WALL CLADDING INSTALLATION INSTRUCTIONS

(Wooden joist horizontal installation)



Key points:

Please read this wall cladding installation instructions carefully before the wall cladding construction and installation.

Caution:

The installation diagrams and instructions described in this guide are for installation purposes only. Any use of Honorwood product profiles must comply with relevant local laws, regulations and building codes. The user assumes all risks and responsibilities associated with such use.

Installation using tools:

Standard woodworking tools, such as chainsaws (desktop and portable), impact drills, hand drills, etc. Our common saw blades are diamond saw blades.

Installation work protection:

Operators should be safety conscious, use safe and qualified construction equipment and wear appropriate protective tools, such as cut-resistant gloves, dust masks, etc.

Profile application structure:

HONORWOOD product profiles cannot be used alone for other load-bearing structures such as beams and columns, and must be used in conjunction with some of the profiles available for load-bearing structures.

Construction and installation drawings:

Before using Honorwood product profiles, the corresponding drawings should be made according to the site to ensure the reasonable matching and dimensional accuracy of the profiles, as well as to reduce unnecessary material loss and labor idleness during construction.

Product storage environment:

Honorwood products must be stacked on a flat, level hardened ground, and avoid direct contact between the product and the ground and long-term in a wet, waterlogged area. To reduce the deformation caused by the product, etc.

Product environmental adaptation:

Honorwood products in the local installation before construction, need to be stored in the local environment for 48 hours to stabilize the product thermal expansion and contraction before use, in order to avoid the large temperature difference between the two places caused by the accuracy of the paving.

Plate installation basis:

The Honorwood wall cladding installation cannot be fixed directly on the substrate surface, joist is needed to ensure that the rain water inside the wall cladding drains smoothly and stays dry. The distance between the wall cladding and the substrate surface is 50 mm.

Caution:

Honorwood wall cladding when you need to use the nail fixed, must first play a good pre-drilled holes, pre-drilled holes can not be smaller than the screw rod diameter of more than 1 mm. Open nail parts from all the edges of the wall cladding must not be less than 10 mm.

Wood plastic products surface temperature and product thermal expansion coefficient, i.e., length of the guide parameters of the stay seam (mm) table

Product length	Installation Temperature of the product surface /°C				Applicable to ambient temperatures, resulting in plate temperatures between -10~60°C Between, allowable deviation ±5°C										
(m)	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60
0.5	1.5	1.3	1.3	1.2	1.1	0.9	8.0	0.8	0.7	0.5	0.4	0.3	0.3	0.1	0.0
1	2.9	2.8	2.5	2.4	2.1	1.9	1.7	1.5	1.3	1.1	0.8	0.7	0.4	0.3	0.0
1.5	4.5	4.1	3.8	3.4	3.2	2.9	2.5	2.2	1.9	1.6	1.3	0.9	0.7	0.3	0.0
2	5.9	5.5	5.0	4.6	4.2	3.8	3.4	2.9	2.5	2.1	1.7	1.3	8.0	0.4	0.0
2.5	7.4	6.8	6.3	5.8	5.3	4.7	4.2	3.7	3.2	2.6	2.1	1.6	1.1	0.5	0.0
3	8.8	8.2	7.6	7.0	6.3	5.7	5.0	4.5	3.8	3.2	2.5	1.9	1.3	0.7	0.0
3.5	10.3	9.6	8.8	8.1	7.4	6.6	5.9	5.1	4.5	3.7	2.9	2.2	1.5	0.8	0.0
4	11.8	10.9	10.1	9.2	8.4	7.6	6.7	5.9	5.0	4.2	3.4	2.5	1.7	0.8	0.0
4.5	13.3	12.3	11.3	10.4	9.5	8.5	7.6	6.6	5.7	4.7	3.8	2.9	1.9	0.9	0.0
5	14.7	13.7	12.6	11.6	10.5	9.5	8.4	7.4	6.3	5.3	4.2	3.2	2.1	1.1	0.0
5.5	16.2	15.0	13.9	12.7	11.6	10.4	9.2	8.1	7.0	5.8	4.6	3.4	2.4	1.2	0.0
6	17.6	16.4	15.1	13.9	12.6	11.3	10.1	8.8	7.6	6.3	5.0	3.8	2.5	1.3	0.0

Additional Notes:

- 1. The above table, calculated based on the linear expansion coefficient of the material tested by a third party, is a reference guide of approximately 0.042mm of expansion or contraction of the length of the sheet per 1 meter of sheet, for every 1°C rise or fall.
- 2. The temperature in the above table refers specifically to the surface temperature of the product (sheet), not the ambient temperature. It is recommended to use a handheld "infrared thermometer" to measure it. The above table of "stay seam" parameter refers to the lengthwise, straight line distance between two product (sheet) ends.
- 3. Products (plates) that require direct screw fixing in individual areas must be pre-drilled and then screwed.
- 4. Connection parts for fixing wall claddings, one part fixing cannot be bigger than 2 wall claddings.
- 5. If there is more than one wall claddings laid in the length direction of the wall claddings, the wall claddings joints are sealed with HLYC-013F edging version, and the wall claddings is reserved with a gap in the HLYC-013F groove, with the gap referring to the thermal linear expansion coefficient.
- 6. Case in point:
 - Such as the selection of 3.5m / root of the plate installation, the installation of the plate surface temperature measured at 16 $^{\circ}$ C, and the local year-round climate characteristics, the highest temperature of the assessment of the plate 60 $^{\circ}$ C (allowed ± 5 $^{\circ}$ C); such cases, from the above table can be found, the installation, the length of the plate direction, adjacent ports, should be reserved for 5.9-6.6 mm spacing.
- 7. Special climate reference: the above table only lists the highest to the product (plate) surface temperature of 60 (±5 °C), basically can be universal most of the use of the environment. If the actual environment is more special, reasonable installation joints can be made according to the guideline of "for every 1 meter of sheet, the length of the sheet expands or contracts by about 0.042mm for every 1°C rise or fall".
- 8. General description: The linear expansion coefficient of our profile (plate), in line with the requirements of European standards, American standards, and this coefficient guide the installation of seam. But the linear expansion coefficient is only for the profile (plate) is not installed fixed free state, temperature on the length of the profile (plate) shrinkage and expansion, and can not cover all the actual use of environmental elements. In response, I hereby add: If the user has a reasonable installation case of WPC products with HDPE as the main raw material, and there is no quality risk caused by shrinkage and expansion after long-term verification, and the installation case is different from the above comparison table provided by our company, in this case, the user can follow his own, has been verified to comply with the local environment of the "reasonable installation of seam solution".

Wall cladding profile table

Product Name	Model	Material Diagram		Specification(mm)	Uses	
Wall cladding HLYC-017B		Wood Plastic	La La	168*24	Wall Decoration	
Positive corner edge board	HIV(-015E			98.5*98.5	External corner decoration	
U-shaped edge board	HLYC-016F	Wood Plastic		68.5*39	Interior corner decoration	
I-shape edge board	HLYC-013F	Wood Plastic		89*38.5	Patchwork decoration	
F-Shaped edge board	HLYC-014F	Wood Plastic		88.5*66	Finishing decoration	
Decorative board HLSC-022E		Wood Plastic		18*184	Window and door decoration	

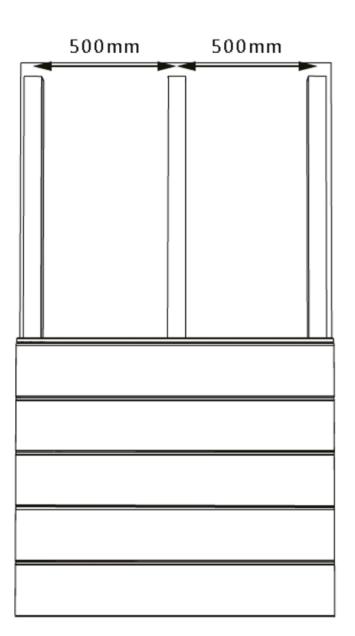
Wall cladding accessories table

A		B# - 4 2 - 1	D'anna	0		
Accessory Name	Model	Material	Diagram	Specification(mm)	Uses	
Connecting accessories	9 IUI DM_ INN / D		Jo Ja	40*37.22*16.7	Wall cladding start and connection fittings	
Wall plate pads 1	HLPP-052 (C)	Rubber		40*20*24.5	The gap between the cut wall cladding and the joist support	
Wall plate pads 2	HLPP-053 (C)	Rubber	0	Ф 20*17	The gap between the cut wall cladding and the joist support	
Flat head screws	HLPM-099 (B)	304 stainless steel	- vonnumm	M5-65	This screw is used for the middle screw hole of the fitting	
Flat head screws	HLPM-098 (B)	304 stainless steel	. Trimming	M4-45	This screw is used to fix the fitting in the side screw holes and rubber pad points	
Colored screws	HLPM-097 (B)	304 stainless steel	· herennum-	M5-48	This screw is used for HLYC-015, FHLYC-016F, HLYC-014F	
Colored screws	HLPM-096 (B)	304 stainless steel	Dimminin-	M5-65	This screw is used for wall plate, HLYC-016F fixing	

Caution:

- 1. If you need to use other materials that are not in the accessory list during construction, please consult the product installation after-sales staff in advance.
- 2. All edge boards and wall cladding fixed with open nails must be pre-drilled first, and then installed with screws. Screw center spacing is not more than 400mm. When the length of edge board and wall board is less than 400mm, the screws should be fixed with no less than 2 pieces.

Diagram of joist installation

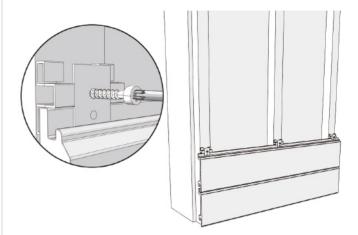


Horizontal arrangement

Caution:

- 1. To ensure effective drainage and ventilation at the wall cladding and wall base level, the thickness of the joist must not be less than 50 mm, and this set of installation instructions uses a thickness of 50 mm as an example.
- 2. The distance between joist centers shall not be greater than 500 mm.

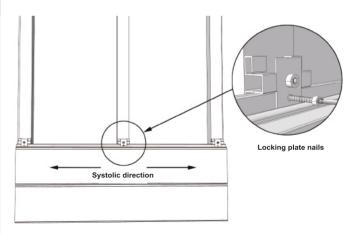
Accessory installation schematic



Accessory installation schematic

Caution:

- Fittings must be arranged one for each joist, and the spacing in the direction of the length of the fixed wall cladding must not be greater than 500 mm / piece.
- 2. Accessories to fix the wall cladding, each wall cladding must have a locking nail, locking nail position according to the actual plate thermal expansion and contraction to determine, generally in the middle of the length of the wall cladding. As shown in the figure below:



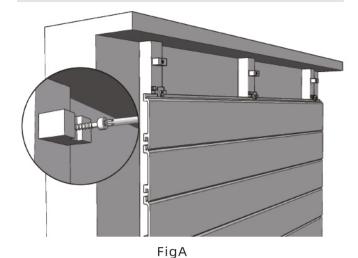
Locking plate nail thermal expansion and contraction diagram

Caution:

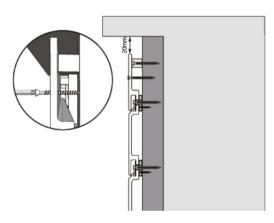
If the length of the wall cladding exceeds the length of a single panel, the intermediate connection is recommended to use I-shape edge board

Schematic diagram of the installation of wall cladding after cutting

1. Secure HLPP-052 (C) with screw mounting. As shown in Figure A:

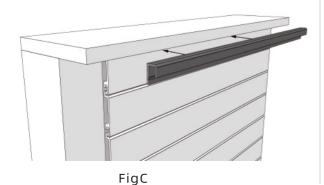


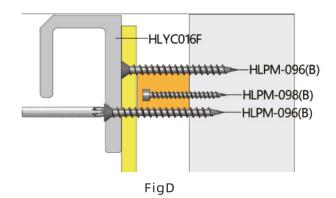
2. After cutting the wall cladding according to the actual size, install the wall cladding. As shown in Figure



FigB

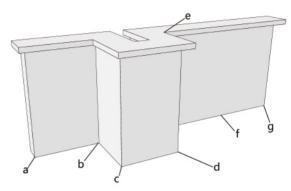
3. install the top HLYC-016F. as shown in Figure C and Figure D:





Installation joist of wall cladding

Schematic of the base level of the wall cladding installation.



Schematic diagram of the base layer

Caution:

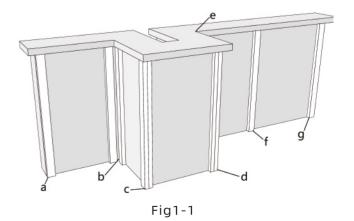
The levelness of the base layer for wall cladding installation must be flat.

Keel installation

1. Install the joist. As shown in Figure 1-1:

Caution:

The joist is installed to the bottom of the gable.



1. Install the middle joist according to the joist center distance not more than 500 mm requirement. As shown in Figure 1-2:

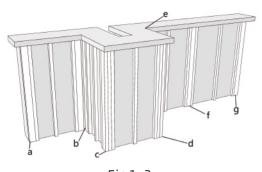


Fig1-2

HLYC-016F Installation

1. Install HLYC-016F from the internal corner of the wall at node b. As shown in Figures 2-1 and 2-2:

Caution:

- 1. Determine the size, HLYC-016F side from the joist edge distance of 32.5 mm. See Figure 2-2 for details.
- 2. Refer to the second note in the lower part of the accessory form.

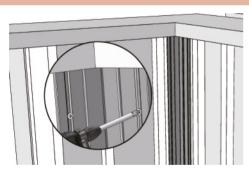


Fig2-1

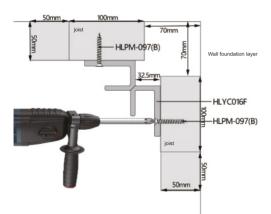


Fig2-2

Wall panel accessories installation

1. Fix wall cladding fittings on each joist. As shown in Figure 3:

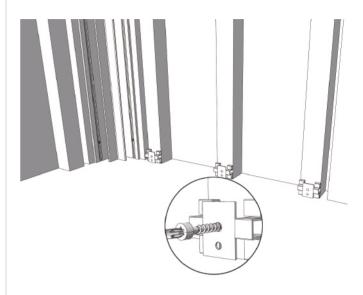


Fig3

Wall cladding installation

1. Snap the wall cladding into the HLYC-016F recess and slide it downward to snap onto the wall cladding fitting. As shown in Figure 4-1:

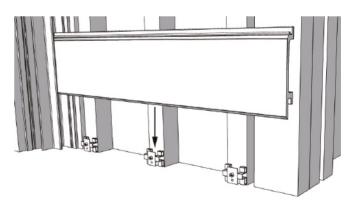


Fig4-1

2. Install the wall cladding connection fittings and fix the locking plate nails at the fittings in the middle of the wall cladding length. As shown in Figure 4-2 and Figure 4-3:

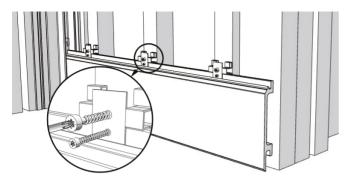


Fig4-2

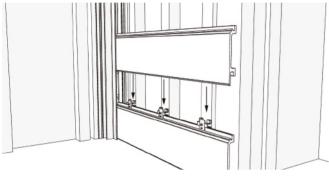


Fig4-3

3. Follow step 2 and install to the top position

HLYC-015F Installation

1. Install the c-node, snap HLYC-015F into the installed wall cladding, and fix the screws after drilling pre-drilled holes in the HLYC-015F screw fixing recess on the other side. As shown in Figures 5-1 and 5-2:



Fig5-1

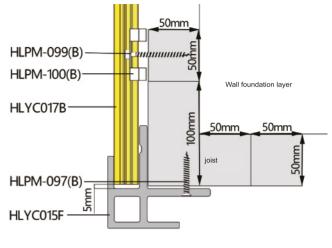


Fig5-2

Wall cladding installation

1. Snap the wall cladding into the HLYC-015F recess and slide it downward to snap onto the wall cladding fitting. As shown in Figures 6-1 and 6-2:

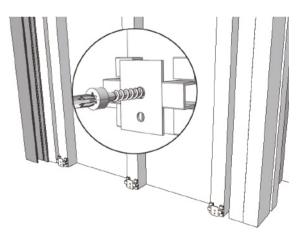


Fig6-1

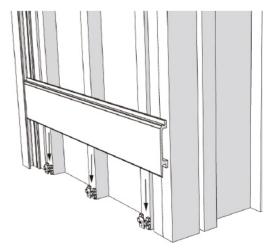


Fig6-2

2. Install the wall cladding connection fittings and fix the locking plate nails in the fittings in the middle of the wall plate length. As shown in Figure 6-3:

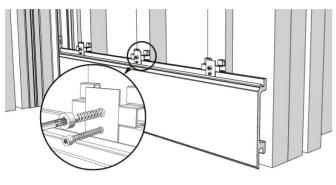


Fig6-3

3. Follow step 2 and install to the top position

HLYC-015F Installation

1. Install the d-node, snap HLYC-015F into the installed wall plate, and fix the screws after drilling pre-drilled holes in the HLYC-015F screw fixing recess on the other side. As shown in Figures 7-1 and 7-2:



Fig7-1

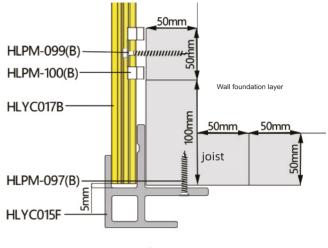


Fig7-2

HLYC-016F Installation

1. Install the HLYC-016F to position e. As shown in Figures 8-1 and 8-2:

Caution:

- 1. Install HLYC-016F after determining the gap (32.5 mm) with the other side of the joist. See Figure 8-2 for details.
- 2. Please let the top of HLYC-016F leave a height gap of one cladding to facilitate the installation of the wall cladding after it is stuck in here when there is a cornice and then slide down.

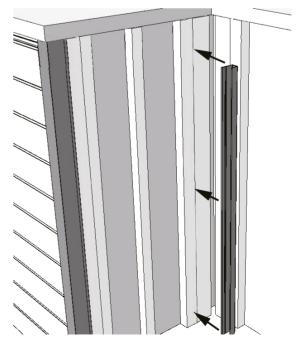
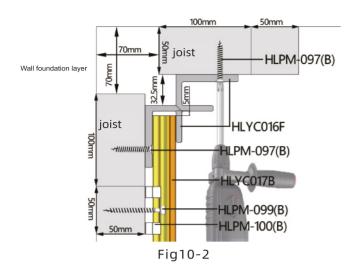
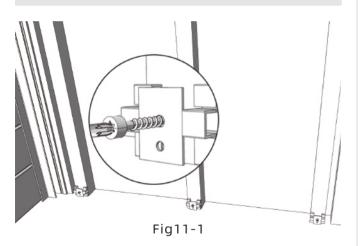


Fig8-1

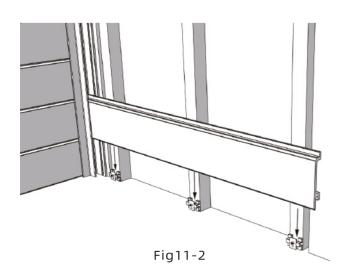


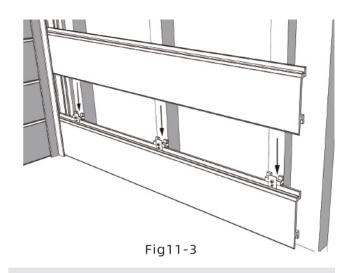
Installation of wall cladding

1. Install the wall cladding accessories. As shown in Figure 11-1:



2. Snap the wall plate into the HLYC-016F recess and slide it downward to snap onto the wall plate fitting. As shown in Figure 11-2 and Figure 11-3:





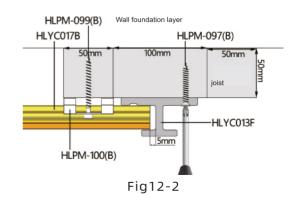
3. Follow step 2 and install to the top position

Installation of HLYC-013F

1. To install f-node, snap HLYC-013F into the installed wall plate and pre-drill the holes in the screw recess on the other side of HLYC-013F before fixing the screws. As shown in Figures 12-1 and 12-2:



Fig12-1



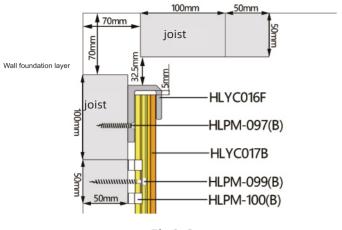


Fig8-2

Wall cladding installation

1. Install the wall cladding accessories first. As shown in Figure 9-1:

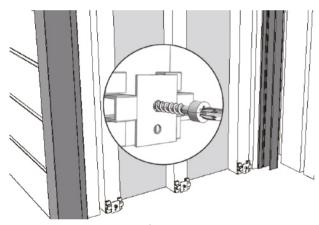


Fig9-1

2. Snap the wall plate into HLYC-015F and HLYC-016F then slide it down to the fitting. As shown in Figure 9-2:

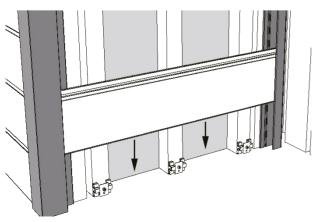


Fig9-2

3. Follow the steps to complete to the second last board. Schematic diagram of the topmost board instal lation. As shown in Figure 9-3:

Caution:

Snap the top remaining HLYC-016F to the top wall plate. Then snap the other side of the wall plate into the HLYC-015F recess, and then slide the whole thing down to snap into the wall plate fitting.

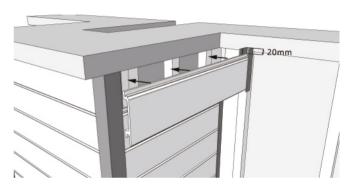


Fig9-3

The other side HLYC-016F installation

1. Near the installed HLYC-016F after the screw fixing recess in the pre-drilled hole after fixing the screw. As shown in Figure 10-1 and 10-2:

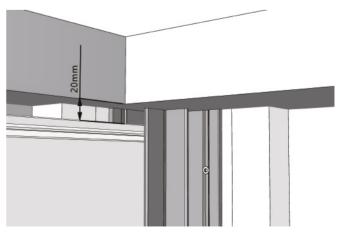
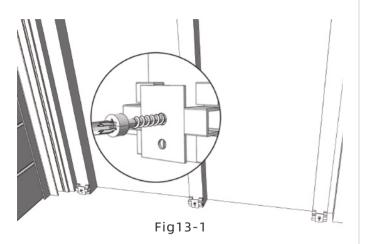


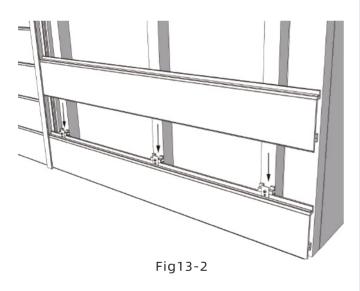
Fig10-1

Installation of wall cladding

1. Install the wall cladding accessories. As shown in Figure 13-1:



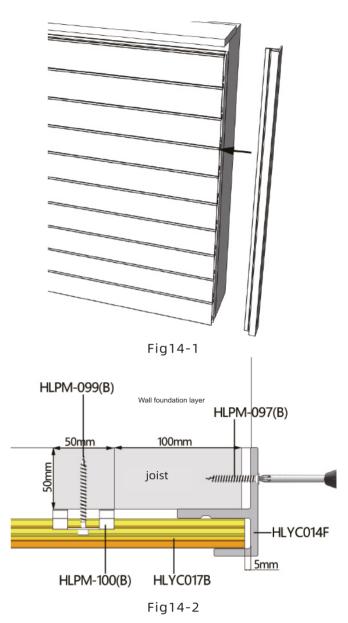
2. Snap the wall plate into the HLYC-013F recess and slide it downward to snap onto the wall plate fitting. As shown in Figure 13-2:



3. Follow step 2 and install to the top position

HLYC-014F Installation

1. Install the g-node, snap HLYC-014F into the installed wall plate, and fix the screws into the joist at the side. As shown in Figures 14-1 and 14-2:



Installation of HLYC-016F

1. Top HLYC-016F installation. As shown in Figures 15-1 and 15-2: $\,$

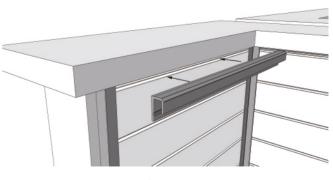


Fig15-1

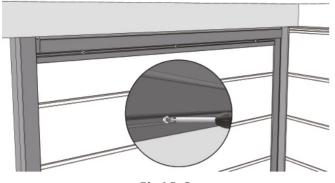


Fig15-2

The effect of the wall cladding horizontal installation is completed As shown in Figure 16.

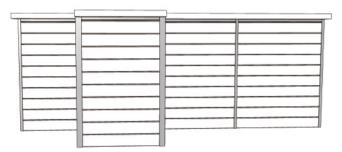
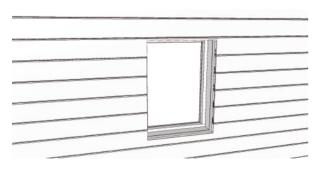


Fig16

Window and door installation

General windows and doors are shown.



Window installation schematic

1. Determine (cut) the size of the wall cladding according to the size of the doors and windows. As shown in Figure 17:

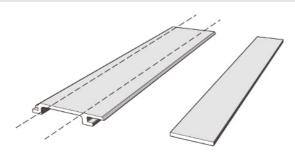


Fig17

2. Door and window wall cladding are installed and screwed in place after drilling pre-drilled holes. As shown in Figures 18-1, 18-2, 18-3:

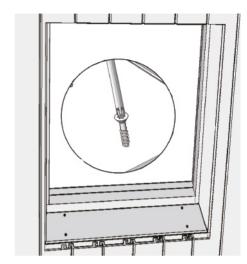


Fig18-1

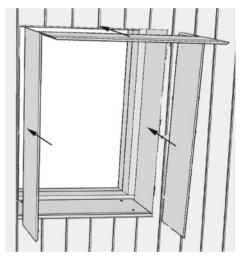


Fig18-2

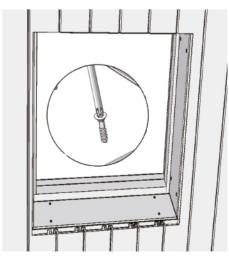


Fig18-3

3. Determine (cut) the size of HLYC-014F according to the size of the doors and windows. As shown in Figure 19:

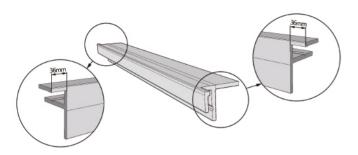


Fig19

4. Doors and windows HLYC-014F installation. As shown in Figures 20-1, 20-2, 20-3:

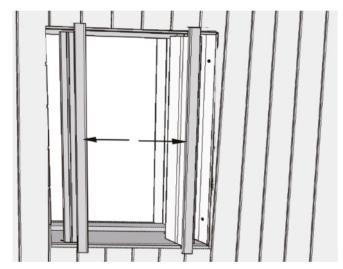


Fig20-1

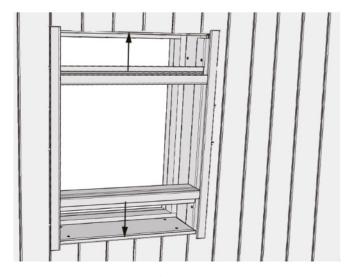


Fig20-2

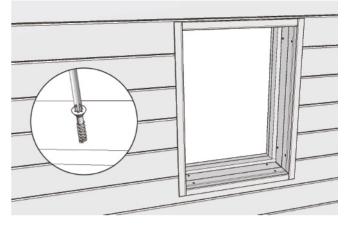


Fig20-3

5. Window and door section drawing. As shown in Figure 20-4 in horizontal section and 20-5 in vertical section:

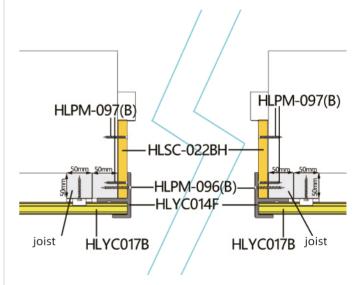


Fig20-4

