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1. Transport, storage

The rules of transportation and storage of Aluron sp. z o.o. products are specified in the General Terms and Conditions

of Sale and Supply as well as the Warranty Card of Aluron sp. z o.o., which are published on the website www.aluron.eu

2. Securing profiles

The rules for securing Aluron sp. z o.o. products are set out in the catalogues and product instructions, as well as the General Terms of Sale and Supply and the Warranty Card

of Aluron sp. z o.o., which are published on the website www.aluron.eu

3. Cutting and processing of aluminium profiles

In order to avoid damage to the coating of the workpiece, use only functional and sharp tools.

Silicones, joint sealing compounds, glazing putty, lubricants and coolants used for mechanical processing should be approved with a neutral pH (approx. 7) and should not contain substances damaging the plastic, rubber, paint or oxide coating.

The buyer is obliged to protect all cut and processed edges of profiles and metal sheets with anti-corrosion sealant

COSMOHD-100.411 or its equivalent with similar confirmed technical characteristics and purpose.

Detailed guidelines in this regard are specified in individual catalogues and product instructions and are defined in the General Terms and Conditions of Sale and Supply and the Warranty Card of Aluron sp. z o.o., which are published on the website www.aluron.eu

4. Surface resistance of aluminium profiles

Both paint and oxide coatings are not resistant to mechanical damage. The products should be protected from contact with corrosive substances, acids, alkalis, and in the case of products with anodized coating, direct contact with lime, cement and other alkaline construction materials should be avoided.

Detailed guidelines in this regard are specified in individual catalogues and product instructions and are defined in the General Terms and Conditions of Sale and Supply and the Warranty Card of Aluron sp. z o.o., which are published on the website www.aluron.eu

5. Operational and protective requirements

Evaluation of coatings including painted/anodized coatings and classification of defects in terms of properties/tolerances/technical parameters is carried out in accordance with the Guarantor's system for evaluation of workmanship tolerances, Qualicoat/Qualanod guidelines and is governed by specific industry standards. Anodized, powder-coated and Decoral-coated surfaces require periodic cleaning and

maintenance by a specialized service with documented confirmation of the date of treatment. Documentation provided, for example: invoices, contracts, entries in the Building Log Book issued by a qualified service for the cleaning and maintenance service. Cleaning and maintenance require a minimum of:

| | CORROSIVITY CLASS | MIN. FREQUENCY |
|-------------------------------------|-------------------|-----------------|
| Cleaning and maintenance of coating | 1 | every 12 months |
| | 2 | every 12 months |
| | 3 | every 12 months |
| | 4 | every 3 months |
| | 5 | every 3 months |

Failure to perform maintenance in accordance with the Guarantor's recommendations will result in termination of warranty for the coating.

It is not allowed to use salt and chemicals to remove ice in the environment of the products in use.

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6. Maintenance of coatings

Before cleaning and maintenance, check the performance of the tools and agents used for this purpose on not visible/decorative surfaces to eliminate possible damage to the decorative surface.

- Use clean water for cleaning, to which you can add a small amount of specialized neutral or slightly alkaline detergents (for example, for anodized surfaces COSMO CL-350.110 or for painted surfaces COSMO CL-360.110).
- Use a soft cloth that does not scratch the surface to wipe the product.
- During cleaning, the ambient temperature should be between 10°C and 20°C, and the coating should not be exposed to direct sunlight.
- Do not clean the coating with a jet of steam.
- Maintenance and cleaning products must have approval of their applicability to a given type of surface.

Note: Procedures described in GRM and preservatives that are on the GRM approval list published on www.grm-online.de are acceptable. GRM stands for Gutegemeinschaft Reinigung von Fassaden e.V. (Association for Quality Cleaning of Facades).

- Detergents of unknown origin must not be used.
- Do not use strongly acidic (pH below 3) or strongly alkaline (pH above 12) detergents, as well as surfactants that may react with the product.
- Do not use abrasive cleaners or clean surfaces by rubbing. It is permissible to use soft fabrics designed for professional cleaning. When cleaning, do not press the fabric too hard against the surface to be cleaned.
- Do not use organic solvents containing esters, ketones, alcohols, aromatic compounds, glycol esters, chlorinated hydrocarbons, etc..
- The detergents used for cleaning must not react with the cleaned surface for more than one hour. If necessary, the cleaning process can be repeated after 24 hours.
- The surface must be rinsed after each cleaning.

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7. Maintenance of seals

The seals are exposed to many adverse factors, such as temperature variation, sunlight, acid rain, etc. That is why, they require special attention and care. The seals perform important functions in the joinery, and if neglected, they get pitchy faster and cease to perform them well. It is therefore necessary to clean them regularly (at least twice a year) with clean water, and after drying protect them with a commercially available seal preservative.

Before performing maintenance, check the effect of the agents used for this purpose (on not visible/not decorative surfaces) to eliminate possible damage.

Detailed guidelines in this regard are specified in individual catalogues and product instructions, and are defined in the General Terms and Conditions of Sale and Supply and the

- During cleaning and maintenance, the ambient temperature should be between 10°C and 25°C.
- Do not wash seals with a jet of steam.
- Preservatives must have approval of their applicability to seals.
- Abrasives must not be used for cleaning.
- Do not use organic solvents containing esters, ketones, alcohols, aromatic compounds, glycol esters, chlorinated hydrocarbons, etc.

Warranty Card of Aluron sp. z o.o., which are published on the website www.aluron.eu

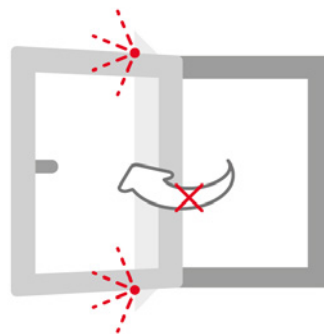
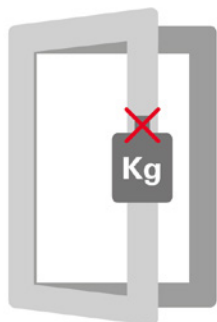
8. Operation of windows and doors

To ensure long and proper functioning of windows and doors made based on Aluron systems as well as to prevent possible

mechanical and aesthetic damage it is advisable to familiarize with and take into account the following tips:

USAGE ERRORS:

- Do not additionally load the window and/or door wings, as well as their components (such as handles). Such additional loads may cause deformation of the wings and lead to damage of moving elements and, as a result, to faulty operation of the entire structure.
- Do not bend the open wing in the direction of the frame and hinges (see figure). This can lead to destruction of the hardware and/or deformation of the wing frame and thus to window lack of tightness.



- Do not leave/wedge any objects between the wing and the frame. This may cause damage to the joinery and/or fittings.
- Do not turn the handles beyond the defined direction and range of their rotation, as this could damage the fittings.



DANGERS FROM ERRORS IN OPERATION:

- **Wind blows and drafts** - pay special attention to the strength of the wind and the predicted weather if you want to leave the window or door open/tilted. Sudden, violent movement of the wing may lead to damage to the wing itself, as well as to other components of the window/door.
- **Fall out** - open window or door wings pose a risk of bystanders falling out. Particular attention should be paid to children, disabled and undesirable persons nearby. For this purpose, it is recommended to use a key-locking handle or a wing opening lock.



- **Slamming** – when operating window and door joinery, there is a risk of injury caused by an improperly closed wing. To protect yourself from this, make sure that when closing the window/door nothing is between the wing and the frame. Special attention should be paid to the hands, which are particularly vulnerable to injury during this activity. Leaving anything in the closing space of the wing risks injuring those in the vicinity and/or damaging the joinery.



- **Hitting against open elements** – while the window/door wing is open, there is a risk of injury or bruise against its protruding elements. This is especially common in the case of activities carried out under an open window wing, so it is advisable to keep them closed when working, but also when, e.g. the children are playing in the room.



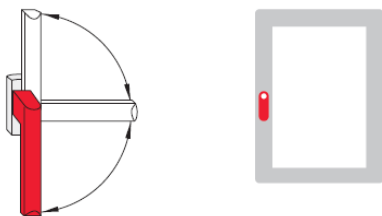
- **Knocking down** – open or not fully closed window or door wings may move uncontrollably during strong drafts and/or wind gusts, thereby hitting/knocking down objects located in their path. For this reason, it is necessary to keep the opening path of window and door wings clear.



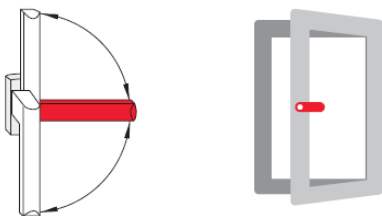
PROPER OPERATION OF WINDOWS

Turn windows:

handle in vertical downward position - window closed,

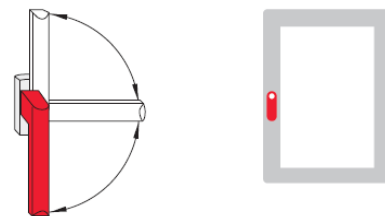


handle in horizontal position - window open.

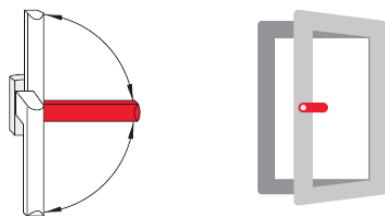


Turn and tilt windows:

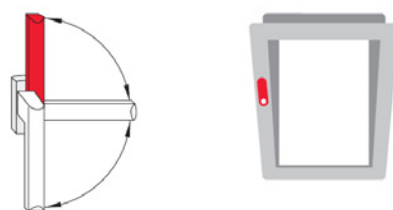
handle in vertical downward position - window closed,



handle in horizontal position - window open,

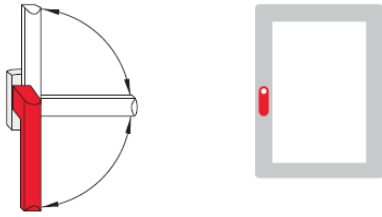


handle in vertical upward position - window tilted.

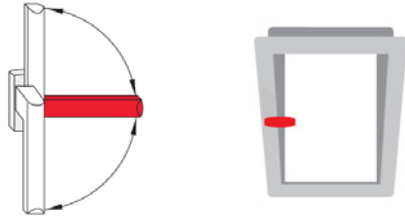


Tilt and turn windows:

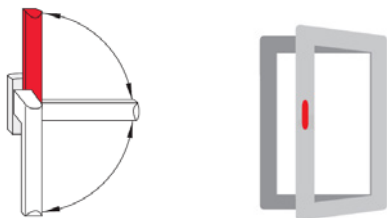
handle in vertical downward position - window closed,



handle in horizontal position - window tilted,

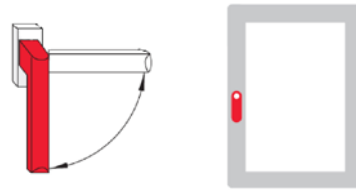


handle in vertical upward position - window open.

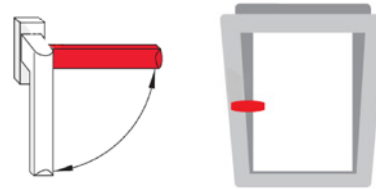


Tilt windows with handle on side:

handle in vertical downward position - window closed,



handle in horizontal position - window tilted.

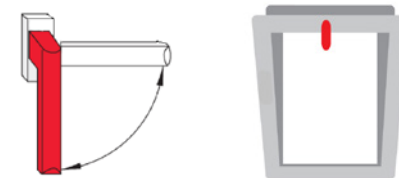


Tilt windows with handle at the top:

handle in horizontal position - window closed,






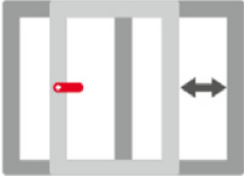


handle in vertical downward position - window tilted.



Tilt and slide windows:

handle in vertical downward position - window closed,
 handle in horizontal position - window tilted, handle in
 vertical upward position - window open.

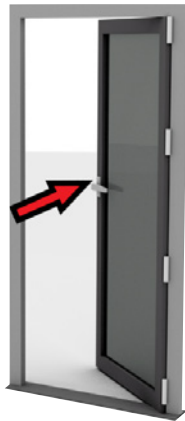
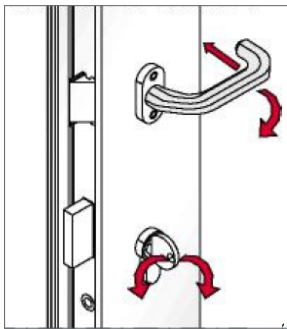
| HANDLE POSITION | SASH POSITION | MEANING |
|-----------------|---------------|--------------|
| | | Sash closed. |
| | | Sash tilted. |

| HANDLE POSITION | SASH POSITION | MEANING |
|---|---|----------------------|
|  |  | <p>Sash opening.</p> |
|  |  | <p>Sash sliding.</p> |
|  |  | <p>Sash locked.</p> |

PROPER OPERATION OF DOORS

Single leaf doors

To open the door, place the key in the lock hole and turn it. Press down on the handle, then pull it when you open toward the side you are standing or push it when you open the door toward the opposite side. When you want to close the door, follow the steps described above in reverse order, keeping in mind that turning the key twice closes the lock.



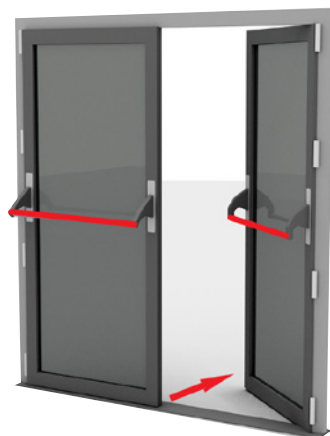
Double leaf doors

They are a variation of the single leaf doors with an additional leaf, the so-called "passive" leaf. To open the door, first open the active leaf according to the description of "single leaf doors" and then unlock the bolts of the passive leaf. To close the doors, follow the steps described above in reverse order.



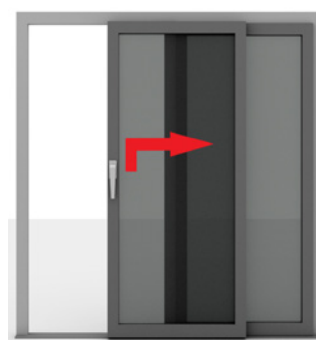
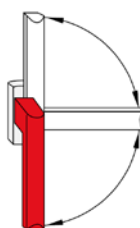
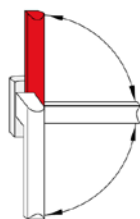
Emergency escape and panic doors

Doors are opened with anti-panic handles (levers, slats) by pressing them while pushing out the leaves on which they are mounted.



Lift and slide doors

The door is opened by turning the handle 180°, which causes the leaf to rise and allows it to slide freely. When the door is equipped with an additional lock, it is necessary to unlock it first, and then turn the handle by 180°.



9. Maintenance of fittings

A prerequisite for the smooth and long-lasting operation of the fittings mechanisms is the observance of the maintenance and operation guidelines recommended by the fittings' manufacturer.

The frequency of fittings adjustment depends on the manufacturer's guidelines and/or the size of the component as well as the frequency and method of opening the joinery. Fittings maintenance instructions are available from the manufacturer and/or dealer.

This publication should be considered together with the General Terms and Conditions of Sale and Supply and the Warranty Card of Aluron sp. z.o.o., which are published on the website www.aluron.eu, as they are an integral part of this document.

