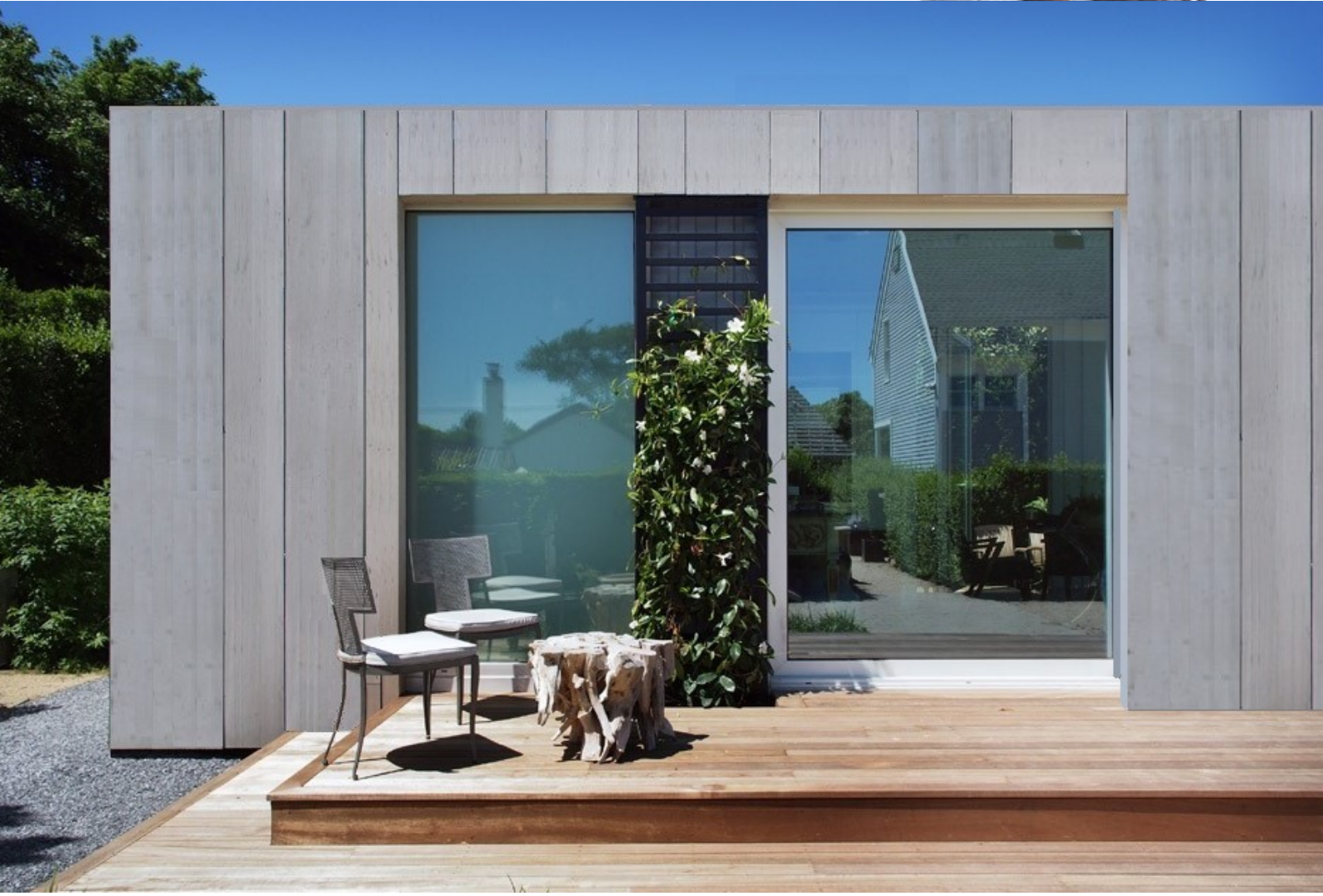


STUNNING container cover-ups.  
How to BEAUTIFY and INSULATE  
container homes in ONE simple  
application.

"with lovely energy efficient cladding"



# Are YOU looking for an awesome way to INSULATE container homes, and enjoy a stunning DURABLE finish? In just ONE easy application?

If so, SmartStone Systems has the products for you. R-2.0 (R10 USA/Canada)  
Beautiful real stone, or porcelain, or reconstituted stone finishes.

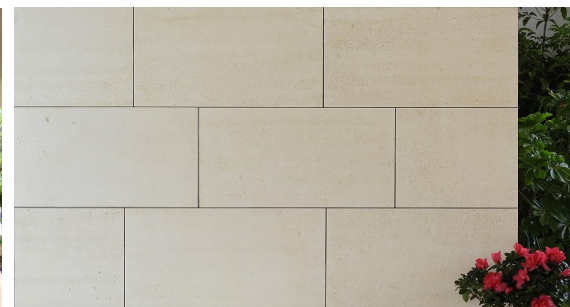
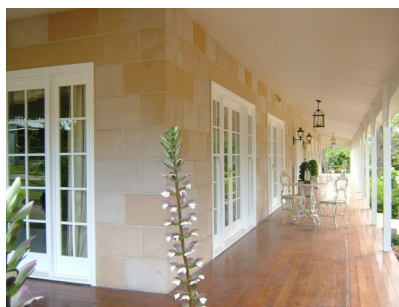
*stone*  
**ecosmart**<sup>®</sup>  
insulated lightweight cladding systems

Natural stone series



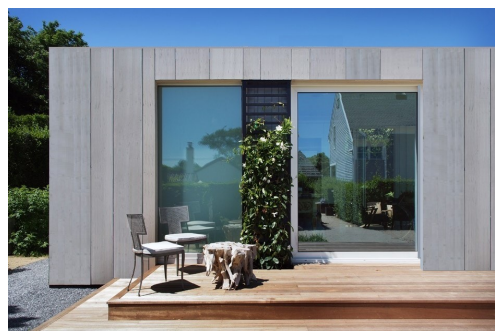
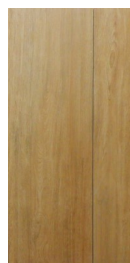
**techstone**<sup>®</sup>  
beauty and durability in reconstituted stone

Reconstituted stone series

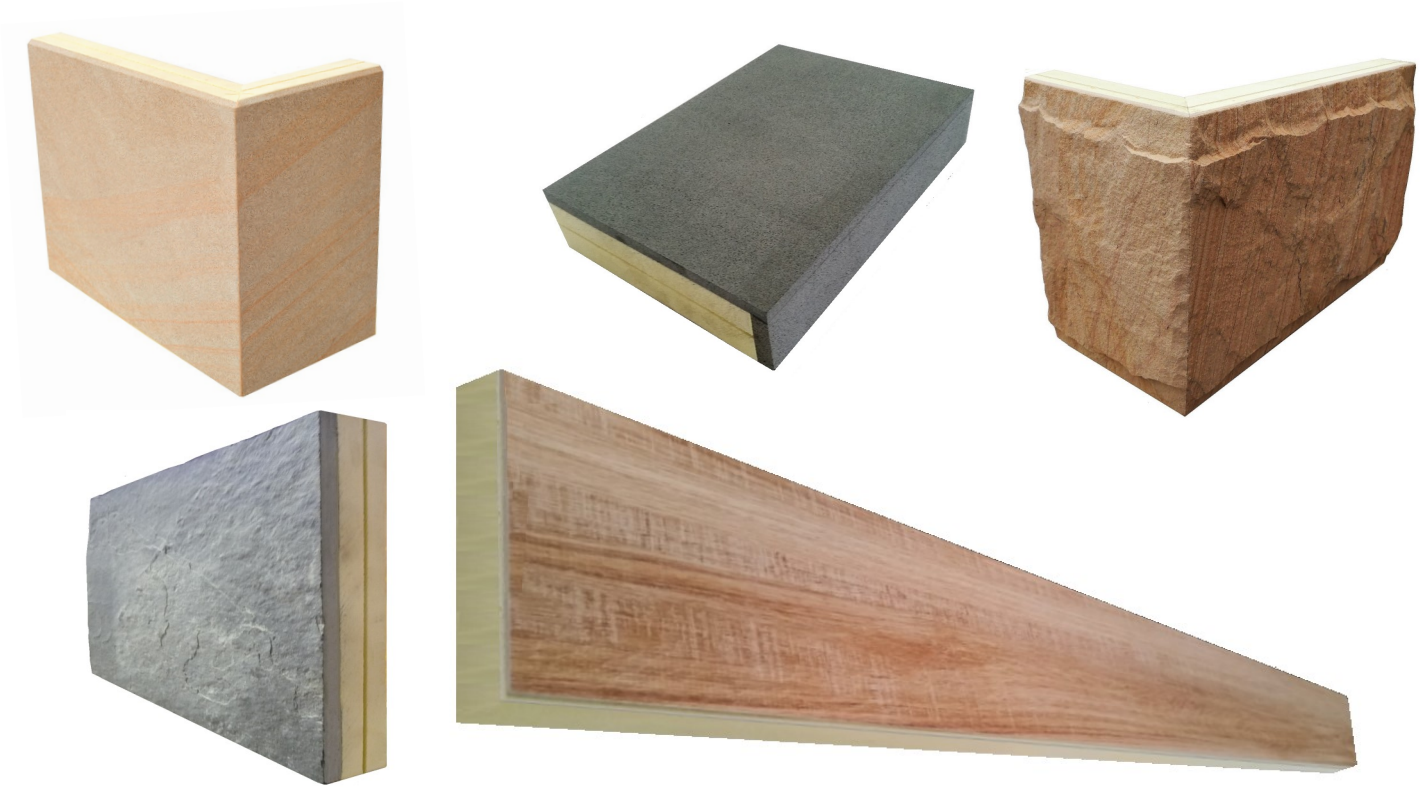


**LePlank**<sup>®</sup>  
cladding, decks, floors and more

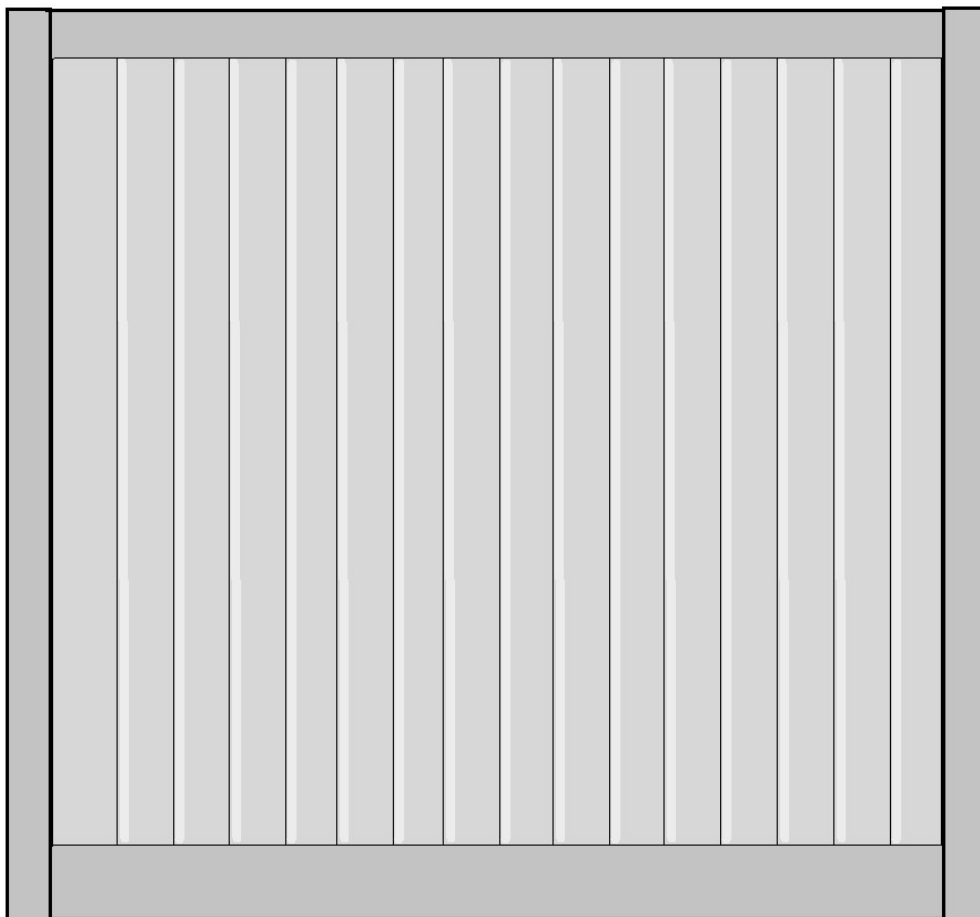
Porcelain series (Wood, stone and concrete)



# How is it done?

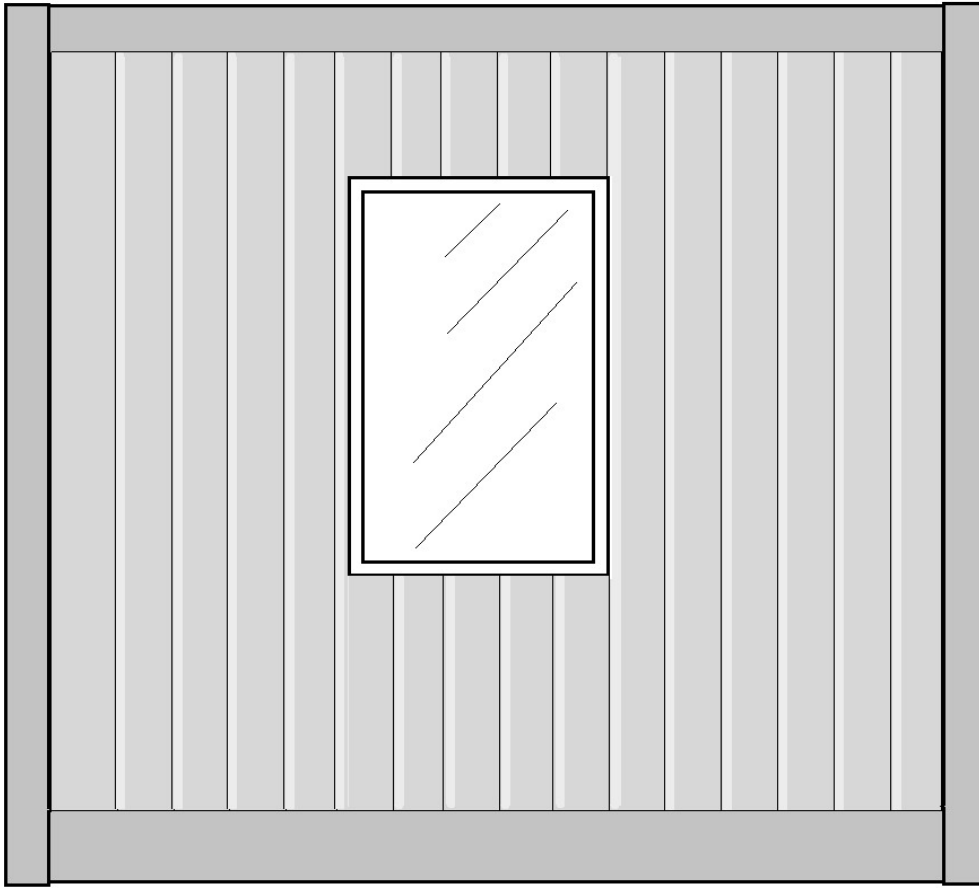


Get your hands on your choice of cladding from of our product range. They are all factory grooved for easy alignment using the PVC joiners during installation.



Get your hands on a container

Install any windows and doors required.

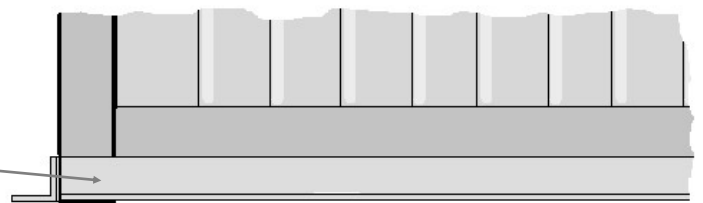


We recommend direct glue fix for installation our products to containers

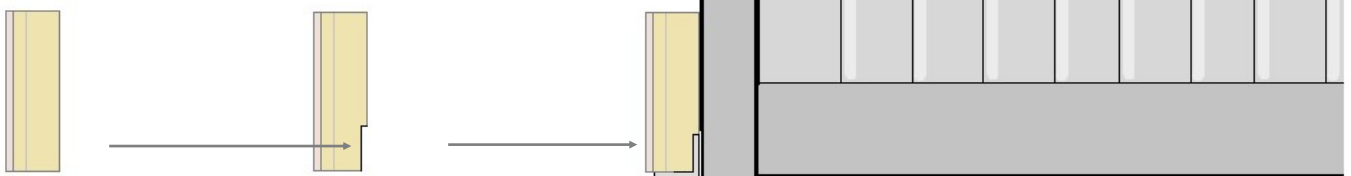
Ideally a starter rail can be locally sourced 50mm x 50mm x 3mm (2" x 2" x 1/8th) galvanized 'L' section.



This can be welded square and level to the bottom of the container all round.

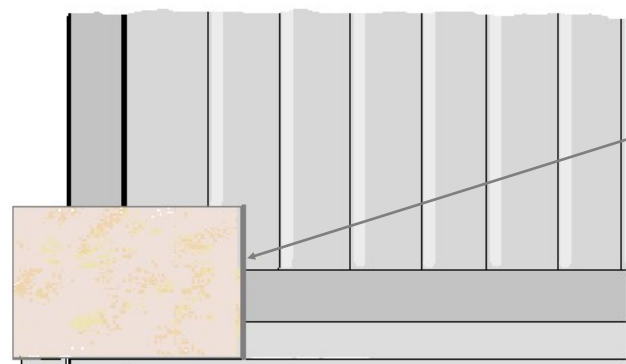
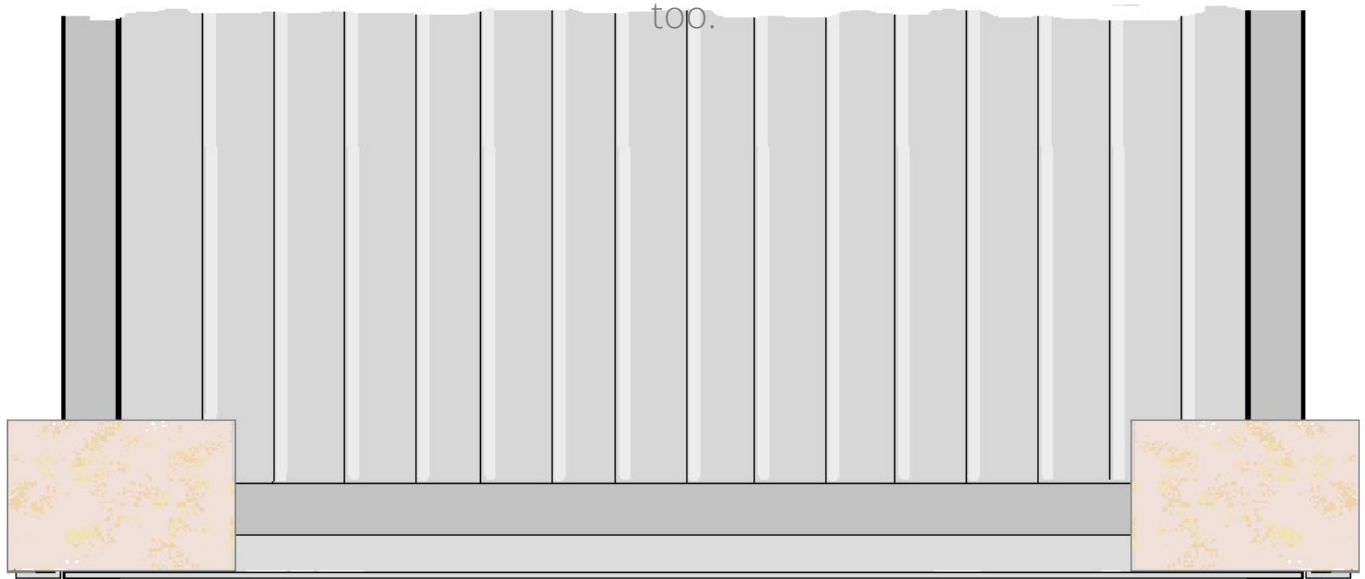


To accommodate the thickness of the starter rail a simple cut-out should be made on the bottom of the first row cladding so that it sits flush with the container sides above.



Start with placement of all the corners first. These should be glued with a reputable neutral cure silicone adhesive (Dow Corning or otherwise).

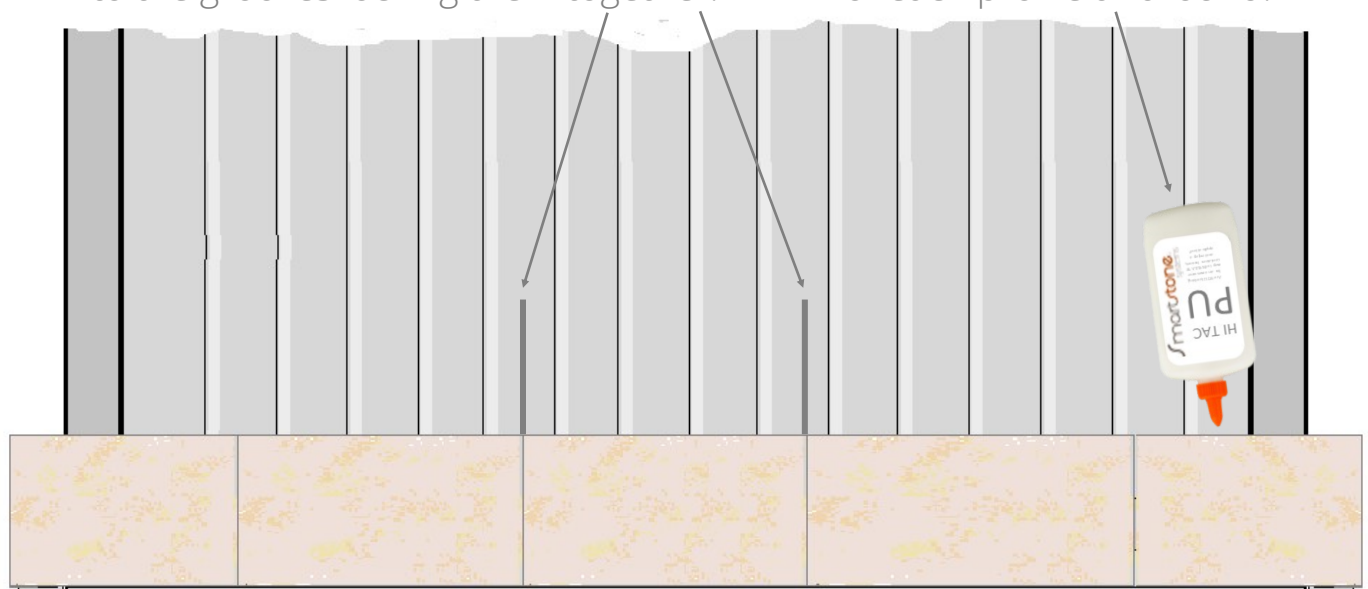
25mm (1") blobs 100mm apart (4") on the high side of the container profile section. A bead of adhesive should be applied to the bottom rail top.



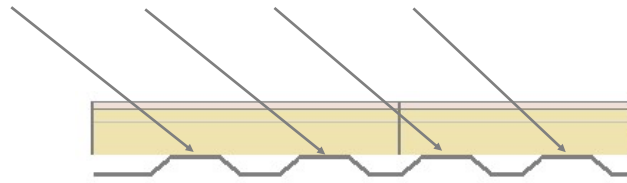
As each piece is placed place the PVC alignment joiners into the end grooves. The next piece should slot into that joiner, locking each in and maintaining perfect alignment. Adhesive should be applied along the starter rail as each consecutive piece is set into place.

The last piece should be cut to required size and glued into place. The alignment joiners can then be pushed down vertically into the grooves locking them together.

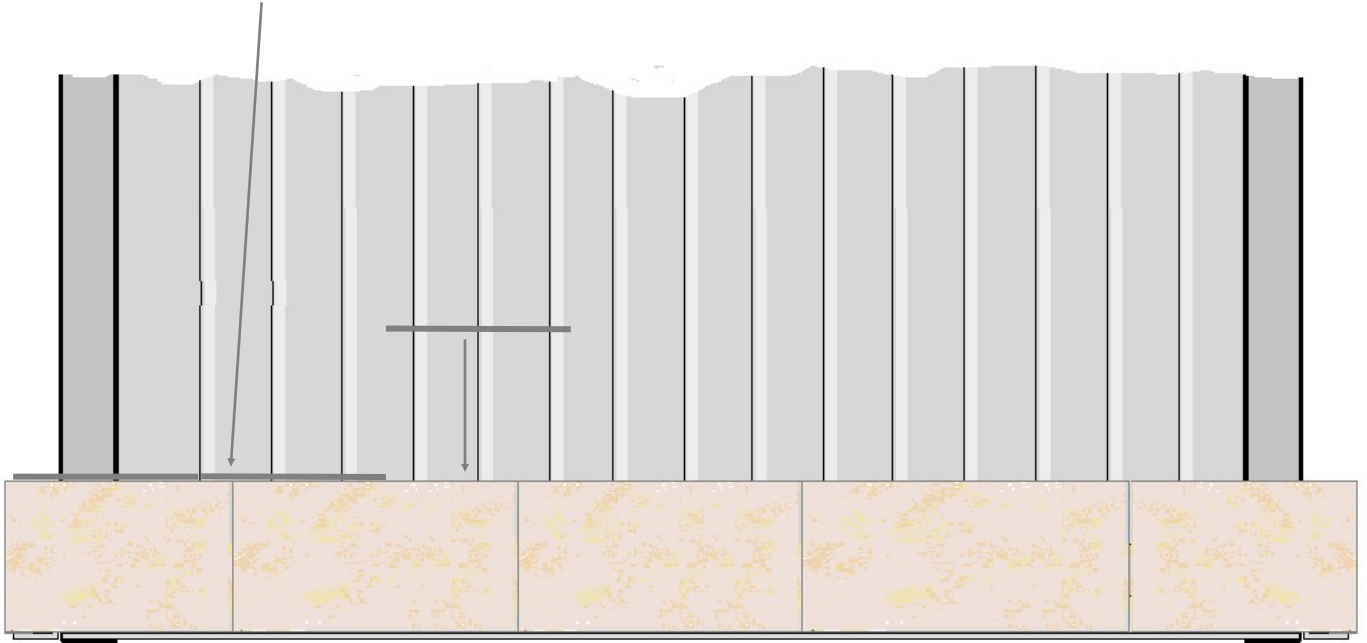
When each course is finished squeeze a small amount of Hi Tac PU Glue down the back of each profile all around.



Hi Tac PU Glue is a single pot expanding foam adhesive. It will flow and expand behind the pieces forming a permanent bond secondary to the silicone.  
Do not use too much.

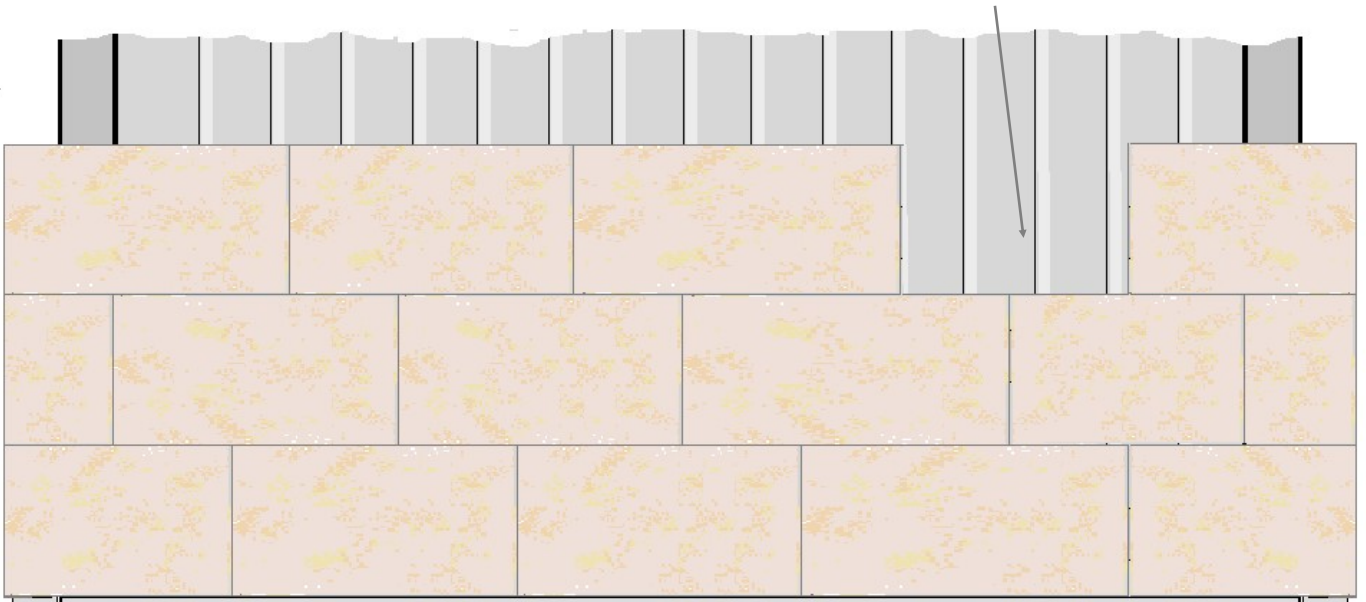


Prior to the second course place PVC alignment joiners around the top of each piece overlapping each joint. These serve to align the second course to the first.

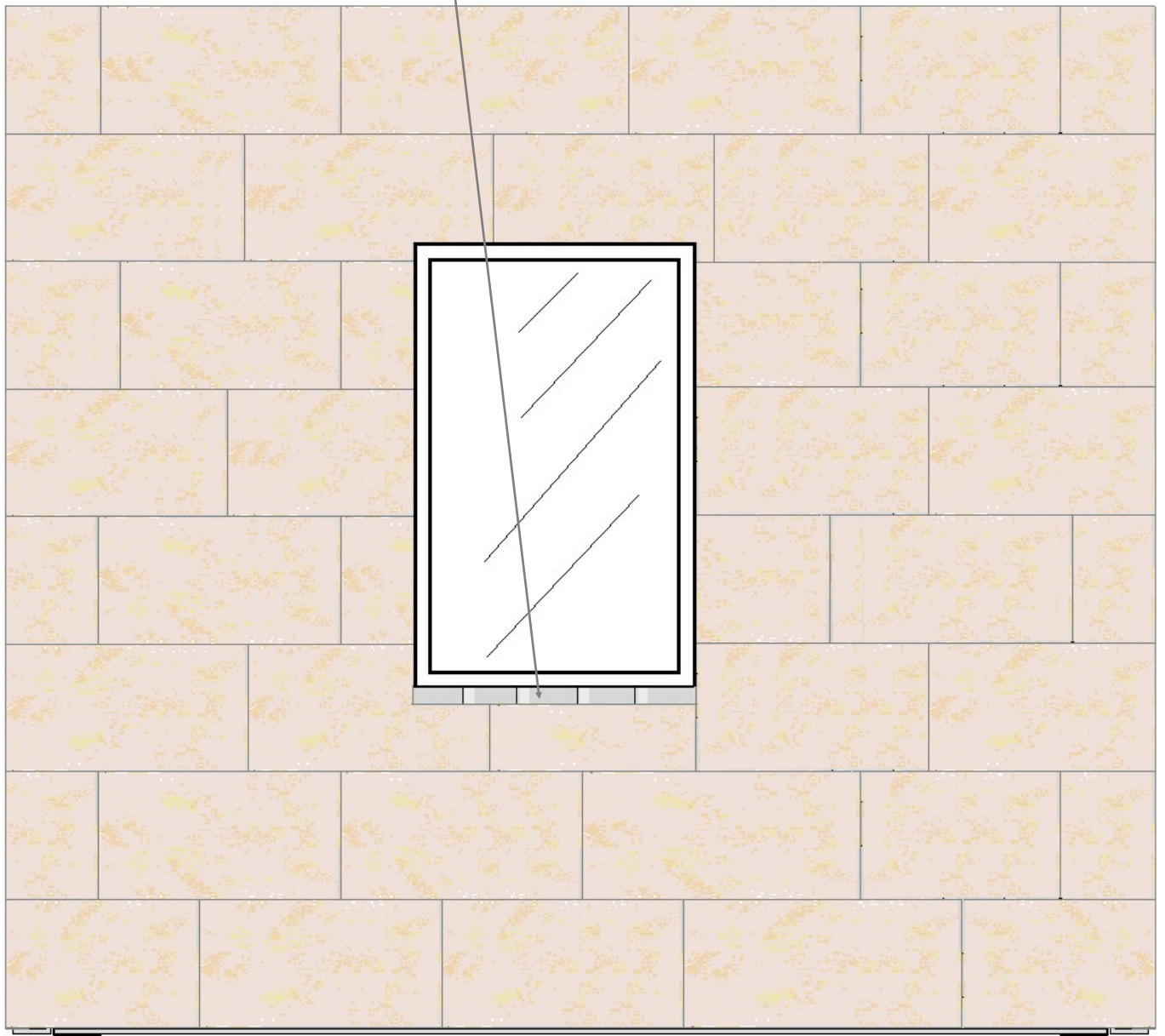


Simply continue the same process for each course until complete.

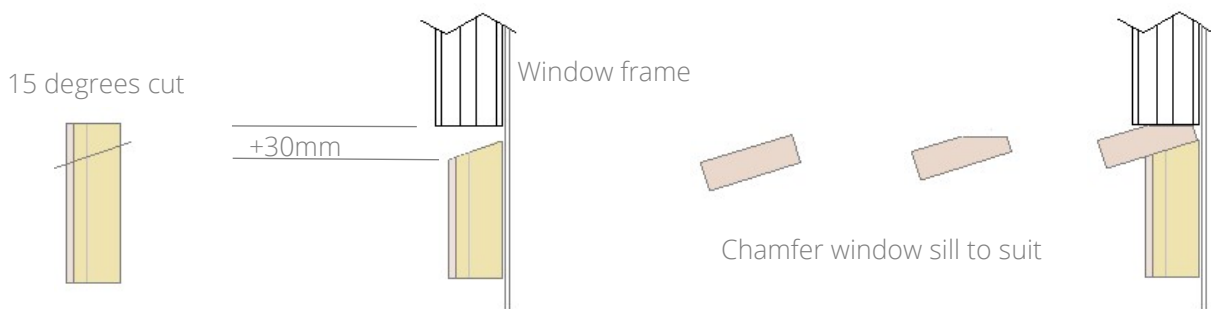
A small bead of silicone should be applied along the top of each course as the above piece is placed in position. When cutting the final piece of each course it is a good idea to check the fit dry first before the initial application of adhesive so as to avoid mess should adjustment need to be made.



Cut the pieces to suit any window openings. The pieces at the bottom of the window should be 30mm (1"3/8) short of the frame to allow placement of the window sills afterwards. See detail below.



Below is a cross section view of window sill treatment. The suggested angle cut is 15 degrees.



## Installation of vertical cladding.

Most of the LePlank range is available in longer 1200mm (4') lengths with some at 1800mm (6') long, as can some EcoSmart Stone or TechStone materials.

They can be installed horizontally, similar to the previous section, or vertically, as follows in the diagrams.



The starter rails are the same as previous details. For window and door sides they should have the aluminium 'L' section fitted before cladding. For vertical installations start the first panel at the door or window opening, work from the bottom up and working toward corners from there. 1,2,3,4 etc. Glue and lock each panel together with joining tongues same as per previous detail.

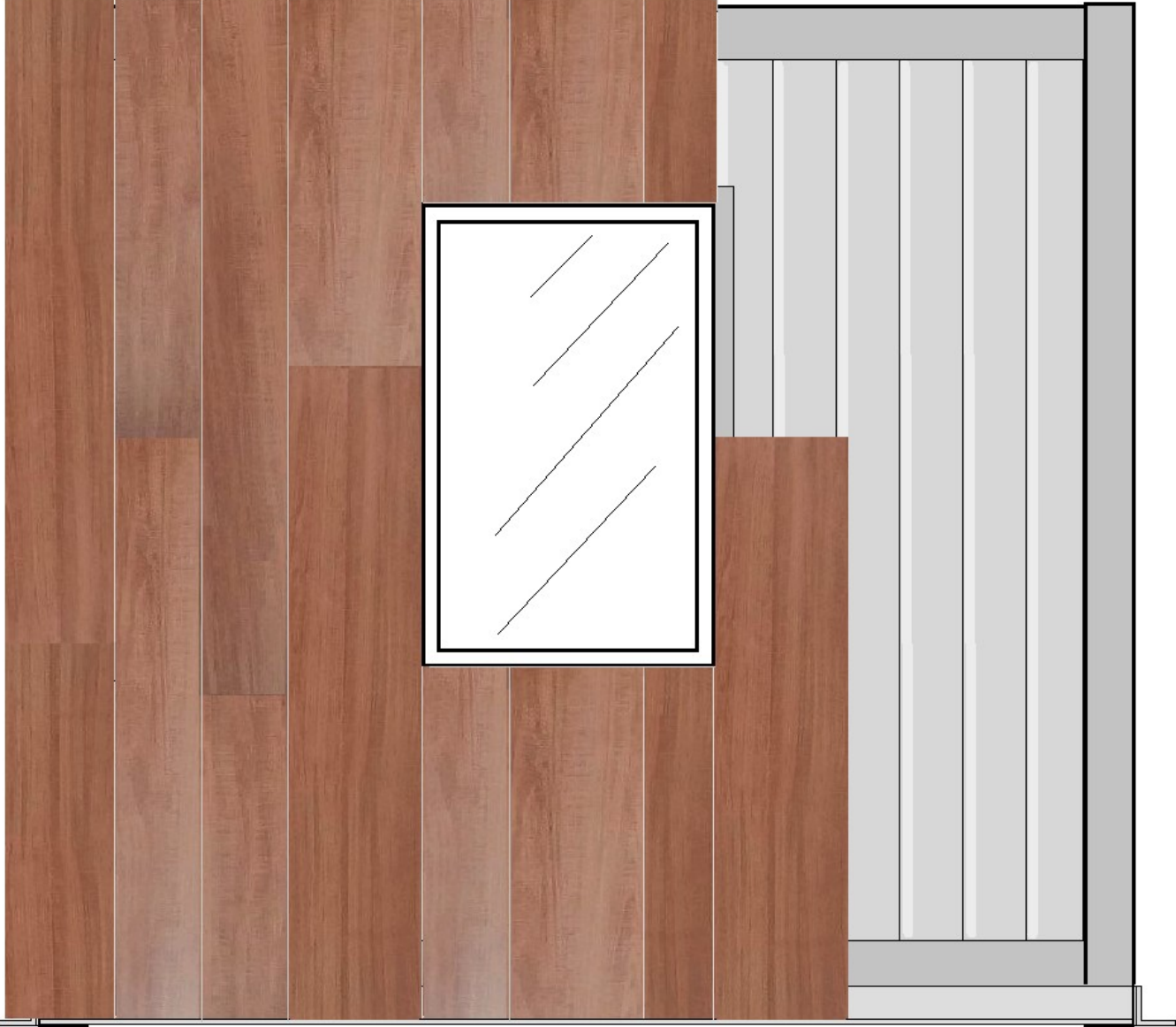


When adjacent to the corner put the next piece in place and scribe the back down the corner of the container as shown in Fig 1. From this line take off at 45 degrees angle as in Fig 2. Prepare the return side corner and cut length at 45 degrees too. Hold the 2 corners together as in Fig 3 and adjust if required to maintain square and level. When satisfied glue into permanent position.



Complete the wall working into the other corner following the same process as above until all walls are finished.

When all walls are completed capping or flashing should be laid around the top of the cladding for adequate waterproofing in conjunction with the roofing detail.



Insulating containers from the outside significantly increases thermal comfort because the metal is no longer exposed to the elements. This eliminates the severe heat and cold transfer from bare metal into the building.



Other considerations for window and door treatments.

Ideally, for butting the stone against window sides and tops the window frames should protrude at least 60mm (2<sup>3</sup>/<sub>8</sub>) from the container wall. If the frames are less than that there are two ways of addressing it. See cross sections.

1. You can use a standard 75mm x 50mm (3" x 2") or similar 'L' section aluminium (painted to suit window frame if required) fixed adjacent to sides and top as a lintel. The pieces can then be butted to them as an edge cover. See Fig 1.

2. If you were to use reveal pieces (one edge faced) they can be placed against the window frame as shown in Fig 2. You would still require an 'L' section as a lintel at the top of window or door. Fig 3. shows the sill finish.

Fig 1.

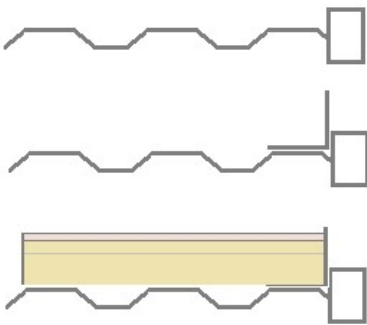


Fig 2.

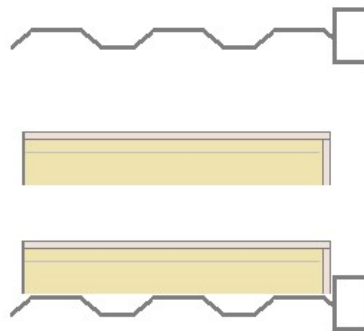
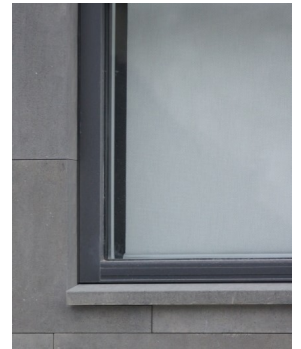


Fig 3.



### Tools you will need to transform your container

4" or 5" angle grinder



Snap Off Blade Knife



Level



Battery drill



Drop saw if available



Dust mask



Safety Glasses



Tape measure



Turbo or diamond blade



Set square



Adhesive Gun



Ear Muffs

Whichever way you  
look at it the results  
are truly stunning.

 Smartstone®  
systems  
'smart walling solutions for smart builders'