



KASKI WINDOW - USE AND MAINTENANCE

Congratulations on your choice of high-quality Finnish windows, and welcome as the owner of durable Kaski windows! With this guide, we want to ensure that your windows operate reliably year after year. Please read the instructions carefully before installation. Follow the maintenance guidelines to preserve the windows' tightness and functionality. Keep this manual for future reference as part of your building documentation.

Kaski products are an example of Finnish product development and skilled wood craftsmanship. The design is based on functional products that withstand use and the stresses caused by weather conditions for decades.

The Finnish climate places high demands on windows: they must endure harsh weather and temperature fluctuations, moisture, and sunlight. Maintenance needs are affected by factors such as rainfall and humidity, building height, eave length, and orientation. The building's geographical location also matters: coastal humidity and wind strain windows more than the more stable inland climate. Likewise, south-facing windows are exposed to strong sunlight. Other factors include the building's ventilation system, structural moisture, and environmental pollutants.

The longevity of the windows requires careful adherence to our operating instructions as well as regular annual inspections and basic maintenance. Annual inspections and maintenance intervals are on page 26.

Kaskipuu Oy

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RECEPTION AND STORAGE

Check the delivery packages immediately upon receipt together with the driver. If there are signs of transport damage, describe the damage as clearly and in as much detail as possible on the waybill. If possible, take photos of the damage. The carrier and sender are not liable for damage that is not recorded on the waybill. Transport damage may also be hidden and not visible without opening the package. Such damage must be reported to the carrier as soon as discovered, and no later than 7 days from delivery. Also inform the seller immediately. Do not install a defective or damaged product without the manufacturer's permission. The manufacturer will not compensate for any additional costs arising from installing a damaged product. Keep all shipping documents.

Windows are packaged and protected on pallets and in protective plastic for transport. These packages are not intended for long-term outdoor storage. Store windows indoors in a dry space, upright on a level surface. If outdoor storage is unavoidable, ensure the base is level, protect the windows well from weather and water, and

allow air circulation between the covers and the windows. Windows may remain on their transport pallets during storage. The maximum outdoor storage time, even when well protected, is two weeks. The manufacturer is not liable for damage caused by inadequate protection or storage.

When storing fire-protection products, the inner surface of the fire-resistant glass must be protected from sunlight. The storage temperature for such products must not exceed +50 °C.

Windows should be installed as late as possible in the construction phase to reduce the risk of damage during building work.

If you purchased unfinished or pre-treated wooden windows, ensure adequate finishing before installation or immediately after. For pre-treated products, note the notice on page 27.

PROTECTING PRODUCTS DURING CONSTRUCTION

Windows should be installed as late as possible so that moisture conditions are close to normal. In buildings under construction with high moisture levels (e.g., masonry structures, freshly cast floors), ensure good ventilation. Prolonged high humidity damages surface finishes and can harm wooden parts or hardware. When protecting windows, ensure no moisture accumulates between the cover and the window. If possible, protect surfaces with plastic or cardboard so that the cover does not press tightly against the window surfaces. Tape is not recommended on windows. Plasticizers in adhesives can damage paint, and under sunlight the adhesive can bond very firmly to the substrate, including glass and aluminium. If tape is used outdoors, it must be resistant to moisture and UV light.

- Deltec Masking Tape Extreme (orange)
- · Deltec Masking Tape Gold (yellow)
- · Deltec Maskin Tape Purple (purple)
- · PROF Maskin tape (blue)
- Stokvis Tapes vapor barrier tape PS 1433 (transparent green)
- · Stokvis Tapes Masking Tape (light orange)
- · Stokvis Tapes UV resistant Masking Tape (blue)
- Tesa 4334 Precision Masking Tape (yellow)
- · Tesa Precision Indoor 26270-00001 (yellow)
- Tesa Precision Outdoor 56250-00002 (light blue)
- · Wurth tissue paper tape (light orange)

If you use tape to protect windows, the following are manufacturer-recommended tapes:

Availability of the above tapes varies by store. Note the tape color. The taping period should be as short as possible, no more than one week. Remove tape by pulling it diagonally along the paint surface (not perpendicular) with a slow, steady motion.

USING WINDOW

In normal use, windows need not be opened frequently—mainly for cleaning. For windows with sash locks, open all locks with the removable handle, support the sash, and carefully open inward. The outer sash locks are opened with fixed small handles or a removable handle. Exercise particular care with large windows when opening and closing. Large windows must be supported when open with a sash support accessory or other means (see "Sash support"). Do not apply extra load to open sashes. Close windows by pushing them shut and fastening all locks carefully. Close any sash support before closing the window. Ensure all locks are secured

Fire-protection windows must remain closed. They may be opened only for cleaning or maintenance. They are invariably heavy and must always be supported when open, regardless of size.

Ventilation windows may be used for airing. They open and close with a single handle and have an intermediate latch that connects the inner and outer sashes. Avoid unnecessary force to prevent damage to the latch.

- No additional load may be applied to the opened sash.
- Window locks must be opened and closed carefully.
- Careless use of locks may cause, among other things, warping of the sash, damage to fittings, abrasion of paint surfaces and moisture entering the structures.
- Only use a ventilation window equipped with a hold-open device for ventilation.

INSTALLATION (GENERAL)

We recommend using an experienced window installer. The space must be dry and at a stable temperature. If necessary, follow the protection instructions under "Protecting products during construction." The manufacturer is not responsible for faults caused by inadequate or incorrect installation or by moisture during construction.

Openings and sites vary, but the common requirements are: dry conditions; a sound, dry opening; careful, sturdy fixing; tight insulation and sealing; and neat, tight trim. Below is guidance for installing a single-opening, side-hinged window; apply similar principles to multi-opening or fixed windows.

Fit leveling screws or shims to the bottom of the opening to set the sill horizontal and at the correct height. Leave at least 10 mm for insulation. Remove the sashes. Place the frame in the opening and center it. Ensure sufficient space for insulation all around and consider any constraints from the exterior cladding. Shim the frame at the corners to the desired depth and lateral position. Countersink the side jambs for fixing screws with a 14 mm wood bit. The number of fixing points is per guideline RT 103241.

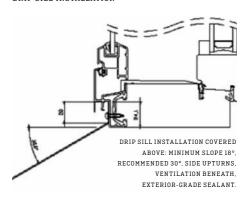
The depth of screw placement depends on the wall structure, but near the frame's centerline is recommended. Fix the jambs starting from the bottom with sufficiently large screws [e.g., 5×100], appropriate to the structure. Check plumb and diagonals, adjust with shims/screws. Place shims as needed considering the framing material. Fix the hinge-side jamb. Fit the outer sash and check operation; adjust frame position and/or hinges as needed. Do the same for the inner sash. Sashes should rest lightly on the sliders in the sill and have even clearances. They must close evenly at top and bottom.

Fix the lock-side jamb with screws. Exterior aluminium expands and contracts with temperature; 3–5 mm of movement allowance is provided. Once the window is in place, check the aluminium sits at the bottom; if needed, pull it down by hand against the bottom rail. Cap the screw holes. Ins-

tall any handles and fresh-air vents. Insulate the

Use PU foam cautiously; excess will soil surfaces. Install the external sill flashing (drip sill). Minimum slope 18°, recommended 30°. Provide adequate upturns at the sides. Ensure ventilation beneath the sill. Use sealant suitable for outdoor use. Fit side and head trims; ensure rainwater cannot enter the insulation gap or structure and that the façade ventilation gap functions. Install interior trim.

DRIP SILL INSTALLATION



FIRE GLASS INSTALLATION

FIRE GLASS (PARTITIONING WINDOW EI30 tai EI15 / E30) STORAGE, MAINTENANCE AND USE

Storage

Store as you would a standard window, carefully. Temperature must not exceed +50 °C, and the window must not be exposed for long periods to UV radiation from the inner-sash side. Heat and UV do not impair fire performance, but may cause clouding of the fire glass.

Installation

Fix the frame with at least 6 \times 120 mm screws; masonry with coarse-thread anchors, timber with wood screws; reinforce metal studs with timber inserts. Number/locations per RT 103241. Seal the gap with Al-class mineral wool. The opening may exceed frame outer size by max 30 mm; fill at least 100 mm deep from the interior face.

Maintenance

Replace damaged intumescent seals or IGUs with equivalents—contact the manufacturer. Do not remove seals for cleaning/painting. Support any fire window over 1 m² when open.

Use

Open only for installation, service, and cleaning. Not for ventilation. All fittings must be closed in normal use. Do not attach blinds or fresh-air vents requiring through-fixings.

Opening for cleaning/service

Do not remove hinge pins; use the designated handle; support sashes over 1 m²; after work, remove support and lock all fasteners.

ADJUSTMENTS

Window adjustment. Adjust sash position via hinges if sealing/operation is off. The sash must rest lightly on sliders. Remove sash (unlock, pull hinge pins) to adjust. Turning inner-sash hinges changes lateral/depth position; frame-side hinges adjust compression. Re-fit and test; repeat as needed.

Hinge adjustment - general. If sealing is uneven or operation poor, adjust clearances via hinges. Remove pins from the bottom up, support the sash, turn hinges as required, reassemble in reverse order. Check frame diagonals. Target clearance 1–4 mm.

Typical cases:

- Top edge tight: tighten lower and middle inner-sash hinges; alternatively loosen top/ middle counter-clockwise.
- Edge rubbing: turn all inner-sash hinges 1-2 turns clockwise.
- Tight at sill: turn top and bottom clockwise 1-2 turns.
- Larger gap on hinge side: turn all frame hinges clockwise two turns; align depths.
- Outer sash uneven gap: turn outer-sash frame hinges 1-2 turns CW/CCW as needed.
- Vent sash won't close: shorten stay pin or bring hinges inward; test and repeat.

AUTOLOCK INTERMEDIATE LATCH

Autolock links inner/outer sashes for one-handle operation. Acts as opening limiter and storm catch, limiting travel and locking for ventilation. Do not leave open in strong wind or driving rain.

Detach sashes (e.g., for cleaning) by opening while pressing the release. Adjust so opening is ≤ 100 mm without releasing. Clean with a damp cloth; lubrication not recommended.



Autolock - intermediate latch

- The parts of the hold-open device are cleaned with a damp cloth and detergent
- · The use of lubricants is not recommended



Autolock intermediate shutter release

OPENING RESTRICATOR

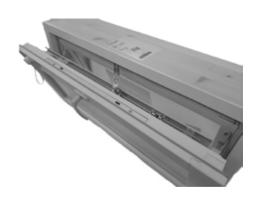
For safety, inward-opening bottom-hung vent windows include a restrictor (≥ 1 pc; wide windows 2). Supplied loose for installer/customer fitting. The FIX 84 latch holds the sash at a set opening; for windows requiring a max 100 mm opening. For cleaning, press the flexible latch tongue and release the cord; refit after cleaning.

Opening restricator for a bottom-hinged ventila-

A metal opening limiter is used in frames with a width of 170 and 210 cm. In widths of 490 - 1690 there is one opening limiter and in widths wider than that there are two opening limits.



FIX 84



WARNING!

- The safety device(s) of a bottom-hinged window must always be attached and properly connected
- The safety device can be removed for washing, after which the device must be attached and adjusted according to the instructions.
- Check and adjust the attachment and rigidity of the safety device regularly.
- If the safety device is not attached properly or is inadequately adjusted, the sash may collapse uncontrollably when opening and cause injury.

SASH SUPPORT

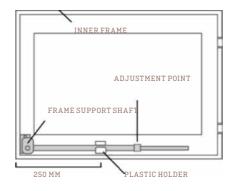
Supports large sashes when open (e.g., cleaning). Set length during installation; loosen joint screws, size, tighten. Normally stowed behind the inner sash. When opening, lower and rotate upright; when closing, rotate horizontal into the clip. Supports only from below—avoid lateral loads. Clean with a damp cloth.





RETROFITTING

Mount the pivot bracket behind the inner sash so its outer edge aligns with the sash step; pre-drill 3 mm. Place the rod clip 250 mm from the outer sash edge.



 Especially recommended for frames 1500 mm or wider

INSECT SCREEN & GRILLE

The insect screen blocks insects during ventilation. Fit from indoors, hinge-side first against the exterior profile; in lapped windows, the top edge locks by spring, bottom by clip. Remove without tools. Clean by vacuuming/washing with mild

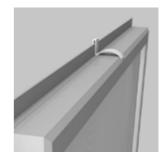
detergent; remove for winter. Birds may damage the mesh. Replace mesh by removing the beading, laying new mesh warm, pressing beading into the groove, trimming excess.

Install summary

- 1) Fit clip to top edge;
- 2) insert screen hinge-side first;
- 3) if not closing, increase sash clearance;
- 4) remove interfering gaskets if needed and refit after the season.







INSECT SCREEN

PERIMETER GRID

CLIP

Insect screens are made of weather-resistant materials. However, we recommend removing the insect screen from the window outside the insect season to avoid damage from external factors such as freezing water and birds.

VENETIAN BLINDS

Blinds limit direct sunlight and adjust brightness; also provide privacy. In integrated models, cords/mechanism are in the cavity; only a control knob is visible. Tilt slats with the knob; open slats before lifting. Lift by pulling the knob outward; do not over-tighten—leave ≥ 0.5 cm gap to the headrail. In cord-retracting models, cords rewind automatically. To lower, pull the cord, press the ring, and lower gently.

Without a cord-reel, wind cords around the knob/ cleat. Fixed windows use a clear wand to tilt. Lift/ lock by pulling cords and easing them to lock; lower by pulling slightly and angling toward the lock. Secure loose cords in cleats [≥ 150 cm high]. Avoid excessive force; lower in a controlled way.





SHUTTER BUTTON

DANGER!

Lifting ropes must be coiled and secured so that small children cannot use them to cause dangerous situations!

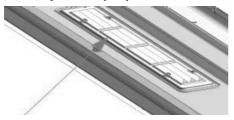
AIR INLETS: KASKI ONEWAY- SUPPLY VALVE (MECHANICAL EXTRACT)

Modern, draught-free, tested; good sound insulation.

Adjust inner nozzle steplessly; keep flap mostly open.



Filter: black Bulpren S15 washable; allergy filter [F7/FE7] replace twice yearly.



Remove filter housing: grip tabs and pull down.





FILTER HOUSING BULPREN S15

Replace filter: remove old, fit new/cleaned.



Washing: dish-soapy water; dry thoroughly; never refit wet.



Refit housing: press until it clicks.



KASKI ONEWAY- FRESH AIR VENT (NATURAL VENTILATION) INNER NOZZLE

Draught-free, for passive systems.

Stepless inner nozzle; keep open. water; dry thoroughly; never refit wet.



Bulpren S15 washable; allergy filter (F7) replace twice yearly.



THE FILTER IS LOCATED BEHIND THE NOZZLE

Remove housing: grip cover and pull out.



FRESH AIR VALVE BODY



FILTER BULPREN S15

Replacement, washing, refit as above.







WINDOW VENT BIOBE VS (DUO)

BIOBE VS-WINDOW VENT

VS: controllable window vent for passive or mechanical systems; filter unit reduces impurities; optional sound attenuator; adjust with end levers (both sideways = open; one sideways/one centered = half; both centered = closed).



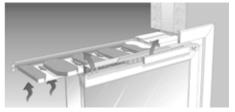
BIOBE VS AIR VALVE

BIOBE DUO WINDOW VENT

DUO: even air distribution; same adjustment and options as VS.

Coarse filters washable. Fibre/allergen filters should not be washed—replace 1-2×/yr. To replace: remove screws, swap filter, re-fix; duct may be vacuumed with valve removed.





BIOBE DUO WINDOW VENT

BIOBE THERMO PLUS AND THERMOMAX

BIOBE THERMO PLUS

Manual: summer = direct through frame; winter = via cavity for pre-heating. Two allergen filters; replace via screws; duct can be vacuumed. Operation: end lever—left summer, middle closed, right winter.



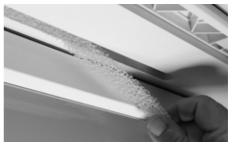
BIOBE THERMOPLUS



BIOBE THERMOMAX

Auto switches summer/winter via thermostat; manual requires user selection. Airflow set on leftend control (left = more, right = less). Filter behind the unit; press the right-edge release and pull unit off to replace.









BIOBE THERMOMAX

AIR-IN KAMELEONT AND AIR TERMICO -WINDOW VENTS

AIR IN KAMELEONTTI

AIR-IN Kameleontti: Finnish fresh-air valve with heat recovery; manual fine-adjustment for direction/speed; summer/winter setting (direct vs. cavity); tool-free service; replace filter bar at least annually (vacuuming may reduce efficiency).

AIR TERMICO

AIR Termico PRV: supply-air window vent without milling; summer direct flow, winter cavity-assisted thermal lift; season switches automatically via filter-bar thermostat.



Filters for replacement air valves are available from Kaski's spare parts store at kaski.fi/kauppa/ or they can also be ordered from Scanserco at https://scancerco.fi/tuotteet/ilmanvaihtoala/biobe/

BALCONY DOORS

Multi-point gear; locking lever with three positions (center locked, sides open). Operate via handle, handle horizontal. Hold-open device locks at ventilation position by pressing handle down; lift to close/open further. Do not move the door with the hold-open engaged; do not slam into end-stop.

Blind adjusted by wand; slats can be fully raised. DANGER: Wind and secure cords for child safety.

Abloy LC102 lock case; Hoppe Amsterdam/New York handles; adjustable strikes; through-handle option. When closing keep handle horizontal to avoid damage. Outdoor locking possible with cylinder (set 65). Hold-open locks by pressing handle down when open.



door locked



1. turn the lock knob to the open position 2. turn the button all the way up and open the door



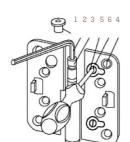
The door is equipped with a wind brake and the brake device is locked by turning the button to the down position.

FIX 150 -HOLD-OPEN DEVICE

With the device, you can adjust the door opening infinitely to the desired ventilation position. The hold-open device operates via the door button. Open the door to the desired ventilation position, turn the button to the closed position (down). The door locks in place and will not slam shut due to the wind. If the button is in the open position (horizontal), the door moves freely. Do not move the door in the ventilation position. This will prematurely weaken the friction force of the hold-open device.

BALCONY DOORS

[Adjustment – height/lateral]: Height: remove caps, turn Allen AV5 clockwise ~1 mm per turn; repeat on all hinges to share load. Lateral: loosen center-hinge screws, loosen bottom if moving latch-side gap, turn side-adjusters clockwise ~2 mm per turn; tighten; adjust top hinge if needed. Align center-hinge depth with top/bottom; tighten all.



Hinge adjustments align the leaf, not a misinstalled frame. Toward-frame adjustment by removing hinge packing plate.

Lubricate hinges and multi-point 1-2×/yr (e.g., PTFE/Vaseline sprays; Würth PTFE/HHS2000). Check clearances and screws yearly.



EN (Striker): Loosen top/ bottom screws, adjust latch plate, retighten; repeat for all strikers.

WINDOW MAINTENANCE

Windows need little maintenance; regular actions ensure function and longevity; instructions also apply to doors.

- Surfaces: wipe with mild alkaline solution.
- Glass: wash with water/window cleaner; dry corners; avoid excess water; no abrasives/ razors on coated glass.
- Stains: mild alkaline cleaners; avoid solvents—may dull paint.
- Blinds: dust/damp-wipe; silicone stains e.g., Würth Acryl Cleaner.
- Vents: wipe: wash coarse filters 1-2×/

- yr; replace fibre/allergen 1–2×/yr; do not vacuum valve units.
- Seals: inspect; press loose seals back; replace damaged.
- Drain holes: keep clear.
- Paint: monitor; touch-up as needed.
- Insect screens: clean: remove for winter.
- Clearances: adjust hinges; sash rests on sliders.
- Hardware: check/tighten fixings.
- · Lubrication: locks, multi-point, hinges yearly.
- Vent sash latch: set opening and compression.

RECOATING

- Timber: painted, stained, or lacquered; aluminium powder-coated. Recoat as needed in good conditions (moisture < 20 %, temp > +5 °C, RH < 80 %). Protect surroundings; follow product data; see tape guidance earlier. Test shade on a hidden area.
- Painted: remove loose paint, sand, clean,

- prime/finish per spec.
- Stained: as above; prime bare wood with stain; two coats tinted lacquer [~5% stain].
- Pre-treated: finish soon after installation; renew per intervals.
- Aluminium: sand, clean, prime if needed, finish-coat to shade.

CLEANING GLASS

Clean regularly—light, frequent washes preferred. Rinse first; use clean tools (microfibre). Mild detergents or vinegar for spots. Rinse and dry. Stubborn stains: cautiously with solvent (denatured alcohol)

and soft cloth; protect other parts; rinse. For standard glass, a purpose-made scraper may be used carefully; avoid high-pH cleaners.

PROBLEM SITUATIONS

- Condensation on outer exterior pane: highly insulated glass; outer surface below dew point; common in autumn mornings; clears as it warms.
- Condensation on inner face of exterior pane: warm/moist indoor air entering cavity; check locks, seals, compression; ensure latch/screen don't prevent sealing; verify exhaust ventilation.
- Condensation on room-side pane: high RH, poor air circulation near window (curtains, sills); recesses/fixed lights more prone; large temperature difference increases risk.

- Condensation inside IGU: failed seal.
- Insects/dust in cavity: design ventilates the cavity; outer seal is discontinuous by design.
- Draught near window: ensure all locks closed; heating on near window.
- Clicking noises: aluminium thermal movement; harmless; most noticeable in rapid temperature shifts: tends to diminish.
- Grey haze: try 3-5% citric acid in wash water; if persistent, likely Haze (optical effect typical of coated glass).

QUALITY REQUIREMENTS

- Based on RT 103241 and Finnish Flat Glass Association warranty terms.
- Manufacture: components made with care; class-appropriate wood joints allowed; no rot, bark, reaction wood, burrs, insect damage, resin pockets, waney edges.
- Dimensional tolerances: frame outer size ±2 mm; clearances ±1 mm from 3 mm nominal; squareness by diagonals (1.5-6 mm depending on size).
- Finish (interior): assessed at 2 m in normal daylight; overall uniform; minor grain/lift/ joints/seams/filler/small scratches/dents

- acceptable; site touch-ups may show slight gloss/tone/level differences.
- Glass: no disturbing distortion (float glass at 45° from 4.5 m); defects assessed at 2 m;
 3 mm point defects not allowed; laminate interlayer defects not allowed on visible faces; spacer step ≤ 3 mm; coated glass may show haze/colour shift; optical interference and tempered-glass anisotropy are not defects; exterior condensation possible on high-insulation units.
- Hardware: quantity/strength dimensioned for normal loads.

PERIODIC MAINTENANCE

- Glass cleaning: yearly.
- Seal inspection: every 3 years (also during cleanings).
- Hinge/clearance adjustment: every 3 years.
- Blind cleaning: yearly.
- Valves/filters service: yearly.
- Drain holes: yearly.
- · Painted surface wash: yearly.
- Recoating: as needed (assess e.g., at 1- and 5-year marks).
- Hardware tightening/lubrication: yearly.
- Vent-latch adjustment: every 3 years.
- Insect screens: yearly inspection and cleaning.

BIOCIDE NOTICE (TEKNOL AQUA 1410-01)

This item has been treated with a wood preservative: [Biocide Regulation 528/2012, PT8]	TEKNOL AQUA 1410-01	
a) Objects treated with TEKNOL AQUA 1410-01 are protected against the following:	Biocides approved for product type 8	
b) Objects treated with TEKNOL AQUA 1410-01 are protected against the following:	Protects against wood-destroying rot and bluestain fungi (PT8-approved biocides).	
c) Articles treated with TEKNOL AQUA 1410-01 contain the following biocidal products:	Propikonatsoli, IPBC	
d) Objects treated with TEKNOL AQUA 1410-01 contain the following nanomaterials:	-	
TEKNOL AQUA 1410-01 The wood preservative is manufactured by:	Teknos A/S Teknos 0y Industrivej 19 Takkatie 3 DK-6580 Vandrup FI-00371 Helsinki Tel: +4576939400 Tel: +3589506091	
e) special precautions for objects treated with TEKNOL AQUA 1410-01:		

The wood must be surface treated, for example by varnishing or painting. The surface treatment must be renewed regularly.
