

# MagiCAD for Revit 2016.11 UR-1 Release notes

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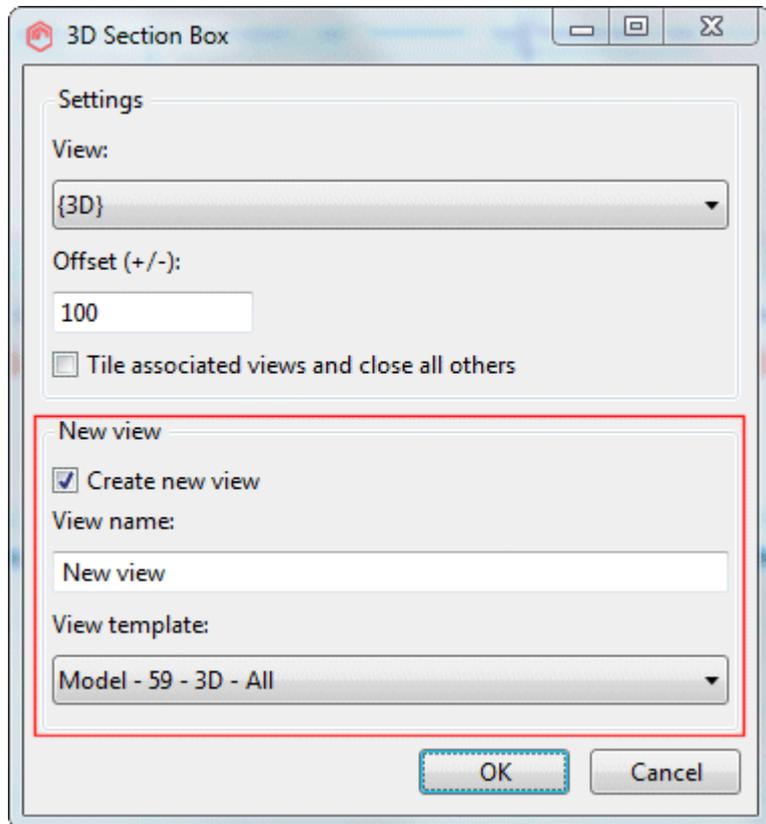
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## New features

### Common features

#### 3D Section Box - Create New 3D view from within dialogue box

It is now possible to create a new view in 3D section box by using a template view for the new view.



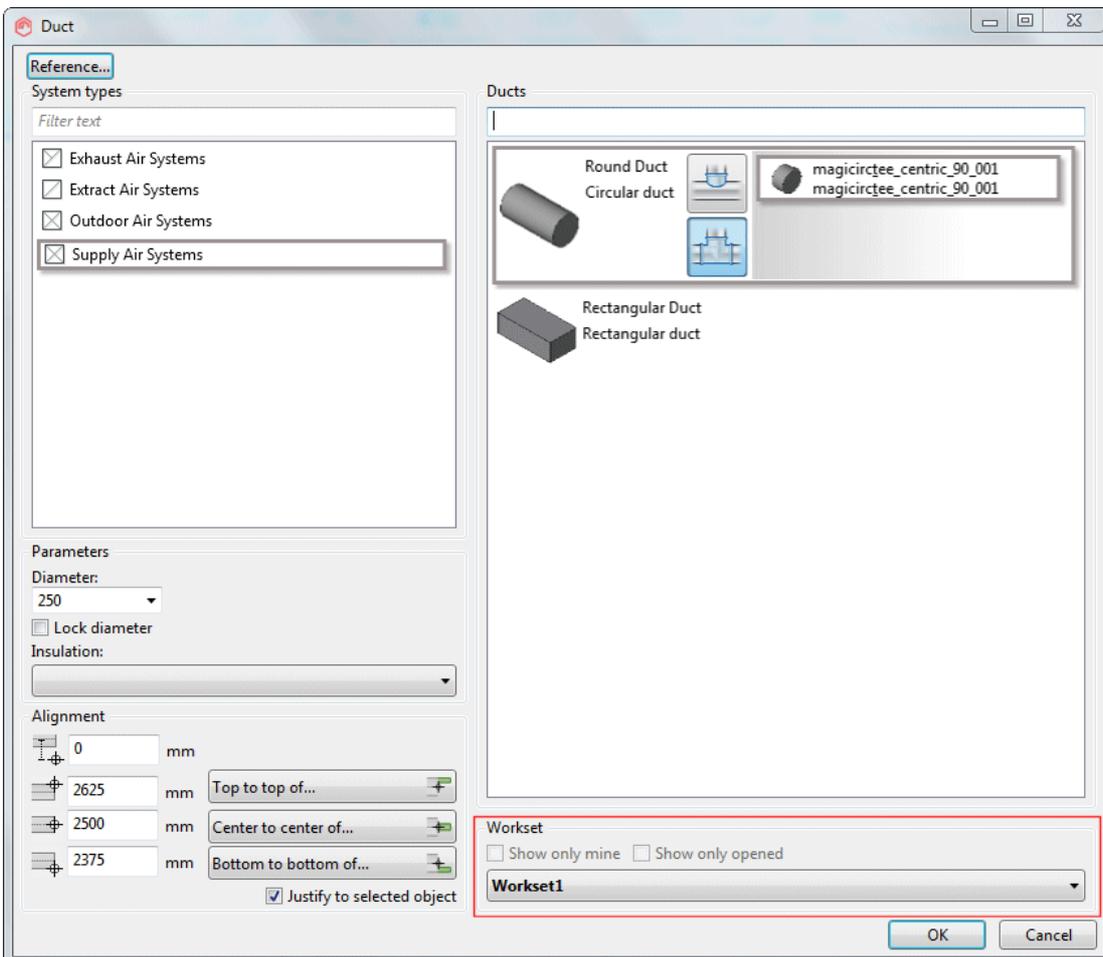
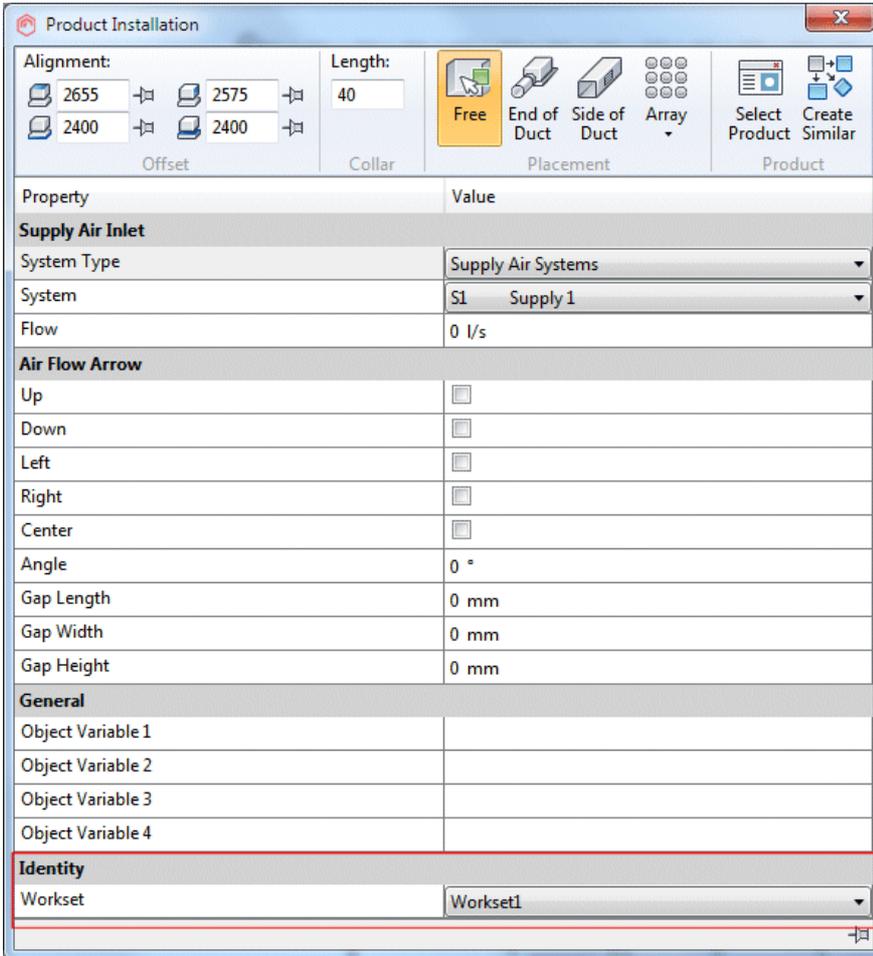
#### Possibility to select workset in MagiCAD dialogs

When you have a large project and you want multiple users editing a project at the same time you have to implement Worksets because Revit typically keeps all project data in a single project file, called the central file. When an individual user works with a Revit project (s)he takes a copy of a central file to her/his computer and when (s)he has finished the job, (s)he saves the work back to the central file. Typically a single user works with a workset which is dedicated to her/him.

MagiCAD supports the idea of the worksets by allowing the user to select the active workset in several of its functions. For example in

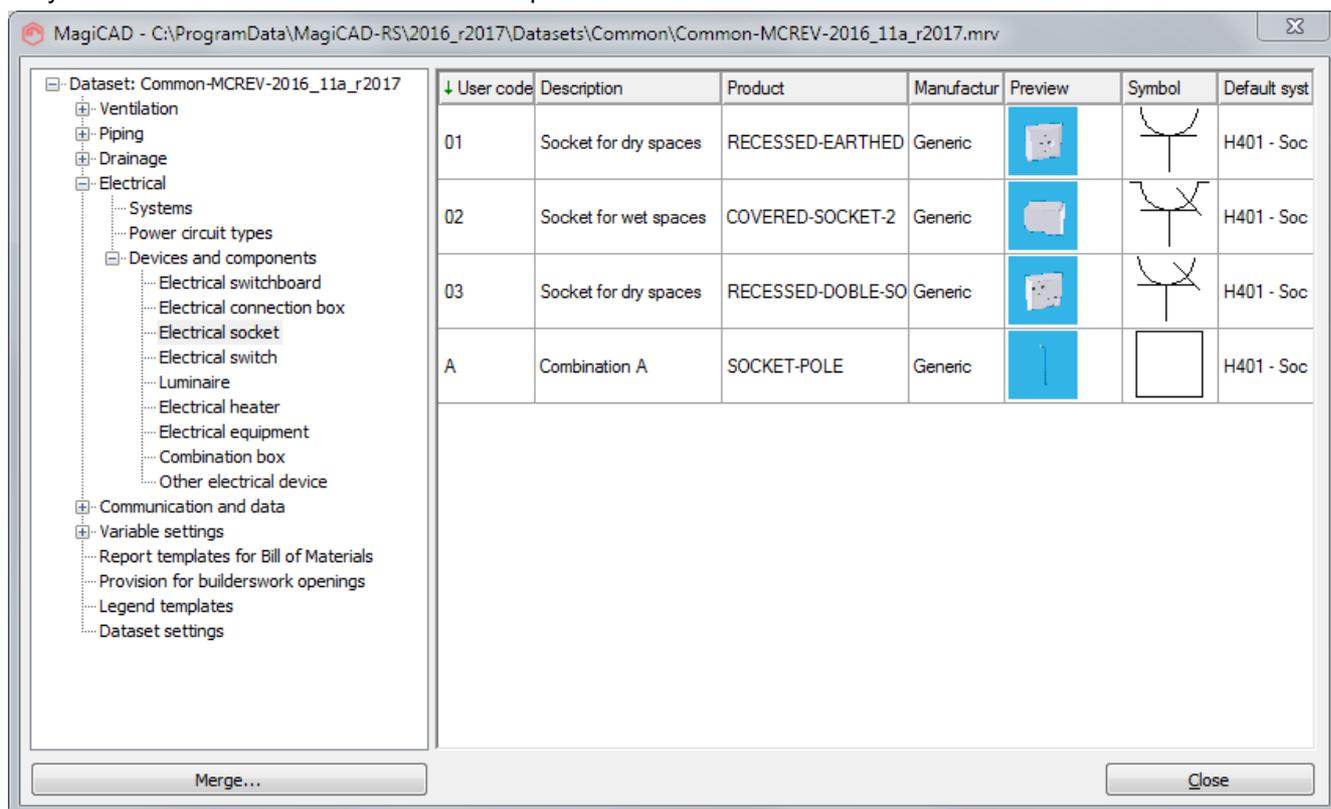
- Duct, pipe, conduit and cable tray draw setting dialogs
- Product installation dialog

The active workset is set to the selected workset and the elements are placed into the active workset. The behaviour of the dialogs vary depending whether the worksets are defined or not. In this manual, the worksets are generally not shown in the user interface dialogs. In case the worksets are in use, they are visible in the dialogs, as shown below.



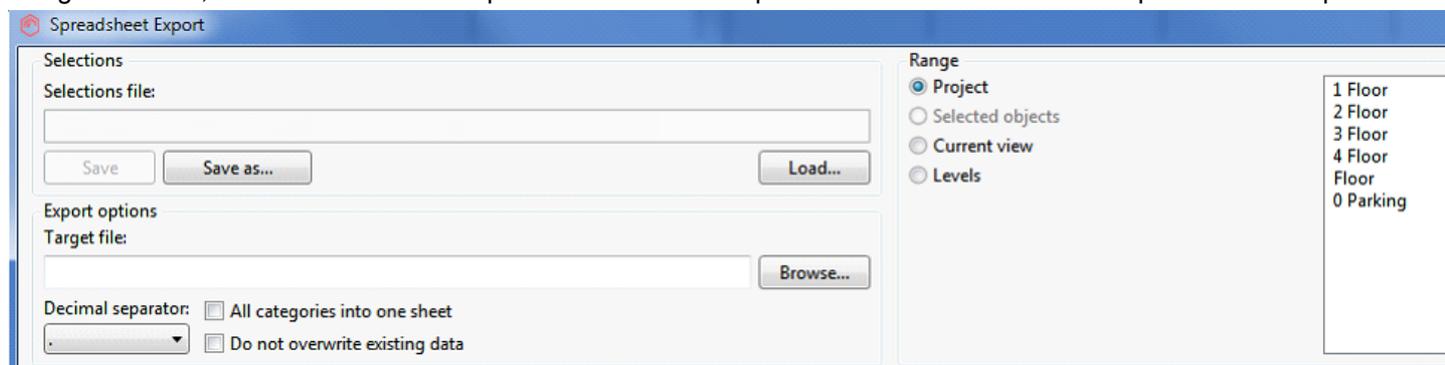
Preview picture, manufacturer and symbol columns have been added to the dataset

Preview, manufacturer have been added to the dataset for each product group.  
 A symbol column has been added for some products.



### Spread Sheet Export

Range selection, selection of decimal separator and over write protection is now added to the Spread Sheet Export



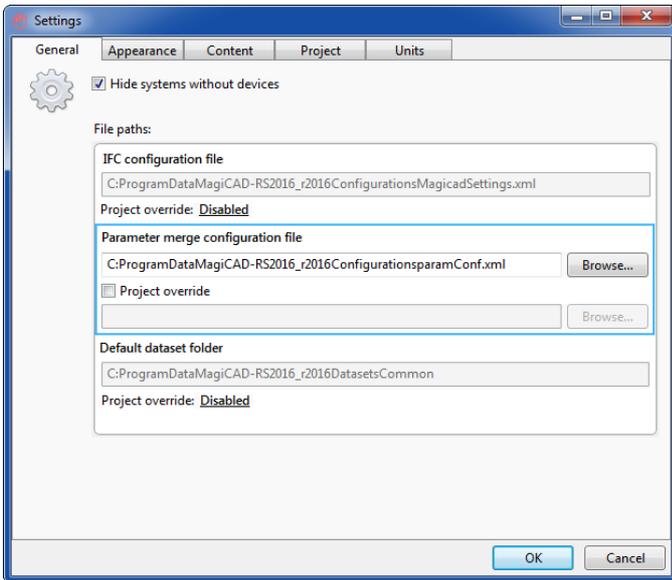
### Floating dialog for BCF management

BCF manager dialog is now a floating dialog. It means that you can make changes to Revit project when the BCF manager dialog remains open.

- The top right corner "Close" (X) button has been changed so that a warning message is shown before the changes are automatically cancelled.
- When the user changes a 3D view, the selected viewpoint camera setting is zoomed automatically.

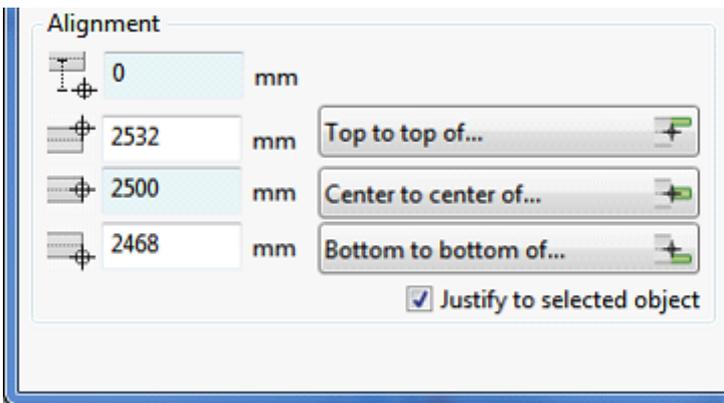
### Configuration file settings "by project"

Configuration files (ifc, parameter merge and default dataset) is now possible to set "by project". Everyone involved with the project can now use the same configuration file.



### Improvements to Duct/Pipe/Cable tray/Conduit command

- New alignment button to take centre offset
- New option "Justify to reference" which is enabled by default
- Changes the functionality so that the reference is now taken so that the curve being drawn is justified with the offset



### Error handling has been improved

Exception report dialog is shown when an unhandled exception is raised; the dialog displays certain information about the exception, and allows to save a more detailed report in a zip file

### "Create similar" can now be used also for drawing cable trays, conduits, wires, pipes and ducts

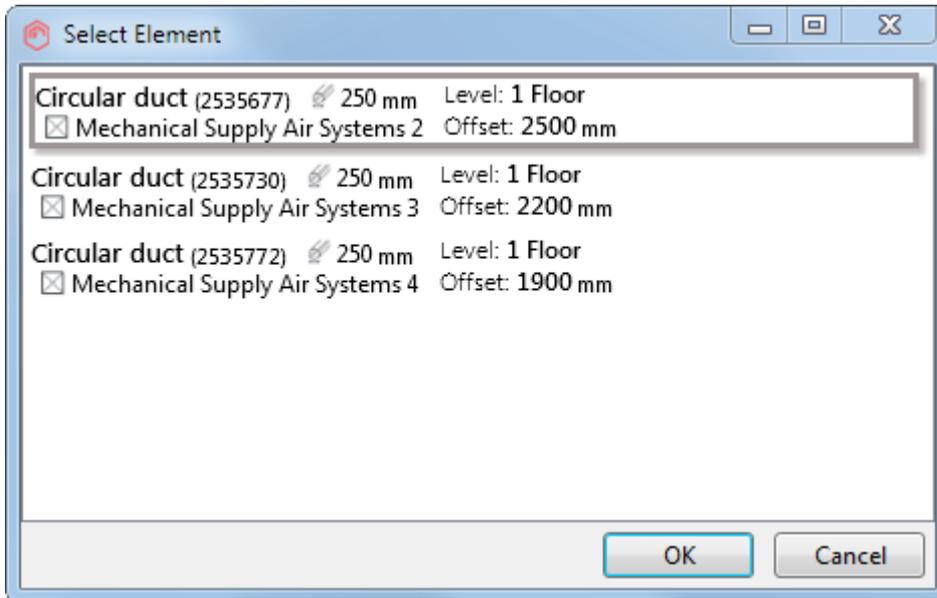
### Improvement for the "search circle" functionality

Search circle function is used when MagiCAD a function should find an object. In case there are several objects on top of each other, a dialog is shown from which the user can select the object he chooses.

The search circle was not used with all the functions and it has now been added to

- Device connection
- Top/Bottom of buttons (in segment drawing dialogs)
- Standard connection.
- Pipe and sewer connection

Also the layout of the dialog has been improved and it looks like this now.



### Provision for builderswork opening: Extra length to IFC

The user can now set the extra length for the partial provision for builderswork opening that he/she needs to make manually. The extra length is given to the Revit parameter *"MC Extra Offset for Provision"*.

### ProductCode and Manufacturer information have been added to the *"Update Parameter"* function

### Convert MagiCAD System Designer symbols into MCREV

The *"Symbol Converter"* function can now convert AutoCAD based **MagiCAD System Designer** symbol databases into **MagiCAD for Revit**. This way these AutoCAD based symbols can be utilized in the schematic drawing tools of MCREV.

## Ventilation and piping

### Improvement to product installation, automatic collar length calculation

If product has a vertical adjustable collar, the new collar related controls now appear in the installation dialog. This change affect to the installation of the air terminals and the manholes.

The new pin buttons next to the offset fields are used to lock a specified point (*"collar adjustment point"*), which does not move when the collar is stretched. Note that the offset value itself is not locked, the lock option is used only in collar length calculation to define in which way the collar is stretched.



- The collar length can be adjusted by changing any offset value, or the collar length directly.
- If the collar adjustment point is not defined, the default value is always the installation point of the product.
- If the collar length field is changed, the offset fields are updated according to the defined collar adjustment point. Locked point is not moved.
- If the offset value is changed on the same side of the collar as the collar adjustment point, collar is not stretched. In this case the whole product is moved without stretching the collar.
- If changed offset value is not on the same side as the collar adjustment point, collar is stretched and locked point is not moved.

Some products have a predefined min and max collar lengths. For others collar length value range is 0-99999. If the value range of the collar length is exceeded in any field, the field is highlighted by a red rectangle. Tooltip also shows the valid range for the field.

**Sizing: radiator valve size could not be changed to different than the radiator's connection size**

Radiator and stop valve which have been connected to the radiator can now be changed to the different size than the radiator's connection size. In the earlier version sizing was stopped with an error message.

This problem occurred especially in the cases when the pipe series size list contains different valve size than the nominal size of the pipe is.

**The valve size from the pipe series is now used in the product installation**

When the component is installed, its size is defined by the "Valve size" in the pipe series. Earlier MagiCAD used the size of the pipe.

Size	Din	Dout	Valve size
10	13.6	17.2	10
15	17.3	21.3	15
20	22.3	26.7	20
25	28.5	33.7	25
32	37.5	42.4	32
40	43.1	48.3	40
50	54.5	60.3	50

**"User code" column is removed from pipe size list in pipe series updater and modify dataset dialogs.**

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## Electrical

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**Default voltage**

230V is set as the default voltage when a product is selected from the product database into the dataset. For the new switchboards the default voltage is set as 400V.

**"In use" checkboxes for systems**

"In use" can now be defined for the electrical systems. With this the user can decide which systems are selectable in the dialogs and which ones are not.

The systems in the old projects are set to "In use" by default.

↓ System code	System name	System classification	In use
H2	Main distribution systems	Electrical	<input checked="" type="checkbox"/>
H3	Emergency power systems	Electrical	<input checked="" type="checkbox"/>
H4	Power interface systems	Electrical	<input checked="" type="checkbox"/>
H401	Sockets	Electrical	<input checked="" type="checkbox"/>
H5	Lighting systems	Electrical	<input checked="" type="checkbox"/>

**Wire drawing "Direct routing" set temporarily when switching to option "free end"**

When the wire drawing is started and connection to a device is switched to "free end", the routing is automatically changed to "direct" / "show route point" (in case it was e.g. "side automatic" before that).

This change has been done because it is not sensible to keep "side automatic" or "orthogonal" on in the "free end" mode.

**Disable "Connect to cable packet after tag placement" if no tag is selected**

In the wire drawing dialog the "Connect to cable packet after tag placement" checkbox is now disabled and unchecked in case no tag is selected.

**ProductCode and Manufacturer information are now editable in the dataset**

When selecting products from the general/generic databases you can set the manufacturer name and product code manually for the created product.

## Resolved issues

### Common features

#### Systems without devices causes unexpected error

Corrected a situation in Revit 2017 environment when reading an empty system caused an error. This happened e.g. when a product was installed.

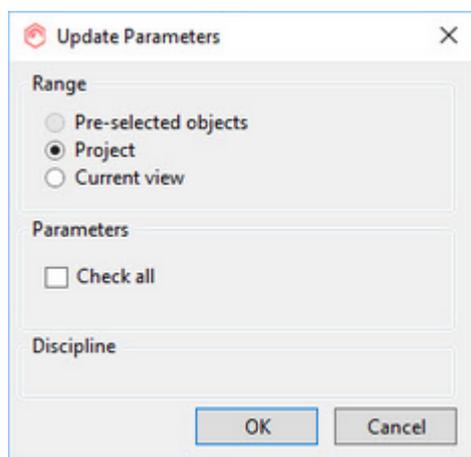
#### Exception with automatic provision for for builderswork opening

Creation of the provision for builderswork opening no longer ends with an error when a duct/pipe/etc goes through the boundary between the layers of a composite structural element.

#### Spread sheet export now removes the parameters that are not included in the specific category when several categories are exported in the separate sheets.

#### When executing "Update Parameter" as the first common function the dialog is wrong

Only the static part of the "Update parameters" function was shown in case the warning dialog of the expiring license was shown.



### Ventilation and piping

#### There was a fatal error when performing a sewer connection without any 3D view in project

MagiCAD now creates a 3D view if no 3D view is available.

#### It is no more possible to use the same rfa name for several families in the dataset

Existing rfa name is checked now also for the sewer devices, sewer components and outdoorwells when a product is added to the dataset. The same rfa name cannot be used in different categories.

#### IFC export of the insulation properties

Comments or descriptions that are made on the insulation did not follow the IFC object. The duct properties were used instead.

Now insulation has its own property set and it works correctly.

#### Error when creating arrow for exhaust air terminal

When placing extract air terminal and selecting arrow, Revit gives warning that it can't create the arrow family.

The error happens when the air arrow "dX" value is set to zero. A new air arrow template has been made where dx = 0 is allowed.

#### Pressure limits from product data is not shown at installation phase for the automatic zone valve.

The pressure range of the automatic zone valves are read dynamically from the product data. Earlier the pressure range was static (20-80) regardless of the product.

Also the default value is changed to min pressure instead of the zero which was used in earlier versions.

### Problems with changing the air devices using *"Find & Replace"*

Collar length value changes when using the *"Find & Replace"* function to replace an air device with the same type of an air device from a different manufacturer.

Also MagiCAD could not keep the connection to a duct although it should have been possible.

This issue affects versions 2016.4 and 2016.11 and is now corrected.

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## Electrical

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### Drawing Packet doesn't add parameters to project

If no MagiCAD parameters are in the project, MagiCAD adds all the needed parameters when the first command is run.

However, *"MC Is cable route start point"* parameter was not added when the conduit command was run.

This is now corrected.

### Wire drawing function removed all the drawn wires in case of an error

In case the user had successfully added the wires and an error happened later during the same *"Draw wire"* command, MagiCAD removed all the wires which were drawn during the same command.

Now MagiCAD does not remove successfully added wires if the failure occurs later during the same command.

### Switchboard installation works incorrectly regarding the alignment buttons and top/center/bottom elevation fields

MagiCAD always used default height 2 m when the default in the dataset was something else. This couldn't even be changed on the instance level when the object was installed to the project.

- Installation offset fields works correctly now with the switchboard.
- When the the height of the switchboard is changed, the offset fields are also updated.

### Find and Replace destroyed the cable routing

Sometimes F&R mirrored the cable ends positions



Now the Find&Replace preserves the order of wire connectors when possible.