

DIY

# UPCYCLED GLASSHOUSE

Use a combination of reclaimed and new materials to create this stylish lean to glass house – an ideal option when space is limited.

WORDS & PHOTOS MARK RAYNER



### MATERIALS

- 4 x reclaimed wooden windows measuring 610mm x 1360mm
- Fence palings cut to the following lengths:
  - » 2 x 1325mm (pieces A)
  - » 2 x 1800mm (pieces B)
  - » 2 x 690mm (pieces C)
  - » 2 x 870mm (pieces D)
  - » 2 x 660mm (pieces E)
- 50mm x 50mm treated timber\* cut to the following lengths:
  - » 2 x 1710mm (pieces F)
  - » 2 x 1395mm (pieces G)
  - » 2 x 65mm (pieces H)
- 90mm x 20mm treated timber cut to the following lengths:
  - » 2 x 665mm (pieces I)
  - » 1 x 1375mm (piece J)

- 70mm x 20mm treated timber cut to the following lengths:
  - » 3 x 800mm (pieces K)
  - » 3 x 1300mm (pieces L)
- 60mm x 20mm treated timber cut to the following lengths:
  - » 2 x 610mm (pieces M)
- 50mm x 20mm treated timber cut to the following lengths:
  - » 1 x 1395mm (piece N)
- 30mm x 20mm treated timber cut to the following lengths:
  - » 1 x 1330mm (piece O)
- 25mm x 20mm treated timber cut to the following lengths:
  - » 2 x 610mm (pieces P)
- 20mm x 10mm treated

- timber cut to the following lengths:
  - » 2 x 1360mm (pieces Q)
- 65mm x 20mm treated timber cut to the following lengths:
  - » 2 x 595mm (pieces R)
- 6 x exterior hinges with appropriate exterior screws
- 40mm exterior screws
- 50mm exterior screws
- 100mm exterior screws
- 50mm roof fasteners
- Corrugated clear PVC roofing cut to the following dimensions:
  - » 2 x 650mm x 900mm
  - » 350mm x 900mm
- Resene Quick Dry
- Resene Lustacryl tinted to Resene Mexican Red
- Exterior latch
- Exterior filler

### TOOLS

- Drill with drill bits
- Appropriate bit for screwing in roof fasteners
- Exterior PVA glue
- Marker pen for marking roofing for cutting
- Paintbrush
- Pencil
- Putty knife or similar
- Sandpaper
- Saw
- Screwdriver
- Set square
- Tape measure
- Tin snips for cutting roofing sheets

\*We used 50mm x 50mm rough sawn tree stakes, but if you use dressed timber instead it will actually measure 45mm x 45mm so adjust other measurements accordingly.



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**Resene**  
the paint the professionals use

### BEFORE YOU BEGIN

Thoroughly clean and prep the wooden windows, removing any old hinges and catches. Remove any flaking paint and lightly sand previous paintwork to 'key' the surface.

### STEP ONE

Measure, mark and cut the timber to the dimensions in the materials list and smooth any rough edges with sandpaper.

### STEP TWO

Place two of the windows on a flat surface and place pieces F next to these, as shown.

### STEP THREE

Attach pieces A across the top and bottom, ensuring corners are at right angles using the set square. Fix together with PVA glue and 50mm screws.

### STEP FOUR

Take piece J and cut a 50mm x 80mm section from each end, as shown. Smooth any rough edges with sandpaper.

### STEP FIVE

Attach this to the bottom section of fence paling, as shown, to form a sill for the front-opening windows. Fix with PVA glue and 50mm screws.



6.



7.



8.

**To get the look**  
Mark painted the background fence with Resene Lumbersider tinted to Resene Sponge



13.



14.



15.

**Top tip #1**  
Most of the timber we used was reclaimed or found, so if some of your timber dimensions differ slightly, simply adjust the measurements accordingly.

**Handy hint**  
For added safety attach the glasshouse to the rear fence or wall with a galvanised bracket and coach screws.



9.



10.



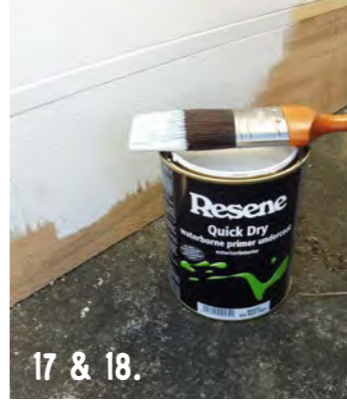
11.



12.



16.



17 & 18.

**Top tip #2**  
When fixing the wooden components, always drill pilot holes first to prevent possible splitting.



19.



20.

**STEP SIX**  
Fix the two opening windows to the sides of the front frame using hinges and appropriate screws.

**STEP SEVEN**  
Attach pieces B to pieces C, as shown, to form two 'L' shapes, fixing with PVA glue and 50mm screws.

**STEP EIGHT**  
Measure, mark and cut a 50mm x 50mm section from the ends of pieces I. Smooth any rough edges with sandpaper.

**STEP NINE**  
Attach these to the frames constructed in step seven, as shown. Fix with PVA glue and 50mm screws.

**STEP TEN**  
Attach the two remaining windows into these frames, as shown, fixing pieces M along the inside bottom edge of each. Fix with PVA glue and 50mm screws.

**STEP ELEVEN**  
Assemble the three walls in situ, as shown, fixing together with PVA glue and 100mm screws. Use a spirit level and set square to ensure the corners are at 90 degrees and walls are upright.

**STEP TWELVE**  
Attach pieces E along the top edges of the side windows, fixing with PVA glue and 50mm screws and then fit pieces H and one of the pieces G along the top back edge, as shown, again fixing with glue and 50mm and 100mm screws. In the same way, fit the second piece G along the front top edge.

**STEP THIRTEEN**  
Fit piece N along the upper back edge, 20mm down from the top, span pieces K across the top of the structure 595cm apart to form the roof supports and measure, mark and cut pieces D flush at an angle to form the sloping top side sections, as shown. Fix all these into position with PVA glue and 50mm screws.

**STEP FOURTEEN**  
Fit pieces R along the front top edge between each roof support, piece O across the front above the opening windows and pieces P parallel with the inner side window framing bars to form shelf supports. Again, fix all these with PVA glue and 50mm screws.

**STEP FIFTEEN**  
Attach pieces L to the shelf supports approximately 25mm apart to form the shelves, fixing at either end with PVA glue and 40mm screws.

**STEP SIXTEEN**  
Fit pieces Q to the front vertical edge of each of the side windows to form a trim, fixing in place with PVA glue and 40mm screws. Fill all screw heads with exterior filler and, once dry, sand smooth.

**STEP SEVENTEEN**  
Apply one coat of Resene Quick Dry to the entire unit and allow to dry.

**STEP EIGHTEEN**  
Apply two coats of Resene Lustacryl tinted to Resene Mexican Red to the entire unit and allow to dry.


**STEP NINETEEN**  
Measure, mark and cut the corrugated roofing panels to the dimensions listed in the materials list and fix into position using 50mm roof fasteners, as shown. Drill an adequate pilot hole through the clear PVC first to prevent it from splitting.

**STEP TWENTY**  
Fit the exterior latch in position on the opening windows, as shown.

**ROOFING TIPS**  
When attaching the roofing panels ensure the fasteners are positioned on the top ridge of any corrugation to prevent any water leaking.

We fixed fasteners at every corrugation along the front roof line as part of the design look, however for structural purposes it's only necessary to fix at every second corrugation.

**HERE'S ANOTHER IDEA**  
Get extra use from your glasshouse over summer by using it as a mini hot house for a couple of chilli plants grown in large pots or directly in the ground.



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