# to DSTU EN 14351-2:2022 (EN 14351-2:2018, IDT)

Windows and doors. Product standard, performance characteristics.

Part 2. Internal pedestrian doorsets.

# TECHNICAL SPECIFICATIONS interior doors are produced under TM "PAPA CARLO Door Factory" and TM "CARLOPORTE"

## I Scope of application

This European Standard defines material-independent performance characteristics, with the exception of fire resistance and smoke protection characteristics that apply to interior doors.

This standard applies to door blocks intended for internal use for construction work and used to close permanent openings in interior partitions.

This standard does not apply to special-purpose door blocks (burglary, bulletproof, fireproof, soundproof, waterproof etc.).

## II Assessment and verification of constancy of performance (AVCP)

Interior doors must meet the requirements of the standard and the characteristics declared by the manufacturer in the Declaration of Performance.

We, as a manufacturer, emphasize and declare all performance characteristics defined in the Declaration of Performance as subject to factory quality control.

We will establish, document and maintain a system of factory quality control of products to ensure compliance of products with the parameters declared in the Declaration of Performance.

A factory product quality control system consists of procedures, regular inspections and tests and/or evaluations and the use of results to control raw materials and other input materials or components, equipment, the production process and the product.

The documentation of the factory production control system provides a general understanding of the assessment of the constancy of product parameters. Thus, factory production control combines work methods and all measures that allow maintaining and controlling the product's compliance with the declared main characteristics.

As a manufacturer, we are responsible for organizing the effective implementation of the factory quality control system in accordance with the conditions of the product standard. We have defined the responsibilities, authorities and relationships between personnel who manage work that affects the constancy of product parameters, performs or inspects such work.

All equipment used in the manufacturing process is regularly inspected and maintained to ensure that use, wear and tear or failure do not cause inconsistencies in the manufacturing process.

#### NOTE

Manufacturers that have a system of factory quality control of products that meets the EN ISO 9001 standard and the provisions of this European standard are considered to meet the requirements for factory quality control of products provided for by Regulation (EU) No. 305/2011.

## III Declaration of working characteristics

#### 1. General requirements for the design of the door unit

- 1.1. Door blocks must meet the requirements of the current standard and the manufacturer's technical characteristics and be manufactured according to the design and technical documentation approved by the manufacturer in the prescribed manner.
- 1.2. The design of the door unit must provide for the installation of a seal in the shelters.
- 1.3. The shape of the door blocks is established in the project documentation or in the order for the production of specific door blocks.

#### 2. Dimensions and limit deviations

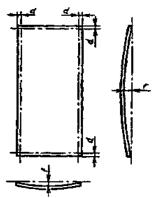
- 2.1. The nominal dimensions of door blocks, assemblies, parts, location of devices, locks, curtains, functional openings and their maximum deviations are established in the normative and technical documentation of the manufacturer.
- 2.2. The gaps between the door leaf and the door frame should be:
  - from above 3 ( $\pm 0.5$ ) mm
  - lateral 3 (±1) mm (this means on each side)
    Side clearances are allowed to be uneven, that is, the clearance on the side of the curtains may differ from

the clearance on the side of the mechanism (especially when the curtains are not adjustable). In this case, the difference should not be more than 2 mm.

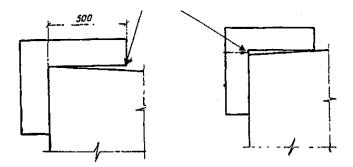
2.3. Limit deviations of the dimensions of door frame and door leaf in the assembled form should not exceed the values that are given in the table

Dimensions mm	Value of limit deviations, mm			
Dimensions, mm	External	External	The difference in the	
	dimensions of dimensions of		lengths of the	
	the door frame	door leaf	diagonals	
Up to 2000 inclusive	±3.0	±1.0	2.0	
From 2001 to 3000 inclusive	±4.0	±2.0	3.0	

2.4. 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 the deviations associated with the bending of the door leaf in the plane. The deflection is measured at the largest deflection point as shown in the figure below.



- 2.5. Deviations from the straightness of the edges of the parts should not exceed 1.0 mm per 1 m of the length of any part of the door block element.
- 2.6. The difference of the front surfaces in the angular and T-shaped joints of adjacent parts of door leaf and door frame, the installation of which is provided in one plane, should not exceed 0.7 mm.
- 2.7. Gaps between adjacent parts of the door leaf elements should not exceed 0.5 mm.
- 2.8. Gaps in corner and T-shaped joints larger than 0.2 mm are not allowed.
- 2.9. Gaps between fittings (curtains, mechanisms, pins, etc.) and their location in the product are allowed up to 1 mm on any side.
- 2.10. Deviations from the squareness of door leaves should not exceed 2.0 mm per 1 m of length.



## 3. Main indicators and characteristics

The main operating characteristics of the door blocks are given in the table below

Characteristic	indicator value
Air permeability, m3/(h • m2), not less than:	1.5
Sound insulation, dBA, not less:	
- ordinary door blocks	25
- door blocks with increased sound insulation (only for use where special acoustic	35
characteristics are required)	
Resistance to static loads, N, not less than:	
a) perpendicular to the plane:	250
b) in the plane:	600
Resistance to impact load of door units:	
a) in the direction of closing, with a load weighing 25 kg, from a height, mm:	245
b) in the direction of opening, with a load weighing 5 kg, from a height, mm:	615
Resistance to punching door blocks with a solid body (except for the glazed part)	
weighing 0.4 kg, falling from a height, mm:	765

Heat transfer coefficient\*

Not normalized

## 4. Requirements for the wood elements

- 4.1. Wooden bars of door leaf and door frame elements can be glued together in thickness, width and length from two or more blanks.
- 4.2. For the manufacture of door blocks, coniferous or hardwood wood is used, as well as glued bar blanks in accordance with the technical requirements of the manufacturer.
- 4.3. Wood moisture should be between 6 11%.

4.4. Defects in wood and defects in mechanical processing of the wood of block parts are limited by the norms established in the table taking into account the types of surfaces (A - front surface, B - external surface and the surface that is visible when opened, C - non-face surface).

Names of wood	Restriction norms by types of surfaces			
defects and processing				Note
defects	A	В	С	
Healthy knots that have grown, and those that have partially grown, with a diameter of up to 30 mm, in the number of pieces per 1 m.p.	Not allowed	1 pc	3 pcs	With a diameter of 30 to 50 mm on the surface of type C, no more than 1 piece is allowed for the entire length of the part
A knot extending to two planes of the workpiece (angular).	Not allowed	Not allowed	1 pc	No more than 30 mm in diameter
Rotten, rotten and tobacco knots	Not allowed			
The crack is not through, with a width of up to 2 mm, a length of up to 100 mm, no more pieces per 1 m.p.	Not allowed	Not allowed	1 piece (as there are several cracks, the sum of their lengths is taken into account)	Cracks through (of any size) or not through with a width of more than 2 mm and a length of more than 100 mm are not allowed in any number on any type of surface
The wormhole is not through with a diameter of up to 5 mm in number, pieces per 1 m.p.	Not allowed	Not allowed	3 pcs	
Swelling in any form and quantity.	Not allowed	They are not normalized	They are not normalized	
Eyes in any quantity	They are not normalized	They are not normalized	They are not normalized	
Chemical colors and sapwood without reducing the hardness of wood in any quantity.	Not allowed	They are not normalized	They are not normalized	
Corner breaks and chips with a depth of no more than 2 mm	Not allowed	Not allowed	They are not normalized	At a depth of more than 2 mm, only for type C, they are allowed without reducing the mechanical properties of the workpiece
Planar tears and chips without going to the edge with a depth of no more than 2 mm, unlimited length	Not allowed	Not allowed	They are not normalized	
Resin pockets that do not reach the edge	Not allowed	Not allowed	They are not normalized	

<sup>\*</sup> subject to standardization only for use where special thermal insulation characteristics are required. In this case, this parameter is indicated in the appendix to the specific order.

The presence of bark on the corners of the workpiece up to 4 mm thick on one side, pieces per 1 m.p., total length up to 200 mm	Not allowed	Not allowed	2 pcs	
Flat bark no larger than 10 x 200 mm, without dips, pieces per 1 m.p.	Not allowed	Not allowed	1 pc	
Rotten, cancer, stepson		Not allowed		

For surfaces of type B and C, it is allowed to putty non-facial areas of wood with water-resistant putty mixtures

#### 5. Quality criteria of front surfaces of doors

- 5.1. This item regulates the quality criteria of front surfaces of doors covered with decorative films, as well as related materials, such as glass, aluminum, plastic, and others.
- 5.2. The structure, texture, color, degree of gloss and other visual and tactile parameters of the finishing material must correspond to the reference samples.
- 5.3. In the manufacture of door blocks, materials and components are used that meet the requirements of the standards in force on the territory of Ukraine.
- 5.4. On the front surfaces of doors lined with decorative film materials (based on polypropylene, polyvinylchloride, polyethylene, paper), the dimensions and number of permissible deviations should not exceed those indicated in the table:

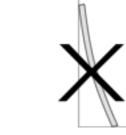
111	the table.		
No	Name of indicators	Admission norms	Notes
1	Irregular gloss or		Allowed as is
	opacity:		stripes, and in the form of
	- width no more, mm	- 5	individual local ones
	- with a total area of no more than cm2/m2	- 5	spots
2	Scratches from damage, superficial,		It is allowed
	inconspicuous*		painting scratches
	- quantity, pcs./product, no more	- 2	special means for
		=	<u> </u>
	- total length, mm/per product, no more	- 50	restoration
3	Dents	Not allowed	
4	Cracks with rupture of the film surface	Not allowed	
5	External inclusions under the film		It is meant
	- quantity, pcs./m2, no more	- 2	extraneous inclusions that got
	- diameter, mm, no more	- 2	between the film and the base
6	Folds	Not allowed	
7	Spots on the film:		
	- Diameter, mm, no more	- 5	
	- quantity, pcs./m2, no more	- 2	
8	Film swelling	Not allowed	
9	Visible adhesive seam of edge width, mm**	up to 0.5	It is allowed in the form of a
			thin strip.
10	Lines, strokes, shagreen, structural	Inconspicuous ones	It is meant
	irregularities	are allowed	unevenness of the MDF surface in
			places of milling

- \* scratches, the depth of which is greater than the thickness of the film coating, are not allowed.
- \*\* this indicator applies only to door panels, the edge of which is glued in the color of the product.
- 5.5. When used to decorate an aluminum profile, it must meet the requirements of DSTU B B.2.6.-3-95. To provide decorative properties, the surface of the profile is anodized. During the anodizing process, longitudinal visible stripes may appear on the profile, which is not a defect.
- 5.6. The surface quality of door elements is checked visually or using simple measuring tools (metal ruler, tape measure, etc.). The inspection is done visually, without the use of magnifying devices, from a distance of 1000 mm, under daylight or artificial lighting in a vertical position (that is, in the position in which the product will be operated). All the specified deviations, which are not visible from the specified distance, cannot be the reason for rejecting the product.

## 6. Transportation, storage and operation

- 6.1. We, as a manufacturer, have procedures that provide for methods of handling the product, and compliance with its transportation and storage to prevent damage or deterioration of its quality.
- 6.2. Marking and packaging:

- a) Product marking must be clear and carry the following information: manufacturer's trademark, product name, quantity, as well as any other information agreed between the manufacturer and the customer.
- b) Packaging must provide protection and guarantee integrity, convenient transportation and storage. 6.3. Conditions of transportation and storage:
  - a) It is necessary to store the door block elements only in the factory packaging.
  - b) When storing doors, measures must be taken to prevent their mechanical damage, contamination, moisture, exposure to atmospheric precipitation, as well as exposure to direct sunlight.
  - c) It should be stored in a dry, well-ventilated room with a relative humidity of 30-65%. The temperature range is from  $+10^{\circ}$ C to  $+40^{\circ}$ C.
  - d) Storage near heating devices is not allowed.
  - e) During storage, it is necessary to exclude the influence of UV radiation sources (direct sunlight, strong light source) on those parts of the products that are not protected by packaging cardboard.
  - f) To avoid deformation of the door block elements, they must be stored:
    - during long-term storage in a horizontal position in the foot, on a hard base, tightly placed side by side without using intermediate pads;
    - short-term (up to 2 days) in a vertical position, leaning against a rigid support, exclusively on the long edge
    - it is forbidden to store the door in a vertical position on a narrow end. This can lead to its deformation.



- In order to avoid deformation of the packages, they must be stored in a horizontal position, with the printed marking up or down, on a rigid base, tightly placed next to each other, without the use of intermediate spacers.
- It is not allowed to lean against the sheets of other cargo, which exerts pressure on their plane and can cause the packing to be pressed and the products to be deformed.
- To walk on horizontally laid door block elements.

#### 6.4. Operating conditions:

- a) Door blocks covered with a decorative film are intended for use in dry, ventilated rooms with an air temperature in the range from +10°C to +40°C and a relative humidity of 30 65%.
- b) Before installing the doors, especially in winter, it is recommended to bring them into the room where they will be installed for a 1 day for acclimatization.
- c) It is forbidden to install the door near heating or heating devices. Sharp fluctuations in the ambient temperature can cause the appearance of cracks on the coating and the distortion of individual elements of the products.
- d) Plaster solutions (of any composition), putty, paint are not allowed to fall on the front surfaces, due to the possibility of stains and damage to the coating during their removal.
- e) To care for the surface of the door, you should not use detergents containing abrasive materials and strong chemicals, as well as solvents. Use only neutral furniture care products according to the instructions for their use.
- f) Ingress of cleaning agents and moisture into locks and hinges shortens their service life. As a result of dust getting into the opening mechanisms, malfunctions and creaks may occur when opening the door. To eliminate them, it is necessary to apply universal grease or grease.
- g) It is recommended to wipe the glass, accessories, handles, with means intended for these types of materials.
- h) Do not allow mechanical action on the fabric of the door and the elements of the door frame and moldings, their contact with hot objects, water, direct sunlight, as this can lead to the loss of the integrity of the coating, a change in color, the appearance of scratches, chips, abrasions, etc. p.
- i) Do not allow mixtures that have an acid or alkaline base to get on the interior door.
- j) When using interior doors in the bathroom, it is necessary to fully ventilate the room after using the bathroom for its intended purpose.
- k) Opening limiters (stops) are installed at the maximum possible distance from the axis of rotation of the door leaves.
- The area of the floor over which the door leaf passes (opening zone) must be free of foreign objects. The standard gap to the lower edge of the canvas should be 10 mm.

## 6.5. Security requirements.

- a) It is forbidden to apply loads that are not provided by the design of the product (for example, hang weights on the fabric, etc.).
- b) It is forbidden to place foreign objects under the door block elements or in the gap between the door leaf and door frame.
- c) There is a danger of a limb being pinched between the sash and the door frame.
- d) when moving the products, given their considerable weight, at least two people are needed. Do not drag the product on the floor, because it may damage it.

#### 6.6. Warranty rules

- a) The warranty period of storage is 1 year from the date of production of the products, subject to compliance with the conditions of transportation and storage and is included in the general period of operation.
- b) The warranty period of operation of the door is 5 years from the date of production (for some collections, a reduced warranty is possible 2 years), subject to compliance with the conditions of transportation, storage, installation and operation.
- c) For some elements of the door unit, which the factory does not produce, the warranty from the date of manufacture is:
  - warranty for accessories (hinges, locks, pins, etc.) 2 years (DSTU B V.2.6-13: 2006);
  - warranty for the seal 2 years (DSTU B V.2.7-158: 2008);
- d) The warranty becomes void if:
  - After the installation of the products, construction work was carried out, which is accompanied by high humidity (plaster, putty, floor pouring, tiling, etc.);
  - Construction materials got on the surface of the product (glue or paint for wallpaper, mounting foam, plaster, putty, etc.);
  - Sand, water, construction mortar and other foreign materials got into the fittings mechanisms;
  - There was a thermal effect of heating or lighting devices, an open flame;
  - Prolonged exposure to UV radiation (direct sunlight, strong light source) occurred.
  - Products were transported, stored or operated at a relative humidity of more than 65%;
  - products were transported, stored or operated at temperatures below +10°C and above +40°C.
  - There was a thermal effect of heating devices or an open fire.
  - Products were operated at relative humidity in the room below 30% and above 65%
  - The products were operated at temperatures below +10°C and above +40°C
- e) The manufacturer is not responsible for damage to the product after its acceptance by the customer in the event of:
  - incorrectly performed installation work;
  - careless storage and transportation;
  - non-compliance with operating rules;
  - occurrence of defects due to the fault of the customer.

#### 7. Installing the product:

- 7.1. As a manufacturer, we are not responsible for the installation of the product
- 7.2. The installation instructions can be viewed at the following links: https://carloporte.com/en/gallery/videogalereya/