	Leaf faces and edges are free from scratches, dents, bubbles, delamination, exposed chambers and color variation.
04	Frame is plumb, level, square and securely fixed without twist or visible distortion.
05	Clearances are consistent and the leaf opens, closes, latches and locks smoothly without rubbing.
06	Hinges, lock, closer and accessories are fixed only into approved reinforced zones.
07	Architrave joints are tight; perimeter sealing and wet-area details are complete where applicable.
08	Protection, cleaning, O&M instructions, keys and warranty documents are handed over.

6.3 Exclusions and limitations

Scope	Limitation
Ratings	This submission does not establish a fire-door, smoke-control or acoustic-door rating without a complete-assembly certificate.
Manufacturer data	Exact WPC formulation, chamber geometry, wall thickness, profile dimensions and reinforcement details remain manufacturer-controlled and require approval.
Project schedule	Door sizes, quantities, finishes, thresholds, glazing/louvres and final ironmongery are governed by the project door schedule and approved shop drawings.
Reference images	Images are supplier references and may show product-family alternatives not included in the proposed 40 mm hollow-core door set.

APPROVAL STATUS: Proposed for technical review. Final compliance is subject to consultant/client approval of the exact product sample, manufacturer documents and coordinated shop drawings.

Appendix A - Supplier reference data

The following images are retained as traceable source references for values transcribed in this TDS. **Where wording is ambiguous, the stricter approval requirement stated in Sections 2 and 6 applies.**

Product Description

Regular size range:	Width: 600-900mm; Height: 1450 - 2800mm ; Thickness: 40mm;or customized
Max:	2800*1100*45/35mm
Material:	WPC + PVC Lamination; glass
Style:	European,Chinese style,Classic style,Modern Style
Color:	Wood grain or pure color from RAL code
Accessories:	Handle lock,hinges,door closer,door viewer,door stopper and others as request
Finish:	Laminated/ paint
Craftsmanship:	Environmentally friendly E1 MDF+ durable PVC lamination+ Solid Core
Thick Tolerance:	40mm/45mm
Density	0.5-0.8g/cm³
Nail Holding Newton	734N
Deformation	<=2.5mm/m
Bending	<=1.5mm/m
SoundProof	<=50dB
Firerated	B1
Formaldehyde release	≤0.5mg/L

Figure A1 - Supplier product-description table supplied by the client.

Product Highlights

- Waterproof WPC Material: Made of WPC + PVC lamination, suitable for coastal humid areas and bathrooms.
- Customizable Dimensions: Width 600-900mm, Height 1450-2800mm, Thickness 40-45mm, or fully customized.
- Fire Retardant B1 Grade: Meets B1 flame retardant standard, suitable for public areas and high-end interiors.
- Superior Sound Insulation: Soundproof rating up to 50dB for enhanced privacy and noise reduction.
- Anti-Termite Protection: Constructed with MDF and WPC materials, naturally resistant to termites.
- High Customization Options: Offers European, Chinese, Classic, and Modern styles with wood grain or pure RAL colors.
- Comprehensive Warranty: Provides a 2-year warranty covering mechanical defects and material issues.

Figure A2 - Supplier product highlights supplied by the client.

Figure A3 - Supplier factory reference: leaf/frame assembly and hollow profile geometry.

DOCUMENT END: This REV 00 TDS is prepared specifically for a nominal 40 mm hollow multi-chamber WPC door leaf and matching WPC frame/architrave system.