

# Horizontal siding installation

## General provisions

Vinyl siding installation can be executed independently.

If siding is installed correct with observance of the installation instructions, it is huge temperature swings- and wind and frost- resistant.

When installing the siding it is necessary to observe some important conditions. Firstly, when facing the building with siding, it is desirable to adhere to a specific consecutive sequence. At first, the surface is prepared and then the starter and finish strip are set, weather strips for windows and doors, internal and external angles After this siding is mounted upward.

Secondly, it is necessary to adhere the effect of possible expansion - compression of panels during heating or cooling. To ensure this condition you should take certain actions.

Thirdly, siding should be mounted on the furring with any surface. This will ensure ventilated clearance for removal of water vapor, in winter will save on heating and in summer will substantially weaken the heating of a house.

It is not recommended to install the panels at low temperatures.

Exterior finish with siding takes little time and, the main thing, provides getting beautiful and durable constructions that do not require additional costs for painting and maintenance.

## Pre-construction activities

In order to fast and high quality of installation work it should be calculated the necessary materials. As a general rule, by installation of siding are used:

1. Siding panels and finishing strips for the specific building or construction, it is necessary to take into account that about 10% of the material is used with working into place.
2. The strips with size of 4x6 cm for manufacture of furring.
3. Screws and dowels, used to fasten strips of furring. Regard should be had on the basis of: 1 screw for a strip 40cm.
4. Aluminum or galvanized nails (screws) with a big head, regard should be had on the basis of: 1 nail for a panel 300mm.
5. Insulated plates used as needed for additional warming of a building, and mounted in furring of siding.

## Required tools

1. Ribbontape.
2. Try square.
3. Metal folding rule.
4. Hacksaw with serrations
5. Metal hammer.
6. Lever.
7. Knife-zax.
8. Power drill.
9. Turnscrew
10. Fine string and chalk

## Surface preparation

This is the most difficult and responsible stage, as on how correct and smoothly are installed bearing structures depends elevation of a building.

1. Remove all the blinds, down pipes, fastening of lamps, grills, as well as any other appliances installed on the surface intended for mounting the siding.
2. If it is needed, the old finishing materials, or fix them so that it did not prevent the siding installation.
3. Set the furring over the whole surface of construction. In case of walls unevenness the furring is smoothen using gaskets made of wood, plywood or reducing the size of strips.
4. On wooden surfaces the furring is made of wooden strips. On stone surface for the furring are used wooden strips with size 4x6sm, strips made of PVC or galvanized profile.
5. When using wooden strips their humidity should not exceed 15-18%.
6. Wooden strips should choose straight, if possible without gnarls must, they must be soaked in antiseptic liquid.
7. For siding installation the strips should be installed vertically at the distance of 30-40cm from each other. They should be installed around windows, doors, other openings and holes, at all corners in bottom and top zones of siding installation. Do not connect the vertical strips together with horizontal, may impair ventilation under the siding.

## Warming

Using the siding allows you to warm the house is not at the expense of interior space, and by placing insulating panels on the outer side of the wall.

1. Furring wall can be covered with insulation or the space between strips may be filled with insulation. Thus insulation thickness should be less than strips thickness.
2. Insulation should be protected by special waterproofing film, and between film and siding should remain ventilated clearance.
3. Before using insulation read carefully installation manual of your chosen type of insulation.
4. An important installation condition of installation is absence of cracks and holes in insulating course.

## Sealing

Seal with sealant walls wherever moisture could penetrate: around windows and doors, outputs (inputs) of electric, gas, water or any more mains.

## Methods of cutting

1. For cutting of vinyl siding can be used: a hacksaw with serrations, a knife-zax or tin snips, an electric lock saw and grinder (low-power), because at high speeds cut-off heats and can smelt, what will cause additional operation of filing bright or burnt edges and their touch up painting (to match color of siding).
2. Using a knife-zax, rut deeply on the panel, then repeatedly bend and straighten the panel until it breaks on the target line.
3. Do not cut and install siding at low temperatures.

## Requirements for fasteners

Fasteners shall not be subjected to corrosion. If you do not adhere to this rule, with time at the point of fasteners will appear rust stains that spoil external appearance of finish. The most effective and not inexpensive fasteners as of today are nails. You can also use screws.

Nails should be made of aluminum or be galvanized with diameter of head at least 1 cm. The stem of a nail should have a minimum diameter of 0.3 cm and a length sufficient to penetrate to the base to a depth of 2.5-3 cm.

## Tolerances on the tension-compression

1. Vinyl siding is nailed so as not to interfere with possible tension-compression
2. Leave a clearance (6 mm in summer, 10 mm in winter) for a possible extension when fastening the panels to chamfers and edges (Fig. 1).
3. Do not nail siding too tightly. Leave a distance of about 1 to 1.5 mm between the upper edge of the nail head and the panel. It is necessary for free extension-compression, which will prevent ripple effect (Figure 2).
4. Center of nail should be in the middle of punched hole (Fig. 3).
5. Aim the nail straight forward. Bent nail deflects the panel and can cause swelling of siding.
6. Do not hammer a nail into front layer of the panel. Perforating with nail of vinyl panel may cause resistance to a possible extension-compression, which would result in swelling siding.

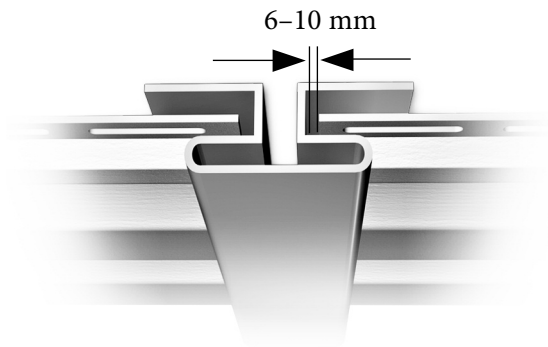


fig. 1

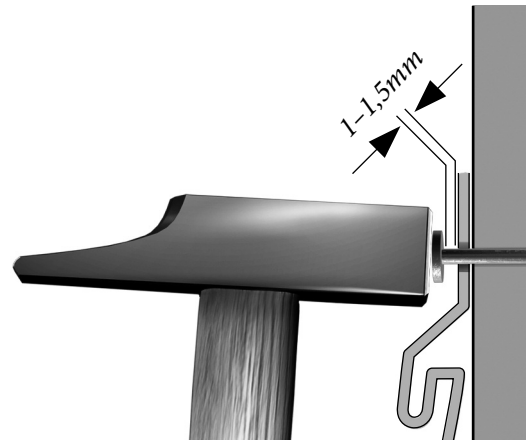


fig.2

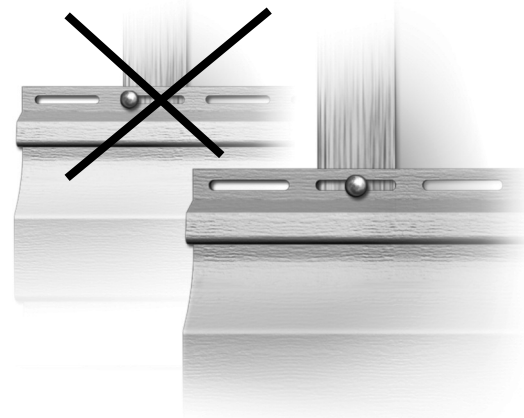


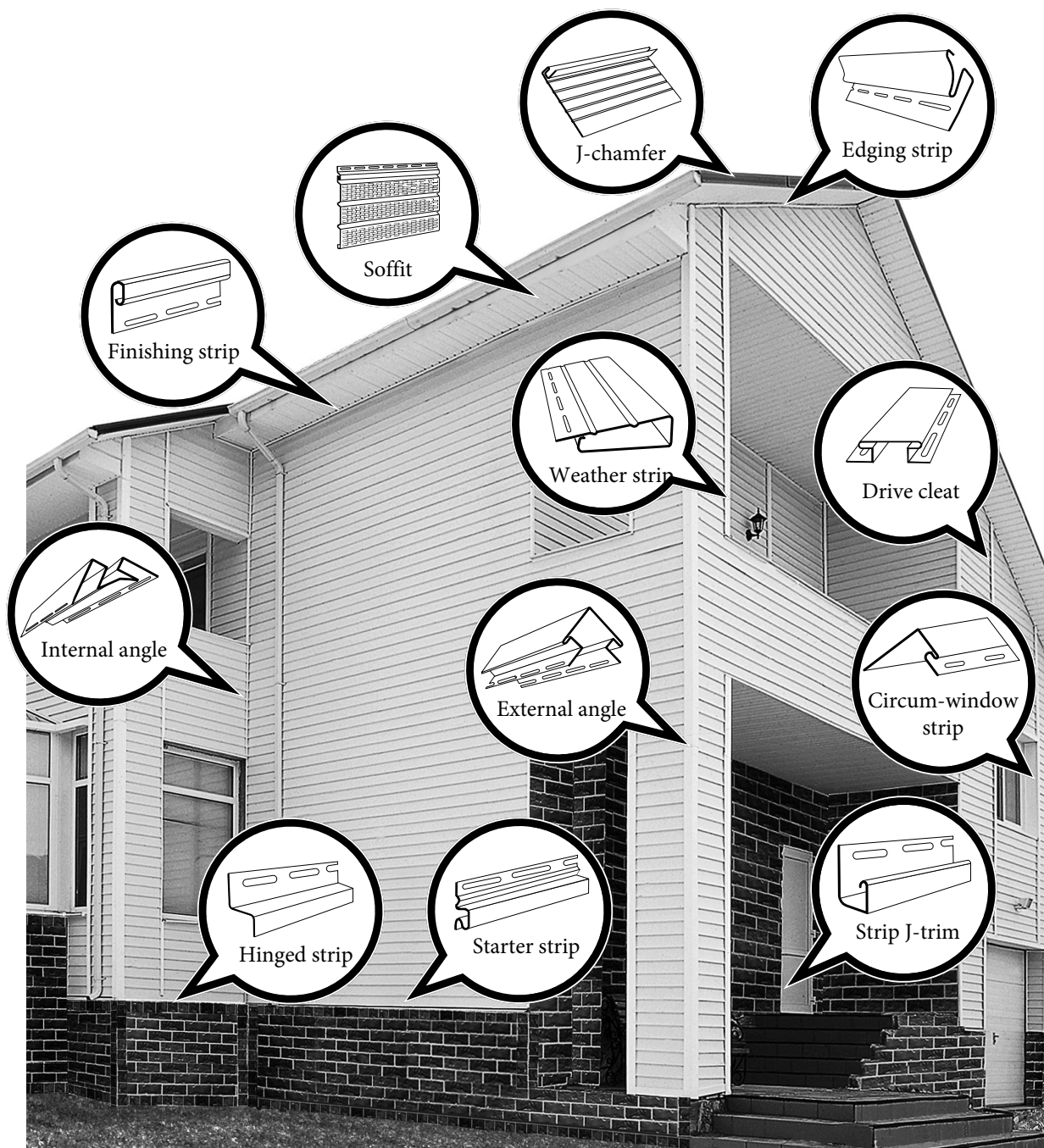
fig. 3

7. Do not tension siding at fastening. Strong tension of the panel changes its shape and can cause incorrect connection of panels and other parts. The next panel should be first connected to bottom panel and push upward to latching. After that it can be nailed.
8. Place the nails correctly. It is recommended to drive nails at the distance of 30-40 cm from each other.

# Finishing strips to siding

For easy installation, vinyl and acrylic, as well as vertical siding and giving to claddings of buildings finished appearance, the company "Alta-Profile Ukraine" produces 12 kinds of finishing strips.

## Finishing strips of horizontal and vertical siding





# Siding installation

## 1. Draw a line with chalk

Find the lowest level of surface intended for siding installation. Drive a nail at the corner of wall on 4 cm above this level. Beat in the same way at the other corner of the wall. Tension between the nails a fine string. With help of level ensure that fine string taut parallel. With chalk mark on fine string a flat, straight line between the nails. Repeat this procedure around the entire house.

## 2. Starter strip setting

Set a starter strip with top edge on the chalk line. Nail the starter strip along the chalk line with nails. If wall surface has dimples, place under starting strip gasket to avoid ripple effect. Do not nail too tightly.

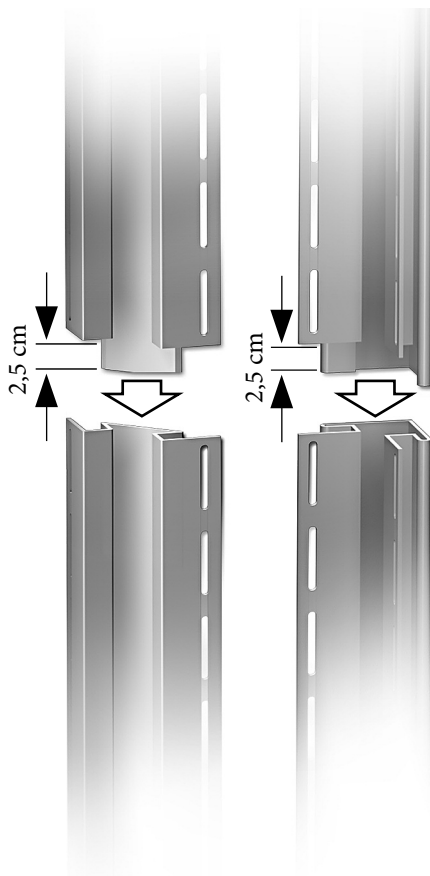


fig. 4

## 3. Adding of starter strip section

When adding starter strip sections, leave between them a distance of 6 mm for possible extension.

## 4. Installing of an internal and external angle

An internal or external angle is installed on the existing junction of two walls 6 mm below the edge of starter strip. Leave above the distance to cornice sufficient to install a soffit. Fasten external angle, driving nails into top holes on both sides. The angle should hang on these two nails. Make sure it is installed correctly. Nail the angle to neighbouring walls, hammering nails on the distance 20-40 cm from each other, placing them in the center of the holes for the nails, provided in the panel. This will ensure possible vertical extension. It should not be nailed too tight (the gap should be 1-1.5 mm). A similar procedure is performed for an internal angle.

## 5. Connection of an external (internal) angle

Connection of angle element is necessary when an element don't reach desired height. Cut 2.5 cm from the top, perforated edge the elements, leaving middle face part. Apply following (top) angle element on bottom element on 2 cm, leaving 0.5 cm for possible extension (Fig. 4).

## 6. Installation of finishing strips around window openings and doorways.

For this operation it is advisable to apply circum-window strip or J-trim. The strips are installed on perimeter of window openings and doorways. Nail the strips around openings and doorways. Do not nail too tightly.

## 7. Installation of the first siding panel

Insert the bottom edge of the first siding panel into starter strip and nail top edge to the wall. To start nailing of panel should from the middle, gradually moving to the edges. Start installation of siding panels from rear part of the house, moving to the front. Leave a distance of 6-10 mm, where the panel goes to an angle element for possible extension-compression.

## 8. Connection of siding panels

In cases where length of walls surface is more than length of siding panels, for connection of panels it is recommended to use a connecting strip (Fig. 5).

## 9. The sequence of siding panels placing

After completing of first siding row install the second, third, etc. rows, starting each time with rear part of the house moving to the front. Last siding row under cornice is mounted only after installation of finishing strip.

## 10. Last siding panel under cornice

Nail finishing strip to the wall behind flush to cornice. Close the last siding panel with previous and press until it clicks. Top strip part joint to finishing strip and snap.

## Installation of siding under a window

### 1. Metering of siding

Installation of siding panels under a window usually requires cutting of panels. Attach siding panel under a window. Holding the panel under the window, mark the width of the window (or window and weather strips) adding 6 mm on each side. Measure and mark vertical space on the panel, leaving 6 mm from bottom window edge window (or window surround). Repeat procedure for measurement of upper window side.

### 2. Cutting of siding

Make vertical cuts on the panel with a hacksaw on the marks applied. Then draw with a knife on horizontal line between the incisions several times. Bend the panel on the marks a few times until marked part breaks off.

### 3. Setting

Set the strip j-trim or circum-window strip, then set top (cut) edge of the panel into the strip groove.



# Installation of vertical siding

Installation of vertical siding is carried out similarly to the installation of horizontal siding, but has its own characteristics.

- 1) Installation of vertical siding is started with installation of hinged strip that is set with top edge on chalk line over plinth of building.
- 2) After installing of hinged strip is carried out installation of an internal and external angle (see p.5).

- 3) Then set starter vertical strip (starter strip). And then in the starter strip is inserted an edge of the first vertical panel and nailed to the wall.
- 4) Next, the installation is carried out similarly to the horizontal siding (p. 5-6).
- 5) At the end of installation finishing strip is nailed to the wall flush to the corner. Then, last panel of siding is connected to the previous. Another panel part is connected to finishing strip and snaps.

fig. 7

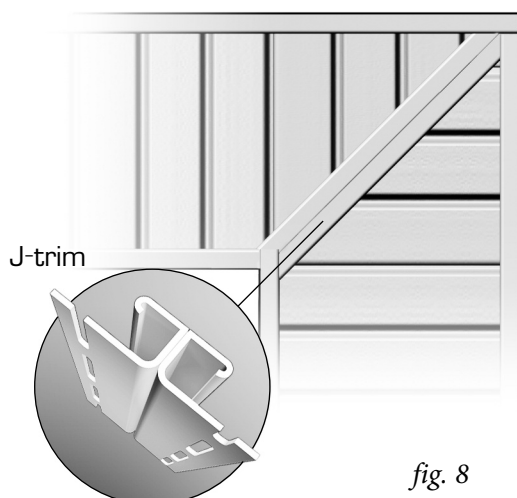
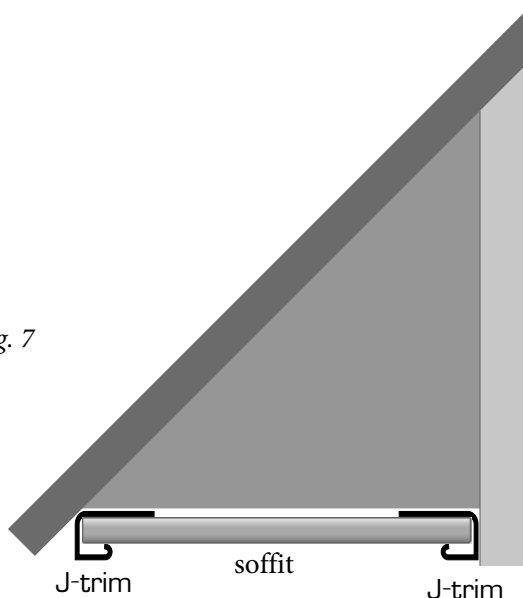


fig. 8

## Soffit mounting

Using vinyl soffit for finishing of open roof fronton will allow ventilation effect and give a finished look to your home.

Using a level, make marks on the wall parallel to bottom edge of fronton. Along the marks set the strip J-trim. The same way should be fastened the strip J-trim to the edge of fronton, it is important to ensure that the strips situated directly opposite (Fig. 7).

Measure the distance between the strips, deduct 6 mm for a possible extension-compression. Cut soffit according to this length.

Install soffit by inserting it into the J-trim strips. Secure each panel on the center of perforating holes.

In rotation angles soffit panel should be cut with an angle of 45°. To create additional support of panels use two J-trim strips connected with back walls (Figure 8).

# Installation of facade panels

To protect building facade from effects of aggressive environment production holding "Alta-Profile" produces strong and durable facade panels simulated natural materials.

First of all, building plinth needs protection as the most vulnerable house fragment. Such factors influence it destructive as: melt water, temperature difference between external and internal environment, deformation in the off-season. Under influence of these factors traditional finishing materials require periodic maintenance and updates (plastering, painting, sealing of cracks, etc.). Using of front panels allows avoiding some complications.

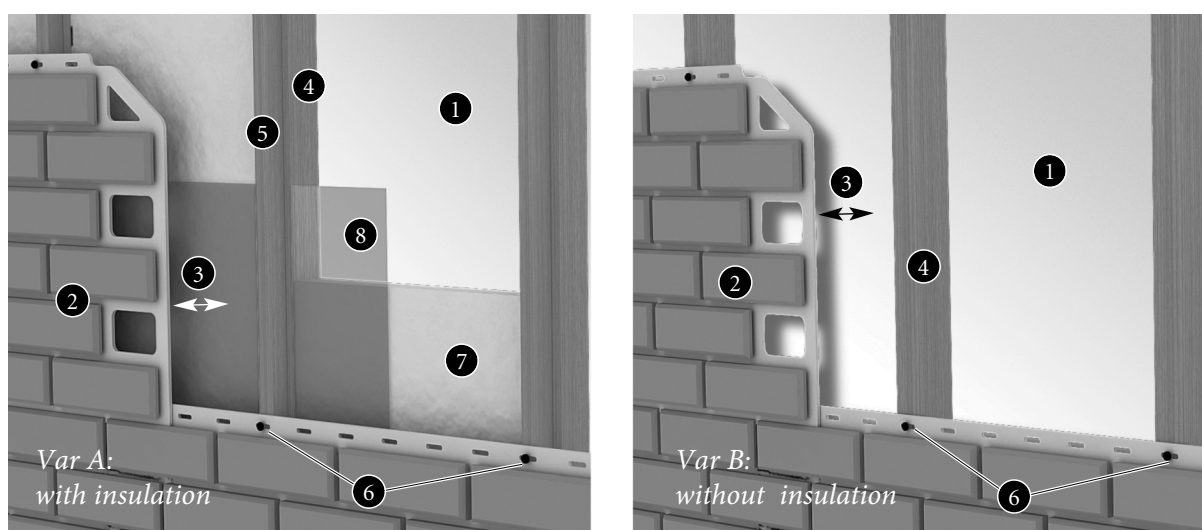
A variety of colors and models allow using facade panels not only for building plinth, but for entire facade. Given small thickness of panels, it is convenient to use them for finishing plinth of already existing buildings, when it is needed to minimize mismatch of plinth planes and the main facade.

The picturesque appearance of front panels, their light weight and small size allow you to use them not only for wall facing of building itself, but also its individual elements (adjoined pipes, towers, transitions, roof lamps, overbuild storeys). Because of their properties front panels are used for interior decoration of interiors. Also, they are used by building fences and fencings of garden and other areas.

Front panel "Alta-Profile" – is an environmentally friendly, non-toxic, artificial material for finishing of house walls. Exterior of panels fully copies beauty of natural materials, while price for finishing panels is much lower.

Easy assembling makes possible installation of facade panels to any facade, independently of its constructive solutions. General installation rules are the same as for vinyl siding, but exist its own characteristics:

*fig. 1: Fastening variants of furring and front panels*



1-1 house wall, 2 – front panel, 3 - ventilated clearance, 4 - strip 50x50 mm, 5 - strip 25x25 mm, 6 - nail/screw, 7 - insulant, 8 - water-proof film

*fig. 1*

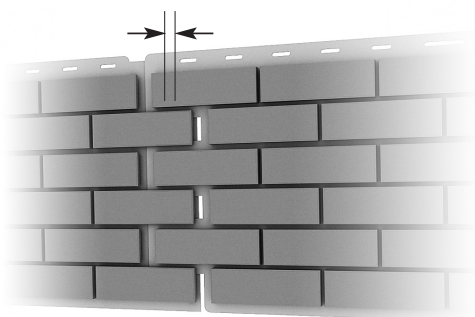


fig. 2

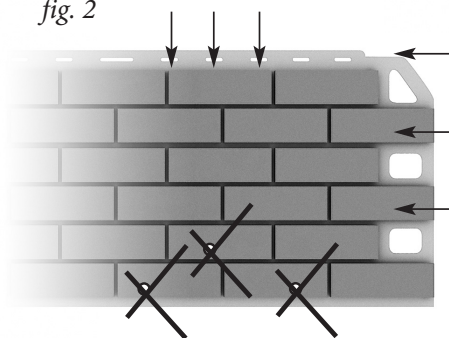


fig3

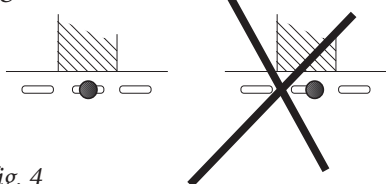


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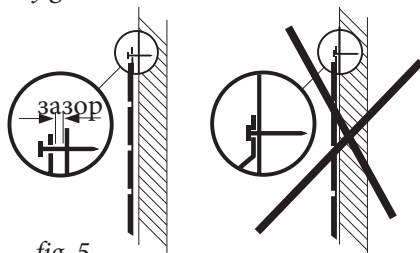


fig. 5

1. At the initial stage of installing it is necessary to prepare the surface, for this firring is set over entire wall surface. When firring installing it is obligatory to use a horizon to exactly set the strips, otherwise in the process of installation will appear imbalance of panels. The company "Alta-Profile" to prevent linear distortions recommends the use only metal galvanized firring. The strips of metal firring are vertically installed at the distance of 25 cm from each other to ensure ventilation under the panels (Fig. 1).
2. For house warming you can use insulation on the walls outside sides. Firring wall (the space between strips) is filled with insulation, thus it must be protected with special waterproof film.

3. To avoid moisture penetration between wall and panels it should be sealed with sealant outputs (inputs) of electric, gas, water and other mains also work the walls around windows and doors.
4. Installation of panels should be implemented, moving from left to right, at this complete installation of one wall, before going to the second.
5. The panels are designed for mounting on vertical surface only. They should not be mounted on the roof and floor covering.
6. Front panels and all their accessories should be fastened to firring only through specially designed grooves for this (Fig. 3). In no case do not attempt to do individually holes, thus may cause violation of physical form of finishing materials.
7. To fix the panels use aluminum or galvanized nails or screws, thus avoiding the appearance of rust stains on the panels. Nails or screws should enter in mounting base strictly perpendicular, in any case at an angle, but on centre of holes provided in strips and panels, it will provide possible vertical extension (Fig. 4).
8. Setting panels, leave short distance between upper edge of nail head (screw) and panel, it will provide free extension-compression (Fig. 5)
9. Installation of panels is recommended at temperatures above zero.
10. When finishing a solid building wall, height and length of which is more than 6 m, given linear extensions that can occur by temperature changing, the company "Alta-Profile Ukraine" recommends:
  - a) make small gaps between the panels (Fig. 2);
  - b) make gaps between the panel and upper edge of nail head (screw) (Fig. 5);
  - c) with decorative strips to arrange expansion joints. As decorative elements can be used facing strip, strip J-trim and connecting strip (for vinyl siding).

Decorative strips can be installed both horizontally and vertically. Finishing strips in this case can serve as decorative elements, giving a special note in design of a building, or highlight the number of floors in a house.

## Used finishing elements of the system "Alta-Decor"



Angle Brick

Length	473mm
Width	103 mm
Thickness	28 mm



Angle Stone

Length	472 mm
Width	112 mm
Thickness	31 mm



Angle Stone Rocky (n)

Length	446 mm
Width	160 mm
Thickness	35 mm



Angle Granit

Length	472 mm
Width	168 mm
Thickness	44 mm



Facing strip Stone

Length	927 mm
Width	73 mm
Thickness	51 mm



Angle Antique Brick (f)

Length	446 mm
Width	158 mm
Thickness	30 mm



Angle Klinker Brick

Length	445 mm
Width	125 mm
Thickness	31 mm



Angle Rubble stone

Length	472 mm
Width	112 mm
Thickness	31 mm



Angle Fagot

Length	445 mm
Width	148mm
Thickness	42 mm



Facing strip Brick

Length	920 mm
Width	125 mm
Thickness	30 mm



Metal starter strip

Length	2000 mm
Width	45 mm



Weather strip Classic

Length	650 mm
Width	150 mm



Weather strip Modern

Length	650 mm
Width	150 mm



Corner element of Weather strip Classic



Corner element of Weather strip Modern



Strip J-Trim

Length	3000 mm
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Jamb

Length	650 mm
Width	200 mm



Corner element of splay



Corner element of splay + Weather strip Classic



Corner element of splay + Weather strip Classic

## Installation of front panels and their accessories

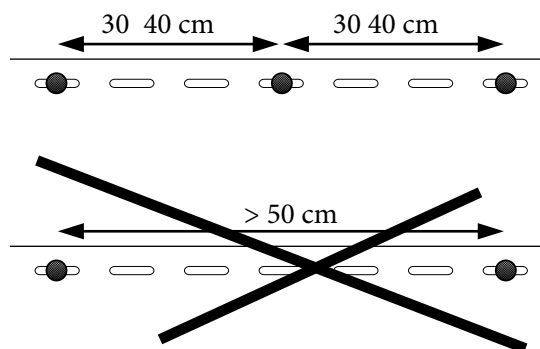


fig. 6

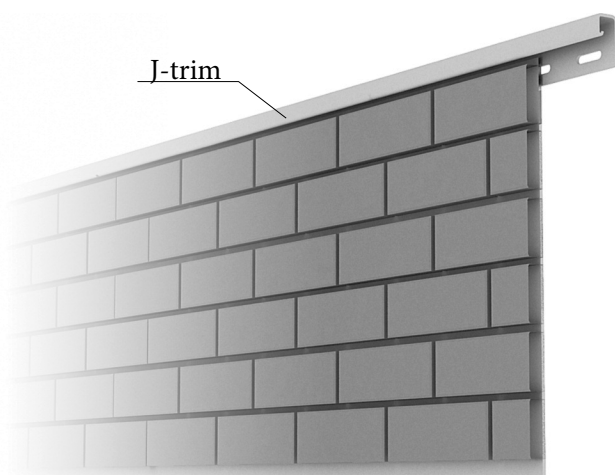


fig. 7

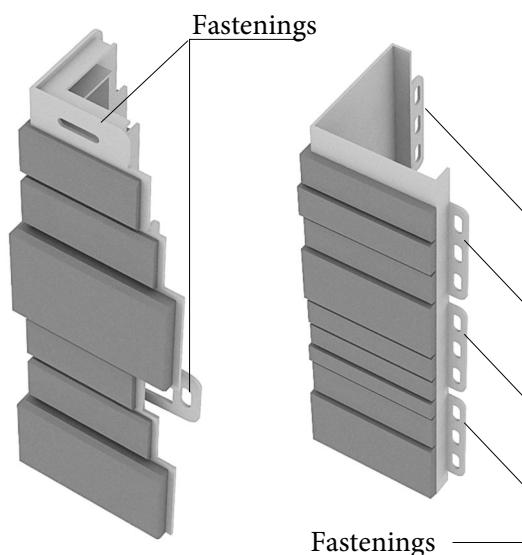


fig. 8:  
External angle  
«Brick Antique»

fig. 9:  
External angle  
«Rocky Stone»

At first are installed finishing strips: starter strip, external angles, 1-profile strip, and only then - front panels. Installation completes by installing of facing strip.

Installing the panels at the temperatures above zero, leave an clearance between strips and panels ends - 5 mm, and at the temperature below 0°C - not less than 10 mm.

1. On firring surface is mounted starter strip in early marked chalk line. Its fastening is made by nails or screws in every 30 cm. (Fig. 6). Starter strip is set evenly and horizontally. When adding starting strips sections, leave the distance between them in 5-6 mm for possible extension. The company "Alta-Profile" provides metal starter strip, it is more reliable than common PVC, as it allows fast connection of front panels between each other. Moreover, it is not seen on finishing wall.

2. If you want to make an jamb and allot front panels, as a starter strip you can use a strip J-profile, which will serve as a rim on the wall of your home (Fig. 7).

Strip J- profile is provided to finish juts on building plinth and it can be used as a final element of facade finishing.

Strip J- profile can be used for finishing of internal angles. It is recommended to align an angle before mounting the panels by aluminum tape.

4. External angle is mounted in existing junction of two walls. Fasten an external angle by means of nails or screws through corresponding slots on both sides. At the same time make sure that the angle is mounted evenly.

Also, an external angle is used to finish doorways and window openings. The company "Alta-Profile" produces several types of external angles that differ from each other in size, shape, and basic installation techniques.

3.1. An external angle of the standard collection of "Stone" and "Brick" is fastened to the panel through appropriate slots. That is why it isn't required additional recommendations for installation of this angle type.

3.2. After expanding of facade panels range, the company produced new designs of external angles, "Brick-Antique" (also used for collection of "Facade tiles") and "Rocky stone".

An external angle "Brick-Antique" has completely different size and fastenings to facing wall (Fig. 8). A new angle has one fastening of two side faces, but compared to other angles has grooves for fastening top and bottom, which simplifies mounting procedure. When installing the panels should be inserted in the outer corner "Brick-Antique" with clearance of 1.5-2 cm (Fig. 10).

By mounting an external angle of the collection "Brick-Antique", it is important to consider one feature. When finishing, both building plinth and entire facade, the number of external angles is selected in accordance with wall height or surface finished. All finishing strips and angles can be cut as well as the panel. If it isn't need to use entire angle, and only its part, it is necessary to do grooves-sawcuts on sawed up pieces. Thanks to grooves-sawcuts the sawed up part of an angle will be fixed of previous angle. This will allow using angles of different lengths and making fixation more reliable.

3.3. An external angle of the collection "Rocky Stone" also has its own distinctive features by installation. An external angle "Rocky Stone" is fastened to firring as well, but unlike angles of other collections, it hasn't grooves for connecting to main panel (Fig. 9).

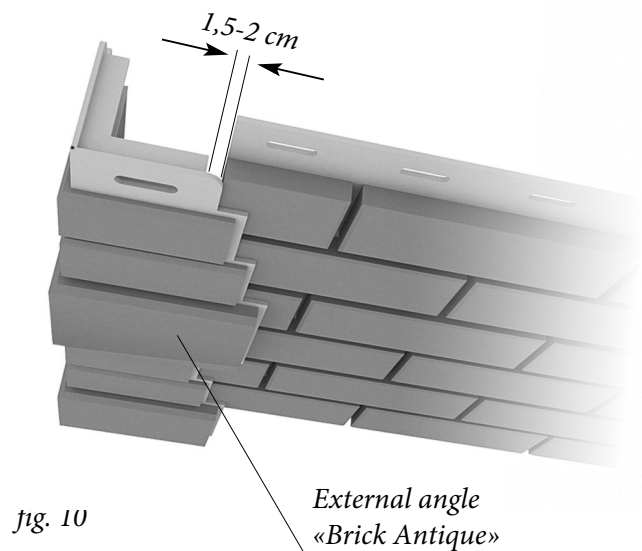


fig. 10

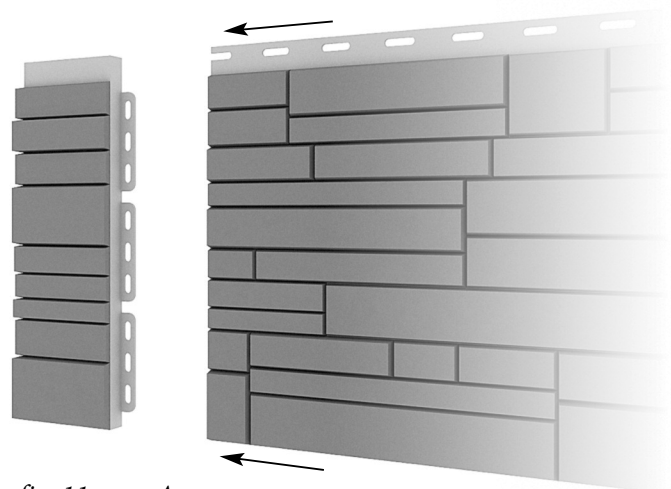


fig. 11: var. A

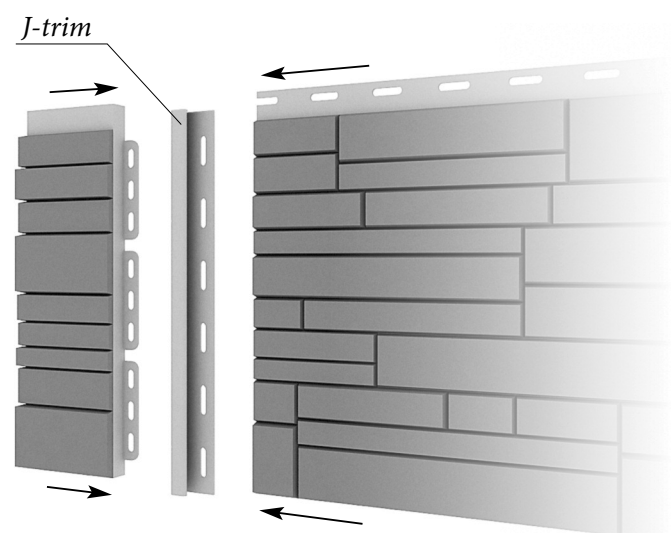


fig. 12: var B



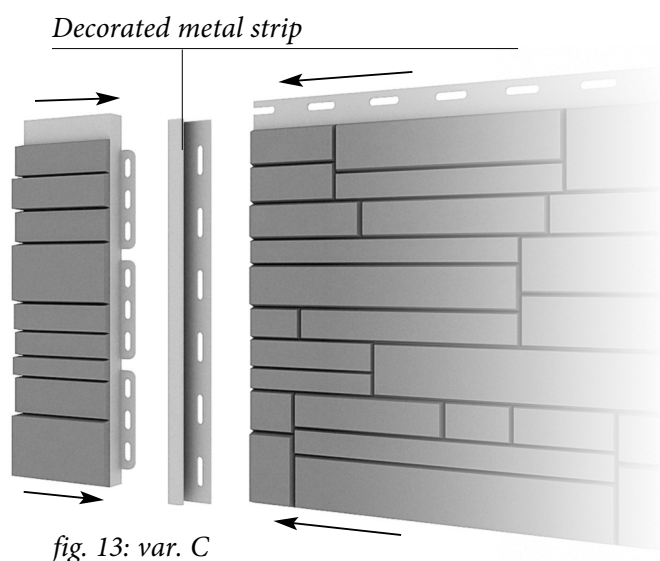


fig. 13: var. C

Facing strip

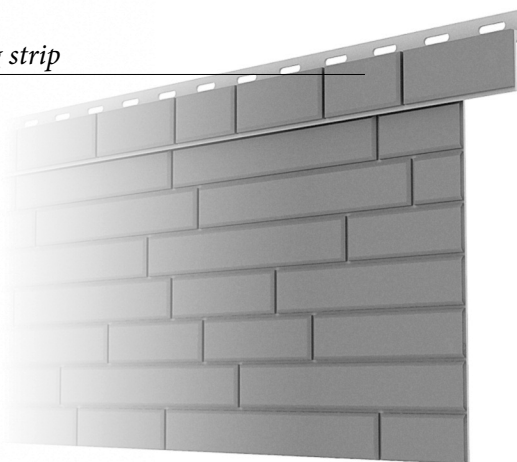


fig. 14

Fastening panel and an angle is made by junction of sawed up panel part to the external angle (Fig. 11). While the exterior angles of other collections are presented in form of protruding finishing elements, so this angle forms with the panel one plane. It was designed, primarily, for column finishing, where required that an angle smoothly enters into panel without protrusions. When finishing the construction with front panels and angles of collection "Rocky Stone" it is very important to accurately measure the length of mounted panel as the panel has should to sawed up smoothly and sharpen so that there are no gaps at the junction with angle. To trim facade panels in case of coupling with angle of "Rocky Stone" it should be used stationary circular saw with disc 300-96Z-32 ( for MDF).

The incision should be performed from the face side of front panel. After cutting the panel remove dust and burrs. The installation height of the disk - 50-60 mm. This process is very complicated and requires long and hard working, but result is worth it.

For easy installation you can use strip J-trim for vinyl siding (Fig. 12). The strip is easy placed on the sawed up panel part, so panel edge aligns. Then angle joined to panel, forming a single plane.

Instead of J-trim strip can be used decorative metal strip – is a P-shaped profile of thin metal (5 mm), made in different colors (Fig. 13).

Also, these profiles can be used for finishing the panels, it will give an special highlight and emphasize individuality of finished surface.

4. Once installed external angles, you can start the installation of front panels. Moving from left to right, set the first angle of the panel with jamb of about 3 mm below the lower edge of starter strip. Slide the first panel left, setting it flush to the angle. Insert the first panel in starter strip and secure with fasteners. The next panel is inserted into the fasteners of the first panel, and so on up the chain, so finishing the first row of front panels. After completing the first panel raw is set the second, third, starting each time from left to right. An important advice: we recommend placing the panels in a checkerboard pattern (with a shift of  $1 / 3 - 1 / 2$  panel) for more secure fixation of lateral connections.

5. The final element of facade panels fixing is a facing strip, which is simply laid over the panel and fastened to firring with nails or screws through junction slots (Fig. 14).

# Installation of plastic weather strips and jamb

The company "Alta-Profile" produces an exclusive product a new finishing element on the Russian market - a plastic weather strip. Weather strip is a figured strip for decorative framing of window opening or doorway. Plastic weather strips will give highlight to the design of your home and, thanks to its lightness and easy installation, will become a favorite element of decoration.

The main task to be solved by plastic weather strip, - is "masking" of cracks between wall and window frame. Weather strip is produced by casting on injection molding machines.

The company produces two types of weather strips - a weather strip "Classic" and weather strip "Modern" and one spacer component – an universal jamb. All weather strips and jamb are available in three colors: brown, sand, white.

For fans of classic the company offers "Classic" - is an embodiment of tradition and romanticism.

For lovers of modern extravagant forms the company offers a weather strip "Modern". It has a more curved shape, which gives a peculiar flavor to the design.

## Finishing variants

1) In order to give an aesthetically complete appearance of the window opening or doorway of your house you can choose any combination of spacer component (jamb) with one of weather strips (Fig. 1).

2) Universal jamb can be used separately from the weather strips. It's easy to use by decorating the window and door niches, which width is less than 20 cm. If you want to hide any defects or inaccuracy. An universal jamb is fastened with wide side directly to the window or door niche. If the distance is less than 20 cm, then jamb is sawed up to desirable width. To facilitate installation to the door or window box is fastened any of finishing strips, which is inserted the jamb in. With other side the jamb is set on firring, and in special curve (at the end of jamb) is inserted the panel. Thus, there is a finishing of doorway and window openings without weather strip using (Fig. 5).

3) Any of the weather strips can be installed without jamb. Where the door or window niches have a wide part - more than 20 cm, so installation of an universal jamb is excluded, because its width is not enough to cover the surface. In this case for surface finishing is used niche a façade panel, which is adjusted to the desired size. Securing the panel on the surface, from one edge of the panel are made special grooves-sawcuts, using grinder with cutting disc with thickness of 2.5 mm. Further, weather strip is engaged for these sawcuts, which on one side has a special projection to secure the panel. The other side of weather strip is connected to the panel (Fig. 2).

4) Weather strip can be used not only as a finishing element of window openings or doorways, but also as a decorative finishing element. In this case the weather strip acts as a decorative strip that you can use as a design element for decoration of your house (Fig. 3).

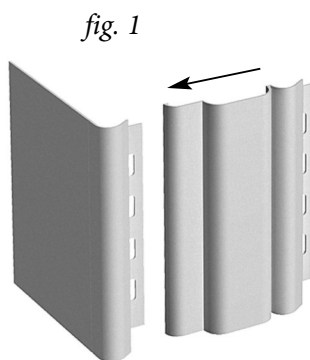


fig. 1

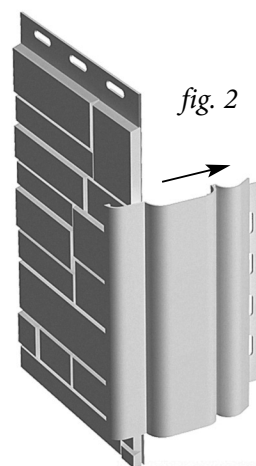


fig. 2

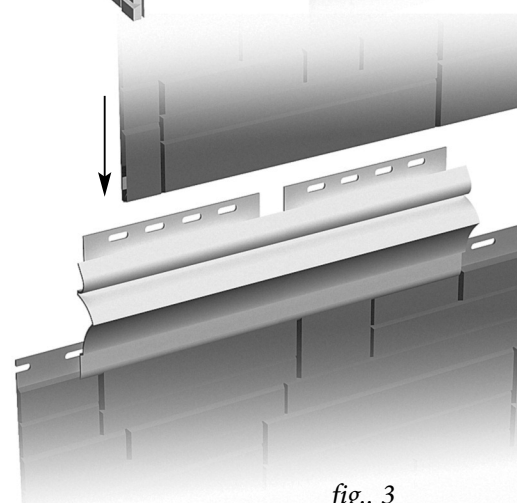


fig. 3

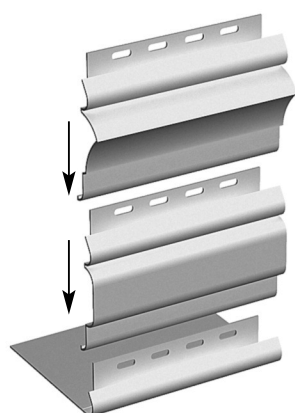


fig. 4



fig. 5

Weather strip as a decorative strip can be used horizontally around on perimeter of a building. Fastening of weather strip is done by starter metal strip J-trim. To do this, you need first to set the strip, and then insert in it a weather strip, hooking one end (where there is a special rounding) of projecting strip part and fastening other end of weather strip through appropriate slots. On the building corners the weather strips are joined to each other at the angle of 45° (are made special cuts). In the place of installation of weather strips the installation of external angles is not required. An angle is set before and after a decorative strip.

5) In decoration of window opening above can be used two weather strips (Fig. 4), and on each sides and bellow one. This will allow express a window more contrasting against the wall. Weather strips are easily fastened together with screws through special grooves, wherein the lateral holes of upper weather strip with plug cut at the angle of 45 °.

6) AN universal jamb can fulfil a function not only of a spacer strip for finishing of window openings and doorways, combined with weather strips, but also be used as a separate element. In this case, we are talking about the possibility to use an jamb as a windowsill or a low tide. Jamb will protect the surface from moisture or foreign objects (similar to Fig. 5).

7) Please Note: In all mating areas of weather strips and jambs it is needed to leave a gap between them for possible linear expansion, which can occur by temperature changes.

Plastic weather strips and an universal jamb from the company "Alta-Profile Ukraine" – is an unique development of the company's technology. Due to its lightness and different colors, weather strips are increasingly used in modern decoration of buildings. Combining different variants of using of weather strips and jambs, you can free experiment, embodying your creative ideas and plans.

# Warranty and service life manual of the Group of Companies "Alta-Profile Ukraine"

## 1. Guarantee obligation

Company-manufacturer guarantees compliance of the products with technic specifications for appropriate type of products. Standard warranty period - 1 year from date of shipment of products from the warehouse of the manufacturer.

In case of non-compliance of product with technic specifications and passport of the enterprise, the company assumes obligations to replace the products.

The claims are accepted prior to installation of the products.

The warranty does not cover the products damaged as a result of:

- non-compliance with recommended transportation rules of the products;
- failure of recommendations for storage of the products, packaged in a plastic sleeve and corrugated box;
- mechanical deformations caused by external shock or any other influences;
- natural disasters (lightning, fire, flood, etc.), and other causes beyond the control of the manufacturer and the seller.

All warranty terms act in the framework of the Law of Ukraine "On Protection of Consumers' Rights" and governed by the laws of the country.

## 2. The service life of plastic products

The service life of products is established on the basis of laboratory tests conducted every year in various test centers, on the basis of the relevant protocols as well as on the basis of long-term experience of the company which produces a variety of products from plastic. The following deadlines are established:

— All products are made of plastic keeps the decorative (appearance) and strength (resistance to impact, flexibility, no blistering and bundles) properties for at least 30 years under operating conditions in moderately cold and cold climates (at temperatures from -50 ° till + 60 ° C).

Justification: The conclusion of CJSC "Center of Certification" "Composite Test" 42-OC on 15.01.2009

— To preserve the color characteristics (light fastness):

- PVC siding - at least 20 years for all colors.

Justification: The conclusion of the Coordination Center "Polycert" 1027 / P-2009 on 22.04.2009

— Facade panels of polypropylene - at least 30 years for all colors.

Justification: The conclusion of the Coordination Center "Polycert" 1028 / P-2009 on 22.04.2009

The lifetime of plastic products is dependent on many factors, including the changing climatic conditions (solar activity, moisture, low temperatures).

In any case, in order not to reduce the terms of service, it is necessary:

— To strictly respect epy developed GK "Alta-Profile" instructions for installation of panels and finishing elements;

— Do not expose the panel mounted to mechanical impact;

— All installation work must be carried out by persons who have the necessary qualifications and authorization to carry out such work;

— During the operation period the product should be periodically cleaned with a rag moisten in warm water.