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ABB AB JOKAB SAFETY reserve for eventuall incorrectness in this manual.
2012-02-28
1. Introduction

This guide briefly describes how to use SafeCAD 2012.

SafeCAD is an application for AutoCAD 2012 developed by ABB AB Jokab Safety, and designed to be used for designing Quick-Guard fencing system with products from ABB AB Jokab Safety.

Some basic AutoCAD 2D- and 3D experience and knowledge is recommended, also knowledge about relevant standards and regulations for different type of applications.

Some settings and system variables in AutoCAD have to be changed manually before using SafeCAD, otherwise the program will not work properly.

Pictures in this guide may look/appear different in your system, due to other user- and system settings.

SafeCAD 2012 is compatible with SafeCAD 2008, but not vice versa.

SafeCAD 2012 is not compatible with SafeCAD versions earlier than SafeCAD 2008, e.g. SafeCAD 2. Though, it is possible to open and generate reports from drawings made with SafeCAD 2.

All dimensions given in this guide are in mm unless otherwise stated.

Special notes
Pay attention to the following special notes in this guide:

- Important!

- A tip!
2. Overview
System requirements and Installation

Requirements
- Windows 7, 32- or 64-bit
- AutoCAD® 2012, 32- or 64-bit

Installation
- Run SafeCAD 2012 *.msi installation file

There is two different setup program for SafeCAD 2012. 32- or 64-bit version. Make sure correct installation file is used.

First time SafeCAD is started a window will appear in which a SafeCAD code has to be entered. Send an e-mail with your AutoCAD license number to support.jokabsafety@se.abb.com to receive this code. This code is valid for a specific period. 10 days before time period expire, a message window will appear when starting SafeCAD.
What’s new with SafeCAD 2012

- Works (only) with Windows 7, 32- or 64 Bit
- Works (only) with AutoCAD 2012, 32- or 64 Bit
- ABB article numbers implemented
- Reports are generated in *.xlsx format
- Layout in reports are changed
- Gas spring for hatches implemented
- Possibility for user’s to add user defined articles into article data base
- 44x44 profile in length 1400mm implemented as an article
- Welded steel mesh 40x40x3.5 in dimension 1074x1216mm implemented as an article
- Option to create conventional door with 44x88 profile
- New hinge, JSM D1C implemented
- New insertion option for the 44x44 profile
AutoCAD settings

Forced settings

1. SafeCAD doesn’t work properly if AutoCAD Mechanical 2012 is loaded. If “AutoCAD Mechanical 2012” is shown in AutoCAD’s program window, AutoCAD must be closed. Then, open AutoCAD 2012 from start menu and make sure that “Mechanical” isn’t shown in AutoCAD’s program window. Close AutoCAD and start SafeCAD program from short cut on desktop.

2. Type UCSORTHO at the command prompt and set system variable to “0”

3. Object snap (OSNAP) must be turned “off” when generating or editing fence.

Optional settings (recommended)

4. Type “COORDS” at command prompt and press enter, set system variable to “2”

5. Type “STARTUP” at command prompt and press enter, set system variable to “1”
   This variable sets style of the window shown when creating a new drawing. See pictures below.

   “Startup” set to “0”

   “Startup” set to “1”

6. From Menu Tools – Options. Select “Drafting” tab and set “Auto Snap Settings” according to picture below. Check box “Marker” (A) and “Display Auto Snap tooltip (B) is optional
## AutoCAD commands

Type short command at command prompt and press enter

<table>
<thead>
<tr>
<th>Command</th>
<th>Short command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle</td>
<td>C</td>
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<tr>
<td>Copy</td>
<td>Cp</td>
</tr>
<tr>
<td>Dimension styles</td>
<td>D</td>
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<tr>
<td>Erase</td>
<td>E</td>
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<tr>
<td>Line</td>
<td>L</td>
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<tr>
<td>Move</td>
<td>M</td>
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<tr>
<td>Multi line Text</td>
<td>Mtext</td>
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<tr>
<td>Offset</td>
<td>O</td>
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<tr>
<td>Pan</td>
<td>P</td>
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<tr>
<td>Polyline</td>
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<td>Re</td>
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<td>Single Line Text</td>
<td>Dtext</td>
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<tr>
<td>Snap to endpoint</td>
<td>End</td>
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<tr>
<td>Snap to insert</td>
<td>Ins</td>
</tr>
<tr>
<td>Snap to midpoint</td>
<td>mid</td>
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<tr>
<td>Snap to perpendicular</td>
<td>Per</td>
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<td>Zoom</td>
<td>Z</td>
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<td>Function keys - AutoCAD</td>
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<td>--------------------------</td>
<td>---------------</td>
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<td>F1</td>
<td>Help</td>
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<td>F2</td>
<td>Text Window</td>
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<tr>
<td>F3</td>
<td>Osnap on/off</td>
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<tr>
<td>F4</td>
<td>Tablet</td>
</tr>
<tr>
<td>F5</td>
<td>Iso Plane Top/Left/Right</td>
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<tr>
<td>F6</td>
<td>Coords on/off</td>
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<tr>
<td>F7</td>
<td>Grid on/off</td>
</tr>
<tr>
<td>F8</td>
<td>Ortho on/off</td>
</tr>
<tr>
<td>F9</td>
<td>Snap on/off</td>
</tr>
<tr>
<td>F10</td>
<td>Polar on/off</td>
</tr>
<tr>
<td>F11</td>
<td>Object snap tracking on/off</td>
</tr>
</tbody>
</table>
3. **SafeCAD commands**

SafeCAD commands can be started from SafeCAD menu, SafeCAD toolbars or by typing SafeCAD command at the command prompt.

**SafeCAD menu**
SafeCAD menu is placed among AutoCAD menus
SafeCAD Toolbars

Generally
When SafeCAD have been successfully installed, main “SafeCAD Toolbar” is displayed.

This toolbar have flyout toolbars, and give access to all available SafeCAD commands via buttons in toolbars. Click with right mouse button on “SafeCAD toolbar” to list and display other specific toolbars related to SafeCAD. Toolbars can also be accessed from Tools menu > Toolbars > SafeCAD
SafeCAD Toolbar with flyout toolbars (all commands)

Commands from “Dim” Toolbar
Commands from “Aluminium Extrusion” Toolbar
Commands from “Bracket” Toolbar
Commands from “End Cap” Toolbar
Insert door and hatches
Commands from Infill panels Toolbar
Commands from “Door Components” Toolbar
Commands from “Light beam Components” Toolbar
Commands from “Other” Toolbar
Commands from “Sliding Element” Toolbar
Commands from “Properties” Toolbar
Commands from “Object” Toolbar
Commands from “Roof” Toolbar
Commands from “Tunnel” Toolbar
Icon for Generate fence command
Icon for Generate reports command
Commands from “Tools” Toolbar

DIM Toolbar

Icon for dimensioning horizontal profiles in 2D
Icon for dimensioning profiles in 3D
Aluminium extrusion toolbar

- Icon for inserting a vertical 44x44 profile (JSM A44A)
- Icon for inserting a vertical or horizontal 44x44 profile (JSM A44A)
- Icon for inserting a 44x88 profile (JSM A4488A)
- Icon for inserting a 44x16 profile (JSM A4416)
- Icon for inserting an 88x88 profile (JSM A8888)
- Icon for inserting guiding rail JSM A56
- Icon for inserting guiding rail JSM A3130B (offset from reference profile)
- Icon for inserting guiding rail JSM A3130B (attached to the reference profile)
- Icon for inserting cable duct 44x25mm (JSM A25_)
- Icon for inserting cable duct 44x60mm (JSM A60_)
- Icon for inserting cable duct 88x68mm (JSM A88)

Bracket Toolbar

- Icon for inserting hinge JSM 35-K, 0 degrees
- Icon for inserting hinge JSM 35-K, 180 degrees
- Icon for inserting floor bracket JSM 30B-K
- Icon for inserting angle bracket JSM 30B-K1
- Icon for inserting small angular bracket JSM 31B-K
- Icon for inserting floor bracket JSM 36-K1
- Icon for inserting floor bracket JSM 36-K2
- Icon for inserting floor bracket JSM 39-K
- Icon for inserting L-bracket JSM 32B-K
- Icon for inserting T-bracket JSM 33B-K
- Icon for inserting I-bracket JSM 34B-K

End cap Toolbar

- Icon for inserting end cap 44x44 (JSM L1A) yellow
- Icon for inserting end cap 44x44 (JSM L1B) grey
- Icon for inserting end cap 44x25 (JSM L2) grey
- Icon for inserting end cap 44x60 (JSM L3) grey
- Icon for inserting end cap 44x88 (JSM L4A) yellow
- Icon for inserting end cap 44x88 (JSM L4B) grey
Infill Panels Toolbar

- Icon for inserting welded steel mesh 40x40mm
- Icon for inserting welded steel mesh 30x30mm
- Icon for inserting woven steel mesh 40x40mm
- Icon for inserting 5mm clear polycarbonate sheet
- Icon for inserting double 5mm clear polycarbonate sheets
- Icon for inserting 3mm polycarbonate sheet for welding applications
- Icon for inserting 1,0mm X-reinforced steel panel
- Icon for inserting 25mm sound absorbing panel
- Icon for inserting 50mm sound absorbing panel
- Icon for inserting 6,4mm laminated glass
- Icon for inserting toughened glass

Door components Toolbar

- Icon for inserting handle JSM D2
- Icon for inserting hinge JSM D1A, 0 degrees
- Icon for inserting hinge JSM D1A, 180 degrees
Lightbeam components Toolbar

Icon for inserting a 1,1m high light beam post incl. Floor brackets
Icon for inserting transmitter JSL50
Icon for inserting receiver JSL50
Icon for inserting large mirror JSM8A incl. Bracket JSM60-L
Icon for inserting medium mirror JSM7A incl. Bracket JSM60-L
Icon for inserting small mirror JSM6 incl. Bracket JSM60-L
Icon for inserting large mirror JSM8A incl. Bracket JSM62-L
Icon for inserting medium mirror JSM7A incl. Bracket JSM62-L
Icon for inserting small mirror JSM6 incl. Bracket JSM62-L
Icon for inserting bracket JSM60-L
Icon for inserting bracket JSM62-L
Icon for inserting bracket JSM63
Icon for inserting bracket JSM9
Icon for inserting mirror JSM6
Icon for inserting mirror JSM7A
Icon for inserting mirror JSM8A

Other Toolbar

Icon for inserting door closer JSM D3
Icon for inserting hook for door closer JSM D3
Icon for inserting wheel JSM D9
Icon for inserting safety switch JSN5

Sliding element Toolbar

Icon for inserting sliding element JSM D6
Icon for inserting sliding element JSM D7
Icon for inserting sliding element JSM D8
Icon for inserting support wheel JSM D9-K
Icon for inserting support wheel JSM D9A-K
Icon for inserting suspension wheel JSM D5, offset from reference profile
Icon for inserting suspension wheel JSM D5, plan to reference profile
Properties Toolbar

- Icon for “Fence Properties” command
- Icon for “Segment Properties” command
- Icon for “Copy Fence Properties” command
- Icon for “Match Fence Properties” command
- Icon for “Match Segment Properties” command
- Icon for “Hatch and Door Properties” command

Object Toolbar

- Icon for inserting annotations to objects
- Icon for calculating electric cable length
- Icon for inserting focus light beam and light grid
- Icon for deleting door and hatches
- Icon for inserting a 44x44 profile between two other 44x44 profiles
- Icon for dividing segment
- Icon for turning fence line on/off
- Icon for coping SafeCAD objects
- Icon for turning protect fence on/off

Roof Toolbar

- Icon for inserting roof
- Icon for editing roof
- Icon for deleting roof

Tunnel Toolbar

- Icon for inserting tunnel
- Icon for editing tunnel
- Icon for deleting tunnel
Tools Toolbar

- Icon for access to SafeCAD article database
- Icon for inserting user defined articles
- Icon for access to SafeCAD options and settings
SafeCAD commands

Generally
SafeCAD commands can be started by entering the command at the command prompt. Type the command at command prompt and press enter.

To list all available SafeCAD commands, type “ARX” at command prompt and press enter followed by selecting option “C” for commands, and press enter. Press enter again followed by function key F2. “AutoCAD Text Window” appears. Press enter in “AutoCAD Text Window” until group “ccseSafeCAD2” appears. Listed commands can be typed at AutoCAD command prompt. Type the command at command prompt and press enter to start it.

AutoCAD Text Window showing some SafeCAD commands
4. SafeCAD layers

When designing a fence, some SafeCAD layers will be created automatically and SafeCAD objects will be placed on these layers. From “Layers Property Manager” it’s possible to manage some visibility and plot settings for SafeCAD objects and others. Colours and line type can also be changed here.

Example of created SafeCAD layers for a fence with welded steel mesh and polycarbonate sheets

Layers can be accessed from drop-down list in “Layer control”. This is useful when turning a layer on/off, or if a layer should “Freeze” or “thaw” in specific viewports.

Drop-down list in “Layer control”
Create a template file (*.dwt) for SafeCAD drawings. Template file can be prepared with settings for different SafeCAD layers and with different tabs and viewports.

- Layer “0” must be set to current when generating or editing fences. Otherwise SafeCAD objects will be placed on wrong layer.

- Create If SafeCAD objects have been placed in wrong layer, use “Fence Properties” or “Segment Properties” to regenerate and restore SafeCAD objects to correct layer

<table>
<thead>
<tr>
<th>Layer name</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIM_TEXT_SAFECAD</td>
<td>Sheet dimension text</td>
</tr>
<tr>
<td>FENCE_ARROW_SAFECAD</td>
<td>Segment numbers and arrows</td>
</tr>
<tr>
<td>FENCE_BASE_SAFECAD</td>
<td>Fence base line</td>
</tr>
</tbody>
</table>
5. SafeCAD Options

Generally
Some settings in SafeCAD can be set with “SafeCAD Options” command.

These settings apply locally on the computer and does not apply to drawing files.

General tab
In general tab it is possible to see current SafeCAD serial number (code) and change some program settings. SafeCAD program folders is also shown.

- “Default fence height”
  Default fence height shown in “Quick-Guard Fence Parameters” window

- “Minimal distance between verticals”
  Specifies minimum distance between vertical profiles in a fence. Distance must be more than 126mm, otherwise L- and T-brackets will get in conflict.

- “Distance between verticals for Economy (Express) fence”
  Default distance between verticals for Express fence

- “Length of the segment's arrow”
  Specifies length (size) of segment's arrow

- “Material dimension height”
  Specifies the text height for infill panel dimensions

- “Segment number text height”
  Specifies text height for segment numbers

“SafeCAD Options-General” window

Select button “Restore Defaults” to change back to original values
Layer's colors tab

In layer’s tab it is possible to change colour of generated SafeCAD objects. Press “Restore Defaults” button if colour should be set as original.
6. Quick-Guard Fence design

Generally

Design the fence according to relevant standards, regulations and Quick-Guard Fence product range. Visit our website www.abb.com/lowvoltage to see product range e.t.c.

Start SafeCAD program from shortcut on Desktop and use a template file with settings for SafeCAD design. Make sure that model space is active, ortho is on (normally), osnap is off and that coordinate system is set to world.

Quick-Guard fencing system is available in two versions, Quick-Guard Standard and Quick-Guard Express, which also can be combined. SafeCAD allows user to design both versions, but Express should only be drawn in demonstrative purpose.

Follow instructions at command prompt when an AutoCAD or SafeCAD command are active.

Fence is based on a single or multiple 2D-Polyline drawn in scale 1:1. Fence will be placed centred, and on top of the polyline.

SafeCAD program needs to distinguish between right- and left side of polyline. Placement of some SafeCAD objects is related to either right- or left side of fence, therefore the polyline should be drawn anticlockwise to be consistent. “Right side” can also be seen as “Outside” and “Left side” as “Inside”. Example to the left below shows the correct way to draw the polyline.

Polyline drawn **anticlockwise**

Polyline drawn **clockwise**

---

Polyline should always be drawn anticlockwise to be consistent.
From the Draw menu, choose Polyline and specify the first point of the polyline. Specify the length of the polyline by typing the length in mm at the command prompt, select direction with mouse pointer (ortho must be on) and press ENTER. If there should be a connected sequence of lines, stay in the command and type a new length in mm at the command prompt, select direction with mouse pointer and press ENTER. If the polyline should have a closed profile e.g. a rectangle, type “C” or “CLOSE” at the command prompt when the last part of the polyline should be drawn and press ENTER.

Use AutoCAD’s RECTANGLE command if designing a closed fence like a rectangle. From menu draw, choose Rectangle and specify first corner start point and then other corner.

Each part of a polyline in a sequence of lines is called a segment in SafeCAD. Each segment is editable separately, and parameters e.g. height and infill material can easily be changed. It’s possible to split a polyline afterwards into more segments with SafeCAD command “Split segment”. Use SafeCAD’s command “Delete Segment” if a segment needs to be deleted.

Door, openings e.t.c. should be created in a separate segment, to utilize functions in SafeCAD as much as possible.

It is recommended to draw the polyline anticlockwise, then program and user knows which side is inside (left side) and outside (right side) of the fence.

Use SafeCAD “Fence Properties” and “Segment Properties” command where applicable when designing fences. SafeCAD objects should only be inserted/deleted “manually” when it’s really needed.
Note that the outer dimension of the Fence will be 44mm (the profile is 44x44) wider than the length of the Polyline. E.g. if a fence should be 3000mm wide, polyline should be drawn 2956mm.

*Picture showing polyline (red line) in centre of fence*
Protect Fence (Fence Protect)

As default, most SafeCAD objects are protected from being moved or copied by mistake. Also an SafeCAD objects property, e.g. changing a profile length is not possible when fence protection is on. Use “Protect Fence” command to turn this protection on/off. Fence is protected (on) when “Fence Protect” variable is set to “1”.

Wrong Dimension notification

As a guide if a panel size is too big, a red cross will appear on the infill panel. This “over size” calculation is based upon infill panel product range. No consideration is taken to strength e.t.c. “Wrong dimension” symbol (the red cross) is placed on layer “WRONG_DIMENSION” and can be turned off if needed. See picture below.

SafeCAD program can not distinguish which side of infill panel is length or height. Compare infill panel dimensions in drawing, with infill panel product range.
Quick-Guard Standard

Generate fence

Design the fence according to relevant standards, regulations and Quick-Guard product range.

Click on "Generate Fence" icon or select “Generate Fence” command from SafeCAD menu. Select a polyline and “Quick-Guard Fence Parameters” window appear. In “Fence Type” drop down list (A), select Standard and enter parameters.

Quick-Guard Fence Parameters window

Use of standard length of profiles, and standard infill panel sizes will result in short delivery time and low price.

Some parameters set as default should normally not be changed

Select a height in drop down list (C) or enter an optional height. Select or enter a “Distance between verticals” (D) and enter a gap in (E). Gap is the distance between floor and lower part of the first horizontal profile. Select “Number of rows” in (F), followed by applying infill material in selected rows (G). When selecting “Number of rows” (F), SafeCAD program by default enters a “Distance” value (H) so infill panels will have the same size (height) in all rows. By specifying another value in Distance (H), placement of the middle bar will change, and also infill panel sizes will change. Distance entered is the distance from ground level to lower part of aluminium profile. Maximum number of selectable rows is five (5). Select type of floor brackets in drop down list (I). Select if floor brackets should be inserted on left- or right side of segment or both sides in drop down list (J). Check box (K) defines if brackets should be placed on right- or left side (outside/inside fence) of polyline. End caps can be inserted on vertical profiles if needed. Select type of end cap in drop down list (L), and select optional settings in drop down list (M) and check box (N). If a more rigid construction is needed, vertical 44x44 profiles can be replaced with 44x88 profiles. Select check box (O) and select optional settings in drop down list (P) and check box (Q) and (R).
All parameters can be changed later on with “Fence Properties” or “Segment Properties” command.
Create your own “Fence Parameters Defaults” with “Edit” button (B) for common used fence types.

Table with recommended parameters when consideration is taken to ABB AB Jokab Safety standard lengths of profiles and size of infill panels. This table is valid for Welded steel mesh 40x40, 5mm clear polycarbonate sheet and 2x5mm clear polycarbonate sheet.

<table>
<thead>
<tr>
<th>Height</th>
<th>Gap</th>
<th>Dist.b.v</th>
<th>No.of.r</th>
<th>Dist.f.g.1</th>
<th>Dist.f.g.2</th>
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<td>2000</td>
<td>3</td>
<td>1068</td>
<td>1956</td>
</tr>
</tbody>
</table>

1 Two (2) rows or distance 1056 between verticals if using Pc sheet or double Pc sheets
2 Recommended to use 44x88 profiles as verticals

**Steel panel**
Distance between verticals should be set to 1980. Standard steel panel is 2000x1000

**Sound absorbing panel**
Distance between verticals should be set to 2000mm. Standard sound absorbing panel are 1963x1200mm

**IMPORTANT!**
Dimensions for woven steel mesh must be more then 140x140mm, otherwise the mesh will fall apart. It's recommended to use welded meshes instead of woven steel mesh.
Do not exceed Jokab Safety’s standard dimensions of profiles and infill panels.
Visit our website [www.abb.com/lowvoltage](http://www.abb.com/lowvoltage) for product range.
Edit fence

generally

SafeCAD objects are “attached” to the polyline. If the polyline is stretched, fence will be regenerated accordingly to the new dimensions of the polyline. It is possible to edit parameters of a complete fence with command “Fence Properties”, or just a part of a fence with command “Segment Properties”. Most SafeCAD objects can be inserted manually, but “Fence Properties” or “Segment Properties” should be used if possible. This will enhance fence design, and give user improved control of the design. Deleting the polyline will delete the complete fence as well.

Do not mirror fence polylines or SafeCAD objects. Do not copy fence polylines. Avoid copying of SafeCAD objects.

edit fence

“Fence Properties” icon or from SafeCAD menu, Edit, Fence

By using SafeCAD’s command “Fence Properties” it is possible to change Parameters for a complete fence. Click on “Fence Properties” icon, and “Quick-Guard Fence Parameters” window will appear, in which it is possible to change parameters for a complete fence (all fence segments at once). Unmark the check box “Keep doors/windows” in the lower left corner if you don’t want to keep the doors/windows as they are. Disable “Keep doors/windows” will “reset” the fence and e.g. doors will be deleted.

With this command it’s possible to change a complete fence to Express and reverse.
Edit Segment

“Segment Properties” icon or from SafeCAD menu, Edit, Segment

By using SafeCAD’s command “Segment Properties” it is possible to change Parameters for individual segments. Click on “Segment Properties” icon and “Quick-Guard Fence Parameters” window will appear, in which it is possible to change parameters for a specific fence segment.

With this command it’s possible to change individual segments to Express and reverse.

Copy Fence Properties

“Copy Fence Properties” icon or from SafeCAD menu, object.

This command copy properties from a fence to a polyline which are to be generated as a fence. Select the fence from which properties will be copied from, and select one or several polylines which are to be generated as a fence.

Match Fence Properties

“Match Fence Properties” icon or from SafeCAD menu, object.

This command copy fence properties from a fence to another fence.
Match Segment Properties

“Match Segment Properties” icon or from SafeCAD menu, object. This command copy properties from a fence segment to another fence segment.
Stretch Fence

**Alternative 1**
From menu View and 3D-Views, select Top and zoom in or out if needed. From menu Modify, select Stretch and make a window from right to left above the vertical profile in the segment that should be stretched. Enter requested length on the command prompt and select direction with the Mouse (ortho must be on) and press Enter.

Make sure that OSNAP is off and coordinate system is set to world before stretching

**Alternative 2**
From menu View and 3D-Views, select e.g. SW Isometric. Select the polyline so the Grips appear. Top view is also an alternative but it might be difficult to select the polyline. Grips that coincide with insertion points of vertical profiles can be stretched by using the mouse pointer device. Go with the mouse pointer to the end Grip that coincide with a vertical profile in beginning or end of the segment, and click with left mouse button when the aperture box coincide with the grip. Then type requested length to stretch on the command prompt and select direction with the mouse (ortho on) and press Enter.

Make sure that OSNAP is off and coordinate system is set to world before stretching

**Inserting objects manually**
Most SafeCAD objects can be inserted manually from SafeCAD toolbars or from SafeCAD menu. Objects inserted manually might be deleted or corrupt if fence line is being stretched.

**Change Length of individual profiles**
Make sure that “Protect fence” is set to “0” and select the profile to be changed. From menu Modify select Properties and set Z scale value.

**Erase Fence**
Use AutoCAD’s command Erase and select the polyline and press Enter. Remaining SafeCAD objects has to be selected and erased manually.

SafeCAD objects can also be deleted by pressing “Delete” from keyboard.
Quick-Guard Express

Express fence is designed to be cut on site, therefore it’s recommended to use Express SafeCAD drawings and reports only in calculation purpose. Express Fence is not as flexible as Standard Fence, because meshes must have an outer wire to be fixed into the T-slot in the aluminium profile.

Draw a single or multiple poly lines anticlockwise in scale 1:1 and click on “Generate fence” icon, or from SafeCAD menu Create, fence.

Select Express as Fence type, and design the fence according to relevant standard, regulations and Quick-Guard product range.

Recommended parameters

<table>
<thead>
<tr>
<th>Height</th>
<th>Dist.b.v.</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1056 or 1456</td>
<td>180</td>
</tr>
<tr>
<td>2200</td>
<td>1056 or 1456</td>
<td>180</td>
</tr>
</tbody>
</table>

By using AutoCAD’s commands it is possible to change the Fence layout, for example stretch and move. It’s not recommended to mirror or copy a fence line or fence objects.

By using SafeCAD’s command “Fence Properties” or “Segment Properties” it’s possible to edit a complete Fence, or each fence segment separately. One segment is a part of a Polyline.
Fence Parameters Defaults

Generally
It is possible for user to create own setups (favorit list) for fences with common used parameters. Fence parameters default list is easy to access and use. This will save time and fences will always look the same. This list is stored locally on the computer and it is not possible to import/export to other systems.

Create
Select “Generate Fence”, “Fence Properties” or “Segment Properties” command to open “Quick-Guard Fence Parameters” window. Press “Edit” button and “Fence Parameters Defaults” window appear. “Quick-Guard Fence Parameters” window
Click on “Create New” button and a new row is inserted into the name list. Click in the new name field and enter a name for the new fence default, e.g., “Height 2.0m Welded steel mesh/Pc”. Go back to “Quick-Guard Fence Parameters” window (without closing “Fence Parameters Defaults” window) and change needed parameters. Go back to “Fence Parameters Defaults” window. Make sure the new name is selected and press “Update” button, followed by “Select & Close” and a new fence parameters default is created, selected, and saved.

Select which “Fence Default” should be used as default in “Quick-Guard Fence Parameters” window.
All fence parameters defaults are selectable from the drop down list in “Quick-Guard Fence Parameters” window.

**Edit**
Click on “Edit” button” in Quick-Guard Fence Parameters” window to open “Fence Parameters Defaults” window. Select “Default” to be changed, and change parameters in “Quick-Guard Fence Parameters” window. Go back to “Fence Parameters Defaults” window and select the default again and press “Update” button followed by “Select & Close” or “Close” button. This fence parameters default is now changed, but changes are not applied automatically to fences already generated.

**Delete**
Click on “Edit” button” in Quick-Guard Fence Parameters” window to open “Fence Parameters Defaults” window. Select “Default” to be deleted and press “Delete” button.
Insert SafeCAD objects manually

Generally
Most SafeCAD objects can be inserted manually via toolbar (icon), menu or by typing the command at command prompt. SafeCAD “Fence Properties” or “Segment Properties” command should be used primarily if possible. This will make the design easier to work with. This chapter only describes generally how to use a few commands.
Read chapter 3 for more detailed information about each command (icon)

- Make sure ORTHO is on when inserting SafeCAD objects manually.
- OSNAP must always be turned off when using SafeCAD commands

- Turn SNAP off to make it easy to select correct reference objects when inserting some SafeCAD objects manually.

Insert aluminium profiles, e.g. single 44x44 profile

Choose a profile (icon) to insert, and follow given instructions at command prompt.

Insert brackets, e.g. L-bracket

Choose bracket (icon), e.g. “INSERT_L_ELEMENT”, and follow given instructions at command prompt.

Insert End cap

Choose end cap (icon) to insert, and follow given instructions at command prompt.

Insert Infill Panel, e.g. mesh

Choose infill panel (icon) to insert, and follow given instructions at command prompt.

Insert door component, e.g. handle

Choose door component (icon) to insert, and follow given instructions at command prompt.

Insert light beam component

Choose light beam component (icon) to insert, and follow given instructions at command prompt.
**Insert other objects, e.g. door closer**

Choose object (icon) to insert, and follow given instructions at command prompt.

**Insert sliding element, e.g. support wheel**

Choose object (icon) to insert, and follow given instructions at command prompt.

**Insert “User defined” article**

Choose command “Insert User Defined Article” and “Select user’s defined article” window will appear. Select the article to be inserted, and follow given instructions at command prompt.

User defined articles must be created by command “New article” in “Edit SafeCAD Articles” window to appear in the list of selectable user defined articles. See chapter 11 how to create a new article

“Select user’s defined article” window
7. Doors and Hatches

Generally

Design the fence so the door or hatch is inserted in a separate segment if possible. Use command “Divide segment” or “Delete segment” to achieve this. Stretch the segment to correct size and place, before inserting the door or hatch.

Picture below shows an example in which a hatch is supposed to be inserted in upper part of segment number two (2), area marked with a green dashed line.

Door and hatches properties can be edited afterwards by using command “Hatch / Door Properties”. Placement and width can also be changed afterwards by stretch or move the nodes of the polyline.

Door and hatches are deleted by using command “Delete Hatch / Door”, or by changing fence- or segment properties. Check box “Keep Doors/Windows” must be disabled if changing fence- or segment properties.

Insert a door or a hatch with command “Hatch/Door” icon ☐️. “Select Door /window type” window will appear. Select Door / Window type and press OK.
Follow instructions given at the command prompt. When reference profiles are selected a new window appears, in which it is possible to change some parameters, and also add some additional equipment, e.g. end caps and safety switches. Depending on selected door/window type, some selections are disabled, and window layout is a little bit different depending on door / hatch type.
Double Hatch

If possible, design the fence so the hatch is inserted in a separate segment.

Insert Double Hatch

Use command “Hatch / Door” and select “Double Hatch” alternative. Select four (4) profiles that define a rectangle and press Enter. “Double Hatch” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of hatch.

A. Selection of additional equipment such as door stop (JSM D13A), crossbar (JSM D14), end cap (JSM L1) and safety switches.
B. Opening angle for left part of hatch.
C. Opening angle for right part of hatch.
D. Field for number of hinges. Changes automatically depending on size of the hatch, but can be changed manually by the user.
E. Selection of hinge type and placement. JSM D1C is set as default.
F. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the hatch is inserted.
G. Drop down list with selection of infill material. Default value is same as for the segment properties in which the hatch is inserted.
H. Check box which control if the hatch opens outwards or inwards.
I. Option for user to create a favorite list with common selections made for this kind of hatch.

Edit Double Hatch

Use command “Hatch / Door Properties” and select the hatch. Window above will appear and parameters can be changed.

Delete Double Hatch

Use command “Delete Hatch / Door” and select the hatch. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the hatch was inserted.
Hatch

If possible, design the fence so the hatch is inserted in a separate segment.

Insert Hatch

Use command “Hatch / Door” and select “Hatch” alternative. Select four (4) profiles that define a rectangle and press Enter. “Hatch” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of hatch.

A. Selection of additional equipment such as door stop (JSM D13A), crossbar (JSM D14), end cap (JSM L1_) and safety switches.

B. Opening angle for hatch.

C. Field for number of hinges. Changes automatically depending on size of the hatch, but can be changed manually by the user.

D. Selection of hinge type and placement. JSM D1C is set as default.

E. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the hatch is inserted.

F. Drop down list with selection of infill material. Default value is same as for the segment properties in which the hatch is inserted.

G. If hinges are placed on the upper horizontal profile this option is selectable.

H. Check box that defines it's a left-hung or a right-hung door.

I. Check box which control if the hatch opens outwards or inwards.

J. Option for user to create a favorite list with common selections made for this kind of hatch.

Edit Hatch

Use command “Hatch / Door Properties” and select the hatch. Window above will appear and parameters can be changed.

Delete Hatch

Use command “Delete Hatch / Door” and select the hatch. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the hatch was inserted.
Sliding Hatch

If possible, design the fence so the hatch is inserted in a separate segment.

Insert Sliding Hatch

Use command “Hatch / Door” and select “Sliding Hatch” alternative. Select four (4) profiles that define a rectangle and press Enter. “Sliding Hatch” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of hatch.

A. Selection of additional equipment, end cap (JSM L1_).
B. Defines how many percent hatch should shown open.
C. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the hatch is inserted.
D. Drop down list with selection of infill material. Default value is same as for the segment properties in which the hatch is inserted.
E. Check box that defines opening direction, left or right.
F. Check box which control if the hatch is placed on outside or inside of the fence.

Edit Sliding Hatch

Use command “Hatch / Door Properties” and select the hatch. Window above will appear and parameters can be changed

Delete Sliding Hatch

Use command “Delete Hatch / Door” and select the hatch. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the hatch was inserted.
Insert Folding Hatch

If possible, design the fence so the hatch is inserted in a separate segment.

Insert Folding Hatch

Use command “Hatch / Door” and select “Folding Hatch” alternative. Select four (4) profiles that define a rectangle and press Enter. “Folding Hatch” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of hatch.

A. Selection of additional equipment, end cap (JSM L1_).
B. Defines how many percent hatch should shown open.
C. Field for number of hinges. Changes automatically depending on size of the door, but can be changed manually by the user.
D. Selection of hinge type and placement. JSM D1C is set as default.
E. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the hatch is inserted.
F. Drop down list with selection of infill material. Default value is same as for the segment properties in which the hatch is inserted.
G. Check box that defines opening direction, left or right.
H. Check box which control if the hatch is placed on outside or inside of the fence.

Edit Folding Hatch

Use command “Hatch / Door Properties” and select the hatch. Window above will appear and parameters can be changed.

Delete Folding Hatch

Use command “Delete Hatch / Door” and select the hatch. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the hatch was inserted.
If possible, design the fence so the door is inserted in a separate segment.

**Insert Door**

Use command “Hatch / Door” and select “Door” alternative. Select one (1) horizontal and two (2) vertical profiles and press Enter. “Door” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of door.

**A.** Selection of additional equipment such as ball catch (JSM D11B), door stop (JSM D13A), crossbar (JSM D14), end cap (JSM L1_) and safety switches.

**B.** Opening angle for door.

**C.** Field for number of hinges. Changes automatically depending on size of the door, but can be changed manually by the user.

**D.** Selection of hinge type and placement. JSM D1C is set as default.

**E.** Drop down list with selection of number of rows. Default value is same as for the segment properties in which the door is inserted.

**F.** Drop down list with selection of infill material. Default value is same as for the segment properties in which the door is inserted.

**G.** Defines if there should be a support profile above the door.

**H.** Defines if it is a left-hung or a right-hung door.

**I.** Defines if the door opens outwards or inwards.

**J.** Defines if the door frame should be constructed with a 44x88 profile.

**K.** Option for user to create a favorite list with common selections made for this kind of door.

**Edit Door**

Use command “Hatch / Door Properties” and select the door. Window above will appear and parameters can be changed.

**Delete Door**

Use command “Delete Hatch / Door” and select the door. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the door was inserted.
Double Door

If possible, design the fence so the door is inserted in a separate segment.

Insert Double Door

Use command “Hatch / Door” and select “Double Door” alternative. Select one (1) horizontal and two (2) vertical profiles and press Enter. “Double Door” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of door.

A. Selection of additional equipment such as door stop (JSM D13A), crossbar (JSM D14) and end cap (JSM L1_).
B. Opening angle for left part of door.
C. Opening angle for right part of door.
D. Field for number of hinges. Changes automatically depending on size of the door, but can be changed manually by the user.
E. Selection of hinge type and placement. JSM D1C is set as default.
F. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the door is inserted.
G. Drop down list with selection of infill material. Default value is same as for the segment properties in which the door is inserted.
H. Defines if there should be a support profile above the door.
I. Defines if the door opens outwards or inwards.
J. Option for user to create a favorite list with common selections made for this kind of door.

Edit Double Door

Use command “Hatch / Door Properties” and select the door. Window above will appear and parameters can be changed.

Delete Double Door

Use command “Delete Hatch / Door” and select the door. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the door was inserted.
Folding Door

If possible, design the fence so the door is inserted in a separate segment.

Insert Folding Door

Use command “Hatch / Door” and select “Folding Door” alternative. Select one (1) horizontal and two (2) vertical profiles and press Enter. “Folding Door” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of door.

A. Selection of additional equipment such as end cap (JSM L1_).
B. Defines how many percent doors should be shown open.
C. Field for number of hinges. Changes automatically depending on size of the door, but can be changed manually by the user.
D. Selection of hinge type and placement. JSM D1C is set as default.
E. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the door is inserted.
F. Drop down list with selection of infill material. Default value is same as for the segment properties in which the door is inserted.
G. Defines opening direction for the door, left-hung or right-hung door.
H. Defines if the door opens outwards or inwards.

Edit Folding Door

Use command “Hatch / Door Properties” and select the door. Window above will appear and parameters can be changed.

Delete Folding Door

Use command “Delete Hatch / Door” and select the door. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the door was inserted.
Sliding Door

If possible, design the fence so the door is inserted in a separate segment.

Insert Sliding Door

Use command “Hatch / Door” and select “Sliding Door” alternative. Select one (1) horizontal and two (2) vertical profiles and press Enter. “Sliding Door” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of door.

A. Selection of additional equipment such as guiding component JSM D12, JSM D12A, JSM D12B, end caps and safety switches.
B. Defines how many percent doors should be shown open.
C. Defines extension of the lower horizontal profile in the sliding door. 300mm is set as default, but can be changed manually by the user.
D. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the door is inserted.
E. Drop down list with selection of infill material. Default value is same as for the segment properties in which the door is inserted.
F. Defines opening direction for the door, to the left or right.
G. Defines if the door is placed on the outside or inside of the fence.
H. Option for user to create a favorite list with common selections made for this kind of door.

Edit Sliding Door

Use command “Hatch / Door Properties” and select the door. Window above will appear and parameters can be changed.

Delete Folding Door

Use command “Delete Hatch / Door” and select the door. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the door was inserted.
Double Sliding Door
If possible, design the fence so the door is inserted in a separate segment.

Insert Double Sliding Door
Use command “Hatch / Door” and select “Double Sliding Door” alternative. Select one (1) horizontal and two (2) vertical profiles and press Enter. “Double Sliding Door” window appears in which some settings can be changed. See picture below.
Fields which are grey is not selectable for this type of door.

A. Selection of additional equipment such as guiding component JSM D12, JSM D12A, end caps and safety switches.
B. Defines how many percent left part of door should be shown open.
C. Defines how many percent right part of door should be shown open.
D. Defines extension of the lower horizontal profile in the left sliding door. 300mm is set as default, but can be changed manually by the user.
E. Defines extension of the lower horizontal profile in the right sliding door. 300mm is set as default, but can be changed manually by the user.
F. Drop down list with selection of number of rows. Default value is same as for the segment properties in which the door is inserted.
G. Defines if the door is placed on the outside or inside of the fence.
H. Option for user to create a favorite list with common selections made for this kind of door.

Edit Double Sliding Door
Use command “Hatch / Door Properties” and select the door. Window above will appear and parameters can be changed.

Delete Double Sliding Door
Use command “Delete Hatch / Door” and select the door. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the door was inserted.
Roller Door

If possible, design the fence so the door is inserted in a separate segment.
Wrong model of Roller door is inserted. Contact ABB AB Jokab Safety for correct model data

Insert Roller Door

Use command “Hatch / Door” and select “Roller Door” alternative. Select two (2) vertical profiles and press Enter. “Rolling Door RD 300 Properties” window appears in which some settings can be changed. See picture below.

Fields which are grey is not selectable for this type of door.

A. Defines on which height from floor level the door is fitted to the fence. Normally it is 0mm
B. Defines daylight height of the roller door.
C. Defines how many percent the door should be shown open.
D. Defines placement of the roller door engine.
E. Defines if the door is placed on the outside or inside of the fence.

Edit Roller Door

Use command “Hatch / Door Properties” and select the door. Window above will appear and parameters can be changed

Delete Double Sliding Door

Use command “Delete Hatch / Door” and select the door. Use “Fence Properties” or “Segment Properties” to reset/regenerate segment where the door was inserted.
8. Roof

Generally

Roof dimensions don’t change when the reference fence segments are being changed, therefore it’s recommended to insert the roof at the very end of the design.

Insert Roof

Select “Create Roof” command and follow given instructions at command prompt. Select two parallel fence segments and enter parameters in “Roof Parameters” window.

Red arrows in picture below shows an example of two selectable parallel fence segments when inserting a roof.

Fix roof sections to the walls with I-bracket JSM 34B-K

Edit Roof

Select “Edit Roof” command and click somewhere at the roof and change parameters in window.

Delete Roof

Select “Delete Roof” command and click somewhere at the roof
9. Tunnel

Generally

Tunnel should be inserted in a separate segment. Prepare a segment and set segment properties before inserting the tunnel. See figure 1 below in which tunnel are to be inserted in lower part of segment number two (2).

- Normally some manual adjustments need to be done when the tunnel is inserted. E.g. delete some brackets which are in conflict with other objects, and also insert some brackets at other places.

**Figure 1**

**Insert Tunnel**

Select “Create Tunnel” command and follow given instructions at command prompt. Select one (1) horizontal and two (2) vertical profiles. See example in figure 1 above where profile A, B and C are selected as reference profiles. Enter distance from ground at command prompt and select if tunnel should be placed on left or right side of segment (fence) and press enter. Enter parameters in “Tunnel Parameters” window.
**Edit Tunnel**
Select “Edit Tunnel” command and click somewhere at the tunnel and change parameters in window.

**Delete Tunnel**
Select “Delete Tunnel” command and click somewhere at the tunnel

After tunnel is deleted, segment has to be restored. Use “Fence Properties” or “Segment Properties” to restore the segment where the tunnel was inserted.
10. Dimensioning

Generally
SafeCAD dimensions command should be used in “Model space”. There are two SafeCAD commands for inserting dimensions. Both commands are related to the length of an aluminium profile. “2D” is used when a horizontal profile should be dimensioned, and “3D” is used for horizontal and vertical profiles.

- Only 44x44 or 44x88 aluminium profiles are valid selections
- Make sure OSNAP is off

Use AutoCAD’s “Linear dimension” command if other dimensions are required, e.g. total outer dimension.

Put dimensions on separate layers. E.g. put TOP view dimensions on a layer named “DIM-TOP” and front view dimensions on a layer named “DIM-FRONT” e.t.c. It will then be possible to turn on/off different dimensions when required.

If you have problem selecting a profile, turn off “Snap” and zoom in the area and make sure only aluminium profile is selected.
2D Dimensioning

Use “2D” command when horizontal profiles should be dimensioned and viewed from TOP view. See example 1 below.
Select command “2D” and then select a horizontal profile and place dimension

Example 1
3D-Dimensioning

Use “3D” command when horizontal or vertical profiles should be dimensioned and viewed from side, e.g. FRONT view. See example 2 below.

Select command “3D” and then select a horizontal or vertical profile, and place dimension

Example 2
11. Article Data

Generally

Article data such as article number, price e.t.c. for SafeCAD objects is stored in “ScReport.db” and “SafeCAD Data.xml” file.

Do not change data in column “Article No.”, Description”, “Unit” or “Weight”

Make a copy of “ScReport.db” file before editing article data. Note that SafeCAD must be closed when copying the file. “ScReport.db” file is stored in folder C:\ProgramData\Jokab\SafeCAD2012\Templates

Edit article data

Click on “Edit SafeCAD Articles” icon and window “Edit SafeCAD Articles” appear. All fields can be changed, but normally only values in column “List Price” and “Purch. Price” should be changed. It is recommended that values in all other columns stays as they are. Enter all data and press save button to close.
Add and delete new article

Add new article
Click on “Edit SafeCAD Articles” icon and window “Edit SafeCAD Articles” appear. Click on “New article” button and browse for article (*.dwg file) to be imported. Enter article data in the table for articles and press save button to close window.

Delete article
Click on “Edit SafeCAD Articles” icon and window “Edit SafeCAD Articles” appear. Select article and click on “Delete article” button
Export and import Article data
SafeCAD article data can be exported or imported as an Excel file (ArticleList.xlsx). This can be useful when updating e.g. all prices.

Export
Click on “Edit SafeCAD Articles” icon and window “Edit SafeCAD Articles” appear. Click on tab “Export to XLSX” and an “ArticleList.xlsx” file is generated.

Picture shows one page of exported “ArticleList.xlsx” file
Import
Click on “Edit SafeCAD Articles” icon and window “Edit SafeCAD Articles” appear. Click on tab “Import from XLSX”. Browse for a file which has to be structurally identical to the file generated by “Export” command. That means that column should not be erased, reordered, etc. Only field data can be updated!
Not all the fields should be updated though. Article number must not be changed. Basically, values that can be changed are “List price”, “Purchasing Price” and “Description”. Erasing of the articles is not allowed! Adding new articles is not allowed! During import, application will read article number and try to find it in the database. If article is found, it’s value will be replaced with the values from XLSX file. If article is not found, nothing will happen. As a consequence, for “new” or “deleted” articles nothing will happen!

Do not erase or add any article in xlsx file which are to be imported to SafeCAD application

Distribute Article data base file
Data base file is stored locally on the computer. If several users shall have same prices e.t.c. it is important that same “ScReport.db” file is used on all systems.
Close SafeCAD application and save a copy of “ScReport.db” file on a media. Other users shall then copy this file to their systems.
If first user have created “New articles”, these objects (*.dwg files) must be copied to other systems as well. These objects is found in SafeCAD symbols folder C:\ProgramData\Jokab\SafeCAD2012\Symbols
12. Reports

Generally

SafeCAD program allow user to generate different kind of reports, e.g. quote, part list and cut lists for aluminium profiles and mesh. Reports is generated in Excel format (*.xlsx) and created/saved in a folder with same name and place as drawing generated from.

Do not save any drawings in SafeCAD program folders.

“Generate Report” command will overwrite exiting reports. Rename all files which should be kept.

Picture showing all available and generated reports
Example of a "quote" report

**Generate Report**

Finish and save the drawing. Click on “Generate Report” icon and program will generate *.xlsx reports automatically.

**Edit reports**

It is possible to change layout for the generated reports, e.g. change text size, font and add some additional text or pictures. SafeCAD report template files (*.xlsx) is stored in SafeCAD template folder C:\ProgramData\Jokab\SafeCAD2012\Templates

- Make a copy of the original template file before changing it.
- Do not change file name of the template file.
- Do not erase any “markers” in the template file
Open the template file with Excel and make changes if required. You can add or edit text, add rows and/or columns, change header and footer e.t.c.

Cell in Excel table that begins with %%= is called a "marker" and must not be deleted or changed. It can be moved e.t.c. but it must exist.

*Picture showing “Quote” report template file*
13. Support

Software updates
Make sure your system have latest software updates.
Check for SafeCAD updates on our web page www.abb.com

Code request for SafeCAD
Send an e-mail with your AutoCAD version and serial number to support.jokabsafety@se.abb.com
We will try to respond to your e-mail within a few working days.

Problem
Read our Frequently Asked Questions (FAQ). It is available on our web page www.abb.com.
If you don’t find your answer here, send an e-mail to support.jokabsafety@se.abb.com

Error reporting
Describe the error in detail and contact our support at support.jokabsafety@se.abb.com
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