Innovations in the JANIsoft 2024 R2
English

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1 Important notes

The innovations and changes are described in general terms. The availability of the systems, materials and functions depends on your level of expansion of the program.

Please also see the notes in the cover letter for the version, which can be found as a PDF document in the program directory ...\"ServiceDesk\Documents" in PDF file format.

The cover letter concerning changes to the version that will be included with future service packs can be found in the menu ribbon via *General* > *Help* > *Program information* > *Service Pack XY* > *Details*.

If you have any questions about further innovations in the version, please contact the relevant JANIsoft licence agreement partner.

Software licensing via CodeMeter

Licensing for JANIsoft now takes place with digital licences. This method can be used to create the licensing for single as well as server licences.

The licensing method via HASP Sentinel is no longer supported. No further adjustments can be made to this licence technology.

S-CAD licences

Autodesk has generally switched from floating licences or ‘unnamed’ licences to ‘named’ or individual licences.

Due to this general rule, we are no longer able to offer S-CAD licences as a floating network solution.

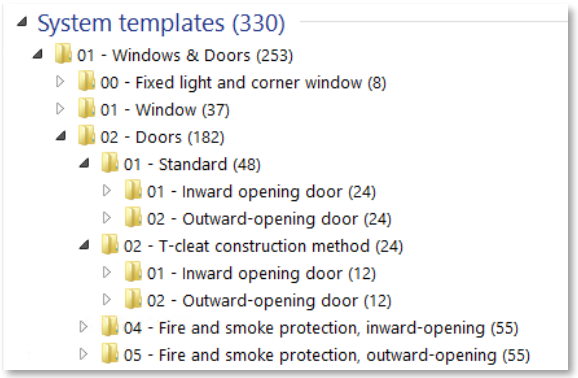
We hope you continue to enjoy using our Jansen software.

2 General program changes (across design types)

2.1 Projects and items

Select template dialogue: Selection of system templates for doors

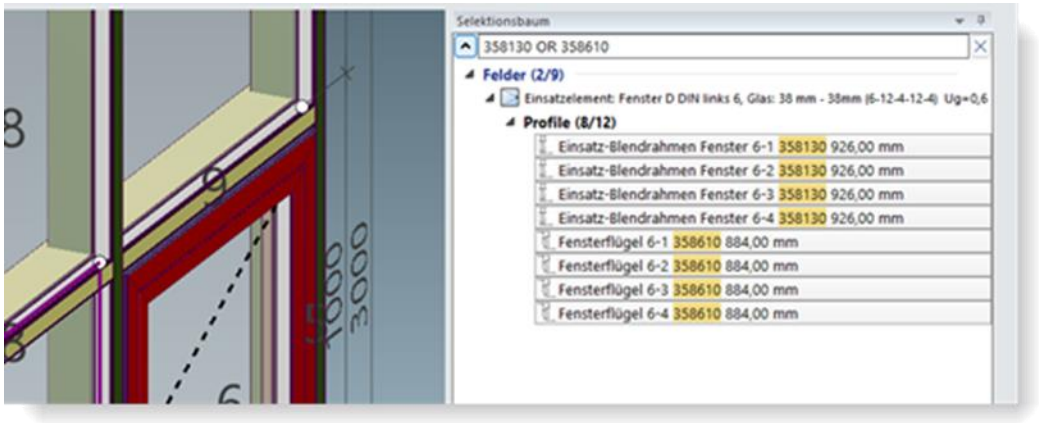
In the *Select template* dialogue, the system templates in the folders *01 - Door (inward opening)* and *02 - Door (outward opening)* have each been moved to new subfolders *01 - Standard*. New system templates have been added to the folders for the *02 - T-connector design* (only valid for the Schüco AD UP 75 and Schüco AD UP 75 BL systems).



2.2 Working in the item window

Selection tree – keyboard navigation

You can use the selection tree in the item window to select one or more element components. From this version onwards, this tree structure can be navigated using the keyboard. The search function in the search bar has also been improved. For example, you can now link individual terms with Boolean operators (AND, OR, NOT, etc.).



2.3 Program help

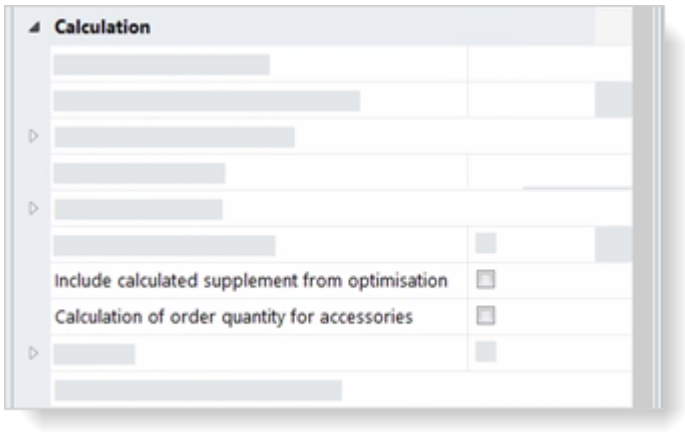
New: Program assistance in French

In the *User settings* dialogue (*User interface* group), French can now be selected as *Language of the help* in addition to German and English.

→ User settings dialogue

2.4 Calculation

Calculation, mass composition:
amendment/extension of the specifications for the calculation



This version results in the following changes to the calculation:

1. **"Consider calculated mark-up from optimisation" output option now project-specific**

   The *Consider calculated mark-up from optimisation* setting has been moved from the *Output options* dialogue (*General* tab) to the *project properties list* . This allows you to adjust this setting for each project. The functionality of the determination has not changed.

2. **New "Calculation of order quantities for accessories" option**

   From this version onwards, articles with the unit of measurement *PU* can optionally be calculated with the order quantity rather than the effective quantity. You will find a new checkbox for this in the *project properties list*.

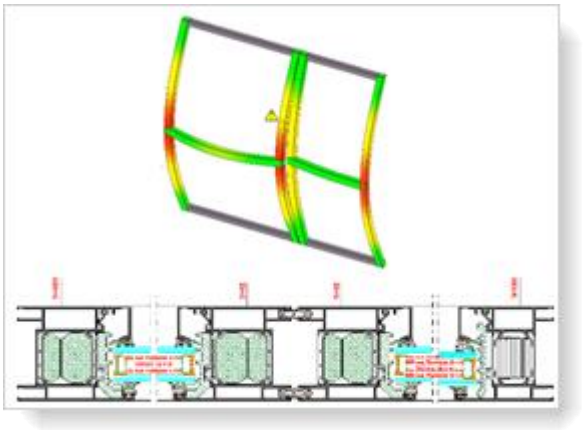
Please note:

- By default, neither of the two checkboxes is activated. Please check the settings for these options for existing projects before outputting them.
- The last option set is used for projects that you create.
- For cross-project output: The mass composition and costing lists are only generated if both settings are identical for each selected project. You will receive a corresponding message.

2.5 Static pre-dimensioning

Expansion profiles as outer frames

From version 2024 R2, the static pre-dimensioning also checks expansion profiles that are used as vertical or horizontal outer frames.



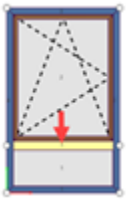
Country selection France:
“Wind" register - Simplified method (DTU 36.5 P3) for windows/doors

From this version onwards, you can select the *Simplified method (DTU 36.5 P3)* as the *determination method* in the *Wind* tab of the *Static pre-dimensioning* dialogue. The selection is only possible when calling up the dialogue in an open window or door position.

The wind load can be determined using the simplified method for building heights of up to 100 metres.

France:
calculation of a point load for window transoms

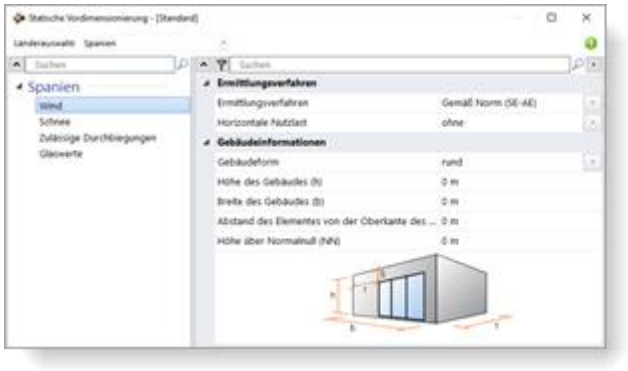
From this version onwards, a vertical point load (live load) of 1.0 kN is calculated on area-dividing transom profiles below a window opening.



Checked according to the permissible deformation for *Transom in Y direction*. This additional load combination is listed in the *Static pre-dimensioning* list and in the *Load combinations* dialogue.

New: ‘Spain’ country selection

From this version onwards, static pre-dimensioning can be carried out in accordance with the applicable standards for Spain. To do this, go to the dialogue *Static pre-dimensioning* and select the entry *Spain* in the *Country selection* list.



2.6 Show profile section / Element view

Show profile section / Element view dialogue:
glass labelling

In the *Profile section - labelling* group, you could determine via the *Glass / Panel* check box in the previous versions whether glass should be labelled with the designations of the film types and glass types. The option only had an effect if the *Glass / Panel* check box was activated at the same time in the *Profile section - dimensioning* group.

As of this version, this dependency no longer exists. In the *Profile section - labelling* group, you will now find two check boxes: *Glass / Panel (dimensions)* and *Glass / Panel (details)*. If you activate only *Glass / Panel (dimensions)*, the dimensions are listed. If you also activate *Glass / Panel (Details)*, the designations of the film types and glass types are listed.

2.7 Glass / Panel

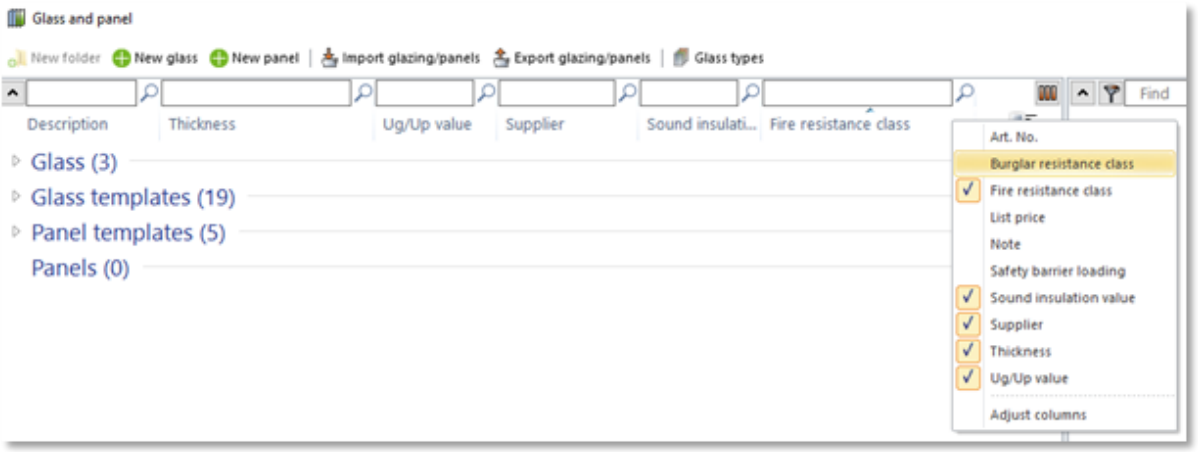
Glass and panel dialogue

New filter options for glass

In the *Glass and panel* dialogue, the following additional columns can be displayed in the detailed view of the glass and panel list from this version onwards.

- Fall protection
- Burglar resistance class
- Fire resistance class
- List price
- Sound insulation value

In the master data and when loading glass in projects and items, glass with the desired properties can be filtered out via these columns.



→ About glass and panel

Panel structure

In previous versions, it was possible to enter the panel thicknesses of the individual panes (outer, inner, centre) to one decimal place. In the program, these entries were displayed correctly with decimal places, for example in the quick info or in the profile section. In the output lists, however, the panel structure is listed without decimal places.

From this version onwards, entries with decimal places are rounded to full millimetres (rounded down until 0.4, rounded up from 0.5).

Please note:

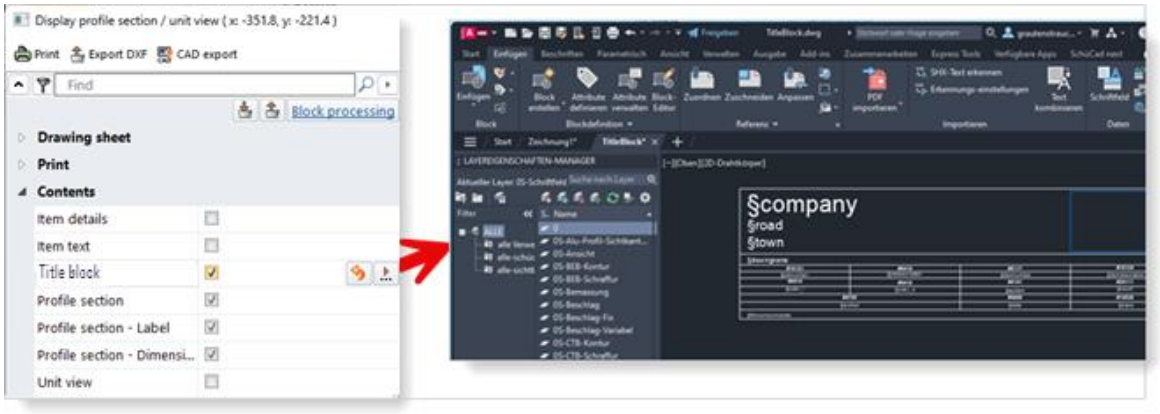
This change also affects panels that have already been entered. In the program, these entries were rounded, for example in the quick info or in the profile section.

2.8 CAD export

Show profile section / Element view:
Customise title block

From version 2024 R2, you can customise the appearance of the title block in the template file for the title block, according to your requirements.

In the *Profile section/Display element view* dialogue, you will find a new three-point button next to the *Title block* field in the *Content* group. Use this button to open the template file in your CAD application. You can make and save your customisations there.



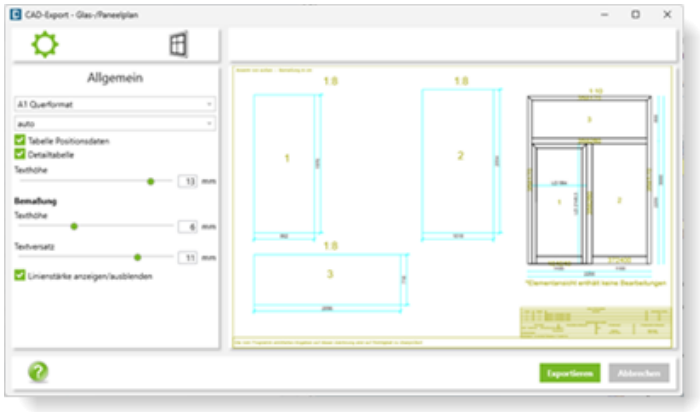
If you have made changes to the template, the *Reset* button also appears next to the *Title block* field in the *Display profile section/element view* dialogue. This allows you to reset the title block to the default setting.

Please note:

Your changes are applied across all users.

CAD export of glass and panel composition: New dialogue with drawing preview

From this version, the new *CAD export - glass and panel composition* dialogue opens for exporting glass and panel compositions. It allows you to see what the transferred drawing will look like even before you start the export.



The tabs in the dialogue allow you to specify what is to be exported and in which view the transfer is to take place. The result of your settings is displayed in the preview area at the same time.

There are also new options for the CAD export of glass and panel compositions:

- Choice of glass/panel dimensions in millimetres or centimetres.
- For door panels covering both sides of the leaf, the panel sections can be shown separately as an option.

2.9 CE marking

CE marking, declaration of performance, CE label printing:
Not applicable to doors in indoor applications

Doors falling under the *Indoor application* area of application must not be CE marked according to EN 14351-1.

Therefore, from this version onwards, no CE marking, declaration of performance or CE label will be issued for doors in interior applications until the appropriate standard is introduced.

CE marking, declaration of performance:
modifications

Text modifications (CE marking, declaration of performance)

In the program interface, some texts have been adapted to the legal requirements. For example, in addition to minor wording changes, only the technical class is now specified for the *Air permeability* service (the exact details of the maximum test pressure and the reference air permeability are omitted).

In addition, the intended use for standard windows, standard doors and sliding elements has been renamed. Instead of *Aluminium element for commercial and private buildings* it is now called *Construction product(s) for windows (including roof windows) and external doors according to section 1. Intended use(s) for connections in residential and non-residential construction*.

Changes to the issue list (CE marking)

The following adjustments to the legal requirements were made in the issue list.

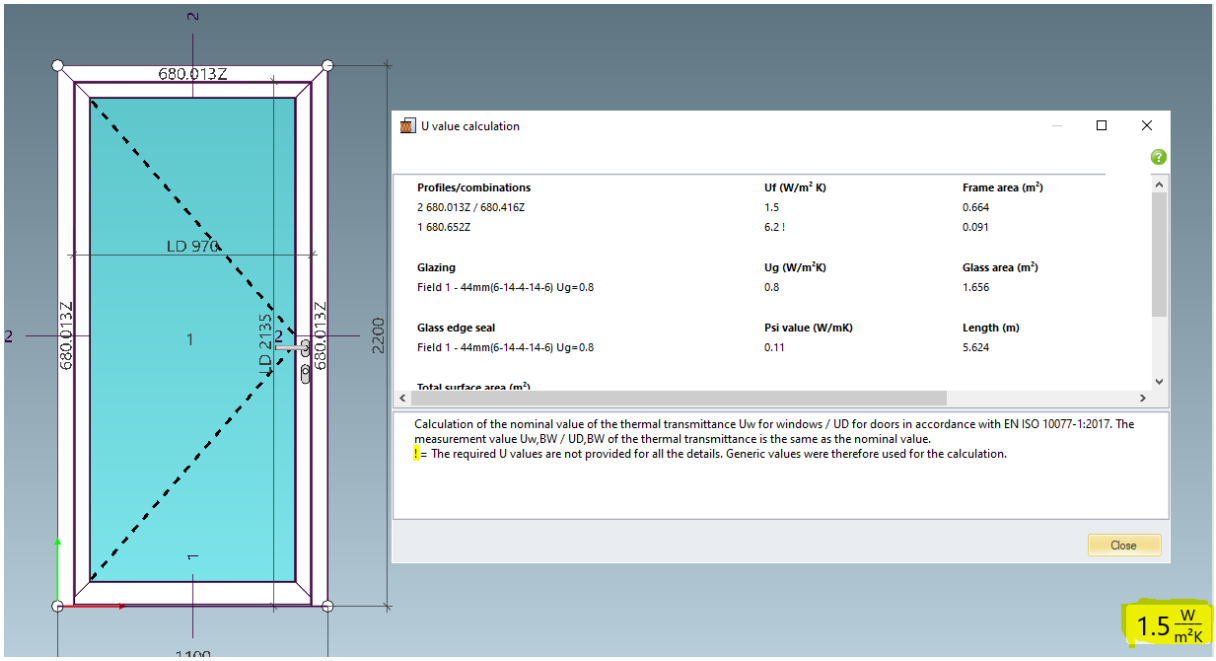
- The Notified Body (for constancy of performance assessment systems 1 and 3) and the unique identification code of the product type are issued.
- The project number, project name, item number, item name and field are omitted.

2.10 U-value determination

Output despite non-calculated sections:
As of version 2024 R1, the U-values are calculated again for each system, even if a section was not found in the calculation database. A profile combination with the worst system value is assumed.

Double-click on the U-value to display the section. An exclamation mark indicates that an information message will appear if a profile combination with the worst value is assumed.

By right-clicking on the profile cross-section, the correct U-value can be adjusted via the 'Change U-value' menu. When all missing sections have been processed with this, the new U-value total for the element is output.



2.11 Machine control

Processing mode:
Variables for second cutting angle in the formula editor

In the formula editor in editing mode, the *cutting_angle_start* and *cutting_angle_end* variables were already available in the previous versions. From this version onwards, you will also find variables for a second cutting angle (*cutting_angle_2_start* and *cutting_angle_2_end*).

2.12 Additional modules

Cancellation of SchüCal mobile

The *SchüCal mobile* add-on module is no longer available from this version onwards. The call-up for the *Mobile Settings* dialogue has been removed from the program interface.

3 Machine control

3.1 Processing mode / Group:

- Grouping processing operations via context menu entry
- From this version onwards, individual processing operations can be grouped together in a processing group in the case of multiple selections via the new ‘Group’ context menu item.

3.2 Processing mode / Zero point:

- Adding processing groups with the saved zero point
- In the previous versions, saved processing groups could already be placed on a profile via the ‘Add processing groups’ context menu item. A desired insertion point on the profile must first be defined in a submenu.
- As of this version, processing groups can optionally be added without redefining the zero point. The processing group is then added with its saved zero point. You will now find the appropriate entry in the submenu.
- Work with your own processing groups

3.3 Processing mode / Series processing

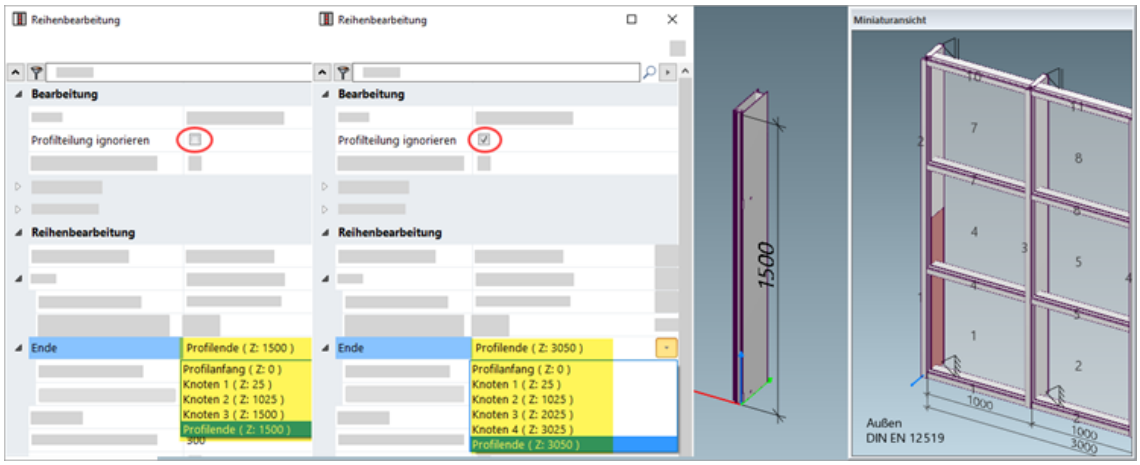
Limit series processing to the profile divisions in the case of sub-profiles

For frame profiles (also frame profiles of insert elements), divisions can be carried out in the element view via the *Add profile division* context menu item. If you divide a profile via this function, a new node (profile division node) is created.

As of this version, you will find the new *Ignore profile division* property for new series processing operations.

a. If you activate the check box, series processing is generated on all sections of the profile. For processing groups type 3 and type 4, all nodes can be selected as *End*, but not the profile division nodes. The end of the overall profile can be selected as *Profile end*.

b. If you do not activate the check box, the profile division node is taken into account and series processing is only generated on the selected part of the profile. For processing groups type 3 and type 4, the profile dividing node can be selected as *Profile end*.



Please note:

Series processing operations recorded with the previous versions remain unchanged. The *Ignore profile division* check box is not available for selection for these series processing operations.

Series processing - new type 5: Node by node

From this version onwards, you can select the new *type 5: node by node* for series processing. The start and end coordinates can be created as per type 3 (without differential dimensions and formulae). As settings, you can specify *Distance to node*, *Maximum distance* and *Maximum number of nodes*.

3.4 Processing mode / Formulae

Formulae referring to the cutting angle of the profile

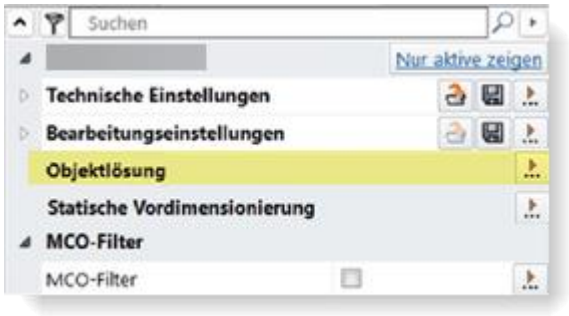
In the formula editor of the processing mode, the new variable cutting angle is offered from this version on. When specifying the coordinates for the insertion point of processing operations, you can combine this variable with the trigonometric **variables sin, cos, tan** and thus enter formulae including the respective cutting angle**.**

3.5 Working with project solutions

For special project solutions, the project office will assist you with project-specific profile processing. This requires a special configuration in the program.

Working with such a project solution is made easier from this version. If you receive a special ZIP file, this can be imported into the program. For the profile system concerned, you can then select which processing is to be applied to the profiles in the respective items.

In the Settings tab (Engineering / Processing) of the item window, you will find the Project Solution group below the Processing Settings group. In the associated selection dialogue, you determine which processing is to be specified for the profiles (system default or the processing specifically provided via the ZIP file).



Please note:

This group is only visible if a corresponding ZIP file is available for the selected system.

4 Static pre-dimensioning

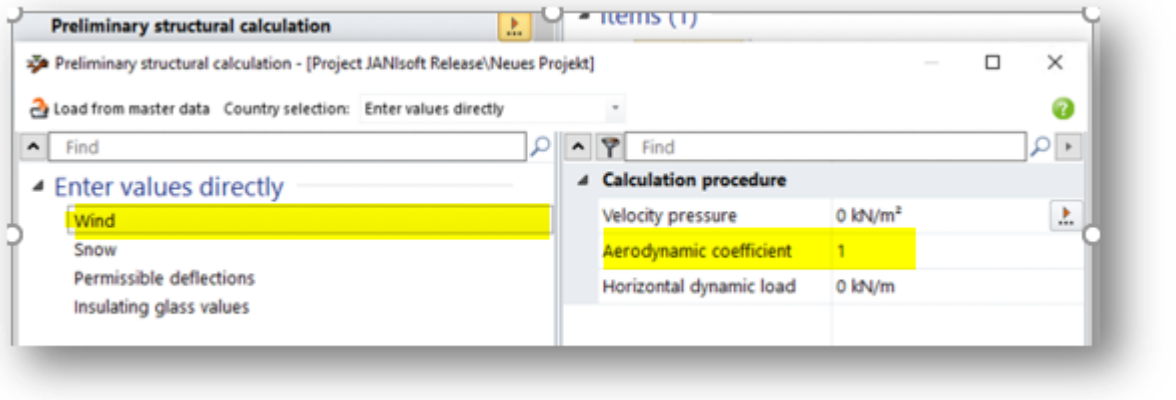
4.1 ‘Wind’ determination process

Changed default values for aerodynamic coefficient.

The standard specification for the aerodynamic coefficient has been changed from **0** to **1**.

The new default value is automatically changed in the master data if you have not already changed the previous default value. In the project and item-specific settings for projects and items already created, the value remains unchanged.

Please check your defaults in the master data and in the project- and item-specific defaults.

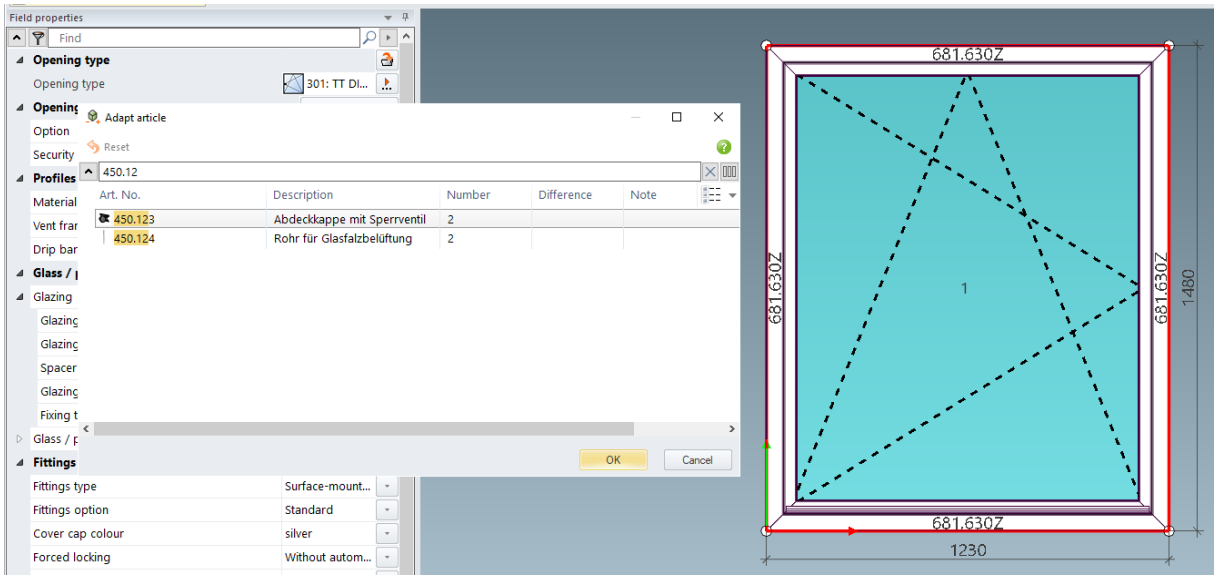


5 Steel systems construction type

5.1 Windows/doors and sliding elements

5.1.1 Janisol HI glazing rebate ventilation determination

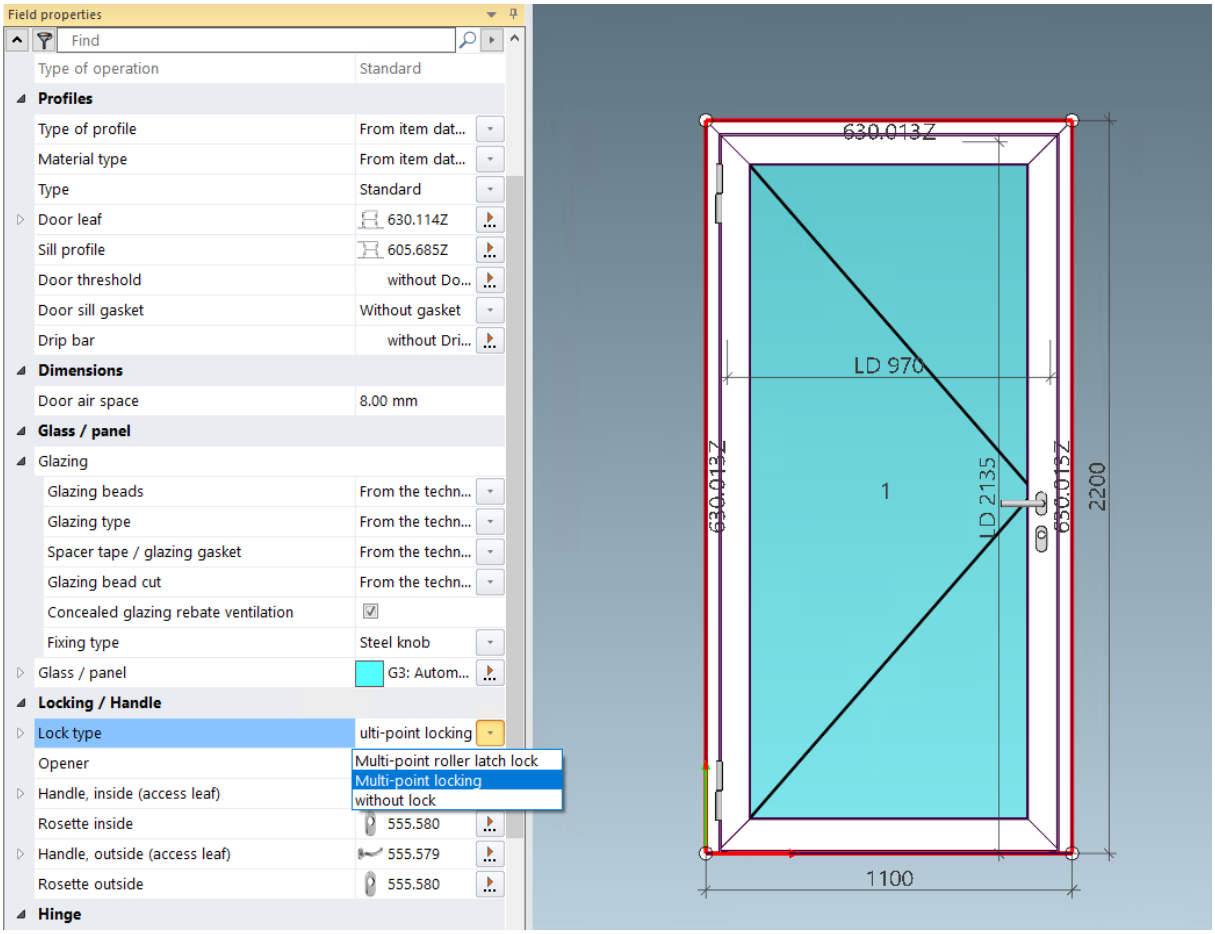
From version 2024 R1, new glazing rebate ventilation in the Janisol HI system is specified in accordance with the documentation.



5.1.2 Janisol RC2 Doors expansion

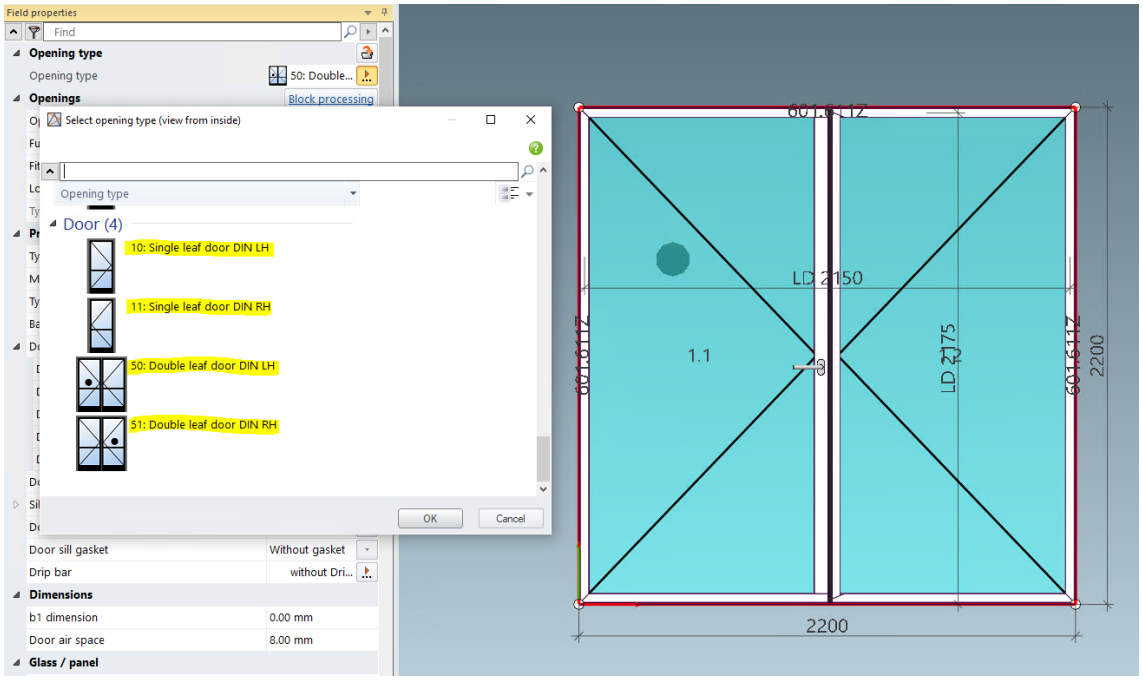
Extension of RC2 fittings for Janisol doors. Lock extensions with locks without multipoint locking

- Bolt lock
- Bolt lock with additional top lock
- Roller latch lock



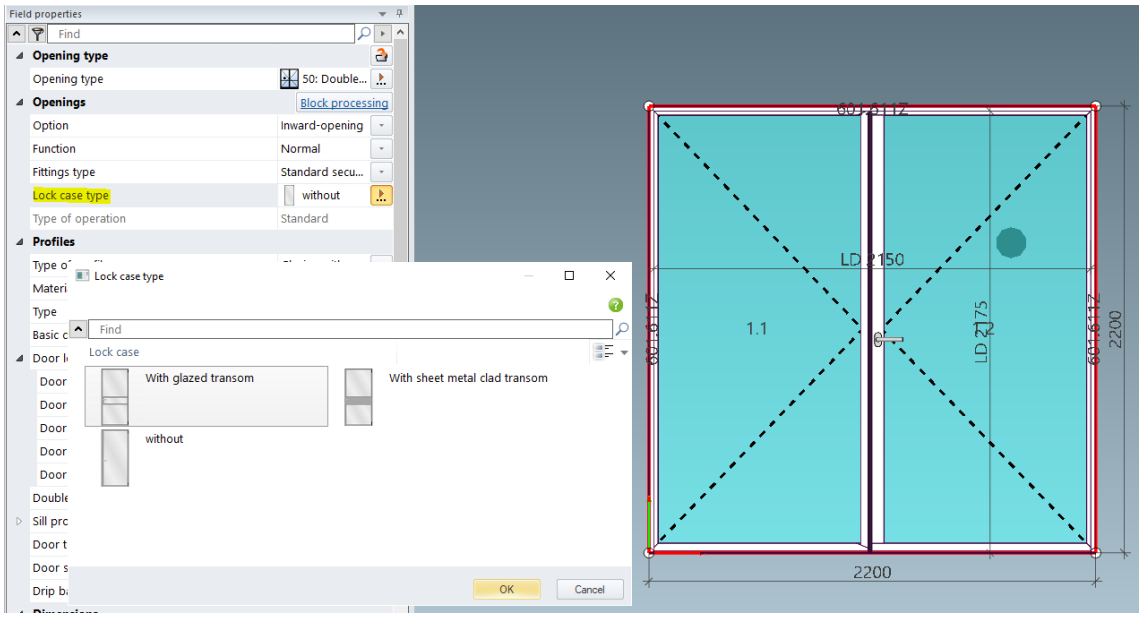
5.1.3 Janisol Arte 2.0 doors - basics

- Calculation of the Arte 2.0 door with opening types 10, 11, 50, 51
- Extension of ‘sheet metal clad bolt’ lock case type



Lock case variants

- ‘Glazed with bolt’ lock case type
- Extension of ‘sheet metal clad bolt’ lock case type

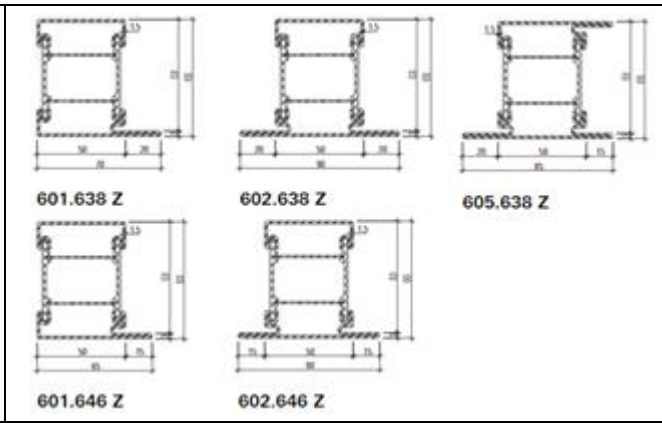


5.1.4 Janisol Arte - installation depth 66 mm

New profiles

(Since 2024 R1 SP01)

The following new profiles can be selected:

601.638Z 601.646Z 602.638Z 602.646Z 605.638Z	

5.1.5 Janisol Arte

"Construction" property removed

Since version 2021 (‘500’ opening types since 2022 R2), only the *with push-in seal* construction type can be selected for new items. The selection lists in the item data and in the *Field properties* tab only showed this alternative. Alternative selections *(with additional aluminium profile*, *self-adhesive stop seal*) - but no longer valid - selection options were only still possible for items that were created before version 2021 ('500’ opening types before version 2022 R2) .

As of this version, the *Construction* property is no longer displayed. The determination does not change for existing items that had the *with plug-in seal* entry in the previous version.

> **Please note:**
>
> For existing items that were created before version 2021 (‘500’ opening types before version 2022 R2) and still had a different selection, there may be deviations in the determination.

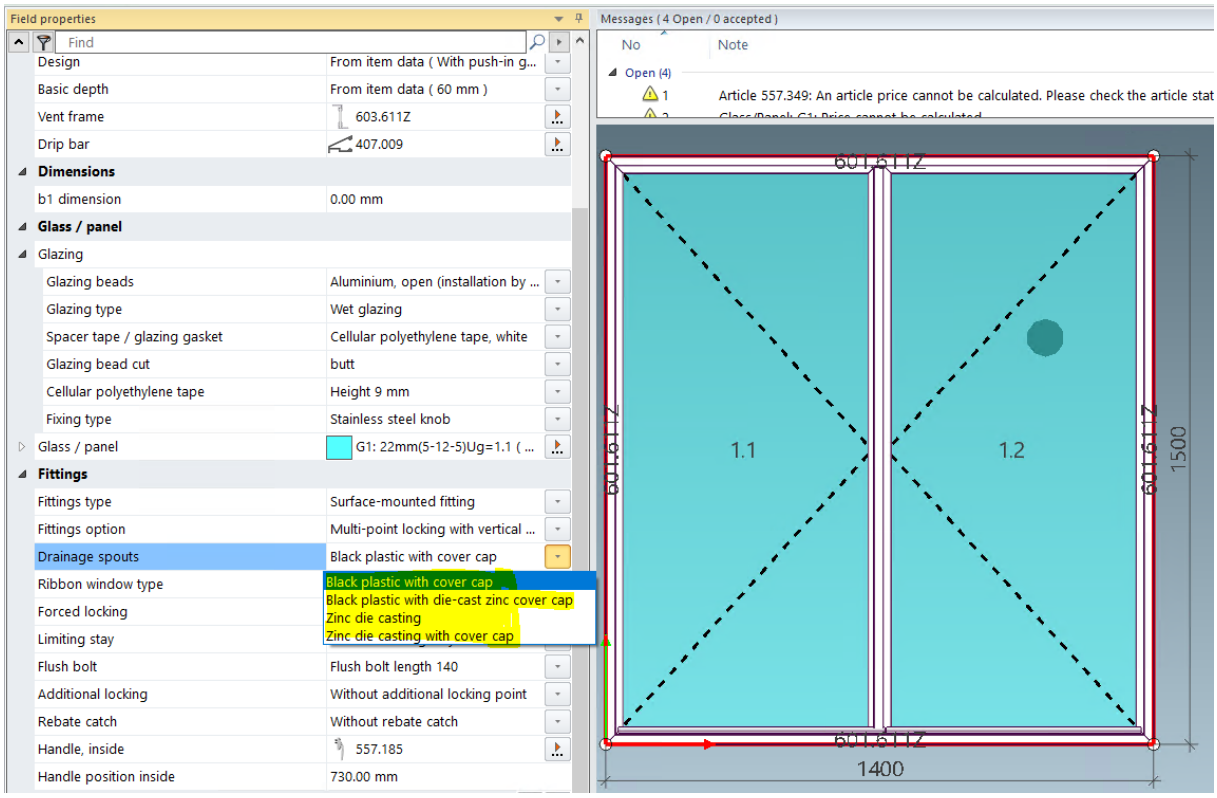
For the old construction type *with additional aluminium profile*, there was previously the *Aluminium strip for plug-in seal* property in the technical settings, under the *Colour* group. This has been also been removed in this version.

5.1.6 Screw 557.164 replaced by screw 557.349

As of this version, screw 557.349 has been replaced by 557.164. This concerns the window fitting determination of the additional locking 557.172 and gear extension 557.188 for the Janisol Arte 2.0 system.

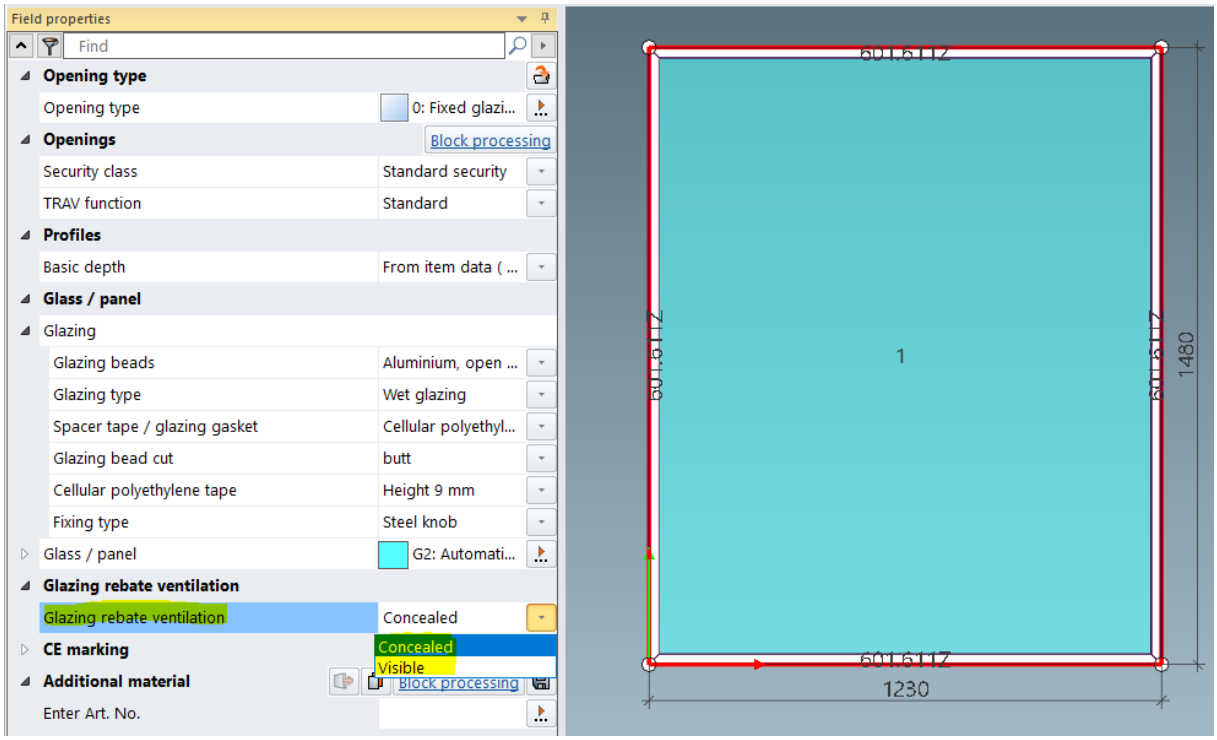
5.1.7 New switch control for drainage spouts

As of version 2023 R3, the drainage setting can also be made in the Panel properties. This applies to the Janisol Arte 2.0 & Arte 66 systems.



5.1.8 New control system for glazing rebate ventilation

From version 2024 R1, it is possible to select ‘visible’ / ‘concealed’ glazing rebate ventilation in the Janisol Arte 2.0 system by means of the dialogue box. Depending on the selection, different drainage articles are specified.



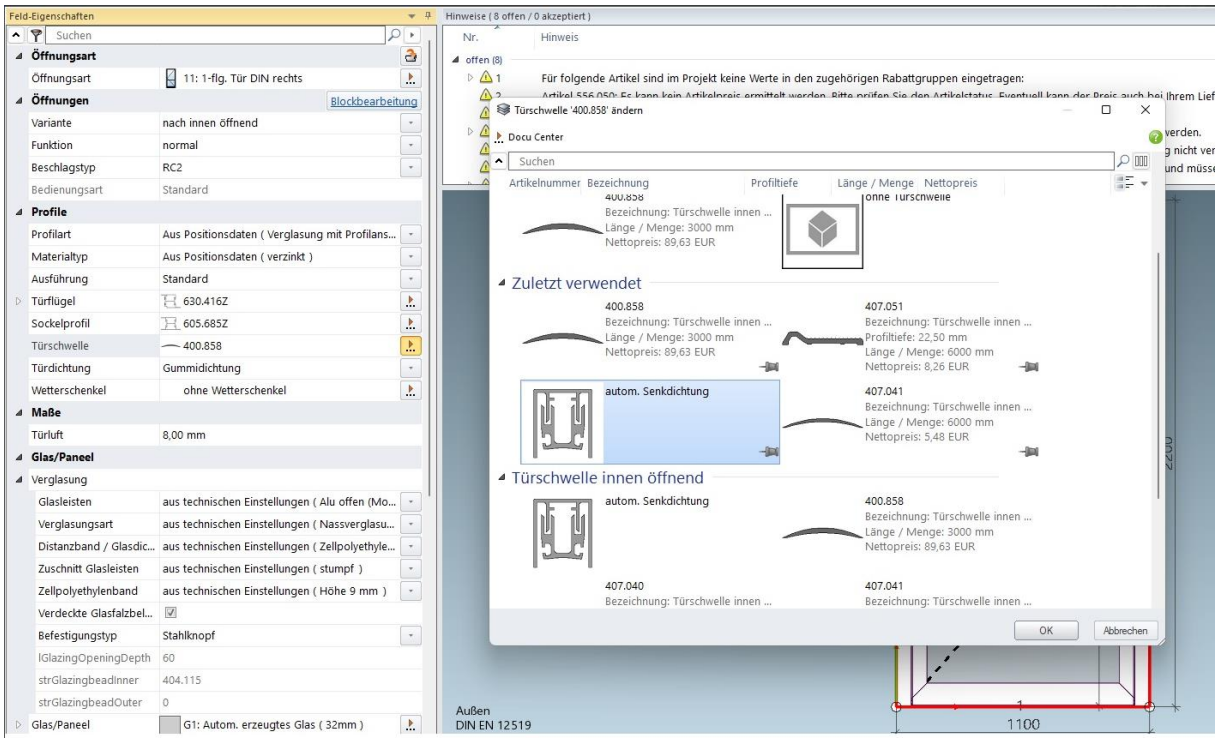
5.1.9 Revision of steel doors gasket selection

Automatic floor seal - selection moved

Floor seal moved to new door seal dialogue control

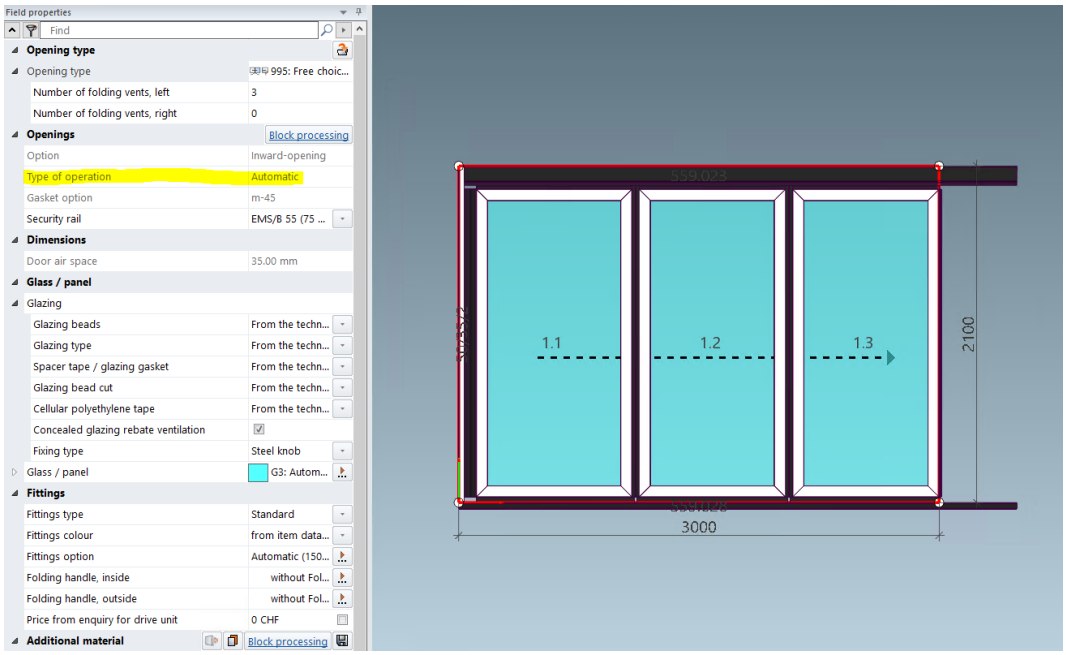
With this procedure, the automatic floor seal is released from the threshold selection and moved to the new door seal selection.

This should help to use the floor seal in combination with door thresholds (half-round thresholds).



5.1.10 Jansen automatic folding/sliding door

The calculation of automatic folding/sliding doors is included.

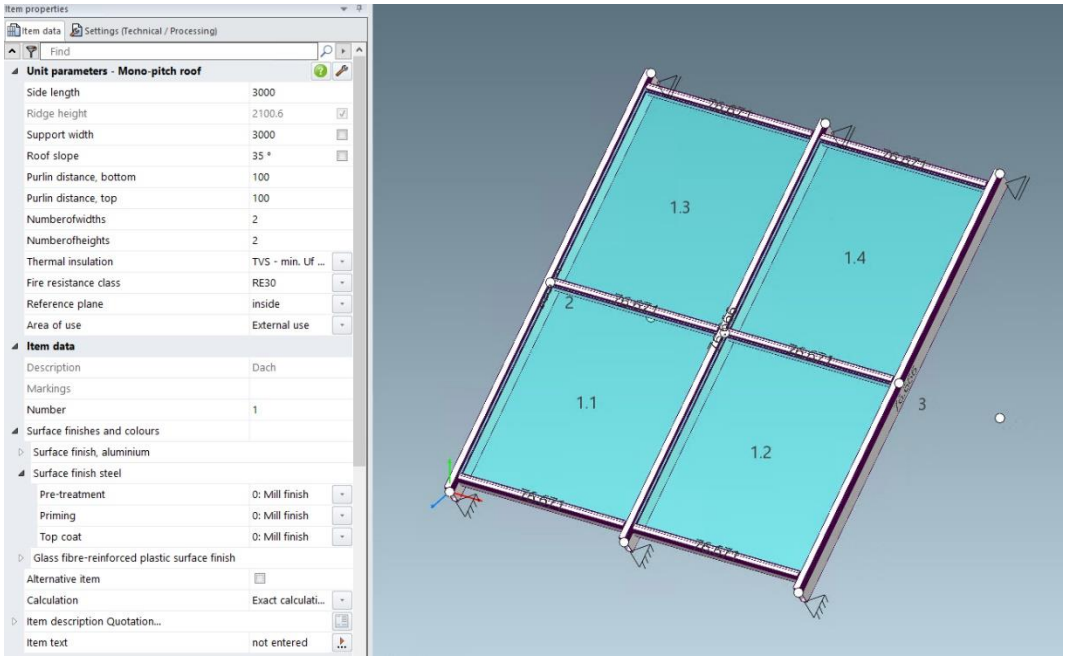


5.2 Façades (steel systems)

5.2.1 VISS Fire Roof extension

With the extension of the VISS Fire roof system, more elements can now be included in the rafter area.

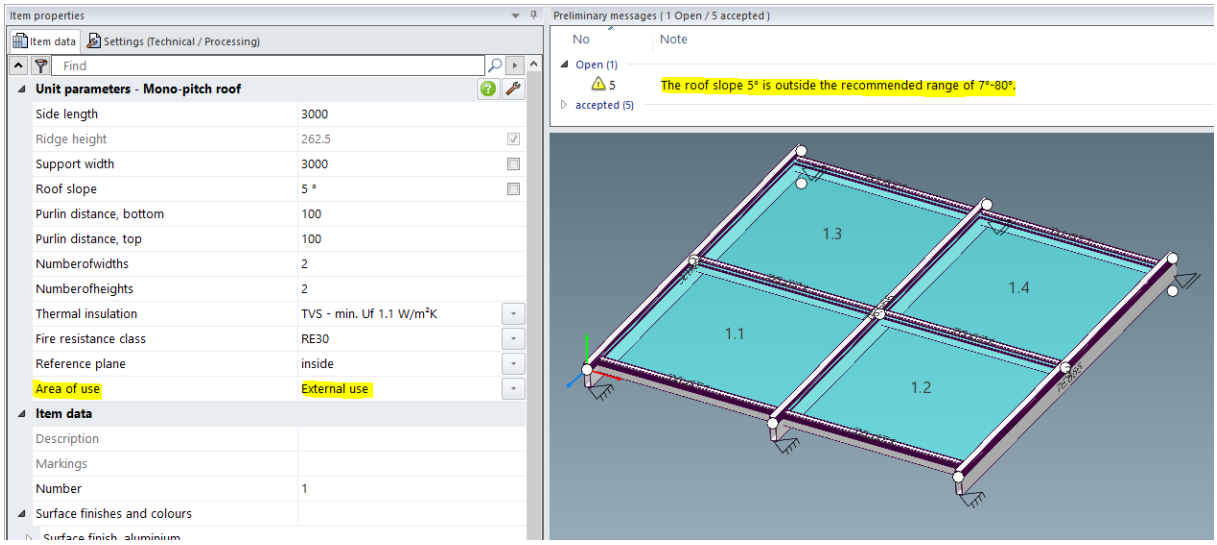
The validation and determination of the rafter elements must be implemented depending on the fire protection class and shape of the roof



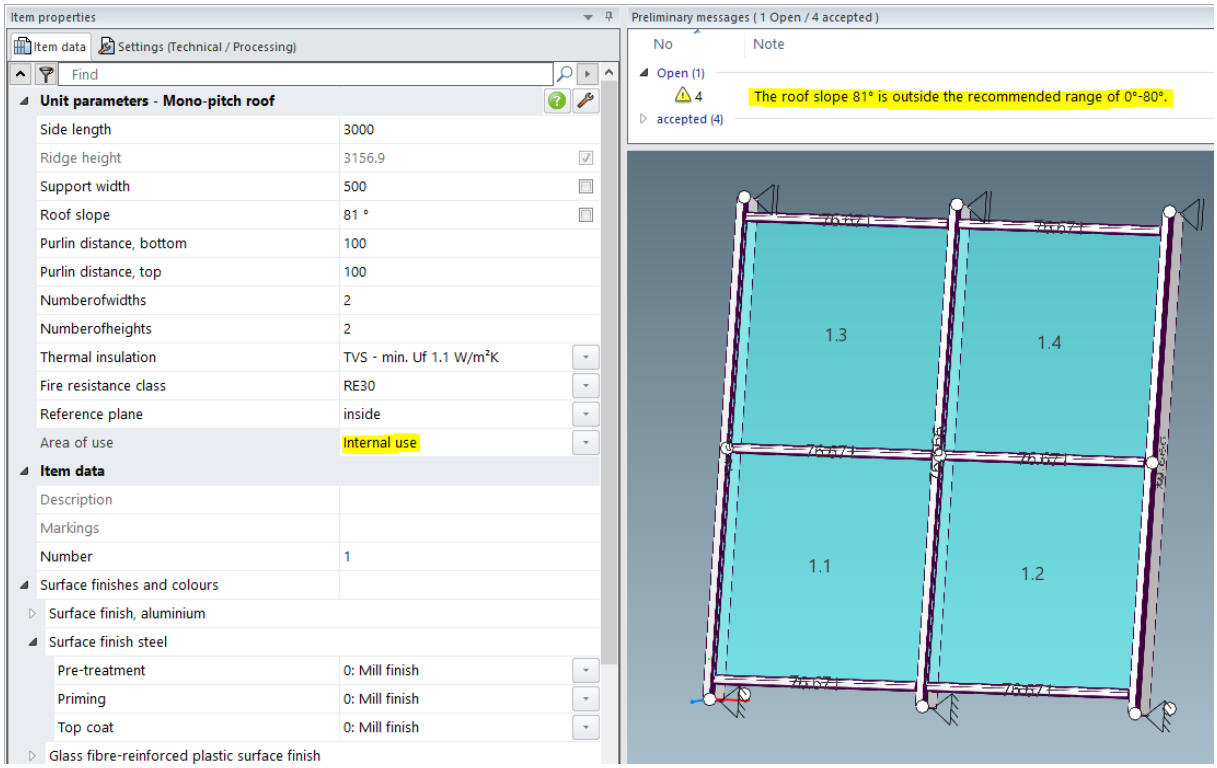
5.2.2 VISS Fire Roof - roof pitch

From version 2024 R1, the adapted information messages on the roof pitch appear. The roof pitch can be built lower due to the newly passed tests, which is why the information has changed.

Roof pitch – external application



Roof pitch – interior application



5.2.3 VISS Fire

New - Fire resistance class EI60

The *grid façade* and *grid façade polygon* templates can be used to create elements in fire resistance class EI60 in the VISS Fire façade system.

To do this, select the following element parameters in the *Item data* tab:

Face width: 50 mm or 60 mm

Thermal insulation: TVS

Interior design: Standard or Linea

Fire resistance class: EI60

Glass/panel can be used from 36 mm to 70 mm total thickness.

5.2.4 VISS 50/60 systems:

Roof glazing - only roof windows as an insert element

In the previous versions, the use of windows and doors as insert elements was generally possible in sloping/inclined elements. This was realised in deviation from the system specifications. From this version onwards, only openings from the Schüco AW RO 50 and Schüco AWS 57 RO aluminium systems can be used in elements with a roof pitch (only available for expansion stages with aluminium and steel materials).

Please note:

The change does not affect existing items. Insert elements that have already been recorded remain inserted - contrary to the system specification.

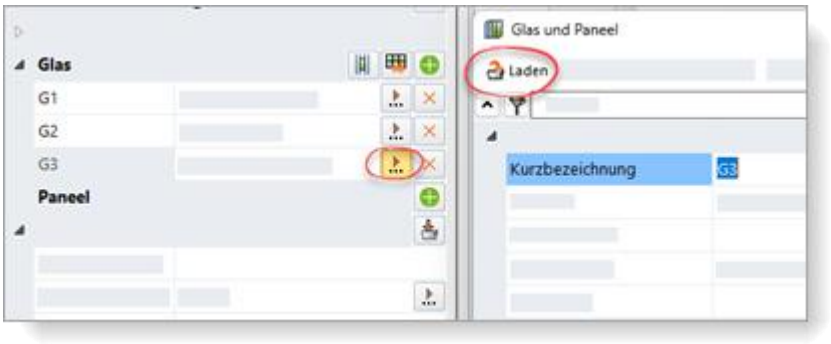
6 Aluminium construction type

6.1 General

6.1.1 Projects and items

Project glass panes and project panels:
changes when loading glass panes and panels

All glass panes and panels that are specifically used in a project are clearly labelled with an abbreviation. This abbreviation is always pre-assigned by the program whenever a glass pane or panel is used in a project. The abbreviation can be changed if necessary.



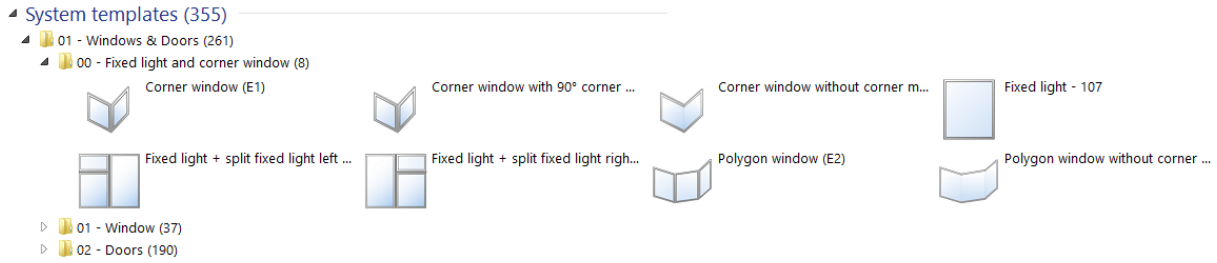
You can use the *Load* feature to change the data of the currently edited project glass pane. You can load the data of a glass pane from the master data or the data of a project glass pane already in use. Please note the following changes to this feature:

- In previous versions, when *loading* a project glass pane that was already in use, the abbreviation of the loaded glass pane was also used. This allowed you to replace one project glass pane with another project glass pane.
- As of this version, the abbreviation is no longer loaded when a project glass pane is loaded. The data is only loaded into the existing project glass pane. It is therefore no longer possible to replace project glass panes in this way.
- To replace an existing project glass pane with another existing project glass pane, use the new *Replace project glass pane with* action button from this version onwards. With this new method, you can only select from existing project glass panes. A selected project glass pane is transferred with all data including the abbreviation. It is not possible to edit this data in the *Glass pane and panel* dialogue.

The changes also apply to loading project panels in the same way as the project glass panes described above.

Select template dialogue:
selection of system templates for fixed glazing

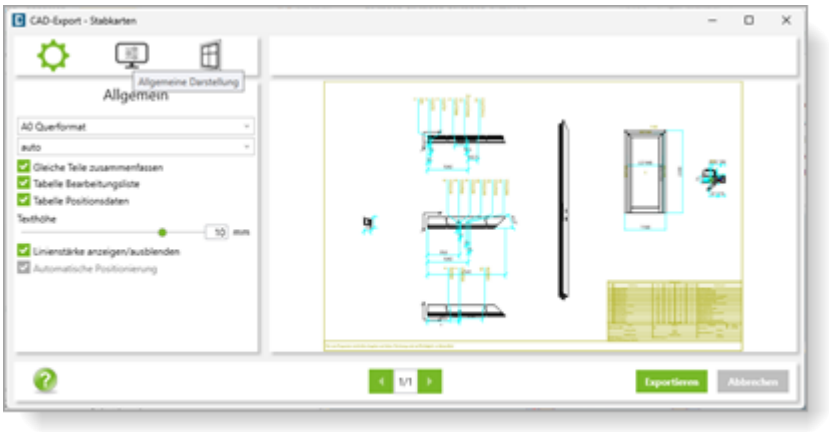
In the *Select template* dialogue, all system templates for elements with fixed glazing are now offered in a separate *Fixed panel and corner window* folder at the top of the folder tree. These templates were previously distributed in the window and door template folders.



6.1.2 CAD export profile preparation diagram

New dialogue with drawing preview

From this version, the new *CAD export - profile preparation diagrams* dialogue opens for exporting profile preparation diagrams. It allows you to see what the transferred drawing will look like even before you start the export.



The tabs in the dialogue allow you to specify what is to be exported and in which view the transfer is to take place. The result of your settings is displayed in the preview area at the same time.

You can drag and drop individual drawing elements to move them around as required.

If you have selected more than one profile for export, simply switch back and forth between the drawings.

6.2 New systems

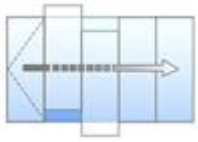
6.2.1 Sliding elements (aluminium)

System	Note
Schüco AS FD 90.HI	Not available in all countries.
FD = folding door	

For Schüco AS FD 90

Elements of this new folding-sliding system can be entered in the program as a free leaf combination.

In the *Select template* dialogue, select the *Free leaf combination AS FD* template (*04 - Sliding elements -> 02 - Folding sliding elements (insulated)*) as the system template.



Free leaf combination AS FD

6.2.2 Doors / Windows (aluminium)

System	Note
Schüco AD UP 90.SI passive house	SI = Super Insulation
Schüco AWS 58.NI	Not available in all countries. From 2024 R1 as an insert element in Schüco FWS 50.NI/50 SG.NI.

For Schüco AD UP 90.SI passive house - available with an activation code.

New system for recording a passive house-compatible single-leaf door opening inwards. Only with leaf-covering door panel.

Regarding Schüco AWS 58.NI

This system is available with an activation code.

Elements can be entered with the following opening types:

	
221 Bottom-hung window	270 Parallel hinged windows

Entering as an independent item:

To do this, select the appropriate system template in the Select template dialogue box (01 Windows & doors -> 01 Windows -> 06 Insert element). You can make the necessary entries for the façade system in which the insert element is to be used in the Item Data tab in the Element Parameters group. This pre-assigns the appropriate insert frames.

In this release, the wind load selection has been moved from the technical settings to the Field Properties tab.

System	Note
Schüco AWS/ADS 75	Not available in all countries.

6.2.3 Façades (aluminium)

System	Note
FWS 50 SG.NI	Not available in all countries.
SG = Structural Glazing NI = Non Insulation	

available with an activation code.

6.3 Systems no longer available

6.3.1 Sliding elements (aluminium)

In the program, the following systems are no longer offered for new items in the countries listed.

System
Schüco ASS 70 FD
Schüco ASS 80 PD.HI

- Belgium
- Germany
- Greece
- Italy
- Luxembourg
- Netherlands
- Poland
- Portugal
- Switzerland
- Slovakia
- Spain

6.3.2 Façades (aluminium)

The following systems have been removed from the Schüco range and are no longer offered in the program for new items.

System	Note
Schüco AOC 50	Replaced by Schüco AOC *
Schüco AOC 60	Replaced by Schüco AOC *
Schüco AOC 75	Replaced by Schüco AOC *
Schüco AOC 50 SG	
Schüco AOC 60 SG	
Schüco SFC 85	(Discontinuation not in all countries)
Schüco SFC 85.HI	(Discontinuation not in all countries)

* As a successor in the program, select the Schüco AOC system with the unit parameters for the corresponding building depth.

6.4 Cross-system (aluminium)

6.4.1 Schüco Perfect

Schüco AWS 75.SI+ and Schüco ASE 60/80.HI

(Only with special activation)

For inward-opening units, from this version onwards it is possible to configure a Schüco AWS 75.SI+ window or a Schüco ASE 60/80.HI sliding unit in combination with a Schüco Perfect module in front. The Schüco Perfect module can also be ordered from within the program. Pricing will be available in an upcoming service pack.

An activation code is required to use the functions. You will receive this as part of a training course. If you are interested, please contact your area manager.

Surfaces and colours for Schüco Perfect

Standard colours have been added to the range for configuring and ordering Schüco Perfect modules, which are assigned to special surfaces for Schüco Perfect.

The colour codes for Schüco Perfect can be identified by a prefixed ‘P-’. The surfaces have the identifiers 50 to 55.

New ‘Schüco Perfect’ discount group

For the system supplier Schüco, the new discount group 241 *Schüco Perfect* has been added to the *solar shading* group.

6.4.2 Schüco Carbon Control

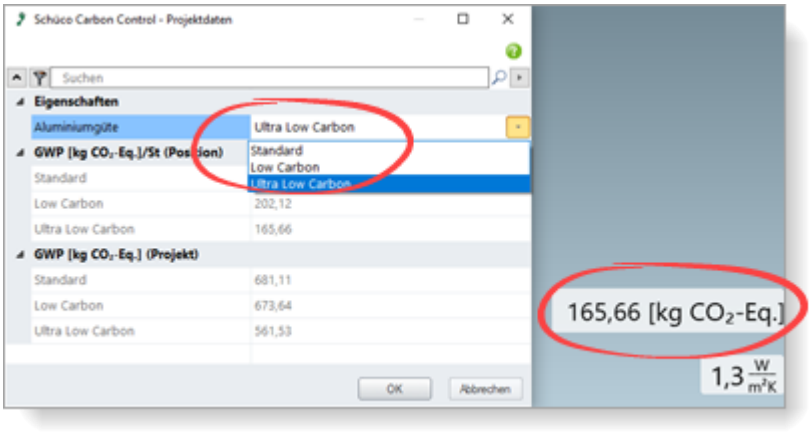
Aluminium grade of aluminium profiles:
Selecting and ordering an alternative aluminium grade for the profiles

(Since 2023 R1 SP02, not available in all countries. Available with an activation code)

In the future, the evaluation of buildings will revolve around the so-called GWP value, the ‘global warming potential’ of the building over its entire service life.

With the extensions made, you will have transparency in the program about the CO_2 values of the products you use, the surfaces and the glass. In addition, you can influence the aluminium quality of the profiles for the order.

- For your projects, you can choose between *Standard*, *Low Carbon* or *Ultra Low Carbon* aluminium grades in the *Project properties*. The calculated values for the item are displayed as CO_2 equivalent per kilogram in the element view and are updated at runtime.
- For the system supplier Schüco, the two properties *Schüco Low Carbon Aluminium* and *Schüco Ultra Low Carbon Aluminium* can be found under the new group *Sustainability surcharges*.
- To order the special *Low Carbon* and *Ultra Low Carbon* aluminium grades, you must enter the object number applicable to the project in the *Aluminium object number* input box in the *Project property list*.

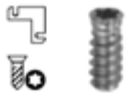


Further information can be found in the programme help under the topic → About Schüco Carbon Control

6.4.3 Cross-system range streamlining

Conversion of connecting screws

For screwed corner connections, the new article numbers for the screws are specified from this version onwards:

Screw	Article old	Article new
	225303	225351
	225304	225352
	225305	225353
	225306	225354
	225307	225355
	225308	225356
	225309	225357
	225310	225358
	225311	225359

6.4.4 Schüco VentoFrame Twist window vent: pre-treatment for maritime climate

From this version onwards in the VentoTherm Twist window vent dialogue, you can no longer specify whether the outer aluminium profiles should be given a special pre-treatment to protect against a maritime climate. The maritime climate pre-treatment property has been removed.

If required, please add this requirement as a free comment when ordering instead.

6.4.5 List output

Schüco AvanTec SimplySmart and Schüco surface-mounted SimplySmart window fitting:

Bottom-hung windows (handle on the side) - New fitting types HD

The window fittings have been extended to accommodate large and heavy bottom-hung windows. The following fitting types can now be selected for bottom-hung windows with a side handle (opening types 200 and 201):

- BASIC - AvanTec SimplySmart HD
- RC1N - AvanTec SimplySmart HD
- RC2 - AvanTec SimplySmart HD
- BASIC - Surface-mounted SimplySmart HD
- RC1N - Surface-mounted SimplySmart HD
- RC2 - Surface-mounted SimplySmart HD

Schüco DriveTec - information on the positioning of the chain and locking drives and the control units

DriveTec (ventilation) operating mode for items with opening types 100 and 101 (turn) and 204 (bottom-hung window (drive on top)):

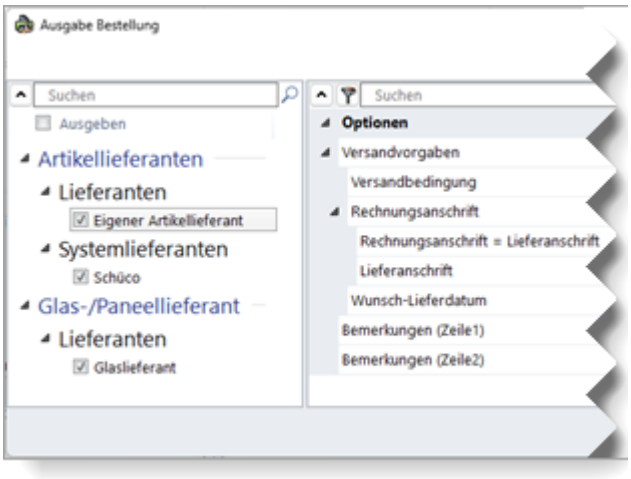
As of this version, dimensions for positioning the chain and locking drives and the control units are indicated in the following lists. The dimensions refer to the variables in the K-drawings and in the work preparation sheets.

- Parts list (in the opening description)
- Element overview (in the item description)
- Window leaf and fittings list (as an additional line)

Ordering from your own suppliers

In previous versions, it was only possible to place orders for self-entered contacts (article suppliers, glass pane and panel suppliers) with special activation. This feature is now always available.

If you have entered articles in the relevant items that are assigned to a separate contact, an additional dialogue opens before the order is placed. Use this dialogue to select which lists of orders are to be placed. As a result, you receive the articles in separate order lists, separated by supplier.



You can set general specifications for these orders in the master data in the *Contacts* dialogue for each supplier. Here you can also design the document template for the order list. (In the directory *..\ProgramData\...\...\System\Data\Templates* you will find three List&Label templates for your own glass suppliers *(GlasTemplate.lst*,

GlasTypeTemplate.lst, *GlasTypeRegisterTemplate.lst*) and one for your own article suppliers *(ArticleTemplate.lst*).

Please keep the following in mind when ordering via Schüco Connect:
When ordering system articles via the menu ribbon > *Place* > *Connect*, the order is not generated for your own suppliers: To order from your own suppliers, you must start the order separately via the menu ribbon > *Place* > *Order*.

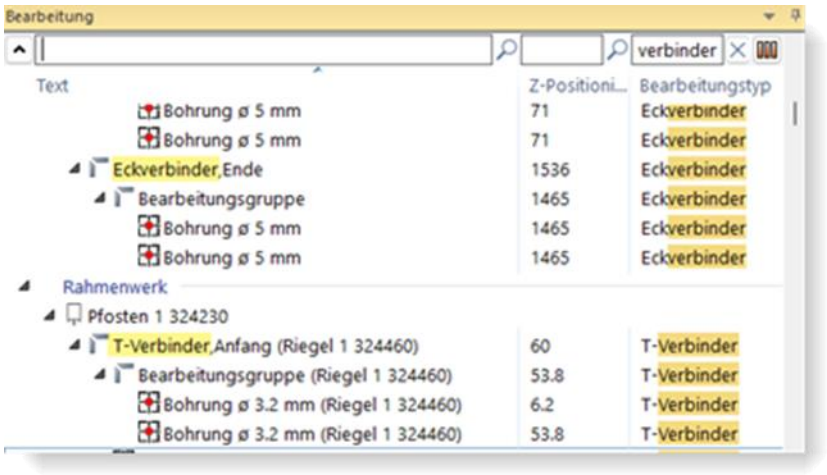
6.4.6 Machine control Schüco systems

MCO filter:
Connector processing

As part of the continuous quality improvement programme, connector processing has been reorganised for the aforementioned systems.

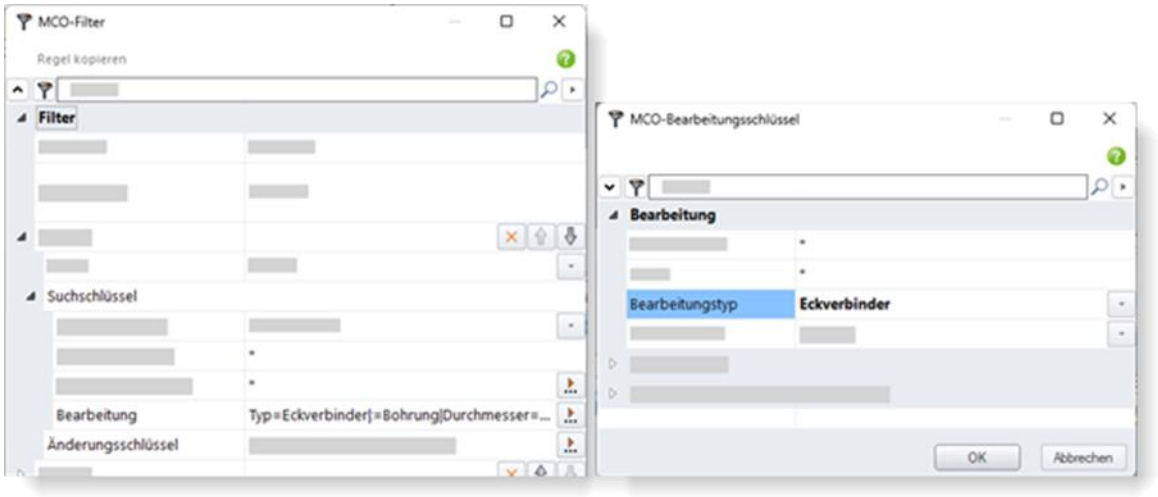
- Schüco FWS 60 CV
- Schüco AWS 114
- Schüco AWS 114.SI

In processing mode, the processing for these systems is now differentiated according to corner connectors and T-connectors. The processing types in the processing tree are named accordingly. For all other systems, all connector processing operations are listed as the connector processing type.



If you have created MCO filters that manipulate processing operations with the *connector* processing type, these MCO filters no longer affect the connector processing in these systems. For this reason, two new processing types, *T-connector* and *corner connector*, have been added to the list of selectable processing types in the *MCO processing key* dialogue box for the search and edit keys.

To ensure that your filters are also effective for connector processing in the systems mentioned, you must add these new processing types to the search keys in your filters.



Collision control for cable transition, emergency exit door locking device and access control: note for non-generated processing operations

If a cable transition, an emergency exit door locking device or an access control is recorded for a door, the positioning of the automatically generated processing operations is checked to see whether there is a collision with other components. If necessary, the positioning is adjusted slightly. If there is not enough space available, no processing operation is generated. As of this version, you will receive a corresponding message.

Processing mode:
read-only view as of the basic package expansion level

Switching to processing mode is always possible from this version onwards, even if the expansion stage of the program does not include control of CNC profile processing machines. The view is read-only. Changes to the processing operations automatically generated by the program are not possible. The corresponding licence extension is required for this.

→Processing mode (MCO)

Processing mode:
Basic element countersinking - new settings

From this version onwards for the *countersink* base unit, in addition to entering values for the *Angle* and *Depth* settings, it is optionally possible to enter the values for the *Angle* and *Diameter* settings.

- When the angle and depth are entered, the diameter is calculated.
- When the angle and diameter are entered, the depth is calculated.

Schüco AD UP 75, Schüco AD UP 90 and Schüco AWS 75.SI+/AD UP 75/ADS 75.SI: Automatically generated processing operations (MCO): Ventilation and drainage

As part of the continuous quality improvement process, the processing for ventilation and drainage has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Please note:

As part of this revision, you will only find settings for the *Spacing* and *Minimum panel size* for processing in the processing settings for these systems (Schüco AD UP 75, Schüco AD UP 90: for blind frames, Schüco AWS 75.SI+/AD UP 75/ADS 75.SI: for blind frames, transoms and door leaves). All other previous items in the *Drainage/ventilation* group have been removed.

The changes also affect existing items.

Schüco AD UP 75 BL:
Automatically generated processing operations (MCO): Notching

As part of the continuous quality improvement process, the processing for notching has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Please note:

The changes also affect existing items.

Schüco AD UP 90:
New technical setting for 'window leaf' drainage/ventilation

The *Window leaf* setting has been added to the technical settings (*Drainage/ventilation* group). This allows you to deselect drainage and ventilation processing in side sections if required.

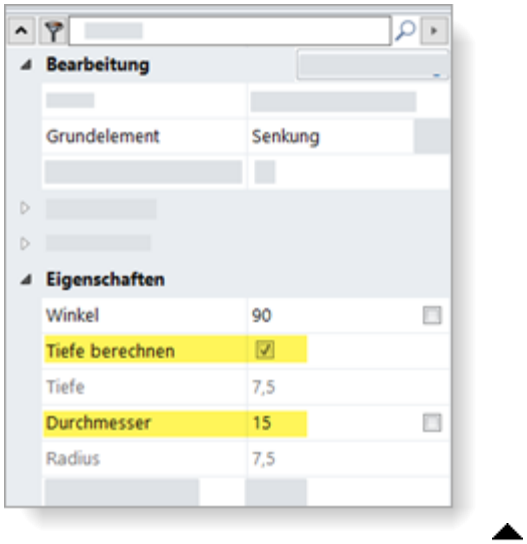
Schüco AD UP systems:
Technical setting for 'bolt' and 'door bolt' drainage/ventilation removed

In the technical settings, in the *Drainage/ventilation* group, the selection lists for *Bolt* and *Door bolt* have been removed.

These processing options did not correspond to the system specifications. In accordance with the technical specifications, drainage and ventilation are provided via the T-connection to the adjacent profiles. Additional processing is not required.

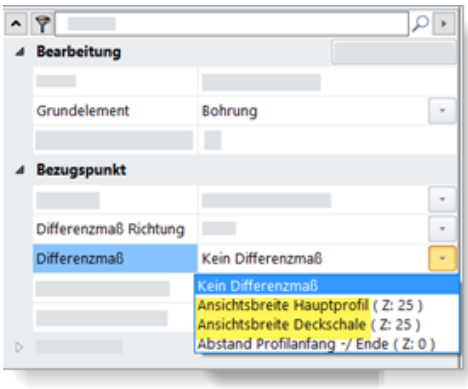
Please note:

This change affects existing items if you had previously selected a different setting.



Processing mode:
renaming differential dimensions for processing operations (façades)

In the previous versions, it was already possible to specify differential dimensions in order to define the reference for the entry point of processing operations. In the case of differential dimensions for façades, *Rebate dimension* and *Chamber dimension* were offered as differential dimensions. These have now been appropriately renamed *Face width of main profile* and *Face width of cover cap*.



Transfer to adjoining profile - improved handling

Processing operations can be transferred to adjoining profiles. To do this, you can select the *Transfer to adjoining profile* check box for processing operations.

In previous versions, you had to set the value for the depth offset so that the insertion point was on the adjoining profile. The coordinates, the side and the corner of the original profile were always taken into account.

From this version, you can also alternatively specify that the selection for the sides and corners of the processing operation is taken from the target profile and the position for the X and Y coordinates is calculated depending on the node of the target profile.

To do this, you will find another selection list *Target profile* when selecting *Transfer to adjoining profile*. Here you can choose between *Automatic* and the adjoining profiles. If *Automatic* is selected, the behaviour of the feature is the same as in the previous versions.

6.4.7 Calculation

Property discounts:
modification (material) and extension (glass, coating)

(Not available in all countries.)

Since version 2023 R3, it has been possible to enter a *Property discount* for material in the *Contacts* dialogue for the system supplier *Schüco*, under *Other* . This property discount was previously taken from the project-specific system conditions for the system supplier for your projects.

From this version, 2024 R2, you can enter this property discount directly in the *Project properties list* . The *Property discount* input field in the system conditions for the system supplier is no longer offered. From this version onwards, you can also enter property discounts for system glass and for coating.

Under the *Calculation* group, you will find three input fields for *system supplier property discounts*.

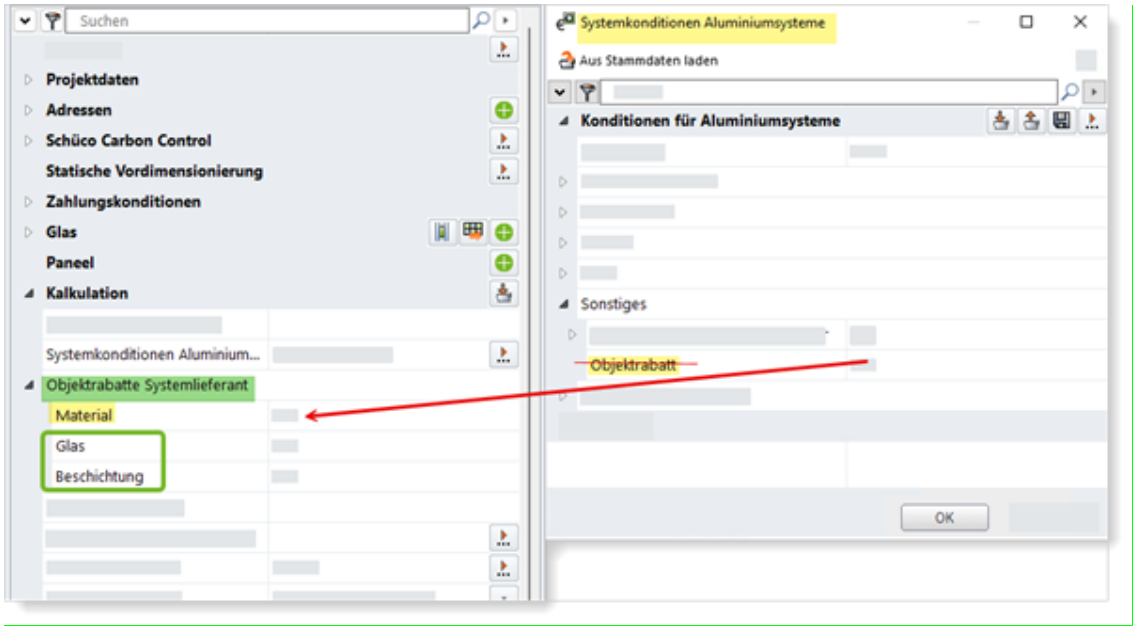
Material

Glass

Coating

Please note for existing projects:

If you have entered a *property discount* in the project-specific system conditions for the system supplier, this is automatically transferred to the new *Material property discount* input field.

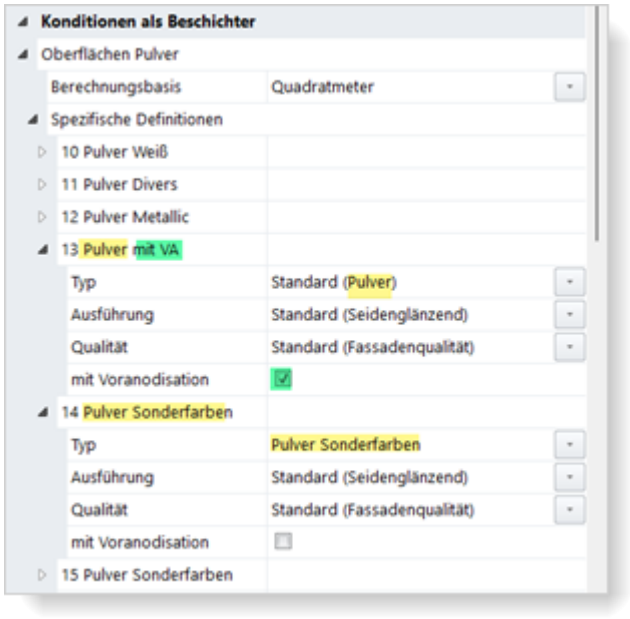


Contacts - Coater:
Surface definitions - powder

From this version, 2024 R2, you can define the properties of the surfaces stored in the program yourself, in the conditions for the system coater and for your own coaters. In the conditions, you will find new input fields for your specific definition below each individual surface identifier, under the *Surfaces - powder* group.

You can specify the type, design, and quality for each identifier. You can also define whether pre-anodisation takes place. The names of the surfaces are defined based on a combination of your specifications.

Due to these new definition options, the names of the surface identifiers 14-19 specified by the program have been changed: Instead of special colour 1, special colour 2 etc., the designation is now always based on the *Powder - special colour* type. All other designations of the surface identifiers specified by the program remain unchanged.



If you require a different surface name, you can enter the text in the field next to the automatically generated name, as in previous versions. Your own designations that you entered in the previous versions for the predefined surface identifiers are retained.

> Please note that your changes in the master data in the *Contacts* dialogue are only applied to new projects (menu ribbon, *General* tab > *Master data* > *General* > *Contacts*). If your modified surface definitions are to apply to a project that has already been created, you must enter them in the project window in the *Project property list*.

As part of this expansion, the group names of the *Anodised surfaces* and *Steel surfaces* groups have also been renamed in favour of uniformity (Different surface designations > Specific definitions). There is no change in functionality for these surfaces.

6.4.8 Production time determination

New triggers

New triggers for production time determination have been added.

Construction type 0: F/T Alu:

Designation	Timetables
Single-leaf RC2N door	1, 3, 10
Double-leaf RC2N door	1, 3, 10

If you want to use the new triggers in your production lines, you will need to reassign them to the relevant activities and assign times to them.

6.4.9 Loading property conditions via RTP (Real Time Processing)

(Not available in all countries.)

In previous versions, project-specific conditions could already be imported into the project via an Excel file suitable for import.

From this version 2024 R2, it is possible to import these conditions directly via RTP (Real Time Processing). To do this, use the additional three-dot button next to the *Aluminium property number* input field.

The same applies to the Excel import: Conditions that have already been entered are overwritten by the import if it delivers corresponding values. If the import does not provide any values for property discounts, discount groups (*System Conditions*), articles (*Article Conditions*) and sustainability surcharges for *Low Carbon* and *Ultra-Low Carbon*, the values you have entered in the program remain unchanged.

6.4.10 Airborne sound insulation

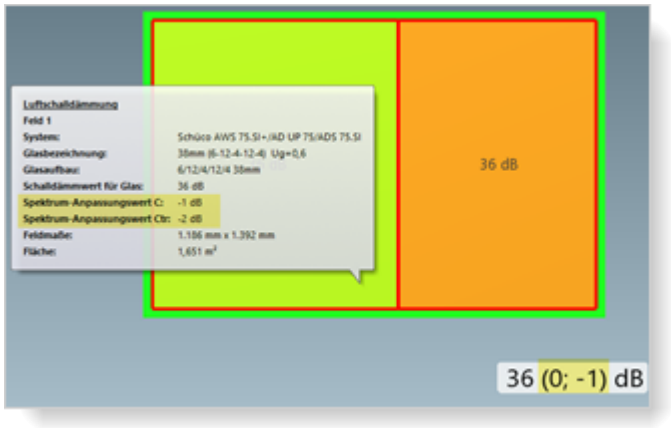
Spectrum adjustment values "C" and "Ctr"

From this version, 2024 R2, the spectrum adjustment values ("C" and "Ctr") are taken into account in accordance with DIN EN ISO 717-1 if these values are available for the element.

In the *Glass/Panel* dialogue, you will find the new *Spectrum Adjustment Value C* and *Spectrum Adjustment Value Ctr* properties for glass and panel under the *Other Technical Data* group. The *npd* (no performance specified) entry is specified here. To ensure that the spectrum adjustment values are taken into account in the airborne sound insulation value calculation for an element, you must enter the relevant values for all infills used.

For ventilation sashes, the spectrum adjustment values for the sash frames are stored in the program.

- Concurrent calculation in the element window:
  The spectrum adjustment values "C" and "Ctr" also appear in brackets in the airborne sound insulation value display.
- Quick info in airborne sound insulation mode:
  The quick info for the infill shows you the spectrum adjustment values "C" and "Ctr" in addition to the sound insulation value and any calculated correction values.

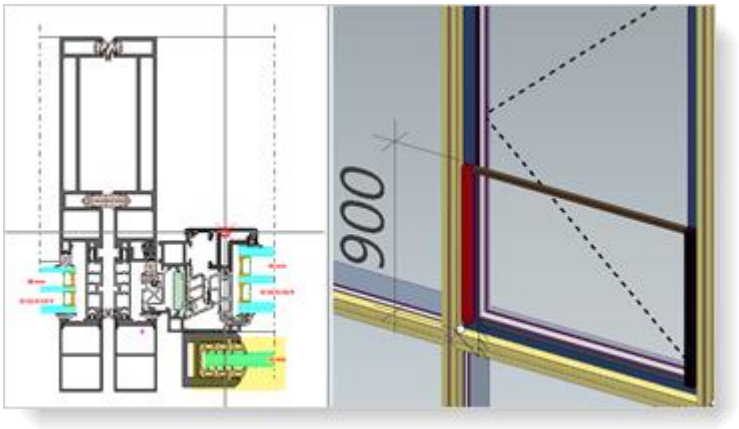


6.4.11 Element processing

Glazing of balustrade safety devices (French balcony) in the profile section

From this version, 2024 R2, the balustrade safety device glazing is shown in the sectional view.

To this end, you must select the profile edges with the sill profile when selecting the desired element section.



6.5 Solar shading

6.5.1 Schüco Integralmaster solar shading:

Use in Schüco FWS 60 - Maximum widths changed

The maximum dimension for the feasibility of the materials TC 3011, TC 3012, TC 3013, TC 2103 has been reduced from 1800 mm to 1500 mm. You will receive an information message in the program if the corresponding transom profiles exceed this length.

6.5.2 Schüco solar shading AB ZDS in Schüco window systems AWS

System change restricted

If you have selected the frame and mullion with integrated guide rail for a ZDS, a system change is no longer permitted for the item in the *Item data* tab. A system change is only possible with the guide rails in place.

6.5.3 Schüco Integralmaster solar shading

Operating page for the 'electric' operating mode

In previous versions, when Schüco Integralmaster solar shading was selected for units, the operating side was not specified. This meant that the position of the cable outlet was not recognisable. In the new *Operating side* field, the appropriate operating side is now preassigned depending on the opening type (*cable outlet (left)*, *cable outlet (right)*). For tilt and top light openings, you must select the side. This information is also given in the order.

Please note:

If necessary, please check the pre-assigned operating side in existing positions with tilt and top light openings for which an Integralmaster with the operating type *electrical* is registered.

6.6 Windows / doors (aluminium)

6.6.1 Correction values for fixed glazing

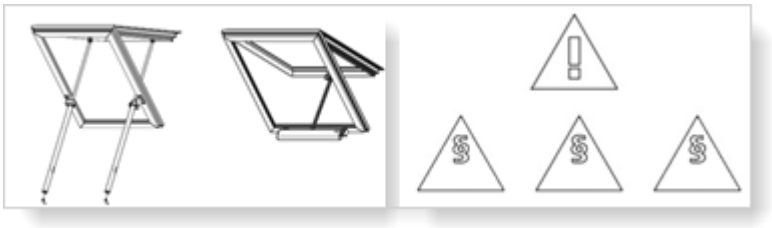
From this version onwards, the correction value 'KFV' [dB] from DIN 4109-35:07.2016 Table 1 is used for fixed glazing if it is required.

6.6.2 Schüco AW RO 50

Schüco AW RO 50 skylight:
Attention - DriveTec operating mode (ventilation)

Automatic preallocation of drives changed

(Since 2024 R1 SP04)



For the *DriveTec (ventilation)* operating mode, the strongest drive is now always preset for the *Chain Drive* and *Linear Drive* drive types, rather than the weakest drive.

The following information on detection and security is now displayed for these opening types:

- The drives are not configured automatically and must be configured manually according to the specifications in the order and production catalogue. The sash weight to be taken into account and the forces required for this are not calculated automatically.
- Based on the requirements of the Machinery Directive, a risk assessment must be carried out with regard to the required protection class and local conditions.
- If the installation height is less than 2.5 metres, please get in touch with your contact in our technical office services.

Please note:

This change affects existing items. If the automatically preset drive type is selected in your items, the most powerful drive is now specified. Please check the positions.

No more use in vertical façades without a roof pitch

According to the system specification, a Schüco AW RO 50 skylight can only be used with a roof pitch of 2 degrees or more. For this reason, from this version onwards, skylights using the Schüco AW RO 50 system can no longer be used as inset units in façades without a roof pitch. Only the element templates under the *04 - Light Roof Construction* group are still permitted. Under the *01 - Mullions - Transoms* group, only the element template for *Sloping Louvred Façade* is still valid.

Please note:

This change affects existing items. If such an opening was inserted in items with corresponding element templates, it is removed.

Technical setting - differential dimension of glazing beads:
Now also valid for external glazing beads

Previously, a differential dimension for glazing beads entered in the technical settings was only taken into account for internal glazing beads. This has been corrected. From this version onwards, an entered differential dimension also applies to glazing beads on the outside (glazing with rebate levelling profiles).

Please note:

This change affects existing items.

6.6.3 Schüco AWS window systems:

New structural posts

(Window systems in installation depths of 50-90 millimetres)

As of this version, the following new structural posts can be entered:

Construction depth	Item
50 mm	570130
60 mm	570140
65 mm	570150
70 mm	570160
75 mm	570170
75 mm (optimised)	570240
90 mm	570180
90 mm (optimised)	570250

New expansion profiles with internal statics

(Window systems in installation depths of 50-75 millimetres)

As of this version, the following new expansion profiles with internal statics can be entered:

Construction depth	Item
50 mm	570190
60 mm	570200
65 mm	570210
70 mm	570220
75 mm	570230
75 mm (optimised)	570260

Please note the following for windows in the Schüco AWS 75.SI+ system:

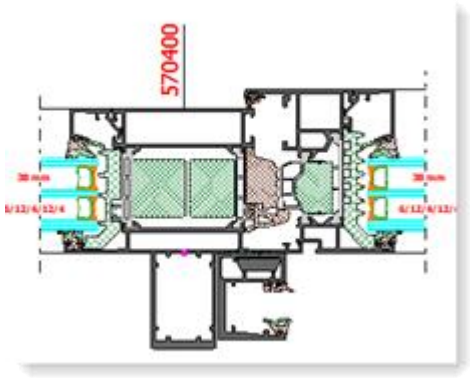
The expansion profiles Art. 570230 and Art. 570260 can only be selected if the *Custom combination* option is selected for the *Profile type window profiles* property in the *Item Data* tab.

Schüco AWS - balustrade safety device:
New structural profiles with external statics

(Window systems in installation depths of 50-90 millimetres)

From this version onwards, the mullion and expansion profiles can be selected with external statics.

Example for Schüco AWS 75.SI+:



When using these structural profiles, please note the recommendation that the transfer of loads to the surrounding load-bearing structure should be coordinated with the structural engineer involved in the project.

change of centre seal range

The new article numbers for the centre seal are specified in the program. With this change, the article numbers for the corner pieces and the sealing frames will also change. Various window systems with installation depths of 65, 70 and 90 millimetres (including block systems and window façades) are affected. Please refer to the updated production documentation for details of exceptions (e.g. not for ventilation sashes).

Construction depth	Old	New
65 mm	246052	245752
70 mm	246055 278723	245755
90 mm	284580	278735

Please note:

This change affects existing items.

6.6.4 Schüco AWS 70.HI and Schüco AWS 75.SI+:

Discontinuation of KDK fitting system

The crank turn/tilt fitting will be removed from the range for the above systems. The *Crank turn/tilt gear-operated handle* operating mode can therefore no longer be selected for turn/tilt and side-hung opening types.

The items you have already entered remain unchanged.

6.6.5 Schüco AWS 75 BS.HI+, Schüco AWS 75 BS.SI+, Schüco AWS 90 BS.SI+

Aluminium-wood window (AWS WoodDesign) - Modified seals on the blind leaf

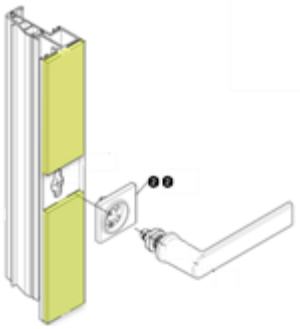
For the aluminium-wood window with opening type *2: blind leaf* glazing is specified from the modified specifications in the glazing tables. The following modifications are made:

	Article old	Article new
Stop seal	245472	245772
Glass unit seal	278864 (12 mm)	278862 (14 mm)

Please note:

The modification of the glass unit seal from 12 mm to 14 mm results in new seal combinations. Check your existing items against the changed possible glazing thicknesses.

Cutting wooden moulding for rectangular rosette



From this version, the wooden moulding on the handle side is in two parts when the rectangular rosette is used. This division is not shown in the element view. The wooden mouldings are cut to size according to K1028988. The tolerances specified there (+/- 0.2 mm) are not taken into account. Please check the cut lengths in relation to the exact handle fit.

Please note:

This change affects existing items.

6.6.6 Schüco AWS 120 CC

Schüco AWS 120 CC.SI airborne sound insulation

From this version, the airborne sound insulation value can be specified for the following units of the Schüco AWS 120 CC.SI system.

- Side-hung / turn-tilt / tilt-before-turn composite window (inward-opening, standard type)
- Fixed panel with side-hung inspection casement

The sound insulation value for the viewing pane must be at least 32 dB. Default sound insulation values have been entered for the *6 mm glass* and *10 mm glass* templates stored in the program.

If no values can be specified for the openings, you will receive corresponding information messages.

Schüco AWS 120 CC.SI:

Miscellaneous changes

The determination for the system follows the updated ordering documents. Changes include:

New selection for the composite casement (insulated or non-insulated)

From this version onwards, in the *Panel properties* dialogue, you can determine in the *Profiles* group whether Art.492110 (insulated) should be specified as before or whether the new Art.556000 (uninsulated) should be specified. (Exception: This selection is not possible for the *Opening inwards, type SG* variant).

Cable transition for CCB solar shading in the casement

The cable transition Art. 263264 with the control cables Art. 200271 (1.5 m) or Art. 200270 (2.5 m) is replaced by the 5-core cable with socket (JST 6-pole) for mounting in the casement profile.

Art. 200458 (length: 1,800 mm + 6,000 mm)

Art. 200459 (length: 2800 mm + 6,000 mm)

In the *Panel properties* dialogue, the selection list for the *Control cable of the CCB* now offers 1.8 m and 2.8 m for selection instead of the lengths 1.5 m and 2.5 m respectively.

Corners for glazed unit seals

In the technical settings (*Seal* group), for the properties *interior glazing* and *exterior glazing*, *Standard with corners* is now also offered for selection.

Stop seal - only Art. 245472 (mounting-optimised)

In the technical settings (*seal* group), only the entries *Installation-optimised* and *Installation-optimised with corners* can be selected for the *Interior stop seal for opening window casements* property.

The entries *Standard*, *Standard with corner edge protection*, *Alternative* and *Alternative with corners* are omitted.

Please note: If one of these omitted selections was previously selected for existing items, the *Installation-optimised* selection option is specified.

Centre seal - new 'Installation-optimised with corners' selection

In the technical settings (*seal* group), the entry *Installation-optimised with corners* can now also be selected for the *centre seal* property.

Height-adjustable rotary hinge

The new rotary hinge Art 269991 replaces the previous rotary hinge Art 276296.

As an additional article, the height adjustment Art. 269405 is specified once per casement. This is attached above the upper rotary hinge to adjust the casement.

New glass supports

The determination of the glass supports has been adjusted. The new glass supports for the composite casement and the revision casement are specified.

Glass support for composite casement: Art. 225471

Glass support for inspection casement: Art. 225472

6.6.7 Schüco door systems AD UP / ADS / ADS HD

Design Edition Gen2 flush pull grip profiles - Pre-assignment of LED strips

For the flush pull grip profiles Art. 546600 and Art. 564610, the *Cold White LED Strip* (Art. 220266) was previously pre-assigned as standard.

From this version onwards, the *LED Strip, Colour Adjustable* entry (Art. 270216) is pre-assigned for new items when selecting the *Design Gen2* operating mode under the *Design Components* group for the *Design - Door Handle* property.

Schüco Fingerprint Easy access control - New article

The current Fingerprint Easy Art. 263282 is replaced by Art. 263651 (surface-mounted) and Art. 263652 (flush-mounted). The previous article, item 263282, is only available for repairs.

The new article numbers for the Schüco Fingerprint Easy are specified for new items from this version onwards if an operation type with Fingerprint Easy is selected under the *Openings* group

(Also for AD UP doors: *Fingerprint Easy* in combination with *SafeGuard, Fingerprint Easy* in combination with *Design*).

Under the *Fingerprint Easy* group, the following entries are offered in the *Installation Position* selection list and the corresponding articles are specified:

Surface-mounted door panel

Flush door panel

Surface-mounted frame installation

Flush frame installation

Surface-mounted leaf frame

Flush leaf frame

Surface-Mounted Active Leaf (2-leaf doors only)

Flush Active Leaf (2-leaf doors only)

Door Handle (Art. 263652)

If you had selected a Fingerprint Easy with the *Leaf Mounting* or *Frame Mounting* installation positions in existing items for single-leaf doors, the determination remains unchanged. You will find corresponding entries for these items as default settings.

Leaf Mounting (2016 version)- Art. 263282

Frame Mounting (2016 version) - Art. 263282

Please note:

- *Door Handle* installation position: Only select this entry if you are using a handle for the door that is suitable for installing the Fingerprint Easy.
- Schüco AD UP door systems: With the*Design and Fingerprint Easy* operating mode, you can now also choose from different installation positions (in the previous versions, *Frame Mounting* was always preset here).
- Schüco AD UP door systems: There is no change for the *Design Gen2* operating mode (recessed grip with integrated Easy Art.263800 fingerprint).

6.6.8 Schüco AD UP 90 with thermal insulation SI

New thermal insulation core Art. 245690

If the entry *SI* is selected in the technical settings for *thermal insulation* for doors in the Schüco AD UP 90 and Schüco AWS 90 SI+/AD UP 90 systems, the new Art. 245690 is specified instead of Art. 245342 from this version onwards.

6.6.9 Schüco AD UP 75 BL/75:

T-connector design - system templates for Schüco AD UP 75 and Schüco AD UP 75 BL doors

In these systems, element couplings are possible in a T-connector design (for couplings with fixed panels, the I-sides of AD UP door frames (Art. 522930) or AD UP blind frames with glazing beads are glazed from the inside and outside (screwed-on glazing bead)).

In the *Select template* dialogue, you are offered suitable system templates for these elements with side lights and top lights in separate orders *(02 - T-connector design*).

Door leaf profiles as frame profiles

In previous versions, it was also possible to use door leaf profiles as outer frames, mullions and transoms in the aforementioned systems. This is not permitted by the system. From this version onwards, it is no longer possible to select door leaf profiles for these applications.

Please note:

This change affects existing items. If in the past you

used a door leaf profile as a frame profile, this will automatically be changed to a valid frame profile.

Barrier-free zero threshold now also for security classes RC1, RC2, RC2N

The barrier-free zero threshold for single-leaf doors. Doors with an all-round leaf and automatic door seal can also be selected in security classes RC1, RC2, RC2N from this version onwards. This was previously only possible for standard security and RC3.

The selection for the variants can be found in the *Field properties* dialogue below the *Door threshold* property if automatic door sealing is selected.

6.6.10 Schüco AD UP 75, Schüco AD UP 75 BL, Schüco AD UP 90:

Adding and combining areas

From this version onwards, it is no longer possible to add and combine areas in items with these systems. For new units with side lights and top lights, please select a suitable system template.

6.6.11 Schüco AWS 75.SI+/AD UP 75/ADS 75.SI:

Schüco AD UP Commercial doors - Barrier-free zero thresholds

(Since 2024 R1 SP01)

If automatic door sealing is selected as the door threshold for doors with the *AD UP Commercial* profile type, you can specify the variants below the *door threshold* property:

- Barrier-free zero threshold 50 mm installation depth
- Barrier-free zero threshold 80 mm installation depth

Machine control

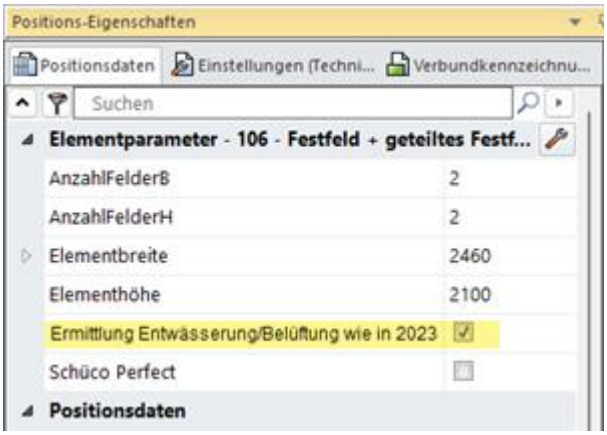
Schüco AWS 75.SI+/AD UP 75/ADS 75.SI:
Ventilation and drainage - old/new determination logic

As part of continuous quality improvement, the machining operations for ventilation and drainage in this system were completely re-recorded for version 2024 R1 and generated in accordance with the current K drawings. For existing items from the previous versions, there are differences compared to the old calculation logic.

Changeover for old items via an element parameter (as of 2024 R1 SP03):

To ensure that old items from current projects can still be processed with the old determination status prior to version 2024 R1, the determination for ventilation and drainage for old items has been switched back to the old determination logic by default with Service Pack 03, although this differs from the current production catalogue status.

The new determination logic can optionally be activated for these items. To do so, you will find the *Determination of drainage/ventilation as in 2023 R3* element parameter in the concerned items on the *Item data* tab.

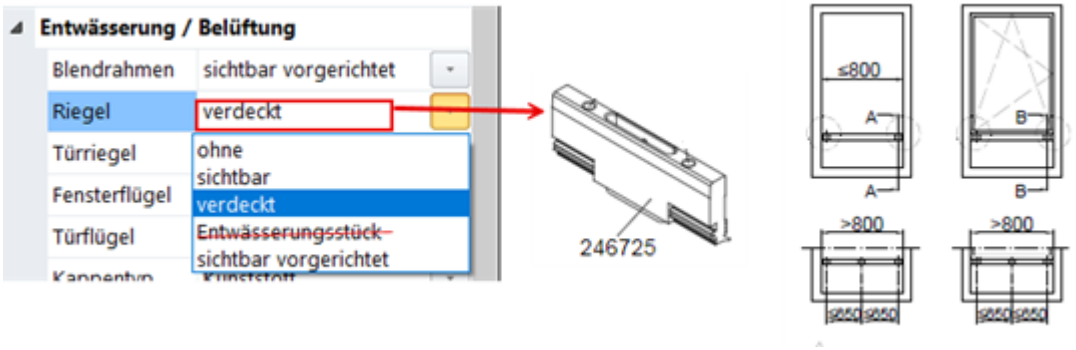


For further details, please refer to the program help.

Schüco AWS 75.SI+/AD UP 75/ADS 75.SI:
AWS window transom: Ventilation and drainage - Drainage piece Art. 246725

(Since 2024 R1 SP03)

In the technical settings, *Transom Drainage/Ventilation* for the *Drainage Piece* selection option has been removed.



The determination and processing of the concealed drainage/ventilation of the AWS window transoms follows the rules from K1008625. If there is a fixed field beneath an AWS window transom and a 6 mm seal is selected, the drainage seal Art. 246725 is automatically specified for concealed drainage.

Please note:

Items already entered with the *Drainage piece* selection option for *Drainage/Ventilation Transom* are automatically changed to *Without* . Please check the setting for your items.

Schüco AD UP 75, Schüco AD UP 75 BL, Schüco AD UP 90:
“Transom” Drainage/Ventilation

Technical settings and processing settings for "transom" drainage/ventilation available again

In the technical settings, the selection list for *Transoms* has been reinstated under the *Drainage/Ventilation* group (*Without*, *Visible*, *Visibly prepared*).

These have no longer been available since 2023 R3. In accordance with the technical specifications, drainage and ventilation should be provided via the T-connection to the adjacent profiles. These specifications have changed (K1014208).

For existing items, the default setting is *Without* and the calculation remains unchanged.

If you select the *Visible* setting, the machining operations are generated according to production drawings K1014208 and K18012:

For profiles with an external static chamber, concealed drainage is specified differently with the *Visible* setting.

If a door is inserted below a transom, no drainage is generated.

If required, you can use the processing settings to influence how many drainage holes should be generated from specific profile lengths.

Schüco AD UP doors in the Schüco AWS 75.SI+/AD UP 75/ADS 75.SI system:

From this version onwards, the drainage/ventilation of the transoms above an inserted AD UP door is the same as for ADS doors and AWS transoms (K1018019).

Please note:

The change affects existing items.

Schüco AD UP 90:
Automatically generated processing operations (MCO): Notching

As part of the continuous quality improvement process, the processing for notching has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Please note:

The changes also affect existing items.

6.6.12 Schüco AWS 75.SI+/90.SI+ and Schüco AWS 75 BS.SI+/90 BS.SI+

in the 'optimised' system variant:

Aluminium-wood windows (AWS WoodDesign) - changes

The following changes apply to openings with aluminium-wood window profiles:

Blind leaf - changed fitting determination:

(Since 2023 R3 SP03)

The determination is made according to the modified production drawings for the blind leaf (K1029421, K1029422).

Push-in handle and rosette cover - stainless steel colour variant:

(Since 2023 R3 SP03)

Ceiling rosette Art. 269345 is now specified for the slot-in handle Art. 247006.

Passive house suitability - testing for glass thickness

Passive house suitability can be achieved in certain combinations of profiles, seals and glazing. Already in the previous versions you received an information message for this, which is no longer displayed if the element fulfils these criteria. A prerequisite for passive house suitability is that the glass used has a glass thickness of at least 48 mm. This has not yet been checked by the program. As of this version, a corresponding glass thickness must also be used in the element so that the message no longer appears.

6.6.13 Airborne sound insulation for windows/doors:

From this version, widening profiles are also taken into account when calculating the airborne sound insulation for windows/doors.

6.6.14 Schüco AWS 90 AC.SI airborne sound insulation value

From this version, the airborne sound insulation value can be specified for the following units of the Schüco AWS 90 AC.SI system.

- windows and French windows D and DK (calculation for the closed state.)
- fixed panels

The sound insulation value for the viewing pane must be at least 32 dB. Default sound insulation values have been entered for the 6 mm glass and 10 mm glass templates stored in the program.

If no values can be determined for the openings, you will receive corresponding information messages.

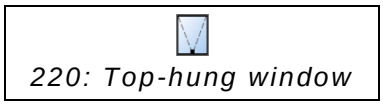
6.6.15 “SimplySmart external opening” window fitting

Miscellaneous changes

Schüco AWS 50.NI to Schüco AWS 75.SI+:

The hardware determination follows the updated pages of the order catalogue (BK 1-3.2 SimplySmart).

Schüco DriveTec for opening type 220: Top-hung window



From this version onwards, you can select the *DriveTec (ventilation)* operating mode for this type of opening. The other selections in the *Field properties* dialogue are adjusted for the fitting system. The individual fitting components are specified in the *Fittings* group.

6.6.16 Cross-system windows and fixed panels:

revision of the permissible sizes

The tables for the permissible sizes have been revised. The determination follows these new guidelines.

Side-hung windows and RC2 top-hung windows - change in minimum dimensions:

Side-hung window: the minimum sizes of the sashes have changed here. New information has been added for low elements.

Top-hung window (with hinge) RC 2: The minimum width has changed here.

Locking bars still only in aluminium:

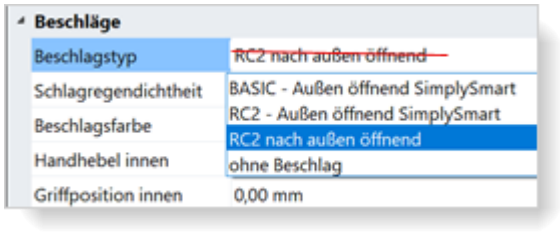
(Since 2024 R1 SP01 and SP04)

For outward-opening windows, the aluminium locking bar in CO or C35 is now always specified (according to the technical setting *Colour > Locking bar*). From this version onwards, the technical setting under the *Hardware > Locking bar* group no longer applies to new items with SimplySmart external opening window fittings (Basic and RC1N).

> **Please note:**
>
> The change affects existing items. In these positions, the aluminium locking bar in CO is now specified instead of the plastic locking rods Art. 248788/248789 (Art. 106116). Please check the setting for the colour of the locking bar there.

Old "RC2 outward opening" fitting type removed

From this version onwards, the *RC2 opening outwards* fitting type can no longer be selected. It has been replaced by the *RC2 SimplySmart outward-opening* fitting type, which was already available in the previous versions.



Please note:

The change affects existing items if this fitting type was selected there. Instead, the valid *RC2 SimplySmart outward-opening* fitting type is specified.

RC2 security class - glazing rebate security devices, round cord for burglar-resistant glazing beads

As a result of the change to the range of glazing rebate security devices, the determination changes with respect to article numbers and quantities for glazing rebate security devices and screws for windows and fixed panels (technical settings > *Glazing* > *RC2/RC2N glazing* > *Glazing rebate security device*). When using glazing rebate security devices, the glass used for windows and fixed glazing must have burglary protection class P4A to achieve the RC2 security.

The length determination for the round cord Art. 244058 for the burglar-resistant glazing beads (K1031539) has also been modified.

Please note:

This change affects existing items.

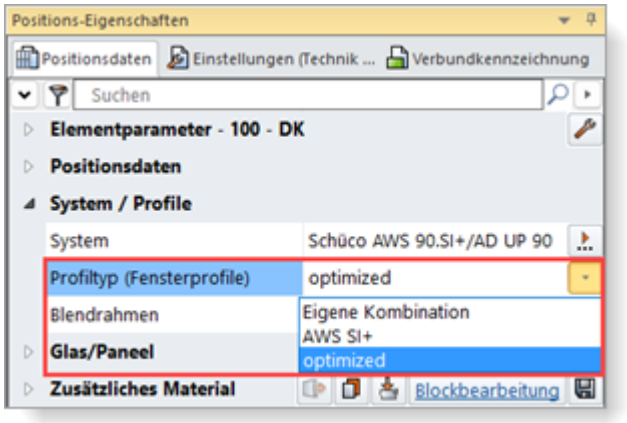
6.6.17 Schüco AWS 75.SI+ and Schüco AWS 90.SI+

in the 'optimized' system variant:

modifications

The following changes apply to elements in the 'optimised' system variant:

Easier input - profile filter



Elements in the ‘optimised’ system variant can be entered more easily from this version. In the *Item data* tab, in the *System/profiles* group, you will find the new *Profile type (window profiles)* option. There you can choose between the *Custom combination*, *AWS SI* or *optimised* entries.

If you select *Custom combination*, all profiles will be offered for selection in the selection lists. This is the standard specification. Existing items remain unchanged.

When *AWS SI+* is selected, no profiles with the *optimised* contour are offered in the selection lists.

When *optimised* is selected, only profiles with the *optimised* contour are offered in the selection lists.

The filter applies both to the selection of frame profiles in the *Item data* tab and to the selection of leaf profiles in the *Panel properties* dialogue.

Please note:

The selection will only filter in the selection lists. Profiles already in use will not be changed automatically.

RC2 security class - glazing

The glazing for openings with RC2 security follows the new glazing table for the glass unit seal Art. 284333 used exclusively in the ‘optimised’ system variant.

Please note:

This change affects existing items.

6.6.18 Schüco AWS 75.SI+/AD UP 75/ADS 75.SI:

Barrel hinges - outward opening - combination with 3K/5K profiles

The barrel hinges are determined according to the specifications in the current K-drawings:

Schüco AD UP 75 Commercial: K1032257

Schüco AD UP 75 and Schüco AD UP 75 BL: K1020875

Schüco AD UP Commercial profile portfolio

For doors in this system, from this version onwards you can simply enter doors with the special profile range for Schüco AD UP Commercial using a profile filter.

In the *Item data* tab, in the *System/profiles* group, you will find the new *Profile type (door profiles)* selection list. Here you can choose between the *Custom combination* and *AD UP Commercial* entries. Your selection results in a corresponding pre-assignment for the door profiles.

In the *Field properties* tab, you will find *Profile type (door profiles)*:

- If you select the *Custom combination* entry in the *Item data* tab, you can choose between the alternatives *(AD UP*, *AD UP BL*, *AD UP Commercial*, *ADS*) for the door in the *Profile type (door profiles*) selection list in the *Field properties* tab.
- If you select the *AD UP Commercial* entry in the *Item data* tab, the *Profile type (door profiles)* selection list is greyed out in the *Field properties* tab for the door. Only the profiles from the Schüco AD UP Commercial profile portfolio can then be selected as leaf profiles.

Technical settings:

The *AD UP Commercial centre gasket* property has been added to the technical settings under the *Gaskets* group. Here you decide whether the centre gasket *(standard with corners*) or the cover gasket Art. 278732 *(without centre gasket*) should be specified for the profiles.

New panic leaf Art. 541670 - Schüco AD UP doors

For the use of 2-leaf, outward opening doors with the full panic variants, the new door leaf Art. 541670 (3-chamber profile) can be selected for the *AD UP* and *AD UP BL* profile types from this version.

The new door leaf can only be used in the aforementioned system with an AWS connection, but not in the Schüco AD UP 75 and Schüco AD UP 75 BL door systems as such.

6.6.19 Schüco Door Control System (DCS):

Discontinuation of components

Outlet DCS Touch Display:

- The *DCS Touch Display* DCS version is no longer available for selection in the Field properties dialogue.
- The *DCS Touch Display checklist* button has been removed from the *(General > Extras > Forms*) menu ribbon.

Please note:

Existing items are automatically converted to the *Standard* DCS version instead. The touch display is no longer specified.

Discontinuation of DCS door communication

- For the *Standard* DCS version, options for DCS door communication can no longer be selected in the Field properties dialogue. The basic packages for door communication (*Basic Package Audio Only* and *Basic Package Video*) no longer apply.

Please note:

For existing items, any previously specified items are no longer specified.

6.7 Sliding elements (aluminium)

6.7.1 Schüco AS PD 75.HI:

TipTronic operating mode – sensor connection box (available with activation code)

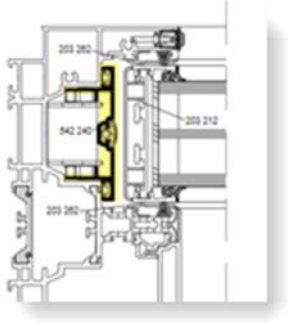
The new article number is specified for the sensor connection box.

Art. 263351 -> Art. 263851

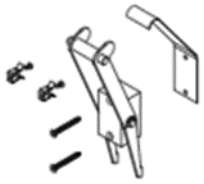
Dynamic cover profile, fastening set for side closing profile (available with activation code)

The new article number is specified for the side cover profile *(dynamic cover profile* in the *Field properties* dialogue).

Art. 542240 -> Art. 552960



The article number for the *side closing profile fixing set* has also been changed.



Art. 220881 -> Art. 225881

Coupling profiles and centre gaskets (available with activation code)

The KS coupling profiles and the gaskets have been optimised.

Access Line and Design Line (manual):

- Art. 203588 - new coupling profile for intersection 4 (formerly: Art. 203218)
- Art. 203618 - new coupling profile for intersection 5 (formerly: Art. 203188)
- Art. 245971 - new centre gasket for both intersections (formerly: Art. 203227)

Design Line (TipTronic) and Performance Line:

- Art. 203613 - new coupling profile for intersection 4 (formerly: Art. 203213)
- Art. 203615 - new coupling profile for intersection 5 (formerly: Art. 203215)
- Art. 245972 - new centre gasket for both intersections (formerly: Art. 203231)

6.7.2 Schüco ASE 80 LC

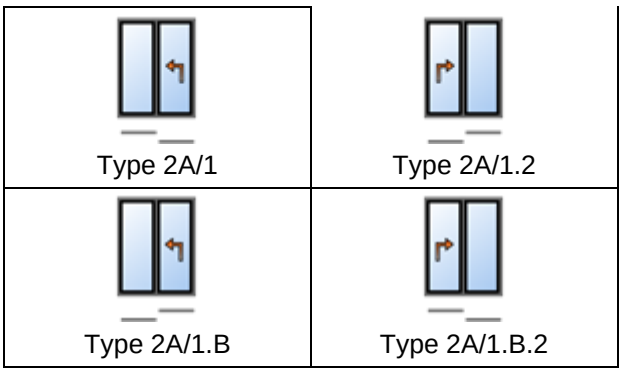
Availability

The ASE 80 LC sliding system is generally approved for the following countries. It is no longer necessary to request an activation code.

Belgium, Finland, Luxembourg, Netherlands, Sweden and United Arab Emirates.

6.7.3 Schüco ASE 80.HI

Fitting type RC3



For the types listed with the *Lift-slide* operating mode and fixed casements (200 kg), the fitting type RC3 can be selected from this version onwards.

The prerequisites for the selection of this type of fitting are:

- In the technical settings, *type 1: locking bracket (locking on the frame)* must be selected in the *Fitting* group as the *Locking variant*.
- In the element settings, the standard threshold must be selected as the threshold and the *Standard* entry for the *Version*.

6.7.4 Schüco ASE 60, Schüco ASE 80.HI and Schüco ASE 80 LC

One-sided attachment of handles

In the previous versions, it was already possible to identify single-sided internally mounted handles with fixings that are not visible from the outside for elements with the *simple push-less leaf* and *push-resistant leaf* composite types. The entry for this variant in the *Field properties* dialogue under the *Fittings* group has now been changed. Instead of a check box for each handle, you will now find a drop-down list above the handle selection, which you can use to specify whether the handles should be fixed on one side or not (choices of *with* or *without*). With the *Custom combination* selection you can determine in a subgroup, leaf by leaf, whether the single-sided fixing is to be specified. The range of products available for the handles is limited according to your specifications.

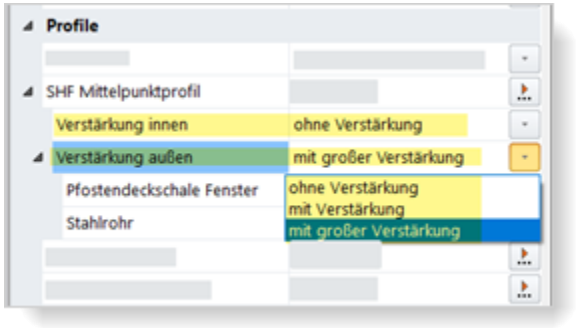
The determination result of your existing items remains unchanged.

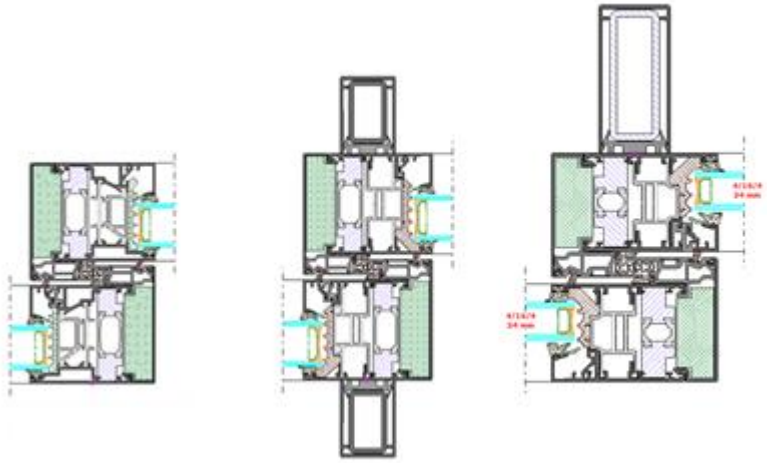
One-sided statics on the SHF centre profile and new "large reinforcement" variant

In the past, reinforcements always had to be added internally and externally as superimposed statics. Alternatively, from this version onwards, it is also possible to record static reinforcements only on the inner or outer SHF centre point profile. In addition, the combination of cover profile Art. 525320 with steel tube Art. 277230 has been added as a new reinforcement variant (*large reinforcement*).

The reinforcement selection for the SHF centre point profiles in the *Field properties* dialogue has been extended to include the new variants. You can now define reinforcements for inside and outside separately. In general, you can choose between *Without Reinforcement*, *With Reinforcement* and *With High Reinforcement* .

Both the small reinforcement and the large reinforcement can be used on one side. They cannot be mixed (e.g. small reinforcement on the inside, large reinforcement on the outside).





Please note:

The settings for your existing items from the previous versions are adopted accordingly (with reinforcement/without reinforcement, inside and outside).

If the sash or the composite type is changed, the standard pre-assignments are made as before:

- Reinforcements are automatically pre-assigned on both sides of double-sliding sash profiles.
- No reinforcements are pre-assembled for non-sliding sash profiles.

What is new, however, is that reinforcements are also automatically pre-assigned on both sides of single-sliding sash profiles.

RC2 fitting type - change to the glazing

The intersection overviews for elements with fitting type RC2 have been updated. The glazing beads are specified in accordance with the amended specifications.

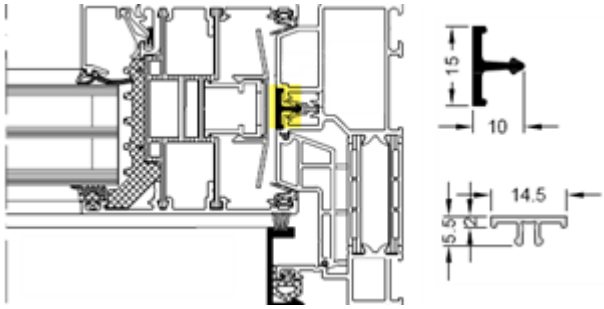
- Movable sashes with the *single-sliding sash* and *non-sliding sash* composite type no longer need to be bonded.
- Fixed panels and movable sashes with the *double-sliding sash* composite type must still be bonded.

Please note:

The changes also affect existing items.

Technical setting for cover profile on the outer frame

The cover profile on the outer frame can be specified in aluminium (Art. 542000) or plastic (Art. 278362).



For the Schüco ASE 60/80.HI systems, the *Outer Frame Cover Frame - Side* feature was already available in the previous versions in the technical settings under the *Design* group.

- This feature has been renamed *Outer Frame Cover Frame*.
- From this version onwards, it also applies to the Schüco ASE 80 LC system. In this system, the cover profile is inserted at the side and at the top.

The specification in your existing items does not change.

6.7.5 Schüco ASS 39 SC

Streamlining of the product range - moving leaf seal

Article 244807 (sliding seal) is omitted. For the system, the *Moving leaf seal* property is therefore no longer offered in the technical settings. The brush seal Art. 244806 is always determined.

Please note:

The change affects existing items. For items that previously had the *Seal* setting, the brush seal is now determined.

6.7.6 Schüco AS FD 75

Miscellaneous extensions

Three additional variants have been added to the optionally usable thresholds, which you can select in the *Item properties* dialogue in the *Item data* dialogue via the *Threshold design* element setting.

In addition to the *Standard* (71 mm frame all-round) and *Threshold 15 mm* (threshold with stop) selections, the following can be selected from this version onwards:

- Frame (50 mm)
- Frame (15 mm) - Same as frame (50 mm), but recessed in the floor.
- Threshold (4 mm)

Panel properties: dialogue

- From this version onwards, you can freely combine the number of leaves on the left and right when determining the opening type.
- If the number of leaves on the left and right is even or odd respectively, you can now determine whether the moving leaf should be on the left or on the right.

Fitting:

- For types (inward opening) that comply with the specifications of the manufacturing documents, the fitting type RC2 or PAS 24 can be selected.
- You can determine whether an *opening control* or a *closing and opening control* is determined.

New technical setting:

- In the *Glazing* group, you determine via the *Sealing tape/sealing piece for glazing bead joints* check box whether the sealing tape or sealing pieces are to be determined to achieve water tightness with wind loads > 300 Pa and to reduce air leakage in the area of the glazing bead joints.

Face width 90 mm - glass thicknesses of 39 mm and 40 mm

It is now also possible to use glass thicknesses of 39 mm and 40 mm in the folding/sliding system with a face width of 90 mm.

6.7.7 Schüco AS FD 75 and AS FD 90.HI:

changes and system enhancements

standard and RC2 fitting types

drainage caps - 'without'

In the technical settings, the new option *without* has been added for the selection of drainage caps (*Drainage / Ventilation* > *Cap type* group). In this selection, determining is done as follows:

- inward opening variants = two standard caps
- outward opening variants = no caps

The setting does not apply to elements with the threshold design *Threshold (4 mm)*. In this case, caps are never determined.

Use of adhesive and Viennese bars

Similar to the Schüco FD 70/80.HI folding sliding systems, glass divisions can be made with the decorative glazing bar Art. 189660 (adhesive bars, Viennese bars). This also applies to elements with the RC2 fitting type.

Selection guide for additional locking points

From this version onwards, the article numbers for additional locking points will be highlighted in red in the article selection dialogue for additional locking points if the maximum leaf height for their use is exceeded.

Fitting type RC2

RC2 now also for face widths of 90 mm

Previously, the RC2 fitting type could only be selected for inward-opening elements with a face width of 104 mm. From this version onwards, this is also possible for elements with a face width of 90 mm. Normal glazing beads are used in this face width and the filling must be glued.

Use of Georgian bars

The use of Georgian bars is now also possible for types with the RC2 fitting type.

Double-sided types

In the previous versions, the RC2 fitting type was only available for types with an odd number of leaves on one side. From this version onwards, the RC2 fitting type can also be selected for types with two leaf stacks. The rule here is that a leaf stack must always have an odd number of leaves.

Permissible leaf heights

The previously applicable minimum and maximum leaf heights for the RC2 fitting type have changed (previously minimum = 2,325 mm, maximum 2,665 mm).

New leaf height minimum:

- 1,922 mm (Schüco AS FD 75 and Schüco AS FD 90.HI)

New maximum leaf heights:

- 3,000 mm (Schüco AS FD 75)
- 3,500 mm (Schüco AS FD 90.HI)

Changes to the fitting determination (RC2 fitting type)

- In addition to the profile cylinder Art. 211980, the profile cylinders Art. 279132 (Schüco AS FD 75) and Art. 279118 and Art. 279214 (Schüco AS FD 90.HI) can now also be selected. The previously possible profile cylinder Art. 241216 is no longer available.
- Key-operated multipoint locking is possible (lock Art. 279777).
- When selecting the additional locking points for the selected lock, only the articles that can be used for the current leaf dimensions are offered. Optionally available without additional locking points.
- The protection set Art. 220851 is not required for types with the RC2 fitting type. It is therefore no longer determined.
- Additional locking points (Art. 269322, Art. 269321) are only determined at the intersections where the external hinges are located.

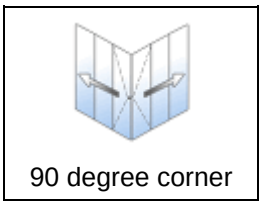
Please note:

The changes in the determination of the fitting affect existing items.

90 degree corner

From this version onwards, elements can be entered as corner solutions.

To do this, select the *90 degree corner* system template in the *Select template* dialogue *(04 - Sliding elements -> 02 - Folding sliding elements (insulated)*).



90 degree corner

In the *Item properties* dialogue, define the width of levels 1 and 2 and the element height in the element parameters. The position for the *moving leaf* is defined in level 2.

You define the folding stacks in the two levels as a free leaf combination directly in the *Field properties* dialogue. As standard, type 6 is pre-assigned with three leaves on the left and three leaves on the right. It is only possible to enter an odd number of leaves. Only the 15 mm threshold can be used as a threshold and only Art. 550810 is available as a weather bar.

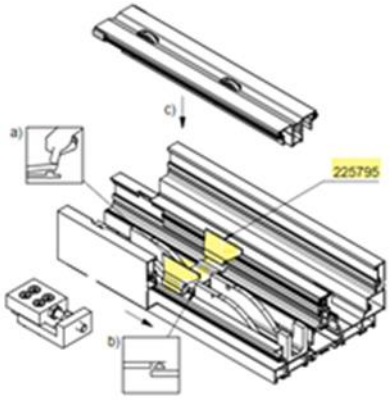
Only the standard fitting can be selected as the fitting type.

6.7.8 Schüco AS PD 75.HI

"Performance" product line - Assembly aid Art. 225795

Available with an activation code.

According to the K-drawing, the flush position must be set for the insert profile carriage Art. 542600 using the adjustment unit Art. 291695. The installation aid Art. 225795 must be used for this.



The adjustment unit has already been determined automatically in the previous versions. From this version onwards, the mounting aid Art. 225795 is also determined. However, it can be deselected as an option. In the Field properties dialogue, you will find the new Mounting bracket property under the Fittings group.

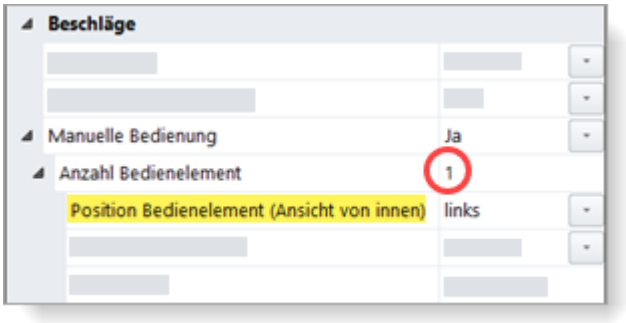
Please note:
The change affects existing items.

TipTronic operating mode – changes

Available with an activation code.

- The determination of the required line extensions (4-core) has been revised. This results in changed lengths.

- If the number of controls for an element is set to 1, you can now specify the position of that control (left or right). With one moving leaf, the locking side is preset; with more than one moving leaf, the left side is preset.

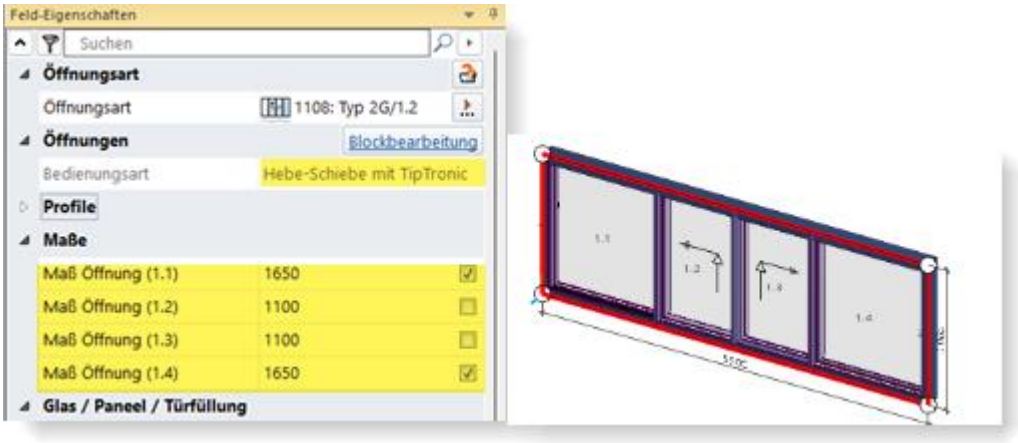


Please note:

These changes also affect existing items.

Asymmetric leaf layout

Asymmetric leaf layouts can now also be realised for elements with the TipTronic operating mode.



Brush seal only in black

From this version, the brush seal is always determined in black (Art. 203540). The alternative option for the grey seal (item 224497) in the technical settings is not applicable.

Please note:

This change affects existing items. If you selected the grey seal in the technical settings, the black seal is now determined.

‘Performance’ product range - New clamping pieces for rollers

Available with an activation code.

The new roller clamping piece (Art. 225562) replaces Art. 220637 in elements of the *Performance* product range. According to K1030292, two clamping pieces are specified per roller.

Please note:

This change affects existing items in the *Performance* product range. For elements of the *Access* and *Design* product ranges, Art. 220637 is still specified.

‘Access’ and ‘Design’ product ranges with manual operation - anti-hooking device for steel tube

Available with an activation code.

For elements with manual operation in the aforementioned product ranges, the new anti-hooking devices (Art. 225568) for the steel tube (Art. 201334) in the large reinforcement profile are additionally specified (two units per hook with Art. 201334).

Please note:

This change affects existing items.

6.7.9 Schüco ASS 70 FD and Schüco ASS 80 FD.HI

Technical settings for rollers removed

In the *Fittings* group, there were settings for the alternative determination of rollers. These were only applied to existing items from older versions prior to 2020 R2. Alternative plastic rollers are no longer available for the systems. Stainless steel rollers are now also always determined for the old items. The *Schüco ASS FD roller* and *Roller/roller hinge* properties are not applicable.

Cross-system:
RC2 security class - round cord for burglar-resistant glazing beads

The length determination for the round cord Art. 244058 for the burglar-resistant glazing beads (K1031539) has been modified.

Please note:

This change affects existing items.

6.7.10 Schüco ASE 60, Schüco ASE 80.HI:

Operating modes with TipTronic - adaptation to the current risk analysis in BK 1-5C

In the ASE 60 and ASE 80.HI systems, it is possible to switch to the *Slide with TipTronic* and *Lift&Slide with TipTronic* operation types in the *Field properties* dialogue for the opening types suitable according to the order and production documents. In the previous versions, you determined the requirements for the fittings specification in accordance with the risk analysis contained in the order catalogue BK 1-5C (11.2018). This risk analysis is no longer up to date. The possible selections were therefore adapted to the risk analysis contained in the current order catalogue BK 1-5C (04.2024).

This results in the following changes for the *Installation Position/Accessibility*, *Building/Room Utilisation* and *o=Operation* properties:

Feature	Selection options - old		Selection options - new
Installation Position/Accessibility	E1: without protective measures, from risk analysis BK 1-5C	=>	without protective measures
	E2: with protective measures, from risk analysis BK 1-5C	=>	with protective measures
Building/room utilisation	N1: from risk analysis	=>	Commercial space, residential space, publicly accessible space
	N2: from risk analysis		
	N3: from risk analysis		
	N4: from risk analysis	=>	space for vulnerable people
Operation	S0 Manual operation without self-hold function, with visual inspection (dead man's switch)	=>	Operation without self-hold function, with visual contact (dead man's switch)

	S1 Manual operation with self-hold function, with visual inspection (wall-mounted, hinged push-button)	=>	Operation with self-hold function (tilt, automatic mode, WRM, app, central push-button)
	S2 Manual or automatic operation without visual contact (wind/rain detector, software control, central push-button, etc.)		

As in previous versions, your selections result in the required or recommended protective measures. Optional components are available depending on the currently selected opening type.

Only the *Resistance 270 Ohm - for operation with key or dead man's switch* option has been replaced by the *Number of external wall switches* input field.

Please note:

For items already entered in previous versions, your settings are always adopted and transferred accordingly.

If the *Resistance 270 Ohm - for operation with key or dead man's switch* option was selected in existing items, an *external wall switch* is specified.

A change in the specification may occur in items in which the entry *N1: from risk analysis* was selected for *Building/Room Utilisation* and/or if the entry *S0: Manual operation without self-hold function with visual control (dead man's switch)* was selected. Safety edges are now specified in these positions as the default setting. You can deselect these if required.

Types 1C and 2C (lift and slide) with level threshold cannot be combined with safety class

In previous versions, it was possible to combine the listed types with a level threshold and the *lift and slide* operating mode with a fitting type with a security class. This combination is no longer permitted from this version. Only the *Standard* fitting type can be selected for this combination.

1C.B

1C.B.2

2C

2C.2

Please note:

This change affects existing items. If a fitting type with a security class was previously selected, the system automatically reverts to the *Standard* hardware type.

6.7.11 Schüco AS FD 75 and AS FD 90.HI:

Machine control
Fitting type RC2 - automatically generated machining operations (MCO)

(Since 2024 R1 SP03)

The machining operations for fitting type RC2 are generated.

90 degree corner - automatically generated machining operations (MCO)

The machining operations for the fitting are generated.

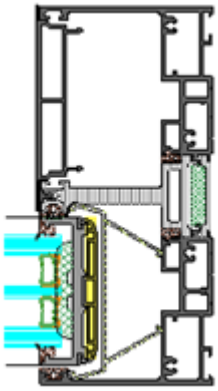
Maximum element width instead of limiting the number of folding leaves

Previously, the maximum number of folding leaves was limited to 9 per side when entering the free leaf combination. This limitation has been removed. Instead, from this version, an automatic check is carried out with regard to the maximum element width of 9000 mm. If this limit is exceeded, you will receive an information message.

6.7.12 Schüco ASS 77 PD.HI:

Inlet profile modified

According to the changed order and production documents, the new Art. 284627 is determined instead of the inlet profile Art. 284818 from this version. The change affects your existing items.



Please note:

The change does not apply to units in the Schüco ASS 77 PD.HI manual system. For these, the inlet profile Art. 284818 will still be determined.

6.8 Façades (aluminium)

6.8.1 Various Schüco FWS systems

Machine control

Schüco FWS 50.NI:
Automatically generated processing operations (MCO)

From this version onwards, the machining operations for drainage/ventilation, notching and fixings are generated for the system.

Schüco AWS 114:
Automatically generated processing operations (MCO): Ventilation and drainage

(Since 2024 R1 SP04)

As part of the continuous quality improvement process, the processing for ventilation and drainage has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Please note:

As part of this revision, you will only find settings for the *Spacing* and *Minimum panel size* for processing in the blind frame in the processing settings for this system. All other previous items in the *Drainage/ventilation* group have been removed.

The changes also affect existing items.

Schüco AWS 114:
Automatically generated processing operations (MCO): Notching and fixings

As part of the continuous quality improvement process, the processing for notching and fixings has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Schüco AWS 114.SI:
Automatically generated processing operations (MCO): Notchings and fixings

As part of the continuous quality improvement process, the processing for notching and fixings has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Technical settings - selection ‘none’ is omitted for glazing rebate ventilation

- Schüco FWS 35 PD
- Schüco FWS 50 and Schüco FWS 60

From this version onwards, in the *System specifications* dialogue, you can no longer select the *none* entry in the technical settings in the *Drainage/ventilation* group for the *Glazing rebate ventilation*.

Please note:

The change affects existing items. Items with the *none* setting are switched to *total ventilation*.

6.8.2 Schüco FWS 50:

'SI eco' thermal insulation

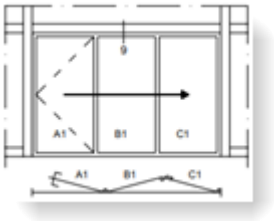
(Since 2023 R3 SP04)

For the *Thermal insulation* element parameter, *SI eco* thermal insulation can now be selected as an alternative to *SI* thermal insulation. This determines the insulation variant without thermal insulation tape.

6.8.3 Schüco FWS 50, Schüco FWS 60

Schüco AS FD 75 and Schüco AS FD 90.HI folding sliding elements as insert elements

Elements of the Schüco AS FD 75 and Schüco AS FD 90.H! Systems can be used with adapter profiles (Art. 382870, Art. 368990, Art. 439050) in panels of façade elements of the Schüco FWS 50 and Schüco FWS 60 systems.



For use in a façade panel, select the *Free leaf combination* opening type. All details on the design (profiles, number of folding leaves, threshold design, fittings) are entered in the *Field properties* dialogue.

Range streamlining - Vulcanised sealing frames

The vulcanised sealing frames for the inner glass seal with the same sealing view have been removed from the range.

- 224891
- 224892
- 224893
- 246580
- 246581

In the technical settings, you can therefore no longer combine the selection *Seal inside > Standard vulcanised for level 1 to level 3* with the selection *Seal view glass seal inside > same*.

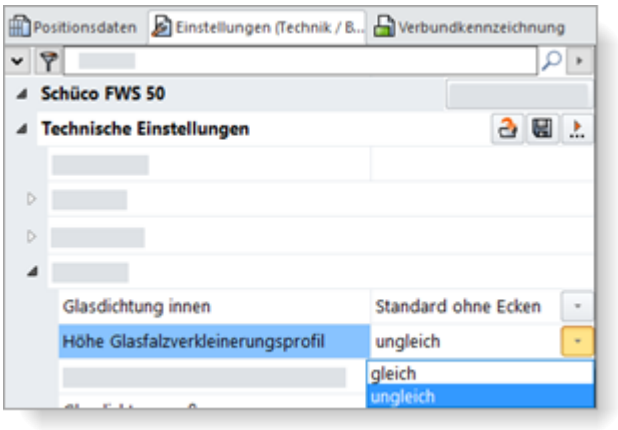
Technical settings

Schüco FWS 50 and Schüco FWS 60:
High glazing rebate reduction profile

In the previous versions, glazing rebate reduction profiles with unequal heights were always determined when using the inner glazing gasket *Standard without corners*. And the same glass system gaskets.

As of this version, you can optionally change the determination via the new technical setting *High glazing rebate reduction profile* in the *Seal* group to *Identical*. In this case, the same glazing rebate reduction profiles and different glazing system seals are determined.

The default selection is *not identical*. As a result, the determination remains unchanged compared to the previous versions.



6.8.4 Schüco FWS50/60 and Schüco AOC:

New non-perforated pressure plate profiles

(Since 2023 R3 SP04)

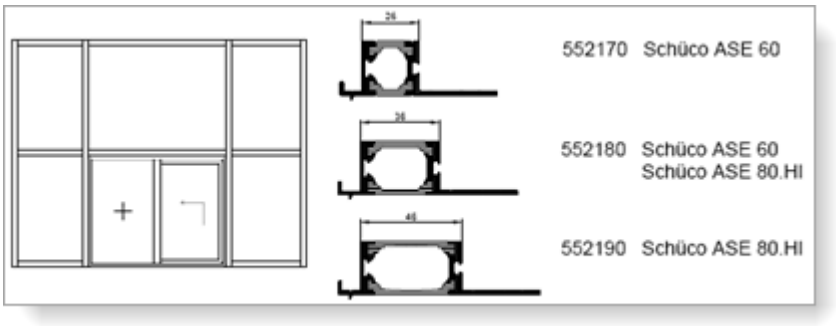
The new non-perforated pressure plate profiles can be selected:

- Art. 477590 (FWS 50, FWS 50 CW, FWS 50 SG, AOC face width 50 mm)
- Art. 477650 (FWS 60, FWS 60 CW, FWS 60 SG, AOC face width 60 mm)

6.8.5 Schüco ASE 60/80.HI sliding elements as insert elements

1-track and 2-track types of the Schüco ASE 60 and Schüco ASE 80.HI systems can be used with adapter profiles (Art. 552170, Art. 552180, Art. 552190) in panels of façade elements of the Schüco FWS 50 and Schüco FWS 60 systems. The *Sliding* and *Lift-and-slide* (not TipTronic) operating modes can be selected. It is not possible to combine these insert elements with a balustrade safety device or insect screen.

The *Design* and *Level threshold* element parameters can be defined for the insert elements in the *Field properties* dialogue.



6.8.6 Schüco FWS 35 PD

Range streamlining - Changed glazing thicknesses, thermal insulation SI

For elements in the SI thermal insulation version, the possible glazing thicknesses are reduced to 46 mm to 50 mm.

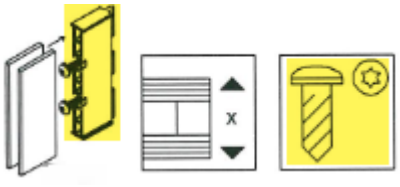
Please note:

This change also affects existing items that were recorded with a previous version.

6.8.7 Schüco FWS 50, Schüco FWS 60

Determination of spacing blocks (glazing bridges)

The glazing bridges Art. 230401 to 230407 and the associated screws required for blocking purposes are determined, as of this version, according to the K-drawings for the security classes *without*, *RC1* and *RC2*.



Please note:

This change also affects existing items that were recorded with a previous version.

SI thermal insulation - flat cover cap

From this version, you can select the *Flat cover cap* entry for the *Exterior design* element parameter for elements with SI thermal insulation.

France - flat cover cap

(France only)

From this version, the French flat mullion and transom cover caps can be specified (Art. 543100, Art. 543130, Art. 543110, Art. 543040). To do this, select the *Flat cover cap* entry in the element parameters for *Exterior design*.

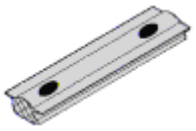
Per-panel ventilation not permitted with RC3/4 and FB3/4 security classes

In previous versions, the RC3/4 and FB3/4 security classes could be selected in the element parameters for elements with per-panel ventilation (technical setting for *Glazing rebate ventilation*). From this version, this combination is no longer possible for new items.

Please note:

If you have selected this combination for your existing items, you will receive an information message from this version. Adjust your settings as required.

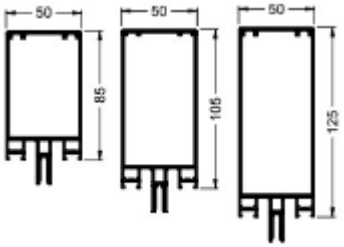
Mullion-transom façades:
Sealing pieces for transom connection with continuous internal glass seal

Schüco FWS 35 PD Schüco FWS 50.NI Schüco FWS 50 Schüco FWS 60 Schüco Seamless	Schüco FW 50+ FR60 FW 50+ BF FW 60+ BF FW 50+ BF.HI FW 60+ BF.HI	

From this version, you can set the technical settings so that the sealing pieces for the transom connection are also specified when the standard seal without angles is used. For this you will find the new *Standard without angles with sealing piece* entry in the *Seal* group for the *Internal glass seal* property.

Schüco FWS 50:
Mullion profiles Art. 536700, Art. 536710 and Art. 536730

From this version, the profiles can be selected without special activation.



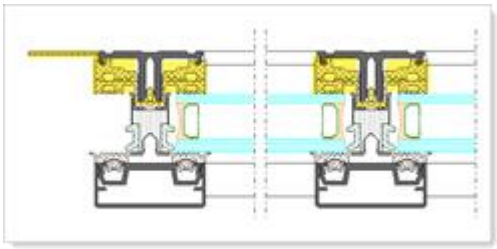
6.8.8 Schüco AOC

'Sloping louvred façade' and 'Pent roof' system templates

The following templates can be selected for the Schüco AOC system. In the technical settings, you must select the *Total ventilation* input for these slanted constructions for *Glass rebate ventilation*.

02 - Façades:	01 - Mullion - transom:	Sloping louvred façade 
	04 - Light roof constructions:	Pent roof 

Inner seals - dimensions in millimetres



From this version, the specified length of the glass unit seals and the building structure connection seals is given in millimetres rather than linear metres.

In addition, the following lists now include cutting dimensions to help you cut these seals to size:

- Cutting composition
- Cutting optimisation

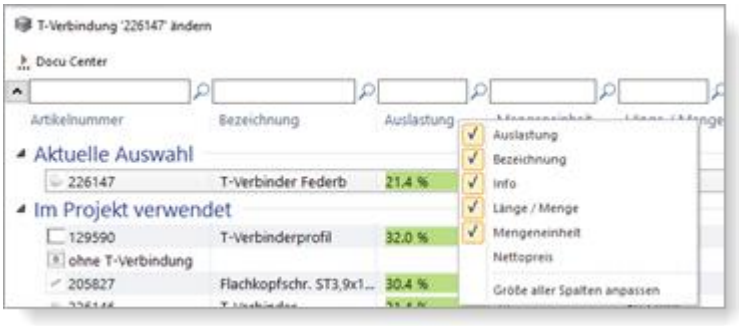
6.9 Static pre-dimensioning

6.9.1 New - Static preliminary design for T-connectors

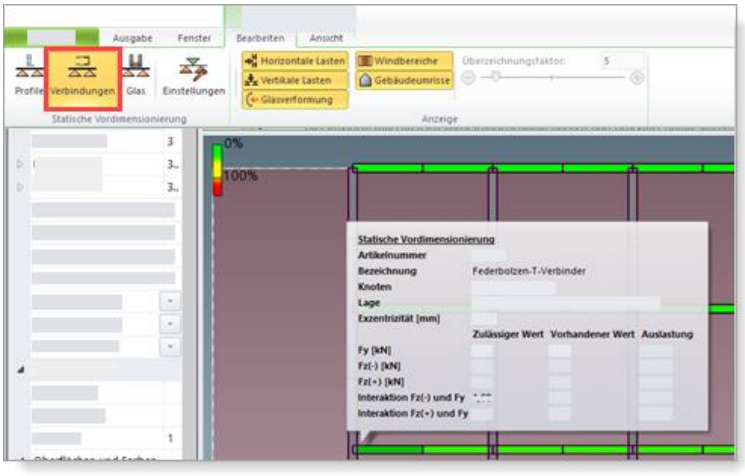
As of this version, a static preliminary design for the T-connectors is carried out for the following systems.

Systems	Exception
Schüco FWS 35 PD Schüco FWS 50 / Schüco FWS 60 Schüco FWS 50 SG / Schüco FWS 60 SG	
Insulated windows/doors	No fire doors No uninsulated systems

- When selecting the T-connectors in the item window, you are supported by the display of the utilisation in the *Change T-connection* dialogue.



- As of this version, in the static mode of the item window, you will find the new *Connections* button in the menu ribbon of the *Static pre-dimensioning* group. If the icon button is activated, the connector statics are shown in this view.
  Quick info on the profile ends shows you the comparison of the permissible and existing values for the individual forces (Fy, Fz(-), Fz(-) and interactions (Fz(-) and Fy; Fz(+) and Fy) and the utilisation.
  For the profile ends you can call up a dialogue via the *Load combinations of connections* context menu item, in which the calculated load combinations of the connectors are displayed.



- In the *Static pre-dimensioning* list, the maximum forces and interactions are listed for the T-connector types occurring in the item

6.9.2 Design rules for glass only according to DIN 18008

As of this version, the glass statics for the country selection *Germany* are calculated exclusively according to DIN 18008. The alternative selection of the design rule according to *TRLV/TRAV* in the *Glass values* tab of the *Static pre-dimensioning* dialogue is no longer possible.

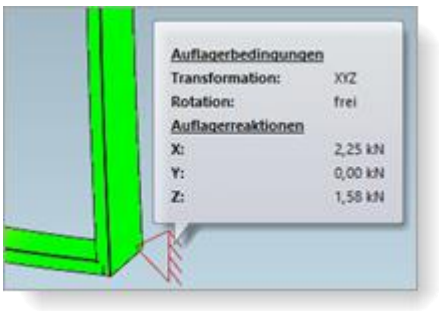
6.9.3 All countries: Alternative 'Global FEM' calculation

Mullion/transom louvred façades (not Schüco FWS 60 CV)

Windows/doors: 2D outline templates (no round elements, no 3D elements)

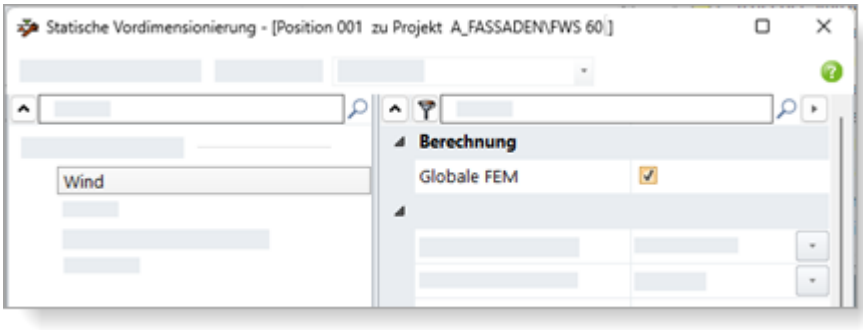
From this version, the calculation of the static pre-dimensioning of the profiles can alternatively be carried out on the basis of a new physical/mathematical calculation kernel. The global finite element method (FEM) is used. In this calculation, the entire element is considered as a three-dimensional spatial framework.

As a result of the static pre-dimensioning, you obtain advanced calculations. For example, this is used to calculate forces in the longitudinal axes (vertical loads) of the posts. In static mode you can see the respective support conditions and reactions in the tooltip for the façade fixings.



Substitution situations are also taken into account.

When you open the *Static pre-dimensioning* dialogue in the *Item window*, you will find the *Global FEM* check box in the *Wind* properties list in the *Calculation* group. This setting is only visible for items for which this alternative calculation method can be used.



- If you do not select the check box, the calculation is carried out according to the previous procedure (calculations as ‘rigid frame statics’).
- If you tick the check box, the calculation will be carried out using the new method.

6.10 Fire and smoke protection (aluminium)

6.10.1 Schüco FireStop ADS 90 FR 90

Frame construction - templates 205 selectable - is available with an activation code.

The system can be selected again for the following templates:

System templates Fire and smoke protection opening inwards and outwards:

- 205 - double leaf Door opening outward + fixed panel top, left and right
- 205 - double leaf Door opening inward + fixed panel top, left and right

6.10.1.1 Sound insulation for automatic door seal

For doors with automatic door seal, a better sound insulation effect can be achieved if the door clearance is reduced from 8 mm to 6 mm and the base profile is additionally sealed (K1022925).

As of this version, you will find the ‘Sound insulation (6 mm)’ check box in the ‘Panel properties’ dialogue below the selection for the door threshold. When you activate it, the door clearance is specified as 6 mm. In addition, you will receive an information message that the base must be additionally sealed. The material for this is not specified automatically.

6.10.2 Schüco FireStop ADS 90 FR 30 and Schüco FireStop ADS 90 FR 90:

Wall connections - screw Art. 205496 replaced by Art. 205081

Fixings previously made with screw Art. 205496 now require screw Art. 205081.

If you have selected a corresponding blind frame fixing in the technical settings under the *Fixing* group, the new screw is specified from this version onwards.

Sound insulation for automatic door seal with butt joint

For doors with automatic door seal and sound insulation, the end faces and hollow chambers of the sealing pad must be sealed with permanently elastic sealing compound for door bases with butt joints. You will receive a message informing you of this. The material for this is not determined automatically.

6.10.3 Schüco ADS 80 FR 30:

Determining the glass unit seal - Technical setting

As of this version, you can influence the determination of the glass system seal via the *Glass unit seal* technical setting (*Glazing* group). The selections apply to glazing type A (normal glazing bead and standard seal).

Please also note for existing items

The standard specification is *Largest possible unit seal*. Check your desired specification for the glass unit seal in conjunction with your settings for the *Glazing bead size* and the glass thickness in the element.

6.10.4 Schüco FireStop ADS systems

Integrated active leaf anticipator (IGV)

Schüco FireStop ADS 76.NI SP, Schüco FireStop ADS 90 FR 30 and Schüco FireStop ADS 90 FR 90 systems

As of this version, for double-leaf doors in full panic with carriers Art. 220450, Art. 220517, Art. 279682, Art. 240508 or Art. 240509, you will find the *Integrated active leaf anticipator (IGV)* property in the *Panel properties* dialogue in the *Door closer / door coordinator* group. If you select the *With IGV* option, item 279874 is specified.

6.10.5 Schüco FireStop ADS 76 NI.SP:

Glazing - Adjusted determination

The determination was adapted to the current glazing table in the order documents (total thicknesses up to 44 mm).

This also required the following changes in the technical settings:

- Amended: In the ‘Glazing bead size’ selection list (Glazing group), the ‘Medium or smallest possible glazing bead’ input is no longer available for selection.

Please also note for existing items

For items with the ‘Medium or smallest possible glazing bead’ selection option, the smallest possible glazing bead is now preset and specified. Check your desired default for the glazing bead in combination with your settings for the glazing bead size and the glass thickness in the element.

- New: As of this version, you can influence the determination of the glass unit seal via the ‘Glass unit seal’ technical setting (Glazing group).

Please also note for existing items

The standard specification is the largest possible unit seal. Check your desired specification for the glass unit seal in conjunction with your settings for the glazing bead size and the glass thickness in the element.

6.10.6 Schüco AWS FR 30 fire protection window

Schüco AWS FR 30 fire protection window: Customer composite not permissible

Schüco AWS 60 FR 30 F30/EI30

Schüco AWS 60 FR 30 G30/EW30

Schüco AWS 70 FR 30 F30/EI30

Schüco AWS 70 FR 30 G30/EW30

As of this version, the composite designation as customer composite (CC) is no longer offered in the item window for profiles in these systems.

Please note:

In existing positions, the composite designation of profiles is automatically changed to Schüco composite (SC) if they were previously designated as customer composite (CC).

6.11 Security systems

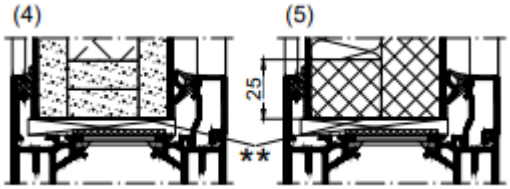
6.11.1 Schüco FireStop ADS 90 FR 30

New panel templates

You can select new panel templates in the *Glass and panel* dialogue.

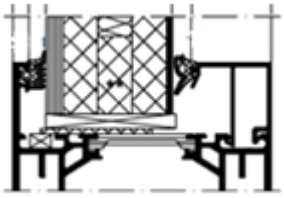
1. Two new panel templates corresponding to types (4) symmetrical and (5) asymmetrical in K1029558.

- *Symmetrical panel 59 mm - UP 0.658 - F30*
- *Asymmetrical panel 59 mm - UP 0.726 - F30*



2. Two panel templates for panel with glass pane on the outside and aluminium or steel sheet on the inside in accordance with Ordering and Production Catalogue 3-4 (04.2024) B5-15.

- *Fire protection panel with 6 mm toughened safety glass - Promatect-H - 2 mm aluminium sheet*
- *Fire protection panel with 6 mm toughened safety glass - Promatect-H - 1 mm sheet steel*



6.11.2 Miscellaneous safety systems:

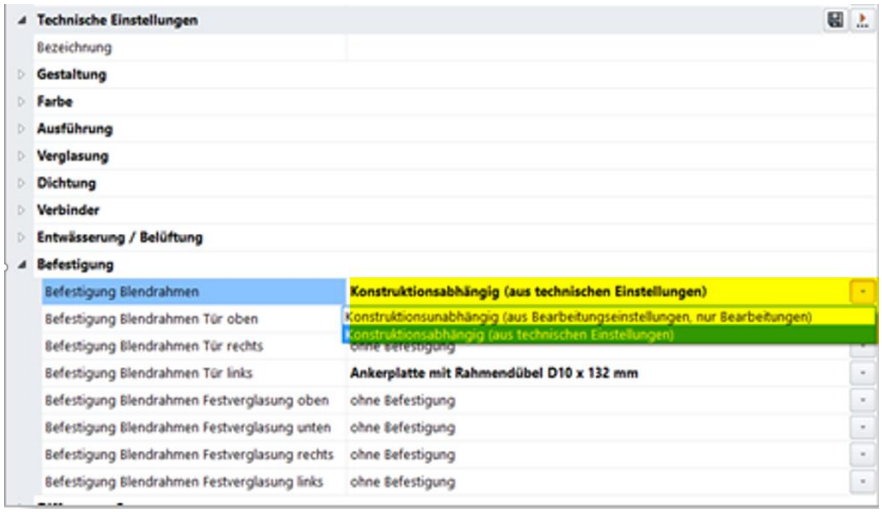
Frame fixings - Determining fixing accessories

As of this version, you can determine whether, and if so, which fixing accessories are to be specified for the frame fixing.

You will find suitable setting options for this in the technical settings of the new *Fixing* group. In principle, you first decide which settings are to be evaluated:

a. *Construction-independent (from processing settings, processing only)*:
As in the previous versions, the determination for machine processing follows according to your settings for the variant in the processing settings. No fixing material is specified.
This is the default setting in the master data.

b. *Construction-dependent (from technical settings)*:
You can select the desired fixing material directly in the technical settings from a selection list. The material is determined and the appropriate processing operations are generated for the machine processing.
Some of the fixing material is created as an article template. If the material is to be taken into account for costing purposes, you must supplement the item data in the master data accordingly.



The settings are possible for the following systems:

Schüco FireStop ADS 76.NI SP	Schüco ADS 80 FR 60
Schüco FireStop ADS 90 FR 30	Schüco ADS 80 FR 30
Schüco FireStop ADS 90 FR 90	
	Schüco AWS 60 FR 30 F30/EI30
Schüco ADS 65.NI SP	Schüco AWS 60 FR 30 G30/EW30
Schüco ADS 65.NI FR 30 EW30	Schüco AWS 70 FR 30 G30/EW30
Schüco ADS 65.NI FR 30 E30	Schüco AWS 70 FR 30 F30/EI30

6.12 Technical settings and processing settings

6.12.1 Schüco ADS 80 FR 30 and Schüco ADS 80 FR 60:

Fixing holes - New variants 5 and 6

For blind frames in the system, two new variants can be selected in the processing settings for the fixing hole.

- Variant 5: 13-mm continuous hole and on wall side 3.2-mm hole (drill pattern for anchor plate)
- Variant 6: 7.5 mm continuous hole

6.12.2 Schüco FireStop ADS 90 FR 90:

New options for fixing with roller door hinges

As of this version, according to the extended approval for doors with roller hinges, the fixing can also be generated above and below the roller door hinge.

In the processing settings, you will find the new *Design for roller door hinge* property in the *Fixing holes* group. There, you determine whether the fixing is to be generated centrally to the hinge or above and below the hinge.

6.12.3 Firestop T90/F90:

Fixing hole variant 3 not applicable

- For blind frames in the system, variant 3 could be selected in the previous versions in the processing settings for the fixing hole. This variant is no longer available for selection.

  Please note:

- For existing positions with this specification, no fixing hole is generated as of this version.

Innovations in the JANIsoft 2024 R1
English

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Table of contents

1 Important notes

The innovations and changes are described in general terms. The availability of the systems, materials and functions depends on your level of expansion of the program.

Please also see the notes in the cover letter for the version, which can be found as a PDF document in the program directory ...\"ServiceDesk\Documents" in PDF file format.

The cover letter concerning changes to the version that will be included with future service packs can be found in the menu ribbon via *General* > *Help* > *Program information* > *Service Pack XY* > *Details*.

If you have any questions about further innovations in the version, please contact the relevant JANIsoft licence agreement partner.

Software licensing via CodeMeter

Licensing for JANIsoft now takes place with digital licences. This method can be used to create the licensing for single as well as server licences.

S-CAD licences

Autodesk has generally switched from floating licences or ‘unnamed’ licences to ‘named’ or individual licences.

Due to this general rule, we are no longer able to offer S-CAD licences as a floating network solution.

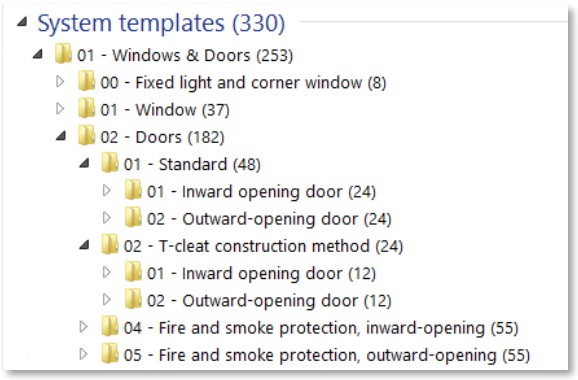
We hope you continue to enjoy using our Jansen software.

2 General program changes (across design types)

2.1 Projects and items

Select template dialogue: Selection of system templates for doors

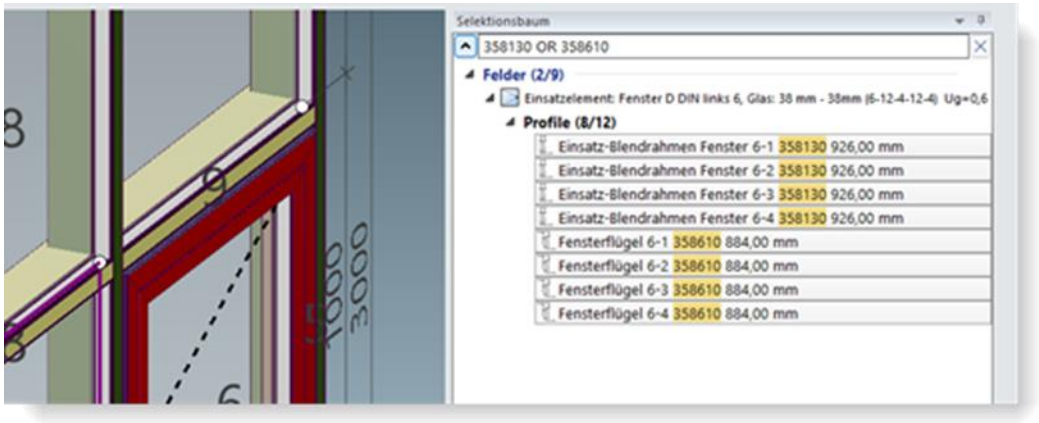
In the *Select template* dialogue, the system templates in the folders *01 - Door (inward opening)* and *02 - Door (outward opening)* have each been moved to new subfolders *01 - Standard*. New system templates have been added to the folders for the *02 - T-connector design* (only valid for the Schüco AD UP 75 and Schüco AD UP 75 BL systems).



2.2 Working in the item window

Selection tree – keyboard navigation

You can use the selection tree in the item window to select one or more element components. From this version onwards, this tree structure can be navigated using the keyboard. The search function in the search bar has also been improved. For example, you can now link individual terms with Boolean operators (AND, OR, NOT, etc.).



2.3 Program help

New: Program assistance in French

In the *User settings* dialogue (*User interface* group), French can now be selected as *Language of the help* in addition to German and English.

→ User settings dialogue

2.4 Calculation:

Material overheads and glass overheads:
Specific input for suppliers

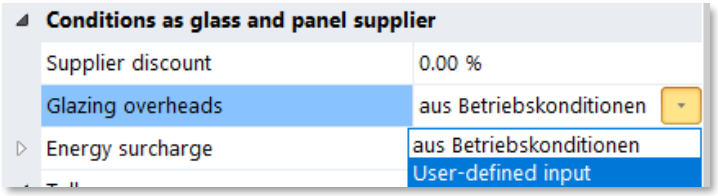
In the previous versions, it was only possible to input a general percentage for glass overheads and material overheads in the *Operating conditions* dialogue. From this version onwards, you can enter a specific percentage per supplier (item suppliers and glass and panel suppliers) if required.

The following changes have been made in the program for this purpose:

Material overheads

- In the master data, you will find the new property *Material overheads* under the conditions for each discount group in the *Contacts* dialogue for item suppliers. The *From operating conditions* input is pre-set in the selection list. This adopts the value you entered in the previous versions in the *Operating conditions* dialogue. If you select the *User-defined input* instead, you can enter a special value for the respective discount group of the item supplier.
- Your specifications for the item supplier are transferred from the master data to the projects on a project-specific basis. In the *Project properties list* of the project window, you can adjust this information again in the item supplier conditions if necessary.
- Material overheads are taken into account in the importing and exporting conditions.

Glass overheads



- In the master data, you will find the new property *Glass overheads* under the conditions in the *Contacts* dialogue for glass/panel suppliers. The *From operating conditions* input is pre-set in the selection list. This adopts the value you entered in the previous versions in the *Operating conditions* dialogue. If you select the *User-defined input* instead, you can enter a special value for the glass/panel supplier.
- Your specification for the glass/panel supplier is transferred from the master data to the projects on a project-specific basis. In the *Project properties list* of the project window, you can adjust this information again in the conditions of the glass/panel supplier if necessary.

Please note that changes in the master data in the *Contacts* dialogue are only applied to new projects. If the overheads are to apply to a project that has already been created, you must enter the overheads in the project window in the *Project property list*. If necessary, you should also adapt your blocks saved, if any, for your system conditions.

2.5 Element processing

Deduction dimensions for door leaf height:
correction for single-leaf doors

If values for *Deduction dimension door leaf width* and *Deduction dimension door leaf height* are specified in the technical settings at the same time, the deduction dimension for the height was not taken into account. This has been corrected in this version.

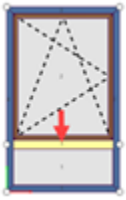
Please note:

the changes affect your existing items if you have specified this combination in the technical settings.

2.6 Static pre-dimensioning

France:
calculation of a point load for window transoms

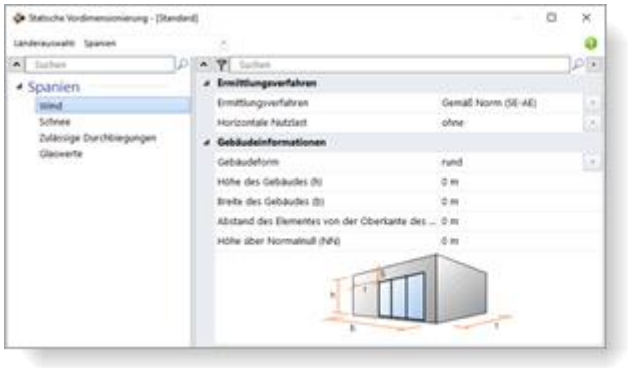
From this version onwards, a vertical point load (live load) of 1.0 kN is calculated on area-dividing transom profiles below a window opening.



Checked according to the permissible deformation for *Transom in Y direction*. This additional load combination is listed in the *Static pre-dimensioning* list and in the *Load combinations* dialogue.

New: 'Spain' country selection

From this version onwards, static pre-dimensioning can be carried out in accordance with the applicable standards for Spain. To do this, go to the dialogue *Static pre-dimensioning* and select the entry *Spain* in the *Country selection* list.



Allowable deflections of profiles:
façades - renaming of calculation procedures

Dialogue Static pre-dimensioning, settings for allowable deflections:

The following texts in the calculation procedure selection list have been renamed, the calculation in the program is not affected by this renaming.

For Germany:

Old		New
DIN EN 13830:2015 (not introduced in Germany)	=>	DIN EN 13830:2015+A1:2020

For *Direct entry* and all other countries (except Belgium and France):

Old		New
EN 13830:2015	=>	EN 13830:2020

2.7 Show profile section / Element view

Show profile section / Element view dialogue:
glass labelling

In the *Profile section - labelling* group, you could determine via the *Glass / Panel* check box in the previous versions whether glass should be labelled with the designations of the film types and glass types. The option only had an effect if the *Glass / Panel* check box was activated at the same time in the *Profile section - dimensioning* group.

As of this version, this dependency no longer exists. In the *Profile section - labelling* group, you will now find two check boxes: *Glass / Panel (dimensions)* and *Glass / Panel (details)*. If you activate only *Glass / Panel (dimensions)*, the dimensions are listed. If you also activate *Glass / Panel (Details)*, the designations of the film types and glass types are listed.

2.8 Glass / Panel

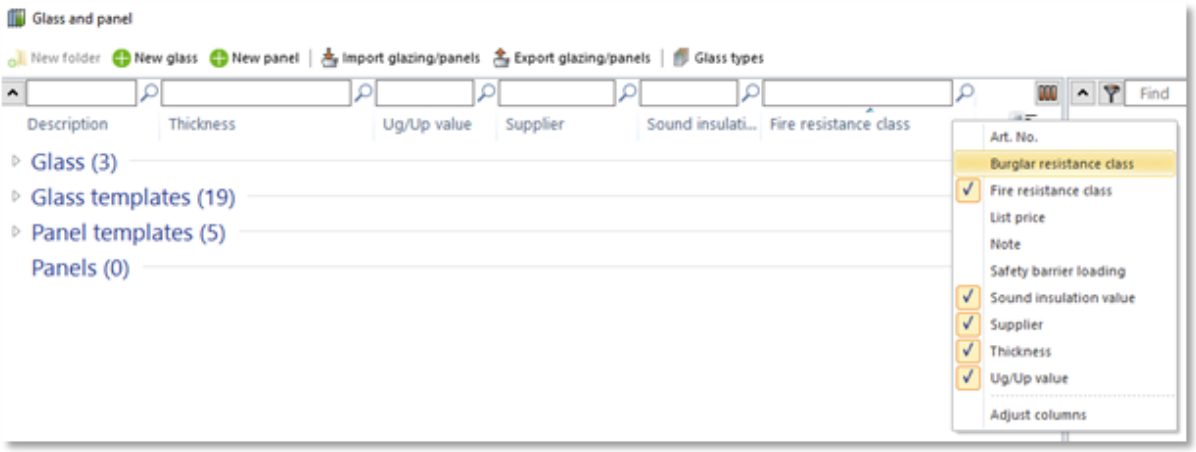
Glass and panel dialogue

New filter options for glass

In the *Glass and panel* dialogue, the following additional columns can be displayed in the detailed view of the glass and panel list from this version onwards.

- Fall protection
- Burglar resistance class
- Fire resistance class
- List price
- Sound insulation value

In the master data and when loading glass in projects and items, glass with the desired properties can be filtered out via these columns.



→ About glass and panel

Panel structure

In previous versions, it was possible to enter the panel thicknesses of the individual panes (outer, inner, centre) to one decimal place. In the program, these entries were displayed correctly with decimal places, for example in the quick info or in the profile section. In the output lists, however, the panel structure is listed without decimal places.

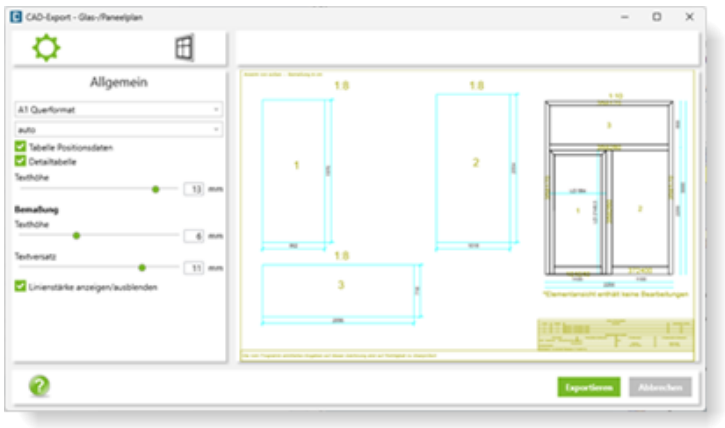
From this version onwards, entries with decimal places are rounded to full millimetres (rounded down until 0.4, rounded up from 0.5).

> **Please note:**
>
> This change also affects panels that have already been entered. In the program, these entries were rounded, for example in the quick info or in the profile section.

2.9 CAD export

CAD export of glass and panel composition: New dialogue with drawing preview

From this version, the new *CAD export - glass and panel composition* dialogue opens for exporting glass and panel compositions. It allows you to see what the transferred drawing will look like even before you start the export.



The tabs in the dialogue allow you to specify what is to be exported and in which view the transfer is to take place. The result of your settings is displayed in the preview area at the same time.

There are also new options for the CAD export of glass and panel compositions:

- Choice of glass/panel dimensions in millimetres or centimetres.
- For door panels covering both sides of the leaf, the panel sections can be shown separately as an option.

2.10 CE marking

CE marking, declaration of performance, CE label printing:
Not applicable to doors in indoor applications

Doors falling under the *Indoor application* area of application must not be CE marked according to EN 14351-1.

Therefore, from this version onwards, no CE marking, declaration of performance or CE label will be issued for doors in interior applications until the appropriate standard is introduced.

CE marking, declaration of performance:
modifications

Text modifications (CE marking, declaration of performance)

In the program interface, some texts have been adapted to the legal requirements. For example, in addition to minor wording changes, only the technical class is now specified for the *Air permeability* service (the exact details of the maximum test pressure and the reference air permeability are omitted).

In addition, the intended use for standard windows, standard doors and sliding elements has been renamed. Instead of *Aluminium element for commercial and private buildings* it is now called *Construction product(s) for windows (including roof windows) and external doors according to section 1. Intended use(s) for connections in residential and non-residential construction*.

Changes to the issue list (CE marking)

The following adjustments to the legal requirements were made in the issue list.

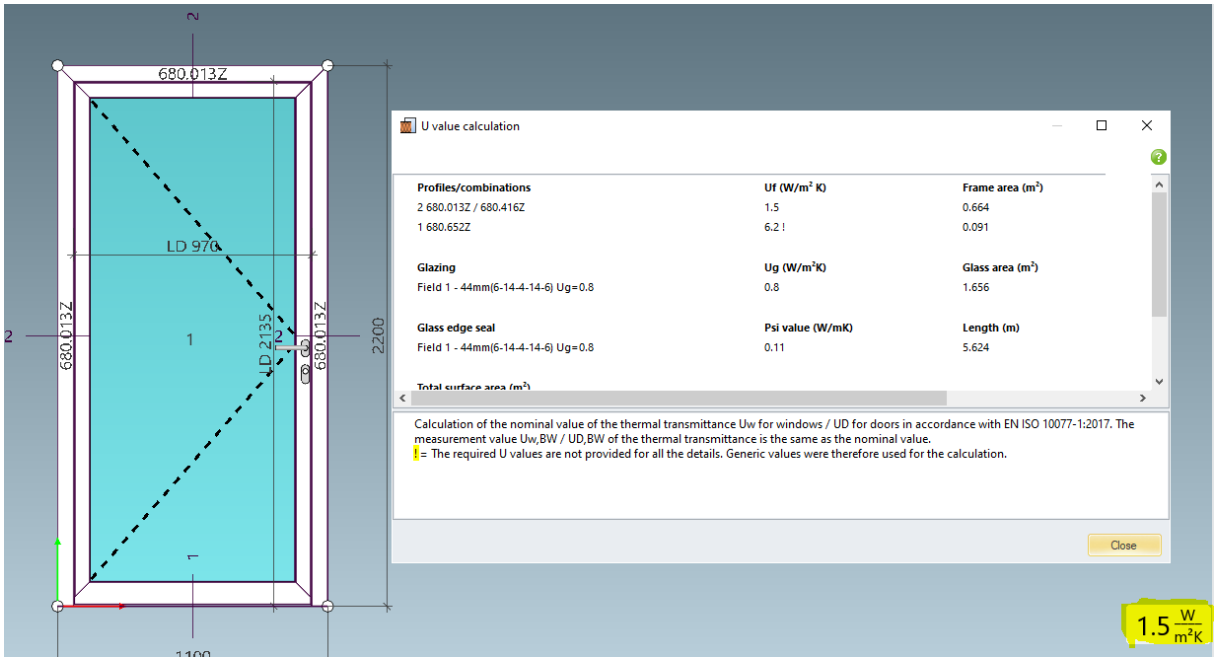
- The Notified Body (for constancy of performance assessment systems 1 and 3) and the unique identification code of the product type are issued.
- The project number, project name, item number, item name and field are omitted.

2.11 U-value determination

Output despite non-calculated sections:
As of version 2024 R1, the U-values are calculated again for each system, even if a section was not found in the calculation database. A profile combination with the worst system value is assumed.

Double-click on the U-value to display the section. An exclamation mark indicates that an information message will appear if a profile combination with the worst value is assumed.

By right-clicking on the profile cross-section, the correct U-value can be adjusted via the ‘Change U-value’ menu. When all missing sections have been processed with this, the new U-value total for the element is output.



3 Machine control

3.1 Processing mode / Group:

- Grouping processing operations via context menu entry
- From this version onwards, individual processing operations can be grouped together in a processing group in the case of multiple selections via the new ‘Group’ context menu item.

3.2 Processing mode / Zero point:

- Adding processing groups with the saved zero point
- In the previous versions, saved processing groups could already be placed on a profile via the ‘Add processing groups’ context menu item. A desired insertion point on the profile must first be defined in a submenu.
- As of this version, processing groups can optionally be added without redefining the zero point. The processing group is then added with its saved zero point. You will now find the appropriate entry in the submenu.
- Work with your own processing groups

3.3 Processing mode / Series processing

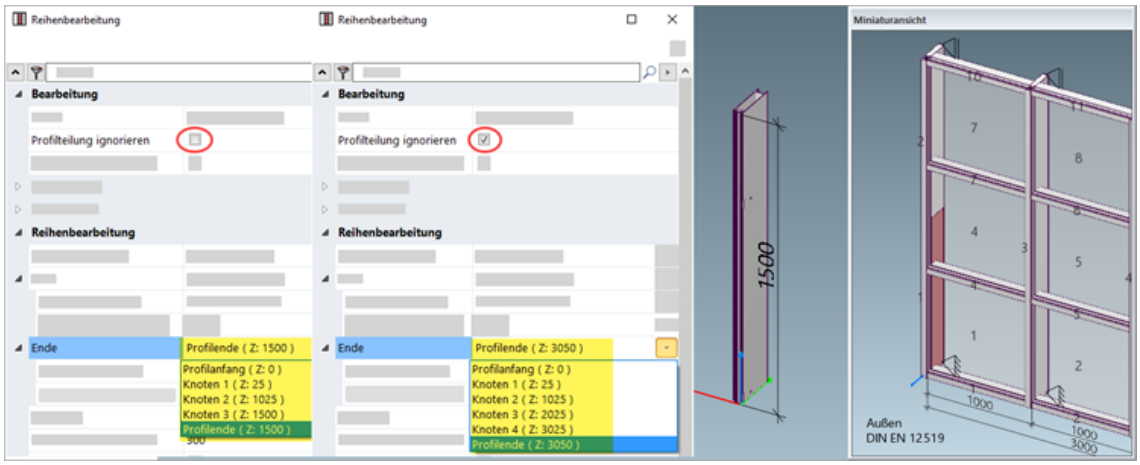
Limit series processing to the profile divisions in the case of sub-profiles

For frame profiles (also frame profiles of insert elements), divisions can be carried out in the element view via the *Add profile division* context menu item. If you divide a profile via this function, a new node (profile division node) is created.

As of this version, you will find the new *Ignore profile division* property for new series processing operations.

a. If you activate the check box, series processing is generated on all sections of the profile. For processing groups type 3 and type 4, all nodes can be selected as *End*, but not the profile division nodes. The end of the overall profile can be selected as *Profile end*.

b. If you do not activate the check box, the profile division node is taken into account and series processing is only generated on the selected part of the profile. For processing groups type 3 and type 4, the profile dividing node can be selected as *Profile end*.



Please note:

Series processing operations recorded with the previous versions remain unchanged. The *Ignore profile division* check box is not available for selection for these series processing operations.

Series processing - new type 5: Node by node

From this version onwards, you can select the new *type 5: node by node* for series processing. The start and end coordinates can be created as per type 3 (without differential dimensions and formulae). As settings, you can specify *Distance to node*, *Maximum distance* and *Maximum number of nodes*.

3.4 Processing mode / Formulae

Formulae referring to the cutting angle of the profile

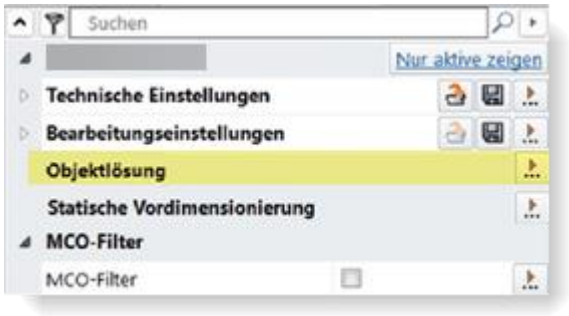
In the formula editor of the processing mode, the new variable cutting angle is offered from this version on. When specifying the coordinates for the insertion point of processing operations, you can combine this variable with the trigonometric **variables sin, cos, tan** and thus enter formulae including the respective cutting angle**.**

3.5 Working with project solutions

For special project solutions, the project office will assist you with project-specific profile processing. This requires a special configuration in the program.

Working with such a project solution is made easier from this version. If you receive a special ZIP file, this can be imported into the program. For the profile system concerned, you can then select which processing is to be applied to the profiles in the respective items.

In the Settings tab (Engineering / Processing) of the item window, you will find the Project Solution group below the Processing Settings group. In the associated selection dialogue, you determine which processing is to be determined for the profiles (system default or the processing specifically provided via the ZIP file).



Please note:

This group is only visible if a corresponding ZIP file is available for the selected system.

4 Static pre-dimensioning

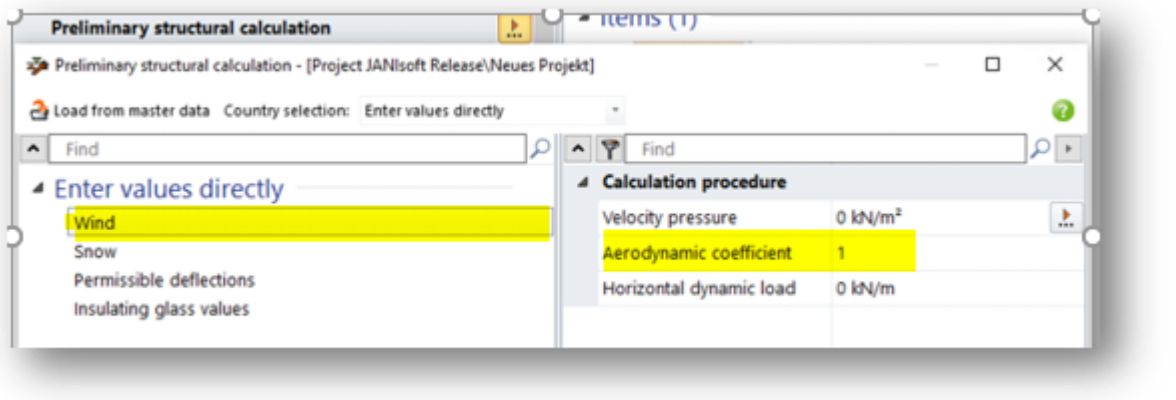
4.1 ‘Wind’ determination process

Changed default values for aerodynamic coefficient.

The standard specification for the aerodynamic coefficient has been changed from **0** to **1**.

The new default value is automatically changed in the master data if you have not already changed the previous default value. In the project and item-specific settings for projects and items already created, the value remains unchanged.

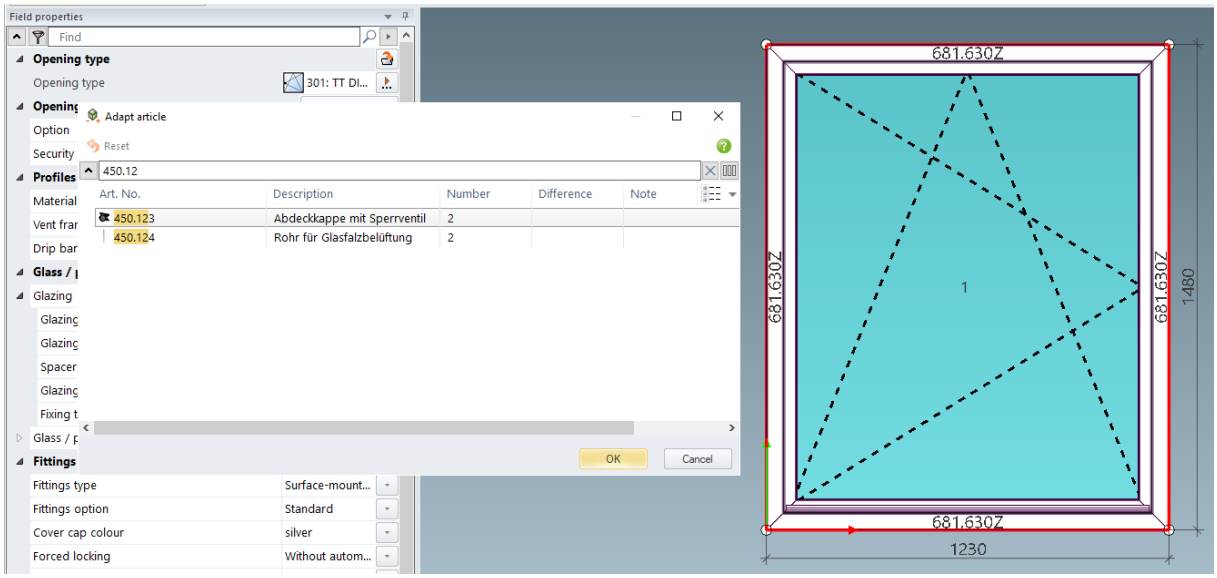
Please check your defaults in the master data and in the project- and item-specific defaults.



5 Steel systems construction type

5.1 Janisol HI glazing rebate ventilation determination

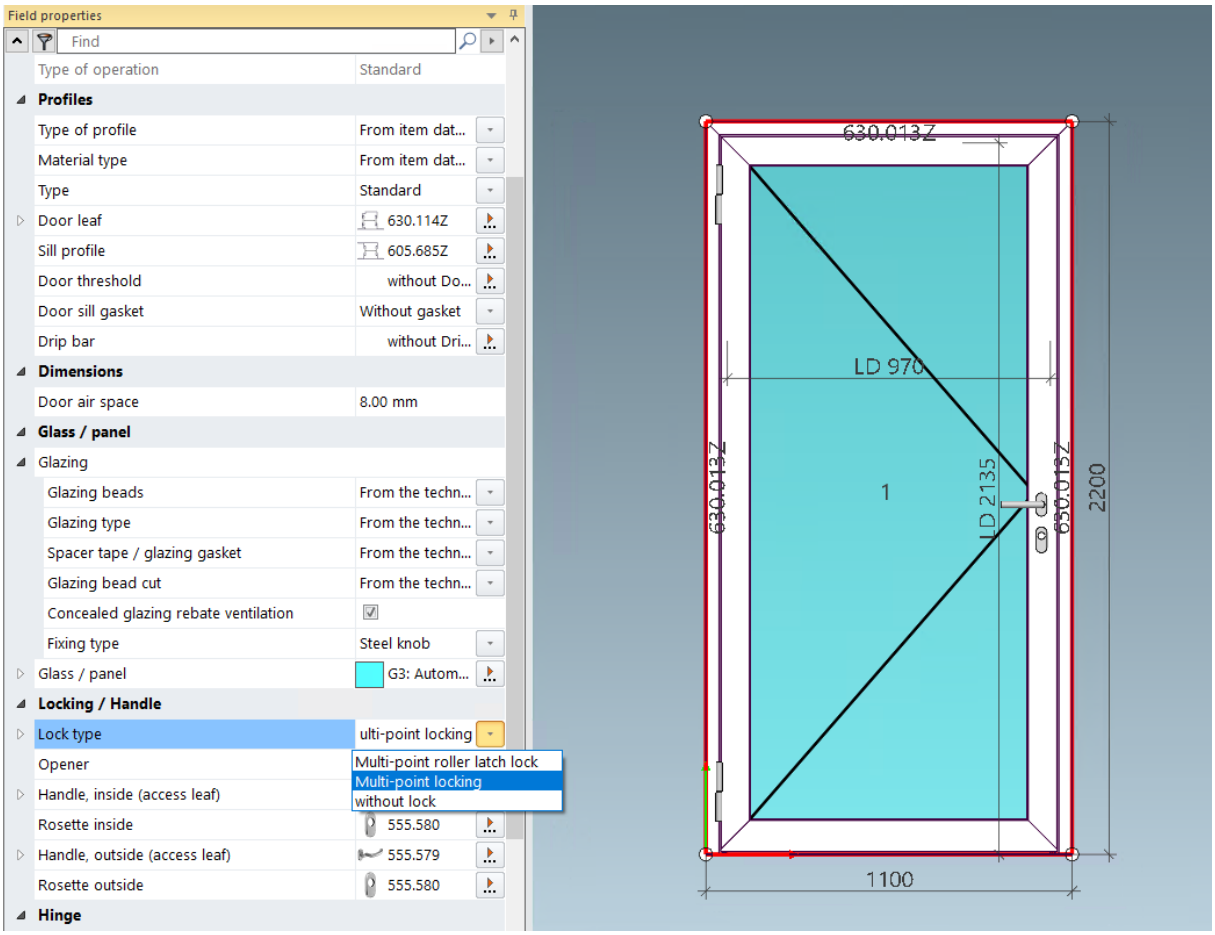
From version 2024 R1, new glazing rebate ventilation in the Janisol HI system is determined in accordance with the documentation.



5.2 Janisol RC2 Doors expansion

Extension of RC2 fittings for Janisol doors. Lock extensions with locks without multipoint locking

- Bolt lock
- Bolt lock with additional top lock
- Roller latch lock

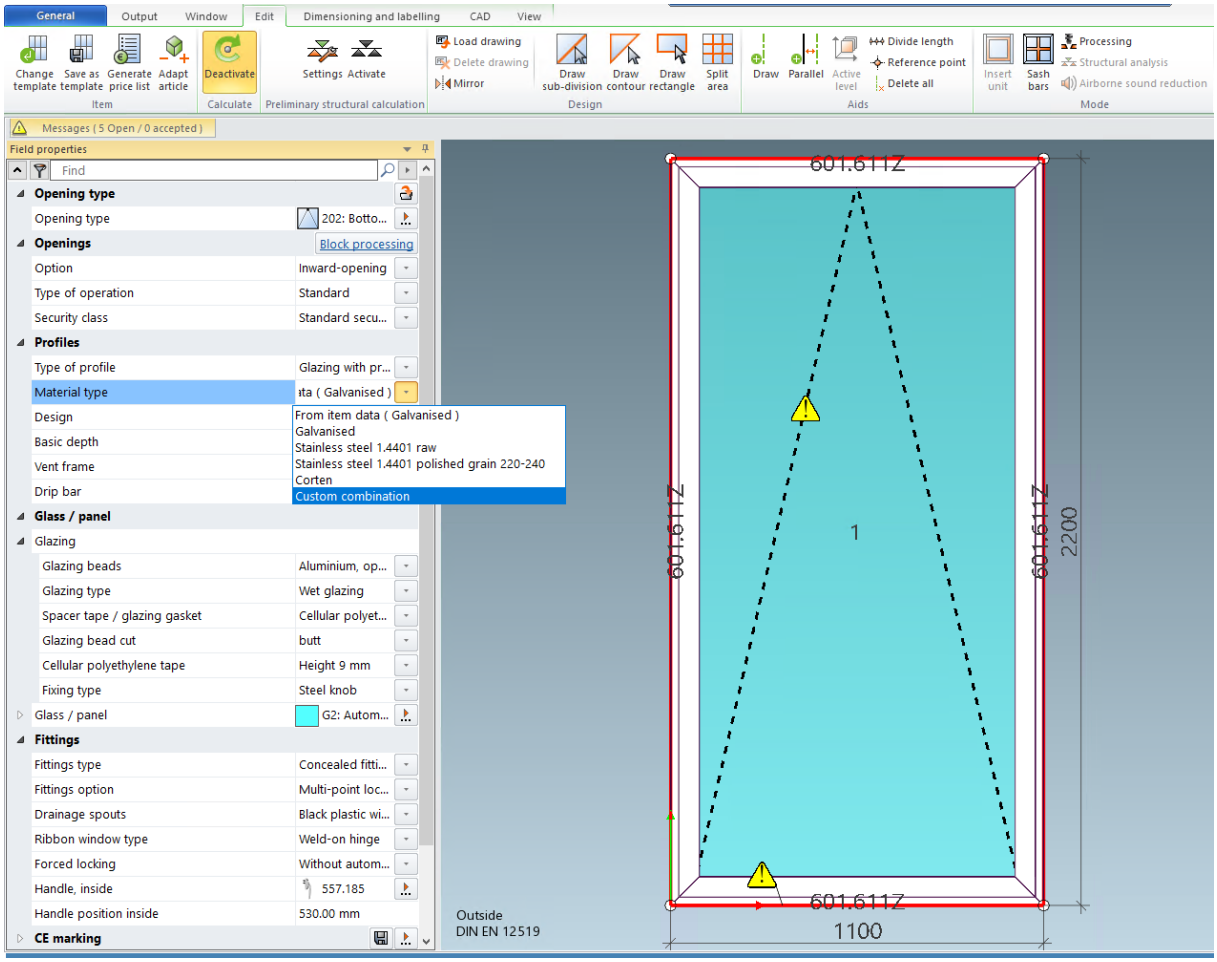


5.3 Janisol Arte 2.0 / Arte 66 MCO

From version 2023 R1, the release of machine control MCO for Janisol Arte 2.0 / Arte 66 is available for all window solutions (turn, tilt-turn, tilt-before-turn, pivoting sash windows) and French windows. Processing for the Janisol Arte 2.0 door will be delivered with the coming updates.

5.4 Janisol Arte: Stainless steel surface .03

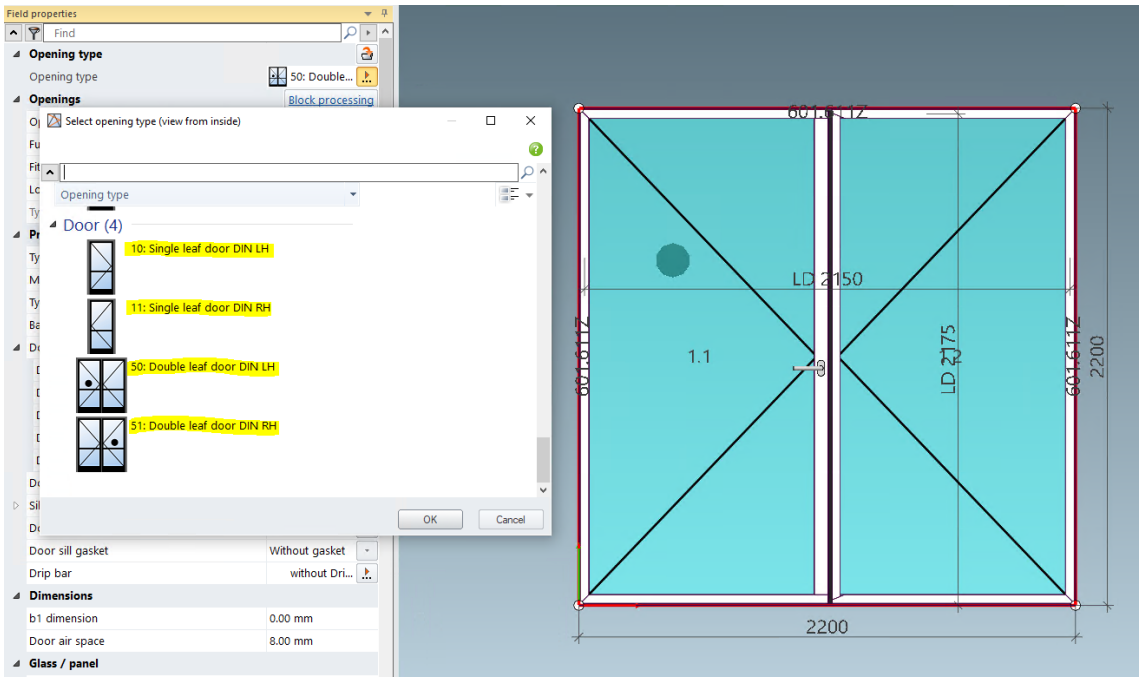
As of version 2023 R1, it is possible to enter elements with material type stainless steel 1.4401 polished grain 220-240.



5.5 Janisol Arte 2.0 doors - basics

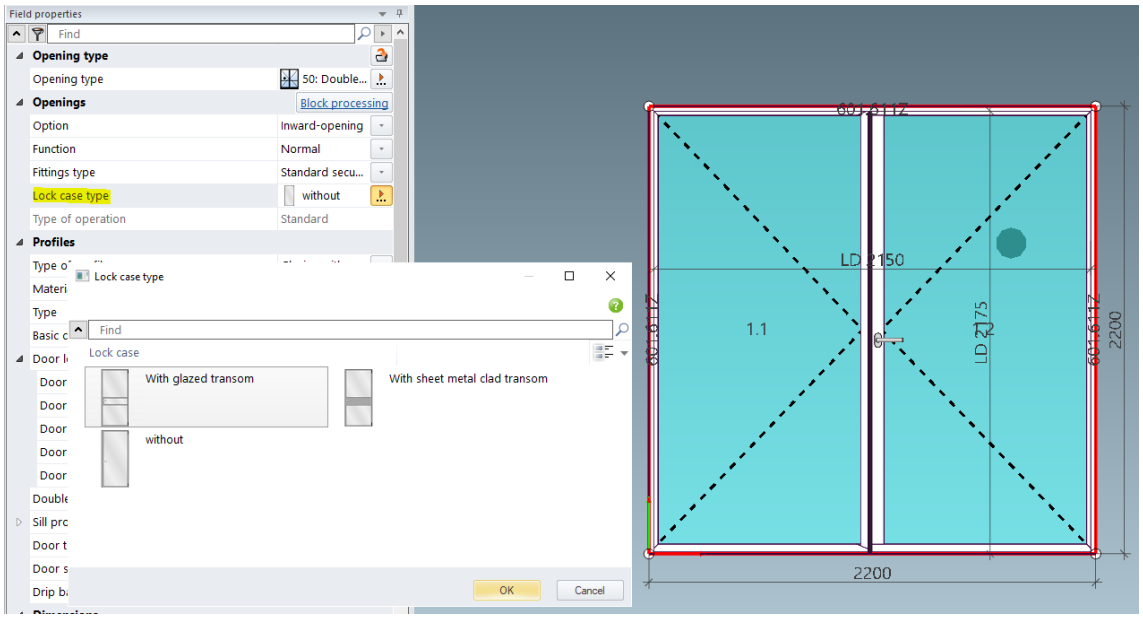
Arte 2.0 door

- Calculation of the Arte 2.0 door with opening types 10, 11, 50, 51
- Extension of ‘sheet metal clad bolt’ lock case type



Lock case variants

- ‘Glazed with bolt’ lock case type
- Extension of ‘sheet metal clad bolt’ lock case type

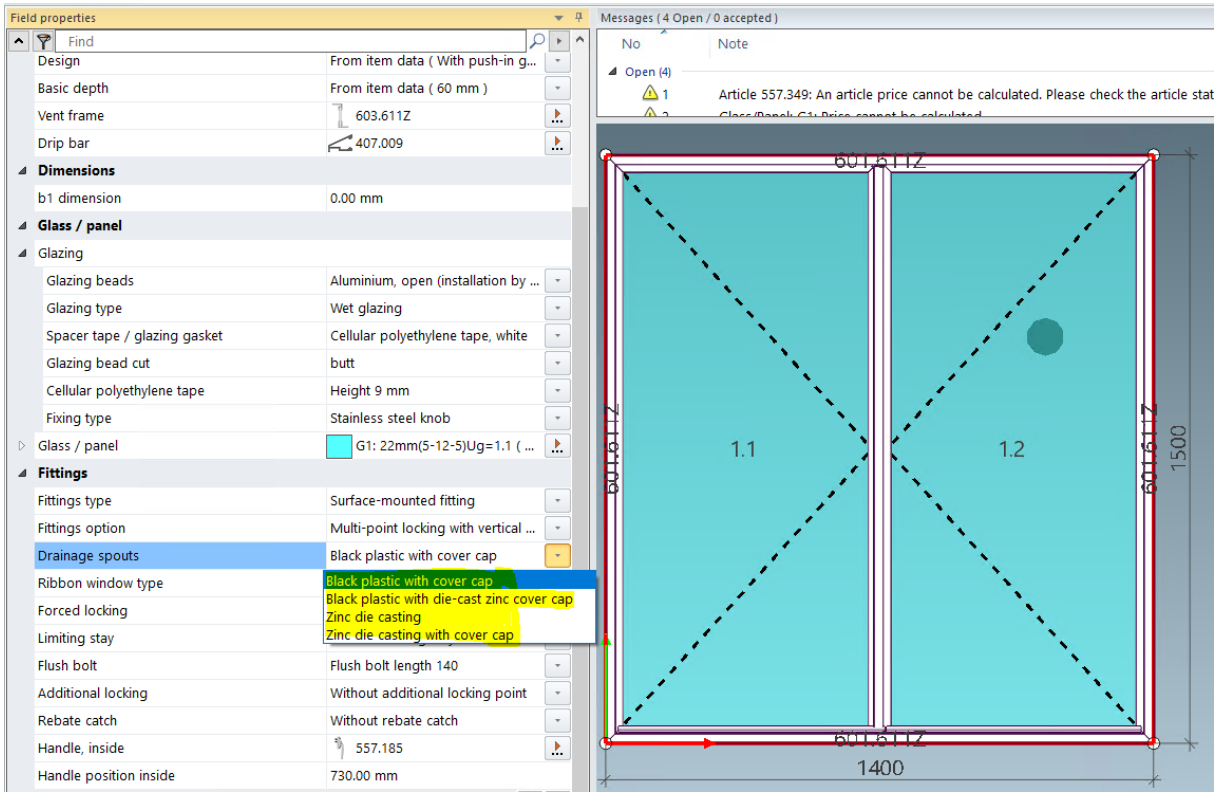


5.6 Screw 557.164 replaced by screw 557.349

As of this version, screw 557.349 has been replaced by 557.164. This concerns the window fitting determination of the additional locking 557.172 and gear extension 557.188 for the Janisol Arte 2.0 system.

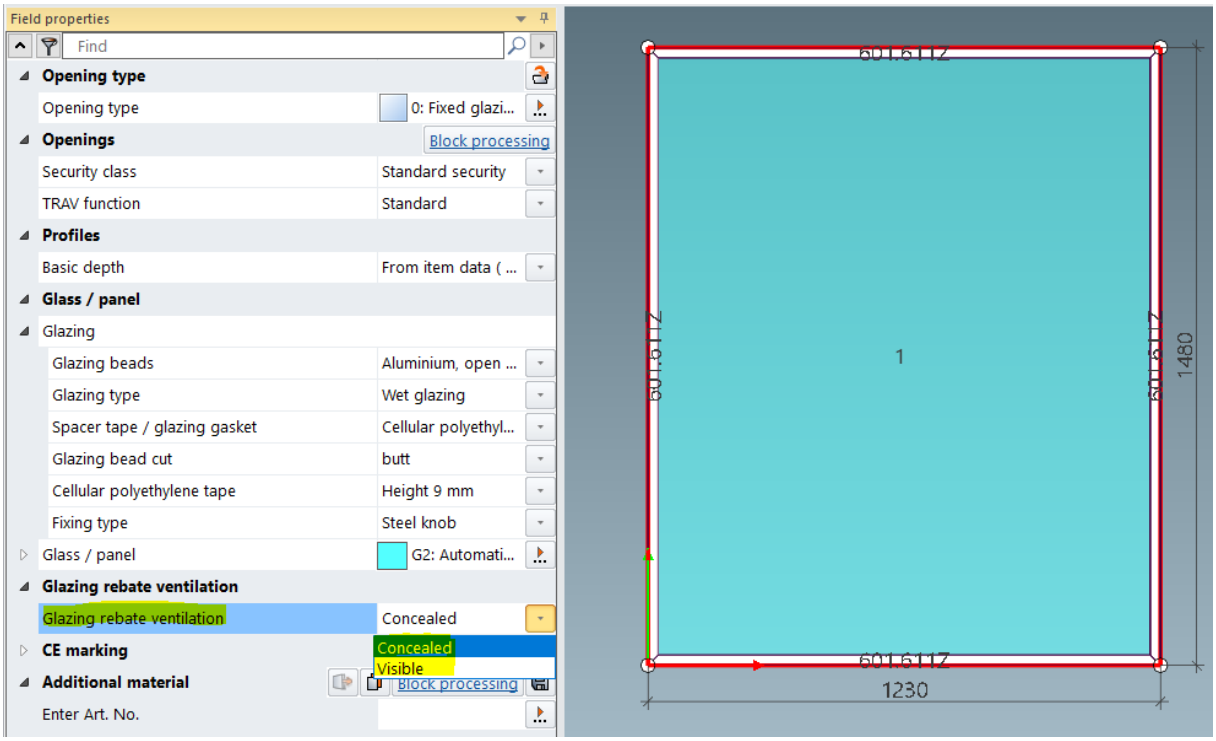
5.7 New switch control for drainage spouts

As of version 2023 R3, the drainage setting can also be made in the Panel properties. This applies to the Janisol Arte 2.0 & Arte 66 systems.



5.8 New control system for glazing rebate ventilation

From version 2024 R1, it is possible to select ‘visible’ / ‘concealed’ glazing rebate ventilation in the Janisol Arte 2.0 system by means of the dialogue box. Depending on the selection, different drainage articles are determined.



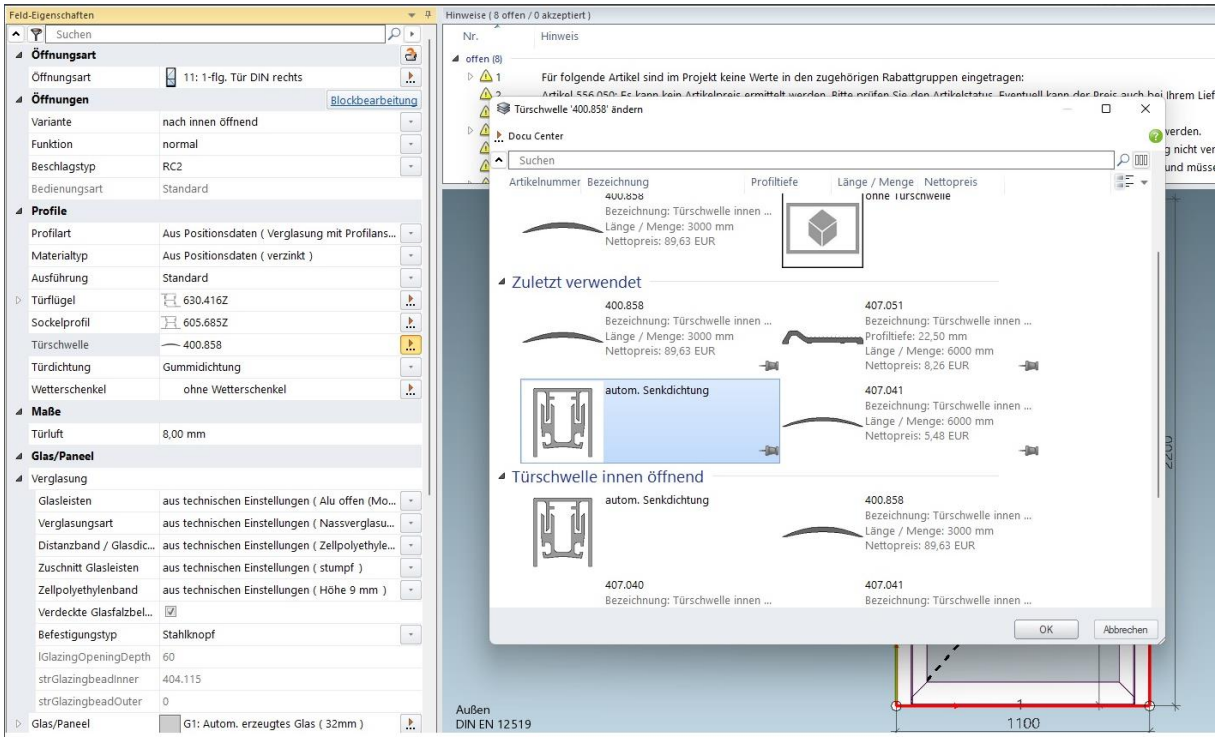
5.9 Revision of steel doors gasket selection

Automatic floor seal - selection moved

Floor seal moved to new door seal dialogue control

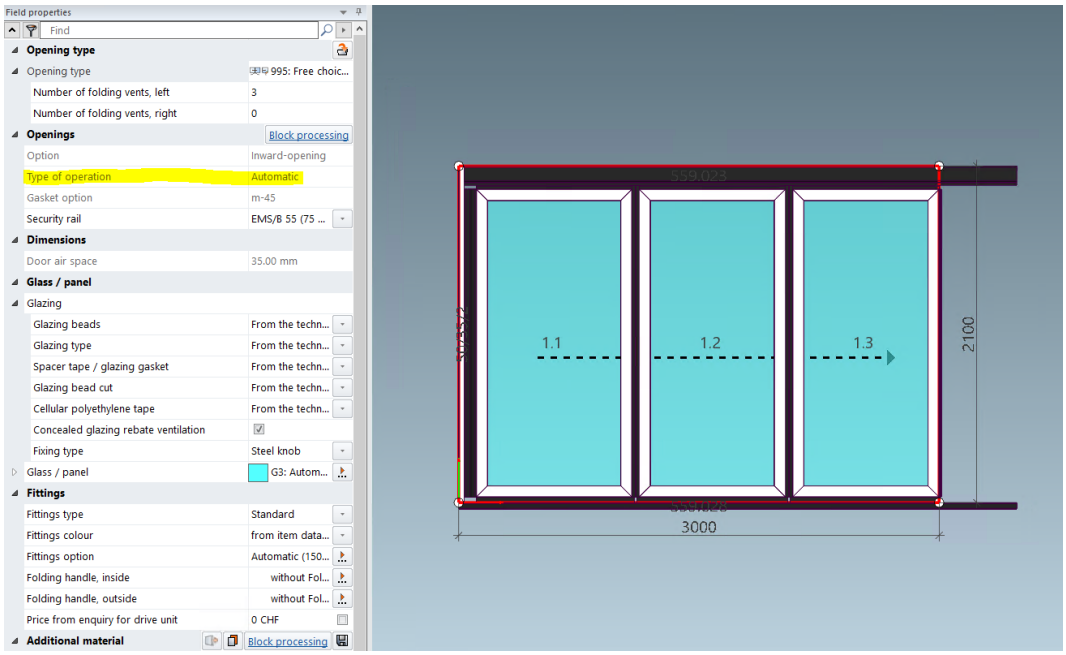
With this procedure, the automatic floor seal is released from the threshold selection and moved to the new door seal selection.

This should help to use the floor seal in combination with door thresholds (half-round thresholds).



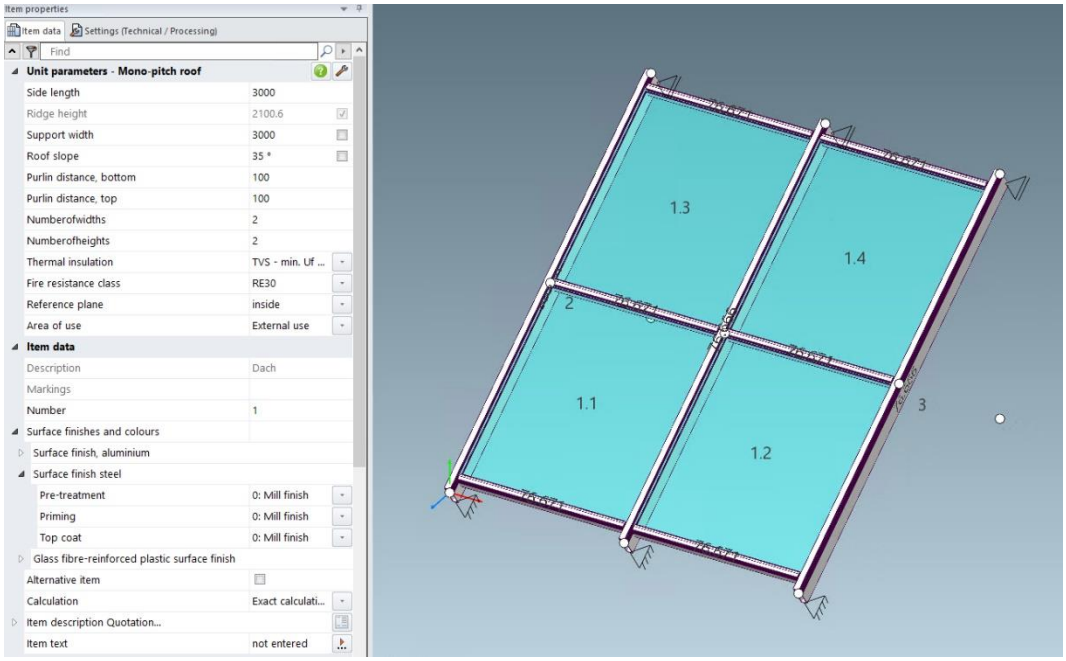
5.10 Jansen automatic folding/sliding door

The calculation of automatic folding/sliding doors is included.



5.11 VISS Fire Roof extension

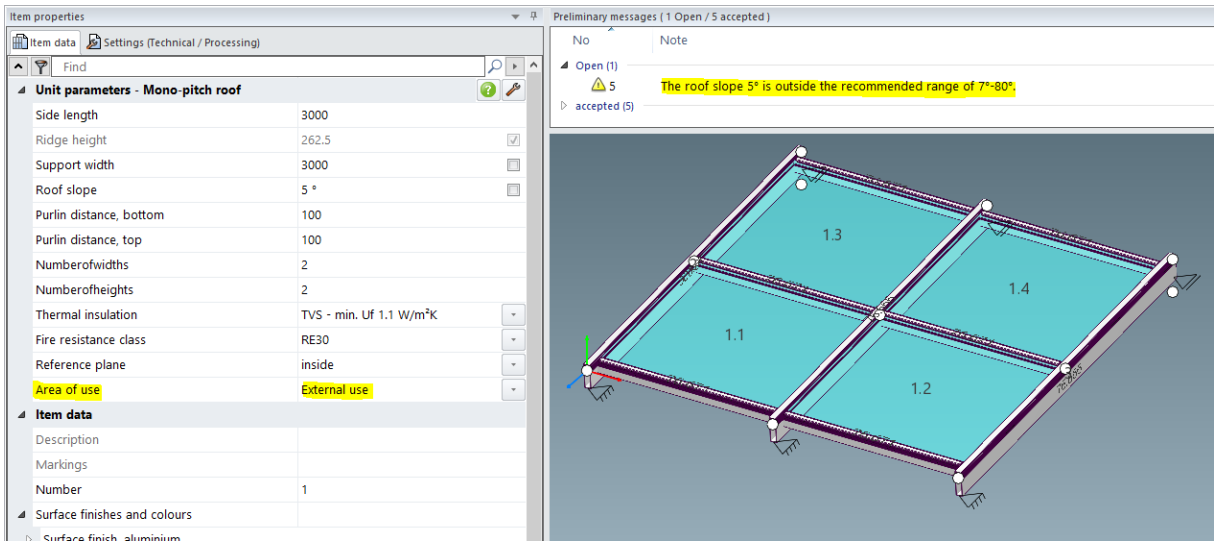
With the extension of the VISS Fire roof system, more elements can now be included in the rafter area. The validation and determination of the rafter elements must be implemented depending on the fire protection class and shape of the roof.



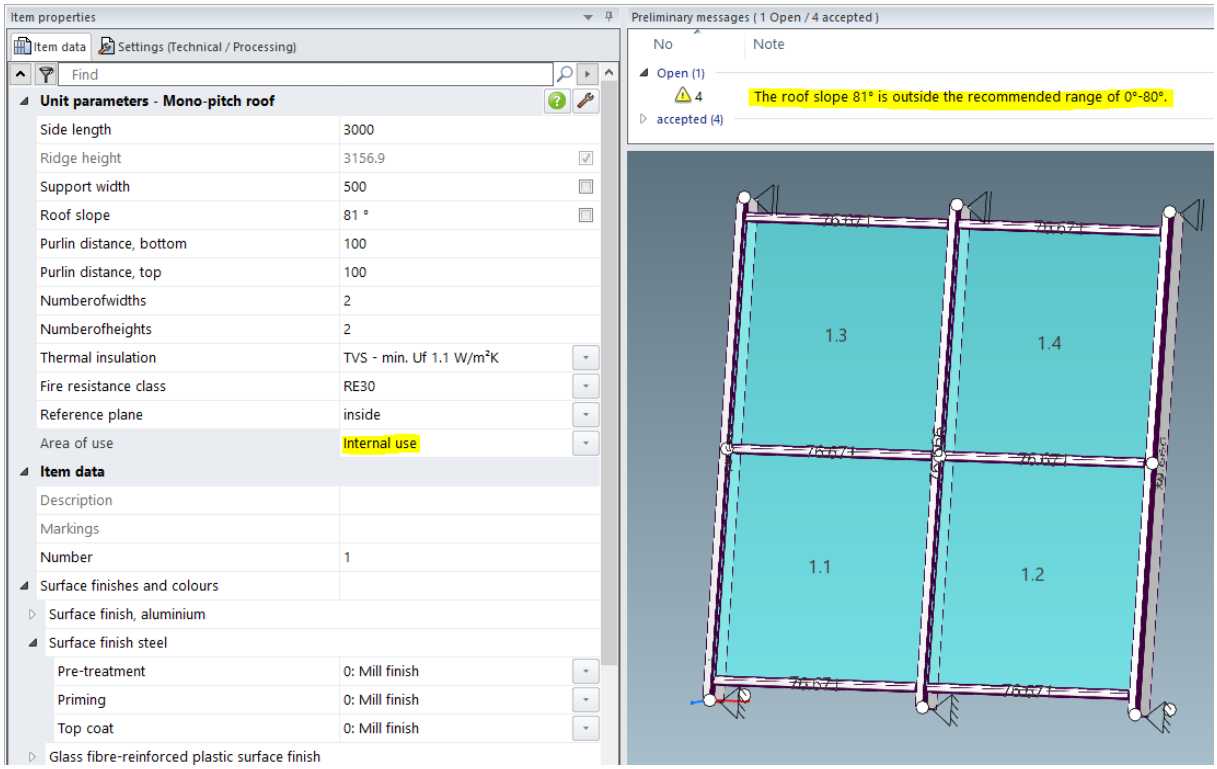
5.12 VISS Fire Roof – roof pitch

From version 2024 R1, the adapted information messages on the roof pitch appear. The roof pitch can be built lower due to the newly passed tests, which is why the information has changed.

Roof pitch – external application



Roof pitch – interior application



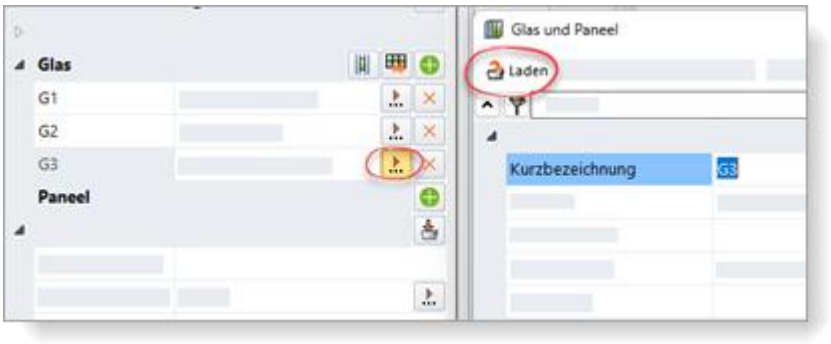
6 Aluminium construction type

6.1 General

6.1.1 Projects and items

Project glass panes and project panels:
changes when loading glass panes and panels

All glass panes and panels that are specifically used in a project are clearly labelled with an abbreviation. This abbreviation is always pre-assigned by the program whenever a glass pane or panel is used in a project. The abbreviation can be changed if necessary.



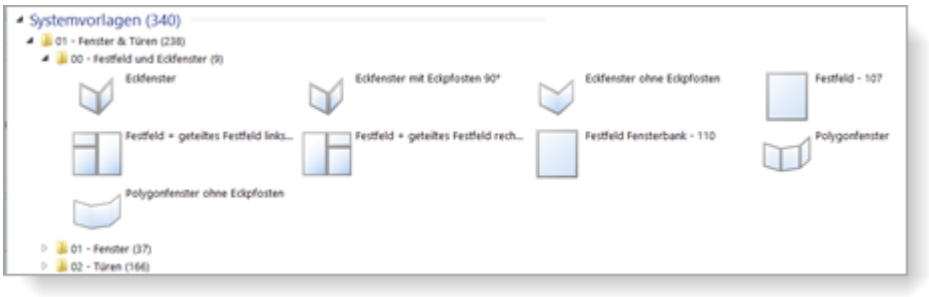
You can use the *Load* feature to change the data of the currently edited project glass pane. You can load the data of a glass pane from the master data or the data of a project glass pane already in use. Please note the following changes to this feature:

- In previous versions, when *loading* a project glass pane that was already in use, the abbreviation of the loaded glass pane was also used. This allowed you to replace one project glass pane with another project glass pane.
- As of this version, the abbreviation is no longer loaded when a project glass pane is loaded. The data is only loaded into the existing project glass pane. It is therefore no longer possible to replace project glass panes in this way.
- To replace an existing project glass pane with another existing project glass pane, use the new *Replace project glass pane with* action button from this version onwards. With this new method, you can only select from existing project glass panes. A selected project glass pane is transferred with all data including the abbreviation. It is not possible to edit this data in the *Glass pane and panel* dialogue.

The changes also apply to loading project panels in the same way as the project glass panes described above.

Select template dialogue:
selection of system templates for fixed glazing

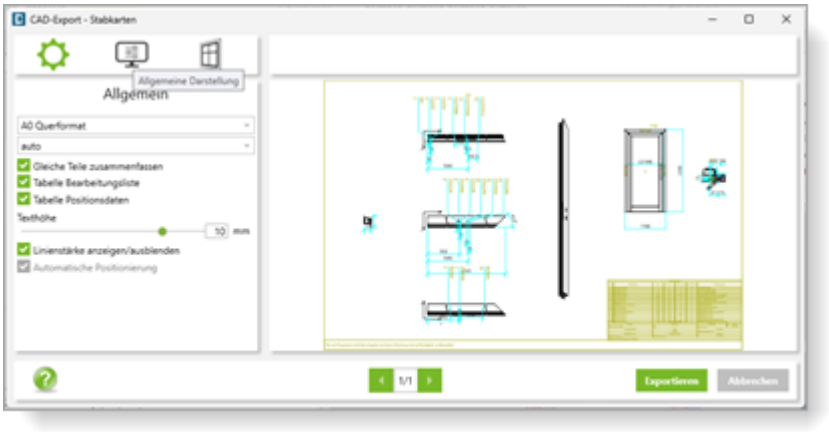
In the *Select template* dialogue, all system templates for elements with fixed glazing are now offered in a separate *Fixed panel and corner window* folder at the top of the folder tree. These templates were previously distributed in the window and door template folders.



6.1.2 CAD export profile preparation diagram

New dialogue with drawing preview

From this version, the new *CAD export - profile preparation diagrams* dialogue opens for exporting profile preparation diagrams. It allows you to see what the transferred drawing will look like even before you start the export.



The tabs in the dialogue allow you to specify what is to be exported and in which view the transfer is to take place. The result of your settings is displayed in the preview area at the same time.

You can drag and drop individual drawing elements to move them around as required.

If you have selected more than one profile for export, simply switch back and forth between the drawings.

6.2 New systems

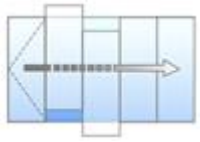
6.2.1 Sliding elements (aluminium)

System	Note
Schüco AS FD 90.HI	Not available in all countries.
FD = folding door	

For Schüco AS FD 90

Elements of this new folding-sliding system can be entered in the program as a free leaf combination.

In the *Select template* dialogue, select the *Free leaf combination AS FD* template (*04 - Sliding elements -> 02 - Folding sliding elements (insulated)*) as the system template.



Free leaf combination AS FD

6.2.2 Doors / Windows (aluminium)

System	Note
Schüco AD UP 90.SI passive house	SI = Super Insulation
Schüco AWS 58.NI	Not available in all countries. From 2024 R1 as an insert element in Schüco FWS 50.NI/50 SG.NI.

For Schüco AD UP 90.SI passive house - available with an activation code.

New system for recording a passive house-compatible single-leaf door opening inwards. Only with leaf-covering door panel.

Regarding Schüco AWS 58.NI

This system is available with an activation code.

Elements can be entered with the following opening types:

	
221 Bottom-hung window	270 Parallel hinged windows

Entering as an independent item:

To do this, select the appropriate system template in the Select template dialogue box (01 Windows & doors -> 01 Windows -> 06 Insert element). You can make the necessary entries for the façade system in which the insert element is to be used in the Item Data tab in the Element Parameters group. This pre-assigns the appropriate insert frames.

In this release, the wind load selection has been moved from the technical settings to the Field Properties tab.

System	Note
Schüco AWS/ADS 75	Not available in all countries.

6.2.3 Façades (aluminium)

System	Note
FWS 50 SG.NI	Not available in all countries.
SG = Structural Glazing NI = Non Insulation	

available with an activation code.

6.3 Systems no longer available

6.3.1 Façades (aluminium)

The following systems have been removed from the Schüco range and are no longer offered in the program for new items.

System	Note
Schüco AOC 50	Replaced by Schüco AOC *
Schüco AOC 60	Replaced by Schüco AOC *
Schüco AOC 75	Replaced by Schüco AOC *
Schüco AOC 50 SG	
Schüco AOC 60 SG	
Schüco SFC 85	(Discontinuation not in all countries)
Schüco SFC 85.HI	(Discontinuation not in all countries)

* As a successor in the program, select the Schüco AOC system with the unit parameters for the corresponding building depth.

6.4 Cross-system (aluminium)

6.4.1 Schüco Perfect

Schüco AWS 75.SI+ and Schüco ASE 60/80.HI

(Only with special activation)

For inward-opening units, from this version onwards it is possible to configure a Schüco AWS 75.SI+ window or a Schüco ASE 60/80.HI sliding unit in combination with a Schüco Perfect module in front. The Schüco Perfect module can also be ordered from within the program. Pricing will be available in an upcoming service pack.

An activation code is required to use the functions. You will receive this as part of a training course. If you are interested, please contact your area manager.

Surfaces and colours for Schüco Perfect

Standard colours have been added to the range for configuring and ordering Schüco Perfect modules, which are assigned to special surfaces for Schüco Perfect.

The colour codes for Schüco Perfect can be identified by a prefixed 'P-'. The surfaces have the identifiers 50 to 55.

New 'Schüco Perfect' discount group

For the system supplier Schüco, the new discount group 241 *Schüco Perfect* has been added to the *solar shading* group.

6.4.2 Schüco Carbon Control

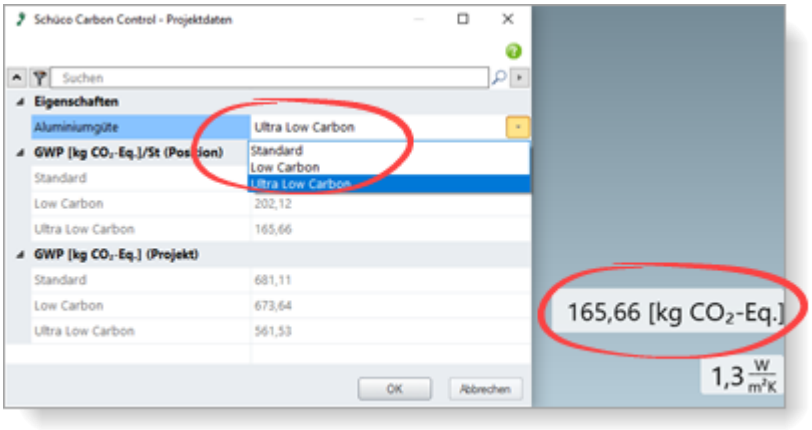
Aluminium grade of aluminium profiles:
Selecting and ordering an alternative aluminium grade for the profiles

(Since 2023 R1 SP02, not available in all countries. Available with an activation code)

In the future, the evaluation of buildings will revolve around the so-called GWP value, the 'global warming potential' of the building over its entire service life.

With the extensions made, you will have transparency in the program about the CO_2 values of the products you use, the surfaces and the glass. In addition, you can influence the aluminium quality of the profiles for the order.

- For your projects, you can choose between *Standard*, *Low Carbon* or *Ultra Low Carbon* aluminium grades in the *Project properties*. The calculated values for the item are displayed as CO_2 equivalent per kilogram in the element view and are updated at runtime.
- For the system supplier Schüco, the two properties *Schüco Low Carbon Aluminium* and *Schüco Ultra Low Carbon Aluminium* can be found under the new group *Sustainability surcharges*.
- To order the special *Low Carbon* and *Ultra Low Carbon* aluminium grades, you must enter the object number applicable to the project in the *Aluminium object number* input box in the *Project property list*.



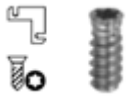
Further information can be found in the programme help under the topic → About Schüco Carbon Control

6.4.3 Cross-system range streamlining

With this program update, the cross-system range streamlining will take effect on 30/10/2022. Items are either omitted completely or replaced by new articles. Details can be found in the Schüco Docu Center.

Conversion of connecting screws

For screwed corner connections, the new article numbers for the screws are determined from this version onwards:

Screw	Article old	Article new
	225303	225351
	225304	225352
	225305	225353
	225306	225354
	225307	225355
	225308	225356
	225309	225357
	225310	225358
	225311	225359

6.4.4 Schüco VentoFrame Twist window vent: pre-treatment for maritime climate

From this version onwards in the VentoTherm Twist window vent dialogue, you can no longer specify whether the outer aluminium profiles should be given a special pre-treatment to protect against a maritime climate. The maritime climate pre-treatment property has been removed.

If required, please add this requirement as a free comment when ordering instead.

6.4.5 List output

Schüco AvanTec SimplySmart and Schüco surface-mounted SimplySmart window fitting:

Bottom-hung windows (handle on the side) - New fitting types HD

The window fittings have been extended to accommodate large and heavy bottom-hung windows. The following fitting types can now be selected for bottom-hung windows with a side handle (opening types 200 and 201):

- BASIC - AvanTec SimplySmart HD
- RC1N - AvanTec SimplySmart HD
- RC2 - AvanTec SimplySmart HD
- BASIC - Surface-mounted SimplySmart HD
- RC1N - Surface-mounted SimplySmart HD
- RC2 - Surface-mounted SimplySmart HD

Schüco DriveTec - information on the positioning of the chain and locking drives and the control units

DriveTec (ventilation) operating mode for items with opening types 100 and 101 (turn) and 204 (bottom-hung window (drive on top)):

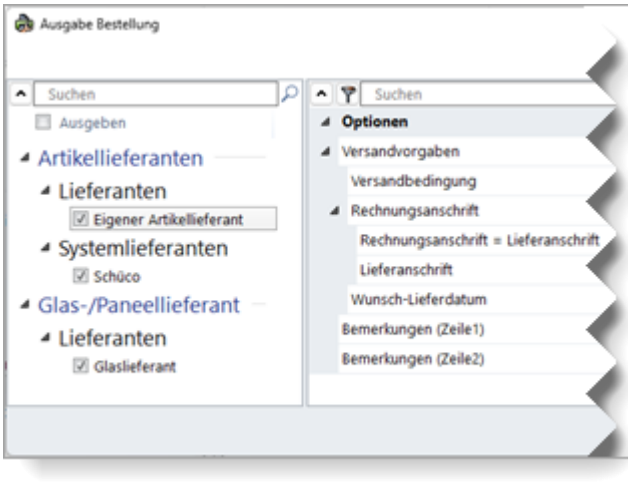
As of this version, dimensions for positioning the chain and locking drives and the control units are indicated in the following lists. The dimensions refer to the variables in the K-drawings and in the work preparation sheets.

- Parts list (in the opening description)
- Element overview (in the item description)
- Window leaf and fittings list (as an additional line)

Ordering from your own suppliers

In previous versions, it was only possible to place orders for self-entered contacts (article suppliers, glass pane and panel suppliers) with special activation. This feature is now always available.

If you have entered articles in the relevant items that are assigned to a separate contact, an additional dialogue opens before the order is placed. Use this dialogue to select which lists of orders are to be placed. As a result, you receive the articles in separate order lists, separated by supplier.



You can set general specifications for these orders in the master data in the *Contacts* dialogue for each supplier. Here you can also design the document template for the order list. (In the directory *..\ProgramData\...\...\System\Data\Templates* you will find three List&Label templates for your own glass suppliers *(GlasTemplate.lst*, *GlasTypeTemplate.lst*, *GlasTypeRegisterTemplate.lst*) and one for your own article suppliers *(ArticleTemplate.lst*).

Please keep the following in mind when ordering via Schüco Connect:
When ordering system articles via the menu ribbon > *Place* > *Connect*, the order is not generated for your own suppliers: To order from your own suppliers, you must start the order separately via the menu ribbon > *Place* > *Order*.

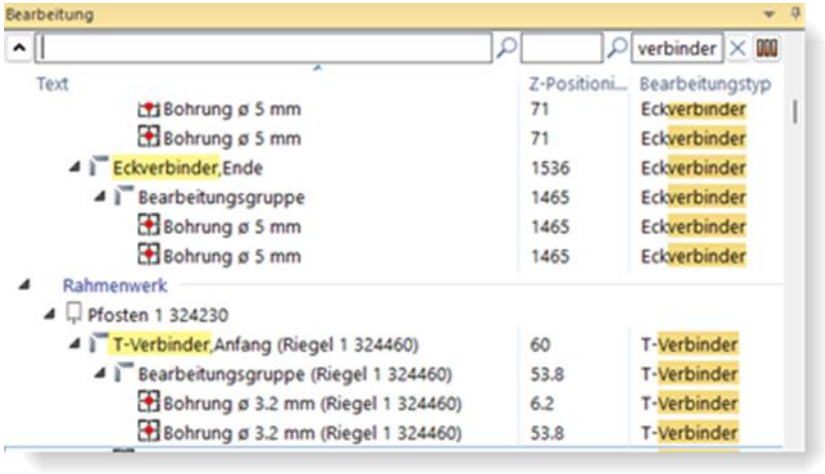
6.4.6 Machine control Schüco systems

MCO filter:
Connector processing

As part of the continuous quality improvement programme, connector processing has been reorganised for the aforementioned systems.

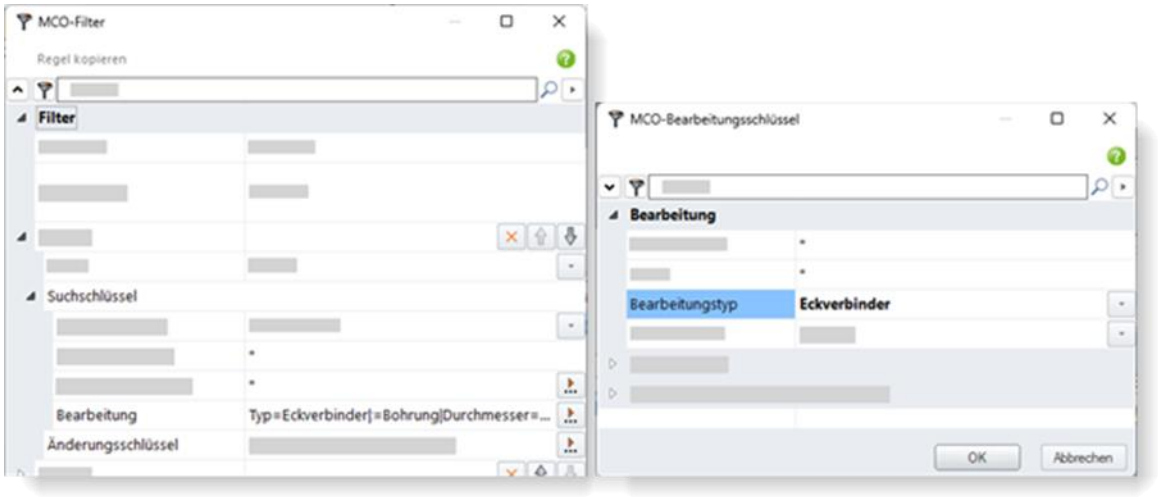
- Schüco FWS 60 CV
- Schüco AWS 114
- Schüco AWS 114.SI

In processing mode, the processing for these systems is now differentiated according to corner connectors and T-connectors. The processing types in the processing tree are named accordingly. For all other systems, all connector processing operations are listed as the connector processing type.



If you have created MCO filters that manipulate processing operations with the *connector* processing type, these MCO filters no longer affect the connector processing in these systems. For this reason, two new processing types, *T-connector* and *corner connector*, have been added to the list of selectable processing types in the *MCO processing key* dialogue box for the search and edit keys.

To ensure that your filters are also effective for connector processing in the systems mentioned, you must add these new processing types to the search keys in your filters.



Collision control for cable transition, emergency exit door locking device and access control: note for non-generated processing operations

If a cable transition, an emergency exit door locking device or an access control is recorded for a door, the positioning of the automatically generated processing operations is checked to see whether there is a collision with other components. If necessary, the positioning is adjusted slightly. If there is not enough space available, no processing operation is generated. As of this version, you will receive a corresponding message.

Processing mode:
read-only view as of the basic package expansion level

Switching to processing mode is always possible from this version onwards, even if the expansion stage of the program does not include control of CNC profile processing machines. The view is read-only. Changes to the processing operations automatically generated by the program are not possible. The corresponding licence extension is required for this.

→Processing mode (MCO)

Processing mode:
Basic element countersinking - new settings

From this version onwards for the *countersink* base unit, in addition to entering values for the *Angle* and *Depth* settings, it is optionally possible to enter the values for the *Angle* and *Diameter* settings.

- When the angle and depth are entered, the diameter is calculated.
- When the angle and diameter are entered, the depth is calculated.

Schüco AD UP 75, Schüco AD UP 90 and Schüco AWS 75.SI+/AD UP 75/ADS 75.SI: Automatically generated processing operations (MCO): Ventilation and drainage

As part of the continuous quality improvement process, the processing for ventilation and drainage has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Please note:

As part of this revision, you will only find settings for the *Spacing* and *Minimum panel size* for processing in the processing settings for these systems (Schüco AD UP 75, Schüco AD UP 90: for blind frames, Schüco AWS 75.SI+/AD UP 75/ADS 75.SI: for blind frames, transoms and door leaves). All other previous items in the *Drainage/ventilation* group have been removed.

The changes also affect existing items.

Schüco AD UP 75 BL:
Automatically generated processing operations (MCO): Notching

As part of the continuous quality improvement process, the processing for notching has been completely reorganised and additional processes have been added. All processing operations are automatically generated according to the K-drawings.

Please note:

The changes also affect existing items.

Schüco AD UP 90:
New technical setting for 'window leaf' drainage/ventilation

The *Window leaf* setting has been added to the technical settings (*Drainage/ventilation* group). This allows you to deselect drainage and ventilation processing in side sections if required.

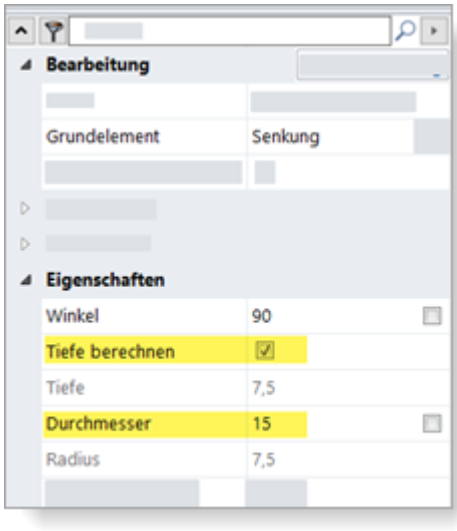
Schüco AD UP systems:
Technical setting for 'bolt' and 'door bolt' drainage/ventilation removed

In the technical settings, in the *Drainage/ventilation* group, the selection lists for *Bolt* and *Door bolt* have been removed.

These processing options did not correspond to the system specifications. In accordance with the technical specifications, drainage and ventilation are provided via the T-connection to the adjacent profiles. Additional processing is not required.

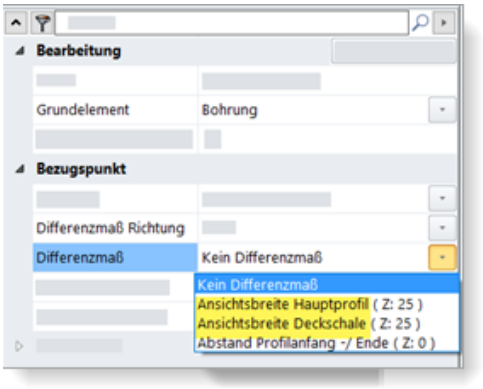
Please note:

This change affects existing items if you had previously selected a different setting.



Processing mode:
renaming differential dimensions for processing operations (façades)

In the previous versions, it was already possible to specify differential dimensions in order to define the reference for the entry point of processing operations. In the case of differential dimensions for façades, *Rebate dimension* and *Chamber dimension* were offered as differential dimensions. These have now been appropriately renamed *Face width of main profile* and *Face width of cover cap*.



Transfer to adjoining profile - improved handling

Processing operations can be transferred to adjoining profiles. To do this, you can select the *Transfer to adjoining profile* check box for processing operations.

In previous versions, you had to set the value for the depth offset so that the insertion point was on the adjoining profile. The coordinates, the side and the corner of the original profile were always taken into account.

From this version, you can also alternatively specify that the selection for the sides and corners of the processing operation is taken from the target profile and the position for the X and Y coordinates is calculated depending on the node of the target profile.

To do this, you will find another selection list *Target profile* when selecting *Transfer to adjoining profile*. Here you can choose between *Automatic* and the adjoining profiles. If *Automatic* is selected, the behaviour of the feature is the same as in the previous versions.

6.4.7 Calculation

Contacts:
New discount groups

(Since 2023 R1 SP01)

New discount groups have been added to the *Contacts* dialogue for the system supplier *Schüco*.

Identifier	Designation
225	Window sill profiles
226	Window sill accessories

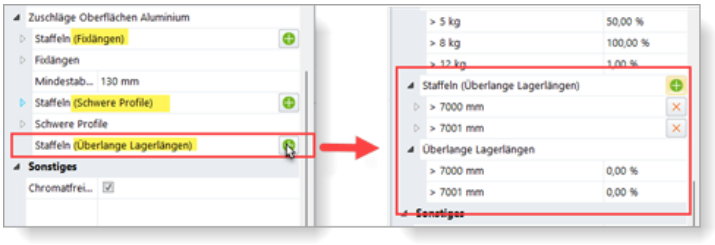
New - surcharges for coating overlong storage lengths

In previous versions, coaters could only enter surcharges for fixed lengths that were determined based on your specifications in the optimisation settings (fixed lengths that were determined using the *Optimum profile order length* or *Intervene in optimisation* options).

From this version, you can also enter surcharges in the conditions for the system coater and for your own coaters that may be incurred for coating overlong profiles. In the conditions, you will find new input fields for *Graduating (overlong storage lengths)* in the group *Surcharges for aluminium surfaces*. There are no default values

> Please note that your changes in the master data in the *Contacts* dialogue are only applied to new projects (menu ribbon, *General* tab > *Master data* > *General* > *Contacts*). If the new surcharges are to apply to a project that has already been created, you must enter them in the project window in the *Project property list*.

As part of this extension, the texts for graduating for fixed lengths and heavy profiles have been renamed for better allocation. Nothing changes in terms of functionality.



New - property discount

(Not available in all countries.)

In the *Contacts* dialogue, the new input field *Property discount* has been added under *Miscellaneous* for the system supplier *Schüco*.

Any property discount entered will be deducted from the calculated price for system articles, system coating and system glass (after the surcharge, before special discounts and overheads).

> Please note that your changes in the master data in the *Contacts* dialogue are only applied to new projects (menu ribbon, *General* tab > *Master data* > *General* > *Contacts*). If a property discount is to apply to a project that has already been created, you must enter it in the project window in the *Project property list*.

6.4.8 Production time determination

New triggers

New triggers for production time determination have been added.

Construction type 0: F/T Alu:

Designation	Timetables
Single-leaf RC2N door	1, 3, 10
Double-leaf RC2N door	1, 3, 10

If you want to use the new triggers in your production lines, you will need to reassign them to the relevant activities and assign times to them.

6.5 Solar shading

6.5.1 Schüco Integralmaster solar shading:

Use in Schüco FWS 60 - Maximum widths changed

The maximum dimension for the feasibility of the materials TC 3011, TC 3012, TC 3013, TC 2103 has been reduced from 1800 mm to 1500 mm. You will receive an information message in the program if the corresponding transom profiles exceed this length.

6.5.2 Schüco solar shading AB ZDS in Schüco window systems AWS

System change restricted

If you have selected the frame and mullion with integrated guide rail for a ZDS, a system change is no longer permitted for the item in the *Item data* tab. A system change is only possible with the guide rails in place.

6.5.3 Schüco Integralmaster solar shading

Operating page for the 'electric' operating mode

In previous versions, when Schüco Integralmaster solar shading was selected for units, the operating side was not specified. This meant that the position of the cable outlet was not recognisable. In the new *Operating side* field, the appropriate operating side is now preassigned depending on the opening type (*cable outlet (left)*, *cable outlet (right)*). For tilt and top light openings, you must select the side. This information is also given in the order.

> **Please note:**
>
> If necessary, please check the pre-assigned operating side in existing positions with tilt and top light openings for which an Integralmaster with the operating type *electrical* is registered.

6.6 Windows / doors (aluminium)

6.6.1 Correction values for fixed glazing

From this version onwards, the correction value 'KFV' [dB] from DIN 4109-35:07.2016 Table 1 is used for fixed glazing if it is required.

6.6.2 Schüco AW RO 50

Adapter seal for locking fitting

The adapter seal Art. 245730 for use in combination with the locking fitting can be determined from this version. For this purpose, you will find the new *Adapter seal for locking fitting* check box in the *Fittings* group.

Manual drive

For the skylight, you can also choose the manual drive as an alternative to the Schüco DriveTec fitting from this version onwards. For this purpose, select the *Standard* input as the *Operating mode*. The hardware types available are *BASIC - AvanTec SimplySmart* and *RC 2 - AvanTec SimplySmart*. You determine the colour of the manual drive in the *Fittings* group.

6.6.3 Schüco AWS window systems:

New structural posts

(Window systems in installation depths of 50-90 millimetres)

As of this version, the following new structural posts can be entered:

Construction depth	Item
50 mm	570130
60 mm	570140
65 mm	570150
70 mm	570160
75 mm	570170
75 mm (optimised)	570240
90 mm	570180
90 mm (optimised)	570250

New expansion profiles with internal statics

(Window systems in installation depths of 50-75 millimetres)

As of this version, the following new expansion profiles with internal statics can be entered:

Construction depth	Item
50 mm	570190
60 mm	570200
65 mm	570210
70 mm	570220
75 mm	570230
75 mm (optimised)	570260

Please note the following for windows in the Schüco AWS 75.SI+ system:

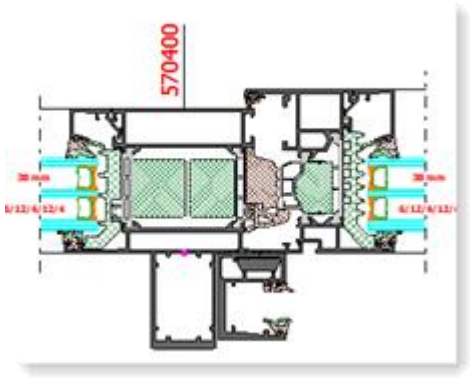
The expansion profiles Art. 570230 and Art. 570260 can only be selected if the *Custom combination* option is selected for the *Profile type window profiles* property in the *Item Data* tab.

Schüco AWS - balustrade safety device:
New structural profiles with external statics

(Window systems in installation depths of 50-90 millimetres)

From this version onwards, the mullion and expansion profiles can be selected with external statics.

Example for Schüco AWS 75.SI+:



When using these structural profiles, please note the recommendation that the transfer of loads to the surrounding load-bearing structure should be coordinated with the structural engineer involved in the project.

change of centre seal range

The new article numbers for the centre seal are determined in the program. With this change, the article numbers for the corner pieces and the sealing frames will also change. Various window systems with installation depths of 65, 70 and 90 millimetres (including block systems and window façades) are affected. Please refer to the updated production documentation for details of exceptions (e.g. not for ventilation sashes).

Construction depth	Old	New
65 mm	246052	245752
70 mm	246055 278723	245755
90 mm	284580	278735

Please note:

This change affects existing items.

6.6.4 Schüco AWS 70.HI and Schüco AWS 75.SI+:

Discontinuation of KDK fitting system

The crank turn/tilt fitting will be removed from the range for the above systems. The *Crank turn/tilt gear-operated handle* operating mode can therefore no longer be selected for turn/tilt and side-hung opening types.

The items you have already entered remain unchanged.

6.6.5 Schüco AWS 75 BS.HI+, Schüco AWS 75 BS.SI+, Schüco AWS 90 BS.SI+ Aluminium-wood window (AWS WoodDesign) - Modified seals on the blind leaf

For the aluminium-wood window with opening type *2: blind leaf*, glazing is determined from the modified specifications in the glazing tables. The following modifications are made:

	Article old	Article new
Stop seal	245472	245772
Glass unit seal	278864 (12 mm)	278862 (14 mm)

Please note:

The modification of the glass unit seal from 12 mm to 14 mm results in new seal combinations. Check your existing items against the changed possible glazing thicknesses.

Schüco AWS window systems with 'installation-optimised' and 'optimised' centre seals

(Since 2023 R1 SP01)

The following modification results for items when the *Installation-optimised with corners* or *'Optimised' with corners* option is selected in the technical settings for the *Centre seal* property in the *Seal* group:

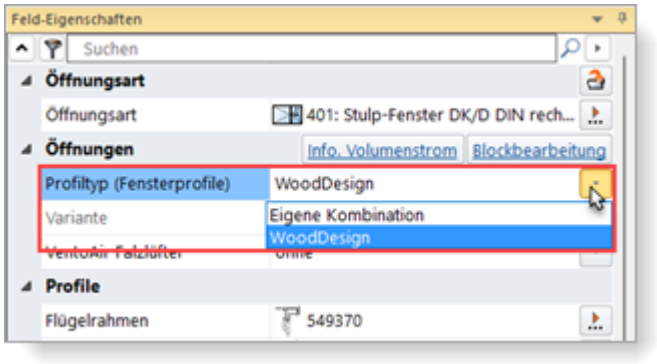
These centre seals cannot be used in some cases, for example, for barrier-free opening types with zero level threshold or when using the Schüco VentoAir rebate ventilator. From this version onwards, in such cases the appropriate seal will be determined in deviation from your technical settings and you will receive a corresponding message.

Please note:

This change also affects existing items.

The following changes apply to openings with aluminium-wood window profiles:

Easier input - profile filter



Aluminium-wood windows can be entered more easily from this version. In the *Field properties* dialogue, in the *Openings* group, you will find the new *Profile type (window profiles)* option. There you can choose between the *Custom combination* or *WoodDesign* entries.

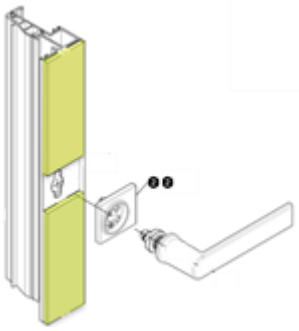
If you select *Custom combination*, all profiles will be offered for selection in the selection lists. This is the standard specification. Existing items remain unchanged.

If *WoodDesign* is selected, only leaf profiles with the *WoodDesign* contour will be offered in the selection lists.

Please note:

The selection will only filter in the selection lists. Profiles already in use will not be changed automatically.

Cutting wooden moulding for rectangular rosette



From this version, the wooden moulding on the handle side is in two parts when the rectangular rosette is used. This division is not shown in the element view. The wooden mouldings are cut to size according to K1028988. The tolerances specified there (+/- 0.2 mm) are not taken into account. Please check the cut lengths in relation to the exact handle fit.

Please note:

This change affects existing items.

6.6.6 Schüco AWS 120 CC

Hangings CCB - changed items

Due to supply shortages, alternative items R2 SP03 had been identified at the same price since 2021 instead of the standard CCB hangings. This change has been reversed. The CCB hangings are determined according to the current order catalogue (with drives Art. 200133, 200137, 200160 and 200170).

Please note the resulting minimum casement widths and influences on the ordering of power supply units and control units.

Schüco AWS 120 CC.SI airborne sound insulation

From this version, the airborne sound insulation value can be determined for the following units of the Schüco AWS 120 CC.SI system.

- Side-hung / turn-tilt / tilt-before-turn composite window (inward-opening, standard type)
- Fixed panel with side-hung inspection casement

The sound insulation value for the viewing pane must be at least 32 dB. Default sound insulation values have been entered for the *6 mm glass* and *10 mm glass* templates stored in the program.

If no values can be determined for the openings, you will receive corresponding information messages.

Schüco AWS 120 CC.SI:

Miscellaneous changes

The determination for the system follows the updated ordering documents. Changes include:

New selection for the composite casement (insulated or non-insulated)

From this version onwards, in the *Panel properties* dialogue, you can determine in the *Profiles* group whether Art.492110 (insulated) should be determined as before or whether the new Art.556000 (uninsulated) should be determined. (Exception: This selection is not possible for the *Opening inwards, type SG* variant).

Cable transition for CCB solar shading in the casement

The cable transition Art. 263264 with the control cables Art. 200271 (1.5 m) or Art. 200270 (2.5 m) is replaced by the 5-core cable with socket (JST 6-pole) for mounting in the casement profile.

Art. 200458 (length: 1,800 mm + 6,000 mm)

Art. 200459 (length: 2800 mm + 6,000 mm)

In the *Panel properties* dialogue, the selection list for the *Control cable of the CCB* now offers 1.8 m and 2.8 m for selection instead of the lengths 1.5 m and 2.5 m respectively.

Corners for glazed unit seals

In the technical settings (*Seal* group), for the properties *interior glazing* and *exterior glazing*, *Standard with corners* is now also offered for selection.

Stop seal - only Art. 245472 (mounting-optimised)

In the technical settings (*seal* group), only the entries *Installation-optimised* and *Installation-optimised with corners* can be selected for the *Interior stop seal for opening window casements* property.

The entries *Standard*, *Standard with corner edge protection*, *Alternative* and *Alternative with corners* are omitted.

Please note: If one of these omitted selections was previously selected for existing items, the selection *Installation-optimised* is determined.

Centre seal - new 'Installation-optimised with corners' selection

In the technical settings (*seal* group), the entry *Installation-optimised with corners* can now also be selected for the *centre seal* property.

Height-adjustable rotary hinge

The new rotary hinge Art 269991 replaces the previous rotary hinge Art 276296.

As an additional article, the height adjustment Art. 269405 is determined once per casement. This is attached above the upper rotary hinge to adjust the casement.

New glass supports

The determination of the glass supports has been adjusted. The new glass supports for the composite casement and the revision casement are determined.

Glass support for composite casement: Art. 225471

Glass support for inspection casement: Art. 225472

6.6.7 Schüco AD UP 90 with thermal insulation SI

New thermal insulation core Art. 245690

If the entry *SI* is selected in the technical settings for *thermal insulation* for doors in the Schüco AD UP 90 and Schüco AWS 90 SI+/AD UP 90 systems, the new Art. 245690 is determined instead of Art. 245342 from this version onwards.

6.6.8 Schüco AD UP 75 BL/75:

T-connector design - system templates for Schüco AD UP 75 and Schüco AD UP 75 BL doors

In these systems, element couplings are possible in a T-connector design (for couplings with fixed panels, the I-sides of AD UP door frames (Art. 522930) or AD UP blind frames with glazing beads are glazed from the inside and outside (screwed-on glazing bead)).

In the *Select template* dialogue, you are offered suitable system templates for these elements with side lights and top lights in separate orders *(02 - T-connector design*).

Door leaf profiles as frame profiles

In previous versions, it was also possible to use door leaf profiles as blind frames, mullions and transoms in the aforementioned systems. This is not permitted by the system. From this version onwards, it is no longer possible to select door leaf profiles for these applications.

Please note:

This change affects existing items. If in the past you

used a door leaf profile as a frame profile, this will automatically be changed to a valid frame profile.

Barrier-free zero threshold now also for security classes RC1, RC2, RC2N

The barrier-free zero threshold for single-leaf doors. Doors with an all-round leaf and automatic door seal can also be selected in security classes RC1, RC2, RC2N from this version onwards. This was previously only possible for standard security and RC3.

The selection for the variants can be found in the *Field properties* dialogue below the *Door threshold* property if automatic door sealing is selected.

6.6.9 Schüco AD UP 75, Schüco AD UP 75 BL, Schüco AD UP 90:

Adding and combining areas

From this version onwards, it is no longer possible to add and combine areas in items with these systems. For new units with side lights and top lights, please select a suitable system template.

6.6.10 Schüco AWS 75.SI+/90.SI+ and Schüco AWS 75 BS.SI+/90 BS.SI+ in the ‘optimised’ system variant:

Aluminium-wood windows (AWS WoodDesign) - changes

The following changes apply to openings with aluminium-wood window profiles:

Blind leaf - changed fitting determination:

(Since 2023 R3 SP03)

The determination is made according to the modified production drawings for the blind leaf (K1029421, K1029422).

Push-in handle and rosette cover - stainless steel colour variant:

(Since 2023 R3 SP03)

The rosette cover Art. 269345 is now determined for the plug-in handle Art. 247006.

Passive house suitability - testing for glass thickness

Passive house suitability can be achieved in certain combinations of profiles, seals and glazing. Already in the previous versions you received an information message for this, which is no longer displayed if the element fulfils these criteria. A prerequisite for passive house suitability is that the glass used has a glass thickness of at least 48 mm. This has not yet been checked by the program. As of this version, a corresponding glass thickness must also be used in the element so that the message no longer appears.

6.6.11 Airborne sound insulation for windows/doors:

From this version, widening profiles are also taken into account when calculating the airborne sound insulation for windows/doors.

6.6.12 Schüco AWS 90 AC.SI airborne sound insulation value

From this version, the airborne sound insulation value can be determined for the following units of the Schüco AWS 90 AC.SI system.

- windows and French windows D and DK (calculation for the closed state.)
- fixed panels

The sound insulation value for the viewing pane must be at least 32 dB. Default sound insulation values have been entered for the 6 mm glass and 10 mm glass templates stored in the program.

If no values can be determined for the openings, you will receive corresponding information messages.

6.6.13 Schüco AvanTec SimplySmart and Schüco surface-mounted SimplySmart window fitting:

Updating the locking bar determination

(Since 2023 R2 SP03/SP04)

The determination of the locking bars has been adapted to the current K-drawing status.

Please note:

This change affects existing items.

Schüco AvanTec SimplySmart and Schüco surface-mounted SimplySmart window fitting: FSB window push-in handles

The seven new handle models added to the range - four of them with lockable variants - can be selected for inward-opening windows with open leaves.

Art. 269801 - 269836 & 269838

Art. 269843 - 269854

Art. 269856 - 269874

Schüco TipTronic SimplySmart RWA bottom-hung window: selecting the fitting variant - text changes

The texts for selecting and determining the fitting variant have been changed. The specification of the fitting type has been removed; instead, the fitting variant is specified. The opening width is also specified.

Example:

Old text	New text
Type 1, variant 1, 400, SK2	Variant 1a, SHEV opening width 400, SK2

6.6.14 Cross-system windows and fixed panels:

RC2 security class - glazing rebate security devices, round cord for burglar-resistant glazing beads

As a result of the change to the range of glazing rebate security devices, the determination changes with respect to article numbers and quantities for glazing rebate security devices and screws for windows and fixed panels (technical settings > *Glazing* > *RC2/RC2N glazing* > *Glazing rebate security device*). When using glazing rebate security devices, the glass used for windows and fixed glazing must have burglary protection class P4A to achieve the RC2 security.

The length determination for the round cord Art. 244058 for the burglar-resistant glazing beads (K1031539) has also been modified.

Please note:

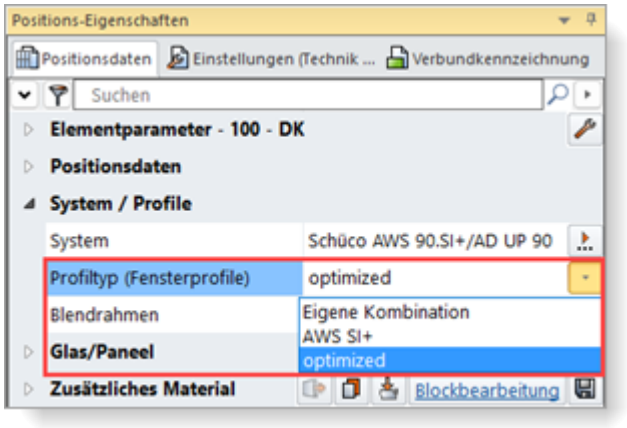
This change affects existing items.

6.6.15 Schüco AWS 75.SI+ and Schüco AWS 90.SI+ in the ‘optimized’ system variant:

modifications

The following changes apply to elements in the ‘optimised’ system variant:

Easier input - profile filter



Elements in the 'optimised' system variant can be entered more easily from this version. In the *Item data* tab, in the *System/profiles* group, you will find the new *Profile type (window profiles)* option. There you can choose between the *Custom combination*, *AWS SI* or *optimised* entries.

If you select *Custom combination*, all profiles will be offered for selection in the selection lists. This is the standard specification. Existing items remain unchanged.

When *AWS SI+* is selected, no profiles with the *optimised* contour are offered in the selection lists.

When *optimised* is selected, only profiles with the *optimised* contour are offered in the selection lists.

The filter applies both to the selection of frame profiles in the *Item data* tab and to the selection of leaf profiles in the *Panel properties* dialogue.

Please note:

The selection will only filter in the selection lists. Profiles already in use will not be changed automatically.

RC2 security class - glazing

The glazing for openings with RC2 security follows the new glazing table for the glass unit seal Art. 284333 used exclusively in the 'optimised' system variant.

Please note:

This change affects existing items.

6.6.16 Schüco AWS 75.SI+/AD UP 75/ADS 75.SI:

Schüco AD UP Commercial profile portfolio

For doors in this system, from this version onwards you can simply enter doors with the special profile range for Schüco AD UP Commercial using a profile filter.

In the *Item data* tab, in the *System/profiles* group, you will find the new *Profile type (door profiles)* selection list. Here you can choose between the *Custom combination* and *AD UP Commercial* entries. Your selection results in a corresponding pre-assignment for the door profiles.

In the *Field properties* tab, you will find *Profile type (door profiles)*:

- If you select the *Custom combination* entry in the *Item data* tab, you can choose between the alternatives *(AD UP*, *AD UP BL*, *AD UP Commercial*, *ADS*) for the door in the *Profile type (door profiles*) selection list in the *Field properties* tab.
- If you select the *AD UP Commercial* entry in the *Item data* tab, the *Profile type (door profiles)* selection list is greyed out in the *Field properties* tab for the door. Only the profiles from the Schüco AD UP Commercial profile portfolio can then be selected as leaf profiles.

Technical settings:

The *AD UP Commercial centre gasket* property has been added to the technical settings under the *Gaskets* group. Here you decide whether the centre gasket *(standard with corners*) or the cover gasket Art. 278732 *(without centre gasket*) should be determined for the profiles.

New panic leaf Art. 541670 - Schüco AD UP doors

For the use of 2-leaf, outward opening doors with the full panic variants, the new door leaf Art. 541670 (3-chamber profile) can be selected for the *AD UP* and *AD UP BL* profile types from this version.

The new door leaf can only be used in the aforementioned system with an AWS connection, but not in the Schüco AD UP 75 and Schüco AD UP 75 BL door systems as such.

6.6.17 Schüco AD UP doors:

Default setting of the material for 'Stop profile centre gasket' changed to 'EPDM'

(Since 2023 R3 SP03)

The standard specification for the technical setting of the *stop profile centre gasket* was previously *polyamide*. This standard specification has been changed to *EPDM*.

Please note:

If you have left the previous *polyamide* standard specification unchanged in the master data and have applied it to your items, the change in the standard specification to *EPDM* will automatically be applied to your master data and items. The determination changes accordingly.

Please check your settings for the AD UP door systems.

Sealing pieces for seal mitres and T-joints according to K1024902

The determination of the sealing pieces has been revised and is now based on the specifications in K1024902.

- The required sealing pieces are determined if you have activated the *Connection with corner reinforcement and corner plate* option in the technical settings.

Technical setting for T-joints for AD UP to AD UP profile combinations:

The new KS sealing piece Art. 270268 is determined for T-joints in AD UP to AD UP profile combinations. In the technical settings, however, you will find a new property that can be used to determine the sealing piece Art. 220397 as an alternative for these profile combinations.

Element couplings

Some optimisations were made for the implementation of element couplings (doors with side lights and top lights). The determination in the program follows the updated production documents.

Pull grip profiles with or without integrated Fingerprint Easy

Since version 2023 R3, the flush pull grip profiles Art. 546600 and Art. 564610 with integrated Fingerprint Easy Art. 263800 can be selected in the above systems.

From this version onwards, these flush pull grip profiles can also be optionally entered without Fingerprint Easy. This results in the following program changes:

The *Design with integrated fingerprint* operating mode has been renamed *Design Gen2*.

Under the *Fingerprint Easy* group, you can then select whether this should be determined or not.

Schüco SafeGuard locking system

(Not available in all countries.)

From this version onwards, the Schüco SafeGuard locking system can be used in single-leaf, inward-opening doors of the Schüco AD UP systems. This is possible for doors in the Standard Security, RC1, RC2N and RC2 security classes.

In the *Field properties* dialogue box, in the *Openings* group, select one of the new entries for the *Operating mode*:

- *SafeGuard*
- *Comfort and SafeGuard*
- *Fingerprint Easy and SafeGuard*
- *Design and Fingerprint Easy and SafeGuard*
- *Design Gen2 and SafeGuard*

The items are then offered for selection as locks.

- Art. 263590 SafeGuard (mechatronic multipoint locking system)
- Art. 263591 SafeGuard Plus (mechatronic multipoint locking system with additional tightening function)

When the number of locks = 3, you can optionally select 1-1-1 or 1-0-1-1 (horizontal) as the installation pattern.

In the technical settings, in the *Colours* group, you will find the new *Emergency release screen* property. Here you determine whether Art. 279982 (RAL 9005) or Art. 245997 (RAL 9016) is to be determined.

Design door handle extensions

(Since 2023 R2 SP04)

The following extensions have been made to the design door handles for doors.

Pull grip profiles in Schüco AD UP 75

(Schüco AD UP 75, Schüco AD UP 75 BL, Schüco AWS 75.SI+/AD UP 75/ADS 75.SI)

For single-leaf doors, the pull grips can now be entered in accordance with the current order and production documents.

In the *Field properties* dialogue, you can choose between the *Design*, *Design and Comfort* and *Design and Fingerprint Easy* operating modes.

Pull grip profiles with integrated Fingerprint Easy

(Schüco AD UP 75, Schüco AD UP 75 BL, Schüco AWS 75.SI+/AD UP 75/ADS 75.SI, Schüco AD UP 90)

In these systems, you can now also select the new operating mode for the *design with integrated fingerprint* flush pull grip profile.

This is used to determine the pull grip profiles Art. 546600 and Art. 564610 for the fingerprint Art. 263800 integrated in the pull grip.

Selecting the type of panel production

From this version, the additional property *Panel production* is displayed in the *Design components* group for operating modes with a pull grip. If the door panel with the inserted pull grip can alternatively be manufactured in-house, you can select this option in the selection list. If there is no alternative, only the panel production information is displayed *(panel from panel supplier)*.

Please note:

The type of panel production determines how the articles for the panel used are calculated and ordered.

- By selecting *Panels in in-house production*, the articles required for panel production are issued in the lists, calculated and ordered.
- If you select *Panels from panel supplier*, the articles required for panel production will not appear in the lists and will not be calculated; they will only be ordered from the panel supplier.

Sketches for panel production

From this version, the flush pull grip is also shown in the *Glass/panel plan* and *Glass/panel composition* sketches. If the *Sketch for model panes/stepped insulating glass* option is enabled, also in the *parts list*.

Whether the panel dimensions (similar to stepped insulating glass) or the panel sections (inner and outer panels separately) are displayed depends on your setting for the output

of the door panel covering both sides of the leaf. (*Output* tab > *Settings* group > *Output options* button > Lists > *General* > *Glass/panel sketches*).

Schüco AD UP doors:
New stop seal Art. 224683

A new stop seal Art. 224683 has been added to the range. The previous stop seal Art. 278156 can still be determined as an alternative to the new stop seal.

In the technical settings, in the *Seal* group, you will find the new *AD UP door stop seal* property. There you can choose between *standard* (Art. 224683) and *alternative* (Art. 278156). The standard specification is *standard*.

Please note:

The change affects existing items. The new stop seal is now determined instead of the previous stop seal.

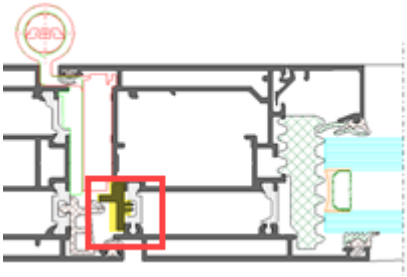
Please also note when determining seal angles:

From this version, for Schüco AD UP system doors, you determine whether or not seal angles are to be determined under the new technical setting *Moulded seal angle for AD UP door stop seal*. In previous versions, these settings were made using the *Stop seal* setting.

For Schüco AD UP 75 BL system doors, as with previous versions, the setting for the *Moulded seal angle stop seal* property applies.

Schüco AD UP doors:
Stop profile for centre seal

New polyamide articles have been added to the range (Art. 270813 (installation depths of 75 mm) and Art. 270814 (installation depths of 90 mm)).



In the technical settings in the *Design* group, you will find the new *Centre seal stop profile* property. There you can choose between *polyamide* and *EPDM*. The standard specification is polyamide.

Please note:

The change affects existing items. Instead of the previous article made of EPDM, the article made of polyamide is now determined.

Schüco AD UP doors:
Widening profiles with face widths of 34 mm, 44 mm and 54 mm

The following articles can now be selected as widening profiles for elements in the Schüco AD UP systems:

Basic depth 75 mm:

Art. 382080

Art. 382090

Art. 382100

Basic depth 90 mm:

Art. 441010

Art. 441020

Art. 441030

Schüco AD UP 75:
Barrier-free zero threshold now also for 2-leaf doors (outward opening)

From this version, the barrier-free zero threshold is also available for 2-leaf doors. Doors with an all-round leaf and automatic door seal can be selected (Standard, RC2N and RC2 security classes).

The selection for the variants can be found in the *Field properties* dialogue below the *Door threshold* property if automatic door sealing is selected.

Schüco Door Control System (DCS):
DCS 'SmartTouch' version

From this version, for doors with a DCS profile, you will find the *with SmartTouch* entry for new items in the *Field properties* dialogue > *DCS components* group > *DCS version* property.

The new 14-pole articles can be selected as cable transitions (Art. 263501 (opening angle 110 degrees) or Art. 263502 (opening angle 180 degrees).

In the *Additional security* selection list, you can specify whether the following articles are to be determined: *NetProtect* (Art. 263447) and/or *DoorProtect* (Art. 263446).

Schüco AD UP door fitting:
Latch inlet parts - range expansion, large PU (100 pieces)

The following articles are also available as a large PU (100 pieces) as an alternative to the previous small PU (10 pieces):

Construction depth	Small PU	New: Large PU
75 mm	279464	279930
90 mm	240566	279929
90 mm	279465	279931

6.7 Sliding elements (aluminium)

6.7.1 Schüco AS PD 75.HI:

TipTronic operating mode – sensor connection box (available with activation code)

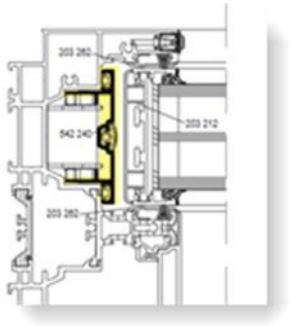
The new article number is determined for the sensor connection box.

Art. 263351 -> Art. 263851

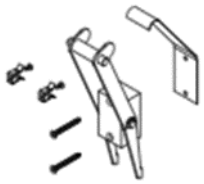
Dynamic cover profile, fastening set for side closing profile
(available with activation code)

The new article number is determined for the side cover profile *(dynamic cover profile* in the *Field properties* dialogue).

Art. 542240 -> Art. 552960



The article number for the *side closing profile fixing set* has also been changed.



Art. 220881 -> Art. 225881

Coupling profiles and centre gaskets (available with activation code)

The KS coupling profiles and the gaskets have been optimised.

Access Line and Design Line (manual):

- Art. 203588 - new coupling profile for intersection 4 (old: Art. 203218)
- Art. 203618 - new coupling profile for intersection 5 (old: Art. 203188)
- Art. 245971 - new centre gasket for both intersections (old: Art. 203227)

Design Line (TipTronic) and Performance Line:

- Art. 203613 - new coupling profile for intersection 4 (formerly: Art. 203213)
- Art. 203615 - new coupling profile for intersection 5 (formerly: Art. 203215)
- Art. 245972 - new centre gasket for both intersections (old: Art. 203231)

6.7.2 Schüco ASE 80 LC

Availability

The ASE 80 LC sliding system is generally approved for the following countries. It is no longer necessary to request an activation code.

Belgium, Finland, Luxembourg, Netherlands, Sweden and United Arab Emirates.

6.7.3 Schüco ASE 80.HI

Fitting type RC3

 Type 2A/1	 Type 2A/1.2
 Type 2A/1.B	 Type 2A/1.B.2

For the types listed with the *Lift-slide* operating mode and fixed casements (200 kg), the fitting type RC3 can be selected from this version onwards.

The prerequisites for the selection of this type of fitting are:

- In the technical settings, *type 1: locking bracket (locking on the frame)* must be selected in the *Fitting* group as the *Locking variant*.
- In the element settings, the standard threshold must be selected as the threshold and the *Standard* entry for the *Version*.

6.7.4 Schüco ASE 60 and Schüco ASE 80.HI

Design Line - conversion to short lengths

From this version onwards, the new article numbers for short lengths of 4.5 m can be selected for new items. In existing items from previous versions, the article numbers for the 6 m lengths are kept unchanged.

SHF centre point profiles for the Design Line version:

Schüco ASE 60	
Old (6 m)	**New (4.5 m)**
494440	552440
494450	552450
494460	552460
494470	552470
494600	552600
494620	552620

Schüco ASE 80.HI	
Old (6 m)	**New (4.5 m)**
494400	552380
494410	552390
494420	552400
494430	552410
494610	552510
494630	552530

Adjustment of application profiles made of plastic in the frame, fitting trims

Since versions 2021 R3 (ASE 80.HI) and 2022 (ASE 60), new items have already been determined for new positions and a new technical setting has been added for the selection of the side frame cover profile (Art. 278362 (plastic) or Art. 542000 (aluminium)). For items created before the versions mentioned above, the old technical settings were retained. The new technical setting for the selection of the side frame cover profile was not offered.

As of this version, the following changes have been made:

- For items created before the versions mentioned above, the old technical settings in the *Design* group for determination with or without integrated round cord (*Insulation profiles - accessories black* and *Guide rail - accessories black* are omitted.
- For items created before the versions mentioned above, you will find the new *Side frame cover profile* property in the *Design* group. The default is *aluminium*.
  Please note: For opening types where the plastic cover profile Art. 278362 has been determined, the cover profile 542000 is determined due to the new technical setting (with clamping bracket Art. 281697 and, if applicable, mounting bracket Art. 281696).
- Schüco ASE 60 only:
  The adjustment is accompanied by a streamlining of the product range. For all items, only black plastic profiles without a round cord are provided (Art. 203192 to Art. 203199). For these, the round cord Art. 244058 is also determined.

6.7.5 Schüco ASE 60, Schüco ASE 80.HI and Schüco ASE 80 LC:

One-sided attachment of handles

In the previous versions, it was already possible to identify single-sided internally mounted handles with fixings that are not visible from the outside for elements with the *simple push-less leaf* and *push-resistant leaf* composite types. The entry for this variant in the *Field properties* dialogue under the *Fittings* group has now been changed. Instead of a check box for each handle, you will now find a drop-down list above the handle selection, which you can use to specify whether the handles should be fixed on one side or not (choices of *with* or *without*). With the *Unique combination* selection you can determine in a subgroup, leaf by leaf, whether the single-sided fixing is to be specified. The range of products available for the handles is limited according to your specifications.

The determination result of your existing items remains unchanged.

6.7.6 Schüco ASS 39 SC

Streamlining of the product range - moving leaf seal

Article 244807 (sliding seal) is omitted. For the system, the *Moving leaf seal* property is therefore no longer offered in the technical settings. The brush seal Art. 244806 is always determined.

Please note:

The change affects existing items. For items that previously had the *Seal* setting, the brush seal is now determined.

6.7.7 Schüco ASS 39 PD.NI:

New locking system with rotary knob, new structural profiles

(Since 2023 R2 SP02)

The rotary knob (258355, 270046, 270047) can now be selected as an additional alternative to the previous locking system. This rotary knob can be used on movable leaves that do not run outwards. This new locking system can only be used in conjunction with the new structural profiles 550910 and 550920. The input option in the panel properties dialogue has been extended:

For the *SHF centre profile*, you can select the new *Small internal structural profile for rotary knob* in the *Reinforcement* selection list. The new structural profiles will then be used and you can select the required article number for the rotary knob as the handle.

6.7.8 Schüco AS FD 75

Miscellaneous extensions

Three additional variants have been added to the optionally usable thresholds, which you can select in the *Item properties* dialogue in the *Item data* dialogue via the *Threshold design* element setting.

In addition to the *Standard* (71 mm frame all-round) and *Threshold 15 mm* (threshold with stop) selections, the following can be selected from this version onwards:

- Frame (50 mm)
- Frame (15 mm) - Same as frame (50 mm), but recessed in the floor.
- Threshold (4 mm)

Panel properties: dialogue

- From this version onwards, you can freely combine the number of leaves on the left and right when determining the opening type.
- If the number of leaves on the left and right is even or odd respectively, you can now determine whether the moving leaf should be on the left or on the right.

Fitting:

- For types (inward opening) that comply with the specifications of the manufacturing documents, the fitting type RC2 or PAS 24 can be selected.
- You can determine whether an *opening control* or a *closing and opening control* is determined.

New technical setting:

- In the *Glazing* group, you determine via the *Sealing tape/sealing piece for glazing bead joints* check box whether the sealing tape or sealing pieces are to be determined to achieve water tightness with wind loads > 300 Pa and to reduce air leakage in the area of the glazing bead joints.

Face width 90 mm - glass thicknesses of 39 mm and 40 mm

It is now also possible to use glass thicknesses of 39 mm and 40 mm in the folding/sliding system with a face width of 90 mm.

Schüco AS FD 75 and AS FD 90.HI:

changes and system enhancements

standard and RC2 fitting types

drainage caps - 'without'

In the technical settings, the new option *without* has been added for the selection of drainage caps (*Drainage / Ventilation* > *Cap type* group). In this selection, determining is done as follows:

- inward opening variants = two standard caps
- outward opening variants = no caps

The setting does not apply to elements with the threshold design *Threshold (4 mm)*. In this case, caps are never determined.

Use of adhesive and Viennese bars

Similar to the Schüco FD 70/80.HI folding sliding systems, glass divisions can be made with the decorative glazing bar Art. 189660 (adhesive bars, Viennese bars). This also applies to elements with the RC2 fitting type.

Selection guide for additional locking points

From this version onwards, the article numbers for additional locking points will be highlighted in red in the article selection dialogue for additional locking points if the maximum leaf height for their use is exceeded.

Fitting type RC2

RC2 now also for face widths of 90 mm

Previously, the RC2 fitting type could only be selected for inward-opening elements with a face width of 104 mm. From this version onwards, this is also possible for elements with a face width of 90 mm. Normal glazing beads are used in this face width and the filling must be glued.

Use of Georgian bars

The use of Georgian bars is now also possible for types with the RC2 fitting type.

Double-sided types

In the previous versions, the RC2 fitting type was only available for types with an odd number of leaves on one side. From this version onwards, the RC2 fitting type can also be selected for types with two leaf stacks. The rule here is that a leaf stack must always have an odd number of leaves.

Permissible leaf heights

The previously applicable minimum and maximum leaf heights for the RC2 fitting type have changed (previously minimum = 2,325 mm, maximum 2,665 mm).

New leaf height minimum:

- 1,922 mm (Schüco AS FD 75 and Schüco AS FD 90.HI)

New maximum leaf heights:

- 3,000 mm (Schüco AS FD 75)
- 3,500 mm (Schüco AS FD 90.HI)

Changes to the fitting determination (RC2 fitting type)

- In addition to the profile cylinder Art. 211980, the profile cylinders Art. 279132 (Schüco AS FD 75) and Art. 279118 and Art. 279214 (Schüco AS FD 90.HI) can now also be selected. The previously possible profile cylinder Art. 241216 is no longer available.
- Key-operated multipoint locking is possible (lock Art. 279777).
- When selecting the additional locking points for the selected lock, only the articles that can be used for the current leaf dimensions are offered. Optionally available without additional locking points.
- The protection set Art. 220851 is not required for types with the RC2 fitting type. It is therefore no longer determined.

- Additional locking points (Art. 269322, Art. 269321) are only determined at the intersections where the external hinges are located.

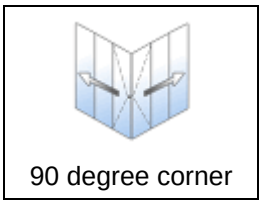
Please note:

The changes in the determination of the fitting affect existing items.

90 degree corner

From this version onwards, elements can be entered as corner solutions.

To do this, select the *90 degree corner* system template in the *Select template* dialogue *(04 - Sliding elements -> 02 - Folding sliding elements (insulated)*).



90 degree corner

In the *Item properties* dialogue, define the width of levels 1 and 2 and the element height in the element parameters. The position for the *moving leaf* is defined in level 2.

You define the folding stacks in the two levels as a free leaf combination directly in the *Field properties* dialogue. As standard, type 6 is pre-assigned with three leaves on the left and three leaves on the right. It is only possible to enter an odd number of leaves. Only the 15 mm threshold can be used as a threshold and only Art. 550810 is available as a weather bar.

Only the standard fitting can be selected as the fitting type.

Glazing options for RC2 and PAS 24 leaf profiles

(Since 2023 R2 SP05)

For types (inward opening) that comply with the specifications of the manufacturing documents, the fitting type RC2 or PAS 24 can be selected. The glazing tables have been modified for this fitting.

The maximum possible glass thickness has been restricted and the 4 mm and (in some cases) the 5 mm glass plug-in gasket is no longer used.

Please note:

This change affects existing items if they contain glass with a thickness that is no longer permitted.

Maximum element width instead of limiting the number of folding leaves

Previously, the maximum number of folding leaves was limited to 9 per side when entering the free leaf combination. This limitation has been removed. Instead, from this version, an automatic check is carried out with regard to the maximum element width of 9000 mm. If this limit is exceeded, you will receive an information message.

6.7.9 Schüco AS PD 75.HI

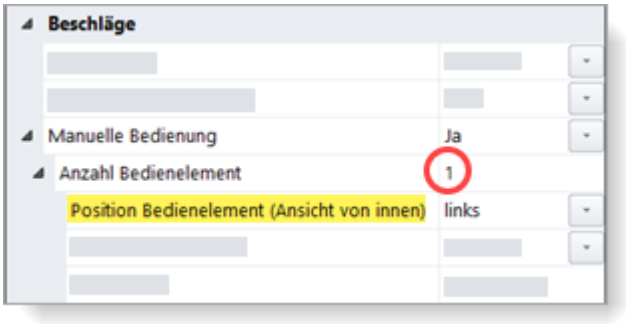
Sliding elements (aluminium)

TipTronic operating mode – changes

Available with an activation code.

- The determination of the required line extensions (4-core) has been revised. This results in changed lengths.

- If the number of controls for an element is set to 1, you can now specify the position of that control (left or right). With one moving leaf, the locking side is preset; with more than one moving leaf, the left side is preset.

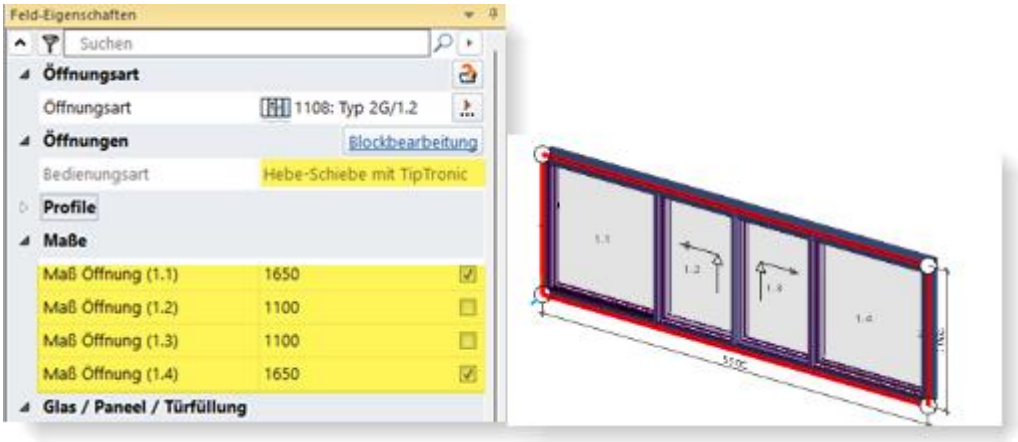


Please note:

These changes also affect existing items.

Asymmetric leaf layout

Asymmetric leaf layouts can now also be realised for elements with the TipTronic operating mode.



Brush seal only in black

From this version, the brush seal is always determined in black (Art. 203540). The alternative option for the grey seal (item 224497) in the technical settings is not applicable.

Please note:

This change affects existing items. If you selected the grey seal in the technical settings, the black seal is now determined.

'Performance' product range - New clamping pieces for rollers

Available with an activation code.

The new roller clamping piece (Art. 225562) replaces Art. 220637 in elements of the *Performance* product range. According to K1030292, two clamping pieces are specified per roller.

Please note:

This change affects existing items in the *Performance* product range. For elements of the *Access* and *Design* product ranges, Art. 220637 is still specified.

'Access' and 'Design' product ranges with manual operation - anti-hooking device for steel tube

Available with an activation code.

For elements with manual operation in the aforementioned product ranges, the new anti-hooking devices (Art. 225568) for the steel tube (Art. 201334) in the large reinforcement profile are additionally specified (two units per hook with Art. 201334).

Please note:

This change affects existing items.

6.7.10 Schüco ASS 50, Schüco ASE 60/80.HI and ASE 80 LC:

Closing aid - handle damper and tension spring

(Since 2023 R2 SP05)

For lift-and-slide models, the handle damper Art. 281214 will now always be determined according to the changed technical specifications. It can no longer be deselected in the program.

In the *Panel properties* dialogue, only the *With handle damper* and *With handle damper and tension spring* options are available for the *Closing aid*. The previous options *With tension spring* and *Without handle damper and tension spring* can no longer be selected.

For leaf weights between 100 kg and 350 kg, the *With handle damper and tension spring* option is automatically selected; for smaller and larger leaf weights, the *With handle damper* option is automatically selected.

Please note:

This change affects existing items.

6.7.11 Schüco ASS 70 FD and Schüco ASS 80 FD.HI:

Technical settings for rollers removed

In the *Fittings* group, there were settings for the alternative determination of rollers. These were only applied to existing items from older versions prior to 2020 R2. Alternative plastic rollers are no longer available for the systems. Stainless steel rollers are now also always determined for the old items. The *Schüco ASS FD roller* and *Roller/roller hinge* properties are not applicable.

Cross-system:
RC2 security class - round cord for burglar-resistant glazing beads

The length determination for the round cord Art. 244058 for the burglar-resistant glazing beads (K1031539) has been modified.

Please note:

This change affects existing items.

6.7.12 Schüco ASE 60, Schüco ASE 80.HI:

Types 1C and 2C (lift and slide) with level threshold cannot be combined with safety class

In previous versions, it was possible to combine the listed types with a level threshold and the *lift and slide* operating mode with a fitting type with a security class. This combination is no longer permitted from this version. Only the *Standard* fitting type can be selected for this combination.

1C.B

1C.B.2

2C

2C.2

Please note:

This change affects existing items. If a fitting type with a security class was previously selected, the system automatically reverts to the *Standard* hardware type.

6.7.13 Schüco AS FD 75 and AS FD 90.HI:

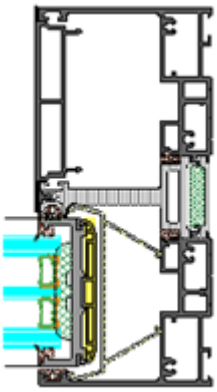
Maximum element width instead of limiting the number of folding leaves

Previously, the maximum number of folding leaves was limited to 9 per side when entering the free leaf assembly. This limitation has been removed. Instead, from this version, an automatic check is carried out with regard to the maximum element width of 9000 mm. If this limit is exceeded, you will receive an information message.

6.7.14 Schüco ASS 77 PD.HI:

Inlet profile modified

According to the changed order and production documents, the new Art. 284627 is determined instead of the inlet profile Art. 284818 from this version. The change affects your existing items.



Please note:

The change does not apply to units in the Schüco ASS 77 PD.HI manual system. For these, the inlet profile Art. 284818 will still be determined.

6.8 Façades (aluminium)

6.8.1 Various Schüco FWS systems

Technical settings - selection 'none' is omitted for glazing rebate ventilation

- Schüco FWS 35 PD
- Schüco FWS 50 and Schüco FWS 60

From this version onwards, in the *System specifications* dialogue, you can no longer select the *none* entry in the technical settings in the *Drainage/ventilation* group for the *Glazing rebate ventilation*.

Please note:

The change affects existing items. Items with the *none* setting are switched to *total ventilation*.

6.8.2 Schüco FWS 50:

'SI eco' thermal insulation

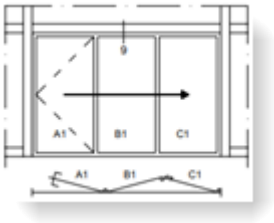
(Since 2023 R3 SP04)

For the *Thermal insulation* element parameter, *SI eco* thermal insulation can now be selected as an alternative to *SI* thermal insulation. This determines the insulation variant without thermal insulation tape.

6.8.3 Schüco FWS 50, Schüco FWS 60

Schüco AS FD 75 and Schüco AS FD 90.HI folding sliding elements as insert elements

Elements of the Schüco AS FD 75 and Schüco AS FD 90.H! Systems can be used with adapter profiles (Art. 382870, Art. 368990, Art. 439050) in panels of façade elements of the Schüco FWS 50 and Schüco FWS 60 systems.



For use in a façade panel, select the *Free leaf combination* opening type. All details on the design (profiles, number of folding leaves, threshold design, fittings) are entered in the *Field properties* dialogue.

Range streamlining - Vulcanised sealing frames

The vulcanised sealing frames for the inner glass seal with the same sealing view have been removed from the range.

- 224891
- 224892
- 224893
- 246580
- 246581

In the technical settings, you can therefore no longer combine the selection *Seal inside > Standard vulcanised for level 1 to level 3* with the selection *Seal view glass seal inside > same*.

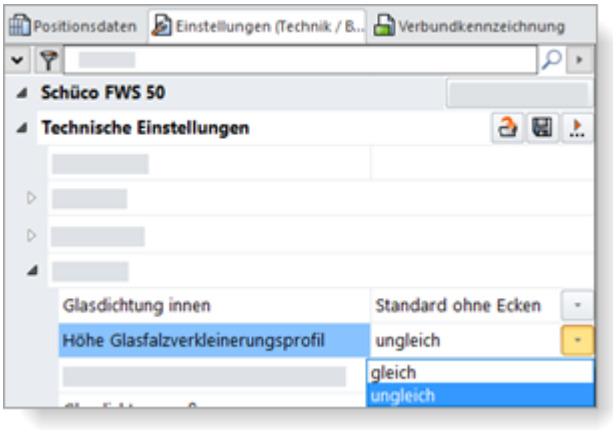
Technical settings

Schüco FWS 50 and Schüco FWS 60:
High glazing rebate reduction profile

In the previous versions, glazing rebate reduction profiles with unequal heights were always determined when using the inner glazing gasket *Standard without corners*. And the same glass system gaskets.

As of this version, you can optionally change the determination via the new technical setting *High glazing rebate reduction profile* in the *Seal* group to *Identical*. In this case, the same glazing rebate reduction profiles and different glazing system seals are determined.

The default selection is *not identical*. As a result, the determination remains unchanged compared to the previous versions.



6.8.4 Schüco FWS50/60 and Schüco AOC:

New non-perforated pressure plate profiles

(Since 2023 R3 SP04)

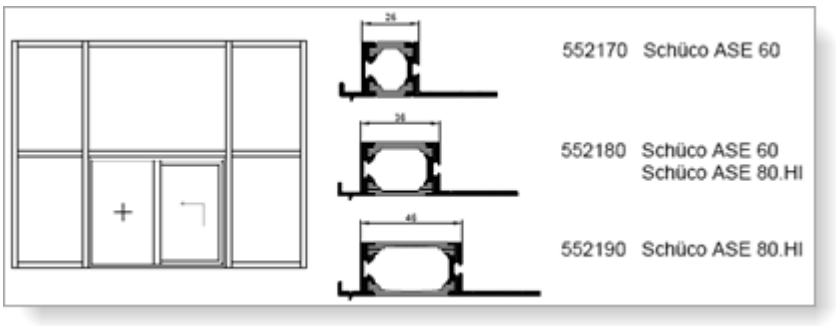
The new non-perforated pressure plate profiles can be selected:

- Art. 477590 (FWS 50, FWS 50 CW, FWS 50 SG, AOC face width 50 mm)
- Art. 477650 (FWS 60, FWS 60 CW, FWS 60 SG, AOC face width 60 mm)

6.8.5 Schüco ASE 60/80.HI sliding elements as insert elements

1-track and 2-track types of the Schüco ASE 60 and Schüco ASE 80.HI systems can be used with adapter profiles (Art. 552170, Art. 552180, Art. 552190) in panels of façade elements of the Schüco FWS 50 and Schüco FWS 60 systems. The *Sliding* and *Lift-and-slide* (not TipTronic) operating modes can be selected. It is not possible to combine these insert elements with a balustrade safety device or insect screen.

The *Design* and *Level threshold* element parameters can be defined for the insert elements in the *Field properties* dialogue.



6.8.6 Schüco FWS 35 PD

Range streamlining - Changed glazing thicknesses, thermal insulation SI

For elements in the SI thermal insulation version, the possible glazing thicknesses are reduced to 46 mm to 50 mm.

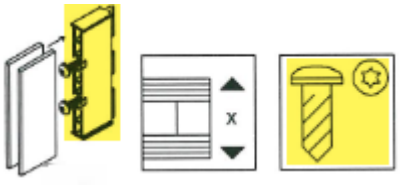
Please note:

This change also affects existing items that were recorded with a previous version.

6.8.7 Schüco FWS 50, Schüco FWS 60

Determination of spacing blocks (glazing bridges)

The glazing bridges Art. 230401 to 230407 and the associated screws required for blocking purposes are determined, as of this version, according to the K-drawings for the security classes *without*, *RC1* and *RC2*.



Please note:

This change also affects existing items that were recorded with a previous version.

SI thermal insulation - flat cover cap

From this version, you can select the *Flat cover cap* entry for the *Exterior design* element parameter for elements with SI thermal insulation.

France - flat cover cap

(France only)

From this version, the French flat mullion and transom cover caps can be determined (Art. 543100, Art. 543130, Art. 543110, Art. 543040). To do this, select the *Flat cover cap* entry in the element parameters for *Exterior design*.

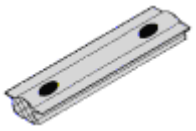
Per-panel ventilation not permitted with RC3/4 and FB3/4 security classes

In previous versions, the RC3/4 and FB3/4 security classes could be selected in the element parameters for elements with per-panel ventilation (technical setting for *Glazing rebate ventilation*). From this version, this combination is no longer possible for new items.

Please note:

If you have selected this combination for your existing items, you will receive an information message from this version. Adjust your settings as required.

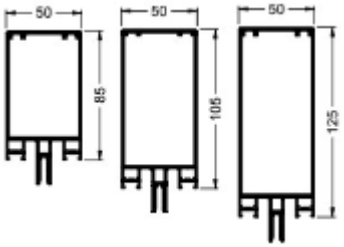
Mullion-transom façades:
Sealing pieces for transom connection with continuous internal glass seal

Schüco FWS 35 PD Schüco FWS 50.NI Schüco FWS 50 Schüco FWS 60 Schüco Seamless	Schüco FW 50+ FR60 FW 50+ BF FW 60+ BF FW 50+ BF.HI FW 60+ BF.HI	

From this version, you can set the technical settings so that the sealing pieces for the transom connection are also determined when the standard seal without angles is used. For this you will find the new *Standard without angles with sealing piece* entry in the *Seal* group for the *Internal glass seal* property.

Schüco FWS 50:
Mullion profiles Art. 536700, Art. 536710 and Art. 536730

From this version, the profiles can be selected without special activation.



6.8.7.1 Burglar resistance RC3 - Changes

As of this version, the changes to the relevant K-drawings for burglar resistance RC3 are taken into account.

- Schüco FWS 50 and Schüco FWS 60:

  1st If the distance to the accessible floor level is greater than or equal to 3,000 mm, the glass inset on the respective lower transom sides can be reduced if required. From this version onwards, you will receive a message informing you of this.

  2nd Determination of the glazing blocks has been corrected. The items required for RC3 are now determined.

- Schüco FWS 50:

  Under certain conditions it is necessary to use a transom with a face width of 60 mm instead of a transom with a face width of 50 mm, because no glass supports for large glass loads or cross glass supports can be used for transom FWS 50. Therefore, as of this version, the selection of transoms with a face width of 60 mm is possible for these cases in the FWS 50 system. You will receive an information message when the transom needs to be replaced.

- Schüco FWS 60:

  The glass inset changes from 20 mm to 18 mm. (This adjustment has already been included since 2022 R3 SP08).

Please note:

All changes also affect existing items.

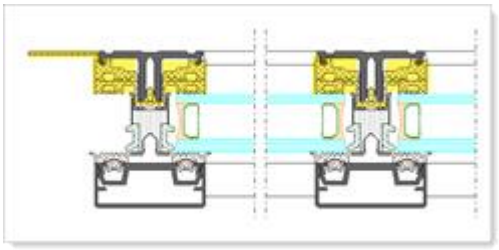
6.8.8 Schüco AOC

'Sloping louvred façade' and 'Pent roof' system templates

The following templates can be selected for the Schüco AOC system. In the technical settings, you must select the *Total ventilation* input for these slanted constructions for *Glass rebate ventilation*.

02 - Façades:	01 - Mullion - transom:	Sloping louvred façade 
	04 - Light roof constructions:	Pent roof 

Inner seals - dimensions in millimetres



From this version, the determined length of the glass unit seals and the building structure connection seals is given in millimetres rather than linear metres.

In addition, the following lists now include cutting dimensions to help you cut these seals to size:

- Cutting composition
- Cutting optimisation

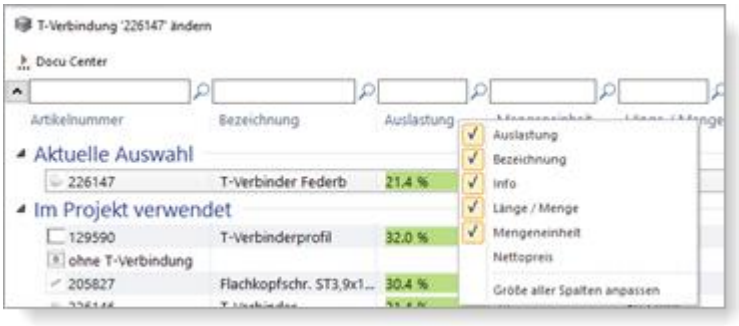
6.9 Static pre-dimensioning

6.9.1 New - Static preliminary design for T-connectors

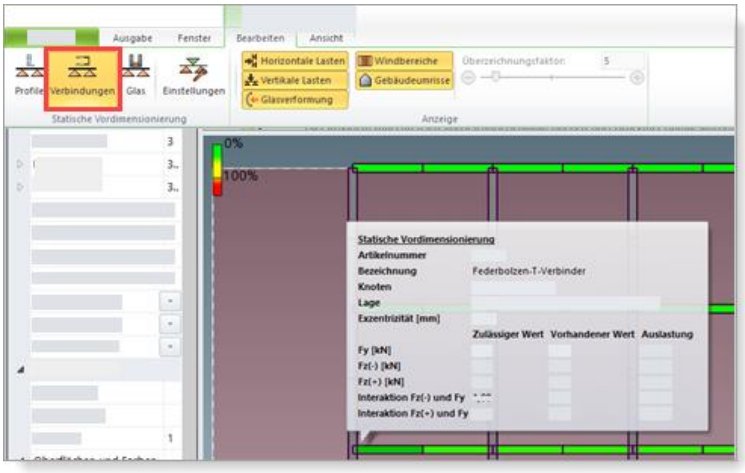
As of this version, a static preliminary design for the T-connectors is carried out for the following systems.

Systems	Exception
Schüco FWS 35 PD Schüco FWS 50 / Schüco FWS 60 Schüco FWS 50 SG / Schüco FWS 60 SG	
Insulated windows/doors	No fire doors No uninsulated systems

- When selecting the T-connectors in the item window, you are supported by the display of the utilisation in the *Change T-connection* dialogue.



- As of this version, in the static mode of the item window, you will find the new *Connections* button in the menu ribbon of the *Static pre-dimensioning* group. If the icon button is activated, the connector statics are shown in this view.
  Quick info on the profile ends shows you the comparison of the permissible and existing values for the individual forces (Fy, Fz(-), Fz(-) and interactions (Fz(-) and Fy; Fz(+) and Fy) and the utilisation.
  For the profile ends you can call up a dialogue via the *Load combinations of connections* context menu item, in which the calculated load combinations of the connectors are displayed.



- In the *Static pre-dimensioning* list, the maximum forces and interactions are listed for the T-connector types occurring in the item

6.9.2 Design rules for glass only according to DIN 18008

As of this version, the glass statics for the country selection *Germany* are calculated exclusively according to DIN 18008. The alternative selection of the design rule according to *TRLV/TRAV* in the *Glass values* tab of the *Static pre-dimensioning* dialogue is no longer possible.

6.9.3 All countries: Alternative 'Global FEM' calculation

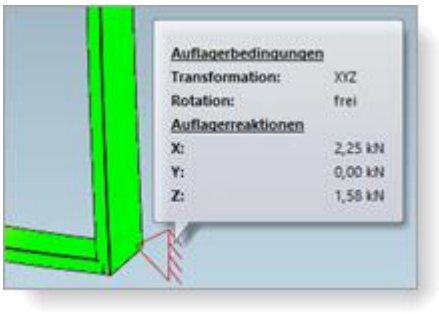
Mullion/transom louvred façades (not Schüco FWS 60 CV)

Windows/doors: 2D outline templates (no round elements, no 3D elements)

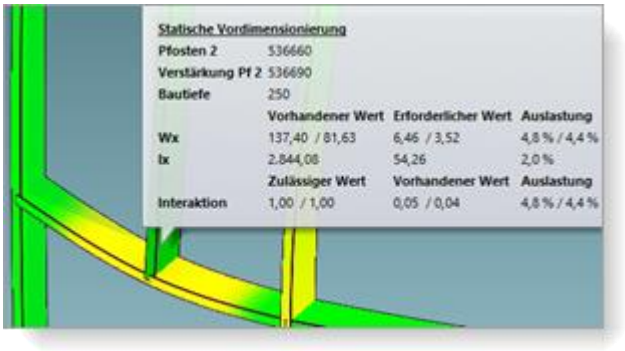
From this version, the calculation of the static pre-dimensioning of the profiles can alternatively be carried out on the basis of a new physical/mathematical calculation kernel. The global finite element

method (FEM) is used. In this calculation, the entire element is considered as a three-dimensional spatial framework.

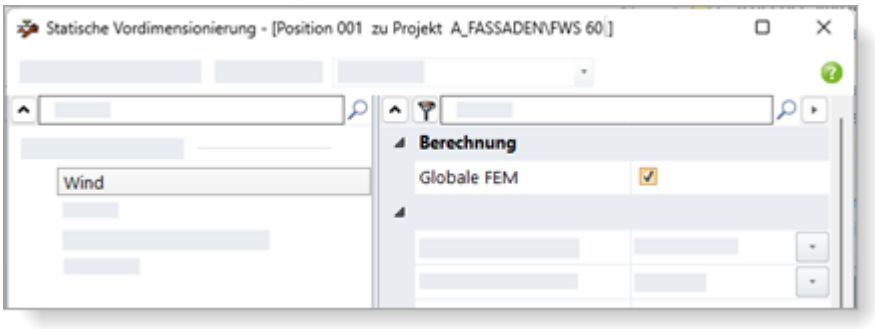
As a result of the static pre-dimensioning, you obtain advanced calculations. For example, this is used to calculate forces in the longitudinal axes (vertical loads) of the posts. In static mode you can see the respective support conditions and reactions in the tooltip for the façade fixings.



Substitution situations are also taken into account.



When you open the *Static pre-dimensioning* dialogue in the *Item window*, you will find the *Global FEM* check box in the *Wind* properties list in the *Calculation* group. This setting is only visible for items for which this alternative calculation method can be used.



- If you do not select the check box, the calculation is carried out according to the previous procedure (calculations as ‘rigid frame statics’).
- If you tick the check box, the calculation will be carried out using the new method.

6.10 Fire and smoke protection (aluminium)

6.10.1 Schüco FireStop ADS 90 FR 30

Fixing hole variant 7 for 'bottom blind frame'

For bottom blind frames in the system, variant 7 can now also be selected in the processing settings for the fixing hole.

Frame fixing - fixed glazing below

If you have selected the option for *Construction-dependent (from technical settings)* in the technical settings in the *Fixing* group , you can select three new inputs for the *Frame fixing fixed glazing below*:

Profile holder with pan-head screw ST 5.5x45

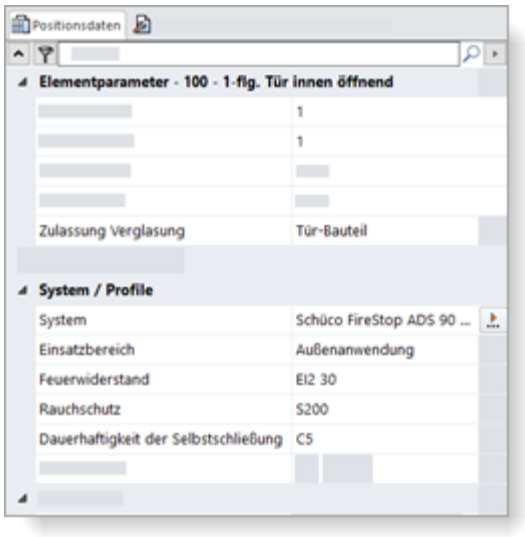
Profile holder with pan-head screw ST 5.5x67

Profile holder pre-prepared with pan-head screw ST 5.5

CE classification test
(Since 2022 R3 SP03)

Since 2022 R3 SP03, single- and double-leaf doors of the system can be tested with regard to the selected performance characteristics according to EN 16034 (e.g. EI2 30, S 200, C5, etc.).

In the *Item data* tab, in the *System / profiles* group below the *Area of application* property, you will find the *Fire resistance* (e.g. EI2 30), *Smoke control* (e.g. S 200) and *Durability of self-closing function* (e.g. C5) properties, if the *Door component* input is selected for the *Glazing approval* property and the *External application* input is selected for the *Area of application*.



Based on the combination of your selections for these properties, the program checks the element for permissible sizes, weights and components used (profiles, fittings, glass and panel). You will receive corresponding messages if the element does not meet a criterion.

To assist you in selecting the appropriate articles, additional columns with relevant information on the CE classification are displayed in the *Article selection* dialogue.

Please note that your classification requirements selected in the item data are not automatically adopted as a property for the output of the CE labelling list in the *Panel properties* dialogue.

This is available with an activation code.

Panel glazing size check

In the *Glass/panel* dialogue, for panels as of this version, you will find the new *Panel type Schüco FireStop ADS 90 FR 90* property in the *Further technical data* group. Panel types (1) to (6) mentioned in K1029558 are offered as possible selections.

If you select one of these entries in the item for the panel used, the size check is carried out according to the size tables from drawing K1029558.

6.10.2 Schüco FireStop ADS 90 FR 90

Frame construction - templates 205 selectable - is available with an activation code.

The system can be selected again for the following templates:

System templates Fire and smoke protection opening inwards and outwards:

- 205 - double leaf Door opening outward + fixed panel top, left and right
- 205 - double leaf Door opening inward + fixed panel top, left and right

6.10.2.1 Sound insulation for automatic door seal

For doors with automatic door seal, a better sound insulation effect can be achieved if the door clearance is reduced from 8 mm to 6 mm and the base profile is additionally sealed (K1022925).

As of this version, you will find the ‘Sound insulation (6 mm)’ check box in the ‘Panel properties’ dialogue below the selection for the door threshold. When you activate it, the door clearance is determined to be 6 mm. In addition, you will receive an information message that the base must be additionally sealed. The material for this is not determined automatically.

6.10.3 Schüco FireStop ADS 90 FR 30 and Schüco FireStop ADS 90 FR 90:

Wall connections - screw Art. 205496 replaced by Art. 205081

Fixings previously made with screw Art. 205496 now require screw Art. 205081.

If you have selected a corresponding blind frame fixing in the technical settings under the *Fixing* group, the new screw is determined from this version onwards.

6.10.3.1 C2C (cradle to cradle)

(Since 2022 R3 SP08)

C2C outputs can now be generated for elements of both systems.

- Schüco FireStop ADS 90 FR 30: C2C in silver
- Schüco FireStop ADS 90 FR 90: C2C in bronze

If an output is not possible due to an element component, you will receive a note in the error list.

C2C issuance for various other systems (cradle to cradle)

C2C can now also be issued for items in the following systems, provided the requirements are met.

System	C2C to silver	C2C to bronze
Schüco AWS 65 BS	X	
Schüco AWS 70 BS.HI	X	
Schüco AWS 90 AC.SI	X	
Schüco ASE 60		X
Schüco ASE 80.HI		X
Schüco AS PD 75.HI		X
Schüco AS FD 75		X
Schüco AS FD 90.HI		X
Schüco AW RO 50	X	
Schüco AF UDC 80	Thermal insulation: Standard	Thermal insulation: HI, SI and SI +XPS Design: CV
Schüco AF UDC 80 SG		X
Schüco AOC	X	
Schüco ADS 80 FR30	X	

Information on the other supported systems can be found in the program: Menu ribbon, *General* tab *> Help > Profile systems > C2C* column.

6.10.3.2 Sound insulation for automatic door seal with butt joint

For doors with automatic door seal and sound insulation, the end faces and hollow chambers of the sealing pad must be sealed with permanently elastic sealing compound for door bases with butt joints. You will receive a message informing you of this. The material for this is not determined automatically.

6.10.4 Schüco ADS 80 FR 30:

Determining the glass unit seal - Technical setting

As of this version, you can influence the determination of the glass system seal via the *Glass unit seal* technical setting (*Glazing* group). The selections apply to glazing type A (normal glazing bead and standard seal).

Please also note for existing items

The standard specification is *Largest possible unit seal*. Check your desired specification for the glass unit seal in conjunction with your settings for the *Glazing bead size* and the glass thickness in the element.

6.10.5 Schüco FireStop ADS systems

Integrated active leaf anticipator (IGV)

Schüco FireStop ADS 76.NI SP, Schüco FireStop ADS 90 FR 30 and Schüco FireStop ADS 90 FR 90 systems

As of this version, for double-leaf doors in full panic with carriers Art. 220450, Art. 220517, Art. 279682, Art. 240508 or Art. 240509, you will find the *Integrated active leaf anticipator (IGV)* property in the *Panel properties* dialogue in the *Door closer / door coordinator* group. If you select the option *with IGV*, item 279874 is determined.

6.10.6 Schüco FireStop ADS 76 NI.SP:

Glazing - Adjusted determination

The determination was adapted to the current glazing table in the order documents (total thicknesses up to 44 mm).

This also required the following changes in the technical settings:

- Amended: In the ‘Glazing bead size’ selection list (Glazing group), the ‘Medium or smallest possible glazing bead’ input is no longer available for selection.

Please also note for existing items

For items with the ‘Medium or smallest possible glazing bead’ selection, the smallest possible glazing bead is now preset and determined. Check your desired default for the glazing bead in combination with your settings for the glazing bead size and the glass thickness in the element.

- New: As of this version, you can influence the determination of the glass unit seal via the ‘Glass unit seal’ technical setting (Glazing group).

Please also note for existing items

The standard specification is the largest possible unit seal. Check your desired specification for the glass unit seal in conjunction with your settings for the glazing bead size and the glass thickness in the element.

6.10.7 Schüco AWS FR 30 fire protection window

Schüco AWS FR 30 fire protection window: Customer composite not permissible

Schüco AWS 60 FR 30 F30/EI30

Schüco AWS 60 FR 30 G30/EW30

Schüco AWS 70 FR 30 F30/EI30

Schüco AWS 70 FR 30 G30/EW30

As of this version, the composite designation as customer composite (CC) is no longer offered in the item window for profiles in these systems.

Please note:

In existing positions, the composite designation of profiles is automatically changed to Schüco composite (SC) if they were previously designated as customer composite (CC).

6.11 Technical settings and processing settings

6.11.1 Miscellaneous safety systems:

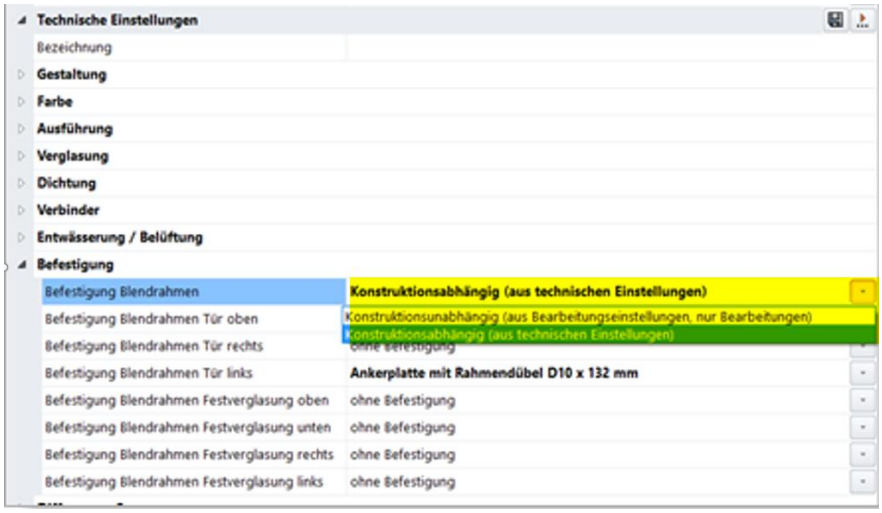
Frame fixings - Determining fixing accessories

As of this version, you can determine whether, and if so, which fixing accessories are to be determined for the frame fixing.

You will find suitable setting options for this in the technical settings of the new *Fixing* group. In principle, you first decide which settings are to be evaluated:

a. *Construction-independent (from processing settings, processing only)*:
   As in the previous versions, the determination for machine processing follows according to your settings for the variant in the processing settings. No fixing material is determined. This is the default setting in the master data.

b. *Construction-dependent (from technical settings)*:
   You can select the desired fixing material directly in the technical settings from a selection list. The material is determined and the appropriate processing operations are generated for the machine processing.
   Some of the fixing material is created as an article template. If the material is to be taken into account for costing purposes, you must supplement the item data in the master data accordingly.



The settings are possible for the following systems:

Schüco FireStop ADS 76.NI SP	Schüco ADS 80 FR 60
Schüco FireStop ADS 90 FR 30	Schüco ADS 80 FR 30
Schüco FireStop ADS 90 FR 90	
	Schüco AWS 60 FR 30 F30/EI30
Schüco ADS 65.NI SP	Schüco AWS 60 FR 30 G30/EW30
Schüco ADS 65.NI FR 30 EW30	Schüco AWS 70 FR 30 G30/EW30
Schüco ADS 65.NI FR 30 E30	Schüco AWS 70 FR 30 F30/EI30

6.11.2 Schüco ADS 80 FR 30 and Schüco ADS 80 FR 60:

Fixing holes - New variants 5 and 6

For blind frames in the system, two new variants can be selected in the processing settings for the fixing hole.

- Variant 5: 13-mm continuous hole and on wall side 3.2-mm hole (drill pattern for anchor plate)
- Variant 6: 7.5 mm continuous hole

6.12 Schüco FireStop ADS 90 FR 90:

New options for fixing with roller door hinges

As of this version, according to the extended approval for doors with roller hinges, the fixing can also be generated above and below the roller door hinge.

In the processing settings, you will find the new *Design for roller door hinge* property in the *Fixing holes* group. There, you determine whether the fixing is to be generated centrally to the hinge or above and below the hinge.

6.12.1 Firestop T90/F90:

Fixing hole variant 3 not applicable

- For blind frames in the system, variant 3 could be selected in the previous versions in the processing settings for the fixing hole. This variant is no longer available for selection.

  Please note:

- For existing positions with this specification, no fixing hole is generated as of this version.

6.13 Forms

6.13.1 Fire protection monitoring reports

(Since 2021 R2 SP03)

The current forms (as at 07/2021) for Schüco FireStop ADS 90 FR 30 and Schüco FireStop ADS 90 FR 90 (T30-1, T30-2, T90-1 and T-90) can be displayed from the program (menu ribbon: *General* tab > *Extras* tab > *Forms* group > *Fire protection monitoring report*).

Can be consulted via:

- Schüco FireStop ADS 90 FR 30 T30-1 (updated)
- Schüco FireStop ADS 90 FR 30 T30-2 (updated)
- Schüco FireStop ADS 90 FR 90 T90-1 (new)
- Schüco FireStop ADS 90 FR 90 T90-2 (new)