



stealth

ELITE ROOF WINDOW RANGE
BY STEELFORMERS

STEP BY STEP INSTALLERS GUIDE

For Roof Penetrations (no greater than 800mm in width) in accordance with the MRM Code of Practice, Version 2.2/2012



TOOLS REQUIRED:

1. Handsaw/skill-saw
2. Battery Drill
3. Tin Snips
4. Riveter
5. Caulking Gun
6. Drill Bits
7. Marker Pen
8. Nut Setter



STEELFORMERS
MANUFACTURERS OF STEELFORM ROOFING

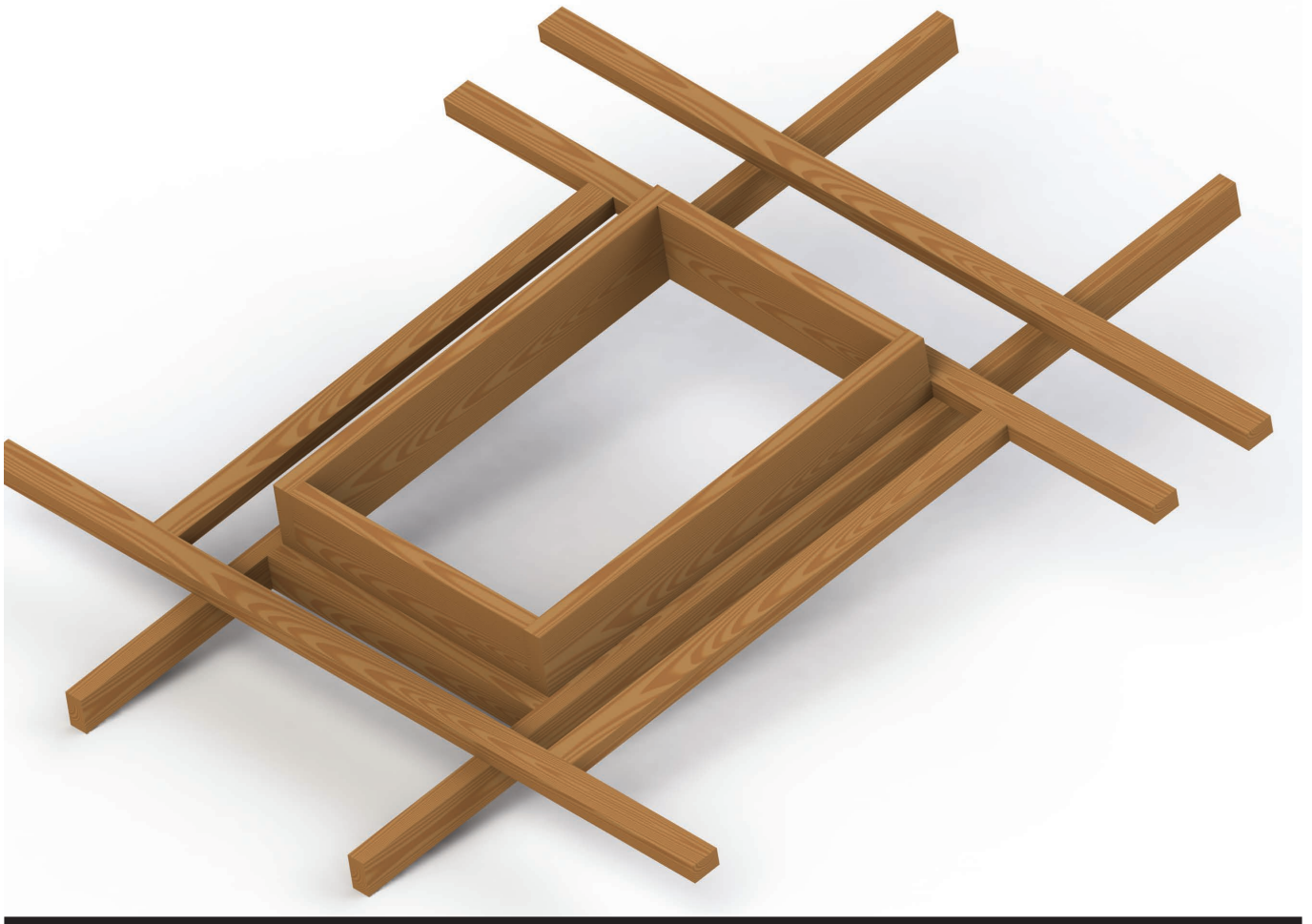
WWW.STEELFORMERS.CO.NZ



stealth
STANDARD ROOF WINDOW RANGE
BY STEELFORMERS



stealth
ELITE ROOF WINDOW RANGE
BY STEELFORMERS



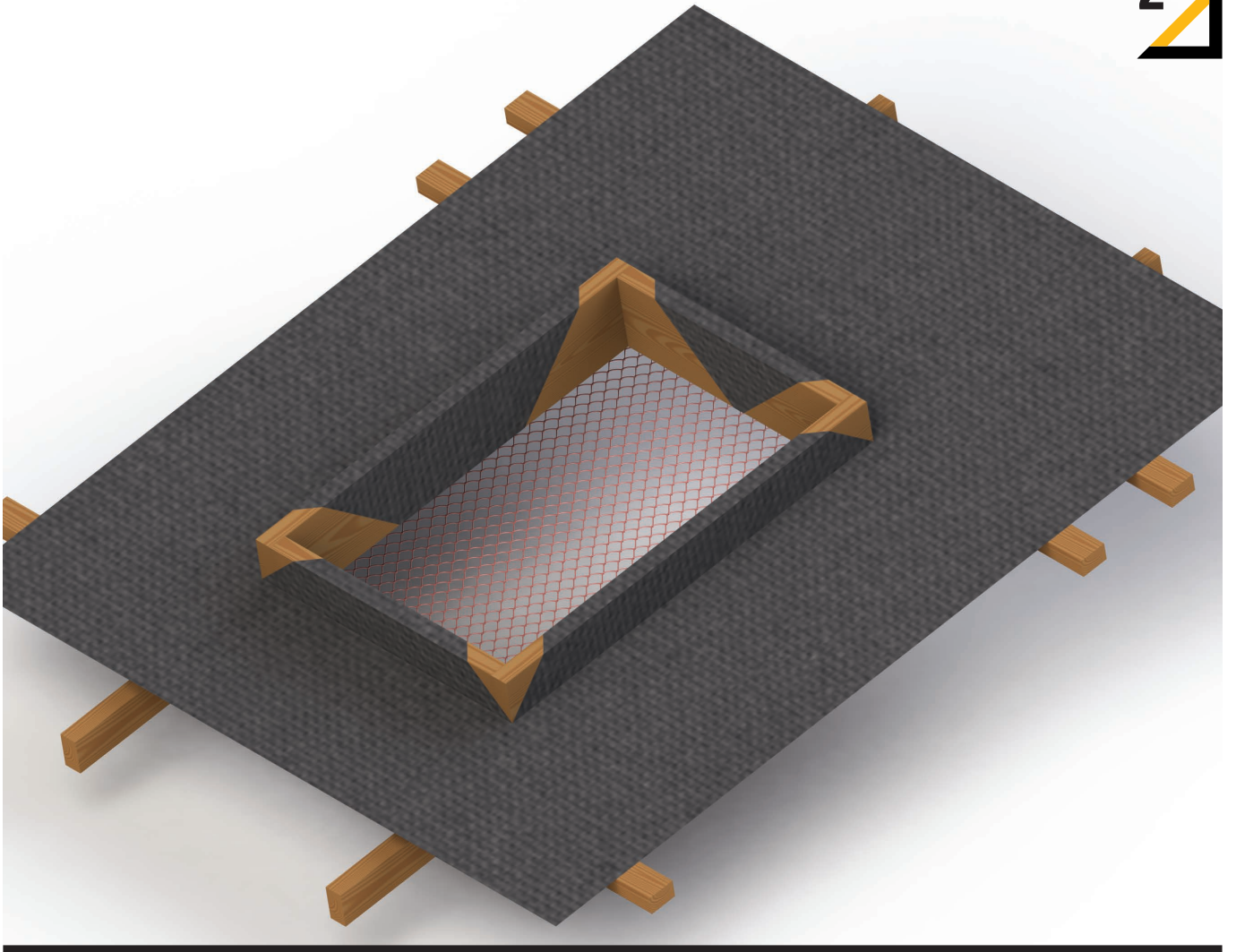
STAGE ONE

We recommend a sub-frame be made out of 200mm x 45mm timber to be installed between trusses. This frame should be fixed to the trusses with 90mm x 3.55mm jolt head nails at no greater than 400 centres and at 150mm from frame corners. Screws of the same gauge and length can be used in this situation if preferred.

Provide additional support for traffic and flashings down either side of the opening, no greater than 150mm from the edge of the sub-frame.

At the lower edge of the sub-frame, provide additional framing to allow for the fixing of a 200mm apron.

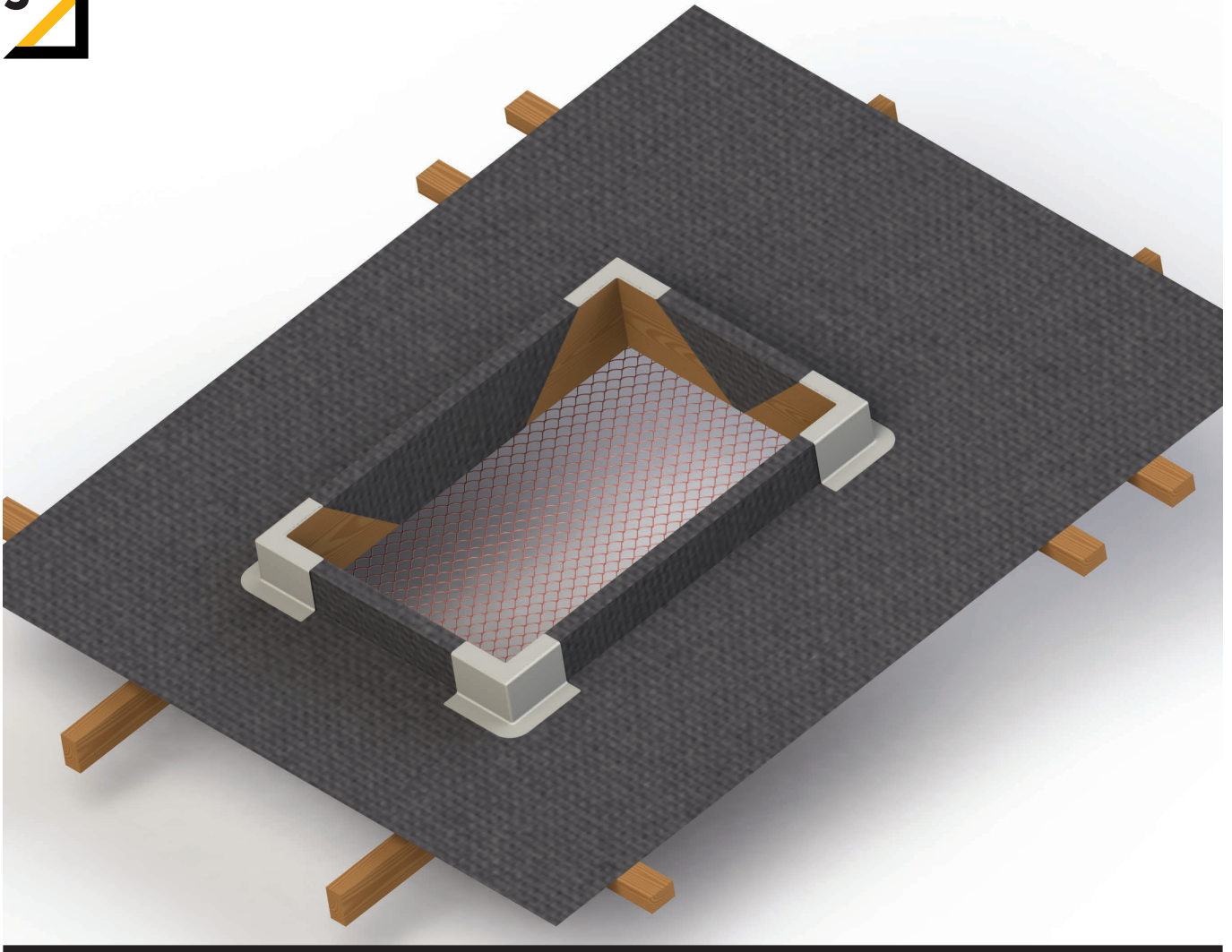
At the top of the roof opening sub-frame provide a double purlin or H3 Ply to provide support for traffic and additional fixing. Double purlin should be fitted at no less than 150mm above the sub-frame.



STAGE TWO

Please note the safety from falling netting which must be used on openings greater than 450mm x 900mm.

The roofing underlay is cut and folded up the sub-frame and the underlay is then stapled to the sub-frame pedestal.



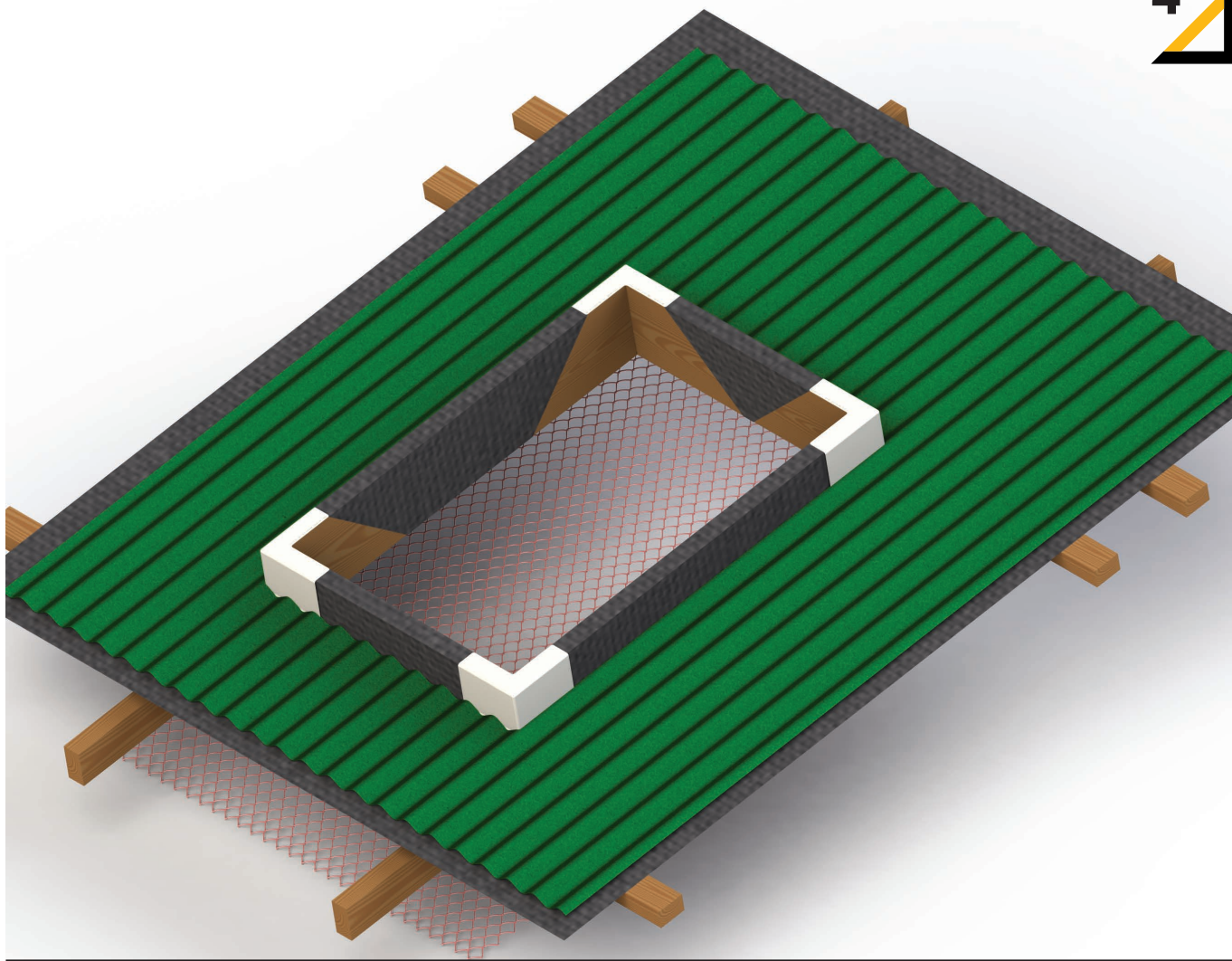
STAGE THREE

Flashing tape is then cut to length to cover any visible timber on the sub-frame up-stand as shown, minimum 400mm in length.

Secure edges of flashing tape with a clout or similar as this will self-seal, don't use screws for this task.

STAGE FOUR

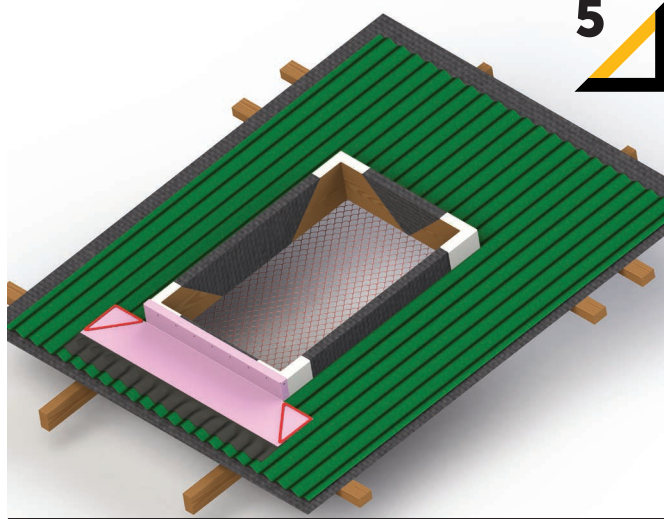
Cut profile sheets around the sub-frame (pedestal) and make sure to turn up the valleys (bottom of corrugates etc.) where they terminate against the sub-frame drip edge (low side). This is particularly important on low-pitch roofs.

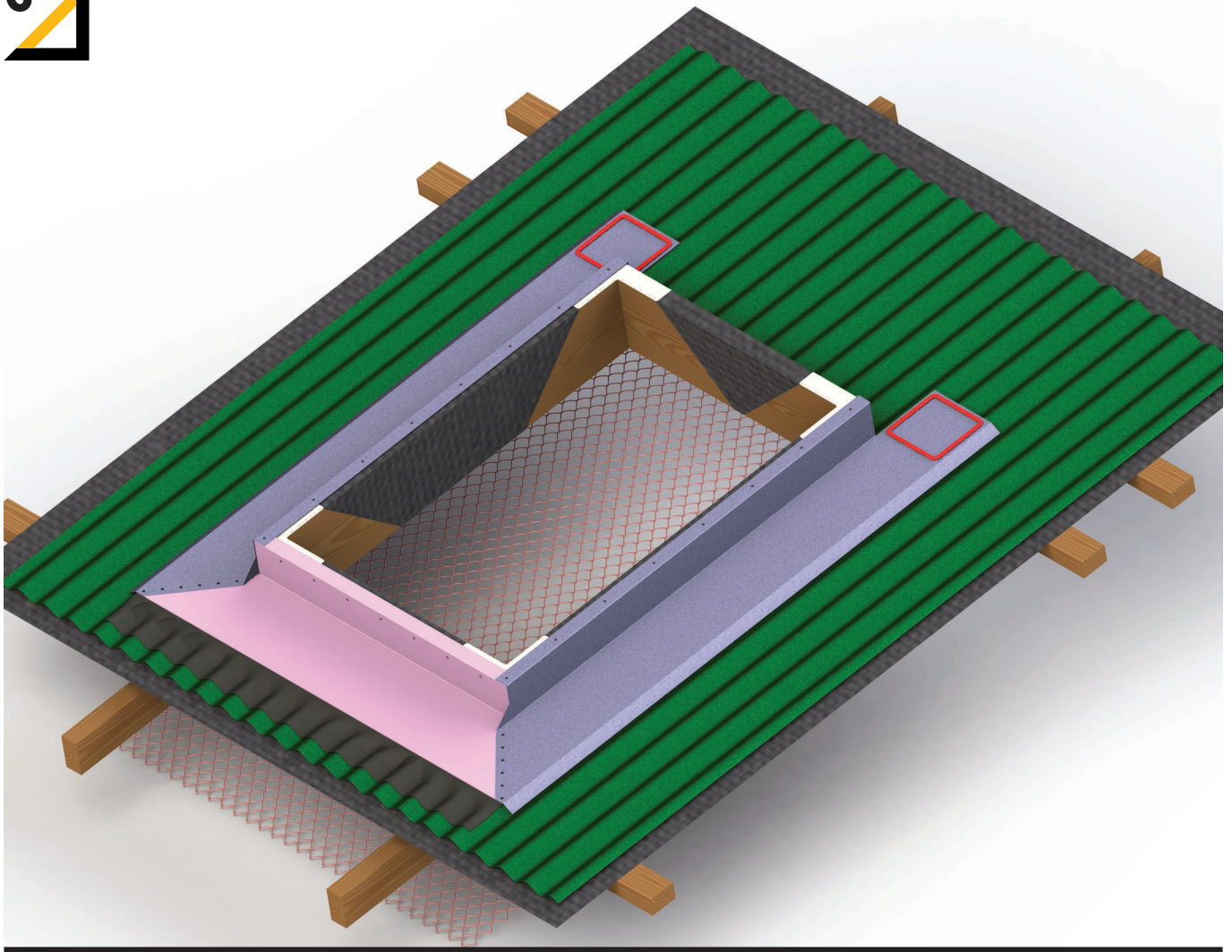


STAGE FIVE

Fit the Lower Apron, allow corner tabs for overlap between the various parts and additional cover, these can also provide additional fixing. Use clouts at 150mm centres to fix the Apron once you are confident the fit and finish is acceptable. Soft edge can be fitted below the apron to close off the lower edge of the Apron.

The red triangular shape at either end of the Apron indicates the use of sealant to seal it to the Side Curbs. Sealant is compulsory below 10 degrees in pitch.





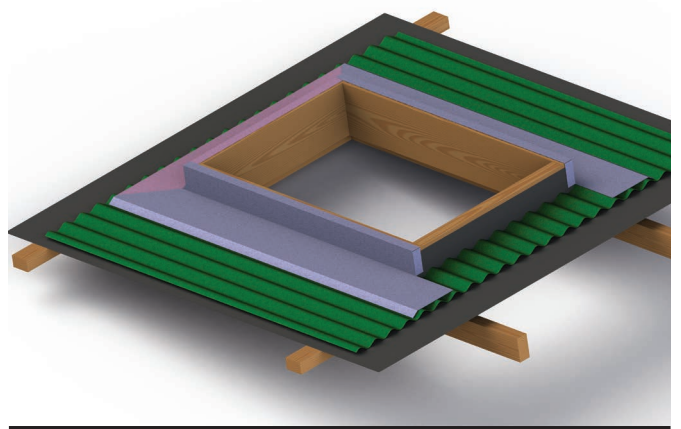
STAGE SIX

Overlay the Side Curbs (side aprons) and check their fit. The sealant stage should not be carried out until you are ready to do final fitting and fixing.

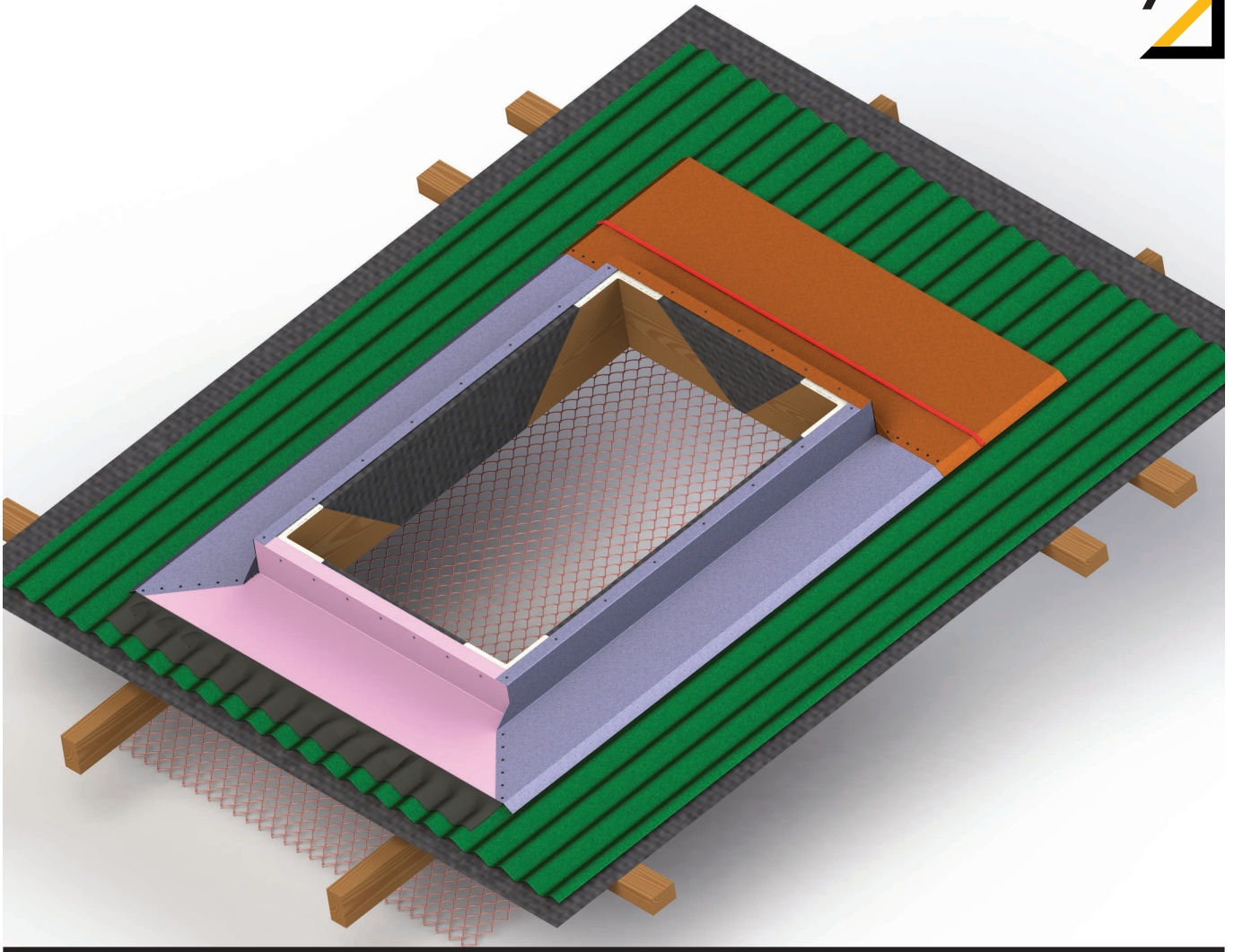
The side curbs must go over at least two ribs of corrugate or rib-line roofing. If the roof is a euro-tray then the side curbs must be covering at least 150mm of the roofing profile. Please see the image of the side curb and its intersection with the apron. The side curb is 'tabbed' and cut to provide a diverter to carry water travelling down the curb away from the corner joint of the parts at the apron. Once you are satisfied with the fit and finish apply Dow Corning DC580 or similar in the triangular pattern as shown on stage 5.

The side curbs can be fixed to the sub-frame with clouts through the top of the pedestal at 150mm centres. At the joint of the side curb and apron fix the sealed joint at 50mm centres with a 4mm sealed rivet.

6A



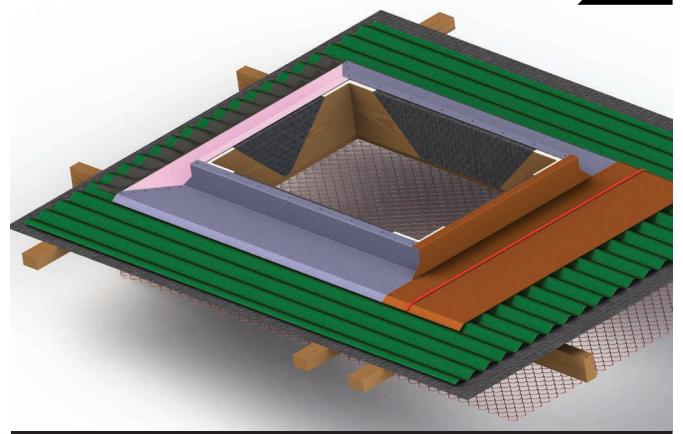
6a (above) shows the tabbed edge at the top of the side curb for detail at that end of the assembly.

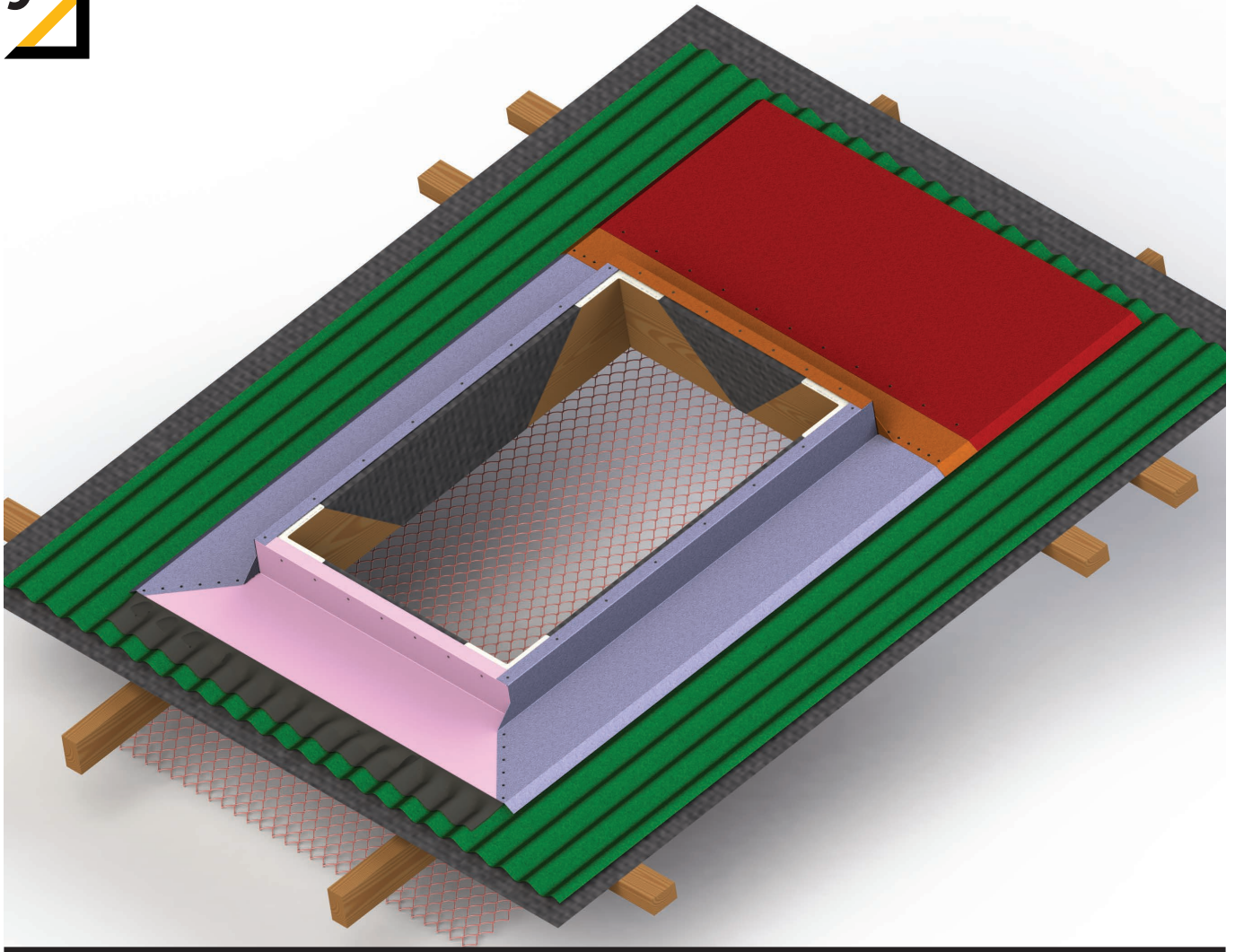


STAGE SEVEN & EIGHT

The final flashing around the opening is to fit the back curb, shown in orange. Stage 6 shows the DC580 silicone or similar that will be used between the side curb and the back curb. As before the silicone is not fitted until you are satisfied that the fit and finish is correct.

Please note the diverters on the back curb at the intersection of the back curb and side curb closest to the sub-frame pedestal. These diverters are there to direct water away from the junction of the parts. Once you are satisfied with the fit of the back curb, apply sealant as shown in stage 6 and tack the curb in place with clouts into the top of the pedestal. Where the side curb laps the roofing profile, fasten the back curb with 4mm sealed rivets at no greater than 50mm centres.

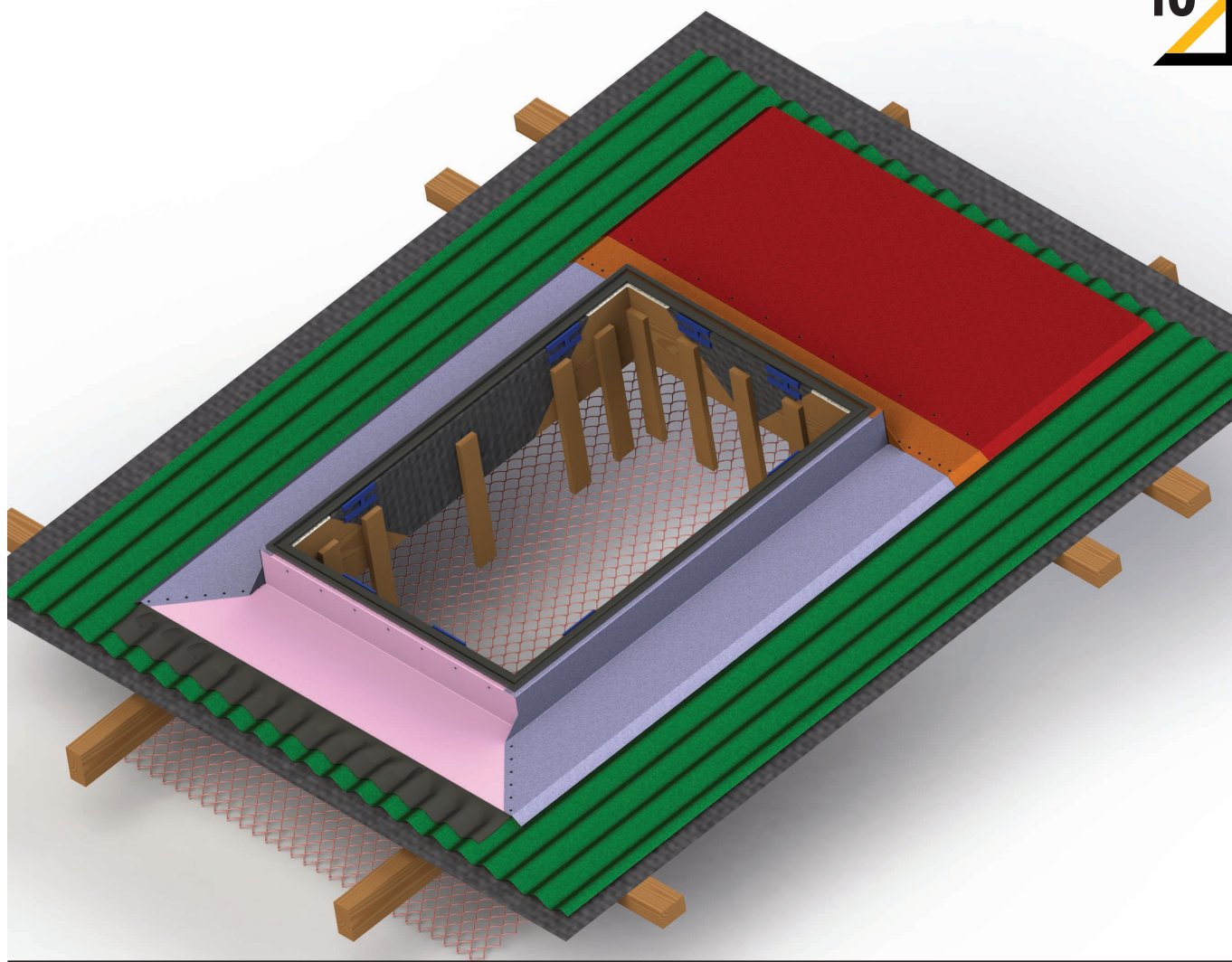




STAGE NINE

There is a red line on stage 8 showing a silicone seal 50mm from the lapped edge of the back curb and the back flashing which continues to the ridge.

The back flashing shown in red is fixed to the back curb at no greater than 100mm centres with 4mm self-sealing rivets along the line of the silicone bead. There is an additional silicone bead 150mm up from the lap as a second line of defence, particularly important on low pitch roofs. The back flashing is fixed as per standard practise with self-sealing gasket 'tek' screws at purlin centres back to the ridge flashing.



STAGE TEN

Prior to the roof window being fitted to the top of the sub-frame two further lines of defence are added to the top of the pedestal.

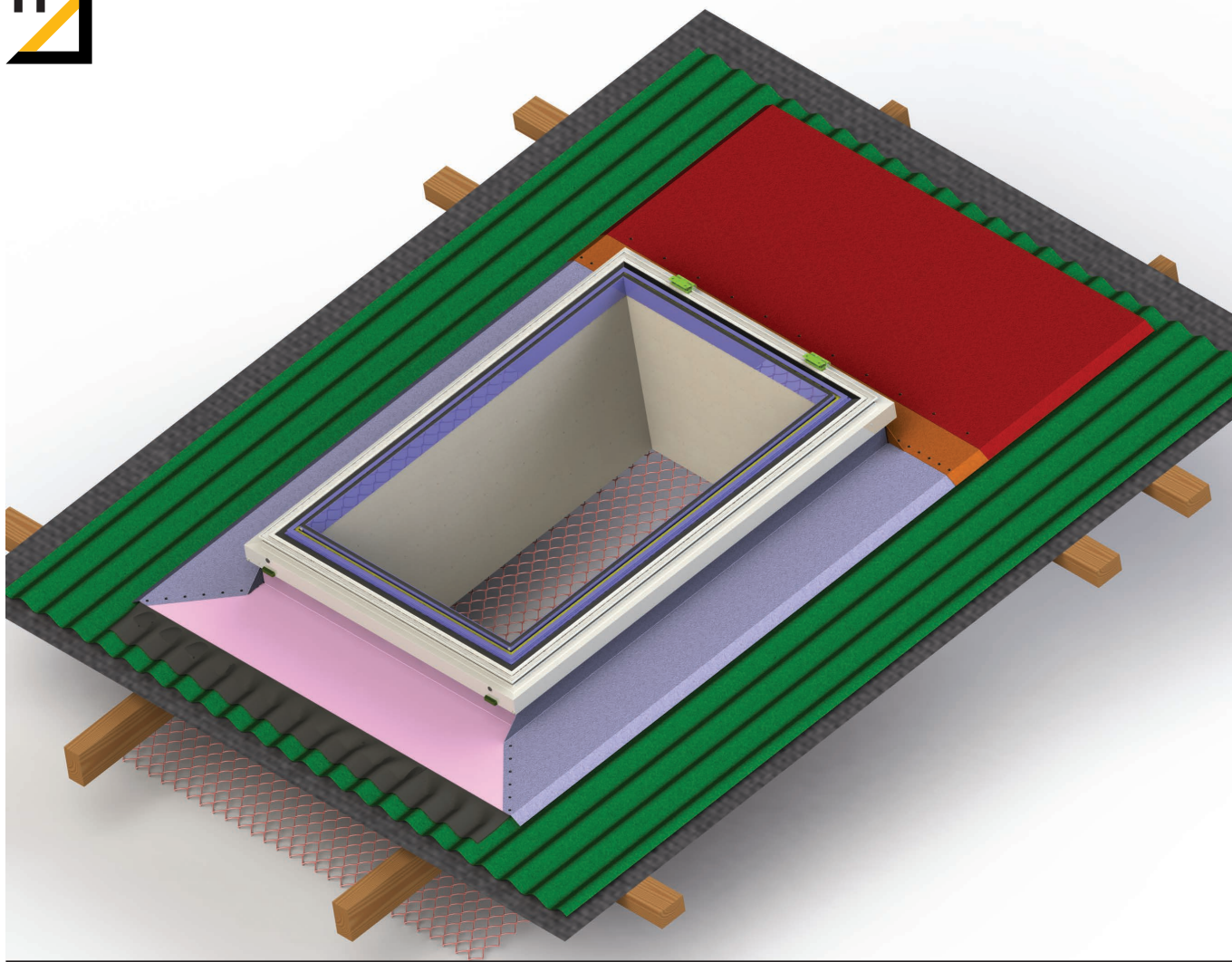
The next step in the installation is to locate the roof window frame as close to nominal position as possible. If you measure the receiving part of the window frame and the opening in the roof sub-frame you'll be able to work out the clearance. Divide this clearance in 2 and allow 2 to 4mm of additional clearance. Rip some timber straps (for one side and the lower edge) and temporarily fix a few shorts to the interior of the sub-frame opening. These strapping shorts will provide you a location to guide the roof window to its ideal centralised location.

Please note the two grey lines around the perimeter opening. The inner grey line is Dow Corning (DC 580), the outer line is Glasscorp Scriber seal (GA01), which is a low density foam tape. Before applying the sealant

or tape wipe down the surface with Glasscorp 7803 Solvent, this will ensure the best adhesion for the foam and silicone. Apply a length of Scriber seal along each edge of the perimeter closest to the roof and joint them neatly. With the foam tape in place Apply a 6mm bead of DC580 to the perimeter edge closest to the hole in the roof.

Stage 10 shows the opening fully strapped, this should ideally be done after the window frame is in and fastened in position.

Carefully lift the frame assembly onto the prepared opening as shown in Stage 10. Temporarily fix the frame to the sill, 150mm from corners adjacent to the Apron. Check that the window frame is central in the opening and fix the top corner of the frame also. The temporary strapping should have the window centrally installed over the tape and silicone.



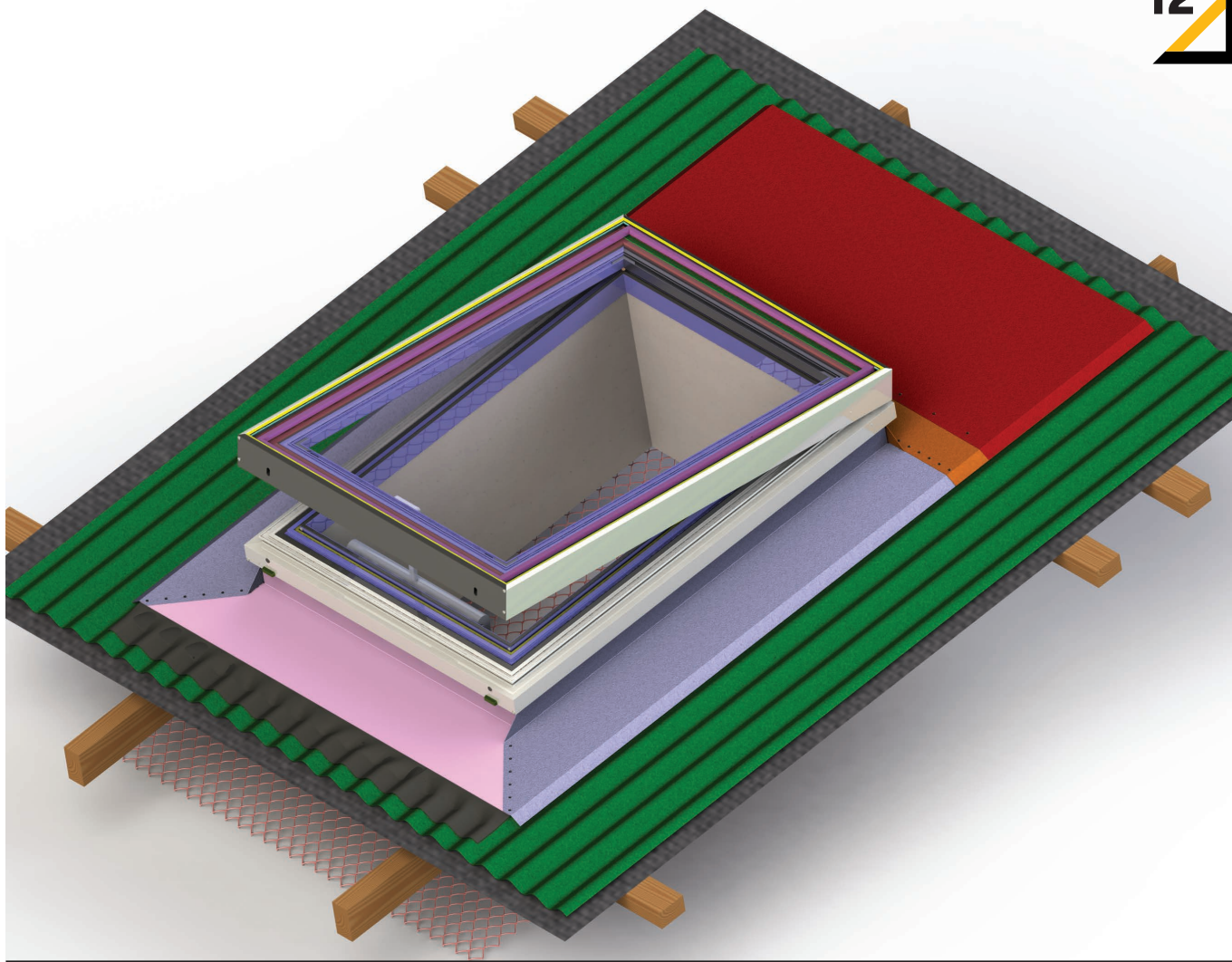
STAGE ELEVEN

With appropriate window fixing packers at no greater than 150 from the frame corners and at no greater than 400 centres fix the window at the packing points. Use 10 gauge SS pan head or countersunk screws, the screw length should be a maximum of 50mm.

If you remove the temporary strapping you can now use 10mm foam rod around the perimeter of the opening internally between the fixing packers. You can then use window installation foam or silicone (DC580) dependant on the gap you have to bridge, this is your interior air-seal.

Stage 11 Shows the operable roof window frame installed, the installation process is the same whether the window is operable or fixed.

With the frame fixed securely in place and air-sealed you can strap the opening to suit the lining (whether it is ply or Gib) and line the interior of the opening. Ensure that the light-shaft or similar is suitably insulated.



STAGE TWELVE

Finished, the final image shows the sash for the roof opening installed and the motor attached.

With regards to installation of larger operable roof windows it is far easier to remove the heavy double glazed sash and install the frame only initially. The sash is simply removed via 6 screws in the outer edge of the frame fastening the hinges.

With the motor push bracket pin removed the sash can be opened up to beyond 90 degrees, at this point the hinge fixings are clearly visible.

Stealth Roof Windows warrants that our products, Fixed and Operable Roof Windows, are free from defects of workmanship and/or material for a period of time as stated below from the date of purchase.

LENGTH OF COVERAGE

STEALTH FIXED ROOF WINDOW

	Years
Stealth Roof Window Components	10
Insulated Glass	10
Powder Coating - Duralloy®	10*

ELECTRIC OPENING STEALTH ROOF WINDOW

	Years
Stealth Roof window components	10
Insulated Glass	10
Powder Coating - Duralloy®	10*
Motors/sensors	3
Controller	3

*Powder coating has specific care requirements when close to breaking surf or geothermal areas. Duralloy® states it's only applicable greater than 100m above the high tide mark. Maintenance must be carried out on a quarterly cycle, washed with warm soapy water for the warranty to remain intact. For properties below the 100m mark from high tide specify Duratec®

Should Stealth Roof Windows (S.R.W.) identify any items to be defective, S.R.W. will at their option choose to replace or repair any fault identified by S.R.W. If Stealth Roof Windows provides a replacement or repair, the balance of the original product warranty period will remain.

Stealth Roof Windows will in no event be liable for loss of profits, indirect costs, special, incidental, consequential or other similar damages.

As Stealth Roof Windows do not install the product(s), in no event will Stealth Roof Windows be liable for any breach of warranty for improper installation.

To the fullest extent allowed by the law, Stealth Roof Windows liability to all buyers for all claims with respect to the products will be limited to the lesser of:

1. the cost of replacing the products, or
2. the cost of obtaining equivalent products, or
3. the cost of having products repaired

WHAT IS NOT COVERED BY WARRANTY?

STEALTH ROOF WINDOWS IS NOT RESPONSIBLE FOR:

1. Defects or damages occurring due to improper installation, cleaning, transit damage, accident, natural disasters, misuse or any other circumstances beyond the control of Stealth Roof Windows.
2. Condensation and any water damage resulting from condensation.
3. Products subjected to stress from:
 - localized application of heat
 - movement of building components
 - expansion or contraction of buildings framing products

Accessories, flashing or other materials that are installed not in accordance with the Stealth Roof Window installers guide, or if the installer is not a practicing licensed building practitioner

TO CLAIM WARRANTY

Within (30) days of discovery of defect, the buyer should contact:

1. who the owner purchased the product from, or
1. contact, Stealth Roof Windows at www.stealthroofwindows.co.nz

STEALTH ROOF WINDOWS WARRANTIES DISCLAIMER

Except as expressly set forth herein, the products are provided "as is", without any warranty, expressed or implied, including, but not limited to, all warranties of merchantability and fitness for a particular purpose; and any such warranties are hereby expressly disclaimed.

