Vestra Oak

Capping Manual

a full guide to installing the capping system to your oak frame

www.vestraoak.com

instructions on installation of our weatherproof oak capping system for glazed oak frames

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Introduction

The weatherproof capping system that we recommend for use on glazing installations has two purposes: to maintain weather tightness over time and to prevent damage to the glazing when the natural movement of the oak occurs.

Installed correctly, this system will prevent water ingress to the oak frame and ensure the weather tightness of the frame as the frame moves naturally and dries overtime. The capping system comprises of two layers of kiln dried oak boards* screwed onto the external face of the structural oak frame which trap the glass onto the frame with weatherproof tape.

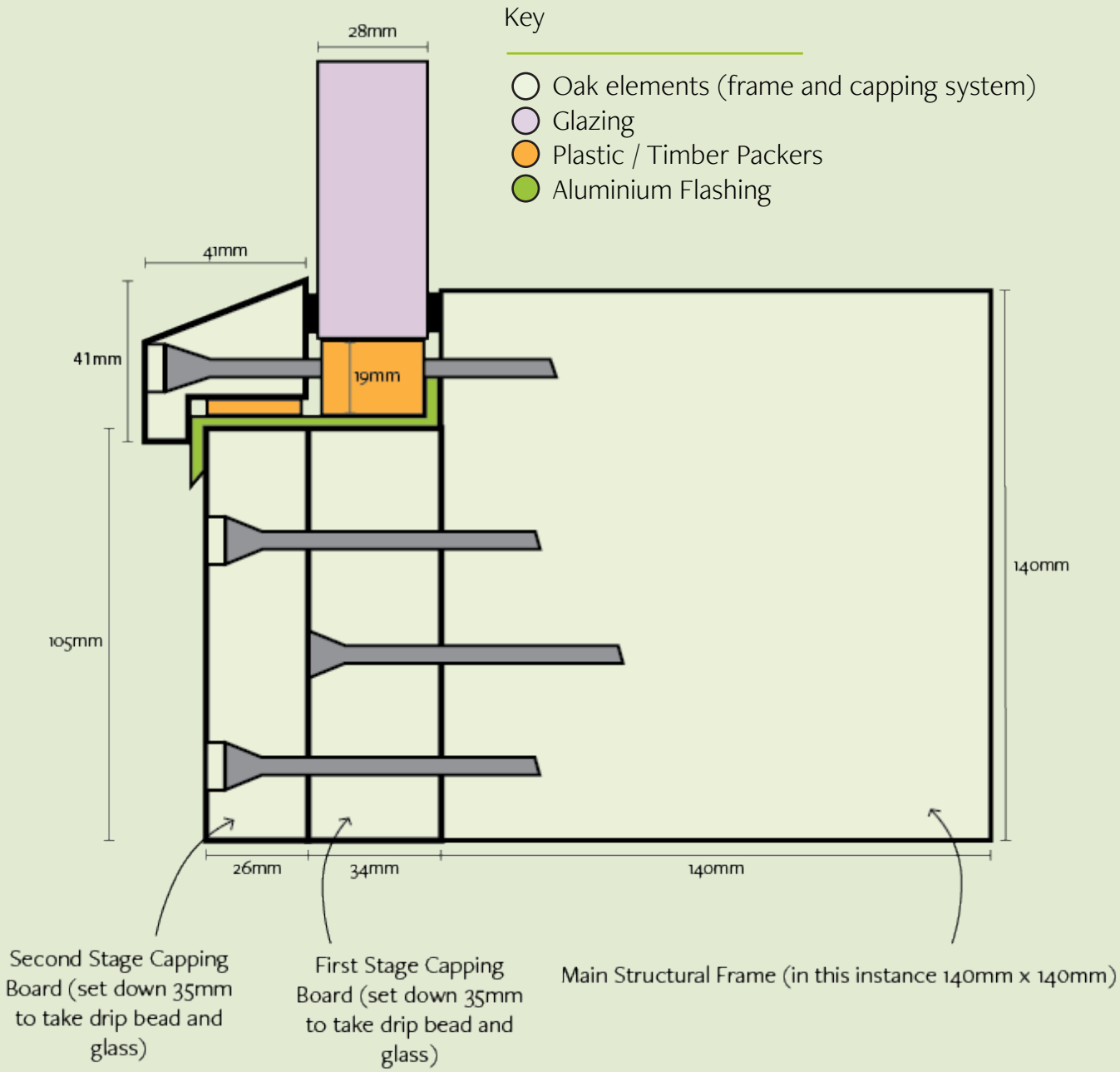
*Sometimes the internal packer is softwood for cost saving

Supplied by Us

- Oak Frame and pegs
- Capping Boards PAR to correct size and numbered (these are not cut to length and need cutting on site. 1st stage capping boards can sometimes be in 2 or 3 pieces in length as they are not seen)
- Pre-machined Drip Bead
- 80mm Aluminium Flashing Strips (to be fitted on site and bent into shape)
- EPDM Glazing Tape

Tools Required

- Chop Saw
- Cordless Drill / Screwdriver
- Tin Snips
- Multi Tool / Handsaw
- Orbital Sander
- 12.5mm plug cutter / oak plugs
- WD40
- PVA Glue (for plugs)
- Glass Lifters
- Stanley Knife
- Stainless Steel fixings
- Spirit Level
- Tape Measure


Key
Oak elements (frame and capping system)
Glazing
Plastic / Timber Packers
Aluminium Flashing
28mm
41mm
41mm
19mm
140mm
105mm
26mm
34mm
140mm
Second Stage Capping Board (set down 35mm to take drip bead and glass)
First Stage Capping Board (set down 35mm to take drip bead and glass)
Main Structural Frame (in this instance 140mm x 140mm)

Once the structural oak frame is installed and pegged securely, it is then time to fit the capping system.

The capping system is made up of 2 layers of kiln dried oak boards, which plant onto the main oak frame and house the glass securely within.

The first stage capping boards are 34mm thick and form the rebate that the glass sits into. The second stage capping boards are 26mm thick and hold the glass within the rebate formed by the first stage.

All boards are supplied pre-machined to the correct width and numbered according to the plan supplied. It is important to note that sometimes multiple pieces are supplied in 1 length to be cut on site. Also, the 1st stage boards can sometimes be supplied in multiple lengths, as they are not visible.

The vertical 1st stage boards are 20mm narrower, where the glass is, than the structural oak behind and the glass will sit into this rebate by 15mm, giving a 5mm allowance for fitting the glass units. The top side of the horizontal 1st and 2nd stage boards is set down 35mm because they must take a drip tray and flashing system.

A detailed section is shown on the previous page

Always start installing the capping system at the bottom and work upwards.

For projects with multiple stories of capping, complete the ground floor capping fully before moving upwards. The top horizontals on the ground floor will act as the bottom horizontals on the 2nd floor, which the aluminium flashing, glass and drip bead will sit on.

Begin with the bottom 1st stage piece. Find the correct board, using the numbered plans provided. This can then be pilot drilled and screwed into the main frame approximately every 600mm with 5x75mm screws; we would recommend the **Carpenters Mate Stainless Steel No.10 Bugle Head Screws.**

Work along the entire bottom section of the frame, securely fixing the 1st stage horizontal boards to the main frame. Ensure that these boards run the whole width of the frame.

Next, pilot drill and screw the bottom 2nd stage capping board. The screws should be alternately placed to the screws in the first stage board.

You can now move on to pilot drilling and fixing the remaining horizontal 1st stage boards, ensuring they all run the entire width of the frame.

Once all the 1st stage horizontals are fixed in place, you can move onto the 1st stage vertical pieces. Measure and cut the boards to length, then drill and screw as before. Where the vertical members meet a horizontal with a drip detail, you will need to leave a 10mm gap for the aluminium flashing.

Once the first stage complete, the aluminium flashing can then be installed. Begin by measuring and cutting the strips to length – they should run the full length of the bottom horizontals of the frame. This should then be hammered into shape, giving a 10mm up-stand against the oak frame and a 10mm overhang on the second stage board. This allows water to flow off the flashing and prevents back flow.

Once the aluminium flashing tray is fitted and in place, the glazing tape can then be applied. The tape should be applied to each opening, flush to the edge. It is important that the taping is done carefully so that the inside finish is tidy and professional.

Next, position some 19mm packers on the aluminium flashing for the glass to rest on. These can be plastic or cut from scraps of timber.

Then remove the white backing from the foam tape and carefully lift the glazing units into place, ensuring the glass is central between the posts. There should be a 5mm gap between the glazing unit and the capping boards on the top and sides. *You may wish to secure the glazing unit temporarily using screwed timber blocks.*

Once the glazing units are installed into the frame, you can move onto the 2nd stage capping.

If you are oiling the oak, it is best to oil the 2nd stage capping piece at this point, before they have been installed.

Begin by installing the top horizontal 2nd stage piece, so that it traps the glass tightly against the main frame. Firstly, find the correct piece as per the numbered plan then pre-drill it. The pilot hole can be 5mm, however you will need to countersink by 12.5mm. Neatly tape along one edge of the piece, cutting the tape away where each vertical member will be, and remove the white backing. This piece can then be screwed into place.

Next install the drip bead. Again, pre-drill the bead, and tape along the back face. Place 4mm packers on top of the aluminium flashing tray to support the bottom of the bead, ensuring there is a suitable gap for water runoff, then screw the bead in with **Carpenters Mate Stainless Steel No.12 100/125mm Screws.**

Ensure the screws do not strike the glass unit and that there is at least a 3/4mm clearance. If not, the glazing unit will need to be lifted slightly more in the opening.

Fit the remaining 2nd stage verticals, ensuring you pre-drill and tape each piece. You will need to cut the bottom of each vertical on an angle to meet the drip bead.

finish

Finally, plug the screw holes with oak plugs to finish; for best aesthetics, ensure the grain direction on the plug matches the direction on the second stage capping boards. Allow the glue to dry fully before cutting them flush and sanding smooth.

If you have any further questions, don't hesitate to contact our team

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