

build better, live better

**SHERA**<sup>™</sup> APPLICATION  
SOLUTIONS

*SHERA*  
zedar shake

Installation





## Technical data

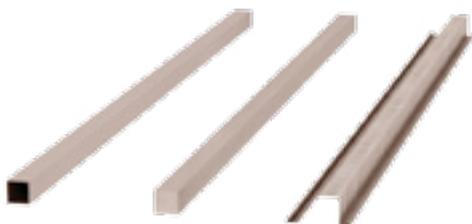
### 1. *SHERA* zedar shake tile per box



20 X 35 cm.    15 X 35 cm.    10 X 35 cm.

Width	Length	Thickness	Weight (per pc.)	Quantity (per box)	Coverage area (per box)
10 cm.	35 cm.	1.2 cm.	0.7 kg.	5 pc.	0.8 sq.m.
15 cm.	35 cm.	1.2 cm.	1.0 kg.	10 pc.	
20 cm.	35 cm.	1.2 cm.	1.2 kg.	10 pc.	

### 2. Recommended accessories



Steel purlin    Wood purlin    *SHERA* purlin

	Size	Length of purlin	Length of rafter
Steel purlin	1.0 x 1.0 in. Thickness 2.3 mm.	0.2 m.	1.0 m.
Wood purlin	1.5 x 1.5 in.	0.2 m.	1.0 m.
<i>SHERA</i> purlin	62 x 25 mm. Thickness 0.55 mm. Length 4.0 m.	0.2 m.	1.0 m.

### 3. Installation technique



Straight sheet - end installation

Length of purlin    Length of overlapping

0.2 m.

0.15 m.

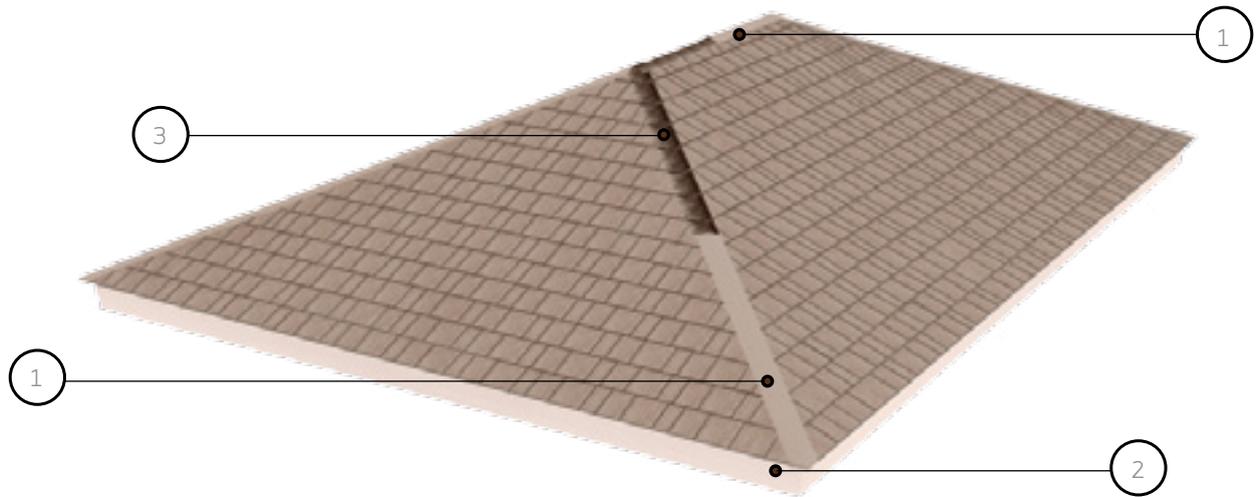


Staggered sheet - end

0.2 m.

0.11-0.19 m.

## 4. Accessories



- ① **SHERA log ridge**  
(Used for both side)  
Size : 10 x 300 x 1 cm.  
Weight : 4.95 kg. / pc.  
Package : 10 pc. / pack  
Coverage : 3 m. / 2 pcs.



- ⑤ **SHERA purlin**  
Size : 62 x 25 x 0.55 cm.  
Length : 4.0 m.  
Weight : 1.8 kg. / pc.  
Coverage : 1.4 pcs. / sq.m.



- ② **SHERA eave**  
Size : 1.7 x 15 x 300 cm.  
Weight : 10.92 kg. / pc.  
Size : 1.7 x 20 x 300 cm.  
Weight : 14.55 kg. / pc.  
Package : 4 pc. / pack  
Coverage : 3 m. / pcs.



- ⑥ **SHERA self drilling screw for steel purlin**  
Length : 2.5 cm. (1 inch)  
Package : 250 pcs. / box  
Coverage : 1 pc. / roof tile



- ③ **SHERA dry tech**  
Size : 17.5 x 300 cm.  
Weight : 1.42 kg. / roll  
Package : 1 roll / box  
Coverage : 2.8 m. / roll



- ⑦ **SHERA self drilling screw for wood purlin**  
Length : 3.8 cm. (1.5 inches)  
Package : 250 pcs. / box  
Coverage : 1 pc. / roof tile



- ④ **SHERA reflective insulation sheet**  
Big roll  
Size : 125 x 6,000 cm.  
Weight : 9.5 kg. / roll  
Coverage : 75 sq.m. / roll  
Small roll  
Size : 125 x 2,000 cm.  
Weight : 4 kg. / roll  
Coverage : 25 sq.m. / roll



- ⑧ **SHERA colour paint**  
Size : 0.946 litre / can  
Weight : 1.1 kg. / can  
Coverage : 6-8 sq.m. / can

## 5. Equipments for installation



A tile grinder machine with 11,000 rpm powered with 4 inches blade for cutting the roof tile and the wooden ridge of a roof.



A screwdriver bit to use with electric drill for screwing the roof tile and the wooden ridge of a roof.



An electric drill with over 4,000 rpm for screwing the roof tile and the wooden ridge of a roof.



A trowel to patch up the screw head.

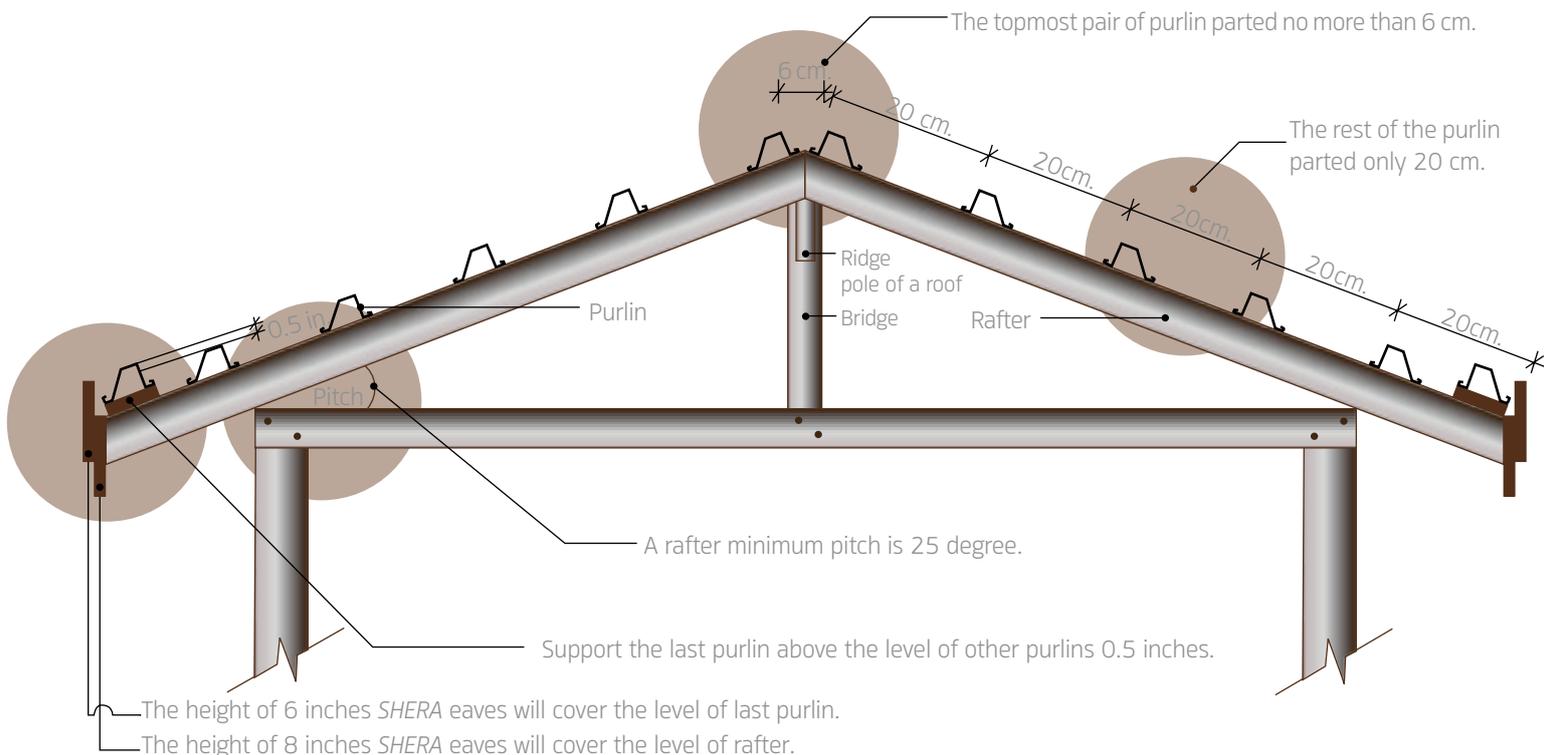


A 600 watt powered blower with a minimum air speed of 3.5 qbm per minute for clearing all dust out of the roof.



A paintbrush for painting and finishing up the job.

## 6. Roof structural preparation

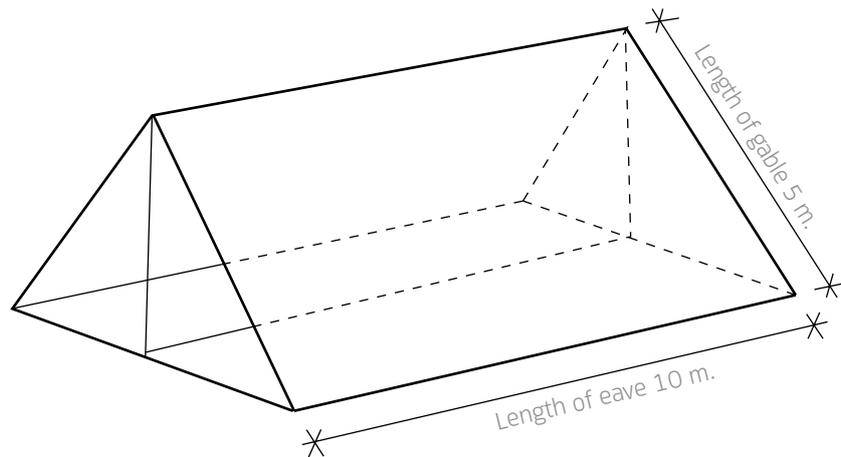


### Sample detailed structure

- Note :
- Use screws to fix *SHERA* purlin at every rafter-contact surface on both sides of *SHERA* purlin.
  - Joining the purlins if joint falls on a rafter, keep overlap of 5 cm. and join 2 purlins with 2 screws.
  - if joint falls in middle unsupported area, keep overlap of 20 cm. and join 2 purlins with 4 screws.

\*Purlin screw size number 10 x ½ (length 13 mm.) should be arranged by Installers.

## Example : *SHERA* zedar shake roof tile & accessories quantity calculation



**Gable roof**

### 1. Roof area

- = Using rectangular area evaluation formula = eaves length x gable length
- = Eaves length (10 m.) x gable length (5 m.) x number of roof plane (2 sides)
- = Overall roof area = 100 sq.m.

### 2. *SHERA* eaves

- = Eaves length (10 m.) x 2 sides = 20 m.
- = Gable length (5 m.) x 4 sides = 20 m.
- =  $\frac{20 + 20}{\text{No. of } \textit{SHERA} \text{ eaves (3 m./unit)}}$  = 13.33 units
- = No. of *SHERA* eaves = Size 1.7 x 15 x 300 cm. =  $\frac{13.33 \text{ units}}{\text{Package rate of } \textit{SHERA} \text{ eaves (4 units/pack)}}$  = 4 packs
- = Size 1.7 x 20 x 300 cm. =  $\frac{13.33 \text{ units}}{\text{Package rate of } \textit{SHERA} \text{ eaves (4 units/pack)}}$  = 4 packs

### 3. *SHERA* purlin (with spacing of 20 cm.)

- = Roof area (100 sq.m.) x *SHERA* purlin usage (1.4 units/sq.m.)
- = Number of *SHERA* purlins = 140 units

### 4. *SHERA* reflective insulation sheet

- =  $\frac{\text{Roof area (100 sq.m.)}}{\textit{SHERA} \text{ reflective insulation sheet usage (each size)}}$
- = Number of *SHERA* reflective insulation sheet (big roll) = 1 roll (75 sq.m./roll)
- (small roll) = 1 roll (25 sq.m./roll)

## Example : *SHERA* zedar shake roof tile & accessories quantity calculation

### 5. *SHERA* zedar shake roof tile

$$\begin{aligned} \text{SHERA zedar shake roof tile} &= \frac{\text{Roof area (100 sq.m.)}}{\text{Number of usage (0.8 sq.m./box)}} = 125 \text{ boxes} \\ &= \frac{\text{Ridge length (10 m. x 2 sides = 20 m.) x number of tile per meter (2.22 tiles)}}{\text{Package rate (25 tiles)}} = 1.77 \text{ boxes} \\ &= \text{Number of SHERA zedar shake roof tile (125 + 1.77)} = 127 \text{ boxes} \end{aligned}$$

### 6. *SHERA* self drilling screw

$$\begin{aligned} &= \text{Number of SHERA zedar shake roof tile (127 boxes) x roof tile package rate (25 tiles) x} \\ &\quad \text{number of screws usage for 1 roof tile (1 unit)} \\ \text{Total screws reqd.} &= \frac{127 \times 25 \times 1}{\text{Package rate (250 units/box)}} \\ &= \text{Number of SHERA self drilling screw tile 13 boxes} \end{aligned}$$

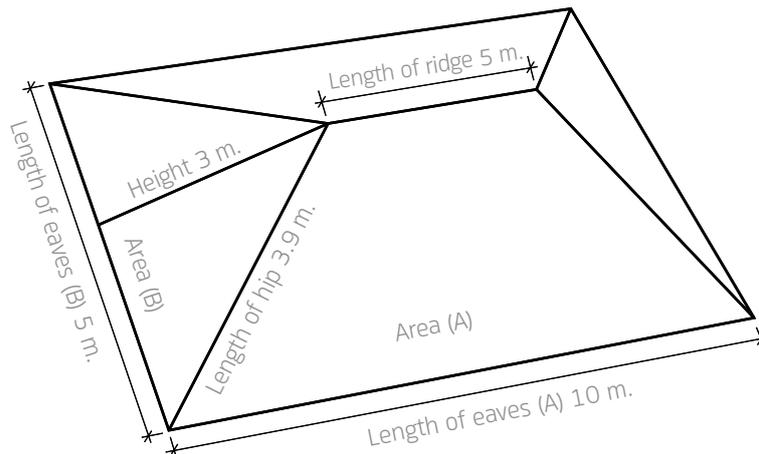
### 7. *SHERA* dry tech

$$\begin{aligned} &= \frac{\text{Ridge length (10 m.)}}{\text{Number of dry tech usage (2.8 m./roll)}} = 3.57 \text{ rolls} \\ &= \frac{\text{Gable length (5 m. x 4 sides = 20 m.)}}{\text{Number of dry tech usage (2.8 m./roll)}} = 7.14 \text{ rolls} \\ &= \text{Number of SHERA dry tech (3.57 + 7.14)} = 11 \text{ rolls} \end{aligned}$$

### 8. *SHERA* log ridge

$$\begin{aligned} &= \frac{\text{Ridge length (10 m. x 2 sides = 20 m.)}}{\text{Number of usage (3 m./unit)}} = 6.66 \text{ units} \\ &= \frac{\text{Gable length (5 m. x 2 sides x 4 sides = 40 m.)}}{\text{Number of usage (3 m./unit)}} = 13.33 \text{ units} \\ \text{= No. of SHERA log ridge} &= \frac{6.66 + 13.33}{\text{Log ridge package rate (10 units/pack)}} = 2 \text{ packs} \end{aligned}$$

## Example : *SHERA* zedar shake roof tile & accessories quantity calculation



**Hip Roof**

### 1. Roof area

Area a = Using trapezoid area formula =  $\frac{1}{2} \times (\text{sum of parallel sides}) \times \text{height}$   
 =  $\frac{1}{2} \times [\text{eave a length (10 m.)} + \text{ridge length (5 m.)}] \times \text{height (3 m.)} \times \text{number of area a (2 sides)}$   
 = Area a (45 sq.m.)

Area b = Using triangle area formula =  $\frac{1}{2} \times \text{base length} \times \text{height}$   
 =  $\frac{1}{2} \times [\text{eave b length (5 m.)}] \times \text{height (3 m.)} \times \text{number of area b (2 sides)}$   
 = Area b (15 sq.m.)

Overall roof area = Area a (45 sq.m.) + area b (15 sq.m.) = 60 sq.m.

### 2. *SHERA* eaves

= Eave a length (10 m. x 2 sides) = 20 m.  
 = Eave b length (5 m. x 2 sides) = 10 m.  
 =  $\frac{20 + 10}{\text{Number of } \textit{SHERA} \text{ eaves usage (3 m./unit)}} = 10 \text{ units}$   
 = Number of *SHERA* eaves usage size 1.7 x 15 x 300 cm. =  $\frac{10 \text{ units}}{\text{Package rate of } \textit{SHERA} \text{ eaves (4 units/pack)}} = 3 \text{ packs}$   
 size 1.7 x 20 x 300 cm. =  $\frac{10 \text{ units}}{\text{Package rate of } \textit{SHERA} \text{ eaves (4 units/pack)}} = 3 \text{ packs}$

### 3. *SHERA* purlin (with spacing of 20 cm.)

= Roof area (60 sq.m.) x *SHERA* purlin usage (1.4 units/sq.m.) = 84 units  
 = Gutter hip length =  $\frac{\text{Hip length (3.9 m.)}}{\text{Purlin spacing (0.2 m.)}} = 19.5 \text{ rolls or } 18.5 \text{ pieces}$   
 =  $\frac{\text{Gutter hip length (18.5 sections)} \times \text{purlin spacing (0.2 m.)} \times \text{no. of gutter hip length (8 sides)}}{\text{Purlin length (4 m./unit)}} = 8 \text{ units}$   
 = Number of *SHERA* purlin = 84 + 8 = 92 units

## Example : *SHERA* zedar shake roof tile & accessories quantity calculation

### 4. *SHERA* reflective insulation sheet

$$\begin{aligned} &= \frac{\text{Roof area (60 sq.m.)}}{\text{SHERA reflective insulation sheet usage (each size)}} \\ &= \text{Number of SHERA reflective insulation sheet (big roll)} = 1 \text{ roll (75 sq.m./roll)} \end{aligned}$$

### 5. *SHERA* zedar shake roof tile

$$\begin{aligned} &= \frac{\text{Roof area (60 sq.m.)}}{\text{Number of usage (0.8 sq.m./box)}} = 75 \text{ boxes} \\ &= \frac{\text{Hip length (3.9 m. x 4 sides = 15.6 m.) x number of tile per meter (5 units)}}{\text{Package rate (25 units)}} = 3.12 \text{ boxes} \\ &= \frac{\text{Ridge length (5 m. x 2 sides = 10 m.) x number of tile per meter (2.22 units)}}{\text{Package rate (25 units)}} = 0.88 \text{ box} \\ &= \text{Number of SHERA zedar shake roof tile (75 + 3.12 + 0.88)} = 79 \text{ boxes} \end{aligned}$$

### 6. *SHERA* self drilling screw

$$\begin{aligned} &= \text{Number of SHERA zedar shake roof tile (75 boxes) x roof tile package rate (25 tiles) x} \\ &\quad \text{Number of screws usage for 1 roof tile (1 unit)} \\ &= \frac{79 \times 25 \times 1}{\text{Package rate (250 units/box)}} \\ &= \text{Number of SHERA self drilling screw tile} = 8 \text{ boxes} \end{aligned}$$

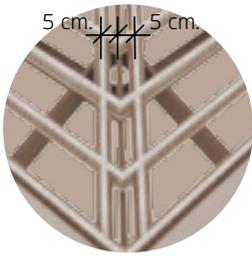
### 7. *SHERA* dry tech

$$\begin{aligned} &= \frac{\text{Ridge length (5 m.) + hip length 4 sides (15.6 m.)}}{\text{Number of dry tech usage (2.8 m./roll)}} \\ &= \text{Number of SHERA dry tech} = 8 \text{ rolls} \end{aligned}$$

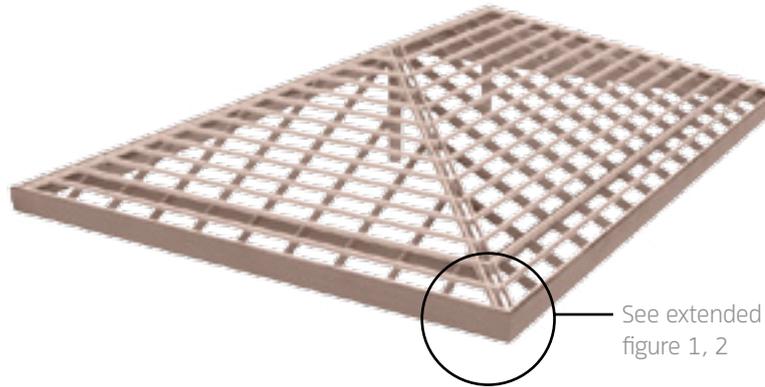
### 8. *SHERA* log ridge

$$\begin{aligned} &= \frac{\text{Ridge length (5 m. x 2 sides = 10 m.)}}{\text{Number of usage (3 m./unit)}} = 3.33 \text{ units} \\ &= \frac{\text{Hip length (3.9 m. x 2 sides x 4 sides = 3.12 m.)}}{\text{Number of usage (3 m./unit)}} = 10.4 \text{ units} \\ &= \text{No. of SHERA log ridge} = \frac{3.33 + 10.4}{\text{Log ridge package rate (10 units/pack)}} = 2 \text{ packs} \end{aligned}$$

## Installation of *SHERA* zedar shake roof tile with hip roof style



Extended figure 1

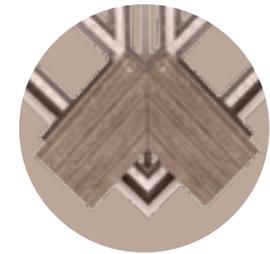
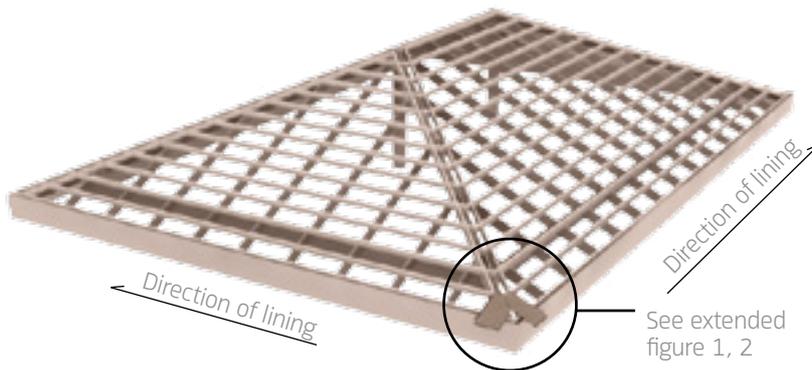


Extended figure 2

1. Use wooden or steel side ridge for supporting tile's end with the distance from ridge to the side 5 cm. each (figure 1). For *SHERA* purlin supporting ridge side must be cut and fixed with 4 screws each. (figure 2).



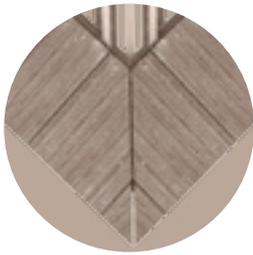
Extended figure 1



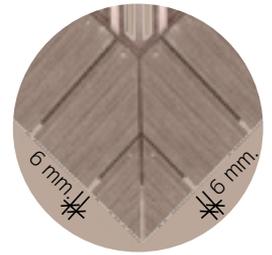
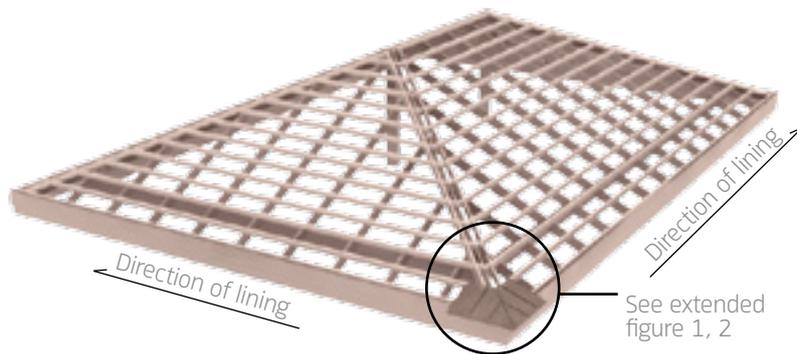
Extended figure 2

2. One box of *SHERA* zedar shake roof tile contains 3 sizes of tiles, which are 10, 15 and 20 cm. wide. Any size will be acceptable for beginning. For example, starting from the middle line of the ridge using the 20 cm. size to start with equal level with the purlin and cut off any excess with grinder machine using tile cutting blade, and then fix with screw, 1 inch long follow extended figure 1. Line another 20 cm. tile on the other side as close as possible to the first one follow extended figure 2.

## Installation of *SHERA* zedar shake roof tile with hip roof style

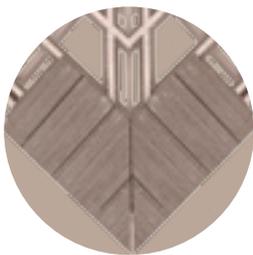


Extended figure 1

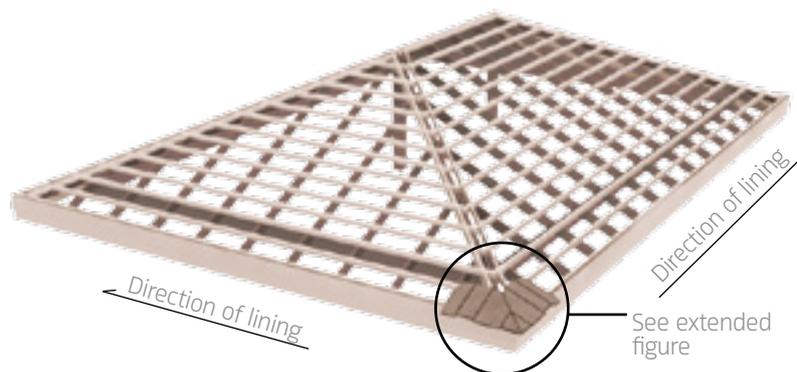


Extended figure 2

3. Use a correctly cut piece of tile to fix in the corner to complete the corner finish. Start putting rest of tiles followed by the tile sized 15 cm. Line all tiles as close as possible to each other follow extended figure 1. A choice of widening the gap between tiles is possible not more than 6 mm. without leaking follow extended figure 2. Fix 1-inch screw using electric screw driver.



Extended figure

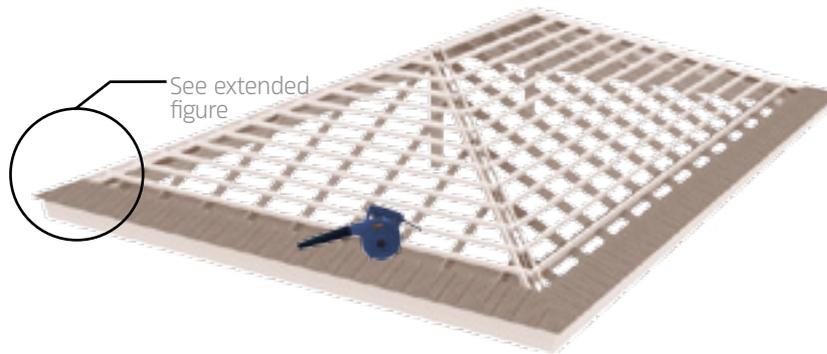


4. Next line up the 10 cm. tile and fix with 1-inch screw. Continue fixing the tiles of the different widths in the same manner as explained before. Switch between different width sizes as per the look desired.

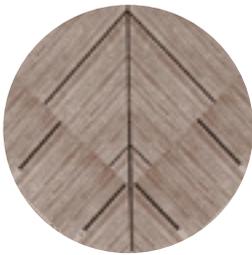
## Installation of *SHERA* zedar shake roof tile with hip roof style



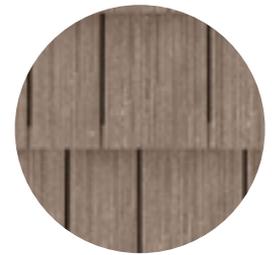
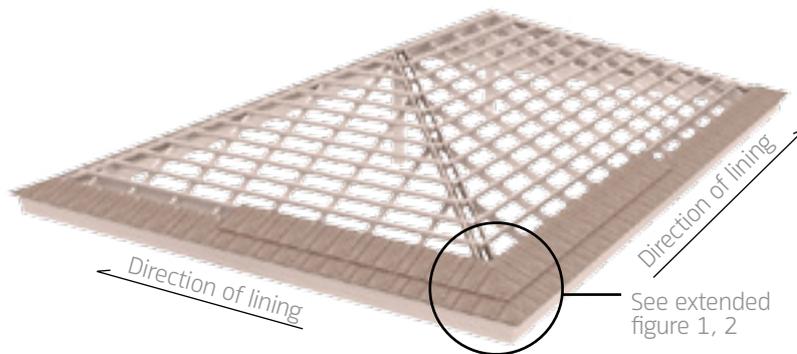
Extended figure



5. Line the last tile on the other side and cut off any excess with grinder machine using tile cutting blade as shown in extended figure. Use blower to blow off any dust resulting from drilling for each finished installing line of tile.



Extended figure 1

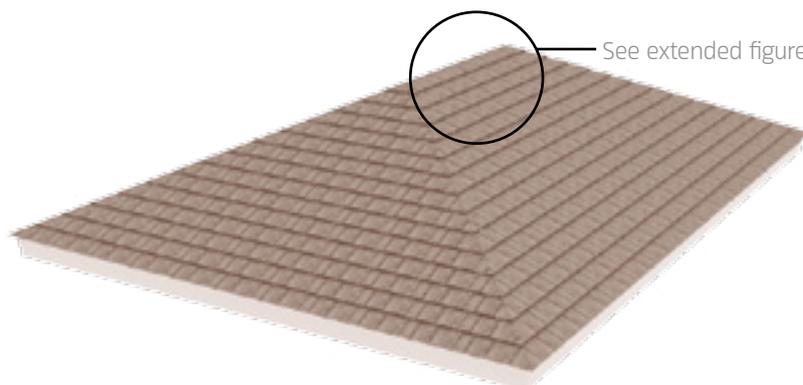


Extended figure 2

6. The second line of tile installing could be switching tile size depending on the look desired for your roof. Begin the second line of tiles around the ridge fixing by 2-inch screw\*, follow extended figure 1. The gap between tiles for each line should not match with the gap on the line below.



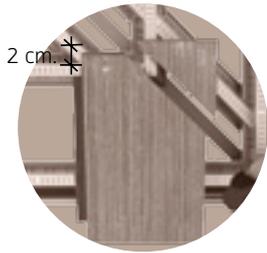
Extended figure



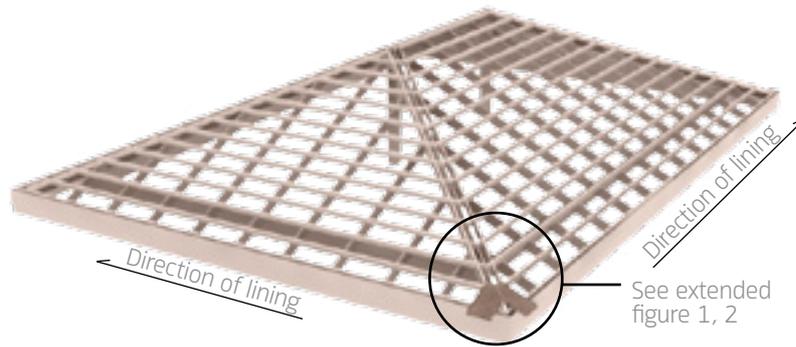
7. On the top of the roof, extra line of tile must be installed, as shown in extend figure. It is fixed by 2-inch screw\* to make tiles close to each others from both sides and to adjust the level of the ridge of the roof to be in line. Cut off any excess tile from the extra rooftop tile to make all tiles at same level.

\*2-inch screw is not included in the extended tool package. Installers must arrange.

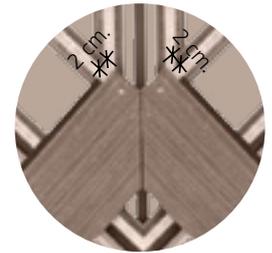
## Installation of *SHERA* zedar shake roof tile in staggered format for hip roof style



Extended figure 1

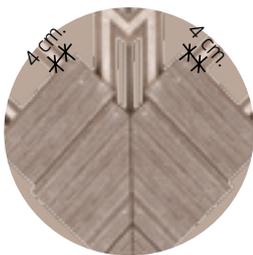


See extended figure 1, 2

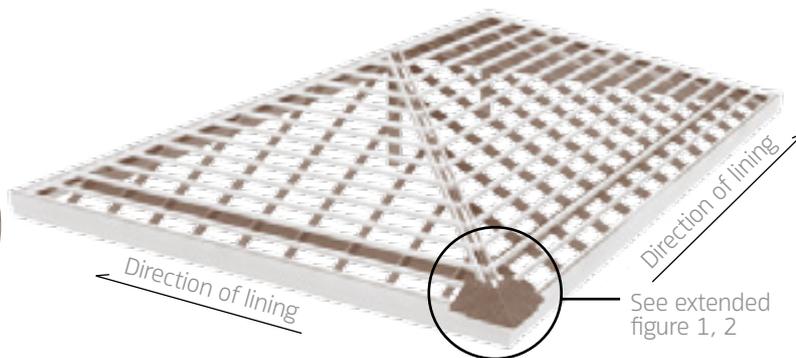


Extended figure 2

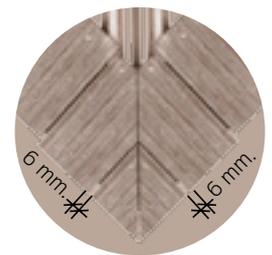
1. Select a size from 3 choices of *SHERA* zedar shake Tile and line up in a staggered form at 3 levels; in the level of purlin, 2 cm. over purlin and 4 cm. over purlin. For example, strating from middle line of ridge of the roof using the 20 cm. tile size to start with over level with the purlin by 2 cm. and cut off any excess with grinder machine using tile cutting blade, and then fix with 1-inch screw follow extended figure 1. Line another 20 cm. tile on the other side as close as possible to the first one follow extended figure 2.



Extended figure 1

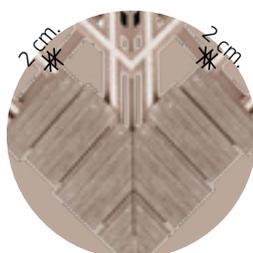


See extended figure 1, 2

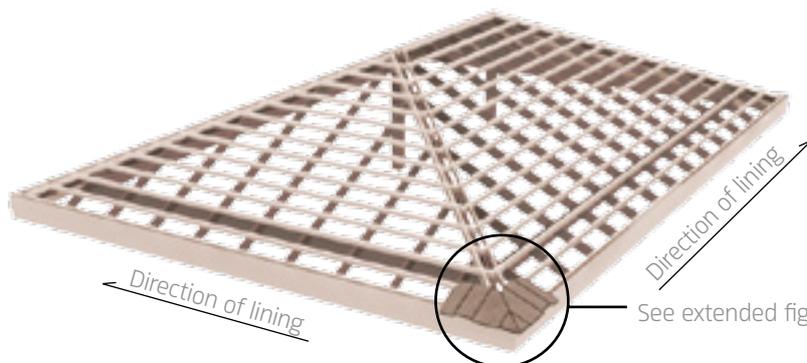


Extended figure 2

2. Start putting rest of the tiles followed by the tile sized 15 cm. next. Line the tile over level with purlin by 4 cm. Line them close to each other following extended figure 1 or choose to widening the gap between tiles not more than 6 mm. (to avoid leakage) follow extended figure 2. Fix with 1-inch screw and tighten with electric screw driver.



Extended figure



See extended figure

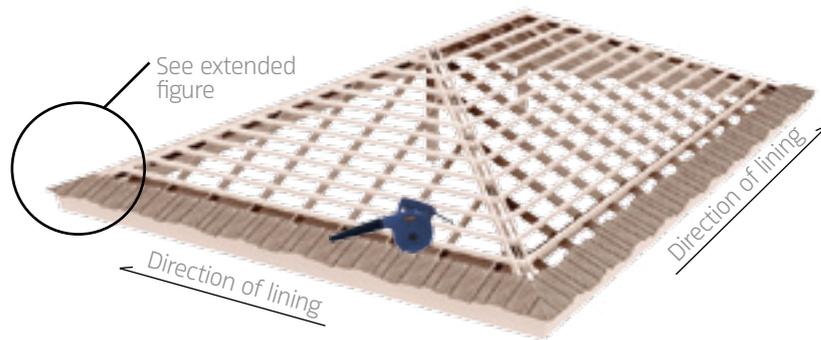
3. Next line up the 10 cm. as the last size with the overlapping by only 2 cm., follow extended figure, and choose to switch lining up sizes properly.

Note: We can move the level of tile up or down, but the differences each time cannot exceed 2 cm.

## Installation of *SHERA* zedar shake roof tile in staggered format for hip roof style



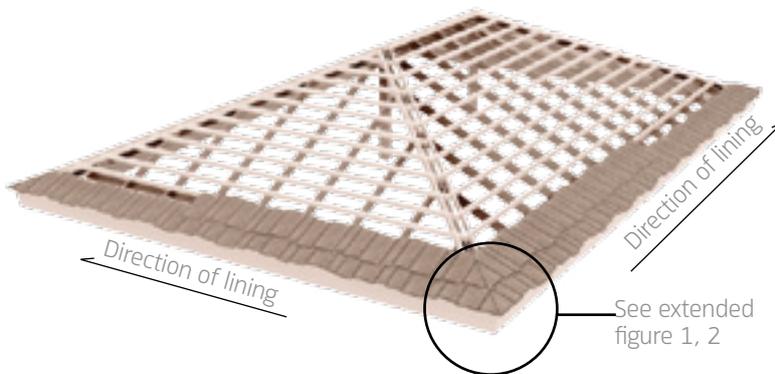
Extended figure



4. Line the last tile on the other side and cut off any excess with grinder machine using tile cutting blade as shown in extended figure. Use blower to blow off any dust resulting from drilling for each finished installing line of tile.



Extended figure 1

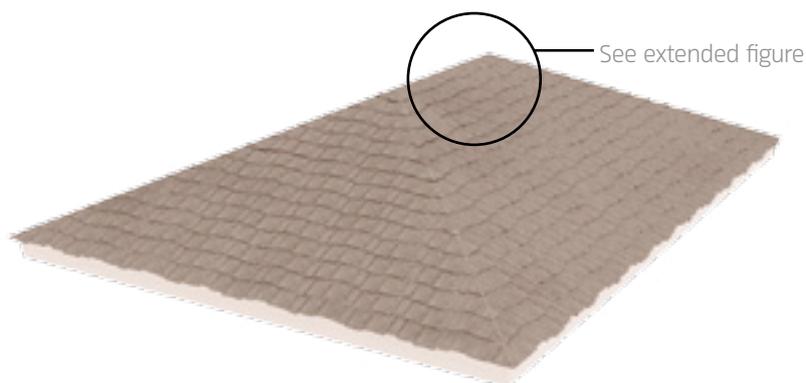


Extended figure 2

5. The second line of tile installing could be switching tile size depending on the look desired for your roof. Begin the second line of tiles around the ridge fixing by 2-inch screw\*, follow extended figure 1. The gap between tiles for each line should not match with the gap on the line below, follow extended figure 2.



Extended figure

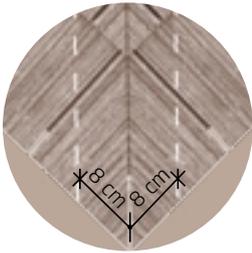


6. On the top of roof, extra line of tile must be installed, follow extended figure. It is fixed by 2-inch screw to make tiles on both sides close to each other and to adjust the level of the ridge of the roof to be in line. Then cut off any excess tile from the extra rooftop tile to make all tiles level equally.

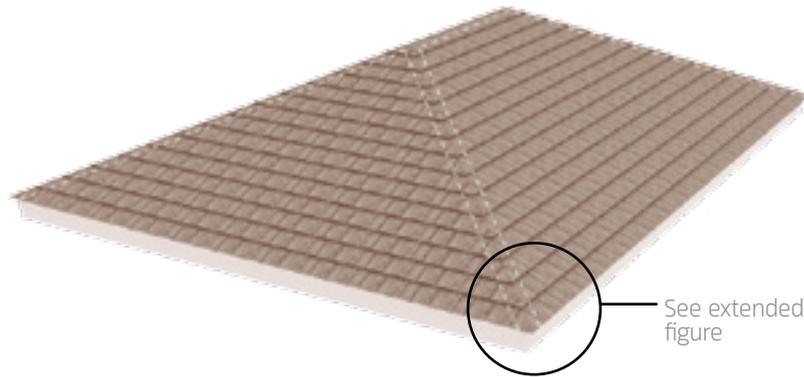
Note: We can move the level of tile up or down, but the differences each time cannot exceed 2 cm.

\*2-inch screw is not included in the extended tool package. Installers must arrange.

## Dry tech installation for hip roof



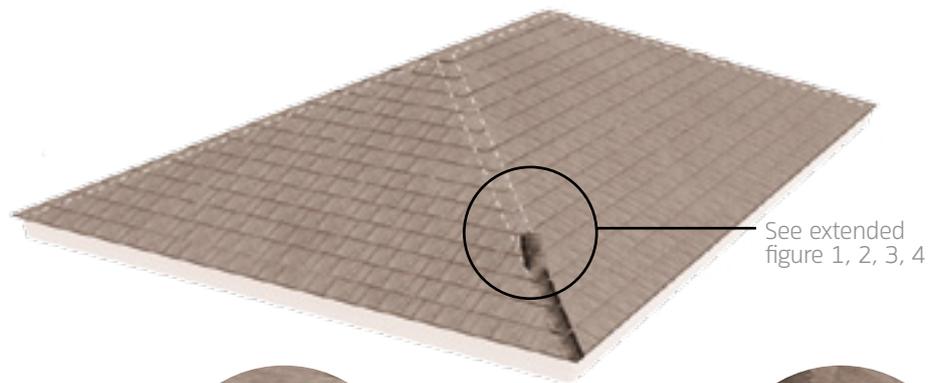
Extended figure 1



1. Draw a line at 8 cm. along the length of joints on both sides of joints in all gables and ridges. Follow extended figure.



Extended figure 1



Extended figure 2



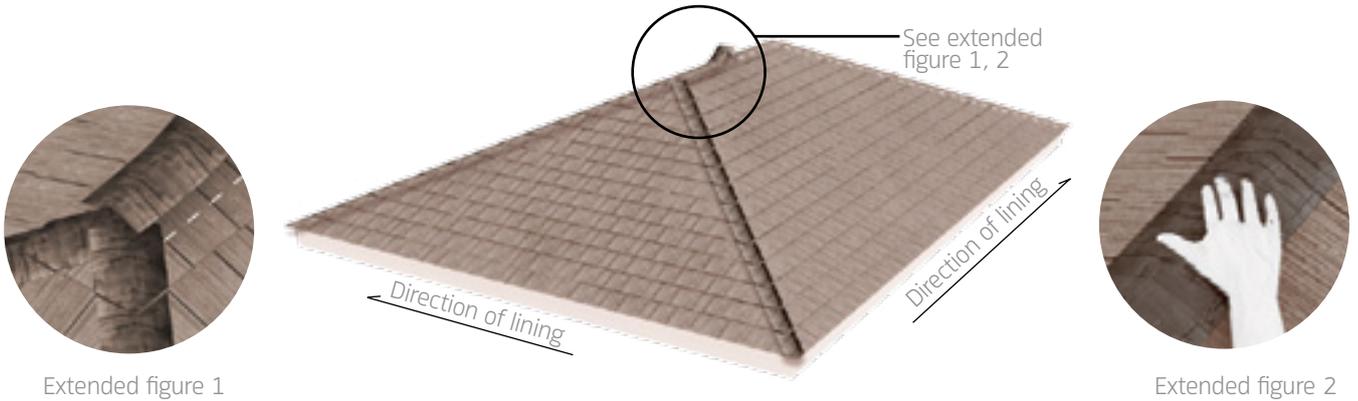
Extended figure 3



Extended figure 4

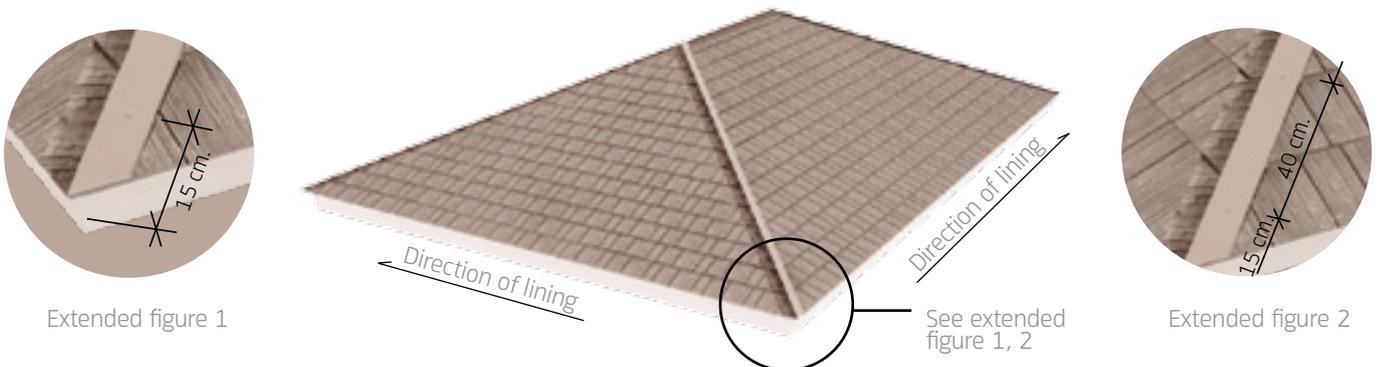
2. Clean roof top before installing the underneath sheet. Divide two sided glue tape into two parts, open glue tape sides one by one only, follow extended figure 1. Install the sheet one side at a time from end ridge roof till the roof top, clearing all the excess air inside to make it as close as possible to the roof including the side of the roof. Try to keep the distance of the sheet not to cross the side by 8 cm., follow extended figure 2. Place the ended side of the sheet to overlap the other side of the roof tile, follow extended figure 3. In case of extended sheet is needed for joint, the overlapping area between sheets should be 5 cm., follow extended figure 4. After that open the last side of glue tape, and install the sheet on the other side of the ridge till the last line.

## Dry tech installation for hip roof



3. Apply the same installation process to the roof top sheet installation by beginning from the point where the roof top and the ridge roof are connected, follow extended figure 1, and press the sheet to clear out all excess air in between, follow extended figure 2.

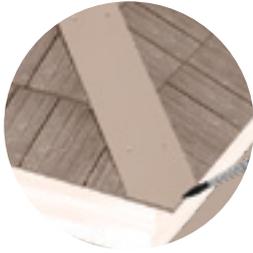
## Log ridge installation for hip roof



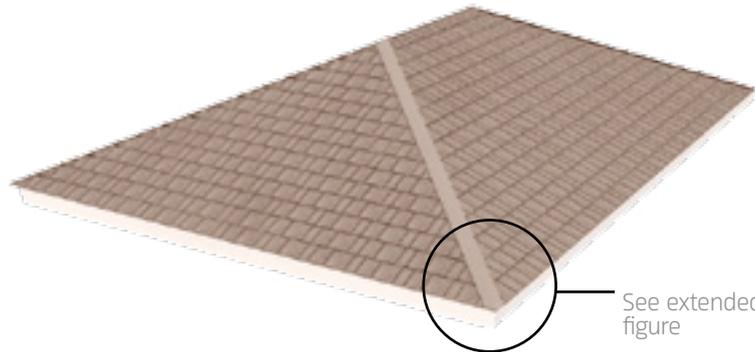
1. Install log ridge to rooftop and ridge roof one side at a time. Cut log ridge ends to level with eaves. Measure inward from the tip of the log ridge to 15 cm. and fix first screw, follow extended figure 1. Fix the log ridge with 2-inch screw\* at the center of the log ridge at every 40 cm., follow extended figure 2, along the length of the log ridge. Make sure the screw head is flush with top of the log ridge, not over or under driven.

\*2-inch screw is not included in the extended tool package; Installer must arrange.

## Log ridge installation for hip roof

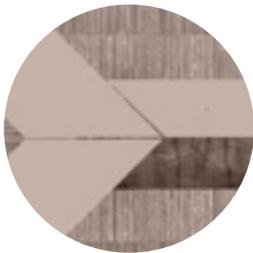


Extended figure

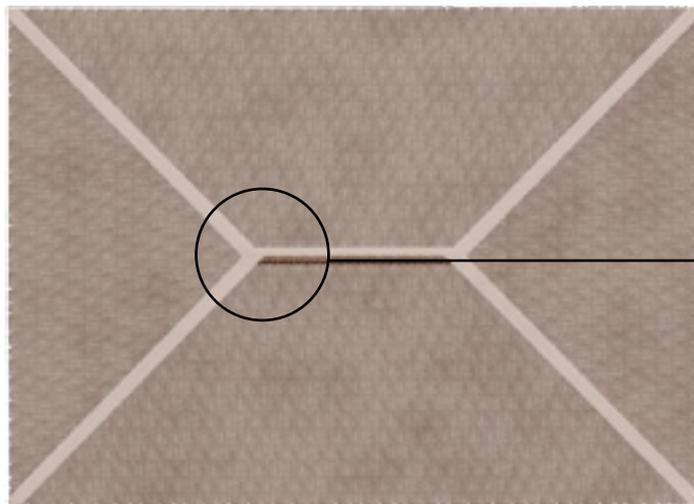


See extended figure

2. Install log ridge on another side of ridge roof with 2-inch screw as explained in point number 1. Follow the process for all 4 sides, and finish it off by using paintbrush, patching up covering tiles roof and all the cuts, as shown in extended figure.



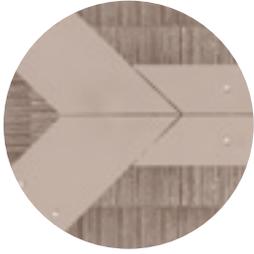
Extended figure



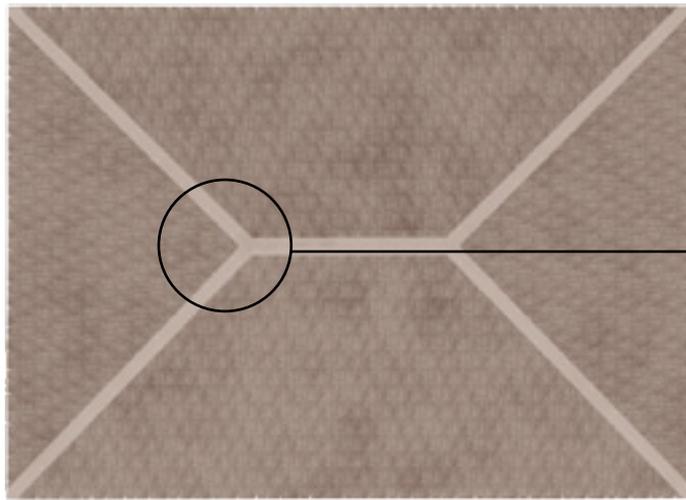
See extended figure

3. Install the log ridge at the rooftop one side at a time. Cut the ends at joint properly, follow extended figure. Fix the log ridge with 2-inch screw\* at the center of the log ridge at every 40 cm., follow extended figure 2, along the length of the log ridge. Make sure the screw head is flush with top of the log ridge, not over or under driven.

## Log ridge installation for hip roof



Extended figure 1



See extended figure 1, 2, 3



Extended figure 2



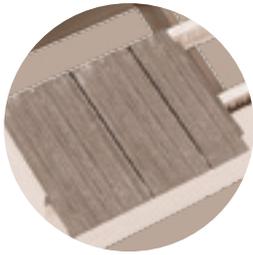
Extended figure 3

4. Install another side of ridge roof with log ridge, follow figure 1, and fix with 2-inch screw\* following the procedure as explained in point number 3. Use trowel patching up the screw heads on the log ridge with acrylic filler\*\* follow extended figure 2, and use paintbrush to paint covering patch up area properly follow extended figure 3.

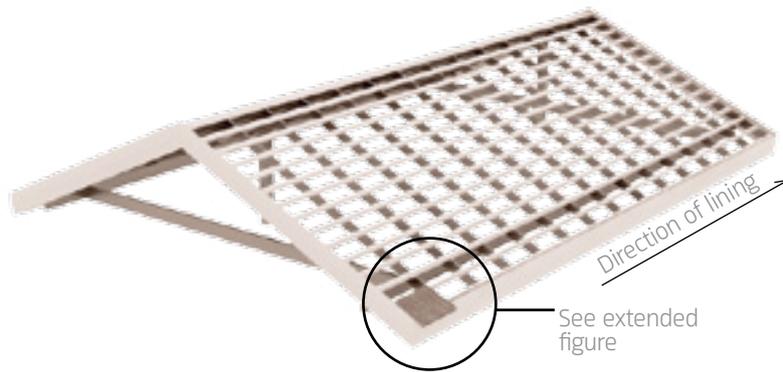
\*2-inch screw is not included in the extended tool package. Installers must arrange.

\*\*Patching up acrylic filler is not included in the extended tool package. Installers must arrange.

## Installation of *SHERA* zedar shake tile with gable roof style



Extended figure



1. One box of *SHERA* zedar shake roof tile contains 3 sizes of tiles, which are 10, 15, and 20 cm. wide. We can start with any size as per preference. For example, use the 20 cm. size first and follow by 15, and 10 cm. accordingly, follow extended figure. Line all tiles as close as possible to each other follow extended figure 1. A choice of widening the gap between tiles is possible not more than 6 mm. without leakage follow extended figure 2. Fix with 1-inch screw and tighten with electric screw driver.



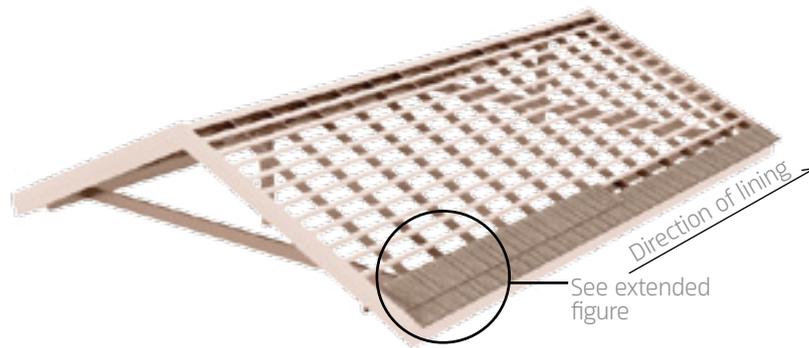
2. Use blower to blow off any dust resulting from drilling for each finished line of tile.

Note: We can move the level of a tile up or down, but the differences each time cannot exceed 2 cm.

## Installation of *SHERA* zedar shake tile with gable roof style



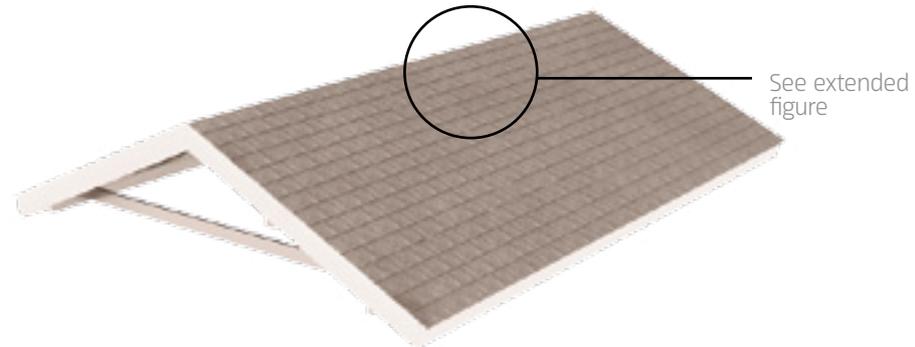
Extended figure



3. The second line of tile installing could be started by switching tile size depending on the look desired for your roof. The connection between tiles in role 1 and role 2 should not match as shown in extended figure.



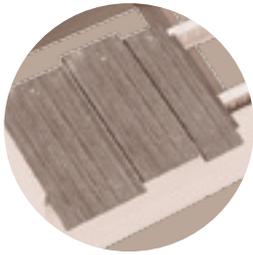
Extended figure



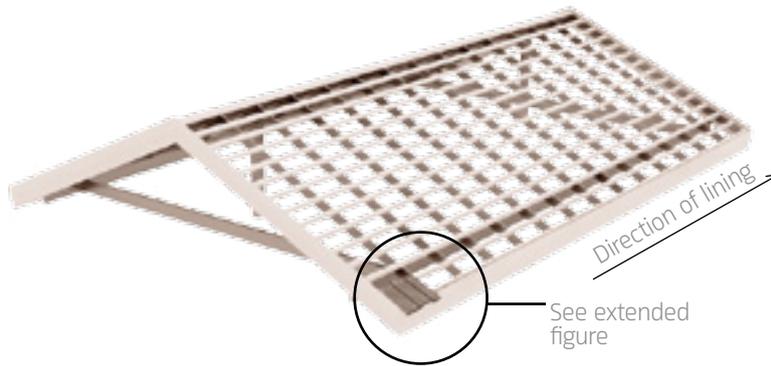
4. On the top of roof, extra line of tile must be installed, follow extend figure. It is fixed by 2-inch screw\* to make tiles closed to each other from both sides. This is also to adjust the level of the ridge of the roof with the gable. Then cut off any excess tile from the extra rooftop tile to make all tiles in level.

\*2-inch screw is not included in the extended tool package. Installer must arrange.

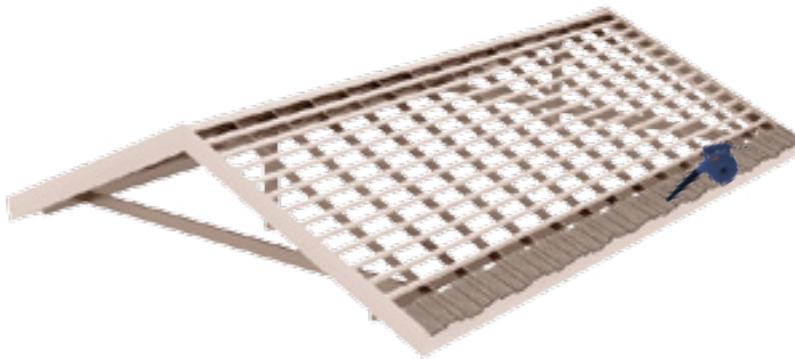
## Installation of *SHERA* zedar shake tile in staggered format on gable roof



Extended figure



1. Select a size from 3 sides of *SHERA* zedar shake tile and line up in a staggered format at 3 levels; in the level of purlin, 2 cm. over purlin and 4 cm. over purlin. For example, start with 20 cm. size at 2 cm. over the purlin level. Then follow by the tile of size 15 cm. at 4 cm. over the purlin level. Next line up the 10 cm. size at 2 cm. over purlin, follow extended figure. Line them close to each other follow extended figure 1 or choose to widening the gap between tiles not more than 6 mm. without leakage. Fix with 1-inch screw and tighten with electric screw driver.



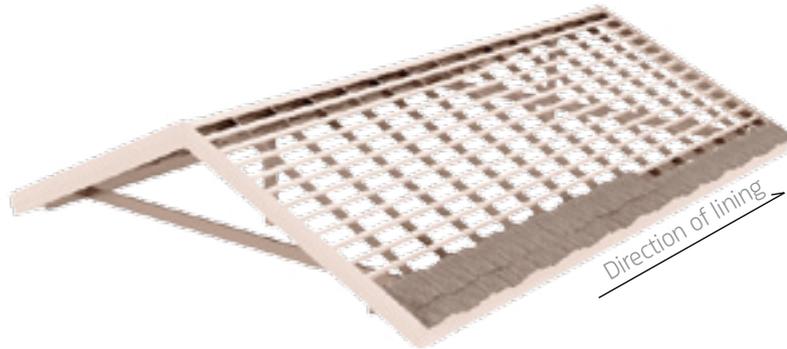
2. Use blower to blow off any dust resulting from drilling for each finished line of tile.

Note: We can move the level of a tile up or down, but the differences each time cannot exceed 2 cm.

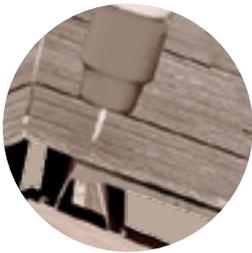
## Installation of *SHERA* zedar shake tile in staggered format on gable roof



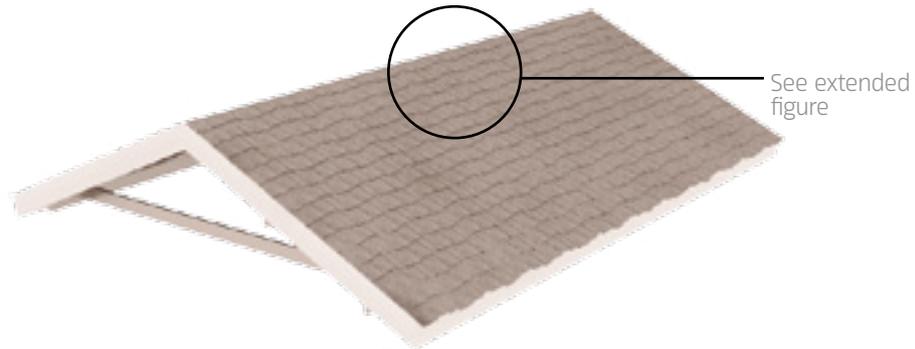
Extended figure



3. The second line of tile installing could be switching tile size depending on the proper situation. The connection between tiles in role 1 and role 2 should not be at the same level follow extended figure.



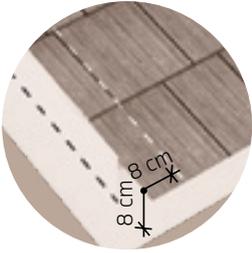
Extended figure



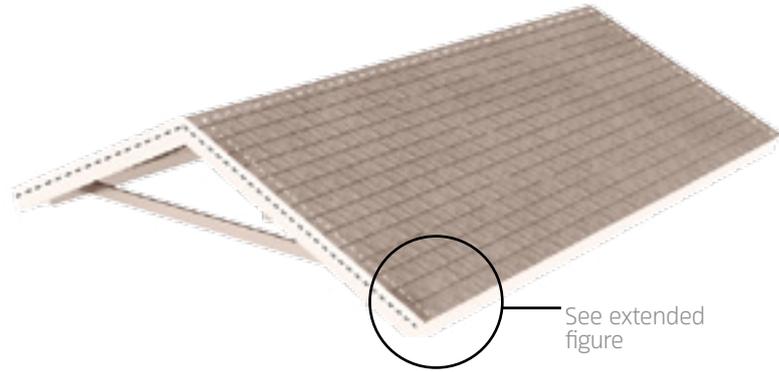
4. When installing up to the rooftop, extra line of tile must be installed, follow extended figure. It is fixed by 2-inch screw\* to make tiles closed with each others for both sides including to adjust the level of ridge of the roof to be the same with the gable, and cut off any excess tile from the extra rooftop tile to make all tiles level equally.

\*2-inch screw is not included in the extended tool package. Installer must arrange.

## Dry tech installation for gable roof style



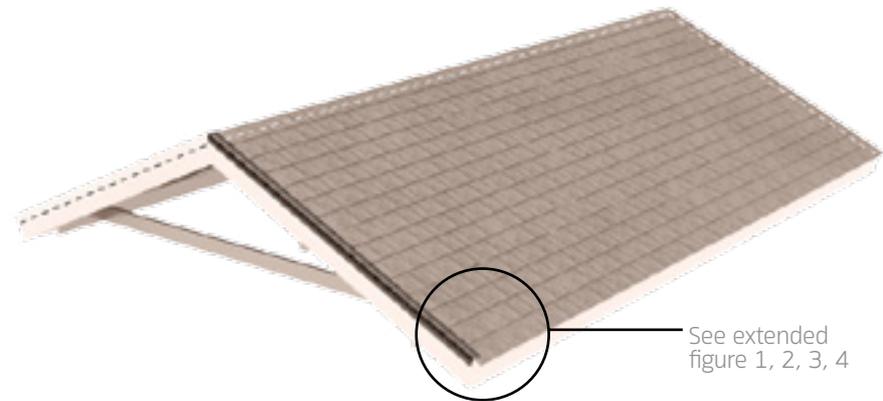
Extended figure



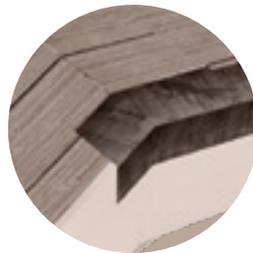
1. Draw a line at 8 cm. along the length of joints on both sides of joint in the ridge and on the edge. Follow extended figure.



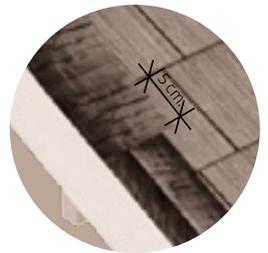
Extended figure 1



Extended figure 2



Extended figure 3



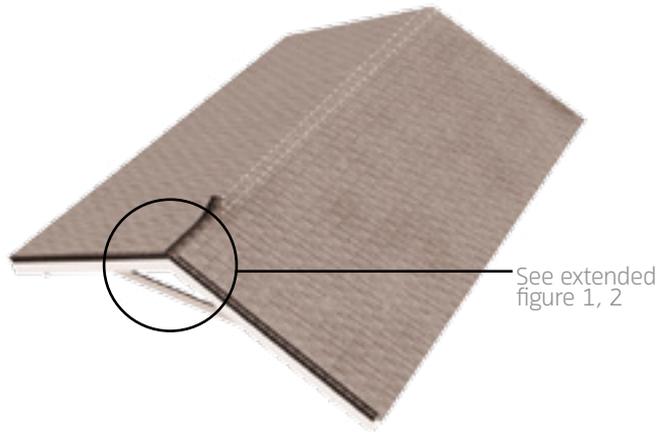
Extended figure 4

2. Clean roof top before installing the underneath sheet. Divide two sided glue tape into two parts, open glue tape sides one by one only, follow extended figure 1. Install the sheet one side at a time from end gable till the roof top, clearing all the excess air inside to make it as close as possible to the roof including the side of the roof. Try to keep the distance of the sheet not to cross the side by 8 cm., follow extended figure 2. Place the ended side of the sheet to overlap the other side of the roof tile, follow extended figure 3. In case of extended sheet is needed for joint, the overlapping area between sheets should be 5 cm., follow extended figure 4. After that open the last side of glue tape, and install the sheet on the other side of the ridge till the last line.

## Dry tech installation for gable roof style



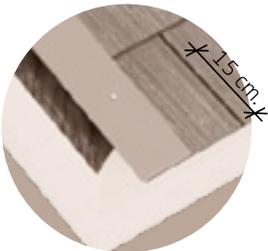
Extended figure 1



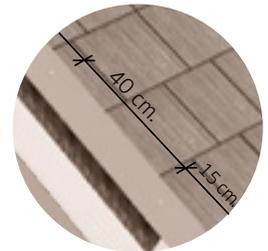
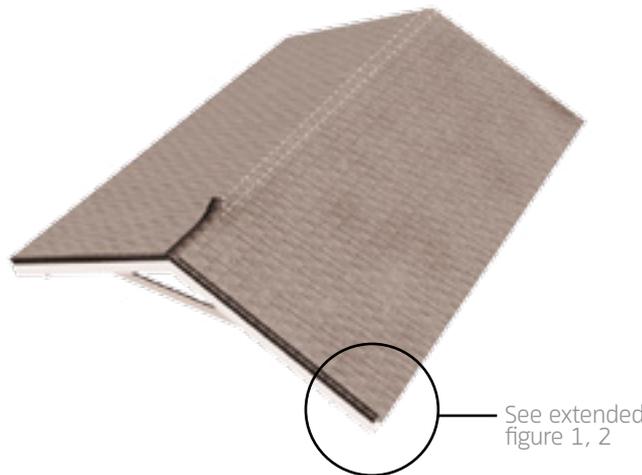
Extended figure 2

3. Apply the same installation process to the roof top sheet installation by beginning from the point where the roof top and the gable are connected, follow extended figure 1, and press the sheet to clear out all excess air in between, follow extended figure 2.

## Installation of log ridge on gable roof style



Extended figure 1



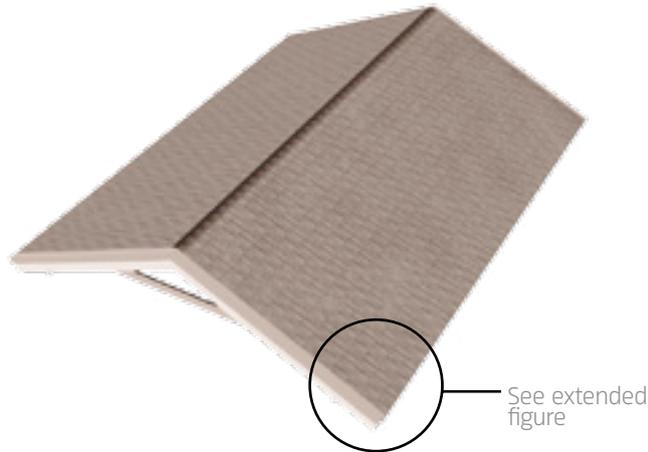
Extended figure 2

1. Install log ridge to cover gable side one side at a time. Cut ends to level with the eaves. Measure inward from the tip of log ridge to 15 cm. and fix first screw, follow extended figure 1. Fix the log ridge with 2-inch screw\* at the center of log ridge at every 40 cm., follow extended figure 2, along the length of log ridge. Make sure the screw head is flush with top of the log ridge, not over or under driven.

## Installation of log ridge on gable roof style

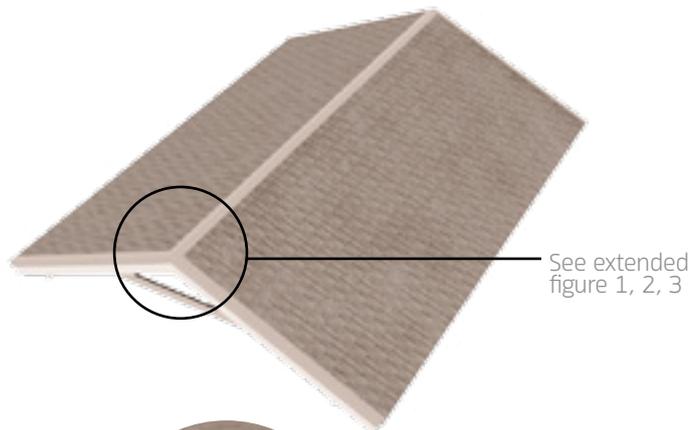


Extended figure



See extended figure

2. Install log ridge on another side of ridge roof with 2-inch screw as explained in point number 1. Follow the process for all 4 sides, and finish it off by using paintbrush, patching up covering tiles roof and all the cuts as shown in follow extended figure.



See extended figure 1, 2, 3



Extended figure 1



Extended figure 2



Extended figure 3

3. Install the log ridge at the rooftop one side at a time. Cut the ends at joint properly, follow extended figure 1. Fix the log ridge with 2-inch screw\* at the center of the log ridge at every 40 cm., follow extended figure 2, along the length of the log ridge. Make sure the screw head in flush with top of the log ridge, not over or under driven. Use trowel to patch up all screw heads on the log ridge with acrylic filler\*\*, follow extended figure 2, and use paintbrush to paint covering patch up area properly, follow extended figure 3.

\*2-inch screw is not included in the extended tool package. Installers must arrange.

\*\*Patching up acrylic filler is not included in the extended tool package. Installers must arrange.

## Handling and storage

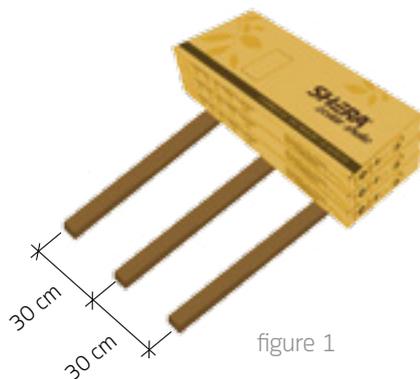


figure 1

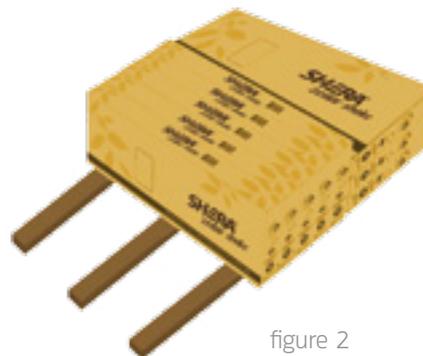


figure 2

1. To avoid direct exposure to water or moisture, products should be stored under cover and above ground level. Use 3 hard woods size 1" x 2" x 1.20 m. long and lay down separating by 30 cm. each. Place 3 product boxes down horizontally on the wooden logs to avoid damage from falling backward, follow figure 1. After that line up another 5 boxes vertically, follow figure 2.



2. Place down another 3 boxes of the product horizontally to protect product falling in front as shown in picture.



3. To line up product horizontally, it should not be more than 2 boxes height because the lower boxes will be overweight.

Remark : To place product in open sunlight, it should be covered by plastic wrap or water resistance wrap.

*Distributor*