





1. General description of the collection

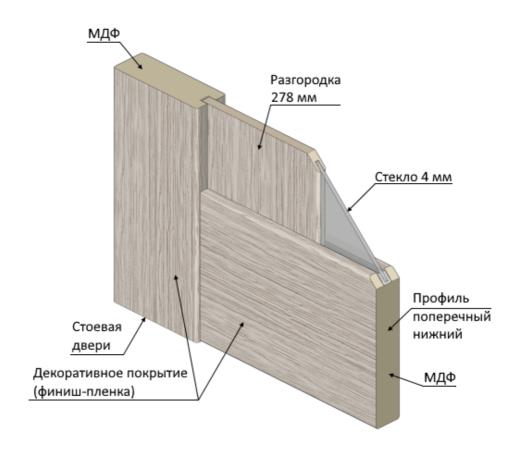
MILLENIUM collection is a prefabricated door with a decorative coating of a finish film (eco-veneer) based on polypropylene (manufactured by the German concern "RENOLIT").

A large selection of various partition profiles, glass, panels, and their combinations made it possible to create a collection of doors with an extensive model range. Here you can find doors with both modern minimalist and classic designs.

2. Main materials and components

Door leaf

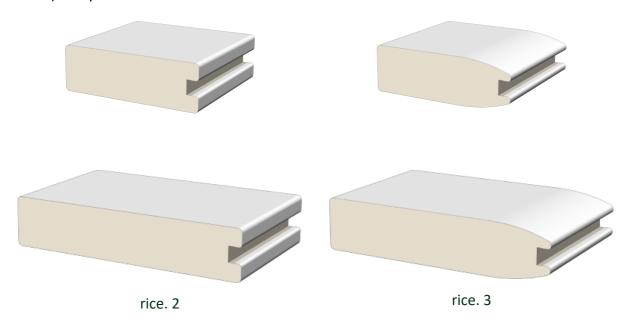
The stem parts of the MILLENIUM collection have a width of 110 mm and a thickness of 38 mm. They are made of high density MDF (900 kg/m3). This allows you to avoid deformation of the door leaf in the future (such doors do not "lead", they do not dry out and do not crack). MDF serves as an ideal base for coating.



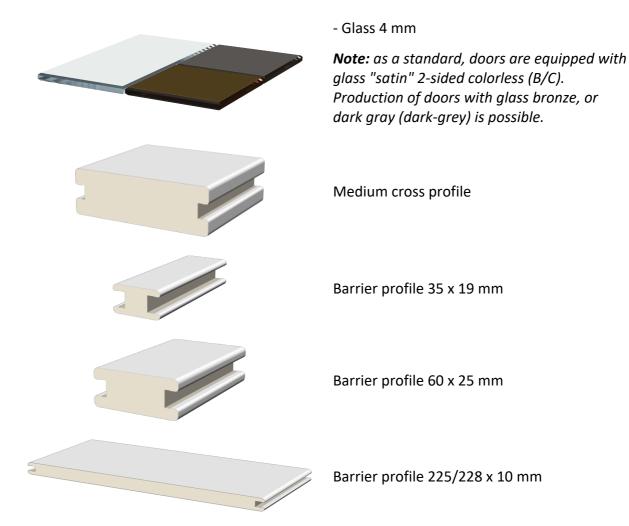




The upper and lower transverse elements, which together with the upright parts form the frame of the canvas, depending on the model, can have a straight (rice. 2) or beveled shape (rice. 3). They are made from solid 35mm thick MDF.



To obtain door models of various configurations, the following profiles and components are used:









For facing the doors of the MILLENIUM collection , high-quality eco-veneer based on polypropylene, produced by the RENOLIT concern (Germany), is used. This coating fully reproduces the natural structure of the tree, and the texture on it is felt tactile. This material is by far one of the best for the manufacture of doors with a polymer coating. An important criterion is its environmental friendliness. Despite the artificial origin, the coating does not contain any harmful impurities, and the material from which it is made (polypropylene) is used in the medical field and in food packaging. This type of coating has passed all the necessary types of certification and is characterized by high performance. Doors coated with eco-veneer can rightly be called durable, since the coating is able to withstand significant mechanical stress and at the same time is resistant to organic solvents and easy to clean.

ADVANTAGES OF ECO VENEER:

A modern material of a new generation, perfectly imitating the texture of natural wood.

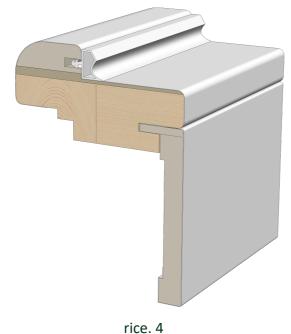
- It fully complies with modern safety and environmental standards for finishing materials, which allows it to be used in children's and medical institutions.
- Wet cleaning with the use of household chemicals is possible.
- Can be used in wet areas.
- Differs in high wear resistance, does not crack, does not fade and does not change structure over time, is not erased during operation.
- Pleasant to the touch and visually.
- Provides long service life without loss of consumer properties.
- Does not emit toxic substances (polypropylene is used in the manufacture of medical accessories and baby food packaging).
- Eco-friendly pigments and dyes are used in the production.
- Thermal utilization is possible (combustion products are not more dangerous than burned wood).
- High resistance to fading in the sun and moisture resistance.

<u>box</u>

Door units of the MILLENIUM collection are equipped with a coplanar frame (Ошибка! Источник ссылки не найден.). The door frames are made from a combined glued solid wood and MDF. Box size 80 x 40 mm. It has a quarter for attaching an expander and grooves for installing a trim and a seal. When ordering doors with a one-sided trim, it must be taken into account that a visible groove remains, which must be closed with a slope or trim (tiles, wallpaper, etc.).





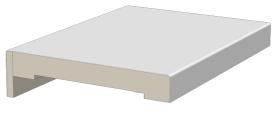


rice. 4

A seal is installed around the perimeter of the box. All fasteners used to mount the door unit must be hidden under the seal. It is also possible to locate the fasteners in the holes of the hinges and the striker of the mechanism.

platbands

The platband with a section of 75x10 mm has a "wing" for depth adjustment with a width of 20 mm (Fig. 5).



rice. 5

A special "wing" facilitates installation and makes it possible to level the slight curvature of the walls. During installation, the architraves are cut at an angle of 90° (please pay attention to this to your installers).

Expander

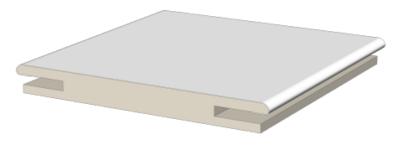
The expander (Fig. 6) is manufactured in 2 width sizes:

• 100 mm - for wall thickness up to 175 mm (with standard box) and up to 152 mm (with coplanar box)





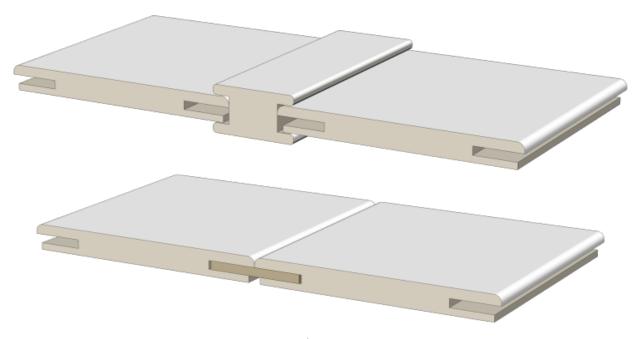
• 200 mm - for wall thickness up to 275 mm (with standard box) and up to 252 mm (with coplanar box)



rice. 6

The expander has a groove for mounting the casing on both sides. This is done so that it can be cut across the floors and used for different door blocks if the wall thickness allows.

With a wall thickness of more than 275 mm (with a standard box) and 252 mm (with a coplanar box), the expander must be joined using a connecting H-profile or a special spherical sling, as shown in fig. 7



rice. 7

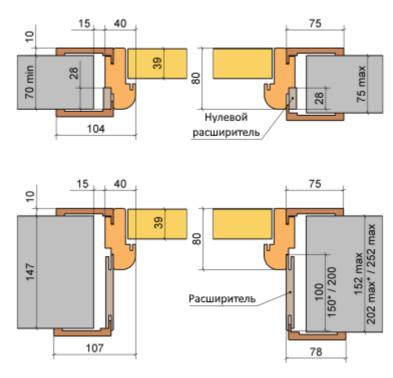
The expander enters the groove of the box by 15-20 mm, and is screwed to the box before installation. If necessary, the expander can be reduced in width by cutting it along the non-front side.





3. Mounting diagrams

MILLENIUM doors is shown in fig. 8



rice. 8

4. Applied fittings

loops

Loops can be of 3 types:

1) Hidden hinges (when the door is closed, the hinges are not visible) (Fig. 9)

Note: 2 or 3 hinges are inserted by default (depending on the model and dimensions of the door leaf). Color of loops - opaque chrome, black.



рис. 9



2) Overhead hinges "butterfly" (Fig. 10)

Note: 3 loops are set by default. Color of loops - chrome, gold.

рис. 10





3) Overhead hinges AL143Q (fig. 11)

Note: 2 or 3 hinges are installed by default (depending on the model and dimensions of the door leaf). Color of loops - opaque chrome, white, black.



рис. 11

Locks

Locks are used in colors: chrome, gold, black (only AGB Polaris).

There are 2 types of mechanisms available:

- 1) AGB Evolution is a standard mechanism with a polyurethane "tongue".
- 2) **AGB Polaris** is a mechanism with a magnetic "tongue" for easy closing and quiet operation.

According to the type of locking, locks are divided into:

- **latch** (just a handle: one hole is drilled under it);
- **latch** (handle with turn signal: two holes are drilled at the factory for installing a handle with a lower turn signal, the so-called WC);
- **key** (handle with key lock: two holes are drilled at the factory for the installation of the handle and cylinder / secret).

Note: the key cylinder is NOT included in the scope of delivery; the door handle is NOT included in the standard scope of supply.

5. Additional accessories and opening options

Thresholds stationary

Thresholds are not manufactured for the MILLENIUM door collection.

Thresholds hidden

It is possible to install a hidden (drop-down) threshold in MILLENIUM door leaves (Fig. 12).



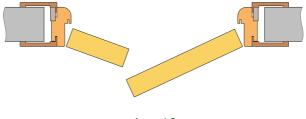




rice. 12

double doors

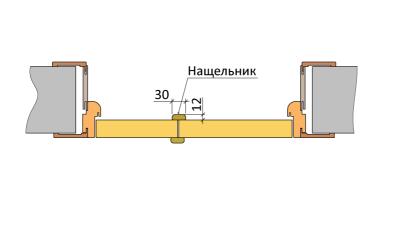
It is possible to order a two-field design (Fig. 13).



rice. 13

If necessary, the gap between the sheets can be closed with a flashing (ordered separately).

Note: please note that the flashing installed on the front surface of the leaf with a coplanar box protrudes beyond its plane, as well as beyond the plane of the box and the casing by 12 mm (Fig. 14, Fig. 15).



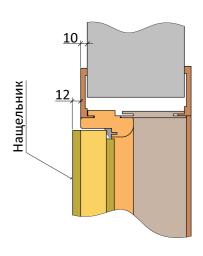


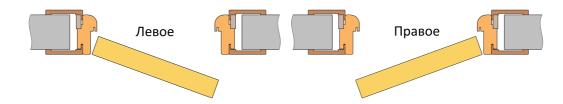
рис. 14

рис. 15





According to the opening options, the doors are divided into "left" and "right" (Fig. 16).



rice. 16

6. Quality criteria for front surfaces of doors with finishing coating with decorative films (collection MILLENIUM)

This normative document regulates some features related to the quality criteria for the front surfaces of doors with a finishing coating with decorative films (collection MILLENIUM). Since there is no separate regulatory documentation for doors with decorative film coatings on the territory of Ukraine, all quality requirements of the DSTU B V.2.6-99:2009 standard also apply to this type of product.

On the front surfaces of doors lined with decorative film materials, the dimensions and number of permissible deviations should not exceed those indicated in Table 1.

Table1

No. p /	The name of indicators	Tolerance standards	Notes
1	uneven gloss or haze: - no more than a width, mm		It is allowed as stripes, and in the form separate local
	- no more than a total area, cm2/m2,	- 5 - 5	spots
2	scratches from mechanical damage, allowed superficial, inconspicuous* - quantity, piece/product, not more - total length, mm / per product, no more	- 2 - 50	Allowed painting over scratches special funds for restoration
3	dents	Not allowed	
4	Cracks with rupture of the film surface	Not allowed	
5	Foreign inclusions under film, - quantity, pcs/m2, not more - diameter, mm, no more	- 2 - 2	Meaning foreign inclusions, caught between foil and base





6	Folds	Not allowed	
7	Film stains: - diameter, mm, no more - quantity, piece/m2, no more	- 5 - 2	
8	Film Bloating	Not allowed	

^{* -} scratches are not allowed, the depth of which is greater than the thickness of the film coating, i.e. to the base of the product.

The quality of the surface is checked visually or using simple measuring instruments (metal ruler, tape measure, etc.).

Inspection of the surface is carried out from a distance of 1000 mm, in daylight or artificial lighting. All these deviations, not visible from the specified distance, cannot be a reason for refusing to accept the product.

Compliance of the appearance of the front surfaces of doors with decorative veneer with the requirements of this document is assessed visually, without the use of magnifying devices.

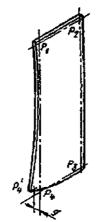
7. Permissible deviations in the geometry of products

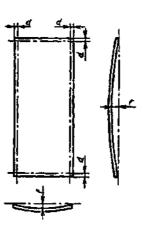
The maximum deviations of the dimensions of the frames of the boxes and door leafs in the assembled form should not exceed the values \u200b\u200bgiven in table 2.

Table2

	Values of limit deviations, mm				
Dimensions, mm	Internal dimensions of	External dimensions of	External dimensions of	Diagonal length difference	
	boxes	boxes	canvases		
From 501 to	+ 1.5	±3.0	0	3.0	
2000 inclusive			- 1.0	3.0	
From 2001 to	+ 2.0	±4.0	0	4.0	
3000 inclusive			- 1.5	4.0	

The deviation from the flatness of the door blocks should be no more than 2.0 mm per 1 m in height and width (we are talking about deviations associated with the bending of the









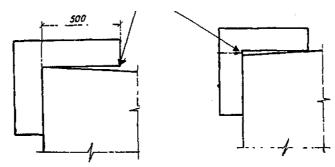
panels along the plane).

Deviations from the straightness of the edges of the parts should not exceed 1.0 mm per 1 m of the length of any section of the door block element. (we are talking about deviations associated with the bending of the ends and edges of the canvases).

The difference between the front surfaces in the corner and T-shaped joints of adjacent parts of boxes and sheets, the installation of which is provided in the same plane, should not exceed 1.0 mm. (we are talking about the differences between the standing and transverse elements when they are connected in the same plane).

Gaps in corner and T-shaped joints larger than 0.2 mm are not allowed. (we are talking about the gaps in the corner joints of the boxes and the joints of the standing and transverse elements of the canvases).

Deviations from the squareness of door panels should not exceed 2.0 mm per 1 m of length.



The main operational characteristics of door blocks are shown in table 3.

Table 3

Name of indicator	Indicator value
Air permeability, m3/(h • m2), not less than:	1.5
Sound insulation, dBA , not less than:	25
Reliability of mechanisms and loops, opening cycles -	50,000
closing, not less than:	