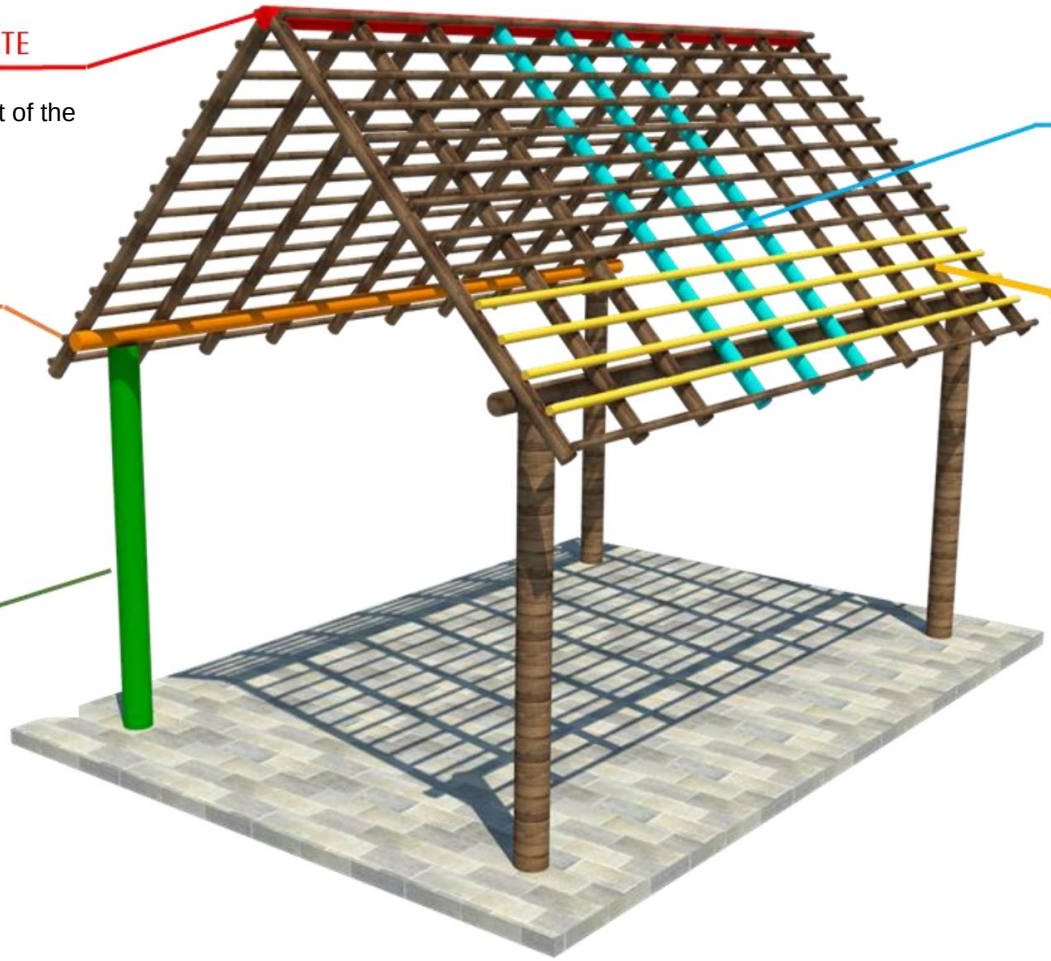
BASIC STRUCTURE OF A PALAPA



CABALLETE

(Upper support of the structure)

CARGADORES

(Main horizontal support elements)

COLUMNAS

(Support posts)

ENCAÑADURAS O LARGUEROS

(Vertical support elements to receive giles)

HORIZONTAL RAILS

(Horizontal elements placed every 20 cm apart)

This diagram is exemplary and aims to show in a simple way the characteristics that should be have a structure to properly place the synthetic palm.
The larger the size and shape, the more complex the structure usually is and requires other structural elements. that do not appear in this scheme.

PRELIMINARY PREPARATION OF THE STRUCTURE

Before installing the synthetic palm, it's very important to prepare the structure beforehand, keeping in mind that any slope between 30 and 45 degrees is sufficient to prevent water leaks and ensure the palapa is watertight. Any angle less than 30 degrees carries the risk of causing waterlogging and leaks.

To ensure impermeability and that rainwater can run off without the risk of stagnation, the structure must have a minimum inclination or slope of 30 degrees, which is equivalent to 58 cm of height for each linear meter horizontally, as shown in images 1 and 2.

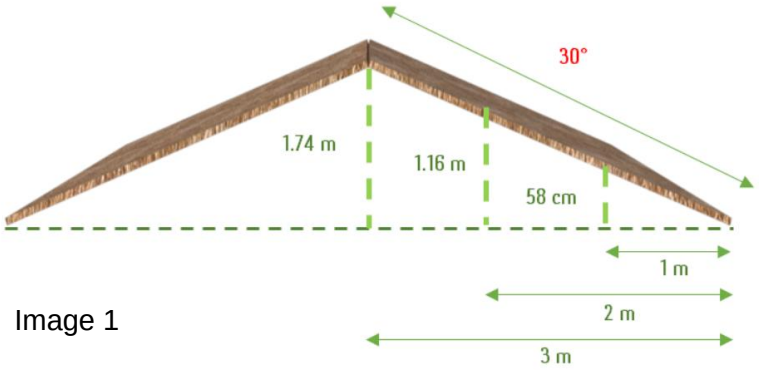


Image 1

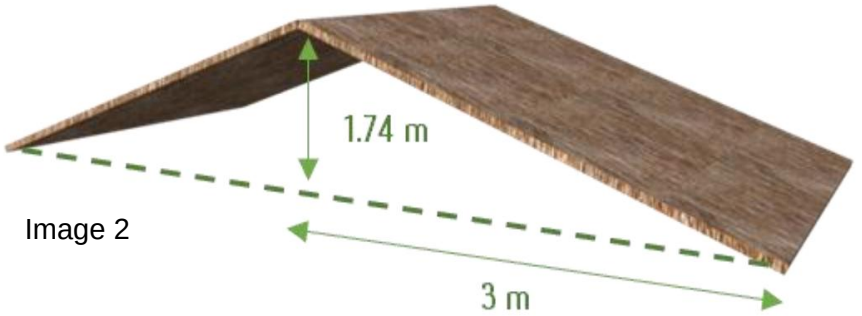


Image 2

The optimal inclination is 45 degrees, which is equivalent to increasing one meter in height for every horizontal linear meter of the structure, as shown in images 3 and 4.

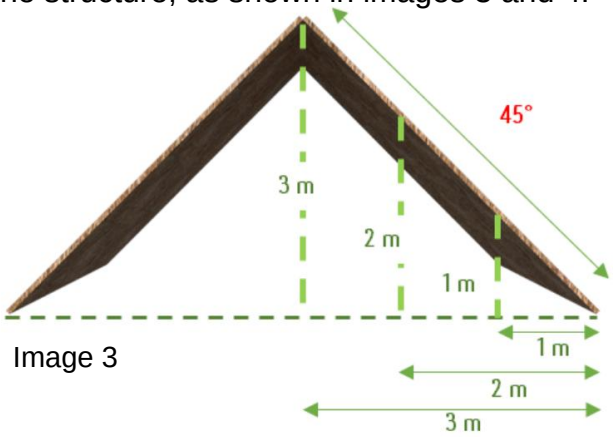


Image 3

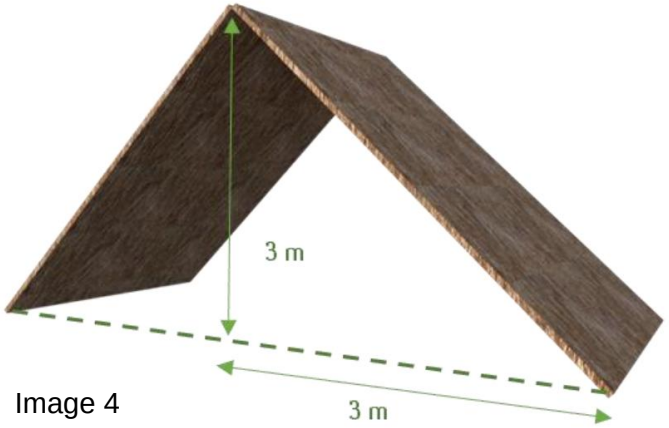
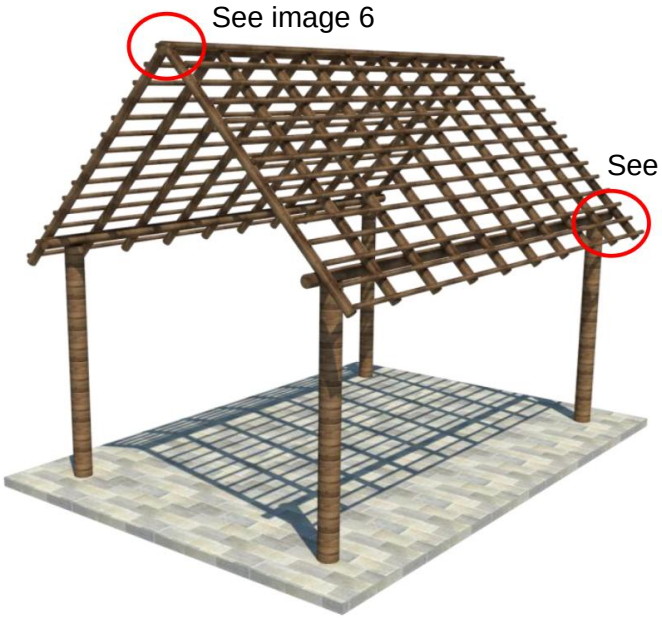


Image 4

PRELIMINARY PREPARATION OF THE STRUCTURE

Between the horizontal rails, there must be a distance of 20 cm from each other, from center to center, as shown in image 5.

The completion of the structure to place the ridge on the ridge should be done as shown in (image 6)



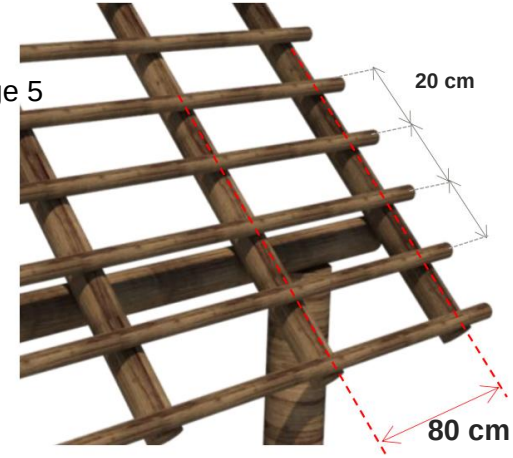


Image 5

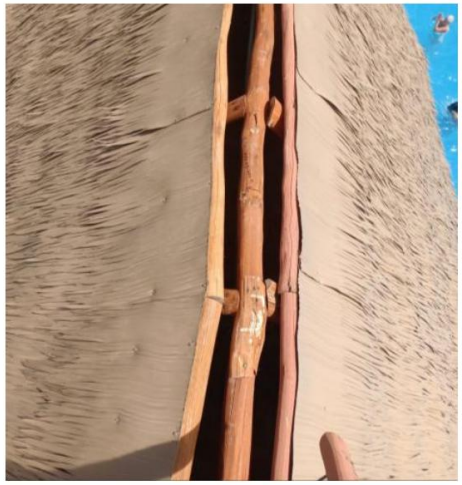
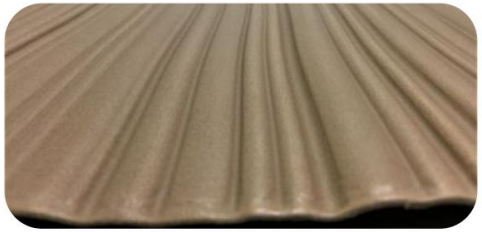


Image 6

SHEET VIEWS

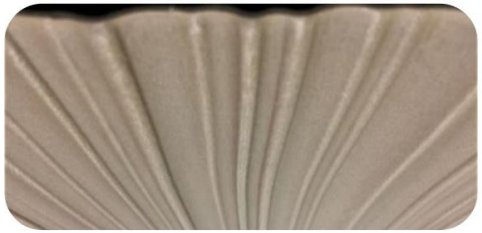
The concave part of the synthetic palm leaves is placed upwards, in the exterior view of the palapa, as shown in image 7



Exterior view concave part

Image 7

The convex part is placed downwards, in the interior view of the palapa, as shown in image 8



Interior view, convex part

Image 8

HOW TO HOLDS THE SHEETS

The recommended procedure for fixing the sheets is as follows:

Standard sashes should be installed starting from the lowest horizontal rail of the structure, continuing towards the top of said structure, placing the sash fringes so that they hang from the lowest horizontal rail of the structure, and the unfringed part is screwed into the first and second horizontal rails. It is recommended that the two screws that go into the center of the sash be installed on the sash to be secured (screws identified in red in image 9). Next, the next sash is joined laterally approximately 5 centimeters and secured again with the two central screws. The same operation is repeated successively until the first row of sashes is completed, proceeding to replace the missing screws of that row, to avoid placing two screws in the same place (screws identified in blue in image 9).

It is advisable to place the special perimeter sheet (long sheet) DOUBLE in the first row or perimeter part of the palapa, to obtain greater volume from the fall of the strips or fringes that hang in the lower part of it as shown in images 11 and 12 of this manual.
Only in the first row is double or even triple sheet placed and in subsequent rows is placed a single sheet.

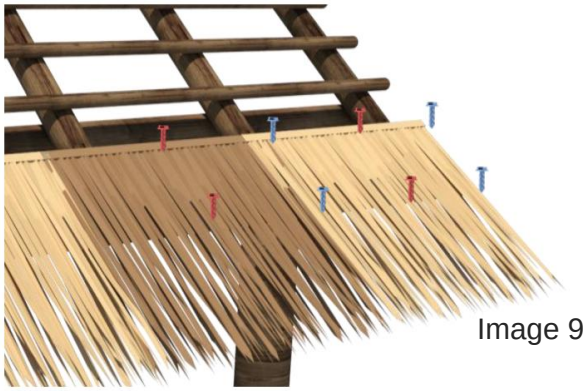


Image 9

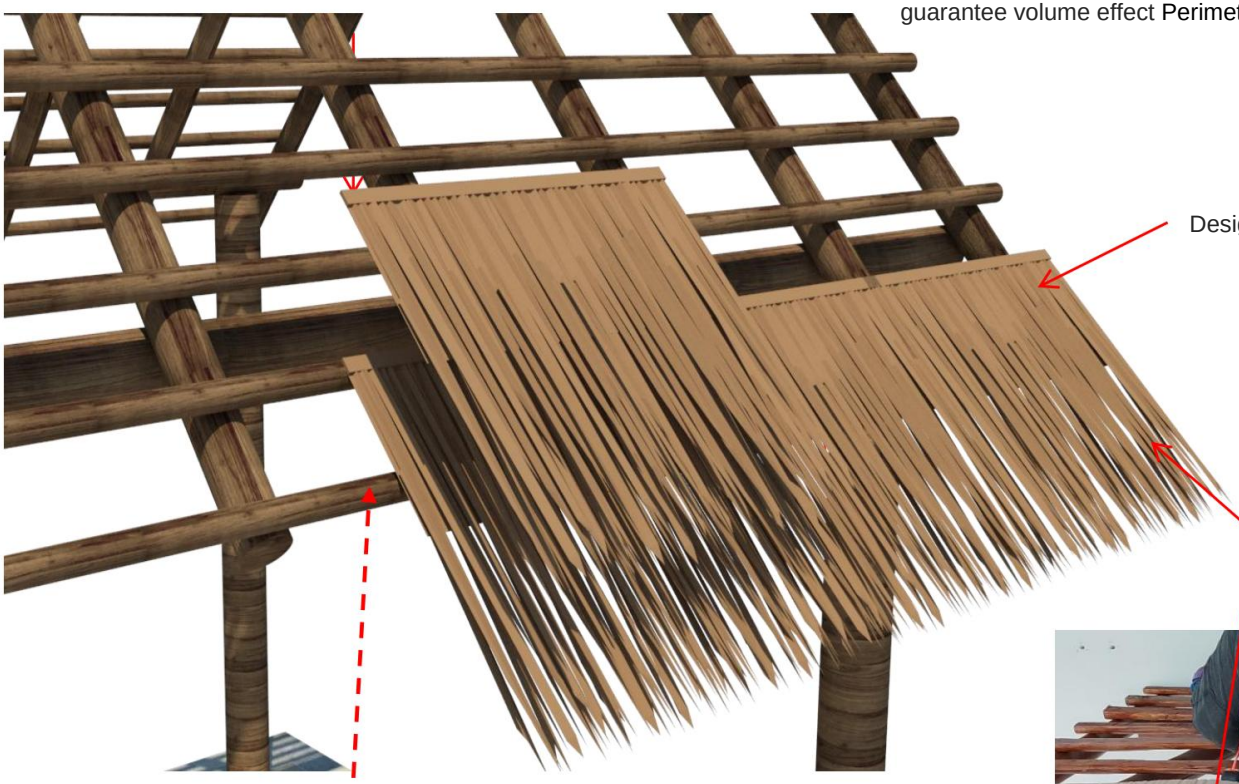
The central pins are illustrated in red to graphically show the procedure and the subsequent pins that are placed as a finish are represented in blue.

Image 10

The central pins are illustrated in red and the reinforcement pins in green to graphically show the procedure.

INSTALLATION OF THE PERIMETER LINE

Place a long sheet on the perimeter of the palapa to guarantee volume effect Perimeter sheet



Design

Fringes

Image 11

Rail where the palm fringes begin to fall .

Image 12

PLACING SHEETS FLUSH WITH HORIZONTAL RAILS

It is important to place the top of the leaves flush with the horizontal rail so that the joints are not visible and are hidden on the same horizontal rail. If any excess of the leaf protrudes, it is cut off, as illustrated in images 13 and 14.

Image 13

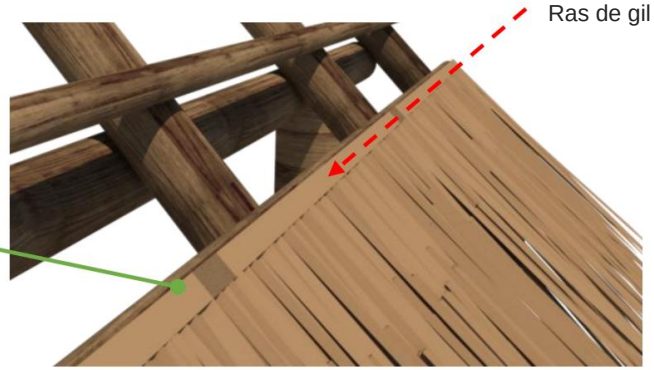


Image 14

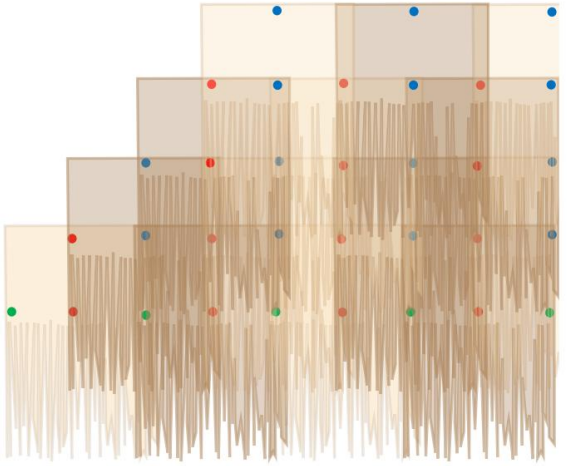
The top of the synthetic palm leaves is attached to the second rail and should be flush with the rail.

Prevent the leaf from protruding above the rail inside the palapa by trimming the excess as shown in image 13.

Finally the blade will be "Flush" with the rail.

PLACING THE SYNTHETIC PALM

Starting with the second row of leaves, the 2 central screws are placed, placing the missing screws from the bottom row to finish securing the leaves of that row, avoiding with this procedure that in any section 2 screws are placed in the same place.



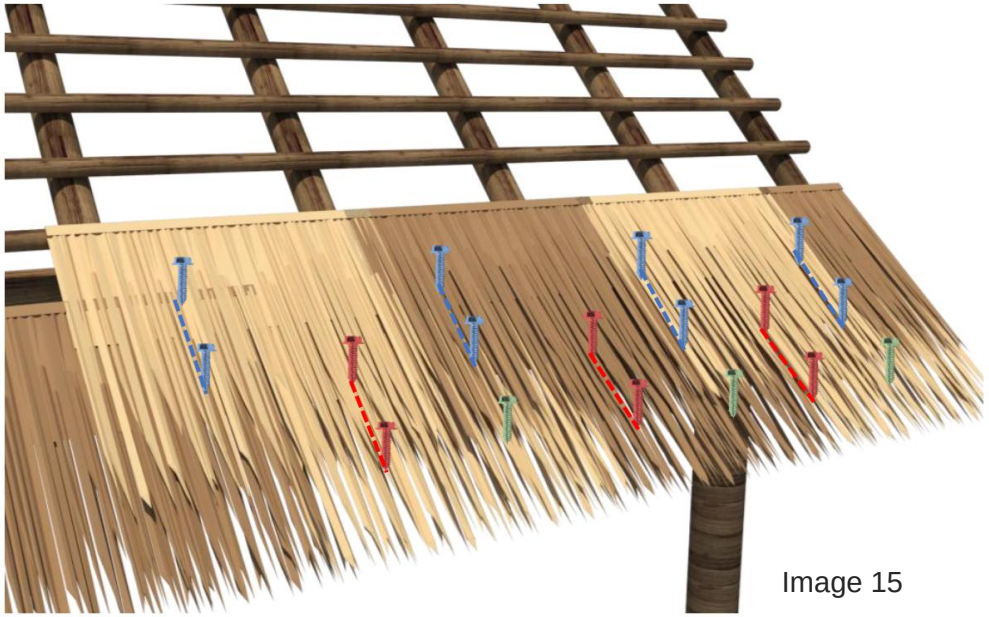


Image 15

The central screws are illustrated in red, the reinforcing screws in green , and the consecutive screws in blue to graphically show the procedure.

It is recommended that you check that the spliced sheets are properly secured and, if necessary, screw them in place with a reinforcing piece.

This process requires approximately 35 screws per square meter.

JOINTING AND STEPPING SHEETS

To make the joints between the leaves as unobtrusive as possible and achieve a uniform appearance on the inside of the palapa, the joints should be placed in the same orientation or manner across the entire surface where the leaves are installed, as shown in the following image.

Correct way to splice

Incorrect way of splicing

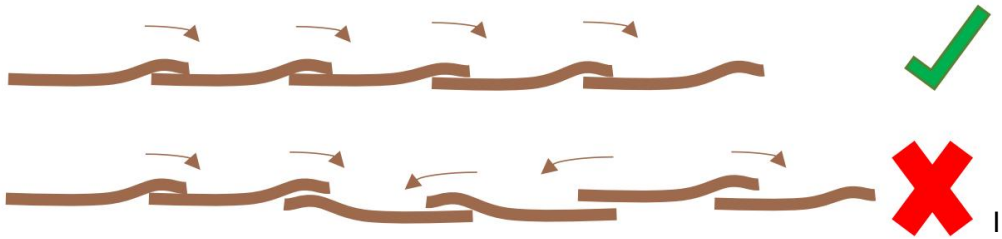
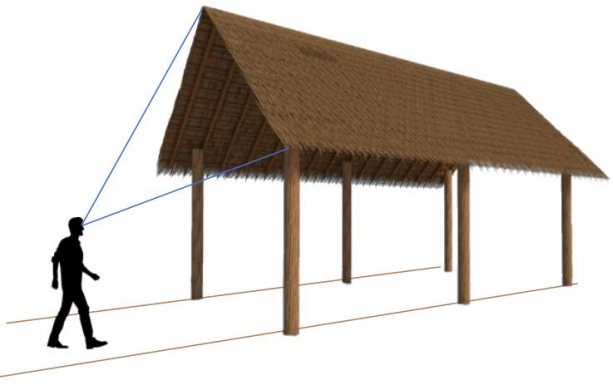
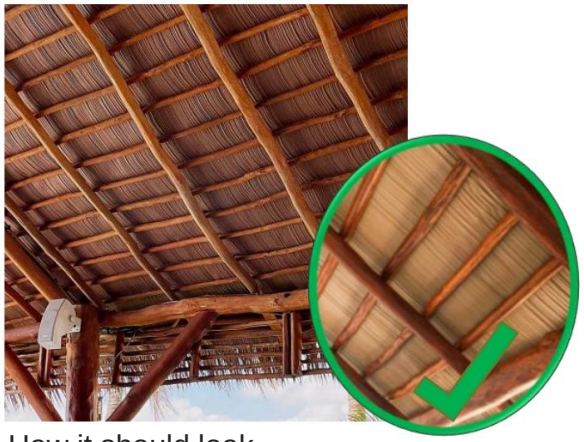


Image 16

It is also suggested that the joint be made in the opposite direction to the main entrance of the palapa, so that the joints are less noticeable upon entering the site.



Access to the palapa



How it should look

How NOT to look

JOINTING AND STEPPING SHEETS

The recommended procedure for correct splicing and aesthetic of the leaves is overlapping or mounting them, horizontally 5 centimeters one above the other, trying to that the splice is always made in the same orientation to give it the same shape to the finish.

Example: right side down and left side mounted above the next sheet and so on. This procedure is done in All the leaves and rows of the palapa. See images 16 to 20

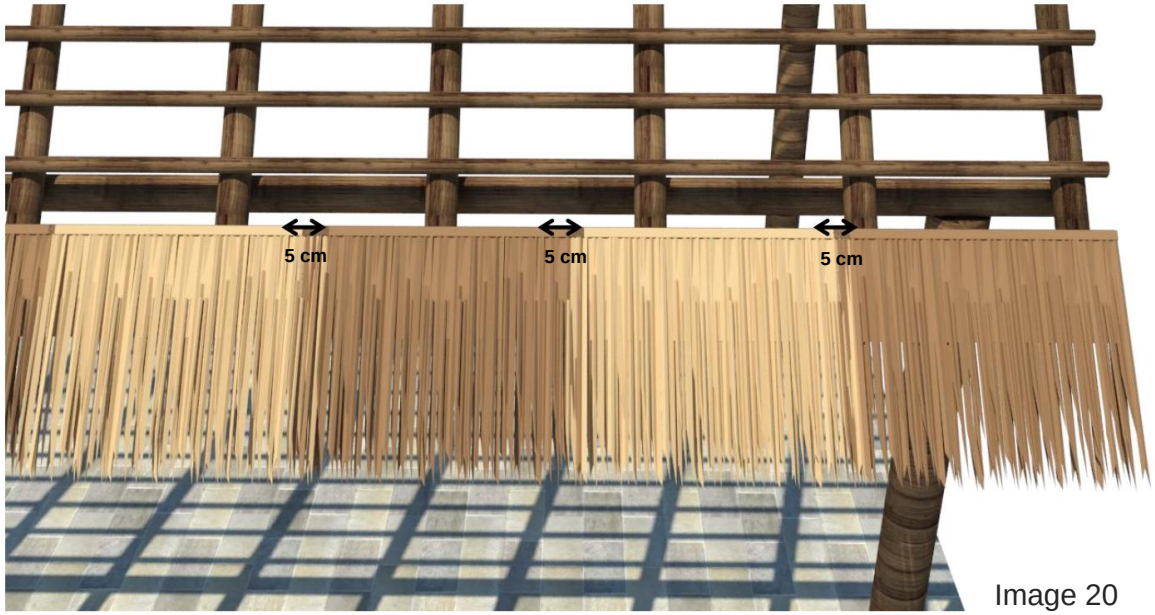


Image 20

Image 17

Image 18

Image 19

* The image represents the leaves in different colors for illustrative purposes to highlight the difference, not real ones.

JOINTING AND STEPPING SHEETS

To prevent the sheets being installed from appearing "sagging" or hanging, it is advisable to stretch or "tighten" them before securing them on both sides (bottom and top), as shown in the following images:

Tensioned leaf

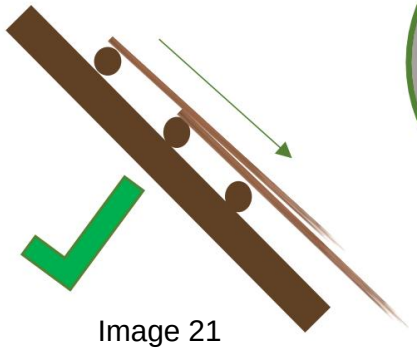


Image 21

Sheet stretching

Warped leaf

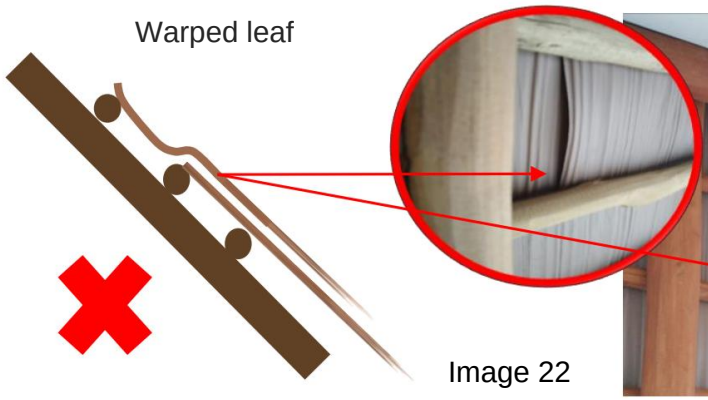


Image 22

This recommendation will prevent that the palm already installed is see like this

JOINTING AND STEPPING SHEETS

Before starting to place the second and subsequent rows, it must be taken into account that, in order to have For proper waterproofing, it is advisable to place the sheets in a staggered manner. To make a correct staggering, a palm leaf is cut in half vertically and attached to the beginning of the next row, to continue placing the subsequent full sheets. Proper staggering of the palm leaves remains as shown in images 23 to 32.

Image 23

Image 24

1st Row of Palm installed
(Start with a full sheet)

2nd Row of Palm installed
(Starts with a sheet cut in half)

3rd Row of Palm installed
(Start with a full sheet)

4th Row of Palm installed
(Starts with a sheet cut in half)

* The images represent the leaves in different colors for illustrative purposes to highlight the difference, not real ones.

JOINTING AND STEPPING SHEETS

These steps are repeated until the synthetic palm leaves are placed on the entire structure.

Image 25

Image 26

Image 27

Image 28

Image 29

Image 30

Image 31

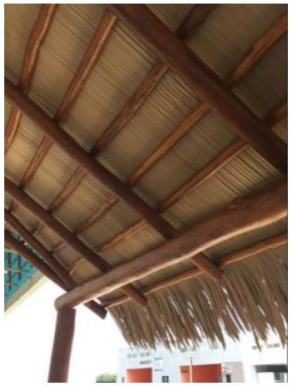
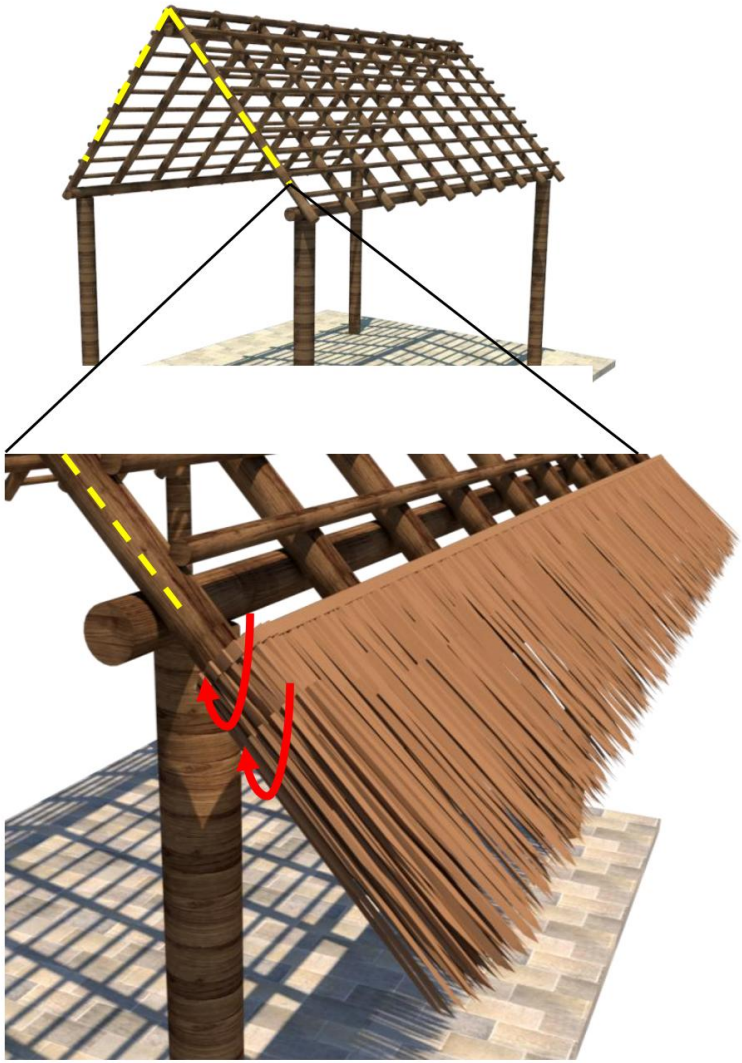


Image 32

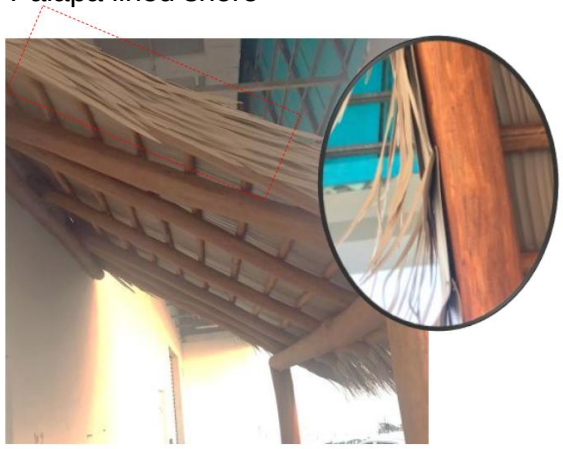
INSTALLATION ON SIDES

To obtain a better visual effect on the lateral edges of the palapa and give it a more voluminous image, the reeds on the edges or sides should not be visible and should be "embraced" with the leaves, so that they are "lined", fixing the leaves with screws below the structure, as shown below.



Palapa-lined shore

Palapa-lined shore



INSTALLATION ON CORNER PIECES

To properly cover the corners where the palapa walls change direction, the tip of the leaf is cut diagonally to align it with the post where the leaves will be joined with the other corner, doing the same procedure on the leaf coming in the opposite direction so that both are joined, as seen in the following images.

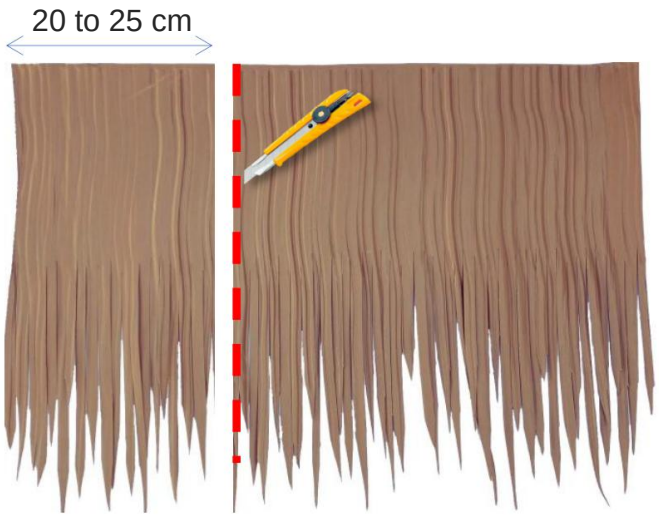
Image 33

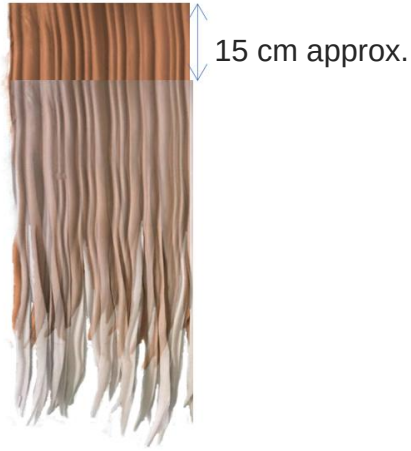
Image 34

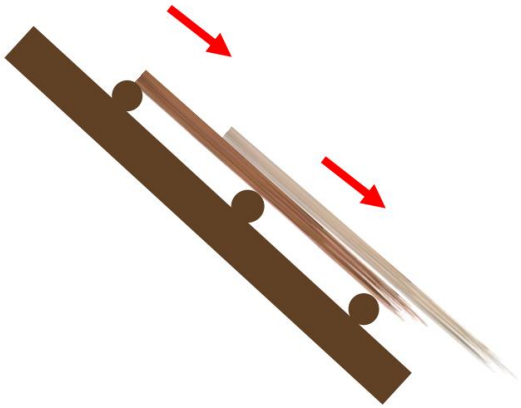
Image 35

INSTALLATION ON CORNER PIECES

Once the two lines of leaves meet at the post where they join, two pieces are used that must have been previously cut vertically between 20 and 25 cm wide, placing these pieces in the center of the joint of each line of leaves to cover the joint, vertically offsetting the first leaf by 15 cm from the second to lengthen the fringes and perfectly cover the length of each of the corners, as shown in the following images.







INSTALLATION ON AND CORNER PIECES

The vertical sheets are placed in the central part of each corner that forms each of the rows, holding the first sheet to the two rails (bottom and top) as you normally hold the palm and the back
The top of the second sheet must be fastened to the bottom rail of that same row to lengthen the fringes and cover perfectly the entire length of the corners, so that they are completely waterproof, as can be seen in the following images.

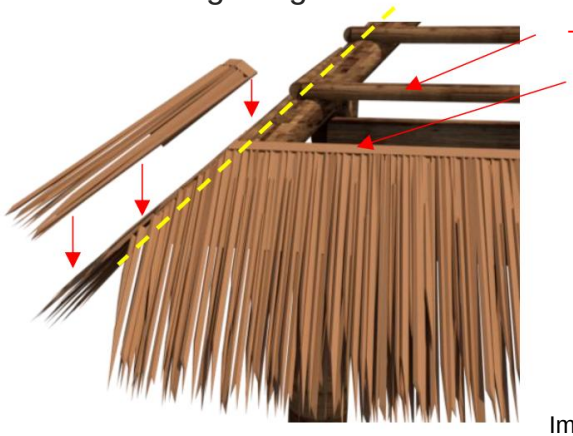


Image 36

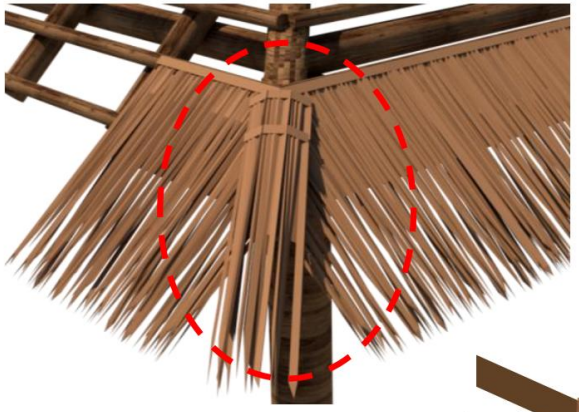
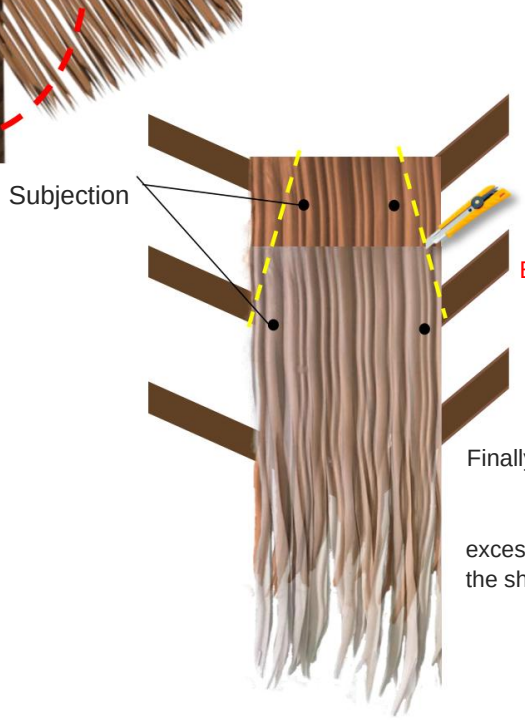


Image 37

Image 38

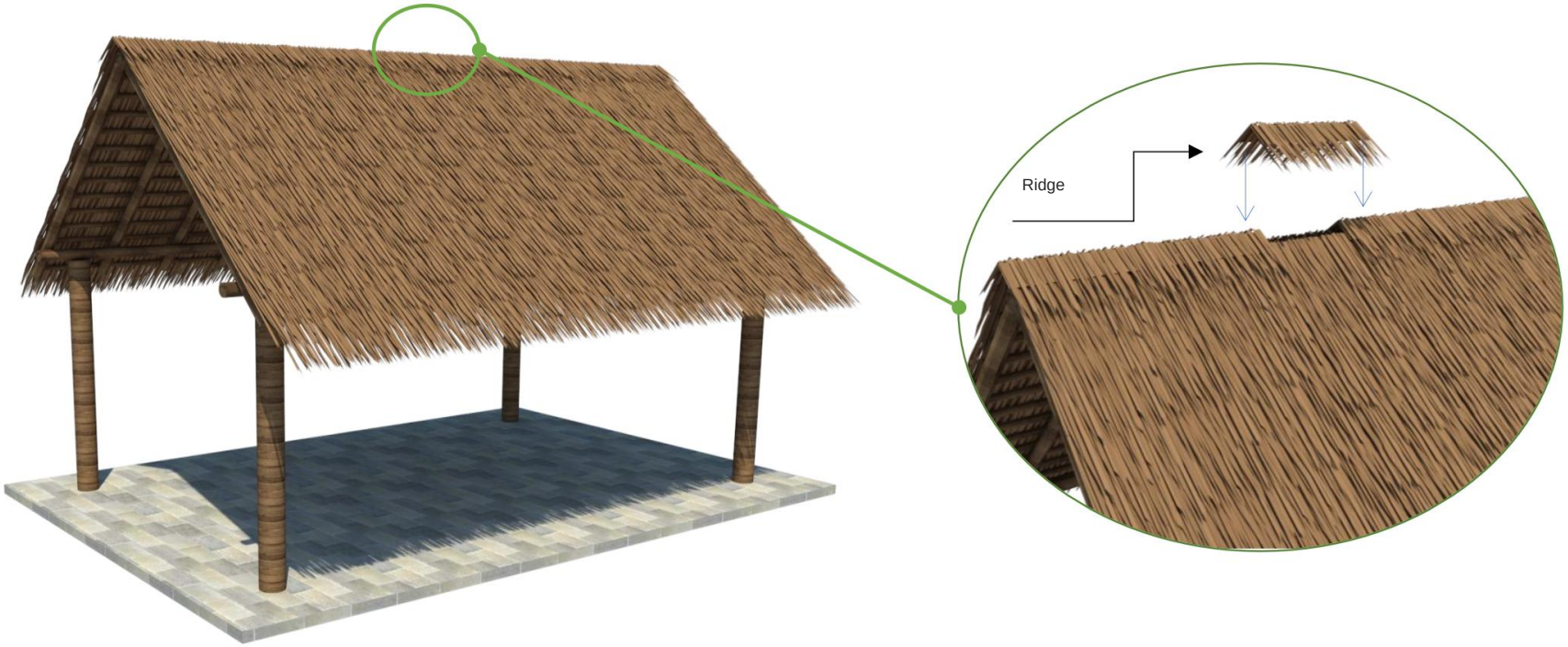
Finally the excesses are cut
to give it the shape of a corner piece



* The images represent the leaves in different colors for illustrative purposes to mark the difference, not real.

INSTALLING RIDGES ON THE RIDGE

Finally, upon reaching the top of the palapa, if it has a ridge, the ridge caps are placed linearly on top of the ridge, butting them together 5 cm apart, screwing them securely to the top of the palapa to prevent water leaks. Once the ridge caps are placed across the entire top of the palapa, the ridge fringes are left hanging on both sides, thus completing the installation.

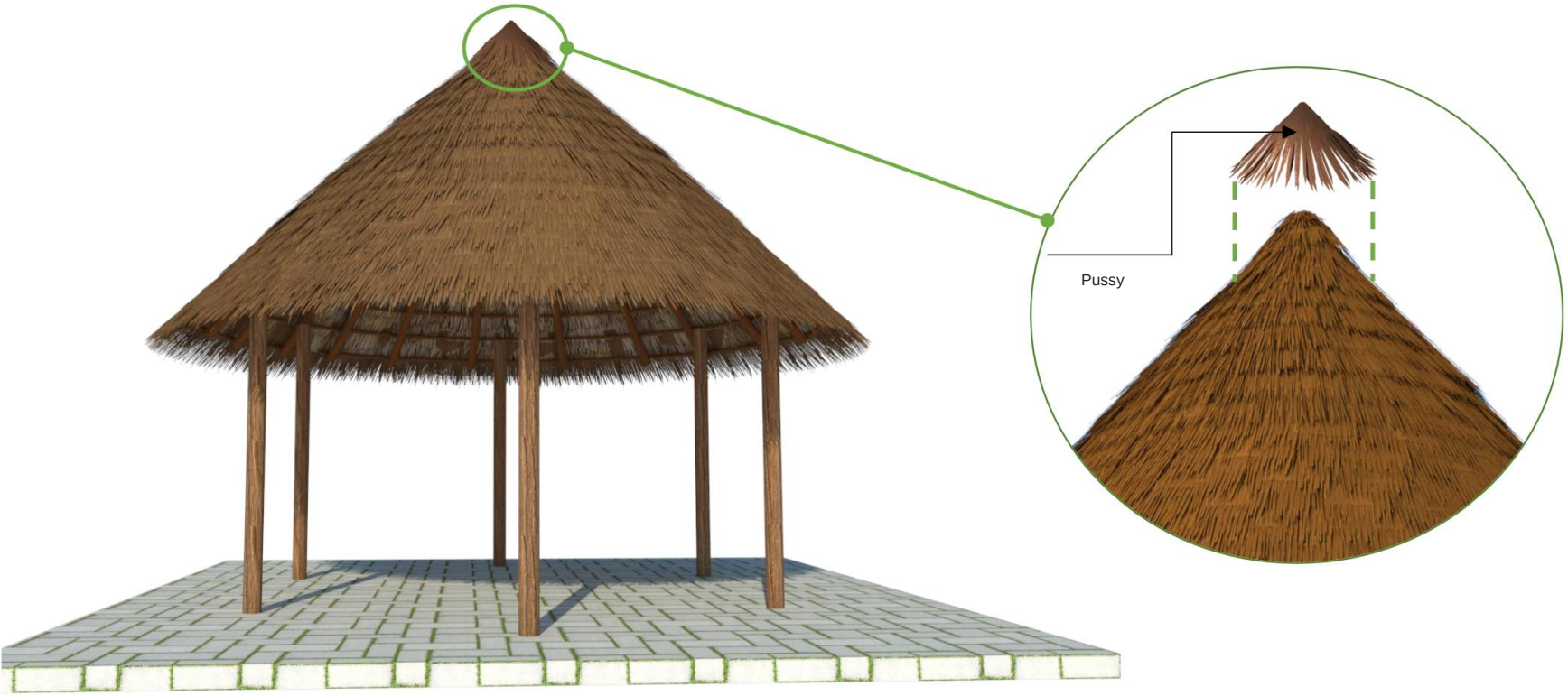


When installing synthetic palm fronds against an adjacent wall, it is recommended to cut a small groove in the wall, embedding approximately 2 cm of the frond and sealing the groove. This procedure will prevent water infiltration onto the walls where the fronds meet.

PLACING CONES ON ROUND PALAPAS

The cones are only for specific use in conical palapas, with an inclination between 30 and 45 degrees.

Beach umbrellas are used to reach the top of the palapa's roof, to give it an aesthetic appearance and ensure the impermeability of the palapa's tip, preventing all types of leaks.



One of the advantages of the cone being made up of two pieces is that it allows it to be adjusted to the inclination of the palapa.