

Installation Manual for SCG SmartWOOD

Fiber Cement
wood substitute
Non Asbestos



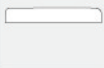
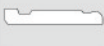
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SCG SmartWOOD products range

Products application	name	width (cm.)	thickness (cm.)	length (cm.)	weight kg./pcs.	surface	edges	color/model	section	usage quantity		
Fence Plank • for fencing, wooden walls decoration, general decoration, exterior and interior shading.	Fence Plank	7.5 cm. (3")	1.2	400	5.4	Teak texture	Squared edge	Primer		3.33 pcs./sq.m.		
		7.5 cm. (3")	1.6	400	7.3	Teak texture	Squared edge	Primer		3.33 pcs./sq.m.		
		10 cm. (4")	1.2	400	7.3	Teak texture	Squared edge	Primer		2.50 pcs./sq.m.		
		10 cm. (4")	1.6	400	9.7	Teak texture	Squared edge	Primer		2.50 pcs./sq.m.		
		10 cm. (4")	1.6	400	9.7	2 side Burr wood texture	Squared edge	Cream Primer		2.50 pcs./sq.m.		
		15 cm. (6")	1.2	400	10.9	Teak texture	Squared edge	Primer		1.67 pcs./sq.m.		
Floor Plank • for exterior or interior floor decoration.	Floor Plank	10 cm. (4")	2.5	300	11.3	Burr wood texture	Squared edge	Cream Primer		3.33 pcs. / sq.m.		
		15 cm. (6")	2.5	300	16.9	Burr wood texture	Squared edge	Cream Primer		2.22 pcs. / sq.m.		
		20 cm. (8")	2.5	300	22.6	Burr wood texture	Squared edge	Cream Primer		1.67 pcs. / sq.m.		
Wood Plank • for wall & panel or decoration.	Wood Plank	20 cm. (8")	0.8	300	7.2	Teak texture	Lining borde Skirt Board edge	Colonial		1.9 pcs./sq.m.		
		20 cm. (8")	0.8	300	7.2	Teak texture	1 side Square Lining	New England		1.9 pcs./sq.m.		
		15 cm. (6")	0.8	300	400	5.4	7.2	Teak texture	Squard edge		Golden teak	size 15 x 300 (cm.) Use 2.7 pcs. / sq.m. size 15 x 400 (cm.) Use 2.0 pcs. / sq.m. size 20 x 300 (cm.) Use 1.9 pcs. / sq.m. size 20 x 400 (cm.) Use 1.5 pcs. / sq.m.
											Red maka	
		20 cm. (8")	0.8	300	400	7.2	9.7	Teak texture	Squard edge		Walnut	
											Silky Rose	
								Deep wood texture	Squard edge	Uncolor	Ivory	
											Sky	
									Oak Red			
									Primer			
Eaves liner • for external and internal ceilings.	Eaves liner	7.5 cm. (3")	0.8	300	2.7	Smooth surface	2-side tapered	Uncolor/ Brown Oak		4.44 pcs./sq.m.		
		10 cm. (4")	0.8	300	3.6	Smooth surface	2-side tapered	Uncolor		3.33 pcs./sq.m.		
	Eaves liner	10 cm. (4")	0.8	300	3.6	Smooth surface	squard edge	Uncolor		3.33 pcs./sq.m.		
	Eaves liner Wood Grain	7.5 cm. (3")	0.8	300	2.7	Deep wood texture	squard edge	Uncolor		4.44 pcs./sq.m.		
Fascia Board • for fascia or gables.	Fascia Board	10 cm. (4")	1.6	400	9.3	Teak texture	1-side tapered	Primer		0.25 pcs. / m.		
		15 cm. (6")	1.6	400	14.2	Teak texture	1-side tapered	Primer/Golden teak		0.25 pcs. / m.		
		20 cm. (8")	1.6	400	19.0	Teak texture	1-side tapered	Primer/Golden teak		0.25 pcs. / m.		
	Fascia Board Smooth surface	15 cm. (6")	1.6	300	10.6	Smooth surface	1-side tapered	Cream Primer		0.33 pcs. / m.		
		20 cm. (8")	1.6	300	14.3	Smooth surface	1-side tapered	Cream Primer		0.33 pcs. / m.		
	Eaves Filler	15 cm. (6")	0.8	300	4.1	Teak texture	-	Primer/ Golden teak		0.33 pcs. / m.		
Skirt Board • for covering floor and wall joints, decoration, or shading.	Skirt Board	10 cm. (4")	1.2	300	5.0	Smooth surface	1-side Skirt Board edge	Primer		0.33 pcs. / m.		
	Skirt Board Modern	7.5 cm. (3")	1.2	300	4.0	Smooth surface	1-side tapered	Primer		0.33 pcs. / m.		
		10 cm. (4")	1.2	300	5.4	Smooth surface	1-side tapered	Primer		0.33 pcs. / m.		
Shading Plank • for suncreening, shading, or light screening.	Shading Plank	7.5 cm. (3")	1.2	300	4.1	Smooth surface	Squard edge	Primer		4.44 pcs./sq.m.		
		10 cm. (4")	1.2	300	5.5	Smooth surface	Squard edge	Primer		3.33 pcs./sq.m.		
Ceiling Border • for decorating ceiling and wall jointing area.	Ceiling Border	5.0 cm. (2")	0.8	300	1.7	Smooth surface	1-side tapered	Uncolor		0.33 pcs. / m.		

2 Installation methods for SCG SmartWOOD Wood Plank

Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
Wood Plank	15 cm. (6")	0.8	300	Teak texture	Squared edge	Golden teak, Red maka,		5.4	2.7 pcs./sq.m.
	15 cm. (6")	0.8	400	Teak texture		Walnut*, Silky Rose,		7.2	2.0 pcs./sq.m.
	20 cm. (8")	0.8	300	Teak texture		Ivory, Sky*, Oak Red		7.2	1.9 pcs./sq.m.
	20 cm. (8")	0.8	400	Teak texture		Primer, Uncolor		9.7	1.5 pcs./sq.m.
	20 cm. (8")	0.8	300	Teak texture	Colonial style	Ivory		7.2	1.9 pcs./sq.m.
					New England style	Ivory			

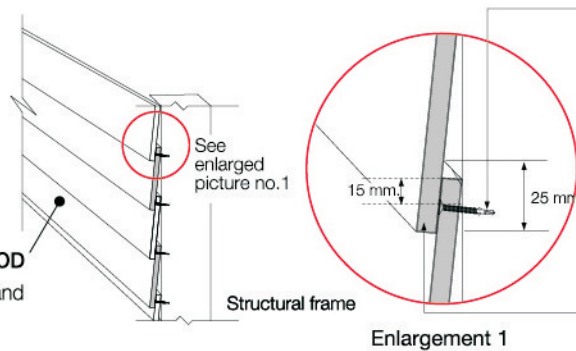
*15 cm. Wide Only

Installation of various models of plank

Installation of all models except Colonial and New England patterns



All models of SCG SmartWOOD Wood Plank except Colonial and New England patterns



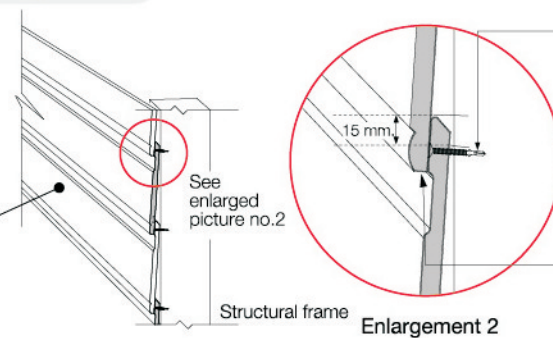
Fixed by nail at 15 mm. from top edge. For the structural steel, fixed by SCG Self Drilling Wing Screw 28.5 mm. for hard wood frame or galvanized frame, fixed by SCG Needle Point Screw 23 mm.

Overlapping distance of the SCG SmartWOOD Wood Plank is about 25 mm.

Installation of Colonial pattern



Colonial pattern



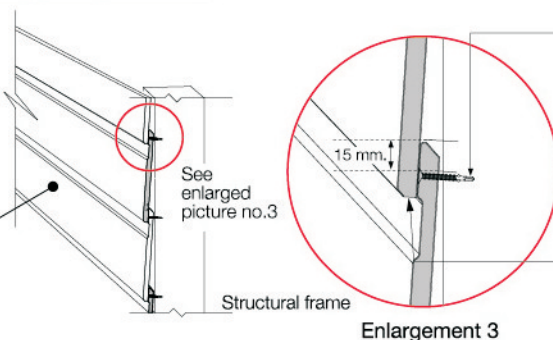
Fixed by nail at 15 mm. from top edge. For the structural steel, fixed by SCG Self Drilling Wing Screw 28.5 mm. for hard wood frame or galvanized frame, fixed by SCG Needle Point Screw 23 mm.

Installation of Colonial pattern must be placed with trim edge on lower side and must be placed over the groove of lower plank.

Installation of New England pattern



New England pattern



Fixed by nail at 15 mm. from top edge. For the structural steel, fixed by SCG Self Drilling Wing Screw 28.5 mm. for hard wood frame or galvanized frame, fixed by SCG Needle Point Screw 23 mm.

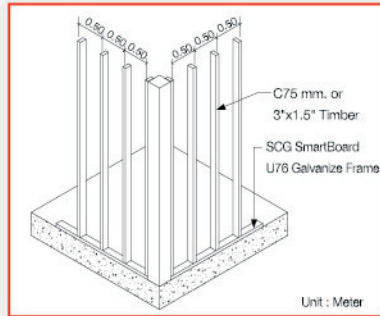
Installation of New England pattern must place the side without groove on lower side and must be placed over the groove of lower plank.

2

Installation methods for SCG SmartWOOD Wood Plank

2.1 Installation of wall joist for SCG SmartWOOD Wood Plank

Installation of timber joist frames and steel joist frames



In case of Timber joist
use 3" x 1.5" Timber

In case of Steel joist
use C75 Structural Steel

In case of Interior wall
use SCG SmartBoard
C74 , U76 Galvanize Frame



In case of installation of the Steel joist, Timber joist or SCG SmartBoard C74 Galvanize Frame provide 50 cm. spacing measured from center of one joist to another joist.

Recommendation for installation of Joist frame

- Determine alignment of wall on floor and ceiling by using plummet.
- Joist frames must be installed and fixed firmly.
- All other equipment such as power ducts or water pipes shall be installed with joists properly prior installation of SCG SmartWOOD Wood Plank.
- Size of main Joist frame for the installation shall be designed and considered by the Engineer.
- Area which designated to be a joint of plank shall be supported by double frame stud, in order to provide more fixing areas for the Joist to plank and prevent cracking at the corner.

2.2 Installation of SCG Galvanize C-Line for bricking wall

In case the wall is in vertical and level plane

prior installation of the SCG Galvanized C-Line, ensure that the wall for installation shall not be inclined and be in level plane (if the wall is not vertical, nor in level, use the Bracket, see the method in Page 4)

1

Drill the wall by Concrete-work Drill and embed the SCG Plastic Insert 37 mm. at every 50 cm. distance.

2

Install the SCG Galvanize C-Line by fixing with SCG Needle Point Screw 38 mm.

3

- In case of installation of the SCG SmartWOOD Wood Plank horizontally, install the SCG Galvanize C-Line in vertical direction.
- In case of installation of the SCG SmartWOOD Wood Plank vertically, install the SCG Galvanize C-Line in horizontal direction.

4

In the area of outer and inner corners, two connecting pieces of joist shall be placed in order to fix the closure plate and fix the edge of SCG SmartWOOD Wood Plank.

5

Install the frame completely in every location and install the SCG SmartWOOD Wood Plank following the Installation Manual in Page 6.

* Install the SCG Galvanize C-Line with 50 cm. spacing between centers of one frame to another frame and adjust the level plane by using wedge.

Caution

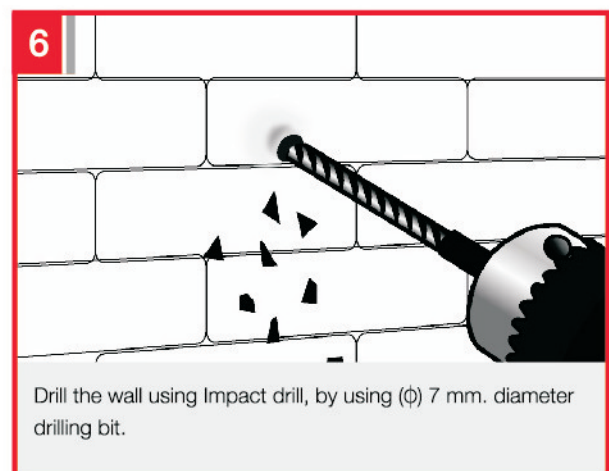
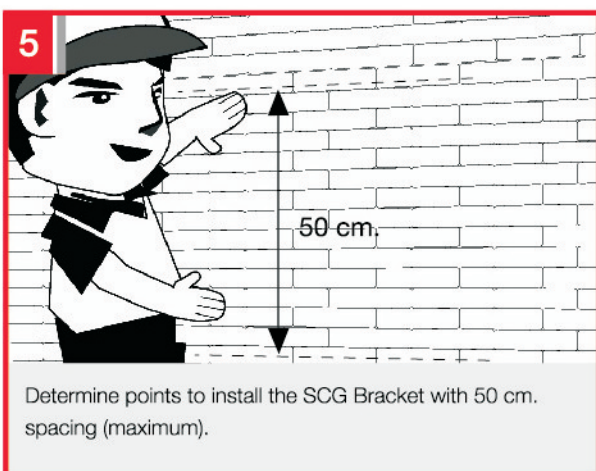
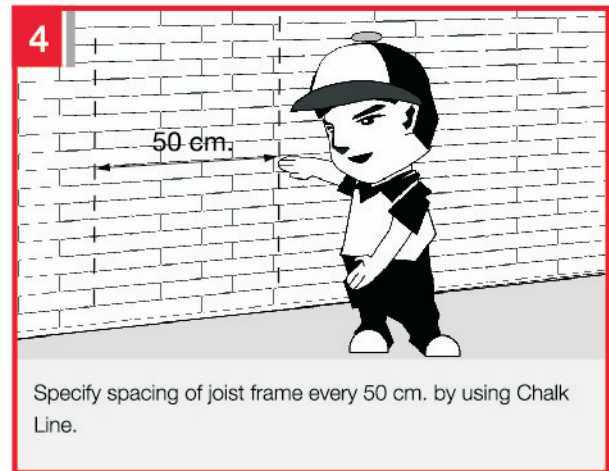
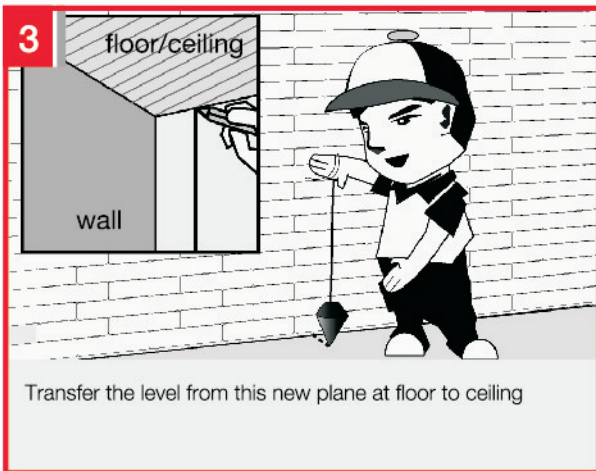
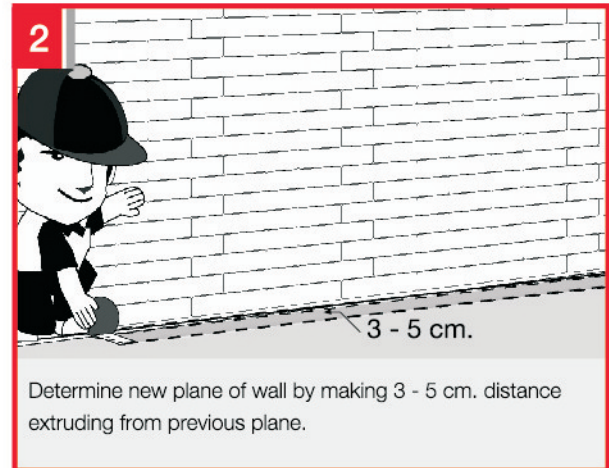
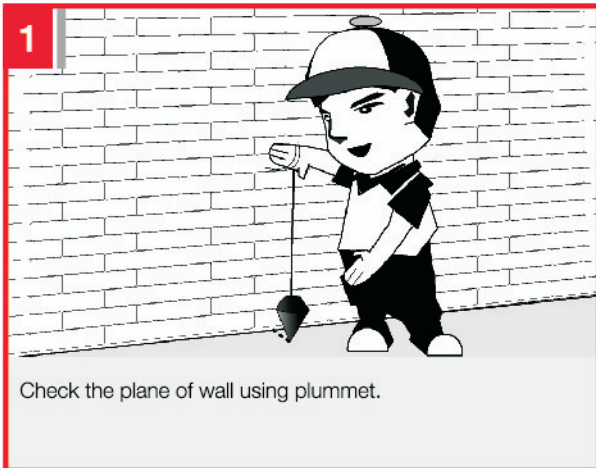
- Do not use SCG SmartWOOD Wood Plank as the fall prevention fences or hang the heavy-weight material without any supporting joist frame.

Recommendation

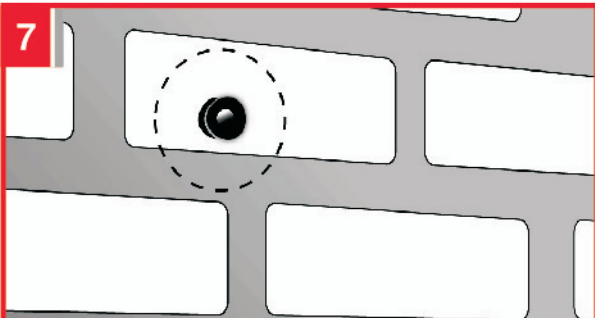
- Area which designated to be a joint of plank shall be supported by double frame stud in order to provide more fixing areas for the Joist to plank and prevent cracking at the corner.

◦ In case the wall is not vertical (inclined) and is not in level plane

In case the wall is not vertical (inclined) and is not in level plane, ones cannot install Joints frame to the wall directly. New wall plane shall be determined again, in order to allow the installation of plank on wall to be in vertical and level plane properly, by following steps.

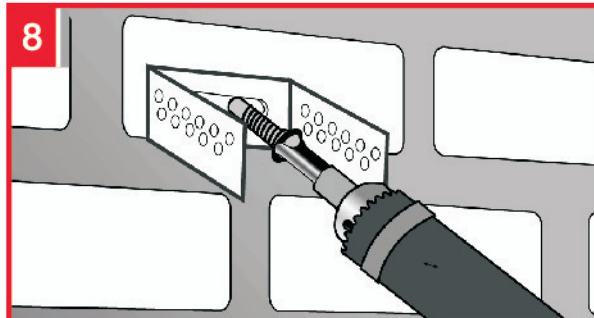


(Please See article 7-14 on page 5)



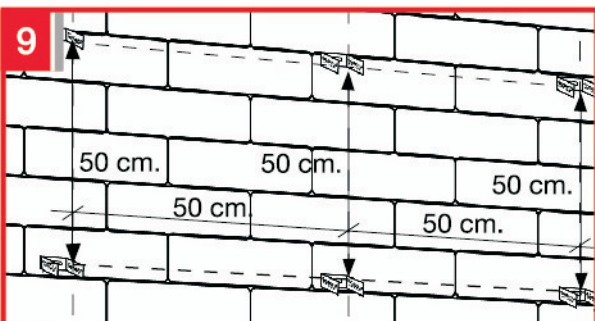
7

Embed SCG Plastic Insert 37 mm. in order to install the Bracket for fixing SCG Galvanize C-Line



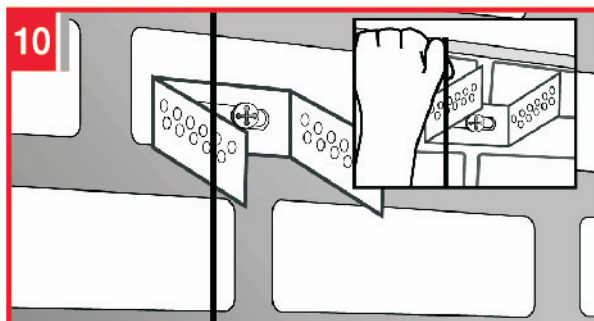
8

Install the Bracket for fixing SCG Galvanize C-Line by using SCG Needle Point Screw 38 mm.



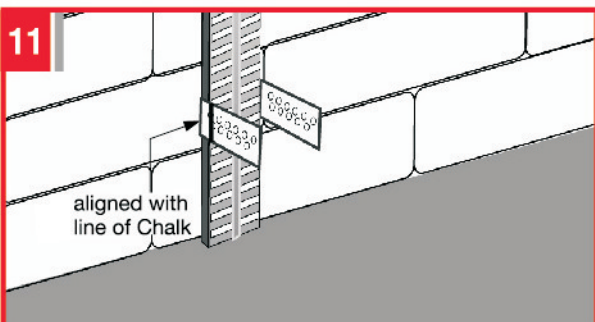
9

Install the Bracket for fixing SCG Galvanize C-Line at every point.



10

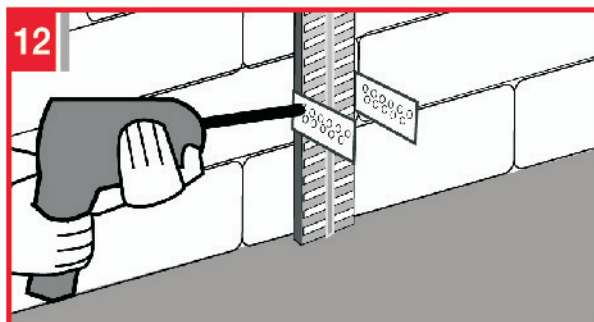
Transfer the level from upper to lower position by using Chalk Line.



11

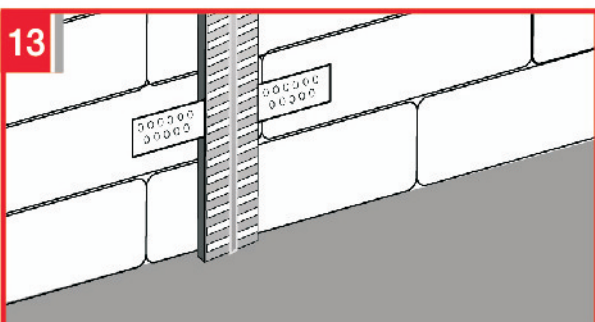
aligned with line of Chalk

Install the SCG Galvanized C-Line frame by making the frame's front to be aligned with line of Chalk.



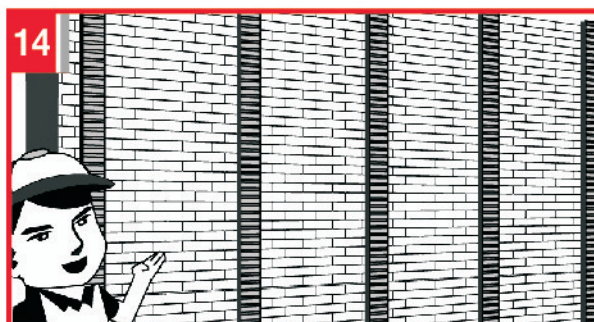
12

Fix the Bracket for fixing SCG Galvanize C-Line to the SCG Galvanize C-Line frame by using 1 of SCG Self Drilling Screw 13 mm. on each side.



13

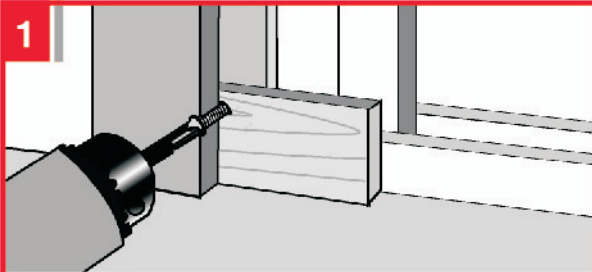
Fold both flanges of Bracket which extruded out to be parallel to the plane of SCG Galvanize C-Line frame.



14

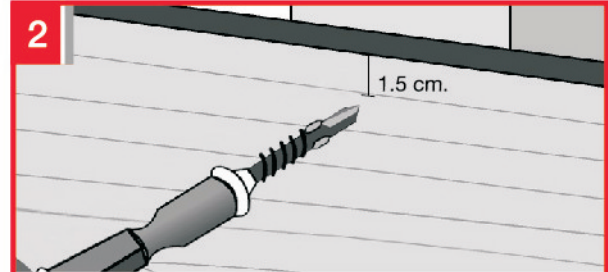
Install the frame at every point and install the SCG SmartWOOD Wood Plank following the Installation Manual Page 6.

2.3 Installation Procedure of SCG SmartWOOD Wood Plank



1

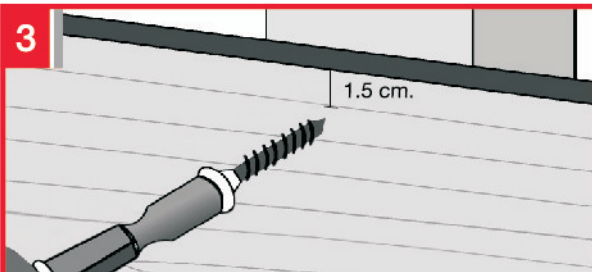
Use SCG SmartWOOD Wood Plank which is cut to 5 cm. width or 8 mm. thick timber piece to support at lower edge of plank.



2

1.5 cm.

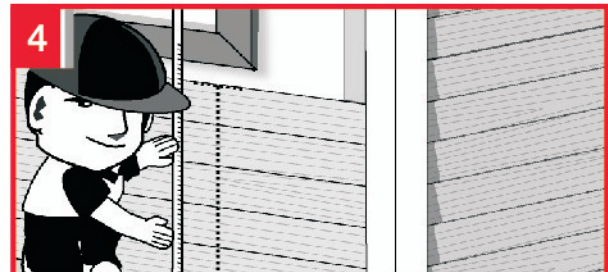
In case of Steel Joist, install the SCG SmartWOOD Wood Plank by SCG Self Drilling Wing Screw 28.5 mm. with flange at 1.5 cm. distance from upper edge.



3

1.5 cm.

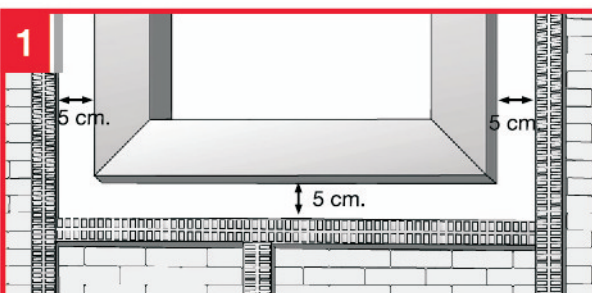
In case of Timber Joist, and SCG C74 Galvanized Joist, install the SCG SmartWOOD Wood Plank by SCG Needle Point Screw 23 mm. at 1.5 cm. distance from upper edge.



4

Check the level to be well matched every 5 planks.

Installation of SCG SmartWOOD Wood Plank in the area of door-window frame



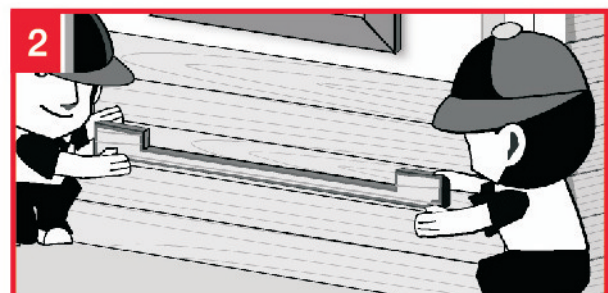
1

5 cm.

5 cm.

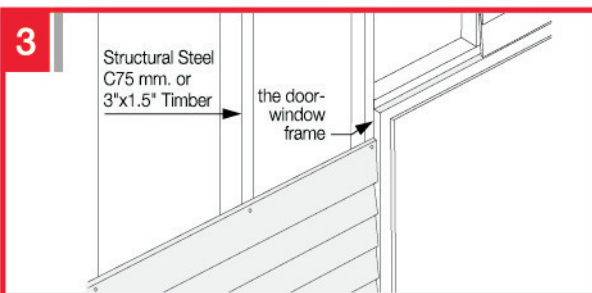
5 cm.

Place the joist at 5 cm. distance from the frame of door-window in order to fix the edge of SCG SmartWOOD Wood Plank to the edge of door-window frame.



2

For installation to the lower corner of frame, cut the panel of SCG SmartWOOD Wood Plank to be well matched with corner.



3

Structural Steel
C75 mm. or
3"x1.5" Timber

the door-
window
frame

In the jointing area of frame, install the SCG SmartWOOD Wood Plank to be perfectly adjoined to the door-window frame.



4

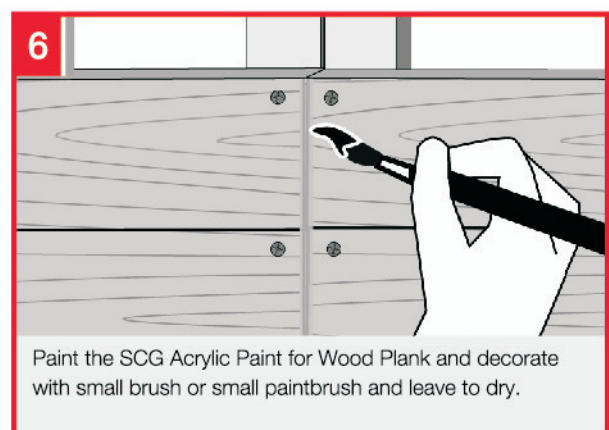
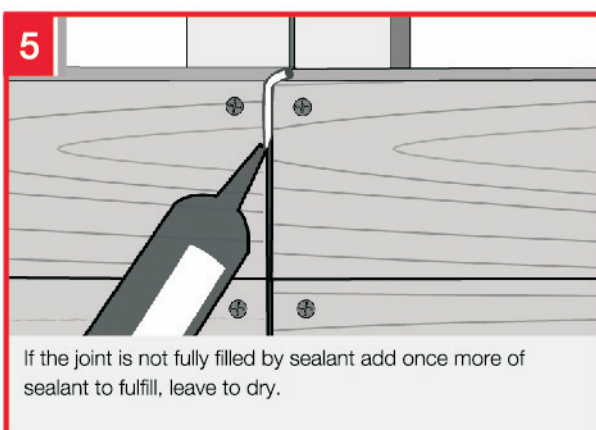
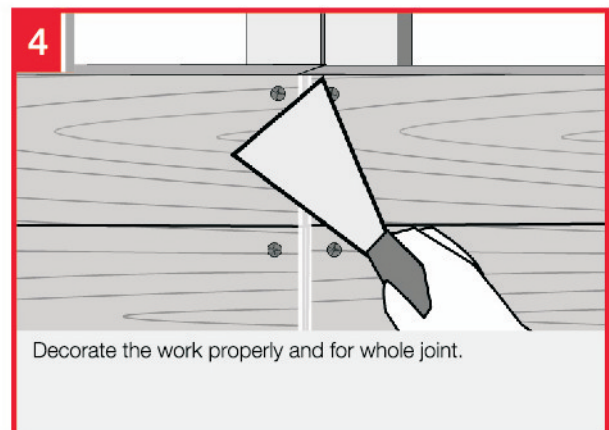
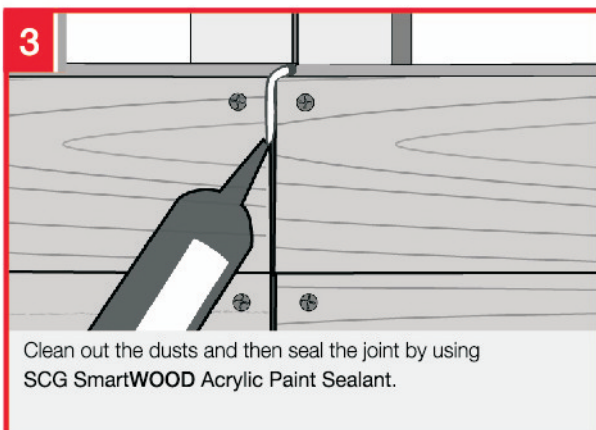
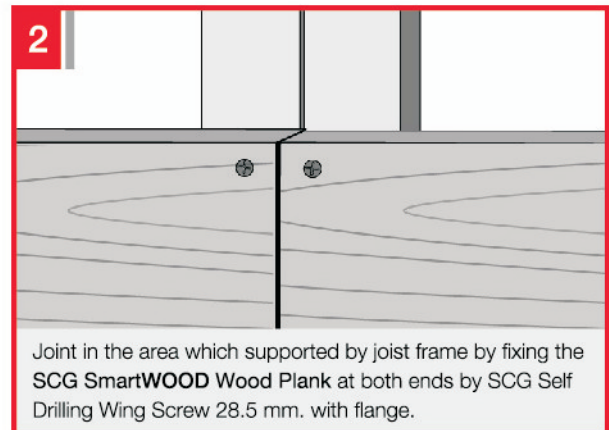
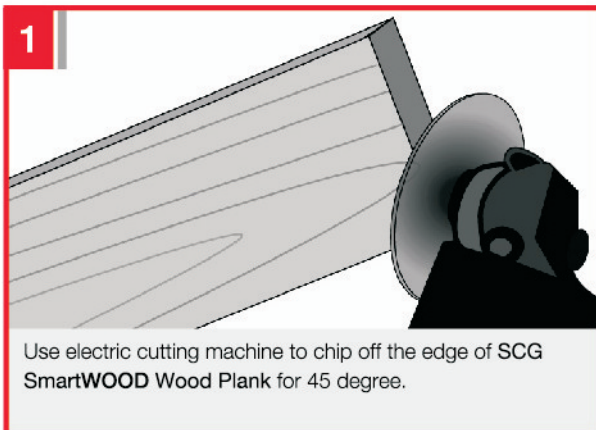
Seal the joint between door-window frame and SCG SmartWOOD Wood Plank by using the SCG SmartWOOD Acrylic Paint Sealant.

2.4 Lengthening and joint sealing

Method No. 1 Lengthening of the SCG SmartWOOD Wood Plank by cutting 45 degree shall be done in the area to which joist frame is supporting and cut into 45 degree with 3 mm. width groove, then fixed by SCG Self Drilling Wing Screw 28.5 mm. with flange. Seal the joint by using SCG SmartWOOD Acrylic Paint Sealant, then cover by color painting for better appearance.

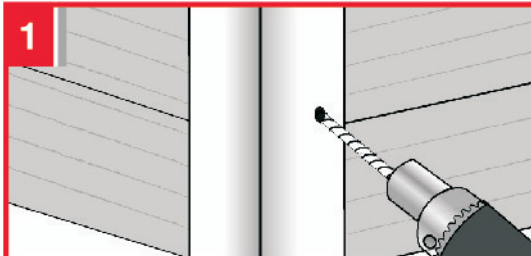
Method No. 2 Lengthening of the SCG SmartWOOD Wood Plank without cutting 45 degree shall be done by leaving the spacing between joints for about 5 mm., then seal the joint by using SCG SmartWOOD Acrylic Paint Sealant.

Methods for jointing and sealing of the joints between SCG SmartWOOD Wood Plank

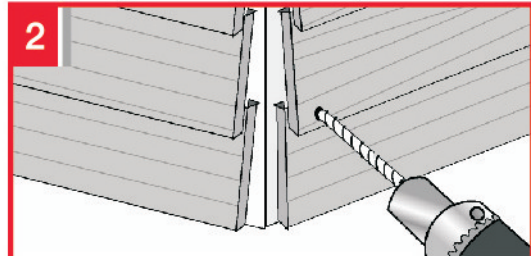


2.5 Installation of SCG Cement Corner Post

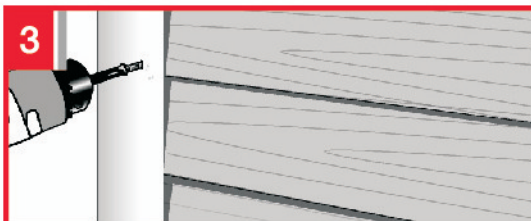
o Installation of SCG Outer Corner Post Cement



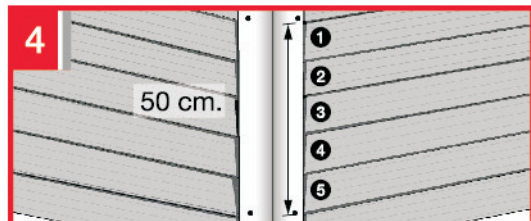
Use drilling machine to make drill hole through the SCG Outer Corner Post Cement at 2 cm. from edge, and at 1 cm. from lower edge of SCG SmartWOOD Wood Plank.



Use drilling machine to make drill hole through SCG SmartWOOD Wood Plank at the position which drilled previously by using 7 mm. Concrete penetration drill.

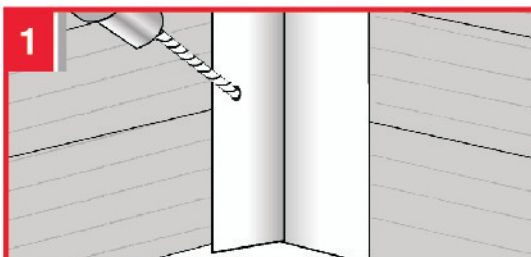


Embed SCG Plastic Insert 37 mm. on SCG SmartWOOD Wood Plank. Install SCG Outer Corner Post Cement by using SCG Needle Point Screw 38 mm.

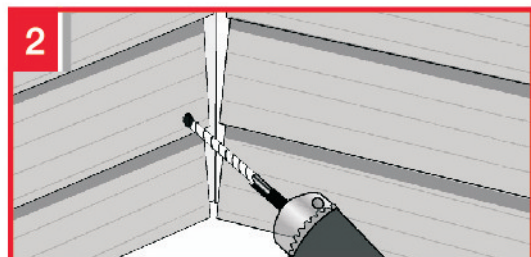


Fix with SCG Needle Point Screw 38 mm. at both ends at 2 cm. distance from the edge and at 1 cm. from lower edge of plank. Each point shall be at about 50 cm. spacing or about every 5 planks of SCG SmartWOOD Wood Plank.

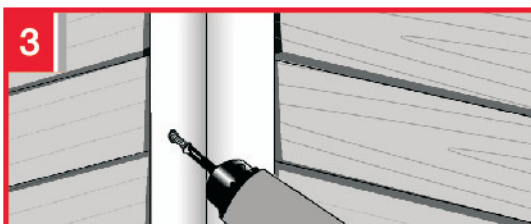
o Installation of SCG Inner Corner Post Cement



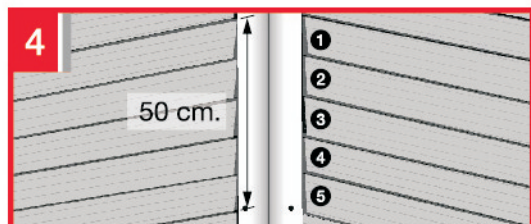
Use drilling machine to make drill hole through the SCG Inner Corner Post Cement at 2 cm. from edge, and at 1 cm. from lower edge of SCG SmartWOOD Wood Plank.



Use drilling machine to make drill hole through SCG SmartWOOD Wood Plank at the position which drilled previously by using 7 mm. Concrete penetration drill.



Embed SCG Plastic Insert 37 mm. on SCG SmartWOOD Wood Plank. Install SCG Inner Corner Post Cement by using SCG Needle Point Screw 38 mm.



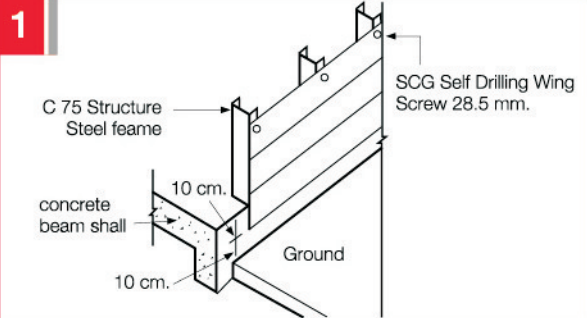
Fix with SCG Needle Point Screw 38 mm. at both ends at 2 cm. distance from the edge and at 1 cm. from lower edge of plank. Each point shall be at about 50 cm. spacing or about every 5 planks of SCG SmartWOOD Wood Plank.

i Recommendation

- Installation of SCG Inner Corner Post Cement shall be carried out after complete the installation of SCG SmartWOOD Wood Plank without 45 degree cutting of the Board.
- Make color painting on the SCG Corner Post Cement by using the SCG Acrylic Floor Paint for Floor Fiber Cement. However, prior doing that apply prime coating on existing surface to make better appearance to the wall.

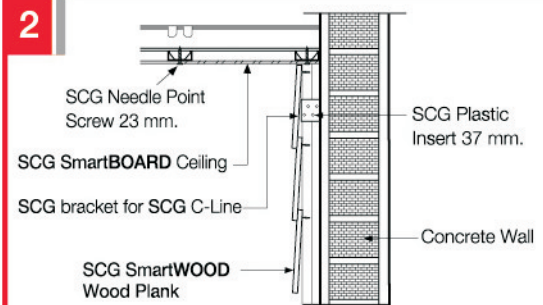
2.6 Installation of SCG SmartWOOD in the moistened area and ceiling area

Installation of Plank in the moistened area



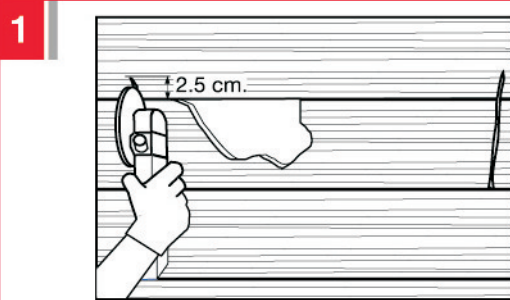
For external SCG SmartWOOD Wood Plank which is close to the ground level, the level of concrete beam shall be lifted up for at least 20 cm. and install SCG SmartWOOD Wood Plank at 10 cm. lower from beam level.

Installation of Plank in the area jointing to ceiling

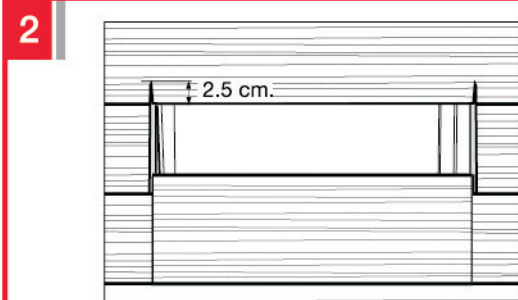


In case that SCG SmartWOOD Wood Plank is jointed to the Smartboard Ceiling Complete the Installation of SCG SmartBOARD Ceiling prior to install SCG SmartWOOD Wood Plank to be jointed to the SCG SmartBOARD Ceiling.

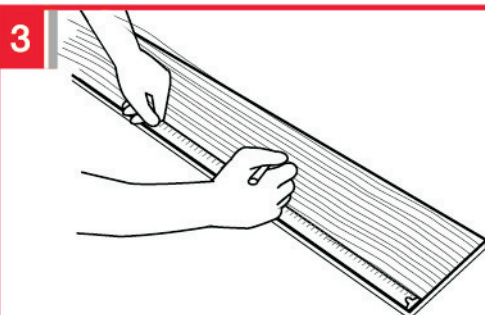
2.7 Reparation of broken panel of SCG SmartWOOD Wood Plank



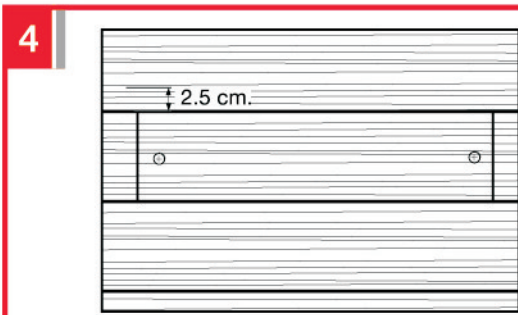
Cut the SCG SmartWOOD Wood Plank which is broken or damaged from the whole span of Joist frame by cutting to overlapping plank in another 2.5 cm. in order to take out the whole broken plank.



Add the frame by SCG SmartBOARD C74 Galvanize Frame fixed with the lower part frame which is broken.



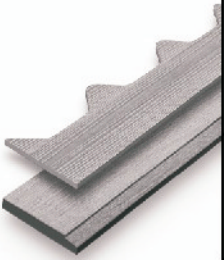
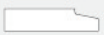
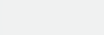
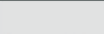
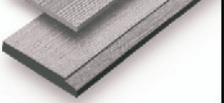
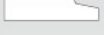



Measure the size then cut the SCG SmartWOOD Wood Plank for desired size.



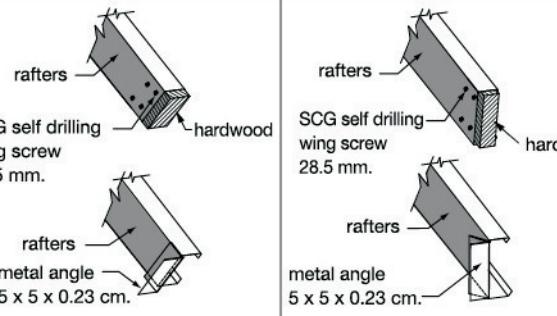
Install the SCG SmartWOOD Wood Plank to SCG SmartBOARD C74 Galvanize Frame which added. Seal the joint following the Installation Manual Page 7 furnish nails head following the Manual Page 19.

3

Installation of SCG SmartWOOD Fascia Board/ SCG SmartWOOD Eaves Filler

	Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
	Fascia Board	10 cm. (4")	1.6	400	Teak texture	1-side tapered	Primer		9.3	0.25 pcs./m.
		15 cm. (6")	1.6	400	Teak texture	1-side tapered	Primer/Golden teak		14.2	0.25 pcs./m.
		20 cm. (8")	1.6	400	Teak texture	1-side tapered	Primer/Golden teak		19.0	0.25 pcs./m.
	Fascia Board Smooth surface	15 cm. (6")	1.6	300	Smooth surface	1-side tapered	Cream Primer		10.1	0.33 pcs./m.
		20 cm. (8")	1.6	300	Smooth surface	1-side tapered	Cream Primer		13.5	0.33 pcs./m.
	Eaves Filler	15 cm. (6")	0.8	300	Teak texture	-	Primer/ Golden teak		4.1	0.33 pcs./m.

1



rafters
SCG self drilling wing screw 28.5 mm.
hardwood

rafters
SCG self drilling wing screw 28.5 mm.
hardwood

rafters
metal angle 5 x 5 x 0.23 cm.

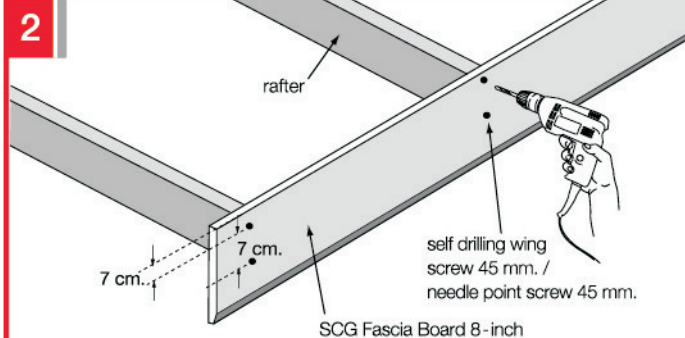
rafters
metal angle 5 x 5 x 0.23 cm.

● right angle rafter

● vertically rafter

Install 50 cm. length of timber piece to the edge of rafter and fixed by SCG Self Drilling Wing Screw 28.5 mm. with flange. In another mean, use angle installed perpendicularly to the rafter alignment (left Figure) or installed vertically with the rafter alignment (right Figure).

2



rafter

self drilling wing screw 45 mm. / needle point screw 45 mm.

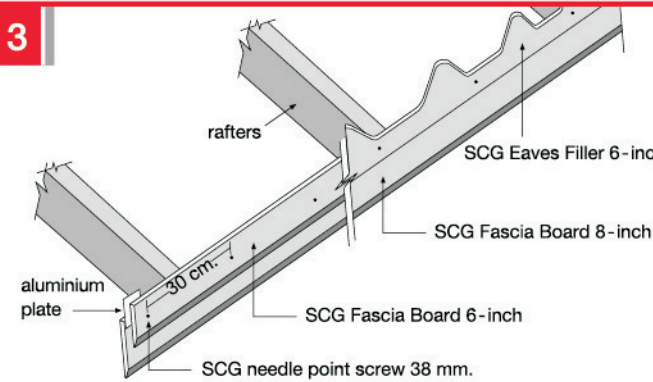
7 cm.

7 cm.

SCG Fascia Board 8-inch

In case that angle is used for covering the end of rafter, install the SCG SmartWOOD Fascia Board of 8" width fixed by two of Self Drilling Screw 45 mm. with flange at each point. In case that the hard-wood is used for covering the end of rafter, use 45 mm. sharp-end screws instead.

3



rafters

SCG Eaves Filler 6-inch

SCG Fascia Board 8-inch

aluminium plate

30 cm.

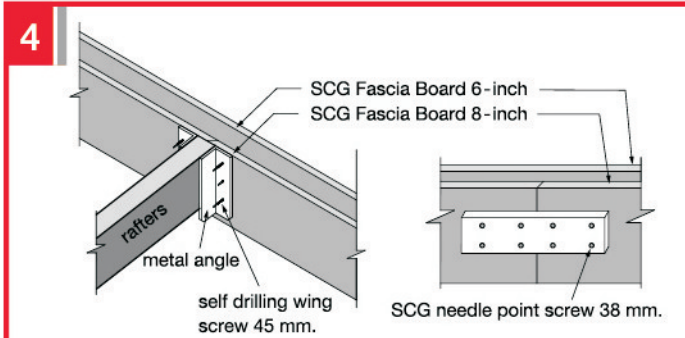
SCG Fascia Board 6-inch

SCG needle point screw 38 mm.

Install the SCG SmartWOOD Fascia Board of 6" width or SCG SmartWOOD Eaves Filler by overlapping with 8" width and fixed by one of Self Drilling Screw 45 mm. to the angle. Fix the SCG SmartWOOD Fascia Board of 6" width to the board of 8" width at every 30 cm. distance by SCG Needle Point Screw 38 mm. and insert 10 x 5 cm. Aluminum plate between eaves for every fixing.

* In case that the hard-wood is used for covering the end of rafter, fixed by 45 mm. sharp-end screws.

4



SCG Fascia Board 6-inch

SCG Fascia Board 8-inch

rafters

metal angle

self drilling wing screw 45 mm.

SCG needle point screw 38 mm.


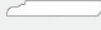
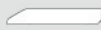

● Board at the rafters

● Board between the rafters

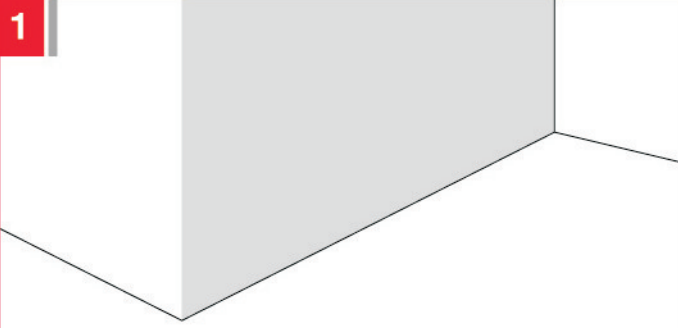
In case of lapping of SCG SmartWOOD Fascia Board at the rafter, add another angle at rafter and fixed by Self Drilling Screw 45 mm. In case of lapping of SCG SmartWOOD Fascia Board between the rafters, use 3" width and 30 cm. length of timber piece to dovetail at the backside of joint and fixed by four of SCG Needle Point Screw 38 mm. at each side. In case that the lapping is made at gable board, use the SCG SmartWOOD Fascia Board of 4" width to cover the 6" width board following the Methods No. 2-4.

4

Installation of SCG SmartWOOD Skirt Board

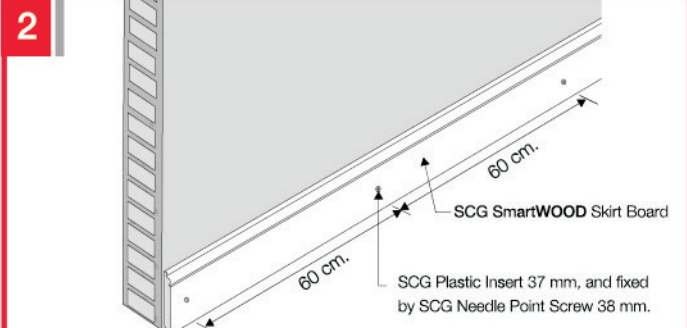
	Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
	Skirt Board	10 cm. (4")	1.2	300	Smooth surface	1-side Skirt Board edge	Primer		5.0	0.33 pcs./m.
	Skirt Board Modern	7.5 cm. (3")	1.2	300	Smooth surface	1-side tapered	Primer		4.0	0.33 pcs./m.
		10 cm. (4")	1.2	300	Smooth surface	1-side tapered	Primer		5.4	0.33 pcs./m.

1



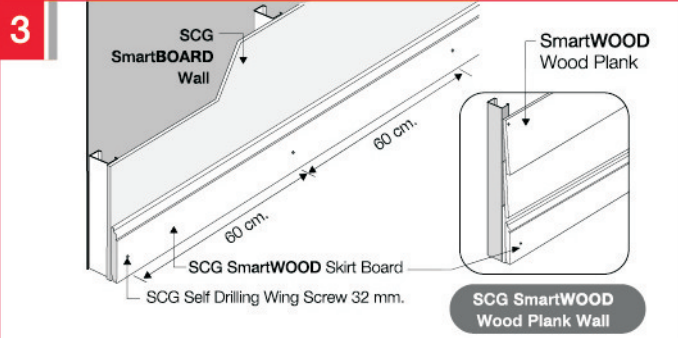
Inspect the orderliness of the area and wall to be installed. Those and wall shall be already finished from cement or painting work.

2



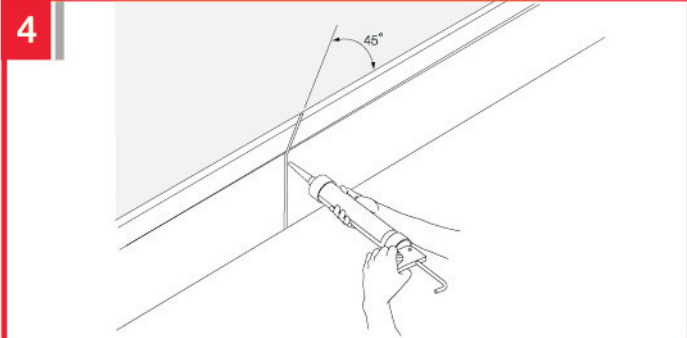
Install the SCG SmartWOOD Skirt Board by embedding SCG Plastic Insert 37 mm., and fixed by SCG Needle Point Screw 38 mm. or hitting by 2" nails for concrete for every 60 cm. at the center of plank.

3



For the light wall, it shall be fixed by SCG Self Drilling Wing Screw 32 mm. with flange at every 60 cm. spacing of joist frame. On the back side, it shall be painted by Fiber cement-purpose Epoxy or with Ayara Tile Fixing Glue at the center for every 30 cm. **in case that the wall is made from SCG SmartWOOD Wood Plank**, install the lowest plank to be perpendicular to the floor without any support at edge.

4



Lapping of the SCG SmartWOOD Skirt Board shall be done by cutting 45 degree and sealed by SCG SmartWOOD Joint sealant and then paint it over again for by Acrylic color.

i Recommendation • Refer the decoration method of screws head and painting from Pages 18-19.

5 Installation of SCG SmartWOOD Fence Plank / Shading Plank

Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
Fence Plank	7.5 cm. (3")	1.2	400	Teak texture	Squared edge	Primer		5.4	3.33 pcs./sq.m.
	7.5 cm. (3")	1.6	400	Teak texture	Squared edge	Primer		7.3	3.33 pcs./sq.m.
	10 cm. (4")	1.2	400	Teak texture	Squared edge	Primer		7.3	2.50 pcs./sq.m.
	10 cm. (4")	1.6	400	Teak texture	Squared edge	Primer		9.7	2.50 pcs./sq.m.
	10 cm. (4")	1.6	400	2 side Burr wood texture	Squared edge	Cream Primer		9.7	2.50 pcs./sq.m.
	15 cm. (6")	1.2	400	Teak texture	Squared edge	Primer		10.9	1.67 pcs./sq.m.
Shading Plank	7.5 cm. (3")	1.2	300	Smooth surface	Squared edge	Primer		4.1	4.44 pcs./sq.m.
	10 cm. (4")	1.2	300	Smooth surface	Squared edge	Primer		5.5	3.33 pcs./sq.m.

Installation of Fence on Joist frame

1

Spacing between joist frames shall be about 40 - 50 cm.

Preparation of Joist frame, in case of timber frame, use 1.5" x 3" timber. In case of steel frame, use C75 Structural Steel or 1.5" x 3" box tube with 2.3 mm. thickness. Spacing between joist frames shall be about 40 - 50 cm.

2

For Steel Joist frame, install the SCG SmartWOOD Fence Plank or Shading Plank by using SCG Self Drilling Wing Screw 32 mm. or SCG Needle Point Screw 38 mm. Position of screws fixing shall be at center of plank or use nuts and bolts for fixing.

Installation of Sunshine Protection Curtain

1

Use the steel box tube to make as column with 50 cm. spacing and use 2.5x2.5x10 cm. angle at 45 degree inclination to fix on the side of steel tube by SCG Self Drilling Screw 13 mm. with flange. Allow the angle to be extruded for about 5 cm. and make 6 cm. spacing between each plank.

2

Install the SCG SmartWOOD Fence Plank or Shading Plank by using 32 mm. SCG drill-end Screw with flange. Allow the end of plank to be extruded from end of angle for 2.5 cm.

Caution

Do not use SCG SmartWOOD Fence Plank / SCG SmartWOOD Shading Plank as the fall prevention fences or any part of structure which will directly withstand the load.

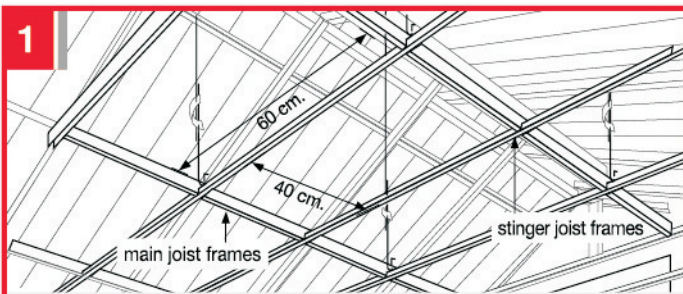
Recommendation

Refer the decoration method of screws head and painting from Pages 18-19.

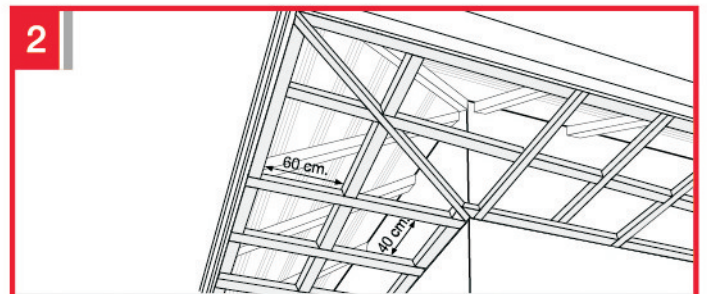
6

Installation of SCG SmartWOOD Eaves Liner

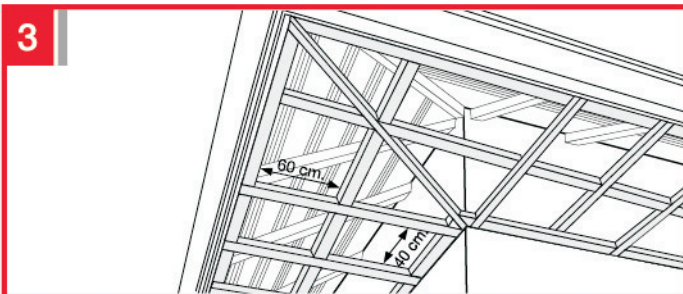
Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
Eaves liner	7.5 cm. (3")	0.8	300	Smooth surface	2-side tapered	Uncolor/ Brown Oak		2.7	4.44 pcs./sq.m.
	10 cm. (4")	0.8	300	Smooth surface	2-side tapered	Uncolor		3.6	3.33 pcs./sq.m.
Eaves liner	10 cm. (4")	0.8	300	Smooth surface	squared edge	Uncolor		3.6	3.33 pcs./sq.m.
Eaves liner Wood Grain	7.5 cm. (3")	0.8	300	Deep wood texture	squared edge	Uncolor		2.7	4.44 pcs./sq.m.



1 For installation of Joist frame, **in case of using zinc-coated steel frame** (C-Line) use 1" width, No. 24. Spacing between main joist frames shall not more than 60 cm. while stinger joist frames shall be about 40 cm.



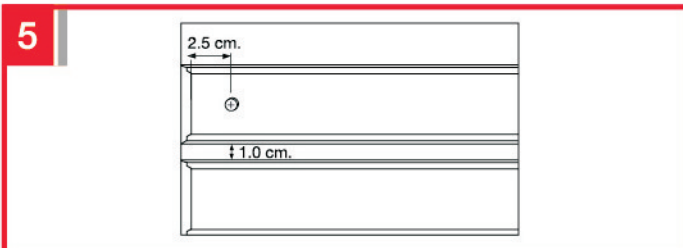
2 For installation of Joist frame, **in case of using timber frame**, use hard wood, which already been oven dried and prevent the termite by chemical essence with size 1.5"x3" size. Spacing between main joist frames shall not more than 6 cm. while stinger joist frames shall be about 40 cm.



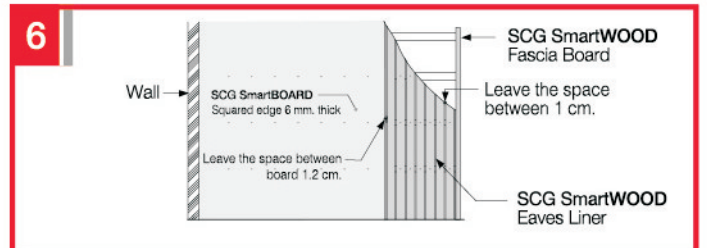
3 For installation of Joist frame, **in case of using steel frame**, the material shall be 1.2-3.2 mm. thickness and already coated by corrosion protective paint. Spacing between main joist frames shall not more than 6 cm. while stinger joist frames shall be about 40 cm.



4 Prior to installation of SCG SmartWOOD Eaves Liner, the insect or animal protection net shall be installed.



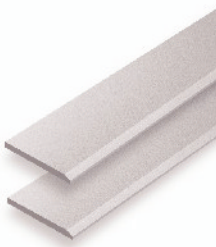

5 Install the SCG SmartWOOD Eaves Liner with 1 cm. spacing between each stick or as required. **In case of using timber frame, or zinc-coated steel frame**, use SCG Needle Point Screw 23 mm. to fix. **In case of using steel frame**, use SCG Self Drilling Wing Screw 28.5 mm. with flange to fix, at least 2.5 cm. from edge of board. **In case of using SCG SmartWOOD Eaves Liner** with 4" width, fixed by two Screws at each point.



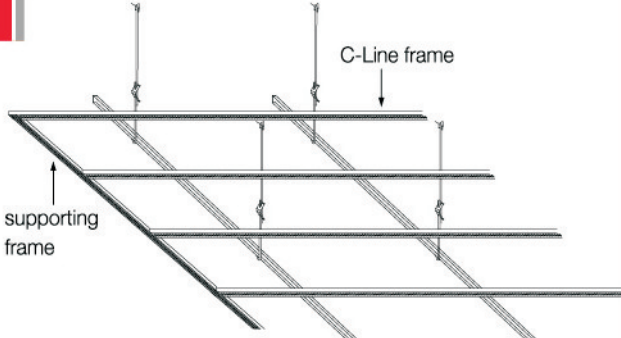
6 For using of SCG SmartWOOD Eaves Liner to make ceiling together with SCG SmartBOARD shall leave 1 cm. joint for better appearance.

- Caution** Do not use SCG SmartWOOD Eaves Liner as the fall prevention fences or terrace guardrail, or any part of structure which will directly withstand the load.
- Recommendation** Refer the decoration method of screws head and painting from Pages 18-19.

7 Installation of SCG SmartWOOD Ceiling Border

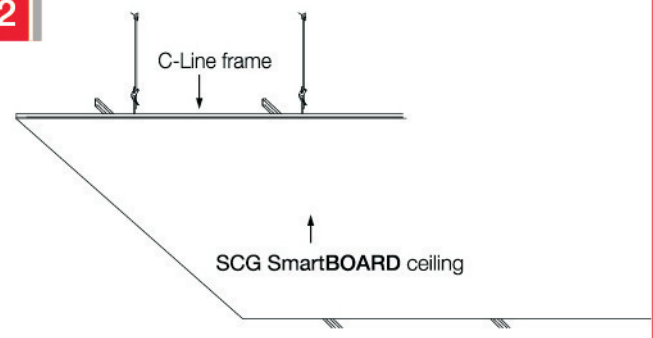
	Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
	Ceiling Border	5 cm. (2")	0.8	300	Smooth surface	1-side tapered	Uncolor		1.73	0.33 pcs./m.

1



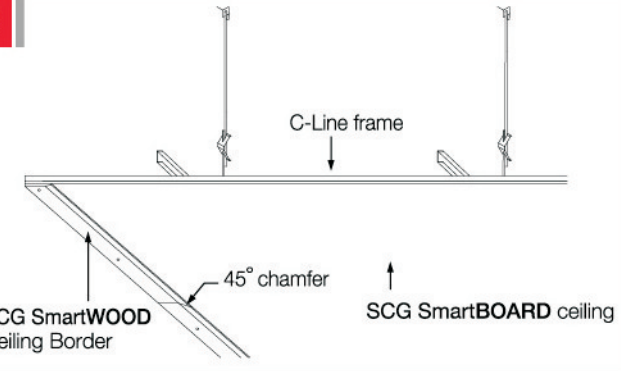
Preparation of the Joist frame, **in case of timber frame** use 1.5" x 3" timber stick, **in case of steel frame**, use C75 structural steel or 1.5" x 3" steel box tube with 2.3 mm. thickness, with 40 cm. spacing between the frames.

2



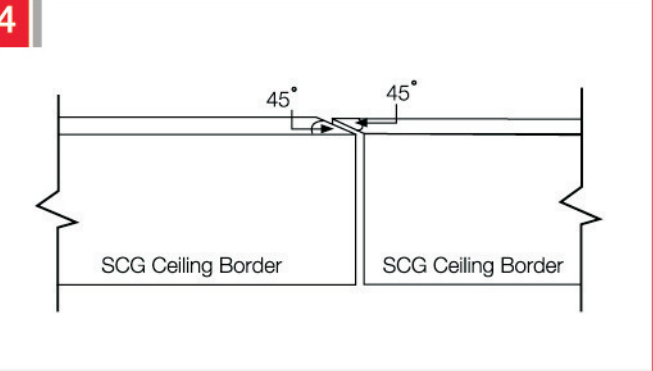
Install the **SCG SmartBOARD** ceiling or Gypsum ceiling properly, as in accordance to installation standard.

3



Install the **SCG SmartWOOD** Ceiling Border to the C-Line frame which fixed by SCG Needle Point Screw 23 mm. ***In case that the structural steel frame** is used, fixed by SCG Self Drilling Wing Screw 28.5 mm., **in case that Gypsum ceiling** is used, fixed by SCG Needle Point Screw 38 mm.





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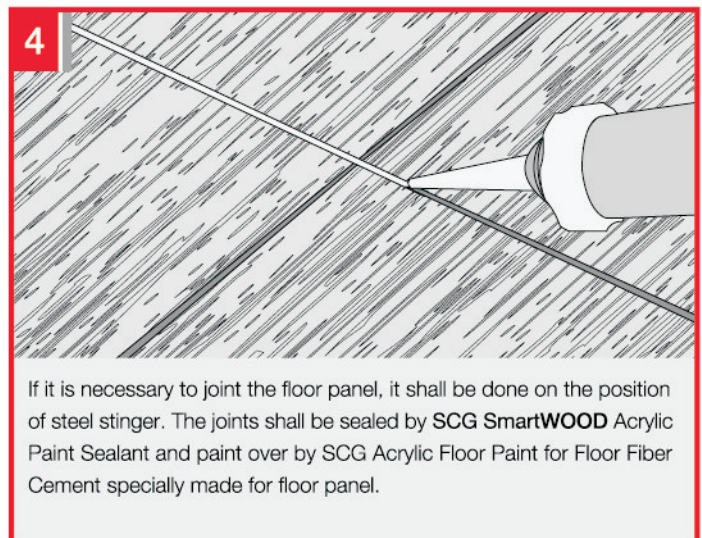
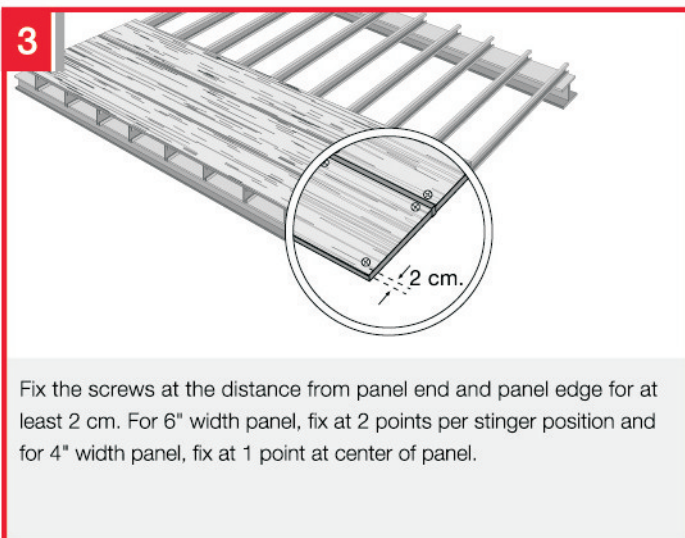
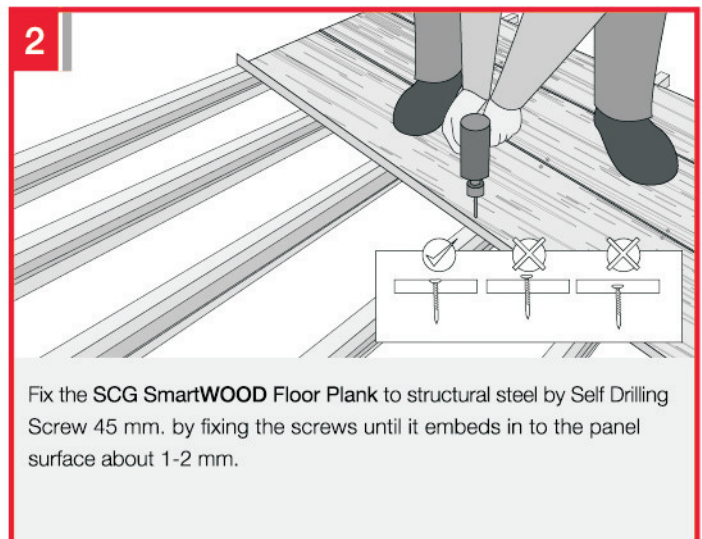
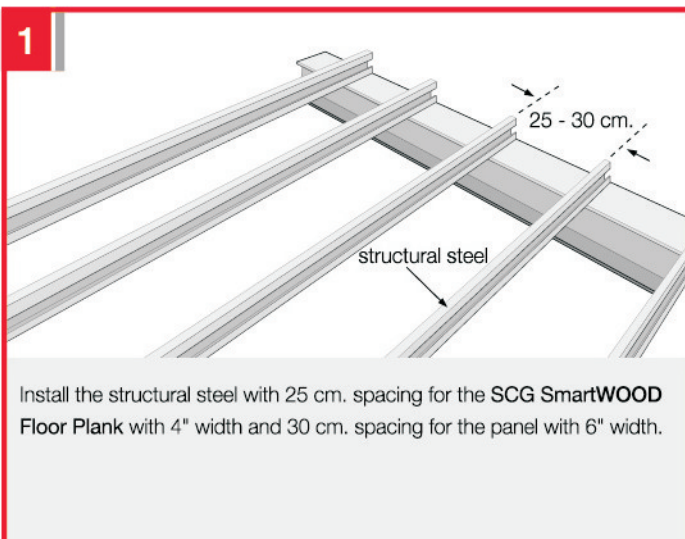
Joint between the Skirts shall be cut 45 degree for better appearance.

- Caution** • Do not use **SCG SmartWOOD** Ceiling Border as the fall prevention fences or terrace guardrail, or any part of structure which will directly withstand the load.
- Recommendation** • Refer the decoration method of screws head and painting from Pages 18-19.

8 Installation of SCG SmartWOOD Floor Plank

	Products name	width (cm.)	thickness (cm.)	length (cm.)	surface	edges	color/model	section	weight kg./pcs.	usage quantity
	Floor Plank	10 cm. (4")	25	300	Burr wood texture	Squared edge	Cream Primer		11.3	3.33 pcs./m.
		15 cm. (6")	25	300	Burr wood texture	Squared edge	Cream Primer		16.9	2.22 pcs./m.
		20 cm. (8")	25	300	Burr wood texture	Squared edge	Cream Primer		22.6	1.67 pcs./m.

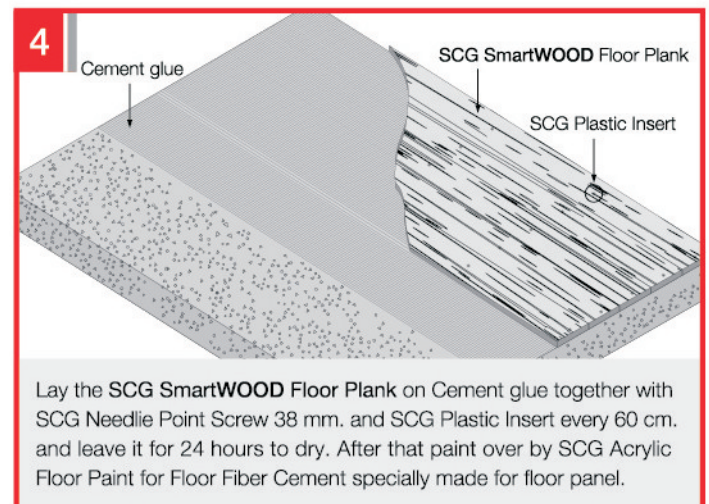
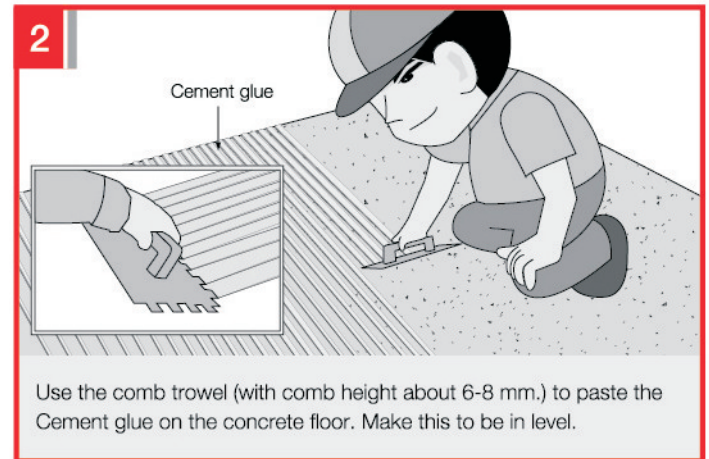
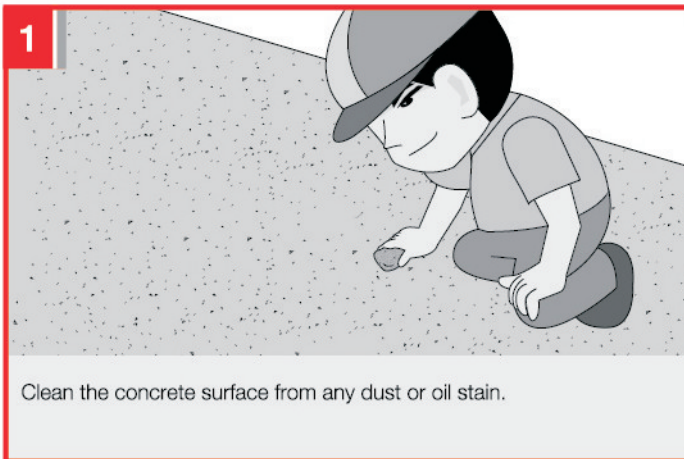
Installation on the Structural steel



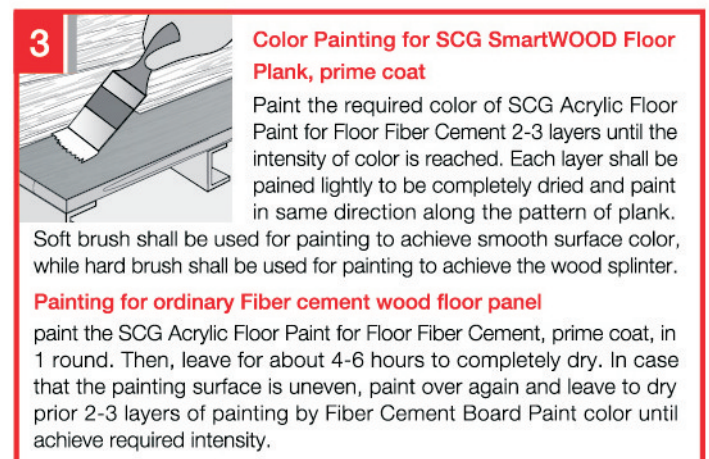
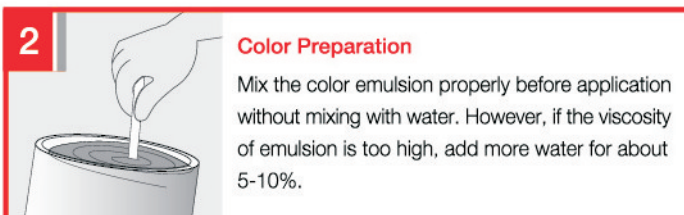
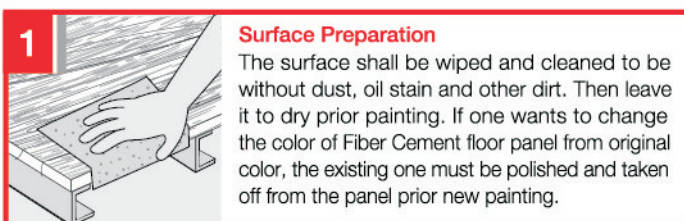
- Caution**
- Do not use as any building's structure or other purposes. The installation shall follow the Installation Manual and use only the standard equipments made by producer
 - Do not eat
 - Avoid the smelling
 - Do not Install SCG SmartWood as floor higher than 50 cm.
 - Do not use in wet area.

8 Installation of SCG SmartWOOD Floor Plank

Installation on the Concrete floor



9 Painting Method for Fiber Cement Floor with SCG Acrylic Paint



Remark

- 1 Color Can shall be used for painting in 50-60 sq.m. in 1 round
- Duration for touchable dry 20-30 minutes for paint over again 1-2 hours for real application 4-6 hours.

10 Painting Method for Fiber Cement Products with SCG Acrylic Paint

In case that the user want to make colors of other plank to be greasy as coated by the urethane (except the SCG SmartWOOD Floor Plank), use the SCG Acrylic Floor Paint for Floor Fiber Cement

1

Surface Preparation

the surface shall be wiped and cleaned without dust, oil stain and other dirt. Then leave it to dry prior painting. If one wants to change the color of Fiber Cement floor plank from original color, the existing one must be polished and taken off from the pane prior new painting.



2

Color Preparation

Mix the color emulsion properly before application without mixing with water. However, if the viscosity of emulsion is too high, add more water for about 5-10%.



3

Painting of Prime Coat

Paint the SCG Acrylic Paint for Fiber Cement prime coat 1 round, leave for about 4-6 hours to be completely dried. In case that the painted surface is not uniform, paint over again and leave to be completely dry before applying painting over.



4

Applying Painting Over

Paint the required color of SCG Acrylic Paint for Fiber Cement 1-3 layers until the intensity of color is reached. Each layer shall be painted lightly to be completely dry and paint in same direction along the pattern of plank. Soft brush shall be used for painting to achieve smooth surface color, while hard brush shall be used for painting to achieve the wood splinter.



11 Painting method for SCG SmartWOOD

SCG SmartWOOD is already coated by acrylic emulsion which produced by modernized color spraying system. The products then can be used immediately without requiring another painting. However, in case there is necessary to paint in order to change color shades, repair the plank or use the SCG SmartWOOD of the model which can be changed the color as preferred such as Cement Model or Primer Coat Model. The using of those products shall perform by following recommendations.

Painting of SCG SmartWOOD (Cement Color Model)

- 1 Clean the surface by clean water, leave until completely dry.
- 2 Paint the Primer Coat for old cement at least 1 time.
- 3 Paint by SCG Acrylic Paint for Wood Plank, the SCG Acrylic Paint for Eaves Liner in oak brown, or 100% Acrylic emulsion. In case the user may require the surface of product to be glossy, then shall chose the Semi-Gloss type of Acrylic emulsion by paint at least twice until the required intensity is reached.

Painting of SCG SmartWOOD (Primer Coat Model)

- 1 Ensure that the surface is in dry condition without dust or stain.
- 2 Paint by SCG Acrylic Paint for Wood Plank or 100% Acrylic emulsion without painting any prime coat. In case the user may require the surface of product to be glossy, then shall chose the Semi-Gloss type of Acrylic emulsion by paint at least twice until the required intensity is reached.

Painting of SCG SmartWOOD, Classic color group (ivory, sky blue, red oak)

Flora color group (silky rose) and SCG SmartWOOD Eaves Liner, oak brown color

In case that require new color painting

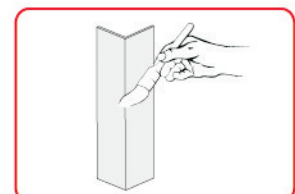
- 1 Clean the surface properly to avoid dust or stain.
- 2 Painted by SCG Acrylic Paint for Wood Plank at least twice until the required intensity is reached.

Painting of SCG SmartWOOD, Natural wood color group (golden teak, walnut and red maka)

The SCG SmartWOOD of this color group has been coated by high-quality of Acrylic emulsion by special spraying differently from other groups. As a result, it is not recommended to paint the color again for whole panel, since aesthetic pattern can be lost. However, if there is necessary for reparation, particular repair is suggested by paint layer by layer while leaving each layer to dry out before painting another layer. Then paint color for at least twice until the required intensity is reached.

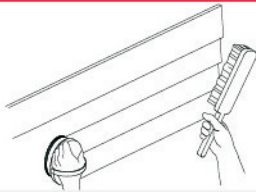
Painting of SCG Corner Post Cement

- 1 Clean the surface by clean water, leave until completely dry.
- 2 Paint the Prime Coat for old cement at least 1 time.
- 3 Paint by SCG Acrylic Paint for Wood Plank or 100% Acrylic emulsion by paint at least twice until the required intensity is reached.



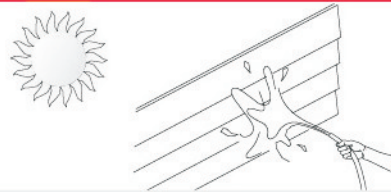
12 Reparation of SCG SmartWOOD

1



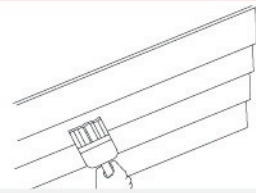
Completely polish damaged original surface off by using bronze/steel wire brush,

2



Clean the surface by clean water, leave until completely dry.

3



Paint the Prime Coat for old cement at least 1 time, leave until dry.

4



Paint by SCG Acrylic Paint for Wood Plank, or 100% Acrylic emulsion by paint at least twice until the required intensity is reached.

13 Coloring for decoration and reparation of SCG SmartWOOD

SCG Acrylic Paint for Wood Plank



- Use for painting over nailing mark or plank jointing.
- It's 100% acrylic, beautiful and shiny. It's body remains just the same as the original SCG SmartWOOD substitute.
- 1 kg./bucket Every type of tree grain color available in SCG Wood Plank

SCG Acrylic Paint for Fiber Cement (WOOD STAIN)



- For painting fibercement substitute wood in general, such has Wood Plank, Eaves Liner, Fence Plank. Gives a glossy look, as if painted with urethane with a natural look, sunlight-resistant, rain-resistant. Good for both exterior and interior.
- 100% water-based, clear acrylic. Also, available in primer and three colors.
- 3.785 l., 3.6 kg./bucket

SCG Acrylic Paint for Eaves Liner in oak brown



- Paint doors or spaces between slats SCG Wood, especially oke brown. With slats, apply primer first on the old surface before applying your chosen color.
- Use 100% water-based acrylic for attractiveness and shine.
- Use 1 kg./bucket

SCG Acrylic Paint for Fiber Cement Floor (WOOD STAIN)

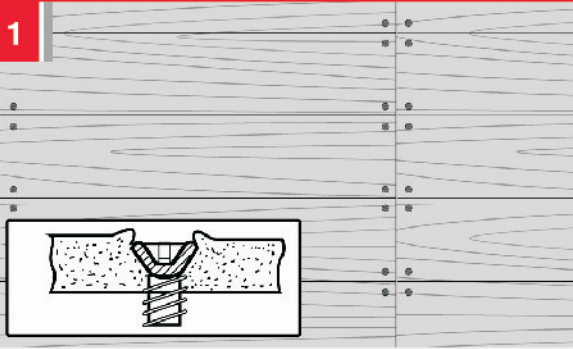
- Painting the fibercement wood will give it a glossy look like urethane with a natural, scuff-proof finish, sunlight-resistant, rain-resistant, better footing than alternatives.
- 100% water-based acrylic. Two choices : matt and gloss.
- 3.785 l., 3.6 kg./bucket

14 Special technique of SCG SmartWOOD installation

Decoration of Screw's head

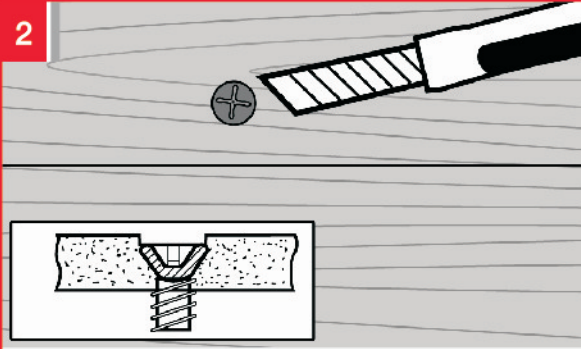
Methods for Decoration of Screw's head

1



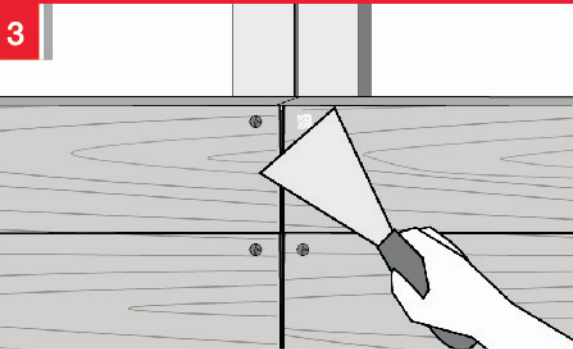
Fix the products by SCG Self Drilling Screw by making the screw head to be embedded into the matrix of SCG SmartWOOD for about 1-2 mm.

2



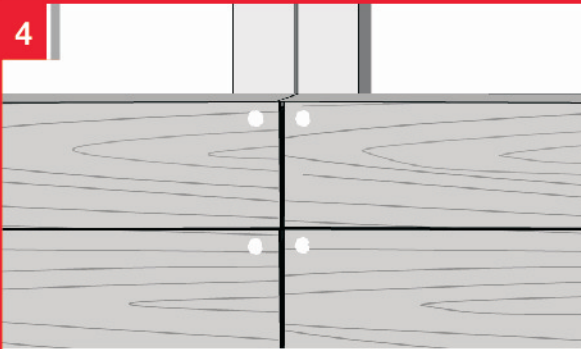
Decorate the edge by cutter neatly.

3



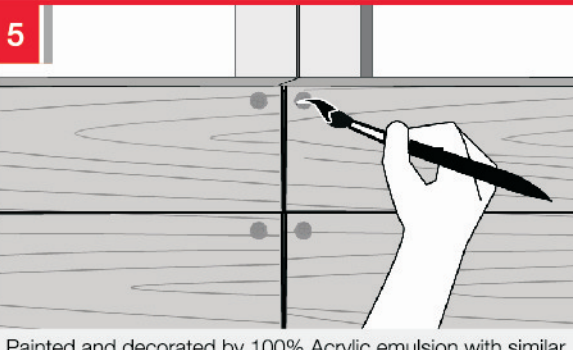
Seal some defect or hole by SCG SmartWOOD Acrylic Paint Sealant.

4




Leave it to dry for about 1 hour, in room temperature.

5



Painted and decorated by 100% Acrylic emulsion with similar color of product, SCG Acrylic Paint for Wood Plank by using small paintbrush. Apply only light amount of color in order to allow the color of each layer to dry until the color is harmonized to the color of SCG SmartWOOD Wood Plank.


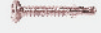







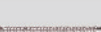
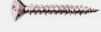
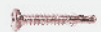


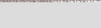
6



Leave it to dry in room temperature.

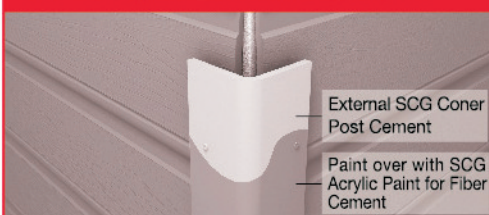
Recommendation • Refer the Method for painting in Page 17

15 Selection of fixing equipment and joists frame for SCG SmartWOOD

Product	Application Area	Accessory	Packaging Size
Wood Plank	Interior	SCG Needle Point Screw 23 mm. 	500 pcs./box
	Exterior	SCG Self Drilling Wing Screw 28.5 mm. 	250 pcs./box
	Brick Walls or old Concrete walls	<ul style="list-style-type: none"> • SCG C-Line  • SCG Bracket  • SCG Needle Point Screw 38 mm. with SCG Plastic Insert 37 mm.  • SCG Self Drilling Screw 13 mm.  	1 strip 60 pcs./pack 250 pcs./box 250 pcs./box 500 pcs./box
Fascia Board/Eave Filler	Fascia	SCG Self Drilling Wing Screw 28.5 mm. 	250 pcs./box
		SCG Needle Point Screw 38 mm. 	250 pcs./box
		2.5 inch Screw 	Available in typical store.
		Self Drilling Screw 45 mm. 	Available in typical store.
Eaves Liner/Ceiling Border	Interior and Exterior	SCG Needle Point Screw 23 mm. 	500 pcs./box
		SCG Self Drilling Wing Screw 28.5 mm. 	250 pcs./box
Skirt Board	Interior and Exterior	SCG Needle Point Screw 38 mm. with SCG Plastic Insert 37 mm. 	250 pcs./box 250 pcs./box
Fence Plank/Shading Plank	Interior and Exterior	SCG Self Drilling Wing Screw 32 mm. 	500 pcs./box
Floor Plank	Interior and Exterior	Self Drilling Screw 45 mm. 	Available in typical store.

Accessory equipment for installation of SCG SmartWOOD

1 External SCG Coner Post Cement



External SCG Coner Post Cement
Paint over with SCG Acrylic Paint for Fiber Cement

- Used for enclose joint between outer corner after installing lattices at 45-degree angles.
- 3 meter length / piece

2 Internal SCG Coner Post Cement



Internal SCG Coner Post Cement
Paint over with SCG Acrylic Paint for Fiber Cement

- Used for enclose joint between inner corner after installing lattices at 45-degree angles.
- 3 meter length / piece

3 SCG SmartWOOD Acrylic Paint Sealant



Paint over with SCG Acrylic Paint for Fiber Cement

Seal the jointing area with SCG SmartWOOD Acrylic Paint Sealant

- Use any glue for any kind of substitute wood and inset nail heads to avoid subsidence.
- Heat-resistant, adaptable for both exterior and interior.
- Fill 310 ml./tube

4 Figure showing installation of SCG SmartWOOD Wood Plank to the brick wall



SCG C-Line

SCG Self Drilling Screw 13 mm.

SCG Bracket

SCG Needle Point Screw 38 mm.

SCG Plastic Insert 37 mm.

SCG SmartWOOD Installation Instruction

Caution

- Do not use as structure of any building, nor use in other purposes. Users must strictly follow either installation manual, or equipment which are only in accordance with the Standards of Producer.
-  Do not eat  avoid the smelling.
- Do not use as floor which installed higher than 50 cm. or more from ground level. • Do not use in the areas that are always wet and moistening.

Attention

- SCG SmartWOOD Product is designed and its application is specified to suit work condition in Thailand only. Application in other countries is considered as direct responsibility of the Designer, Construction Supervisor, and Installer.
- Painting products are containing the chemical substances. Do not eat or allow any contact with eye.
- During use, standardized Personal Protection Equipment shall be used. After finish the work, close the containers tightly and keep out of children.
- If feel irritated after have skin contact, wash with clean water for several times, and immediately see the doctor.
- If swallow or eat, do not make the patient vomit but drink lot of clean water in order to make the chemical substance diluted. Then, immediately see the doctor.
- Specifications for installation are only the fundamental recommendation for general operation. Correct method of installation and structures to be used shall consider from the Standard of Structural Steel Building E.I.T. 1015-40, and Specification for Design of the Ministry Regulation Vol. 6 (1884), which announced in the Act of Building Control 1979.

For Designer

- Any Properties specified in this document are the average values from Testing of Product which followed the specified standards, by sampling from the Products during the period before distribution only.
- Specifications for installation are only the fundamental recommendation for residential houses, or any building which is not higher than 23 m. only. For any other buildings, or buildings with higher risk shall consider the wind load for design of structures and fixing methods as well. If it is necessary to calculate while lack of certified document from reliable institute, the unit wind load following Item 17 of the Ministry Regulation Vol. 6 (1884), which announced in the Act of Building Control 1979.
- Application of products which are not in the application purposes shown in this Installation Manual shall be direct responsibility of Designer, and Construction Supervisor.

For Installer and User

- Specifications for installation are only the fundamental recommendation for general operation. Correct method of installation and structures to be used shall consider from the Standard of Structural Steel Building E.I.T. 1015-40, and Specification for Design of the Ministry Regulation Vol. 6 (1884), which announced in the Act of Building Control 1979.
- In any case that the users require applying the Product for uses in other purposes which are not specified in this Installation Manual, consult with Architect and Engineer.

Recommendation for Safety Operation

- The SCG SmartWOOD Products compose of the silica. Cutting, grinding, drilling, or polishing of the products may cause the distributing dust. If those are accidentally eaten or inhaled to human body in considerable amount and over a long period, this may case danger to human body and the respiratory system.
- Cutting, grinding, drilling, or polishing of the products shall be carried out in well ventilated area. Avoid using the machine for cutting, grinding, drilling, or polishing of the products that may cause high amount of dust.
- Do not work during bad climates such as, during storm, or raining, or on the wetting roof.
- Always wear Personal Protection Equipment which is in accordance to the Standards, such as dust mark, safety goggle, clothes, hand glove, safety shoes.
- Any person who does not wear the Personal Protection Equipment which is in accordance to the Standards, or any unauthorized person who does not involve to the work must not go near to the working area, in order to avoid dangerous circumstance which may occur.
- Lifting or transportation of products shall be performed with special attention. It is prohibited to bow oneself for lifting. Do not twist the body or change direction during lifting. Moreover, avoid long period of continuous work in order to prevent injury or fatigue.
- Every time of lifting, ones must lower their body and hold the product firmly, then apply strength from their legs in order to lift up.
- For cleaning the working area after complete the works of cutting, grinding, drilling, or polishing of the products, use vacuum machine and seal the dust containing bag tightly, or use the cleaning liquid. Do not sweep the dust since it can make dust spread out.
- Separate and collect the debris of material resulted from installation, reparation, dismantling of products with special attention. Then those shall be disposed by corrective means in accordance to the sanitary regulations specified by the government.
- Clean the body using clean water after Cutting, grinding, drilling, or polishing of the products.

First Aid

- If the dust or any material debris accidentally enters the eye, do not rub or scrub. Clean with pure water several times, and immediately see the doctor.

Verify that all methods are following the most update of Installation Manual of Products

- Installation Manual of Products is always updated. The designer, construction supervisor, and installer shall verify that all methods being used are following the most update of Installation Manual of Products. They can confirm by the website : www.siamfibrecement.com