

# **INSTALLATION, OPERATION, CARE and MAINTENANCE INSTRUCTIONS**

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## **WARRANTY CERTIFICATE**

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### **WOODEN & WOOD-ALUMINIUM ENTRANCE DOORS SIDE ENTRANCE DOORS**

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## INSTALLATION, OPERATION, CARE and MAINTENANCE INSTRUCTIONS

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Dear Customers,

Congratulations on your thoughtful purchase. With the new front door, you have a high-quality one Quality product purchased from one of the leading front door manufacturers in Europe. But even the very best products should be used, operated, cared for and maintained correctly. Wood is a natural material with ideal properties – when treated appropriately. Aluminium outer shells are practically indestructible, but also require a low level of care and maintenance. Door production at the manufacturing plant is subject to a strict in-house control process and, in the case of functional doors, even external supervision by authorized institutions. If you have any complaints, please contact your specialist retail partner. The quality guidelines are used for the assessment.

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For later inquiries or spare parts deliveries, please enter your order number here.  
Order No.: \_\_\_\_\_

# 1. PRODUCT LIABILITY/WARNINGS



## **Warning**

Indicates a potentially hazardous situation which, if not avoided, could result in serious injury.

**Risk of injury** due to body parts becoming trapped in the opening gap between the door leaf and the frame. When closing doors, never reach between the door leaf and the frame and always proceed carefully. Keep children and people who cannot assess the dangers away from the danger zone.

**Risk of injury and material damage** if the door leaf is pressed against the edge of the opening (wall reveal). Do not press the door leaf against the edge of the opening or use appropriate safety devices (opening limiters).

**Risk of injury and material damage** due to additional load on the door leaf. Additional loads can have a negative effect on the door construction and the hinges. The fittings (door handles and push bars) are particularly sensitive and are not intended for unforeseen loads. (Please do not hang on the door leaf fitting or lift the door leaf over the fitting component). Avoid placing additional strain on the door leaf!

**Risk of injury and material damage** due to additional load on the door leaf. Additional load puts strain on the door construction and hinges; The fittings (handles and push bars) are particularly sensitive to unforeseen loads (no hanging on the door leaf fitting or lifting the door leaf over the fitting part is permitted). Avoid placing additional loads on the door leaf!

**Risk of injury** due to wind and draughts. Avoid wind effects when the door is open. If there is a risk of wind or draughts, be sure to close and lock the door leaf.

**Risk of injury and material damage** due to uncontrolled closing and opening of the door leaf. Make sure that the door leaf is slowly guided by hand over the entire range of movement up to the absolute closed or open position. Avoid uncontrolled slamming!

**Risk of injury and material damage:** if the door leaf is open with the main bolt extended at the same time hook/bolt. When the door leaf is open, the main bolt must not be extended using the key, otherwise the main bolt and the hooks/bolts could cause damage to the frame.

**Risk of injury!** Aluminium and glass surfaces can heat up to over 75°C when exposed to direct sunlight - there is a risk of burns if the skin meet with heated surfaces!

## General product liability and warnings



### The opening and closing.

The opened door leaf does not meet any requirements regarding joint tightness, driving rain tightness, sound insulation, thermal insulation and burglary protection. The front door becomes the ventilation of the room used, appropriate air exchange must be ensured. Please note the airtightness limit values (EN 12207) of our front doors specified in the CE marking.

### Special requirements

We expressly point out that our front doors are designed for use in residential and non-residential buildings. However, it is important to ensure that the interior conditions (temperature and relative humidity) are within the standard guidelines (please see warranty certificate). Different climatic conditions that exist when used, for example, in swimming pools, saunas, cold stores, etc., as well as special requirements such as increased salt or acid concentrations in the ambient air (near the sea, rivers and lakes, dairies, stables, chemical plants, etc.) require our express written approval. If front doors are not locked properly (e.g. only locked using the lock latch), the requirements for burglary protection are not met.

### Glasses may break

Float and patterned glass do not meet any requirements regarding increased risk of breakage, burglary protection and fire protection (note the regional building regulations, guidelines, Standards and regulations). Glass can break easily. The resulting sharp-edged broken edges and glass splinters pose a risk of injury. Glasses supplied loose must be stored in a dry place. Excessive Moisture destroys the edge seal. Increased thermal loads and heat build-up on the glass can lead to spontaneous glass breakage. Avoid partial shading of glasses. Heat buildup on the glass can also occur from external heat sources (radiators, lighting) and from sunlight, which is increased by dark objects in the immediate vicinity of the glass. Avoid subsequently attaching foils and paints to the glass. The European guidelines (see guarantee certificate) apply to the assessment of glass defects.

### Take wear into consideration

Safety-relevant fittings must be regularly checked for tight fit and checked for wear. Depending on requirements, the fastening screws must be tightened or parts replaced. All door elements whose intended use is opening, closing and locking are at least once monthly to avoid damage caused by "resting wear" (especially corrosion and sluggishness).

### Protect elements from external loads

During the construction phase, a variety of mechanical, climate and chemical stresses affect the doors. Protect Therefore, cover/mask the components and ensure sufficient ventilation to reduce the risk of high amount of moisture even during the construction phase. (The maximum permitted climatic conditions must not be exceeded, see guarantee certificate).

Protect wood and wood-aluminium elements from moisture, rain and snow during storage and construction. If the elements are covered, make sure that the wooden surfaces do not darken partially due to any exposure to sunlight. Use suitable adhesive tapes to protect the surface (see under Priming and painting - this is how it's done). The adhesive tapes must be UV-resistant and compatible with painted wood and aluminium surfaces. The adhesive tapes should be removed as quickly as possible. Moisture, mortar, concrete and plastering materials can trigger chemical reactions, especially in wood species rich in resin (e.g. larch) and those containing tannic acid (e.g. oak). These could lead to permanent colour changes to the surface.

Protect your wooden surfaces during the construction phase by masking them with suitable material.\* Alkaline leachates from facades and masonry can cause irreparable damage to painted wood and powder-coated aluminum surfaces. To avoid this, front doors must be protected (covered) or cleaned in a timely manner.

The doors are equipped with rotating hinges so that the door leaves can be protected against the reveal by means of a door stop. Otherwise, the damage can occur as enormous tensile forces act on the rotating hinges. Door stoppers must therefore be provided on site!

### **Particular risk of injury**

Functional sharp edges can lead to injuries if handled carelessly or improperly, especially if people are (fully or partially) between the opened door leaf and sash.

### **Execution only by qualified personnel**

Security components for functional doors (escape/fire protection and burglary-resistant doors) may only be installed, adjusted, maintained or replaced by qualified personnel. Electrical components such as electric door openers, electric or motorized locks and associated control devices including power supplies may only be put into operation by authorized specialist personnel (electricians). Please note that we cannot carry out any plausibility checks on your orders with regard to conformity with the respective building regulations, guidelines, standards and other regulations. The customer acts independently in this regard.

If the door causes damage to the building or other related property or injuries to people or animals, the manufacturer will not be legally or financially liable for the associated damages and costs.

### **\*Annotation:**

There are also various drying accelerators for screeds that allow for faster cure after installation and thus faster moisture removal.

## 2. UNLOADING, TRANSPORT TO THE CONSTRUCTION SITE

**The following points should be noted:**

- Check the front door of the truck for visual damage
- Remove the front door from the truck
- Follow the instructions on the stickers “Observe important instructions before assembly” (attached to the timber packaging) and all other stickers on the packaging
- Check the front door for any damage and that it is correctly executed according to the written information from the Check order confirmation. Do not install damaged or faulty doors; contact customer service immediately. If possible, the elements are to be transported in the same position and position as they will later be installed. Transport from the truck to the storage location is not the responsibility of the manufacturer.

## 3. STORAGE UNTIL INSTALLATION

Front door storage should be in dry, well-ventilated rooms. To protect the elements from dust, the front doors in their original packaging can still be covered with cardboard or foil. Timber and timber-aluminium front doors must not be leaned directly against each other to avoid damaging the coating. Therefore, lean the elements individually against the wall or screw them individually to the protective packaging with strips at a distance. When storing, make sure that the protective film is undamaged. The protective film must not meet with the painted wooden surfaces!

## 4. RECOMMENDATIONS FOR USE

The front door is designed to fulfill the usual functions of tightness, security and warmth. Therefore, it is important to know and plan carefully for the environmental factors so that the structure is not overloaded. When using the front doors, take into account their intended use, according to our recommendations from the CE product performance declaration.

### **Exposure to moisture and sunlight**

The level of loads essentially depends on the orientation of the front door (direction) as well as on the additional protective measures against rain and sunlight such as a canopy or vestibule depend. The load on the front door is particularly extreme when facing NW, W or SW. The minimum protection required here is a sufficiently deep canopy, and even better, complete protection of the front door, for example with a vestibule. Attention: darker colours are not suitable for doors oriented towards S or SW - risk of heating up to 75° Celsius possible - high temperatures lead to the layers of wood possibly drying out, door leaf distortion and early destruction of paint layers. The manufacturer cannot accept any liability for any defects caused by ignoring the above recommendations!

**CANOPY**



with canopy



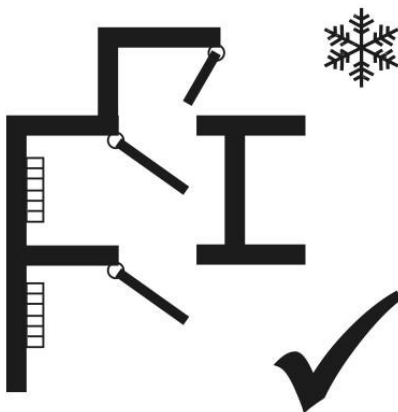
without a canopy

**WITHOUT a canopy!**

No protection against Weather and sunlight!  
Such an insert is for the timber door  
Not suitable!  
Danger of delay!  
Frequent renovation intervals of the paint coat necessary!

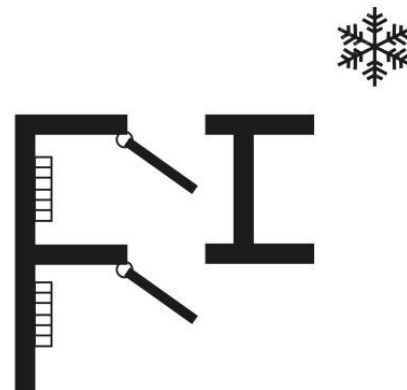
**Interior use**

The use of the interior space and the heating of the room directly in front of the door system essentially determine the climatic load on the door on the room side. A broad distinction can be made.



**Normal use:**

No heating of the anteroom,  
Protection through a vestibule



**Increased stress:**

Heated living room, radiators,  
or underfloor heating right next to the door  
Risk of door leaf distortion!



**leaf distortion**

**SIDE ENTRANCE DOORS**

Important: when using side entrance doors, our recommendations from the CE product performance declaration and their intended use must be taken into account (only suitable for uninhabited and unheated rooms)!

### Front doors that open outwards

The information in this recommendation also applies to front doors that open outwards. The most important change is that constructive weather protection must be guaranteed, although a sufficiently large canopy would be the least. The hinges on this front door are equipped with a locking screw that must be loosened before adjustment (locking screw is only visible and can be removed when the door leaf is open to 90 degrees).

### Special climatic influences

Front doors are constructed in such a way that they can withstand the usual climatic influences of Central Europe or comparable climate zones. If the place of use is subject to particular climatic influences, e.g. high altitudes, sea climate, this can lead to an acceleration of the maintenance and care intervals.

### Interaction of stress / summary

The impact of the listed influences on the design must be viewed in interaction with one another. If multiple increased or even extreme stresses are placed on the front door, there is a risk of overstressing. This affects the functionality of your front door. Therefore, try to plan the loads on your front door within the normal range.

### Note on thresholds:

We would like to point out that when it comes to comfortable thresholds (with low overhang), the onsite building conditions are taken into account when planning. Conditions regarding water drainage in the sensitive threshold area must be taken into account. (e.g. Rigol, canopy, etc.)

### Notes on sealing

With timber doors, it is important to ensure that the hinges are adjusted correctly to ensure that the inner, circumferential door leaf seal rests evenly on the frame over its entire length and without excessive pressure. In the case of timber-aluminium front doors, the outer seal in the aluminium profile does not serve as a sealing element, but rather prevents the view into the rebate area between the sash and the frame, so any leakage or failure of the outer sealing profile to rest on the aluminium is not a product defect.

### Important points:

- 1) Have the front door checked in all details by a responsible person immediately after installation and have the proper work confirmed on the construction acceptance report.
- 2) Advise the person in charge that the front door should be double locked as often as possible (at least when you are away and at night). This is the only way to ensure that the lock is protected against burglary. This can prevent possible door leaf distortions.
- 3) Front doors that consist of a load-bearing timber construction (including timber-aluminium front doors) can warp.

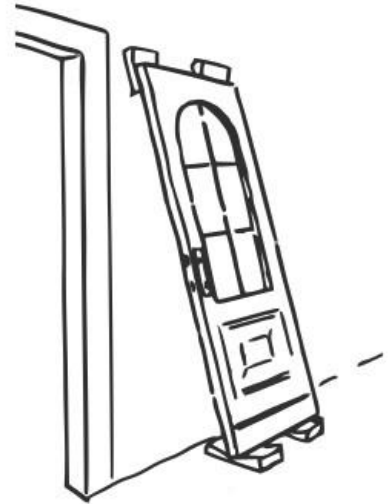
### Basic rules:

- a) Distortion delay is permissible if this does not affect the function.
- b) Distortion delay in new buildings is normal due to the high humidity (IS NOT A REASON FOR A COMPLAINT!) and usually disappears after the second heating season (month May) after installation.

## 5. INSTALLATION RECOMMENDATIONS

### 5.1 Unpacking, removing the door leaf

- Lean the front door on the outside, for example against a wall, loosen and store any cardboard boxes with accessories and additional keys
- Carefully loosen the protective packaging on the inside and at the top
- Carefully remove the protective foil (the foil must not meet with painted wooden surfaces!)
- Remove the cover caps from the hinges (optional)
- Unlock the front door with a key
- Before unhooking, pay attention to existing cable connections and disconnect them before removing the sash (cable plug is secured with a screw)!
- Unhook the door leaf and lean it upright to protect it from damage (e.g. protect against pressure points with foam strips)
- never use the handle set to lift the door or door leaf
- Use carrying straps or trolleys for transport
- Loosen the vertical edge protectors of the frame
- The front door is ready for assembly.



### 5.2 Assembly instructions

The assembly must be carried out by qualified personnel taking into account the "Installation Guide" carried out by the RAL quality association for windows and front doors:

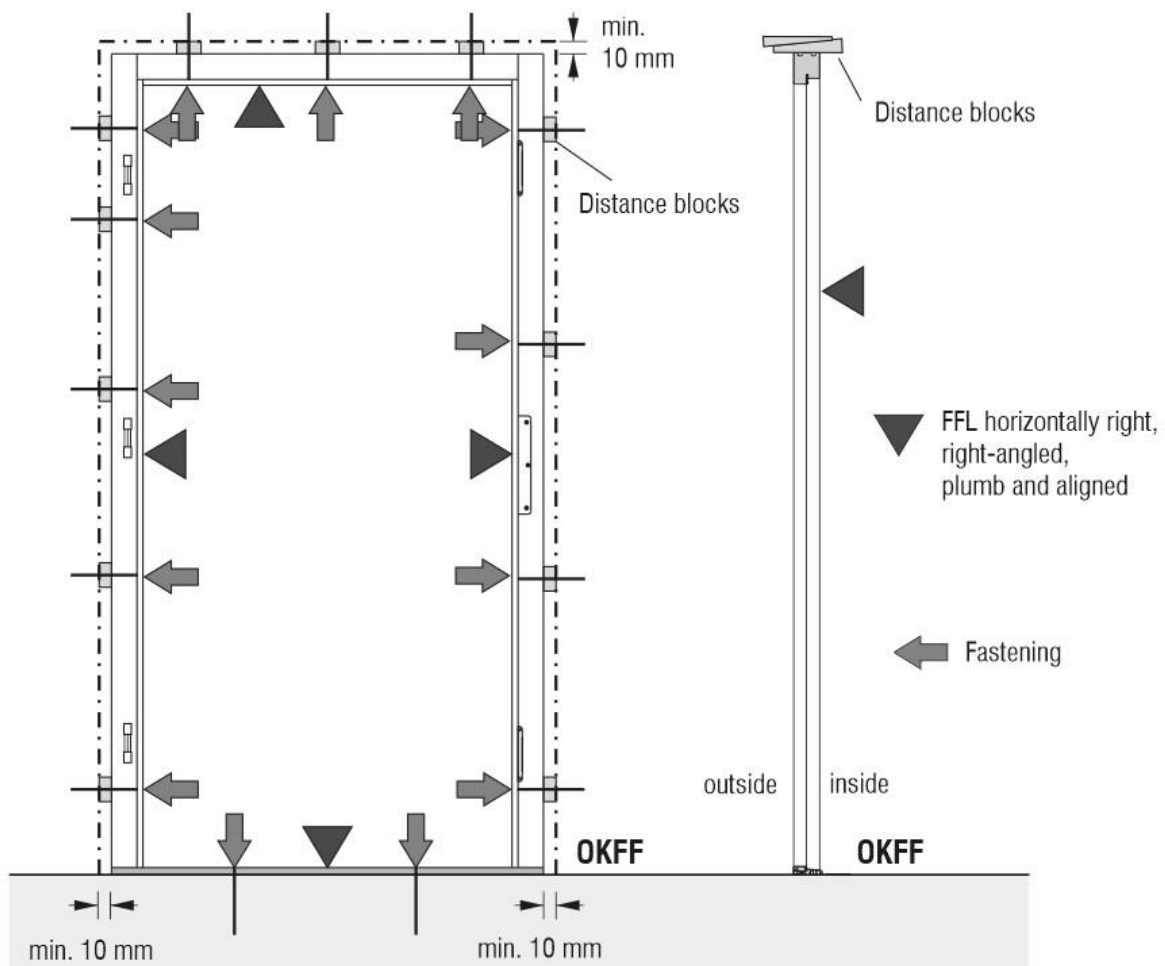
- Place the frame in the installation opening in the correct position horizontally and align the height on the left and right side of the frame
- If the interior floor is not yet finished, the meter plan (100 cm height from FFL) should be noticed
- Be sure to observe the frame construction depth according to the specific building plan (attention: segmental and arched doors must be set as far inwards as possible to ensure the door opens)
- Prepare two to three spacer battens of exact length to be used later  
Rebate can be used to prevent bulging of the frame parts (very important if PU expanding foam is used)  
Block the frame behind the wall in at least 11 places (4-times on the left and right, 2- up to 3-times above)
- Spacer blocks approx. 20 cm from the top and bottom edges of the frame and additional blocks place evenly at a distance of approx. 50-60 cm.
- Check the plumb/aligned position of the frame parts and if necessary, make appropriate adjustment
- Align any crooked frame parts so that they remain installed straight



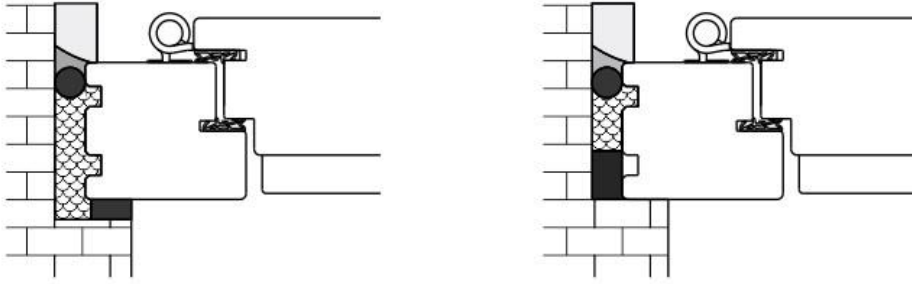
## INSTALLATION, OPERATION, CARE and MAINTENANCE INSTRUCTIONS

- Carefully hang the door leaf and carry out a functional test (if necessary, possibly on the lock side) and block or wedge it to plumb position again
- The gap between the door leaf and the threshold should run parallel!
- Check the horizontal and evenness of the threshold profile and adjust if necessary
- carefully unhang the door leaf
- Outgoing electrical cables (electric strike, motorised lock ...) guide into cable tube on the site
- Mark the drill hole positions (the holes for 210 mm frame dowels should be drilled through the spacer blocks).
- Practical tip: 7.5 mm 180 mm window screws with a small Torx head have proven to be well suited instead of frame dowels - the drill hole can be drilled in a concealed manner, for example in the sealing groove
- Now insert the two to three spacer slats (necessarily at the bottom of the floor rail and in the middle at a height of 100 cm)
- Mask the frame parts with Tesa tape 4438 or 4838 to protect against PU foam
- Insert the pre-compressed strips on one side and carefully foam the construction gap on the other side
- After the foam has dried out, cut off the remains and then remove the tape very carefully after 24 hours at the latest. Remove and attach the sealing foil tape
- Hang the door leaf and adjust it so that it functions properly - see the detailed procedure in the chapter 5.3:

The following points must be checked



**Important:** when planning and building, be sure to secure the thermal separation on the substructure (under the door threshold). Ensure a suitable slope of the floor to allow drainage water to flow away from the door. On the lower side of the threshold facing outwards, equip it with appropriate water drainage foil (must for new buildings).



Execution of the construction connection joint according to the state of the art!

**Rule:**

Windproof on the inside, waterproof on the outside, tighter on the inside than on the outside – should be done using sealing films, pre-compressed tapes and sprayable sealants.

### 5.3 Ensure functionality

The following points must be ensured when testing functionality or front door operation:

Grease the latch, main bolt and hook for better and error-free operation

- The gap between the door leaf and the frame should be the same on the left, right and top
- Check that the locking elements reach securely behind the locking parts on the frame
- Check that the door leaf runs smoothly over the floor
- Door hinges must not creak
- Does the drop-down seal (automatically lowerable seal in the lower fold) function properly and lies when down neatly on the floor.
- Door opens and closes smoothly
- Tight fit of external handle and internal handle
- Tight fit of the outside push handle and the inside handle (slight play is permitted here)
- Easy locking and unlocking via the profile cylinder (two full rotations)
- Function of the door catcher (optional for locking type M2 -W) – also functions from the outside when closed

Check the condition of the door

- Clean the door leaf (also the rebate areas, especially at the top, so that no construction dirt can damage the rebate area or, more importantly, the locking mechanism (clean the rebate at the top towards the hinges!))
- Check electric strike function (available as an option); to be connected by electrician

### 5.4 Assembly of handle sets and profile cylinders

If possible, have handle sets and profile cylinders assembled or pre-drilled at the factory to minimize the amount of work and risk on the construction site. The complete factory assembly of the handle set and profile cylinder ensures that the attachment was carried out professionally and correctly.

If the handle set and profile cylinder are installed on site, please follow the manufacturer's recommendations.

**In any case, please pay attention to the following points:**

- The lock on the front door leaf must be removed to install the handle, as the front door leaf locking mechanism area must not be drilled through when the lock is installed.
- Make sure that the profile cylinder and handle sets are installed without tension!
- Be sure to keep the profile cylinder security card. Only with the security card you can later order additional keys if required.

## 6. OPERATION

Door can be operated using a push button, knob or push handle. By pressing the handle, the latch is unlocked and the door can be opened. If a knob or push handle is installed, the latch is to be unlocked by turning the key against the locking direction up to end position.

### Block

A full turn with the key in the locking direction engages the locking bolt/main bolt. Another full rotation then brings all locking elements (hooks or bolts) into engagement. Front doors are generally equipped with a multi-point lock.

Our recommendation: Regular locking with the key overnight or when you are away for a long time is of great importance, not only for safety reasons but also with regard to the door leaf, which is held in a straight position on the lock side due to the engagement of the locking elements (upper and lower hooks/bolts) thus counteracts the risk of door leaf distortion.

### Unlock

By turning the key as far as it will go, the locking elements (top, bottom and the main bolt) are retracted, at the very end the latch is retracted and the door can be opened.

With electronic automatic locking EAV3 type locking mechanism after activation by the access control system, the upper and lower hooks as well as the latch are retracted, so the door is ready to be opened. Important: When the main bolt is extended (door locked with a key as an additional security measure), you cannot open the front door by operating the access control system. The same applies if an electric door strike is installed.

### Frequency of use

The frequency of use has the main influence on the mechanical strength.

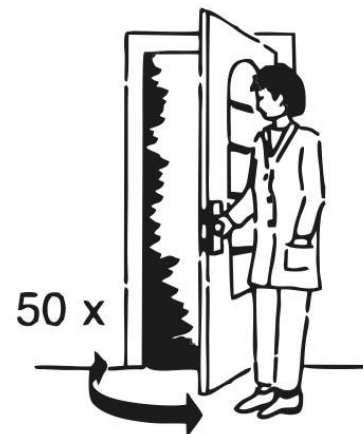
Frequency of use during opening and closing processes per day:

Normal: up to 50x

Increased: more than 50x,

The wear and tear on the parts is greater,

frequent checks and possibly replacements are necessary



## 7. IMPORTANT PRODUCT INFORMATION

### 7.1 Technical Notes - Wood

Wood is a natural and living material. Despite careful selection of materials and precise processing, there may be unavoidable colour deviations compared to samples, due to the material and processing properties. Some possible reasons for this are: The large-scale processing, the use of carrier materials with different adhesive bases (e.g. a veneered door leaf, but the frame is made of solid wood according to the requirements), the composition of individual components, growth-related differences in the wooden surfaces and the structure, repeat orders. These phenomena are an expression of the individuality and authenticity of the natural material wood and do not represent a defect. Differences in colour and structure between different veneer sheets that have been treated with colourless (non-pigmented) or lighter glazes and oils are an expression of the natural colour and growth properties of the wood – and therefore no defect! All wooden surfaces that have been treated with colourless or lighter glazes and oils (i.e. colour fans, colour samples, showroom doors) will inevitably change colour over time, despite being stored in darker rooms! The colour of a front door that has been treated with colourless or lighter glazes and oils is exclusively and unavoidably determined by the natural, specific wood colour may differ from the reference colour sample. milling and V-joints differ from the wood colour and structure of the door surface due to a multi-layer plywood structure and are no reason for a complaint!

#### **Wood type oak**

Oak wood contains tannic acid which can react with water under certain conditions. This happens when there is water on the wood for a certain time, or when the wood becomes damp or moist. The reaction results in yellowish or darker discoloration of wood, which can be seen through the glaze. This property is a natural phenomenon and can never be completely ruled out. There is therefore no reason to make any claims if discoloration occurs on oak wood caused by tannic acid reactions.

#### **Wood type larch**

Larch wood is very diverse in terms of structure and colour (yellow, reddish, brownish, light and dark). That's why the colour of the front door is not uniform. Different coloured wooden parts are no exception for larch wood doors and therefore do not give rise to a complaint. Larch wood is rich in resin. The release of resin is possible with both glazed and opaque paints and is to be seen as a natural phenomenon, which does not constitute a reason for claims. Due to the UV sunlight, the parts made of larch wood, which are exposed to more frequent irradiation, can leave a permanently darker colour.

#### **Wood type Meranti**

Meranti woods contain ingredients that can react with water under certain conditions. This happens when there is water on the wood for a long time or when the wood becomes damp or moist. The reactions result in yellowish or darker discoloration of the wood, which can be seen through the glaze. This property is a natural phenomenon and can never be completely ruled out. Any discoloration of the wood caused by the reaction of ingredients is not a reason for complaint.

### **Knotty wooden surfaces**

The size, quantity and arrangement of the branches are natural and individual to each front door, which do not give rise to complaints. Wood cracks, small veneer chips, unevenness on the surface, or unevenly sanded surfaces in the case of colourful wood structure, repaired areas, filled areas, waxed areas and other deviations in knotty wood structure surfaces do not give rise to complaints. Please note our care instructions!

## **7.2 Technical information - Surface treatment**

### **Oiled surfaces**

Colourless or pigmented wood oils are used. Therefore, there are natural colour differences between veneered surfaces and solid wood parts, but these do not represent a defect! The colour is determined by the natural colour of the wood. The door colour may differ from the reference colour sample from the colour card. The colour samples are not binding colour promises. UV protection is only available to a limited extent on oiled surfaces! Surface treatments with oils do not comply with the EU standards EN 927-1 or DIN EN 927-1 or Ö-NORM B 3803! Our recommendation: treat with wood oil at least once or twice a year (wipe off with a cotton cloth afterwards!) and always lightly sand the surface beforehand. No guarantees on the wooden surfaces, glue joints or in the event of any delay if the subsequent treatment with oils has not been carried out and maintained professionally as recommended! Appropriate protection against external weather influences must be provided here, otherwise the warranty will be void.

Oiled wooden surfaces do not correspond to a standard structure for wooden building elements and are available expressly at the customer's request and at the customer's own responsibility with the obligation of regular aftertreatment!

### **Colourless painted surfaces**

UV protection is only available to a limited extent on painted surfaces with a colourless glaze! There is no guarantee for colourless painting on external surfaces! Existing natural colour differences between veneered surfaces and solid wood parts do not represent a defect! The colour is determined by the natural colour of the wood. The door colour may differ from the reference colour sample from the colour card. The colour samples are not binding colour promises. Possible colour changes and colour differences between the frame, door leaf and strips are not a reason for complaint! We only recommend colourless glazes for interior surfaces. The location of the front door on the property (direction) and the special weather conditions as well as the stability of the colour play a very important role in the durability of the front door and the paint layer surface! If the location is unfavorable, appropriate protection from the weather and UV protection must be ensured!

### **Front doors with untreated wooden surfaces (raw)**

are only manufactured and delivered in exceptional cases and at the full responsibility of the client. For front doors with a raw surface, the manufacturer does not give any warranty on the wooden surfaces, top layers, veneer and wood connections or glue joints! The manufacturer does not give any warranty on any colour changes to the wood! Likewise, the manufacturer does not give any guarantees regarding the stability of the wood and its ability to warp!

Attention: Raw wooden surfaces are unprotected and offer no resistance to weather, dirt, humidity and water. Raw wood is unprotected from UV sunlight! Before the front door is installed, proof of professional surface treatment must be provided! Before painting, all connections between the wooden parts must be sealed with joint protection! After painting, all joints (glass and fillings) must be sealed with silicone compound.

**Information mentioned also applies to impregnated/primed wooden surfaces!**

### Glazed knotty/brushed wooden surfaces

The lacquer layers on knotty/cracked/brushed wooden surfaces are not completely continuous, but can show various unevenness or cracks in the wood or be separated in certain places - these are typical weak points of the material that may not be able to withstand the damaging effects of water and moisture. For this reason, the manufacturer does not provide any warranty for the lacquer layers on GLAZED knotty/cracked/brushed wood surfaces. Increased maintenance and renovation intervals can also be expected here.

### Wood surfaces with metallic effect

For some colours with a metallic effect, this is achieved by applying a thin layer of silver metallic particles. Due to manual painting processes, the arrangement and number of metallic particles may differ more or less from the colour sample and may not be quite the same. Therefore, any related claims will be rejected. Cover layers can sometimes turn whitish under different weather conditions. These whitish spots on the surface are sometimes even more pronounced if water drops remain on them for a certain time. After the paint layers have dried, these white spots disappear again. This effect is a natural phenomenon and therefore no claims will be accepted in this regard. Painted surfaces with metallic colours are more susceptible to colour changes due to the influence of UV radiation and can show yellowish or greenish nuances after some time, depending on the wear and tear. These phenomena do not constitute grounds for complaint. The varnish layers react more sensitively to touching them with your hands if they are damp, dirty or possibly covered in hand cream residue than with normal glazes. Therefore, only the push handle or door handle should be used when opening and holding the door leaf. We will not accept complaints about possible paint damage caused by ignoring our recommendations.

### Aluminium surfaces with metallic effect

Metallic, fine structure (FS) and other shades with colour effects can be used from standardized colour cards from other manufacturers or components (e.g. window manufacturers) differ. Such deviations do NOT constitute a reason for a claim! The colour differences in the structure (for rough, structured surfaces) or in the colour effect (for metallic and special colours) depend on the painting process, the amount of coating, the spray equipment and the drying process, despite the same article number and the same colour supplier. In the painting plants, aluminium is coated under a wide variety of painting conditions. Although every coater works according to the current state of the art, the colours or colour effects achieved cannot be 100% identical. Possible colour deviations are therefore completely normal and should therefore not be seen as a defect.

## 7.3 Technical information - special versions

### Flush design

There may be deviations in flush designs because the seals between the door frame and the door leaf require a clearance of 4.5 mm (state of the art) in order to seal optimally in a wide range of climatic conditions. For flush front doors, professional and accurate installation down to the millimeter range is very important. It is important to follow the assembly instructions when installing. Despite optimal closing and sealing function and correct door leaf adjustment, the visible gap dimensions between the door frame and the door leaf (both inside and outside) can deviate from the specified 4 mm to  $\pm 2$  mm. These gaps can also be uneven (top/bottom, left/right). Due to climatic changes (outside/inside air), the door leaf is not always aligned, but rather adapts to the respective climate influences with a slight deformation (4 mm is allowed according to the EN 12219 Class 2 standard).

**Attention:** There are visible locking parts such as individual bolts in the gap between the door frame and the door leaf

Strike plates, latch, main bolt, visible hinge parts and various other components. All of these features meet the state of the art and justify the design of a flush front door. This means there are no claims for complaints.

### **Outward opening front doors**

The planner must provide a canopy for front door that open outwards. Regardless of whether the material is timber, aluminium, plastic or steel. The assembly company must carry out carpentry work in accordance with guidance VOB DIN 18355 and clearly comply with the obligation to inform if it has recognized that there are problems with the door due to its arrangement. If you ignore these recommendations or install an outward-opening front door without appropriate rainwater protection (e.g. without a canopy) the possibility of water ingress as a result of standing water in the sealing area cannot be ruled out. The associated possible door damage releases the manufacturer from its warranty obligation and you can no longer claim this damaged front door as defect! Likewise, floor connections without a stop or with lowering seals (cold enemy). A floor connection without a stop is not suitable for external doors! The floor connection with lowering seal is not CE tested. Therefore, no statements can be made about the test values for watertightness and airtightness. These performance characteristics are measured with NPD (no performance determined) explained.

## **7.4 Technical information on glazing**

### **General considerations**

With VSG safety glass panes with white matt film, there may be colour deviations due to production. Any colour differences to existing glazing are possible and do not constitute a reason for complaint. Pressure compensation must be carried out at an altitude of 900 m above sea level.

### **Reflective glass (Spy glass/Stopsol/Antelio )**

The so-called "spy glass" is a type of glass plate coated with a silver layer (1 glass level - outer surface). This outer mirror effect coating is very sensitive to scratches or damage caused by metallic or sharp objects. Optionally, the spy mirror glass can also be coated on the inner surface (second pane glass) can be ordered, although the mirror effect is not so pronounced here. However, the glass pane on the outside is not as sensitive.

### **Enamelled insulating glass**

Colour deviations in the glass surfaces of the product are permissible and should be considered state of the art. The visual quality of enamelled or screen-printed glasses is assessed from a distance of at least 3 m and from a vertical viewing angle, in normal daylight, without direct sunlight or backlight. The glass surfaces are not scratch-proof! Possible scratches or minor surface damage are a result of the manufacturing process (state of the art) and use as well as product maintenance. Therefore, there are no grounds for complaint. When assessing any defects on the glass surfaces, the "Guidelines for assessing the visual quality of glass", issued by the Glass Crafts Association, apply and must be taken into account.

### **Note when the glass delivered loose (not installed)**

Since we do not carry out the glazing of the elements ourselves, we hereby point out a limited warranty with regard to the function of tightness (driving rain and air) as well as the tightness between the glass retaining strips and the sash frame (Dampfstop®) and any complaints that may arise as a result.

## 8. CLEANING – CARE – MAINTENANCE

### 8.1 General

To maintain a flawless surface, continued ease of use and long-term tightness of the elements, it is necessary to regularly clean, care and maintain the elements. In addition to weathering, the components are also exposed to smoke, industrial exhaust fumes, dust from nature, animals, etc. Such dirt and deposits, in conjunction with rain and condensation water, can damage the surfaces and thus impair the surface appearance.

### 8.2 Wooden surfaces

#### 8.2.1 Cleaning and care

Ready-coated wooden surfaces are coated with environmentally friendly, water-thinnable acrylic thick-film glaze. Please treat your elements with great care so that no damage occurs to the finished coated wooden surface.

**Wood is a living substance and requires an intact coating.**

Clean the frames and door leaf regularly. The best solution for this is soapy water or a mild Hand dishwashing liquid. Wipe with clean water. To do this, use soft cleaning cloths and sponges. Abrasives, household cleaners and glass cleaners with aggressive ingredients such as alcohol or ammonia are not suitable. Stubborn dirt such as tar or paint splashes can be carefully loosened or removed with vegetable oil such as olive oil or with a drop of WD-40. The care milk from the care sets for acrylic thick-film glazes (not included in delivery) is only suitable for the after-treatment of smaller areas, such as glazing beads and weatherboard strips, where the glazes usually show initial damage due to weathering. Treatment with care milk on larger areas is not recommended due to possible staining (optical defects).

#### 8.2.2 Maintenance and repair of damage

External influences (e.g. during construction, hail, etc.) can cause damage to the paint. Major damage should be repaired by a specialist - please contact your dealer or service partner. Minor damage such as scratches, fine cracks and incipient damage can be repaired with a fine brush and a water-thinnable acrylic-based coating material. It is important that the damaged area is repaired immediately. Otherwise, there is a risk that water can enter, which will freeze in winter and thereby loosen the coating. The damage can therefore only be repaired at a late stage with much greater effort. It is not possible to give a generally valid recommendation for the required maintenance intervals for your front door. The reason lies in the very different demands placed on the respective wooden front doors. These depend largely on the installation situation, the location of your structure and the respective weather conditions (e.g. sunlight, rain, snow, wind, proximity to the lake, hail).

The golden rule for a long front door life is therefore: It is best to check your front door at any time of the year (i.e. four times a year), but at least twice a year for damage, signs of weather (e.g. cracks, dents, bubbles, etc.) and after every hailstorm. Repair the damage and wear on the coating immediately. See also ÖNORM B 5305. Sand the damaged areas with 180-grit sandpaper and then paint over them suitable thick-film glazes or opaque coatings. If the bare wood appears when sanding, first prime with a water-thinnable acrylic impregnation glaze. After the thick-film glaze has dried or the surface has been re-primed, sand over the damaged area again. This time with 220-240 grit sandpaper. The thick-film glaze should be applied up to 3 times to the damaged area. The drying time is 2-4 hours depending on the temperature (recommendation: ambient temperature and wood surface temperature 15 - 25°C ). Under no circumstances should you paint at temperatures below 10°C or in extreme heat.

### 8.2.3 Recoating of front doors

If the maintenance work described above was not carried out in a timely manner, the entire front door may need to be recoated, even years later. In this case, please be sure to contact a painting specialist in your area! For your information and as a guide for the painting company to prepare an offer, we have listed the sequence of necessary work:

- Strip or sand off any old coating residue
- Lightly sand wood surface lengthwise with 180-grit sandpaper using a sanding block (no steel wool!)
- Remove dust
- Apply (paint) colourless wood impregnation
- Intermediate sanding and dust removal
- Quantity calculation for the impregnation or primer
- 1 liter is sufficient for an area of approx. 8-10 m<sup>2</sup>, which corresponds to approx. 20 running meters of frame circumference
- Apply primer evenly with a polyester fiber brush. Attention: Do not paint over fittings and seals!
- Only paint at temperatures between 15 and 25°C . Depending on the temperature, the drying time is up to 6 hours.

For further procedures, please refer to the section “unfinished wooden surfaces” below.

### 8.2.4 Unfinished coated wooden surfaces

Wooden surfaces are impregnated and primed in the factory. The colourless, environmentally friendly impregnation with a deep effect protects the front door against excessive moisture absorption, wood-discolouring fungi (blue stain) and wood-destroying fungi (rot). Before assembly, the first step is to apply the primer paint, but this does not prevent any moisture in the wood, deformation, or damage to the product! This already contains a slight pigmentation, which gives your front door additional UV protection. The wooden surfaces must then be given two coats of intermediate paint. Immediately after installation, another coat of paint is required as a final coat. It is best to have the painting done by a painting company.

### **Priming and painting – that's how it's done**

Sand the wooden surface lengthways with sandpaper (more heavily near the silicone joint) and remove the dust. The sandpaper should have a grain size of 220-240 and be applied to a cork or rubber sanding block. Please do not use steel wool. Apply a primer paint that matches the colour of a thick-film finish glaze.

Apply the final coat (thick-film glaze or topcoat) with an equal thickness on all sides using a polyester fibre brush. Polyester fibre rollers are also suitable for application on large areas. With three coats you get the required total layer thickness of 60 µm for glazes and 80 µm for opaque coatings. Please do not paint over the glass, the silicone glass seal, the rebate seals, and the fittings. We recommend that you use masking tape or remove the seals and carefully reinstall them after the painting process.

We tested the Tesa building protection tape (item no. 4838 or 4438) and the Schuller building protection tape (item no. 45459) for suitability. Remove the tapes immediately after finishing the surface. Quantity calculation for the varnish (thick-film glaze): 1 liter is sufficient for an area of approx. 4 m<sup>2</sup>, which corresponds to approx. 7 running meters. Frame scope with the required 3 coats.

You can obtain the original primer colours and thick-film glazes or topcoats from your specialist dealer. All our coating materials are water-soluble and do not contain any environmentally harmful solvents. For transparent glaze coatings, we recommend choosing a medium colour from the extensive colour palette.

### **The reason for our recommendation:**

Colourless and light-coloured coatings do not offer enough UV protection on the outside because of the low pigment content. The coating weathers away more quickly. You need to repaint more often. Conversely, with very dark coatings, there is a risk that the wood will heat up too much and cracks will form into which moisture can penetrate.

## **8.2.5 Alternative surface**

ADLER Pullex wood oil Elements made of wood/aluminium or wood are impregnated at the factory, primed and given an industrial finish with a wood oil (maybe colourless, brown or with a grey cast)

### **Cleaning, care, and maintenance for elements made of wood-aluminium (indoor use)**

Occasionally clean the inside of the front door with a wet cotton cloth. To extend the durability of oiled wooden surfaces, the coating should be inspected regularly in conjunction with cleaning or care.

If repainting is necessary due to damage to the interior, the following measures are recommended depending on the degree of damage:

- sanding and recoating with Adler Pullex 50520 clear wood oil (for brown with Adler Pullex ST Toscana , or for grey with Pullex ST Silverback 05/4.
- sanding the factory coating down to raw wood and then rebuilding the surface by painting it twice with Pullex 50520 clear wood oil, or for brown with Pullex ST Toscana , or for grey with Pullex ST Silverback 05/4.

### Care and maintenance for outdoor wooden surfaces

This system coating is only partially suitable for wooden front doors. Colourless and almost colourless Coatings have reduced UV protection. The dry film thickness does not correspond to EU standard 927-1 or ÖNORM B 3803 or DIN EN 927-1. Furthermore, wood oil is fungicide-free for ecological reasons. This results in reduced durability and increased maintenance compared to thick-layer glazed door elements. Front doors with an oiled wooden surface on the outside must be installed in protected locations (e.g. canopy/vestibule). To counteract greying and the attack by wood-discolouring fungi on the wooden surface, oiled wooden surfaces that are exposed to outdoor weathering require regular care. For aftercare outdoors, we recommend our Adler Pullex 50520 wood oil (colourless) and for brown oiled surfaces the Adler wood oil Pullex ST Toscana or for grey oiled surfaces the Adler wood oil Pullex ST 05/4 Silverback. Depending on the weather or exposure of the front door, follow-up care must be carried out once or twice a year. The wood oil is applied thinly with an absorbent cloth or soft brush and then wiped with the dry cloth lengthways in the direction of the wood (very important!). After drying overnight, repeat the process.

If regular follow-up care has been missed and individual door areas already show greying or wood-discolouring fungi, the affected areas must be sanded down to the raw wood and then painted over at least twice with Adler Pullex 50520 wood oil. Excess material should be removed with a cloth after approx. 15 minutes! Intermediate drying time before the 2nd treatment – overnight.

Intact surfaces can only be maintained with Pullex Wood oil (colourless) to wipe over.

#### A notice:

If these recommendations regarding the necessary regular aftercare of oiled wooden surfaces are not followed, the guarantee will be void! The warranty also expires if the front door with an oiled outside is installed in a weathered position (unprotected).

#### Danger:

Rags soaked in wood oil can self-ignite. Store-soaked rags in closed metal containers or under water.

## 8.2.6 Special wooden surfaces

### Surface Protor finish fine structure

The surface of the 2-comp. Varnish is almost the same as car paint and can easily withstand normal mechanical stress, such as key chains or footsteps. The surfaces are a bit rough here because there are fine structure particles mixed into the paint. Any deep scratches or damage must be treated with 2-comp. Polyester putty must be repaired, sanded smooth and then painted over with original paint (repair paint with fine structure particles and hardener).

### Old wood effect surface

Creating old wood effect surfaces in the factory takes place in several steps and is sometimes very complex. For instructions on repair options, please contact your specialist retail partner.

### 8.2.7 Surfaces made from old wood (Vintage series)

**Reclaimed wood** is old wood that has acquired its beautiful patina through natural weathering processes, which can be seen through cracks in the wood, rough brushed and chopped surfaces, patched areas, knots, colour differences, worm bites and insect holes. Reclaimed wood is constantly changing due to mechanical, climatic, and other external conditions, which cannot be the subject of a complaint, as these natural phenomena are characteristics of this wood. Possible traces of weathering (e.g., water strikers) and other stains are not grounds for complaint.

**NOTE:** 3-layer panels with external gluing are only approved for protected outdoor areas. They must not be exposed to direct weather, either through precipitation or sunlight. The individual slats can become detached due to excessive moisture or drying out outdoors. When used outdoors, we recommend adequate protection of the panel with a canopy or similar. In addition, when used outdoors, the panels must always be treated with a surface protection approved for outdoor use and thus protected against moisture absorption.

### 8.3 Aluminium surfaces (powder coating)

Environmental influences can cause aluminium surfaces to become dull over time, changing the level of gloss and colour fastness. Basically, the aluminium surfaces are manufactured with a matt gloss level.

#### Cleaning recommendation

If proper care of the coated aluminium elements is intended, they must be cleaned at least once a year or even more often in the case of severe environmental pollution according to the following guidelines:

- Pure water with a small addition of neutral or very slightly alkaline cleaning agents.
- Soft, non-scratching cloths or rags can also be used as additional mechanical cleaning components.
- The elements must be cleaned when cold (max. 25°C).
- The cleaning agents may also only be used when cold (max. 25°C). Please do not use steam jet devices.
- Do not use acids or strongly alkaline cleaning agents, which can attack the aluminium surface.
- Do not use any scratching or abrasive agents (or other aggressive cleaning methods). Please only use cloths or industrial cotton wool for cleaning.
- Rough rubbing should be avoided.
- Do not use organic solvents such as esters, ketones, alcohols, aromatics, glycol ethers or halogenated hydrocarbons, etc.
- Do not use cleaning agents of unknown composition.
- Substances containing grease, oil and soot can be removed with aromatic-free petrol hydrocarbons.
- Residues of adhesives, silicone rubber or adhesive tapes etc. can also be removed in this way. Immediate removal is important.
- The maximum exposure time for these cleaning agents must not exceed one hour. The cleaning process can be repeated after at least 24 hours if necessary.
- Immediately after each cleaning process, rinse sufficiently with clear cold water.

### Maintenance and repair of damage

You can conceal fine scratches on the aluminium powder coating with a car polish that contains colour pigments. This product is available in many car accessories shops in various basic colours. Important: Mask off the area around the scratch, otherwise the level of gloss of the surrounding area may change.

Deep scratches and manual damage should be repaired as follows:

- Sand the damaged area.
- Damage with 2-comp. Fill with polyester putty and sand smooth.
- Remove dust.
- Tape off the damaged part to protect remaining surfaces.
- Spray several times with a powder coating spray (not included!). Can be prepared in the paint shop for car paints according to a colour sample provided, which can measure the correct gloss level.
- Polish the remaining door parts according to the care instructions to avoid or even out any differences in colour and gloss compared to the newly colour and gloss difference to the newly coated/treated areas.

Recommendation: Leave the painting of aluminium parts to a specialist company. Or better yet, reorder damaged spare parts from a specialist retail partner via the factory.

**Important:** The manufacturer assumes no responsibility for repairs and repair work that were not carried out at the factory.

## 8.4 Glass surfaces

We recommend commercially available, ammonia-free glass cleaners. When using wooden doors, please ensure that the cleaner does not get onto the finished coated surface or remain there. Use soft cleaning cloths (no steel wool, no scouring rags) to avoid scratching the window. Stubborn dirt such as tar or paint splashes can be carefully dissolved or removed with spirit, acetone or benzene.

The glass surface must then be cleaned with water.

Under no circumstances should you use metal objects such as razor blades.

Alkaline detergents, acids or cleaning agents containing fluoride must not be used for cleaning. The glass surface must be protected from:

- Mortar splashes, cement slurries, untreated concrete surfaces, fibre cement panels
- Welding beads, flying sparks (from working with a cutting disc)
- Acidic facade stone cleaners

## 8.5 Locking and fittings

### 8.5.1 Locking

All moving hardware parts must be checked for wear and tight fit at least once a year and then greased or oiled. Lubricate the locking elements (hooks or bolts, deadbolt and latch, gears or all moving parts) and locking parts with technical acid-free grease (available from all DIY and automotive stores) or technical Vaseline and apply a few drops of oil to the moving parts underneath at all guide slots. Then perform the opening functions of the element several times.

**Important:**

- Under no circumstances use commercially available WD-40 to lubricate locks (this can cause the existing grease to soften and dry out)!
- E-opener must not be oiled/lubricated.
- Movable hinge parts are mounted on special plastic sleeves that must not be oiled!

**Recommendation:**

using spray oils to lubricate locks, e.g. Fenosol fitting spray from Fenoplast or Interflon Fin Super Spray from Interflon.

### 8.5.2 Visible fittings

**Visible fittings made of stainless-steel**

Chemical oxidation and contamination also occur on stainless steel parts. Due to the respective environmental influences (such as rain, dust, dirt, harmful gases, etc.), these are not conventional rust spots despite their similar appearance. The stainless-steel fittings (such as pull handles and handles, stainless steel applications, etc.) should be cleaned at least once a year with special stainless-steel cleaner (available as a liquid agent or as a paste in all markets with stainless steel goods).

**Visible fittings made of anodized aluminium**

Only PH-neutral agents (PH values between 5 and 8) should be used for cleaning (e.g., hand dishwashing liquid). Even heavily soiled anodised surfaces must never be cleaned with agents that leave scratches or scuff marks. Special cleaning pastes are available from specialist retailers for this purpose.

**Brass visible fittings**

The same recommendation applies here as for the fittings made of anodized aluminium.

## 8.6 Seals

Cleaning may only be carried out with a mild, commercially available cleaning agent. To care for and maintain the functionality of the sealing profiles, we only recommend special care products for rubber parts, available in all technical markets with sealing rubber products. The rubber seals should be treated with the care product at least every two years to maintain their suppleness and prevent premature brittleness.

## 9. VENTILATION, CONDENSATE (THEW WATER), SCREED

The formation of excessive humidity in the interior must be avoided (max. 65% for a maximum of 8 hours a day, max. 55% over the rest of the time). This can lead to consequential damage such as the swelling of wooden parts, the deformation of components, corrosion damage to the fittings, the detachment of thick-film glazes, the formation of mold and an unhealthy living environment.

### **Proper and sufficient ventilation brings you several advantages:**

- Healthy living: oxygen supply for the air we breathe and removal of contaminated air.
- Energy saving: Ventilating as needed prevents the interior walls from cooling down unnecessarily and thus saves heating energy.
- Prevention of structural damage

Excessive humidity leads to condensation forming on front doors, windows, and walls.

### **Consequences:**

- Mold formation
- Rot
- Paint damage
- Corrosion and material damage
- Deformations or distortion of components

### 9.1 Basic rules for default

Warping of door leaves because of climatic changes is permitted if this causes the locking and Sealing functions can still be guaranteed. As a rule, the flexibility of the sealing profiles compensates for door leaf warpage in the longitudinal axis of up to 4.0 mm. The strike plates and hinges should be readjusted according to the written instructions (enclosed with the door packaging) to ensure the locking functions. Important for new buildings: Warping of a door leaf is the result of excessive humidity, as excess building moisture from the air was not removed in a timely manner (see under Prevention of condensation). After ensuring a normal climate (45-55% RLF / 20-22°C), the door leaf aligns itself very slowly (the water diffusion process runs very slowly and can last until the second heating season has been completed (month of May) until the wood moisture has reached a level has reached its normal position and the door leaf has thereby aligned itself again). Delay because of excessive humidity is not a reason for complaint!

### **Causes of high humidity:**

- Building moisture – especially after plastering, screeding, or painting work
- Wet rooms – such as bathrooms, shower facilities, laundry cows, indoor swimming pools, basement rooms, washer-drying rooms, saunas, aquariums etc.

### 9.2 Prevention of condensation

#### **Principle: Please ensure that moist air escapes!**

If there is temporarily high building humidity of more than 65%, you must ventilate several times a day! Depending on the amount of moisture, ventilate several times a day. Open the windows as wide as possible (shock ventilation). Turn off the radiators while ventilating (do not allow the room temperature to fall below 15°C).

During the cold season, use the economy ventilation setting in your bedroom at night so that there is a minimum air supply. Avoid long tilted positions of the window sash in winter, as condensation will form when the lintel cools down.

### **Advice for the planning phase:**

- Use an inexpensive replacement front door leaf while laying the screed/cleaning work!
- Place radiators under the windows.
- Only lay the screed after the interior plaster has dried out.
- Place your window components and front doors, if possible, in the middle of the wall to the reveal depth or, in the case of insulation, on the same level.
- Equip indoor swimming pools with air conditioning.

### **Use quick-drying screeds**

Lt. According to the standard, there is a 14-day ventilation ban for classic cement screeds to ensure the necessary

The surface strength and load-bearing capacity of the screed are guaranteed. The building moisture therefore remains in the air in the building. In the case of wooden and wooden-aluminium front doors, this large amount of moisture penetrates the painted wood. This can cause the wood to swell, causing irreparable damage. Unfortunately, the manufacturer cannot accept any liability for this. The advantages of quick-drying screeds are obvious. With usual rapid screeds, these can be walked on or ventilated after just two days. This means protection of building elements such as windows and doors, and the walls are also protected from moisture damage. The shortened drying times do not allow the adjacent components (windows, front door, walls) any time to absorb moisture.

The use of expensive air-drying devices is no longer necessary for quick screeds.

The decisive advantage, however, is certainly the considerable shortening of the entire construction phase - true to the motto "time is money". These positive factors quickly compensate for any additional financial outlay.

## **9.3 Condensation formation on the insulating glass component**

Condensation (condensation) can form on the outer glass surfaces if the glass surface is colder than the surrounding air. The formation of condensation on the outer pane surfaces of the insulating glass is determined by the U-value, the humidity, the air flow as well as the inside and outside temperature. The formation of condensation on the room-side pane surfaces is caused by impairments in air circulation (e.g., deep reveals, curtains, flower pots, interior blinds, etc. as well as unfavourable arrangements of radiators or similar) and by thermal bridges on the buildings (walls, floor slabs, ceilings).

With insulating glass with high thermal insulation, condensation or ice can temporarily form on the weathered side of the glass surface if the outside humidity and the air temperature are higher than the temperature of the pane surface. Therefore, condensation must be considered according to ÖNORM 8110/2.

## 9.4 Condensation formation in the fold area

When there is a very high level of moisture, moisture penetrates the fitting rebate through the joints between the door leaf and the frame. The temperatures there are very low, so even a small amount of humidity is enough to cause condensation. Even if this condition only exists for a short period of time every day, it is enough for condensation to form. On the other hand, the air circulation in the rebate area is sufficient, but usually not for drying out, so the amount of water here also increases with every day. Proper and regular ventilation can also help here!

## 9.5 Condensation on the fittings

Components such as front doors or windows are relatively thin components in the outer shell, which, due to their diverse properties and functions, cannot be optimized in terms of thermal insulation to the same extent as thick floors, walls, ceilings, and roofs. Therefore, the standard allows condensation to occur on windows and doors. The metal fittings can therefore cool down at low outside temperatures or during temperature fluctuations to such an extent that the conditions for condensation/condensation are present. The formation of water, for example on the profile cylinder, is a purely physical phenomenon (state of the art) and therefore no reason for a claim for defects. At sufficiently low temperatures, the condensate can freeze, but this is no reason for complaint.

### **Important:**

Through unhindered air flow and heating to the appropriate room temperature and the elimination of Excess humidity (ventilation) eliminates the conditions for condensation.

### **Conclusion:**

Condensation may occur on windows and front doors - it cannot be avoided structurally - but it must not dampen the adjacent wall area.

### **Golden Rule:**

- Correct and sufficient ventilation at high humidity
- Ensure warm air circulation to the front door surface in the event of condensation.

## WARRANTY CERTIFICATE

The warranty period for your entrance doors for business customers is 24 months from handover. The guarantee applies exclusively to defects in material and workmanship that can be proven to be the fault of the manufacturer. Such defects will be remedied by the manufacturer within the warranty period. The business customer must give us at least two attempts to remedy the defect. Any visual defects that may have arisen due to improper storage, manipulation or improper use of the doors must be reported in writing immediately upon receipt of the goods; Subsequent claims will no longer be recognized by the manufacturer. Complaint claims must be submitted in writing to the point of sale with the customer address, original invoice, and enclosed guarantee certificate.

The production and CE marking of the front doors comply with the harmonized standard EN 14351-1 provided declaration of performance of the product. For products with a specific intended use that are manufactured in individual cases, the one-off production principle (non-series production) applies. For the existing structural systems that are built according to specific structural specifications for the individual case due to their characteristics and requirements (e.g.: special dimensions, special constructions, special construction, special fittings, monument protection requirements), the specific CE performance properties that cannot be tested are explained with NPD. For these products, the manufacturer has the production technical documentation, documents from the factory production control, technical factory drawings of the specific component and the acceptance protocol after delivery release for production.

Wood quality: our products comply with EN 942, which determines the quality criteria for wooden building elements.

### **The following cases are excluded from the guaranteed conditions:**

1. visual defects that were not reported immediately when the door was accepted - it is essential to observe the "Important information before installation" sticker.
2. doors that were installed despite visual defects having been identified.
3. doors that have been installed for a requirement that is not intended for this type of door - please refer to the CE declaration of performance in the delivery note documents under properties - for use in heated/unheated buildings; if an inward-opening door has been installed as an outward-opening door, any door damage that may have occurred is not a reason for complaint.
4. if the customer has handled the product improperly or carelessly (e.g., unprotected, stored in dirty or damp rooms) or damp rooms).
5. if the front door has been installed without an appropriate canopy (a sufficiently large canopy is required to prevent permanent contact with rainwater); this is particularly important for oiled surfaces and doors that open outwards!
6. if the installation was not carried out in accordance with the manufacturer's recommendations and by professionally qualified personnel. by qualified personnel.
7. if the door frame has been installed incorrectly (door frame parts e.g., curved, extended, crooked, crooked, diamond-shaped, not at right angles, not horizontal, etc.). The fitter must install any crooked hanger frame parts in such a way that they remain straight.
8. if colour changes have occurred due to contact with building materials. (alkaline plaster mortar or other building paints, rainwater run-off from the façade and plaster).
9. If the door was delivered in a raw state, only pre-impregnated or oiled, the manufacturer does not provide any warranty for the surface, wood/veneer surface layers and any warping. Such surfaces are to be regarded as critical, also with reference to an increased need for maintenance intervals. The silicone is supplied loose with unfinished doors. The areas where silicone sealing is required on site (e.g., glazing beads, panel mouldings, weatherboards) only have limited adhesion of the paint coating and the associated possible peeling of paint coats, which therefore do not give rise to any complaints.
10. If the surface treatment was carried out by the customer himself or by a third party (expertise in painting is required and verifiable). The paint should be done before installation!

11. If oiled wooden surfaces are not treated with wood oil or not treated professionally (at least 1-2 times a year), any surface defects or possible door leaf warping are not a justified reason for complaint! Failure to carry out the required after-treatment will result in excessive moistening/drying of the wood and warping, open glue joints and veneer layers, colour changes and stain marks, mould growth, visible traces of rainwater on the surface, etc.
12. If defects in the wood have already been repaired by the manufacturer with wood shuttles or wood putty and resin leaking from the repaired resin gall in the wood are not grounds for complaint.
13. Any rough edges in milled V-joints (milled against the direction of the veneer) are not grounds for complaint. Likewise, deviations in the colour of the joints from the rest of the wood surface colour are not defects, but rather the result of a multi-layer plywood structure.
14. Cracks, knots, possibly falling branches, wood splinters, wood discoloration, rough edges on doors with knotty or brushed surfaces and worm holes on old wood surfaces do not give rise to complaints.
15. The arrangement, size and quantity of branches is arbitrary and different (unique) for every front door and does not give rise to complaints.
16. Wavy stripes according to the wood texture, uneven structures of wood and/or veneer are natural phenomena of wood growth and therefore not a reason for complaint!
17. If there are colour differences in the product itself or in the colour sample - minor colour deviations Material-related and do not entitle you to a complaint!
18. Differences in the colour of the wood, the wood texture (the course of annual rings and their widths as well as colours, differences in the veneer directions both transversely and lengthways) as well as the wood structure are natural factors and do not constitute a reason for complaint! Differences in colour between knotty and knot-free wooden parts are the result of different natural wood colours and are not grounds for complaint!
19. If small or large colour discolorations occur on oak doors, these are the consequences of reactions of the tannic acid in the oak wood and aqueous thick-film glazes or rainwater due to weathering.
20. Mirrors in different shapes and proportions are never a reason for a complaint with oak wood, as they are a normal part of the wood.
21. The door parts of larch doors generally have different colours. Larch wood is very diverse (yellow, reddish, brownish, light, and dark), which is why the colour of the front door cannot be uniform. Larch wood naturally has a very high resin content, which is why resin leakage from larch wood front doors is NOT a reason for a complaint. Visible stains because of the resin contained in the wood are also not grounds for complaint!
22. If there are visible differences in colour due to nail holes growing out in the area where the glass and the glass and infill frames.
23. There is no UV protection for colourless stains, so the wood can darken or fade because of light. There is therefore no reason to make a complaint! The colour tone of the front door can vary greatly due to the natural wood base colour if it is painted with colourless stains or treated with oils.
24. If changes in the colour of the respective coatings occur due to UV radiation from the sun or contact with rainwater. Some colours on wood (such as light or reddish) and especially metallic colours tend to change colour due to UV radiation, but these are not a reason for a complaint!
25. Visual defects on the surface that are not assessed according to the guidelines of the Testing Institute for Door Technology + Burglary Security PfB Rosenheim. The guidelines only describe scratches, cracks, scrapes, etc. as surface defects if they are clearly visible from one meter in diffuse daylight and without optical aids.
26. If visual defects on glazed or opaquely coated surfaces (colour differences, colour spots, etc.) are not visible from 5 m on the outside and from 3 m on the inside, according to RAL RG regulations.
27. If there are visual defects in the glass and viewed from a 90° angle and according to the "Guidelines for assessing the visual quality of insulating glass" or "Guidelines for assessing the visual quality of flat glass with screen printing or enamelling as well as with painted "Paint application" are described as permitted.
28. Doors that are temporarily exposed to the direct influence of precipitation or continuous direct UV radiation (sufficiently wide and deep canopies are essential!)
29. Doors that are exposed to high external humidity (proximity to rivers, lakes, the sea, forests, shady or humid locations with little air circulation).
30. Doors exposed indoors to direct influences above 65% relative humidity for more than 8 hours a day to 55% relative humidity the rest of the time.

## WARRANTY INFORMATION

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31. If the door is attached or installed next to a radiator, i.e. the relative humidity inside falls below 40%. The user's task is to ensure a comfortable climate under normal living space conditions (45-55% RLF / 20-22°C), if necessary, through free ventilation or air conditioning settings!
32. Appearances of condensation are not grounds for complaint. Condensation is caused by physics/construction and cannot be avoided. Regularly open and wipe with water as needed!
33. Under certain climatic conditions (humidity, temperature) condensation of water (or ice) can occur on door fittings (e.g., on the profile cylinder), but this is a state of the art and not a product defect.
34. A curvature/warping of the door leaf or the floor frame parts in the longitudinal axis up to 4 mm and transverse axis up to 2 mm (is permissible according to DIN EN 12219 Class 2) is not a reason for a complaint! Delay in new buildings because of increased air humidity (building humidity) is not a reason for a complaint!
35. If the hinges or striking plates are improperly adjusted (after installation or by the customer) and the door is therefore not fully functional in terms of closing and sealing. The hinges and strike plates are factory set. After installation, the hinges and locking plates should be finely adjusted by the fitter! All future adjustments of the hinges and strike plates and thus changes in the position of the door leaf are not grounds for complaint. The owner should have the settings carried out according to the attached instructions and as required or at least once a year.
36. In the case of flush front doors, there may be differences in the flushness and in the gap widths between the door leaf and the frame due to manufacturing and climatic conditions. To achieve optimal tightness in different climatic conditions, the seals between the door frame and the door leaf require a clearance of approx. 4.5 mm. The gap dimensions can vary by  $\pm 3$  mm after adjusting the straps to ensure a better closing function. These differences are state of the art and therefore not grounds for complaint.
37. Aluminium shells shrink and expand with changes in temperature. These circumstances do not affect the functionality, construction, and safety of the product. Minimal slot openings may occur at the connection points of the aluminium parts, but these do not constitute a reason for a complaint.
38. Drop-by-drop water ingress in the area of the sealing profile is approved for external doors (PfB Test Institute for Building Elements) and is not a defect! Absolute driving rain tightness is not required for external doors.
39. In timber-aluminium front doors, the outer seal in the aluminium profile does not serve as a sealing element, but prevents the view into the rebate area between the sash and frame, so any leakage or failure of the outer sealing profile to rest on the aluminium is not a product defect!
40. If the maintenance work has not been carried out in accordance with the maintenance recommendations and in good time.

### **In general, the guarantee does not apply to:**

- a) the restriction cases mentioned in the brochure ("installation, operation, care and maintenance instructions")
- b) Neglecting the required care, control and maintenance guidelines as described in the brochure
- c) failure to report the discovered defect and the warranty claim to the sales partner or representative in a timely manner
- d) Causing mechanical damage
- e) Improper treatment of the surface, in particular through aggressive or aggressive cleaning agents (ammonia or alcohol-containing, caustic, abrasive agents), unsuitable adhesive tapes, contact with alkaline substances (lime and cement splashes, especially on wooden surfaces) or repeated contact with softeners (e.g. oil-based hand cream), failure to take protective measures against contamination with other substances (e.g. assembly foam, etc.)
- f) damage (e.g. swelling of the wood) due to excessive air humidity in the room (see ventilation instructions in this brochure)
- g) Exceeding the usual loads in the relevant technical standards
- h) Damage caused by force majeure (e.g. storm damage, flood, hail, earthquake, fire).
- i) Any modifications and additional fabrications to the doors made without the written consent of the manufacturer will void the warranty.

## WARRANTY INFORMATION

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During the warranty period, service on the product can only be carried out by authorized specialists from the manufacturer or a representative, otherwise the warranty claim will be void. Period of warranty for spare parts and services: The manufacturer guarantees services and the procurement of spare parts for at least 3 years after the end of the warranty period.

### **Warranty area:**

Member States of the European Union and Switzerland. The Guarantor has entered a legal obligation with this document and the conditions described therein. The user's rights can also be enforced against the buyer. In the event of unjustified claims, the client will be charged the craftsman's actual travel costs and any labour costs in accordance with the applicable tariffs.

Customer: \_\_\_\_\_

Your specialist retail partner / seller - signature and stamp:

Date of sale: \_\_\_\_\_

## SERVICE DOCUMENTATION

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In order for this guarantee to remain valid, in addition to the annual mandatory cleaning, care and maintenance, a check (visual inspection) for surface damage and any other damage is required to be carried out and, in the event of damage, to have it repaired immediately by a specialist.

Assembly carried out\* by (company/entrepreneur) \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_

\*... after assembly a functional test was carried out. Functional test passed YES / NO (check)

Description of any deviations identified:

Deviations corrected on (date): \_\_\_\_\_ Signature: \_\_\_\_\_

The checks and any maintenance work must be documented here. The guarantee only remains complete documentation exists.

1. Check carried out on \_\_\_\_\_ of \_\_\_\_\_

Maintenance measure: \_\_\_\_\_

2. Check carried out on \_\_\_\_\_ of \_\_\_\_\_

Maintenance measure: \_\_\_\_\_

3. Check carried out on \_\_\_\_\_ of \_\_\_\_\_

Maintenance measure: \_\_\_\_\_

4. Check carried out on \_\_\_\_\_ of \_\_\_\_\_

Maintenance measure: \_\_\_\_\_

5. Check carried out on \_\_\_\_\_ of \_\_\_\_\_

Maintenance measure: \_\_\_\_\_

6. Verification carried out on \_\_\_\_\_ of \_\_\_\_\_

Maintenance measure: \_\_\_\_\_

*We reserve the right to change or modify any of the subject without notice  
Printing errors are possible!*

