

EXTERNAL DOOR  
INSTALLATION  
AND MAINTENANCE  
GUIDE



**KASKI** 



# CONGRATULATIONS!

You have chosen a Kaski door, known for its high-quality and Finnish origin. We have prepared this guide to make sure that your door will serve you reliably for many years to come. Before starting installation of the door, please carefully read the installation and maintenance instructions. Keep the manual as a part of the construction documentation. By following these instructions, you will make sure that your Kaski doors will cause minimum problems in use.

In the maintenance and usage guide you will find tips for the use and maintenance our long-lasting products. For us, satisfaction of our customers is the most important aspect. Therefore, actual users, their needs and wishes have played the key roles in the development of our products.

The nature too is thankful to you for your choice. Kaski doors are manufactured using materials and techniques, which are friendly to the environment, and are good for the quality of indoor air in your home.

Thank you for choosing the high-quality Finnish Kaski item!

## TABLE OF CONTENTS

Acceptance, Storage and Handling	4
Installation Guide	5
Hinge Adjustment and Maintenance Guide	7
Lock Frame User Guide	8
Striker Plate Adjustment Guide	9
Other Accessories	10
Maintenance	11
Door Repair and Maintenance Painting Guide	12

# ACCEPTANCE, STORAGE AND HANDLING

Check the packages together with the driver immediately when you accept the delivery. If any packages display transport damages, describe the nature of the damage as clearly as possible and with full details in the waybill. If possible, take photos of the damage. The transport company and the consigner are not responsible for any transport damages that are not recorded in the waybill. Transport damage could also be hidden, so that it cannot be detected without opening the package. Such damages must be reported to the transport company as soon as they are discovered, however no later than within 7 days from the delivery. Immediately notify the seller as well of any damages. Do not install a defective or damaged item without the manufacturer's consent. The manufacturer assumes no responsibility for any additional expenses that might result from installation of a defective item. Preserve the transport documents.

For transport, the doors are wrapped in protective plastic covers and placed on pallets. These packing materials are not intended for long-term outdoor storage. Doors must be stored in a dry room on a level base. If you have to store the doors outdoors, make sure that the base is level and that the doors are well protected against weather and water, also make sure that the space between the protective covers and the doors is ventilated. During storage, doors may be kept on the transport pallets. The manufacturer assumes no responsibility for any damages caused by inadequate protection or storage conditions.

If you have purchased an uncoated door, ensure sufficient surface treatment before the door is installed or immediately after installation.

The seal should only be applied on the door after surface treatment. The manufacturer assumes no responsibility for products the

quality of which has deteriorated due to inappropriate protection or storage.

We advise not to protect doors using tapes. Various plasticisers are used in tapes, which facilitate their adhesion to e.g. painted surfaces. The effect of such plasticiser could be so strong that it also softens the paint under it. When the tape is removed, the paint coat of the door could be damaged. Protect the door with plastic or cardboard such that there is ventilation between the protective cover and the door and make sure that the tape does not get in direct contact with the door surface (e.g., wrap the door in polyethylene construction sheeting). If for any reason you need to attach the tape directly onto the door surface, proceed as follows:

USE THE FOLLOWING TYPES OF TAPE LISTED BELOW IN THEIR ORDER OF PRIORITY:

- Deltac Masking Tape Extreme (orange)
- Deltac Masking Tape Gold (yellow)
- Deltac Masking Tape Purple (purple)
- PROF Painter's Tape (blue)
- Stokvis Tapes vapor barrier tape PS 1433 (green transparent)
- Stokvis Tapes painter's tape, Fine Line pro (light orange)
- Stokvis Tapes UV resistant painter's tape (blue)
- Tesa 4334 Precision Masking Tape painter's tape (yellow)
- Tesa Precision Indoor 26270-00001 (yellow) Only for indoors.
- Tesa Precision Outdoor 56250-00002 (light blue)
- Würth silk tape (light orange)

Even if you use any of the tapes listed above, the time of contact should be minimal. If the tape stays in contact with the door surface for weeks, especially if the humidity and temperature are high, the painted surface can be damaged. The exposure of the painted surface to the tape should be as short as possible, at most one week.

# INSTALLATION GUIDE

Careful installation is important to ensure functionality, tightness and long service life of the door. We recommend to engage a professional to instal your doors. If you instal the door yourself, you will find one of the recommended installation method here. This guide does not rule out application of any other generally acceptable methods or methods that are appropriate for the particular structures at the site. The space where the door is installed, has to be dry and with even temperature. The customer has to make sure that humidity present during the construction stage does not damage the door. The manufacturer assumes no responsibility for damages resulting from installation or humidity during the installation process.

## INSTALL THE DOOR FOLLOWING THE STEPS SET OUT BELOW:

Before starting the installation work, make sure that the door fits the doorway and that there is a sufficient gap for insulation all around, ca 10 to 20 mm. Insert wedges under the threshold at both ends and in the middle; make the threshold level. Leave about 10 to 20 mm space for insulation under the threshold. Move the bottom part of the frame sideways into the centre of the doorway and into the required in/out position. Make sure that there is material in the wall at the location, where frame fastening holes are located, so that the frame can be securely screwed to the wall. Fasten the top edge of the frame to the doorway with wedges. Make sure that the vertical part of the frame at the hinge side is completely vertical and attach it firmly to the wall at all fastening points using appropriate screws of sufficient size.

To ensure that the frame is securely attached, place wedges behind the fastening points.

Remove one screw from the top hinge and

screw a long screw into the wall structure through that point. Fasten the vertical frame of the lock side from the lowermost fastening point.

Before installing the door leaf, check the cross-dimensions of the frame and adjust, if necessary. Lift the door leaf onto the frame.

Adjust the vertical frame post at the lock side according to the door leaf, and fasten to the wall. There should be wedges behind all the fastening screws and the lowermost hinge to adjust the position of the frame and fasten the frame securely to the wall structures. Adjust the frame position, if necessary. Make sure that the gaps between the door leaf and the frame are equal on each side.

If necessary, adjust the gaps with hinges. Adjust the vertical position of the door to the desired height with hinges. Adjust all hinges so that the load they carry are equal. Adjust the striker plate on the frame to the suitable tightness. Insulate the mounting gap with insulation wool or foam in accordance with the specifications of the site. Be careful when portioning insulation foam to ensure that when it expands it does not damage the product or the surrounding surfaces. Make the vapour barrier of the mounting gap according to the specifications of the site. Instal the subsill to the external part of the threshold, and finish the installation by covering the mounting gaps on both side with battens in accordance with the specifications of the site to produce the desired appearance.

# INSTALLATION GUIDE

Double doors and doors with side panels are installed the same way, by first attaching the vertical post of the frame on the side of the moving door. The vertical frame on the side panel side is fastened with the side panel to match the moving part of the door. This ensures that the gap between door leaves is tight. Also attach the door head and the threshold to the frame. If the frame of a double door is delivered in parts, follow the frame mounting instructions included in the set of accessories of the door.

The tightness of the side panel can be optimised by adjusting the counter pieces of the edge latches.

When installing a door into a beam wall, note the following: Leave sufficient deflection margin at the top edge. Due to the deflection margin, the top edge of the door head has to be insulated with wool. The frame fastening screws must not reach the wall beams. In beam structures it is necessary to ensure that the buck stays in place.

## INSTALLATION GUIDE, FIRE DOORS

WHEN INSTALLING FIRE DOORS, ALSO MAKE OBSERVE THE FOLLOWING:

A fire door intended as an external door is always extremely heavy, and therefore its installation requires particular caution to avoid damages. For fire safety consideration, installation of such products demands special care in installation, and strict observance of the given installation instructions. Use wooden or wood-based mounting wedges for installation. Use fasteners that are appropriate for the particular wall structure; for mounting into a wooden wall, use lag screws, and for mounting into an aggregate wall use appropriate fixing plugs and screws.

The fastening screws must be at least 6\*120mm in size. The maximum width of the insulation gap is 20 mm. Use one of the following as the insulation product: Wurth Sealfire W300/ W350, Joints Firefoam PRO+, Gun PRO+, Nullifire FF197 or Sika Boom-F+ fire resistant

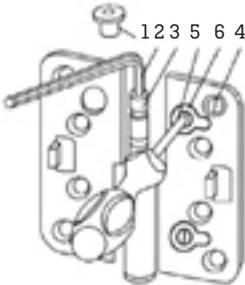
PU foams or A1 class rock wool. If necessary, the seam may be sealed with the acrylic fire seal Wurth Sealfire W100.

The insulation must extend to the entire depth of the frame. Place the rock wool discs delivered with the door into the drilled holes of the lever handle along with mounting the fittings. Check the size of the door gap; the door gap must be 3 mm +/- 1 mm, adjust if necessary.

# HINGE ADJUSTMENT AND MAINTENANCE GUIDE

## HINGE ADJUSTMENT AND MAINTENANCE GUIDE 3248-110TMKSS

Vertical adjustment of the door (see the figure): Loosen the knob (1) of one of the hinges with an Allen wrench (2). When you turn the Allen screw (3) clockwise, the door rises ca 1 mm / one turn of the screw. After the door has risen to the desired height, adjust the rest of the hinges the same way so that the weight of the door spreads equally to each hinge. Finally screw in the hinge knobs (1). Lateral adjustment of the door (see the figure): Open the door so wide that you can easily adjust the hinge screws on the frame side. Using the screwdriver, loosen the (5) (fastening screws of the middle hinges (4) for about one and a half turns.



If you wish to move the bottom edge of the door to move towards the lock side, so that the gap between the door and the frame at the hinge side becomes wider, loosen the fastening screws of the lowermost hinge (4) for about one and a half turns. After that, turn the adjustment screws (6) clockwise: one clockwise turn of the adjustment screw (6) moves the door at the hinge towards the lock side by about 2 mm (one-half turn moves the door 1 mm, 2 turns - 4 mm). After adjusting both lateral adjustment screws (6) to the same depth, tighten the fastening screws (4). If necessary, also adjust the top hinge. Adjust the lateral adjustment screws of the middle hinge (6) to the depth to which the door has been set after adjustment of the bottom and top hinges has been completed. It is important to adjust the middle hinges in the lateral direction so that it is aligned with the top and bottom hinge. Finally tighten the fastening screws (4) of all hinges one more time. NB! Adjustment of the hinges is used to correct the position of the door leaf in the frame. This adjustment is not intended to straighten a door frame that has been installed incorrectly. You can adjust the position of the door leaf in respect of the frame on the hinge side by removing the washer under the hinge (see the figure).

Regular lubrication, e.g., with Teflon or Vaseline spray improves the functioning of the hinges and extends their service life.

# LOCK FRAME USER GUIDE

## LOCK CASE LC102

Cylinder lock case with an automatically deadlocking latchbolt. The lock features lever handles on both sides. The deadlocking is controlled by a snib in the forend. When the snib is in deadlocking mode, the door is opened by turning the outside key 180° or the inside thumbturn 90°. The handles are then activated, and the latchbolt can be retracted.

### SNIB POSITION:

UP = Deadlocking, latchbolt protrudes 21 mm. The lever handles are activated by the key or the thumbturn.

DOWN = Latchbolt protrudes 14 mm. The door is opened with the lever handles.

The lock case LC102 is fitted with a feature to prevent unauthorized use of the snib. The snib is locked to the deadlocking mode by turning a set screw, located below the snib, about two turns anticlockwise by a hexagonal key, until the screw stops and is opened by turning the screw clockwise.

## LOCK CASE KP4190

Cylinder lock case with an automatically deadlocking latchbolt. The deadlocking is controlled by a snib in the forend.

### SNIB POSITION:

UP = Deadlocking, latchbolt protrudes 21 mm. The lock can only be unlocked with the key or the thumbturn. DOWN = Latchbolt protrudes 14 mm. The lock can be also unlocked with handles.

## LOCK CASE 4190 SYM

The lock case functions as described above for KP4190. This model allows to change the handing of the lock case as follows: Remove the lock case from the door and push the larger bolt inside. There is a 3 mm Allen screw on the side of the bolt, loosen it, pull the bolt out from the lock case, turn it 180 degrees, insert back to its place and tighten the screw. Do the same with the smaller bolt. The locking screw of the smaller bolt is 2 mm Allen screw. The screws of the bolts must be carefully tightened, but excessive force should be avoided. Instal the lock case back to the door.

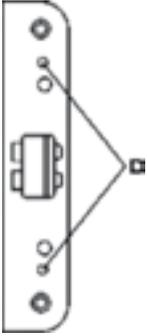
## LOCK CASE KP200

A KP200 lock is locked and opened either from the outside by turning the key two turns, or from the inside by turning the thumbturn two turns. The KP200 lock does not have the automatic locking function. The lock is activated manually, which means that the bolt moves inside or outside according to the operation.

When the door is in the day mode, i.e. not locked, it is opened with the handle, that causes the smaller bolt to move. Always check the activation of the lock by pushing the handle to make sure that the door does not open. This lock case is not compatible with Abloy lock cylinders.

# STRIKER PLATE ADJUSTMENT GUIDE

## ADJUSTMENT GUIDE FOR STRIKET PLATE LP711



The striker plates have a stepless and slipless adjusting mechanism, by which the function of the seal can be optimized, making the door comfortable to use. The adjustment is made easily in the forend of the striker plate by a screwdriver. The breaking strength of the product complies with the requirements set to security striker plates. You can improve the door's burglary protection level by screwing the striker plate screws to the depth where they reach the wall structure. In this case it is impossible to increase the gap between the door and the frame by force. Do not overtighten the striker plate screws.

Adjustment guide: To make the door tighter, turn the screws D clockwise. The adjustment bore has to be aligned with the front edge of the striker plate. Do not apply excessive force.

## ADJUSTMENT GUIDE FOR STRIKER PLATE 0092B

To adjust the striker plate, loosen the adjustment screws. Move the screws in the oval shaped hole to the desired location and tighten the screws. Test the functioning of the door / lock. The adjustment is correct, when the gap between the door and the frame is uniform on all sides of the doors, and the door leans against the seals evenly, and is easy to close and lock.

## LEVER BOLT FIX S3105

A door featuring a lever bolt is opened by turning the handle into the horizontal position, and opening the door. The door is closed also when the handle is in the horizontal position, and the handle is pushed down only after the door has been closed. The door is locked and unlocked by turning the thumbturn on the inside. If there is a lock cylinder on the outside of the door, the door can also be opened and closed from outside.

## FIX 150 DOOR HOLDER

The device allows to adjust the position of the door steplessly to the desired airing position. The door holder is controlled by the espagnolette handle. Open the door to the desired airing position, turn the handle into the closed position (down). The door is locked into place and does not close due to wind. If the handle is in the open position (horizontal), the door moves freely. Do not move the door when it is in the airing position. It reduces the friction force of the door holder prematurely.

### STRIKER PLATE ADJUSTMENT



1. Loosen the top and the bottom screw
2. Adjust the counter-bolt
3. Tighten the locking screws
4. Adjust all the striker plates in the similar manner

# OTHER ACCESSORIES

## **BLINDS AND CHILD SAFETY**

Wrap the cords around the cord holders so that the blind cords do not hang too low and do not form loops or beackets that could cause hazard to small children.

## **WARNING**

1. Small children can wrap the cord around their necks and get strangled by the cord, chain and strings used to operate the blinds.
2. To avoid risk of strangulation and getting stuck, keep the cords out of reach of small children.
3. Move beds, cribs and pieces of furniture away from blind cords.
4. Do not tie cords together. Make sure that the cords do not get twisted and form loops.
5. Instal the safety devices included in the set and use them in accordance with the installation instructions to reduce accident risks.

# MAINTENANCE

## CLEANING

Use water and neutral and mild detergents, e.g. a mixture of Fairy liquid and water to clean door surfaces. Do not use strong solvents (such as thinners or acetone), paint cleaning preparations or abrasives to clean painted surfaces. They could soften the varnish and paint coating.

## MAINTENANCE OF LOCK CASES AND LOCKS

Lubricate all bolts, base of the thumbturn and lock cylinders (service locks, safety locks, locking bolts) and the sliding parts of the door holders with lock oil once a year. Also check that the fastening screws of the handle, the lock and lock cylinder are properly tightened, screws can loosen in use. Remember, that locks can be operated only when the door has been properly closed. Always make sure that the door is locked by pushing the door, especially if the door has tight seals. When the deadbolt of the service lock actuates, you will hear a slight click. This is the sign that the door has been

securely locked.

If the lever handle of the door does not return normally to the top position, check that the lever handle is installed perpendicularly in respect of the door. Also check that the handle fastening screws are not overtightened. Handle screws must be properly tightened so that the handles stay in place during their use, but use of excessive force should be avoided. Additionally, if the door features a quick release handle, also check that the handle is not pressed too tightly against the base. If necessary, make sure that the handle's return spring is properly in place (note, that not all handles have a separate return spring). If necessary, adjust the position of the handle to make sure that it is perpendicular to the door, loosen the fasteners or the quick release device and/or instal the possibly detached return spring.

# DOOR REPAIR AND MAINTENANCE PAINTING GUIDE

All painted surfaces exposed to wear due to weather need maintenance painting. The need for maintenance painting has to be assessed annually and if it is required, the surface has to be painted immediately. Frequency of maintenance painting depends on structural factors, amount of exposure to weather and wind direction. The most common reason for damage to wood is moisture. It is essential that wood must be allowed to dry before repairing damage or re-painting. Moisture in wood must not exceed 20% when it is painted. During painting and while paint is drying, surface and paint must be more than +5°C and relative humidity less than 80%. Kaski doors are surface treated using high-quality surface treatment substances. Repair and maintenance painting instructions for different types of paint are provided below.

## PROTECTION

We advise not to protect doors using tapes. Various plasticisers are used in tapes, which facilitate their adhesion to e.g., painted surfaces. The effect of such plasticiser could be so strong that it also softens the paint under it. When the tape is removed, the paint coat of the door could be damaged. Protect the door with plastic or cardboard such that there is ventilation between the protective cover and the door and make sure that the tape does not get in direct contact with the

door surface (e.g., wrap the door in polyethylene construction sheeting). If for any reason you need to attach the tape directly onto the door surface, proceed as follows:

USE THE FOLLOWING TYPES OF TAPE LISTED BELOW IN THEIR ORDER OF PRIORITY:

- Deltac Masking Tape Extreme (orange)
- Deltac Masking Tape Gold (yellow)
- Deltac Masking Tape Purple (purple)
- PROF Painter's Tape (blue)
- Stokvis Tapes vapor barrier tape PS 1433 (green transparent)
- Stokvis Tapes painter's tape, Fine Line pro (light orange)
- Stokvis Tapes UV resistant painter's tape (blue)
- Tesa 4334 Precision Masking Tape painter's tape (yellow)
- Tesa Precision Indoor 26270-00001 (yellow) Only for indoors.
- Tesa Precision Outdoor 56250-00002 (light blue)
- Würth silk tape (light orange)

Even if you use any of the tapes listed above, the time of contact should be minimal. If the tape stays in contact with the door surface for weeks, especially if the humidity and temperature are high, the painted surface can be damaged. The exposure of the painted surface to the tape should be as short as possible, at most one week.

# DOOR REPAIR AND MAINTENANCE PAINTING GUIDE

Possible damages, such as cracks, flaking or other surface damages must be repaired immediately.

1. Remove all cracked or loose paint.
2. Clean the door by mild alkaline cleaning agent, e.g., "Maalarinliuotin" (Solmaster). Dilute the cleaning agent in accordance with the manufacturer's instructions. If the surface to be repainted is very dirty, it may also be washed using a mild grease / silicone cleaning agent.
3. Make sure, that the putty, the primer and the topcoat are compatible with each other and, in case of a factory-painted door, with the 2-component catalyst paint.
4. Fill possible damages with alkyd plaster / lacquer putty suitable for outdoor use. If damages are deeper and larger, it is advisable to use a two-part plastic filler intended for automotive use.
5. Polish the area being repaired with sandpaper; using first rougher (P150) paper, where necessary, and finishing with finer (P320-500) paper.
6. If the repaired area is in a visible location, we recommend to roughen the entire painted area with fine sandpaper before applying the top-coat. Ensure the adhesion of the new coating to the old coating whether by washing the coated areas with grease / silicone removal solution, or by applying a coat of solvent-based adhesion primer suited for outdoor use, e.g., Otex primer (Tikkurila). Note that the tone of older paint surfaces has already changed and therefore spot coating, even with the correct tone, will not produce an even end result, and thus it is advisable to apply the top coat to the entire visible area.
7. Apply the entire visible area with semi-gloss (20-30 G6°) alkyd paint suited for outdoor

use and for door surfaces, e.g., wood and metal paints (Sadolin), Futura (Teknos),

Teho window and door paint (Tikkurila) or solvent-based acrylic automotive top coat, e.g., Spies Hecker Permacron. It is also available in spray bottles (Pintaväri Oy). When applying the paint by spraying, carefully cover any nearby and surrounding surfaces against paint spray. Also ask the paint dealer to provide guidelines for masking off borders, cleaning and blending.

Repair painting of the PVC glass strips can be done using the same topcoat paints and methods. The plastic surface has to be roughened with a fine (P320-400) sand paper and, if necessary, treated with degreasing agent. Otex adhesion primer makes sure that the new paint coat adheres to the surface.

## WATER-BASED ACRYLIC PAINTS AND VARNISHES

1. Remove all loose and flaky paint mechanically; clean other surfaces of loose dirt and dust.
2. Remove porous wood, if any, for example by sanding.
3. Wash mouldy spots with RENSA mould-removal solution and rinse thoroughly with water.
4. Treat exposed wood surfaces with protective treatment, e.g., WOODEX Kylläste Aqua or WOODEX Kylläste.
5. Paint the surfaces with the chosen Aquatop tone; you may also use oil or acrylic paints [e.g., Futura 15, WOODEX Peittävä Puun suoja Aqua or Nordica Eko house paint].

# DOOR REPAIR AND MAINTENANCE PAINTING GUIDE

## PAINT-COATED ALUMINIUM SURFACES

Minor repairs, where the paint film has not been damaged down to the base, are carried out as follows: polish the surface lightly, remove loose dust and apply a coat of acrylic automotive paint to the area.

Abrasions, where the base is visible, are repaired as follows: properly grind the damaged area, remove loose dust, apply primer using the 2-component polyvinyl butyral resin Wash primer, followed by grinding, where necessary. Finally apply a coat of alkyd-based automotive paint.

## PANELLED ENTRANCE AND CABIN DOORS

We advise to always get your panelled door with factory made surface treatment (translucent tinted stain + varnish). If, however, you have purchased an uncoated door, treat the surface immediately. We recommend to Teknos translucent stains for this purpose. Before surface treatment clean the door of dirt and dust. If you wish to preserve the colour of the wood, use the translucent wood stains Teknos 1702 Mänty. After staining, apply two coats of varnish. We do not recommend to treat your door only with varnish without any protective agents. Use brushes or sprayer as the application tool.

## MAINTENANCE PAINTING OF STAIN TREATED SURFACES:

1. Perform the preliminary operations as described above.

16

2. Treat untreated wooden surfaces with a protective finish of the desired tone (Aquaprimer 2900-02, Woodex transparent wood stain).

3. Treat all surfaces using Aquaprimer 2900-02 tinted Aquatop varnish (add ca 5% of glaze to the varnish) or with tinted Helo semigloss Helo special varnish. Note. Before maintenance painting check the tone by applying it to an invisible section of the door, e.g., on the top surface.

## THRESHOLDS

The wooden parts are treated with water-based wood oil, tone TM1703 teak. If necessary, the threshold may be re-treated with a suitable water-based wood oil. Aluminium parts may be cleaned with mild detergent and damp cloth.





Kaski -ovet, joita koskee EN 14351-1+A1 tuote-standardi, ovat CE-merkityjä. CE-merkintä osoittaa, että tuotteet täyttävät standardissa määritetyt olennaiset vaatimukset. CE merkintä on ovilehdessä sarana- tai yläpuolella. Suoritustasoilmoitukset CE-merkityistä tuotteistamme löytyvät nettisivuiltamme osoitteesta [www.kaski.fi](http://www.kaski.fi)