Reliance
Industries Limited
Growth is Life

RelWOOD™
REIMAGINE. SUSTAINABLY.

OPENING NEW DOORS TO THE FUTURE

RelWOOD™
REIMAGINE. SUSTAINABLY.

NATURAL FIBRE REINFORCED COMPOSITE DOOR FRAMES

Reliance
Industries Limited
Growth is Life

MARKETED BY:
RELIANCE INDUSTRIES LTD.,
Reliance Corporate Park, Bldg. 8, Wing B,
First Floor, Thane-Belapur Road, Ghansoli,
Navi Mumbai - 400701.

MARKETED BY:
RELIANCE INDUSTRIES LTD.,
Reliance Corporate Park, Bldg. 8, Wing B,
First Floor, Thane-Belapur Road, Ghansoli,
Navi Mumbai - 400701.

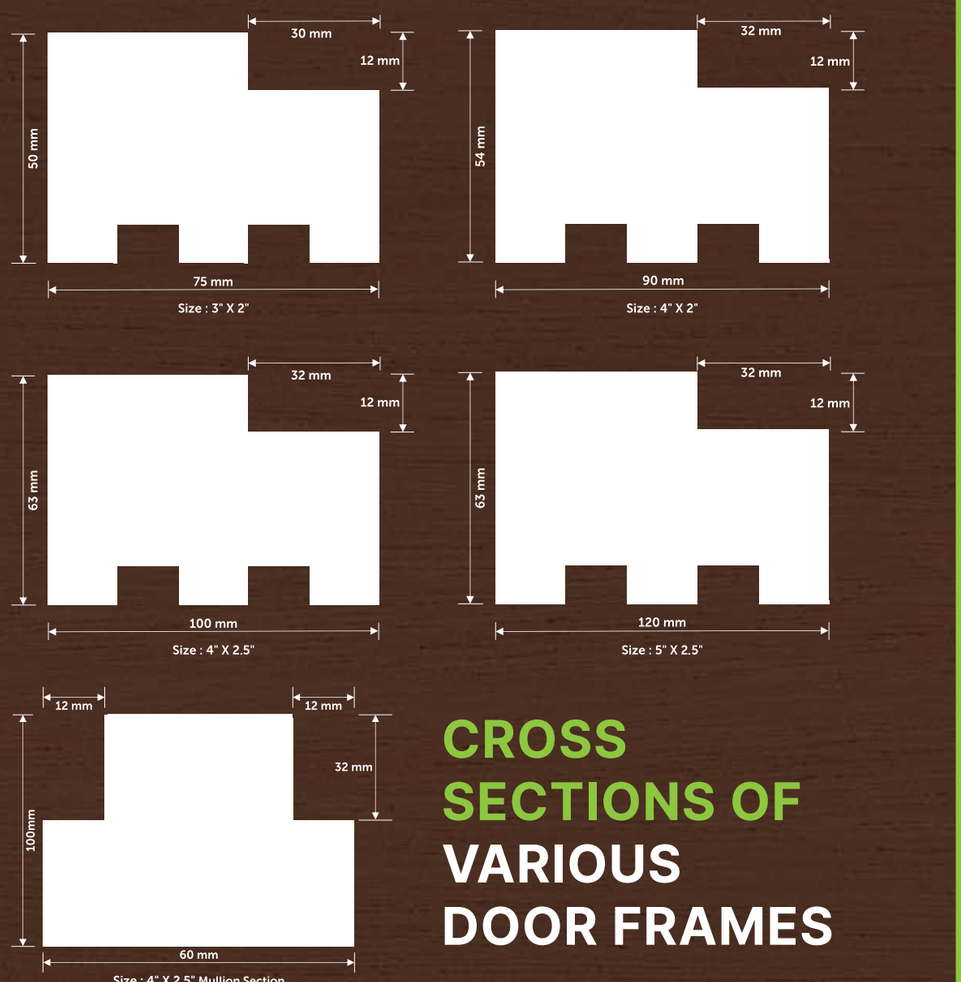
www.relwood.in | care.relwood@ril.com | 88505 12345 | Toll-Free Helpline: 1800 889 7570

@relwood.official | @RelWood | RelWood™

Welcome to the future of door frames with RelWOOD™, a ground-breaking natural fibre composite product designed to offer unparalleled performance and aesthetics.

RelWOOD™ door frame advantage

- 100% Termite, Fungus And Borer Proof
- Low Maintenance
- 100% Waterproof
- Long-Lasting Durability
- Fire Retardant
- Aesthetic Appeal
- Eco-Friendly
- No Formaldehyde



CROSS SECTIONS OF VARIOUS DOOR FRAMES

Preparation of Door Frame for Installation

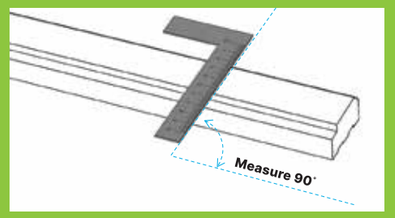
Materials

- RelWOOD™ door frame
- Adhesive (compatible with RelWOOD™)
- Screws (compatible with RelWOOD™)
- Sandpaper
- Primer and Paint (or Polish) suitable for RelWOOD™
- Hinges and Other Hardware

Tools

- Measuring Tape
- Carpenter's Square
- Hand Saw or Table Saw
- Chisel
- Hammer
- Drill Machine
- Clamps
- Sanding Block or Electric Sander
- Paintbrush or Spray Gun
- Protective Gear (Gloves, Safety Goggles)

Measuring RelWOOD™ Door Frame



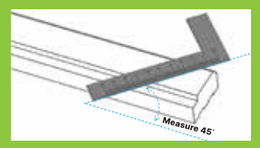
Measure and Mark: Use a measuring tape to measure the size needed for the door frame (length, width, and thickness). Mark these measurements on the RelWOOD™ door frame with pencil.

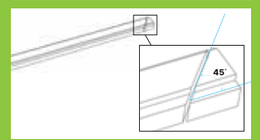
Cutting the RelWOOD™

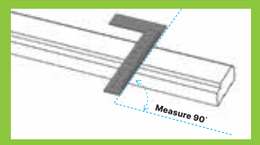
Cut the Vertical Pieces (Stiles): cut the vertical section of the relwood door frame at 45^0 degree angle from the edge using a hand saw or table saw to make mortises.

Cut the Horizontal Pieces (Rails): Cut the horizontal section of relwood door frame to match the door's width. Make sure the horizontal section fit well between the vertical section.

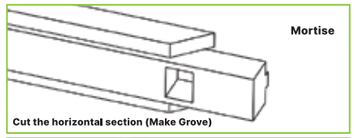
Check the Cuts: Use a carpenter's square to ensure the corners are exactly 90^0 degrees and the cuts are precise.

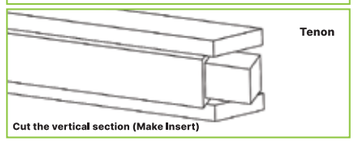






Making the Joints





Cut the Mortises: Use a chisel and hammer to make holes(mortise) at both the edges in the horizontal section of the door frame where the vertical section of the frame will fit.

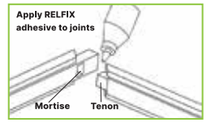
Cut the Tenons: Cut one edge of both the vertical section of the door frame to make tenon using chisel and hammer. The tenon is made by cutting the edges at 45^0 degree in the above steps.

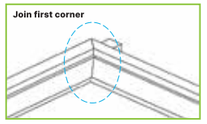
Assembling the Frame

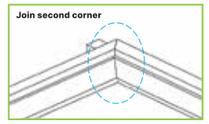
Apply adhesive: Apply a thin coat of Relfix adhesive to the joints for added strength.

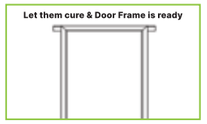
Join the Pieces: Insert the horizontal pieces into the vertical pieces, making sure they fit tightly. Use clamps to hold the frame together while the Relfix adhesive dries.

Secure with Screws: For extra stability, reinforce the joints with screws.









Smoothing the Frame

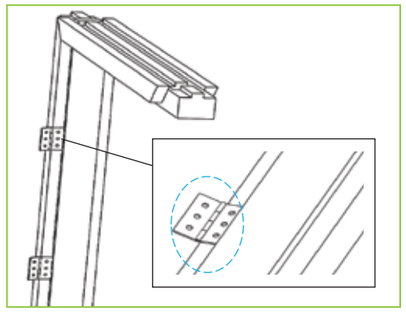
Sand the Frame: Once the adhesive has dried and the frame is solid, sand all surfaces and edges with sandpaper or an electric sander. Start with a rougher grit and finish with a finer one for a smooth finish.

Check for Smoothness: Run your hand over the frame to ensure it's smooth and there are no rough spots.

Priming and Painting (or Polishing): If you plan to paint the frame, start by applying a primer suitable for RelWOOD™. This helps the paint stick better. Let it dry completely.

Paint or Polish: Apply the first coat of paint or polish using a brush or spray gun. Let it dry, then lightly sand it with fine sandpaper. Add more coats as needed, allowing each coat to dry before applying the next.

Installing Hinges and Hardware



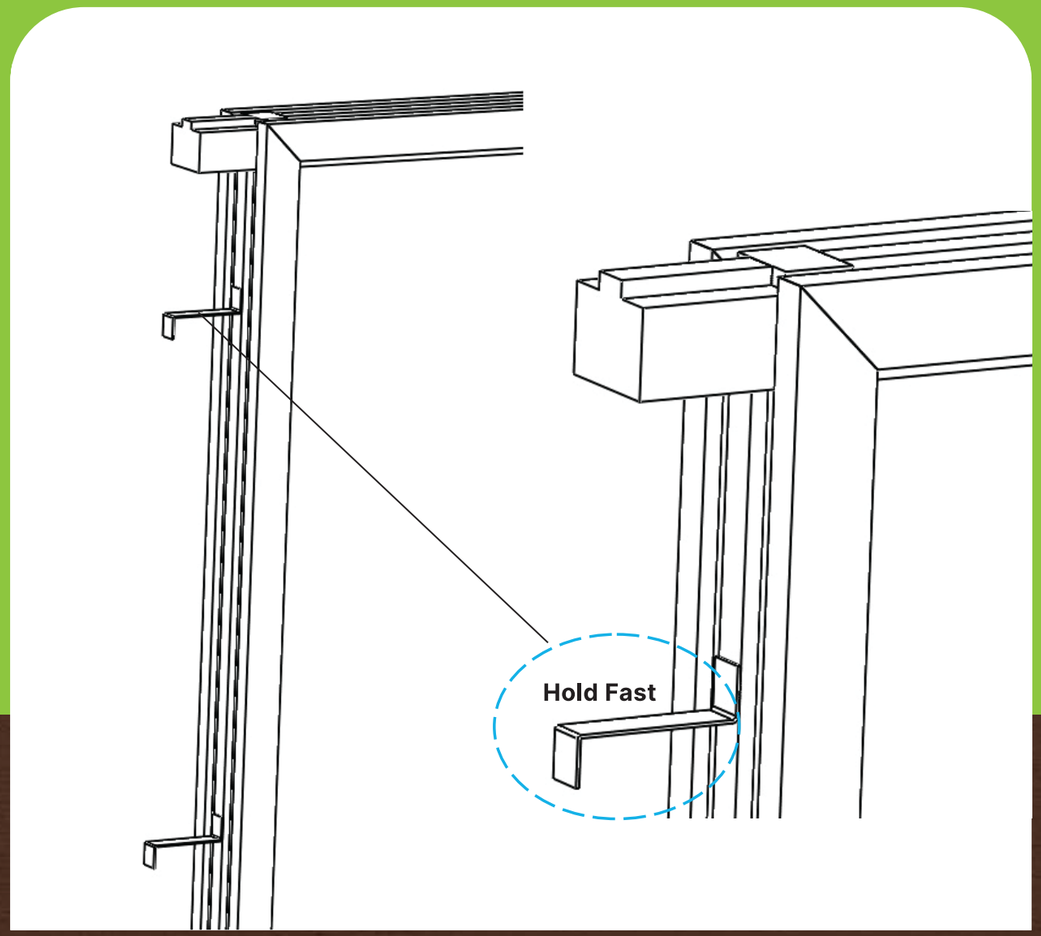
Mark Hinge Positions: Measure and mark where the door hinges will go on the vertical pieces. Usually, hinges are placed about 7 inches from the top and bottom, with a third hinge in the middle.

Cut Recesses for Hinges: Use a chisel to carve out spaces for the hinges so they sit flat against the frame.

Attach Hinges: Drill small holes and screw the hinges onto the frame. Make sure they are aligned properly for the door to open and close smoothly.

Installation Guide on the Wall
Using Hold Fast Fixing

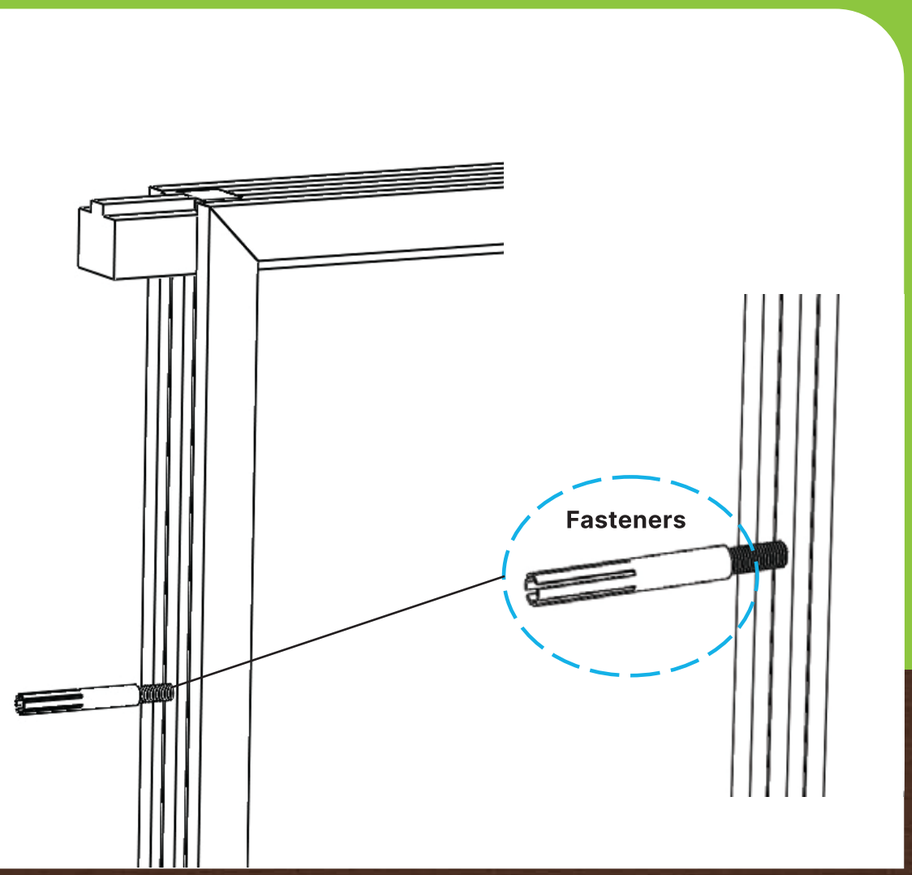
1. Attach hold fasts to the sides of the frame using stainless steel screws, selecting hold fasts according to the size of the door.
2. Number* of hold-fast shall be decided as per size, height and weight of the door.
3. Hold fast method is generally used during cement grouting.
4. Ensure at least six hold fasts are used for optimal frame stability.
5. **Final Finish:** Inspect the frame and touch up any areas that need it.



Hold Fast

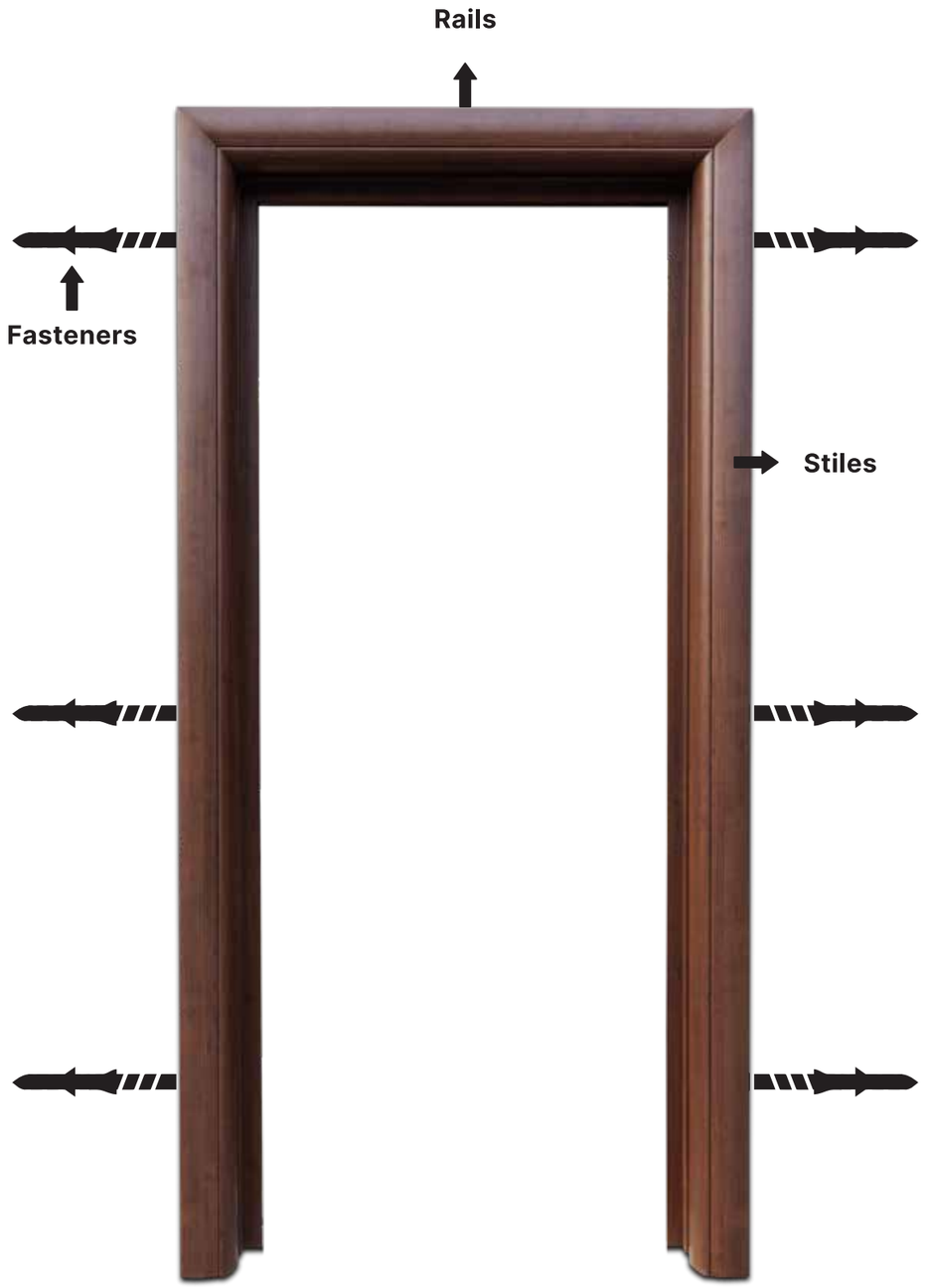
Installation Guide on the Wall
Using Fastener

1. RelWOOD™ door frames can also be fixed by anchor expansion bolt.
2. Anchor expansion bolt with polymer sleeves are used in case when the RelWOOD™ door frame is getting fixed either to the RelWOOD™ surface or softer surfaces.
3. Expansion bolt are used when RelWOOD™ door frame are inserted or joined with a solid base material like concrete, brick etc.
4. Number of fasteners shall be decided as per size, height and weight of the door.
5. Inspect the frame and touch up any areas that need it.
6. ***Fastener is generally used during refurbishing and replacement of the door.**



**These are indicative guidelines for installation of RelWOOD™ door frame. For best results, consult your architect, contractor or carpenter.*

Fastener



Standard Dimensions of RelWOOD™ Door Frames

Size: 5"x2.5", 5"x2", 4"x2.5", 4"x2", 3"x2"
Length: 7ft

BENEFITS OF

RelWOOD™ DOOR FRAME VS WOODEN DOOR FRAME

Features	RelWOOD™ Door Frames	Wooden Door Frame
Termite, borer, fungus and bacteria	100% termite, borer, fungus and bacteria proof, even under moist condition.	Attacked easily by termites, borer, fungus and bacteria.
Water proof	RDF is 100% waterproof even under moist condition.	Wood has tendency to absorb water.
Fire retardant	It is fire retardant.	Act as a natural fuel and catches fire. Hence not a fire retardant.
Expansion, bending & twisting, shrinkage	Resilient against severe weather conditions, with no expansion or distortion.	Due to weather condition, prone to twisting, swelling, expansion and bending.
Workability	Regular carpentry tools are enough to work on.	Regular carpentry tools are enough to work on.
Surface coating & maintenance	Convenient to paint, polish and laminate.	Regular maintenance is required as possibility of peel off is very high.
Screw holding	High screw holding.	Screw get rusted in moist conditions.

Note: Advisable to use screw. Nailing not recommended.