

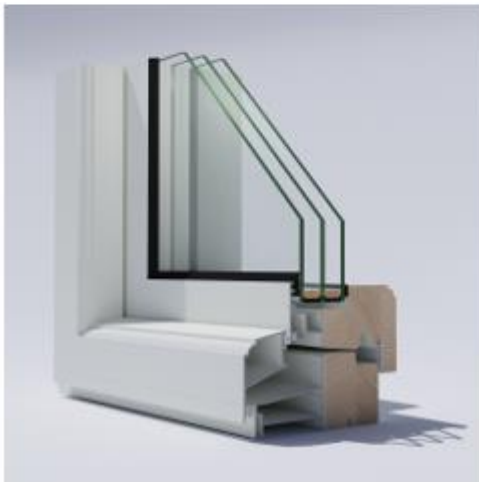
LEIAB WINDOWS AB - Sweden



STIL



HAGA



EPOK



ROYAL

Email: david.karlsson@leiab.se

Date Created: 2022-10-27 (rev. 1)

Enquiries regarding specialist maintenance must be referred to the **manufacture, Leiab Windows AB**. Maintenance by unauthorised persons may affect product warranties.

Postal Address	Telephone	Vat No	Banking acc No	Internet	e-mail
LEIAB Fönster AB, Box 141 SE-598 05 Mariannelund	+46 496 70 700	SE5562190578	513-0299	www.leiab.se	info@leiab.se Page 1 (23)

Glazing options

Refer to as built drawings and order confirmations for location of glazing options.

Ironmongery

Side hung inward opening (LIF)

Window reference	Item	Supplier
LIF	Operating Handles	Hoppe
	Hinges	Bufab
	Espagnolette	Winkhaus
	Espagnolette (bottom hung)	Fix
	Ventilators	Biobe

Tilt/turn inward opening (LKF)

Window reference	Item	Supplier
LKF	Operating Handles	Hoppe
	Hinges	Winkhaus tilt before turn
	Espagnolette	Winkhaus
	Ventilators	Biobe

Outward opening door (LUD)

Door reference	Item	Supplier
LUD or LUDD	Operating Handles	Hoppe
	Hinges	Dr Hahn
	Espagnolette	Winkhaus

Inward opening door (LID)

Door reference	Item	Supplier
LID	Operating Handles	Hoppe
	Hinges (only sidehung)	Bufab
	Hinges (Turn/tilt)	Winkhaus
	Ventilators	Biobe

Window / Door Operation

Inward opening sidehung window/door (LIF/LID)



Window/door in closed position



Rotate the handle 90 degrees for side hung position

Adjustment instructions



Tilt/turn (LKF)



Window in closed position



Rotate the handle 90 degrees for tilt position.



Rotate the handle 180 degrees for turn position

Adjustment instructions



Operations & Maintenance Manual Parallel Opening (LKF PAD)



Window in closed position.



Rotate the handle 90 degrees for ventilation position.



Rotate the handle 180 degrees for side hung position.

Attempting to slam the window closed will only result in damage to the window mechanism.

Adjustment instructions



OBV safety catch restrictor

Location

Firstly, establish the correct position, to achieve no more than 100mm of opening. This position will normally be on the opposite side of the hinges, and near to, but not hindering the operating handle.

The safety catch on a side hung casement or tilt & turn window should be vertical with the button upper most, whereas on a top hung casement it will be horizontally mounted on the bottom. On casement windows the main body of the safety catch is located on the outer frame upstand, whereas on the tilt & turn it is on the opening sash up stand.

See diagram 1 for illustrations

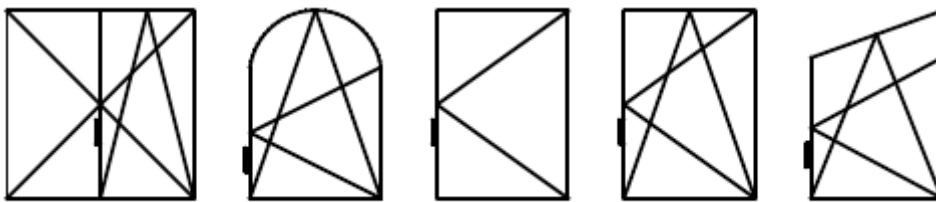


Diagram 1: Recommended positioning of Safety Catch

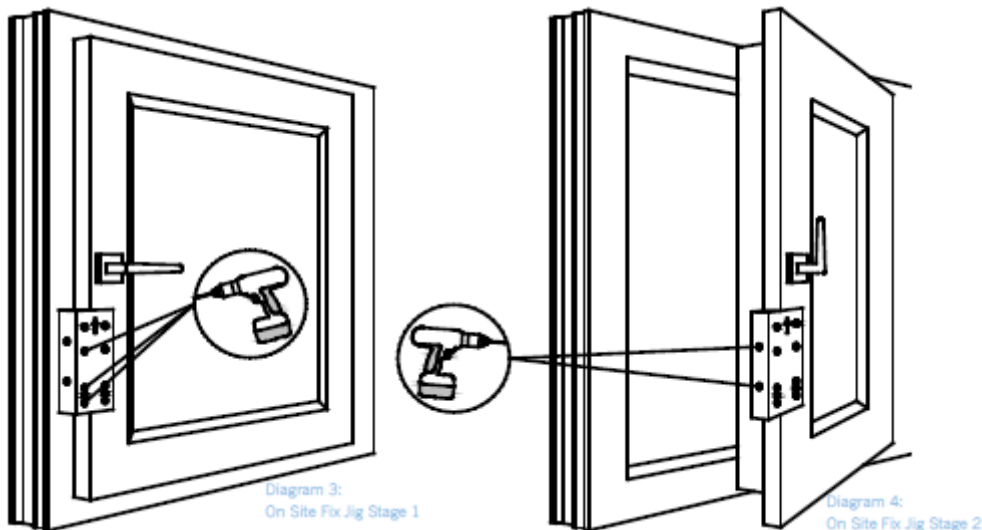
Fitting

Fit the safety catch body first by pre-drilling using by using the site fix jig.

Fix Part Number: 2833559

On windows where the mounting face of the up stand is not square an angled packer will be required. After positioning the jig, drill the five holes (or seven if using certain angled packers) and fit both parts using the appropriate screws. Check by closing the window and ensuring that the hook automatically engages and disengages using the release button.

Please refer to diagrams 2 - 4 for jig positioning.



Due to the window settling/sagging during their life span or the differing arcs of hinges it may be necessary for a subsequent adjustment to be made. This can be achieved by releasing the hook base plate fixing screws and moving the plate to align the upper most edge in alignment to the mark on the Safety Catch body. Finally retighten the hook base plate fixing screws.

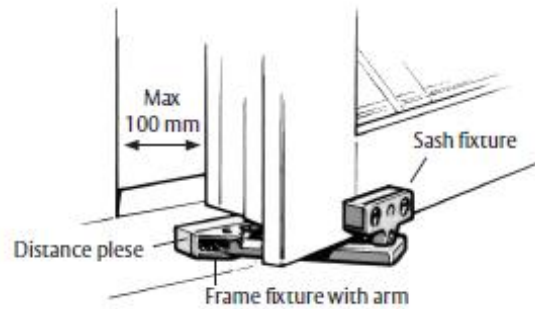
Operating instructions

The robust design incorporates the following features:

- Conforms to BS6375 Part 2. Load bearing capability of Safety Devices.
- The OBV automatically prevents the opening of a window greater than 50mm - 100mm (depending on the positioning on the window).
- The OBV locking bar can be released for full opening of the sash by keeping the push button depressed. In ventilation mode push the button the close the window.
- The OBV will automatically re-engage when the window closed.
- Surface mounted vertically or horizontally on both outward opening and inward opening windows, it can be retrofitted to existing windows as an additional security and safety device.
- 3mm adjustment of steel hook possible for correct operation.
- Easily fitted using 5 screws. The steel hook is fixed with three screws (for PVCu windows fixing into reinforcement is recommended). Drill jigs available site fixing.
- An extensive range of packers and mounting blocks available.
- 1mm shims available for optimum positioning of steel hook.
- Purpose designed to provide high levels of child safety and increased security for both new and existing windows, together with a lockable 50mm vent position.
- Can be fitted by eye utilising aligning mark on body of Safety Catch. The line can be transferred using a pencil to indicate the position for the hook base plate.
- The OBV is available in white as standard.

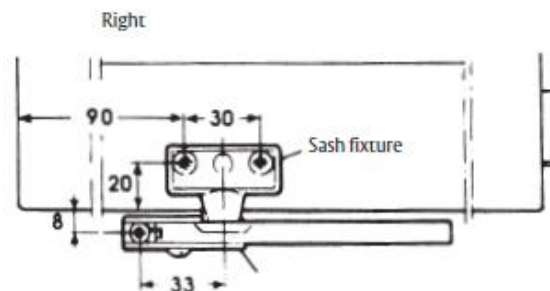
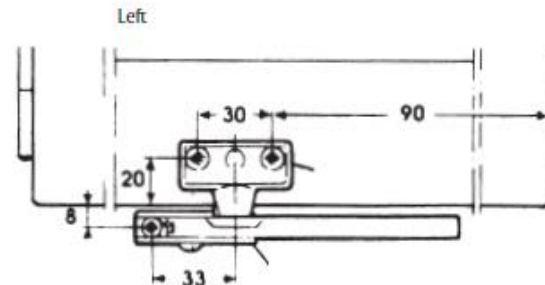


ASSA FIX 92 restrictor

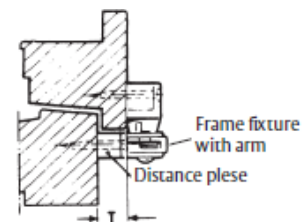


Fitting

Mark the screw holes on the sash.
 Drill \varnothing 2,5 mm to the depth of 15 mm.
 Fit the sash fixture to the sash according to the figure below.
 Measure the distance from the sash to the inside of the frame, distance T according to the figure below.
 Choose the distance plese according to the table below.
 Mark the screw holes on the frame according to the figure below.
 Drill \varnothing 2,0 mm to the depth of 20 mm.
 Fit the frame fixture with the distance plese on the frame.
 When the window is being closed, the safety function is automatically engaged.

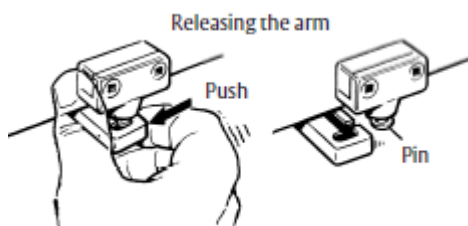


T mm	Distance plese
13-15	12
15-17	14
17-20	16



Distance plese no 2 with T 3-5 mm is possible to order when needed.

Window opening larger than 100mm



Outward opening door (LUD)

Door in closed and secured position. The handle must be turned to the downwards position to engage the locking mechanism and hold the door securely in the closed position. If the handle is not turned downwards the door will not be secured.



To open the door, turn the handle upwards 90 degrees and then push the door outwards.

Operations & Maintenance Manual



The door has an inbuilt friction stay that will lightly hold it in the open position when activated. To activate this function, open the door to the desired position then rotate the handle down 90 degrees and leave it in this downwards position (as shown in picture 3). To disengage the friction stay raise the handle back up 90 degrees to the open position (as shown in picture 2).

The friction stay is only designed to lightly hold the door in position and will be overdriven if mild pressure is applied. Examples of mild pressure would be a person physically pushing on the door or if the door is held open during windy conditions.

The door is also fitted with a high-level restrictor which prevents it from opening further than 90 degrees. This is to protect the door from hitting the edge of the brickwork reveal when opened. There is a risk that this restrictor will disengage if enough pressure is applied, therefore it is strongly advised that the door is not left in the open position during windy or unintended conditions.



Before closing the door, the friction stay must be released. To release the friction stay raise the handle up through 90 degrees to the open position (as shown in picture 4). The door can now be pulled into the closed position. Once closed the handle must be turned back through 90 degrees to the downwards position (as shown in picture 1). This engages the locking mechanism and holds the door securely in the closed position. If the handle is not turned downwards the door will not be secured.

Adjustment instructions



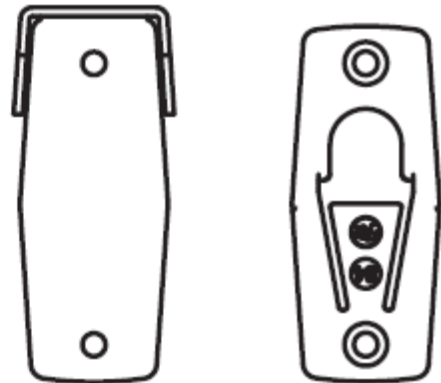
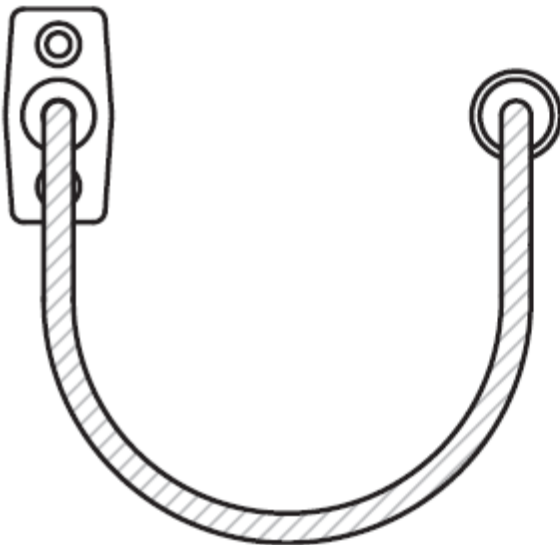
ASSA Fix 184 balcony door restrictor

Fitting

Use screw TKFX SPAX 3,5x40 and fit as per the picture. For childproof locking Assa 184 must be fixed with an opening gap of maximum 100mm.

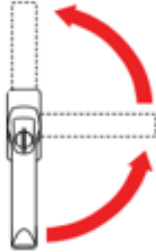


Parts included



Tilt and turn (LKF) handle function

180 degrees, Window in turn position



90 degrees, Window in tilt position

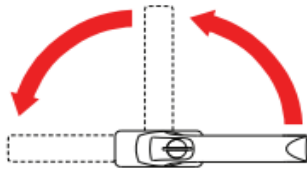
0 degrees, Window in closed position

When key operated, make sure the key is in the correct position.

Parallel opening (PAD) handle function

When key operated, make sure the key is in the correct position

90 degrees, Window in ventilation position

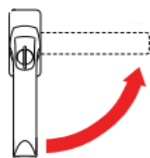


180 degrees, Window in turn position

0 degrees, Window in closed position

Door (LUD, LID) and window (LIF) handle function

When key operated, make sure the key is in the correct position



Handle is in open position

Handle is in closed position

Operating the KISI child safety restrictor
(For non-lockable handles)



To operate the handle, press the two “buttons” on the side (as pictured above) and rotate the handle whilst pressing the buttons.

Operating lockable TBT4 handle for tilt/turn or parallel opening window

Handle in locked and closed position.

Turn the key 180 degrees clockwise to unlock the handle.



Turn the handle 90 degrees to ventilation position as picture.



When in the ventilation position turn the key clockwise whilst turning the handle 180 degrees to side hung position.



Handle at side hung position. To close the window, close the window and turn the handle back to its closed position and turn the key 180 degrees anticlockwise to lock the handle.



Deliveries

Regarding the planned delivery can you please note the following.

The goods will be packaged and shipped in accordance with Leiab standards.

Any alternatives to this standard delivery terms must be advised and agreed upon 6 weeks prior to the confirmed delivery dates.

- The windows and doors will be loaded onto a fully loaded 13 metre side-curtain articulated lorry that will be transported directly from our plant to the delivery address.



- Upon delivery and before off-loading commences, it is essential that you visually inspect the load and if there are any damages that these are noted on the POD/Delivery Docket and witnessed by the driver. Damage caused while offloading by forklift / crane will be viewed as damages by others as well as damages incurred whilst loading out/distribution. The insurers demand this as otherwise they will not recognise these damages as a claim.
- The windows and doors will be Packaged on Leiab's standard non-returnable one-way timber pallets – Picture below.



Operations & Maintenance Manual

- The windows and doors have a plastic wrap. This is not weather-proof and is only intended as a light duty dust protection.
- The individual pallets will be marked with the respective floor.
- The individual pallets will have a QR Code containing a description of the windows/doors on each pallet.
- Leiab can provide a compiled pallet list for the individual pallets on each delivery.
- The trailer is loaded from the passenger side of the trailers and off-loading should be commenced from the rear of the trailer and then moving forward.
- We recommend that the individual pallets are off-loaded using a forklift. To avoid damages while off-loading please use a forklift that can separate the pallets sideways before lifting them off the trailer.
- The trailer should be parked on level ground and the forklift is also offloading on level ground.
- To reach the window pallet row on the inside (driver's side) of the trailer then we recommend that the forklift is equipped with long forks to reach these.
- Should a delivery be turned away due to the site being unable to unload it, an additional re-delivery cost will be passed to the customer and must be agreed prior to a new delivery date being made.
- The windows and doors must not to be exposed to muddy site conditions nor allowed to be stored in direct sunlight.
- All handles, sundries etc are supplied on a last delivery unless otherwise instructed. The quantities are to be confirmed immediately upon the arrival of these.
- All handles and sundries are to be fitted by others.
- We strongly suggest that the balcony doors once installed are either locked off preventing unauthorised usage or sand-bagged in the open position preventing them from flapping opened and closed in the wind. All windows are to be secured in the open position and not allowed to flap.

Leiab shall require further information regarding:

- The delivery coordination - can you please provide the following details for our haulier to make the necessary bookings?
- Any special delivery vehicle requirements such as Silver/Gold Fors etc are not included and are to be confirmed at placement of order.
- Who shall be the contact person?
- The telephone number / email address?
- The delivery address and if there is a special gate that the haulier must enter through.
- Please ensure that the necessary customs clearance documents have been completed prior to the windows and doors being despatched from Leiab.

Should you wish to discuss any of the details in the attached then please contact us immediately.

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Maintenance and cleaning

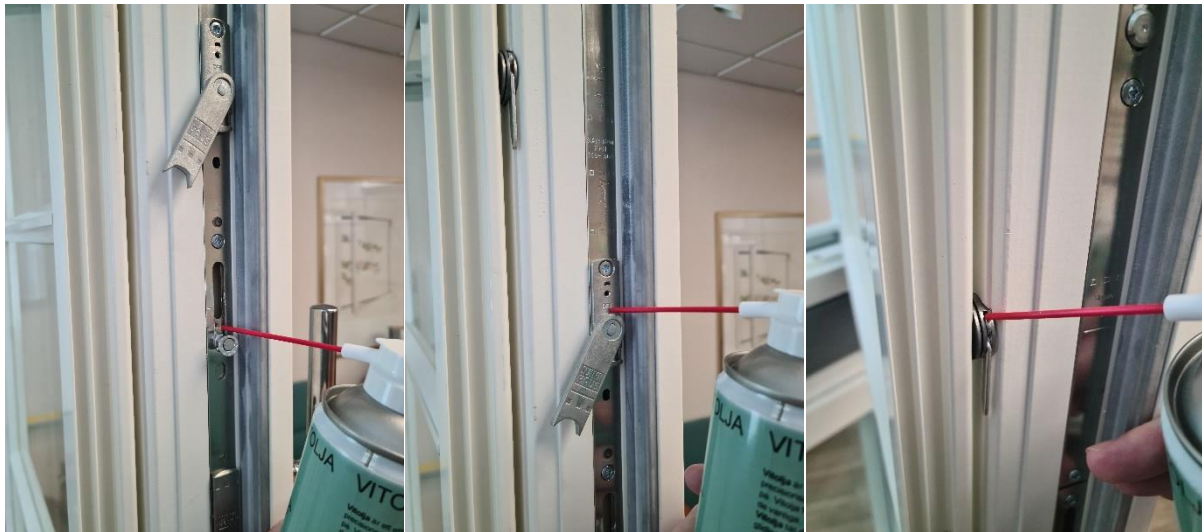
The frequency at which maintenance and cleaning operations should be carried out is subjective and account should be taken of the following factors:

- Weather conditions
- Frequency of use – The less a window/door is used the more likely to require regular inspection than one which is operated daily.

The above conditions will vary at different times of the year, and it is the responsibility of the client to interpret the general guidelines, taking such factors into account.

All cleaning should be carried out from the top downwards to avoid polluting already cleaned surfaces, with the debris from above.

All moveable parts of the espagnolette and keeps should be oiled at least 1-2 times annually. This includes in and around the closing mechanism. We recommend a silicon spray. Do not use mineral based oils. The closing keeps should also be oiled.



Internal timber surfaces should be cleaned with a mild household polish or cleaner specified for use on timber surfaces. Damage may be repaired by lightly rubbing down the affected surface with a fine abrasive paper dusting thoroughly to remove all debris and applying one or two coats of a clear lacquer finish.

Proper care of all products is a matter of good housekeeping, and no special attendances should be required.

Any defect that may be noted within the periods of warranty should be advised immediately to the supplier, providing as complete details as possible.

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To clean the glazing of a 2+1 door/window.

Start by opening the door, when the door leaf is at the desired position turn the handle back to its closed position to engage the friction stay.



Locate the sash clips on the inside edge of the door leaf. (See below).

There are 3 clips on the door leaf.



Operations & Maintenance Manual

Disengage the sash clips by lifting the "arm" of the clips as far as they will turn. This will allow the inner and outer sashes to be separated. If the arm won't budge simply by using your fingers, use a flat head screwdriver and lightly twist the arm open.



Once the sashes are separated the insides of the glass can be cleaned.



Operations & Maintenance Manual

When the cleaning is complete push the sashes back together and re-engage the sash clips by turning them back to their original position.



Once it is ensured that the sashes are secured back together, rotate the handle back to its open position and the door will be ready to operate again.

Maintenance of powder coated facades

There are no known surface covering treatments within the building industry which are maintenance free, but by using polyester powder coating, maintenance is reduced to a minimum, at the same time offering guaranteed systems.

It is recommended that the aluminium is cleaned at once-a-year intervals or as seen necessary.

When repairing minor damage on the frame i.e., where the under surface is not bare, the following needs to be carried out. If specialist work is required, we recommend John North from The Refinishing Touch Limited.

- Sand the damaged area carefully without causing further damage to the pre-treated areas.
- Loose particles are removed.
- Repair paint used.

For repair work to areas where the metal is bare, the following needs to be carried out:

- The area which is to be repaired should be sanded and cleaned to remove loose material.
- Exposed metal should be treated with primer.
- Repair paint used.

If specialist work is required, we recommend John North from Refinishing touch Limited.

Cleaning of glass

Before undertaking the cleaning of glass, make sure there are no traces of dirt or grime on the glass or the cleaning equipment. This is to avoid any scratches on the glass. The window glazing should be cleaned with a soft cloth and a high-quality window cleaner.

The glazing must not be cleaned with products containing hydrogen fluoride or phosphoric acid since these corrode glass.

Steel wool, scrapers other abrasive materials must not be used to clean the glazing as it will leave scratches. To dry the window, use a window scraper or wipe with a slightly damp cloth.

The trickle vent has an external fly mesh which prevents debris from entering the building. In the unlikely event that it should get blocked, the inside may be removed by releasing the screws on either side of the internal grille, as shown in accompanying diagrams. Only use mild detergents to clean in all cases.

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Contacts

Please see Leiab Windows homepage: <https://www.leiab.co.uk/en/contact/>

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Installation of windows

Checklist when installing LEIAB's fixed windows, opening windows and inwards opening doors

Delivery and storage on-site

Damages caused during transport or any missing products must be noted on the consignment note. Any damage should be communicated before fitting, no later than 7 days after delivery. Otherwise ABM07 is in effect.

Store the products in their original packaging in a dry and well ventilated space, away from direct sun light. The plastic around the products from the factory is only intended as packaging during transport.

Wall type and fitting tolerances

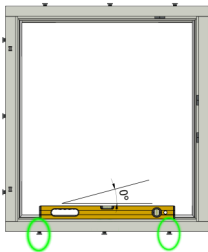
Installation should be done in a solid material and shims should be of a sturdy material.

For fitting materials in combination with adjustable fitting collars refer to ByggAMA or equal.

LEIAB recommends a installation gap between the door and the wall opening of 7.5-15 mm on each side.

Opening products should be installed with the sash removed from the frame.

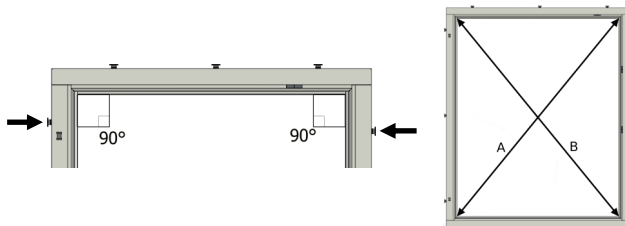
1. Adjust the bottom part



Use the fitting collars in the bottom piece to level it.

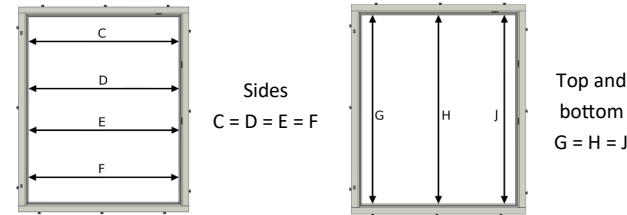
2. Adjust angles and diagonals

Use the upper fitting collars to adjust the frame until all four corners are at right angles and the diagonals are equal, $A = B$.



3. Adjust width and height

Use the remaining fitting collars to adjust the frame until all measurements along the width and height are equal.

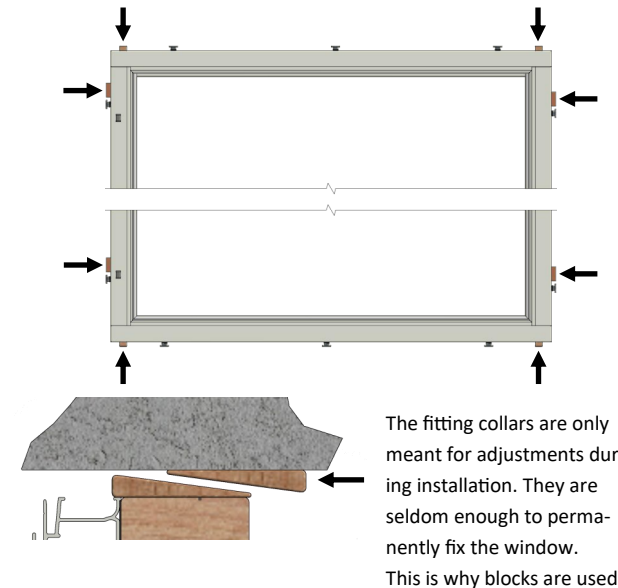


Also check that the frame is plumb inwards and out, and that it is not twisted in any way.

4. Apply supporting blocks and wedges

Once the frame is adjusted, use supporting blocks near the fitting collars to support the frame against the wall opening.

Also use wedges at the top, above the side parts to force the frame against the bottom of the wall opening.



5. Install frame screws

Once the frame is adjusted and the blocks are in place, insert and tighten frame screws through the fitting collars.

Make sure that all fitting collars are used.

6. Final checks

Once the frame is mounted, install the sash and ensure that the frame does not settle or moves from its fitted position in any way.

In particular, check that the hinge side does not sink from the weight of the sash and that the diagonals are still equal.

Afterword

A good installation according to these instructions is vital for proper function of the products.

Most important is to achieve a correct adjustment and a rigid fixation of the frame.

Post installation adjustments

If needed, to achieve a proper functionality, the hinges and other ironmongery can be adjusted according to our adjustment instructions. These adjustments can only partially compensate for an improper installation.

Complete adjustment instructions are available at:

www.leiab.se

Service and supplementary adjustment might be needed and is not included in the supplier's commitment.

Installation of outwards opening doors using fitting collars

Checklist when installing LEIAB's outwards opening doors

Delivery and storage on-site

Damages caused during transport or any missing products must be noted on the consignment note. Any damage should be communicated before fitting, no later than 7 days after delivery. Otherwise ABM07 is in effect.

Store the products in their original packaging in a dry and well ventilated space, away from direct sun light. The plastic around the products from the factory is only intended as packaging during transport.

Wall type and fitting tolerances

Installation should be done in a solid material and shims should be of a sturdy material.

For fitting materials in combination with adjustable fitting collars refer to ByggAMA or equal.

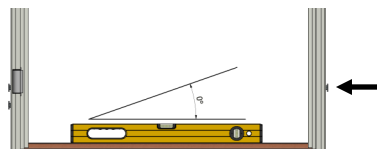
LEIAB recommends a installation gap between the door and the wall opening of 7.5-15 mm on each side.

Opening products should be installed with the sash removed from the frame.

1. Adjust the threshold

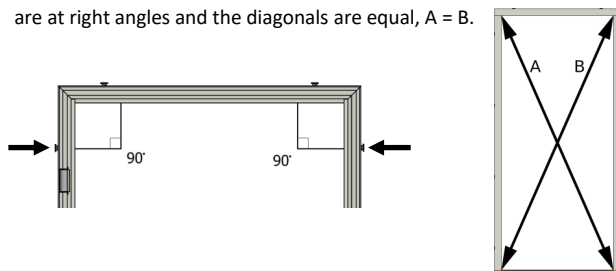
Ensure that the threshold is level and fully supported from below.

Use the lower fitting collars to fixate the threshold first



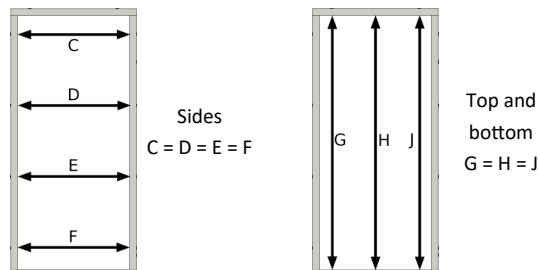
2. Adjust angles and diagonals

Use the upper fitting collars to adjust the frame until all four corners are at right angles and the diagonals are equal, $A = B$.



3. Adjust width and height

Use the remaining fitting collars to adjust the frame until all measurements along the width and height are equal.

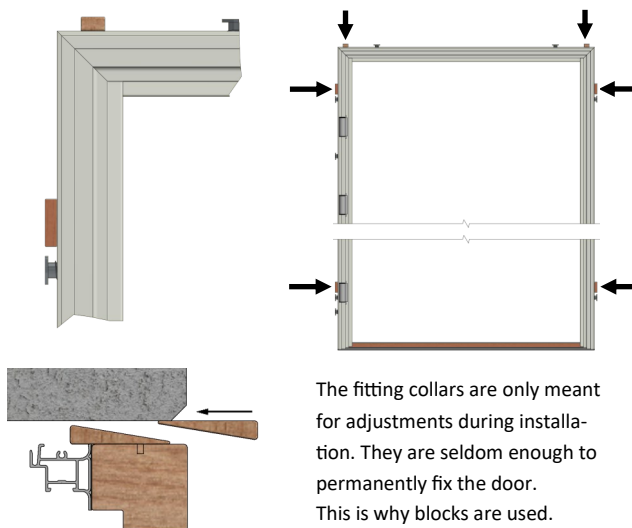


Also check that the frame is plumb inwards and out, and that it is not twisted in any way.

4. Apply supporting blocks and wedges

Once the frame is adjusted, use supporting blocks near the fitting collars to support the frame against the wall opening.

Also use wedges at the top, above the side parts to force the frame against the bottom of the wall opening.



The fitting collars are only meant for adjustments during installation. They are seldom enough to permanently fix the door. This is why blocks are used.

5. Install frame screws

Once the frame is adjusted and the blocks are in place, insert and tighten frame screws through all fitting collars.



Make sure all fitting collars are used, especially those in the aluminium frame on the hinge side.

Re-torque the screws in the frame hinges and make sure their locking screws are tightened. Instructional videos on this is available on our website.

6. Final checks

Once the frame is mounted, install the sash and ensure that the frame does not settle or moves from its fitted position in any way.

In particular, check that the hinge side does not sink from the weight of the sash and that the diagonals are still equal.

Afterword

A good installation according to these instructions is vital for proper function of the doors.

Most important is to achieve a correct adjustment and a rigid fixation of the frame.

Post installation adjustments

If needed, to achieve a proper functionality, the hinges and other ironmongery can be adjusted according to our adjustment instructions. These adjustments can only partially compensate for an improper installation.

Complete adjustment instructions are available at:
www.leiab.se

Service and supplementary adjustment might be needed and is not included in the supplier's commitment.

Installation of outwards opening doors using straps

Checklist when installing LEIAB's outwards opening doors

Delivery and storage on-site

Damages caused during transport or any missing products must be noted on the consignment note. Any damage should be communicated before fitting, no later than 7 days after delivery. Otherwise ABM07 is in effect.

Store the products in their original packaging in a dry and well ventilated space, away from direct sun light. The plastic around the products from the factory is only intended as packaging during transport.

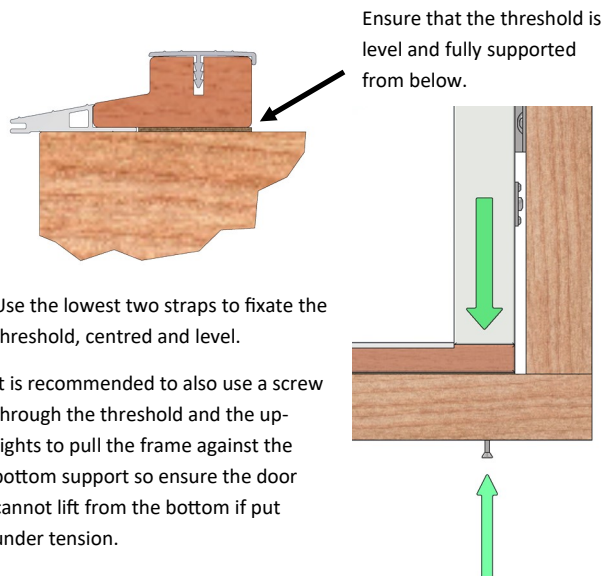
Wall type and fitting tolerances

Installation should be done in a solid material and the straps should be non flexible and properly fitted. For other fitting materials in addition to the straps refer to ByggAMA or equal.

Opening products should be installed with the sash removed from the frame.

Straps should be located max. 150 mm from edges and spaced max. 450 mm apart.

1. Adjust and fixate the threshold



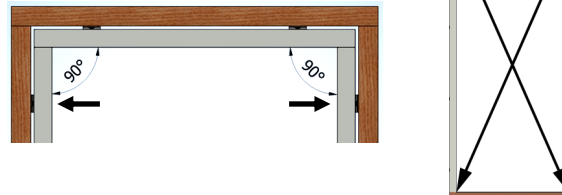
Ensure that the threshold is level and fully supported from below.

Use the lowest two straps to fixate the threshold, centred and level.

It is recommended to also use a screw through the threshold and the up-rights to pull the frame against the bottom support so ensure the door cannot lift from the bottom if put under tension.

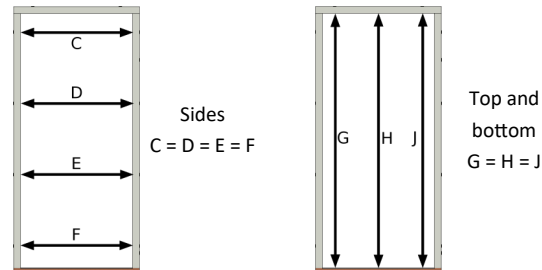
2. Adjust angles and diagonals

Use the upper straps to adjust the frame until all four corners are at right angles and the diagonals are equal, $A = B$.



3. Adjust width and height

Use the remaining straps to adjust the frame until all measurements along the width and height are equal.



Also check that the frame is plumb inwards and out, and that it is not twisted in any way.

4. Fixate straps securely into the wall



The straps must be securely screwed to the door frame and welded or screwed to the wall.

They must not rotate, even if put under load from the frame and the sash.

5. Make use of the aluminium fitting collars

There are fitting collars installed in the aluminium frame on the hinge side of the frame.



These must be fixated, either directly to the wall, or using a steel plate to screw them to the wood frame.



Re-torque the screws in the frame hinges and make sure their locking screws are tightened. Instructional videos on this is available on our website.

6. Final checks

Once the frame is mounted, install the sash and check again that the frame has not settled or moved from its fitted position in any way.

In particular, check that the hinge side does not sink from the weight of the sash and that the diagonals are still equal.

Afterword

A good installation according to these instructions is vital for proper function of the doors.

Most important is to achieve a correct adjustment and a rigid fixation of the frame.

Post installation adjustments

If needed, to achieve a proper functionality, the hinges and other ironmongery can be adjusted according to our adjustment instructions. These adjustments can only partially compensate for an improper installation.

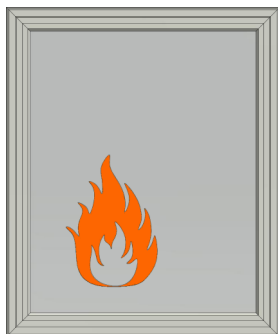
Complete adjustment instructions are available at:

www.leiab.se

LEIAB reserves the right to amend any technical information/instructions provided at any time without prior notice

Service and supplementary adjustment might be needed and is not included in the supplier's commitment.

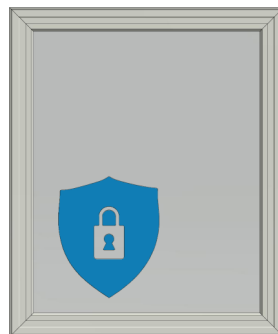
Fire



Installation follows the same principles as the respective standard product with the additions below:

- Insulation around the frame should be with a material that does not burn or melt, such as ceramic fiber or mineral wool. Minimum density should be 30 kg/m³ uncompressed.
- On both the inside and the outside, the joint should be sealed with a fire retardant sealant. The sealant should be listed in the current list MTK Brand (www.mtk.se)
- When installing fire rated doors or windows, the manufacturer's instructions MUST be followed.

Security



Installation follows the same principles as the respective standard product with the additions below:

- Security can be enhanced by making sure the wall adjacent to the locking points and the hinges is as robust as possible and does not flex.
- Installation with fitting collars can be strengthened by placing a pressure plate between the collar and the wall. This will both support the frame and allow for adjustment.
- If installing the old-fashioned way, with shims and screws. Make sure the shims are located adjacent to the locking points.
- If installing with fitting collars, the shims should be left in place. The shims should also be glued to the wall frame to lock them in place.

Noise



Installation follows the same principles as the respective standard product with the additions below:

- When installing sound insulating products it is imperative there are no holes, cracks or voids in the insulation around them.
- Leave a 15 mm gap between the insulation on the outside to leave an air gap.
- Consider using double insulation strips. The inner one should be surface sealed with a plastic coating.
- On the inside, the insulation should be topped with a backer rod that is pressed into the gap. On top of this add a seal with diffusion-tight and elastic mastic with good adhesion to both the frame and the wall e.g. silicone, acrylic latex caulk or similar.

For additional information and detailed instructions regarding heightened performance products, refer to LEIAB's web page www.leiab.co.uk and www.tmf.se.

LEIAB WINDOWS WARRANTIES TERMS AND CONDITIONS 2020.1

LEIAB Window's warranty consists of four parts.

1. *A general warranty with warranty conditions according to ABM 07* (General conditions for the purchase of goods intended for commercial construction activities). The warranty only applies on the basis that damage has not occurred through incorrect assembly, lack of maintenance, external influences or careless handling. The liability period is 10 years from the delivery of the goods and it begins with a guarantee period of 5 years. If the product is intended for a contract that must be final inspected or handed over, the period of responsibility and the warranty period are counted from the day the contract is approved. However, the liability period and the warranty period for a product delivered to a contractor expire no later than 11 and 6 years respectively after the delivery of the product.
2. *A functional guarantee of 10 years regarding the function of the product.* The warranty only applies on the basis that damage has not occurred through incorrect assembly, lack of maintenance, external influences or careless handling. The functional guarantee of 10 years is counted from when the product is delivered. The delivery date can be found in the QR code on the label of each product.
3. *LEIAB also provide a 25-year warranty on aluminium extrusions, timber frame and powder coating.*
4. *A guarantee against condensation inside insulating panes in 10 years.* This warranty is only valid if the glass pane has not been exposed to any abnormal strains, no additional manipulation such as cutting or shaping the glass pane have been made, and no paint, adhesives, blinds or heat reflecting treatment have been added. The 10-year guarantee against condensation inside the insulating pane is calculated from when the insulating pane is manufactured and the date appears in the spacer strip inside the insulating pane.

Limitations on Scope of Warranty

- LEIAB's warranty conditions for glass follow the Swedish Planglasföreningens guidelines for assessment and complaint handling of flat glass, June 2011. As per the glass suppliers Terms and Conditions there are no warranties against cracks forming in the glass nor spontaneous granulation of toughened glass. This is because cracking normally occurs due to factors that the glass manufacturers cannot control or influence.
- There is no guarantee for damage that may occur when using dark colors on the blinds or for damage that may occur when blinds are retrofitted.
- The warranty only covers materials and labor to correct the defect, repair the product or replace the product. The guarantee does not cover costs for any necessary scaffolding or lifting devices or costs for restoration of lining, plaster or connections

A handwritten signature in black ink, appearing to read "Johan Pettersson".

Johan Pettersson

MD LEIAB Fönster AB (trade mark LEIAB Windows)

General conditions for the purchase of goods intended for commercial construction activities

ABM 07

These conditions have been drawn up by the Construction Contracts Committee [Föreningen Byggandets Kontraktskommitté (BKK)] and the Federation of Swedish Building Material Producers Organisations [Byggmaterialindustrierna], namely the Swedish Precast Concrete Federation [Betongvaruindustrin], the Building Material Producers' Association of Sweden [Industrins Byggmaterialgrupp – IB], the Swedish Plastics & Chemicals Federation [Plast- och Kemiföretagen], the Swedish Forest Industries Federation [Skogsindustrierna] the Swedish Federation of Wood & Furniture Industry [TMF – Trä- och Möbelindustriförbundet], Swedisol, the Swedish Flat Glass Association [Svensk Planglasförening], the Swedish Association of Air Handling Industries [Svensk Ventilation], the Swedish Ready Mixed Concrete Association [Svenska Fabriksbetongföreningen – (SFF)] and the Swedish Aggregates Producers' Association [Sveriges Bergmaterialindustri]. The Association of Swedish Building Materials and Hardware Merchants [Sveriges Bygg- och Järnhandlareförbund (SBJF)] has also taken part in the negotiations.

Initial regulations

1. "Framework conditions" have been used in ABM 07 to leave it open for the parties to agree on regulation differing from that provided by ABM 07. These are marked by the wording "unless otherwise agreed" or similar.

The following definitions are used in the application of ABM 07:

Purchase sum: price exclusive of value added tax for all the goods which, under the contract, are to be delivered to a project or a place of delivery.

In writing: information that can be read and stored. Examples of methods of communication of such information are post, fax and e-mail.

2. Unless otherwise stipulated below or otherwise agreed between the parties, the Purchasing Act applies.
3. If the Seller's tender differs from the Buyer's enquiry, this shall be clearly stated in the tender. Otherwise what is prescribed in the enquiry will apply, unless the circumstances clearly imply otherwise.
4. Unless otherwise stated, the tenderer is bound by his tender for one month from the submission of the tender.
5. In addition to possibly being protected under intellectual property legislation or the Business Secrets Act, a document containing proposals and ideas that is provided by the party inviting or submitting a tender shall not be used by the other party without the consent of the party making the proposal except in the relation between the tenderer and the party inviting the tender.
If in the intended object of the procurement the inviter of the tender makes use of such a document from a tenderer whose tender has not been accepted and whose consent has not been obtained and this entails financial advantage to the inviter of the tender, the inviter of the tender shall pay reasonable financial compensation to the tenderer.
6. Unless otherwise agreed the Seller shall not later than at the time of delivery supply assembly, operating, servicing and maintenance instructions in Swedish to the extent appropriate to the nature of the goods.
7. A party is responsible for compliance with statutory provisions insofar as they relate to the party's undertaking.
8. All persons on or delivering to a building site have a duty to wear a name badge giving the name and employer of the wearer and to carry valid identification, for example, in the form of a driving licence or ID card.

Unless otherwise agreed the Seller shall pay liquidated damages for each reported occasion when one of his employees or an employee of a carrier utilized by the Seller infringes the provisions of the previous paragraph. Liquidated damages shall be SEK 500 per person per day.

Commentary

The purpose of the rule is to make it simple to identify persons on the site. There is no objection to information concerning the name and employer of a person being made clear by other means than with a name badge, e.g. by marking of clothing.

Transport and reception

9. The Seller shall, in good time before delivery, give the Buyer information of importance to the transport and reception of the goods.

When the Seller is responsible for transport the Buyer shall inform the Seller without delay if transport cannot take place in the manner stated by the Seller. Should the Buyer fail to do this, he is responsible for ensuring that access roads connecting with the site and conditions on the site permit delivery in the manner stated by the Seller. It is also the duty of the Seller to obtain necessary knowledge of conditions of importance to the completion of transport.

Commentary

ABM 07 contains no conditions of delivery. Examples of different conditions of delivery from which parties may choose are contained in "Levansklausuler för Byggbranschen" [Delivery Clauses for the Construction Industry] and "INCOTERMS".

Right to extension of time

10. A party is entitled to an extension of the delivery period if the completion of the purchase is prevented as a result of circumstances on the side of the opposing party or as a result of circumstances beyond the party's control or other conditions not caused by the party, which he cannot be expected to have anticipated and whose consequences he could not reasonably have avoided. For there to be a right to such extension a party is required to notify the opposing party of the hindrance without delay.

Liability in case of delay

11. A party shall inform the opposing party immediately if conditions that the party has or ought to have anticipated will lead to delay, stating at the same time when delivery or reception can take place.
12. Unless otherwise agreed in writing the Seller shall for each week or part of a week by which he exceeds the agreed date for the delivery of the goods pay liquidated damages of 2 % of the purchase sum or of that part of the purchase sum that relates to contracted and late part-delivery. Otherwise, for example in connection with a sub-order under an annual contract or frame work agreement, the liquidated damages shall be calculated on that part of the purchase sum that relates to the sub-ordered and delayed delivery.
Liquidated damages for delay under this paragraph shall be paid to the amount of at least SEK 2 000 per week or part of a week. However the Seller is not liable for liquidated damages for more than ten weeks of delay.
Should the Seller be able only to deliver a certain part of the agreed delivery on time, the whole delivery is to be regarded as late until the agreed part has been delivered. If in such a case the Seller has informed the Buyer in writing of shortfall in quantity and the Buyer before the agreed date of delivery has agreed in writing to accept the reduced quantity, the Seller is liable – provided that the reduced quantity is delivered on time – only to pay liquidated damages based on that part of the purchase sum that relates to the outstanding quantity.
13. In the event of delay in receiving the goods the Buyer shall pay compensation for the loss thereby incurred by the Seller. Such compensation shall be payable to a maximum amount of 20 % of the purchase sum or of that part of the purchase sum that relates to agreed and delayed part-delivery. In the case of a sub-order under an annual contract, frame work agreement or similar, the maximum amount shall be calculated on that part of the purchase sum that relates to the sub-ordered and delayed reception. Compensation under this clause shall however always be payable to an amount of at least SEK 2 000 per occasion of delay.
14. Beyond the provisions of Clauses 12 and 13 a party is not entitled to compensation for loss in case of delay other than in the event of cancellation as provided below.
15. A party is entitled to cancel the purchase with relation to goods that have not been delivered or received in due time if the delay is of substantial importance to him and the opposing party has realized or ought to have realized this.
Should the delay involve goods that shall be manufactured or procured especially for the Buyer in accordance with his directions or requests and the Seller otherwise is unable without substantial loss to make use of the goods, the Buyer may cancel the purchase only if the purpose of his purchase has been negated by the delay or if another seller has undertaken to deliver similar goods before the new delivery date advised by the Seller under Clause 11. Should the Seller fail to give notice of the delay or the delivery not be effected within the time stated when the delay was advised, the Buyer shall however be entitled to cancel the purchase as stated in the first paragraph.

Should the maximum period of delay under Clause 12 be exceeded, the Buyer is entitled to cancel the purchase.

If the purchase cannot be completed within a reasonable time as a result of circumstances envisaged in Clause 10 a party may cancel the purchase to the extent that its completion is prevented. In the case of such cancellation further sanctions may be claimed only when circumstances on the side of and caused by the opposing party are involved.

16. If delayed goods are connected with goods already delivered or with goods to be delivered later in such a way that it would cause significant inconvenience to the party entitled to cancel if he were in part to abide by the purchase, the purchase may be cancelled in its entirety.
17. Should a party cancel the purchase in the case of a delay, he is entitled to compensation for loss arising after the cancellation. The damages, including compensation under Clause 12 or 13, shall not in total exceed the purchase sum.

Reception inspection

18. The goods shall be accompanied by a delivery note.
When the goods are delivered to the Buyer, he shall check them against the delivery note and also inspect the goods for externally visible defects.
When the goods are unpacked or otherwise before the goods are installed the reception inspection shall be completed with the care appropriate to the nature of the purchase and the goods.
Should the goods have been delivered for contract works for which final inspection or other handover is to take place, the Buyer shall after unpacking and before installation check the goods for visible damage and obvious defects. The check

will then be completed by final inspection or other approval of the Buyer's contract works.

Complaints

19. The Buyer may not claim that goods are defective unless he notifies the Seller of the defect (complaints) within the times stated below.

A defect which has been noticed or ought to have been noticed when the goods were delivered to the Buyer shall be complained of within a week thereafter and before the goods are installed. If the defect may be assumed to have arisen in transit and the goods have been signed for on a separate consignment note, the defect shall also be reported immediately to the carrier.

Otherwise a defect shall be complained of within a reasonable time after it has been noticed or ought to have been noticed or has otherwise come to the knowledge of the Buyer as a result of a complaint from another party.

Commentary

"Complaint from another party" may include the complaint presented by the Buyer's employer, usually by inspecting the contract works. The Buyer shall complain to the Seller without delay if items objected to at inspection are due in the Buyer's opinion to defects in the goods.

Seller's liability for defects

20. Unless otherwise agreed, the following will apply:

The period of liability is ten years calculated from the handover of the goods and it begins with a guarantee period of five years. If the goods are intended for contract works that are to be subject to final inspection or otherwise handed over the period of liability and the guarantee period will be calculated from the date when the contract works are approved. The period of liability and the guarantee period for goods delivered to contract works will however expire not later than eleven years and six years after the handover of the goods respectively.

The Seller is liable for defects that appear and are reported during the period of liability. For defects that appear after the expiry of the guarantee period, however, the Seller is liable only if the defect is substantial and is shown to be due to negligence on the part of the Seller.

The guarantee liability implies a liability of the Seller to remedy defects that appear during the guarantee period. However the Seller is not liable for defects due to incorrect assembly or installation, inadequate maintenance, incorrect operation, neglect, abnormal use or other circumstances attributable to the Buyer. The Buyer has a liability to carry out and document agreed maintenance and servicing measures. If during the guarantee period the Seller is of the opinion that he is not liable for a reported defect it is up to him to show that the goods are in accordance with the contract and to show probability that the reported defect is due to a circumstance on the Buyer's side.

Commentary

Deliveries to contract works take place earlier than the approval of the contract works. The provisions of ABM 07 assume that the interval between these events does not exceed one year. Such a limitation of the supplier's liability has not previously been included in ABM.

21. After receiving a complaint the Seller shall, without delay and without cost to the Buyer, remedy defects or make a new delivery. If without further enquiry the Seller can show that there is no defect, he is entitled to reasonable compensation for costs incurred.

22. Should the Seller fail to remedy a defect or make a new delivery without delay, the Buyer is entitled, after notifying the Seller, to compensation for reasonable costs of remedying the defect himself or to a price deduction equivalent to the defect.

23. If remedying of defects or a new delivery is out of the question or does not take place within a reasonable time after the complaint, the Buyer may cancel the purchase in respect of the defective goods, if the defect is of substantial importance to the Buyer and the Seller was aware or ought to have been aware of this. Should the Buyer cancel in respect of defective goods, he may at the same time cancel the purchase in respect of earlier or later deliveries if because of the connection between them he would have suffered significant inconvenience from abiding by the purchase of these deliveries.

24. If the Seller is responsible for a defect in the goods, he is also liable to pay compensation for loss arising from the defect.

The Seller's liability to pay compensation under this clause is limited to 15 % of the purchase sum or such higher amount as is covered by the Seller's liability insurance together with applicable policyholder's excess. This limitation does not apply to costs of locating the defect, costs of access to and installation of repaired or replaced goods, and costs arising from the repair or replacement.

For loss resulting from damage due to stoppage or disruption of industrial production or other commercial activity compensation is payable only if the loss is shown to be the result of gross negligence on the part of the Seller.

The Seller is not liable for compensation under this clause if he can show that there has been a hindrance to the handover of defect-free goods such as is referred to in Clause 10 and the Seller has informed the Buyer of this in accordance with the provisions of the same clause.

Liability for goods in party's charge etc

25. A party is liable for damage caused by neglect or inadequate care on his part to material, goods or facilities provided for him by the opposing party, unless he can show that the damage was not caused by his negligence.

Insurance

26. Unless otherwise prescribed in other contract documents relating to the Seller's insurance, the following will apply:

The Seller shall during the guarantee period including the period after the handover of the goods have the usual third party liability insurance covering loss resulting from defects in the goods. The insured amount shall be not less than two hundred times the price base amount and the policyholder's excess shall be not more than three times the price base amount.

The Seller shall at the request of the Buyer supply the Buyer with evidence that the agreed insurance exists. If the Seller fails to do this, the Buyer may himself contract insurance at the Seller's expense.

In the event of loss it is the duty of the Seller to use the agreed insurance.

Risk of breach of contract

27. If after the purchase it becomes clear that the actions or financial position of a party are such that there is strong reason to assume that he will not fulfil a substantial part of his undertakings, the opposing party is entitled for his own part to suspend fulfilment and to withhold his performance and to demand that satisfactory surety is furnished for the proper fulfilment of the agreement. The party that has suspended his fulfilment or prevented goods from being dispatched shall resume fulfilment if the opposing party provides acceptable surety for his fulfilment. If surety is not provided without delay, the party that has demanded surety may cancel the purchase in respect of that part that has not been fulfilled.

A party is entitled to cancel the purchase without first demanding surety if the opposing party is declared bankrupt or otherwise as a result of insolvency cannot be expected to fulfil his obligations under the agreement.

Should the Buyer cancel the purchase with regard to a part-delivery, he is entitled at the same time to cancel in respect of earlier or later deliveries if because of the connection between them abiding by the purchase in respect of these deliveries would cause him significant inconvenience.

Price

28. A fixed price not subject to indexation shall be adjusted in consideration of both cost changes resulting from actions of a public authority and cost changes caused by war or other crisis situation of similar effect which relate to supplies or services necessary for the goods, and also cost changes due to abnormal price changes relating to materials included in the goods. Adjustment of the agreed price shall however be allowed only if the cost change has been unforeseeable and materially affects the whole cost of the goods.

Payment and limitation

29. A period of limitation of three months calculated from the date of handover applies to the Seller's claims. However to the extent that the Seller's claims relate to the originally agreed purchase sum or value added tax a period of limitation of 21 months calculated from the date of handover applies. If the goods are intended for contract works the limitation periods will be calculated from the date of approval of the contract works. However the Seller is entitled to payment to the extent that the Buyer is entitled to payment from his employer.

If the Seller can show that he neither knew nor ought to have known of his claim, the period of limitation is calculated as three months from the date when he ought first to have had such knowledge. However the period of limitation shall never be longer than two years calculated from the approval of the contract works.

After interruption of a period of limitation a new period of limitation of two years applies.

30. An invoice shall be paid within 30 days from the date when it is received. Payment does not imply approval of the goods.

If the Buyer has a legitimate claim against the Seller on account of the purchase, the Buyer may withhold as much of the payment as is equivalent to the claim.

31. If payment is not made in due time, interest on overdue payments under the Interest Act shall be payable. On amounts withheld by the Buyer under Clause 30 interest on overdue payments is calculated from the date when payment ought properly to have been made.

Cancellation

32. The Buyer is entitled to cancel orders for goods not delivered. When cancelling the Buyer shall reimburse the Seller's costs for cancelled goods and pay reasonable compensation for loss of profits, if the Seller cannot obtain compensation for this by selling to another party or in some other manner.

Product safety

33. The Seller is liable to the Buyer for costs resulting from an injunction issued against the Buyer under the Product Safety Act if the injunction is due to properties of goods included in the purchase.

Dispute

34. Unless the parties have agreed otherwise, the following will apply. Disputes arising from the agreement shall be settled in Sweden, applying Swedish national law. If the amount in dispute does not clearly exceed 150 times the price base amount, exclusive of value added tax, the dispute shall be settled in a public court. In other cases disputes shall be settled by arbitration in accordance with the Swedish Arbitration Act. By price base amount is meant the price base amount at the time of bringing the action.

Commentary

The parties should agree that disputes will be tested by other means, such as by simplified resolution of disputes under AB 04 Chapter 10 § 1 or by mediation in accordance with the rules of the Mediation Institute of the Stockholm Chamber of Commerce.

This is a translation of the Swedish general conditions ABM 07. In case the translation should differ from the Swedish text, the Swedish text shall apply.