





# **Issue Status**

Revision	Description	Date	Created By	Checked
2019 UR-1 (REV B)	Localisation document for MagiCAD release 2019 UR-1	26/10/2018	SA	RH
2019 UR-2 (REV C)	Localisation document for MagiCAD release 2019 UR-2	12/02/2019	SA	RH
2020 MR (REV A)	Localisation document for MagiCAD release 2020 MR	30/05/2019	SA	MJ
2020 UR-1 (REV B)	Localisation document for MagiCAD release 2020 UR-1	05/11/2019	MJ	RH
2020 UR-2 (REV C)	Localisation document for MagiCAD release 2020 UR-2	20/02/2020	SA	RH
2021 MR (REV A)	Localisation document for MagiCAD release 2020 MR	03/06/2020	SA	RH



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# **MagiCAD New Features**

# **MagiCAD 2021 MR for Revit – New features:**

Compatible with Autodesk Revit 2018, 2019, 2020 and 2021

- Install Back Boxes For Electrical Devices
- Create Automatic Main Riser Diagrams
- Define Bend Radius For Crossings
- Support For Using Multiple Shared Parameter Files
- Renewed Update Parameter Tool And Improved Handling Of Parameters In Schematics
- Easy Access To The Help Manual
- Gas System Design With Integrated Calculations
- Upgraded Drainage Connection Tool



### **UK Localisation**

Out-of-the-box Revit provides a global 3D collaborative design platform for all aspects of Mechanical, Electrical and Plumbing (MEP) design. Revit ships as a 3D coordination platform with the ability to perform basic calculations aligned to American design standards and workflow. In order to use UK content and enable UK aligned calculation outputs, MagiCAD for Revit is the solution of choice. As an Autodesk AEC Solution Associate, we work to fill in the gaps with localised content and align Revit to a country specific design workflow.

For our UK and Irish markets, MagiCAD is localised to meet the calculation, presentation and workflow requirements of the MEP industry. When installed, MagiCAD offers content such as ductwork and pipework fittings, more than 1,500,000 manufacturer-verified MEP product variants, and over 1200 BS engineering symbols. MagiCAD overrides the ASHRAE calculation engine, enabling customers in the UK and Ireland to perform fully integrated pressure drop calculations, domestic water and drainage diversity calculations, and sprinkler calculations to local standards.

MagiCAD for Revit unlocks the potential of Revit to offer powerful modelling tools, MEP content, calculation outputs, and the templates required to support the successful delivery of projects to a UK and Irish design workflow.

# **UK Aligned Standard & Specifications**

**BS EN Standards** Over 1200 **DW144 standards for** 2D Engineering symbols for **Ductwork Pipework** to BS 1553 Commonly used UK Commonly used UK **Ductwork & Pipework** Uniclass 2015 Codes in **Ductwork / Pipework** Systems (now aligned to **Systems and Products** Sizing & Pressure drop new CIBSE guidance) methods **Version Compatibility** MagiCAD MagiCAD MagiCAD MagiCAD 2018 2020 2021 2019 Revit 2018 Revit 2017 Revit 2018 Revit 2017 **Revit 2019** Revit 2018 Revit 2019 Revit 2020 Revit 2018 Revit 2019 Revit 2020 Revit 2021

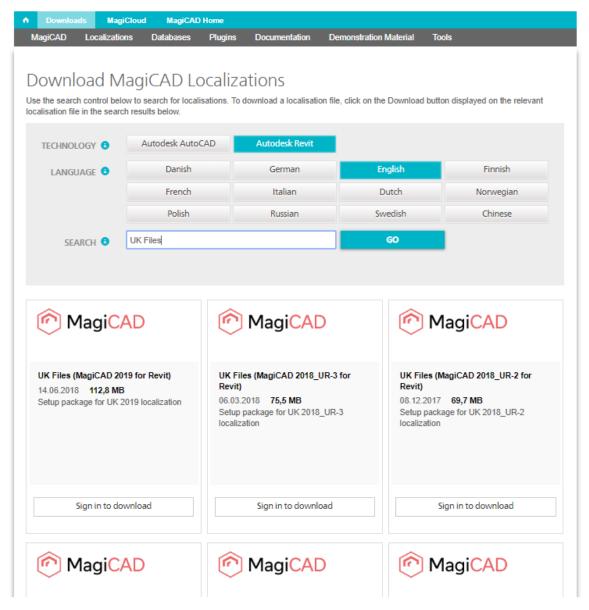


# Installing a new localisation pack

# **MagiCAD Website**

To install the latest localisation pack, go to <a href="www.magicad.com/Downloads/Localizations">www.magicad.com/Downloads/Localizations</a> and filter though the menu shown below to find the relevant UK files.







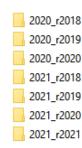
To download from the website, you will need your MagiCAD Activation key. This will be provided to a member of your organisation who was selected to be your MagiCAD company representative when MagiCAD was purchased. Please see the example below: -



Once you have signed in you can download and install the localisation pack.

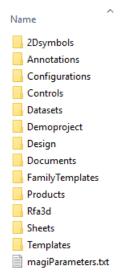
When you install MagiCAD to your machine, like other software programs, all of the required files will be installed into the "Program Data" folder. The MagiCAD file path is C:\ProgramData\MagiCAD-RS All of the installed versions of MagiCAD will be shown here. The Program Data folder is hidden in Windows Explorer by default, if you cannot see the Program Data folder you should contact your I.T. Manager for access.

If you already have earlier versions of MagiCAD installed, you will have numerous folders as shown below. The first set of numbers in the folder names is the MagiCAD Version and the second set of numbers with the prefix (r\_) is the Revit version which the MagiCAD installation is compatible with.





Within these folders you will find all of the MagiCAD specific folders as shown below.



The key localisation folders for the UK are as mentioned below, these folders contain the information which MagiCAD uses to provide localised content:

### **Annotations**

This folder contains a master set of annotation families updated with each release.

#### **Dataset**

This folder contains the most up-to-date master dataset with the updates incorporated as detailed later on in this document.

# **Templates**

This folder contains the most up-to-date master Revit template with the updates incorporated as detailed later on in this document.

# **Shared Parameters**

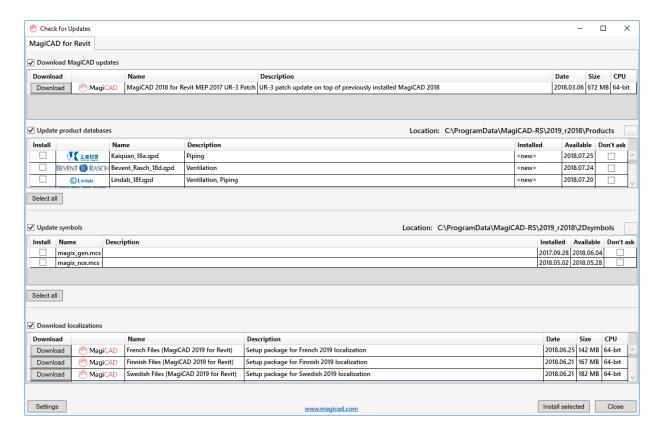
This text file brings in all of the relevant parameters within MagiCAD. We recommend that this file should be read-only and should not be edited.



### **Check for Updates**



The MagiCAD updater is a tool for updating the latest versions of MagiCAD's product databases, symbols, localisation files and plug-ins. The tool can be found in the common tab of MagiCAD for Revit.



After clicking the check for updates button a list of available updates will be shown. Simply select the updates you wish to install and click **Install selected.** 



### **Available Localisation Packs**

# MagiCAD 2021 Main Release (MR) for Revit

MagiCAD version 2021 (rev.a) MR

Updates incorporated within (rev.a) MagiCAD version 2021 MR.

Revit Template UK-MCREV-2021\_a\_r2018.rte

UK-MCREV-2021\_a\_r2019.rte UK-MCREV-2021\_a\_r2020.rte UK-MCREV-2021\_a\_r2021.rte

# **General Configurations**

- Builderswork filter added to relevant views.
- Electrical system filters aligned with CIBSE guidance.

# **Tags & Annotations**

 Standard "MC\_Connection\_Node\_Gas\_Piping.rfa" Gas Connection Node tag created for new Gas Calculations function.

Dataset UK-MCREV-2021 a r2018.mrv

UK-MCREV-2021\_a\_r2019.mrv UK-MCREV-2021\_a\_r2020.mrv UK-MCREV-2021\_a\_r2021.mrv

# **Devices & Components**

15mm DWS WC Outlets added.

Back boxes has been added to the Dataset.

# **Duct, Pipe & Cable Route Series**

New Trunking series added to Cable Routes; "Galvanised Steel Trunking".

New duct sizes added to all DW144 Ductwork.

### **Piping**

New Gas types added along with more gas devices and gas valves.



# MagiCAD 2020 Update Release 2 (UR-2) for Revit

MagiCAD version 2020 (rev.c) UR-2

Updates incorporated within (rev.c) MagiCAD version 2020 UR-2.

Revit Template UK-MCREV-2020\_c\_r2018.rte

UK-MCREV-2020\_c\_r2019.rte UK-MCREV-2020\_c\_r2020.rte

# **General Configurations**

- Updated System names and colours in line with new Society of Digital Engineering (CIBSE) Guidance. (Documentation can be found from the CIBSE website here: https://www.cibse.org/knowledge/cibse-publications/cibse-digital-tools and in the MagiCAD UK localisation pack C:\ProgramData\MagiCAD-RS\2020\_r2018\Documents\UK\)
- New splash screen added including list of important template items and project implementation Datasheet.
- QA Checking Views added for piping & Ventilation

Dataset UK-MCREV-2020\_c\_r2018.mrv

UK-MCREV-2020\_c\_r2019.mrv UK-MCREV-2020\_c\_r2020.mrv

# **Duct, Pipe & Cable Route Series**

• Generic 3-Port valve has been added to the dataset for new feature.



# MagiCAD 2020 Update Release 1 (UR-1) for Revit

MagiCAD version 2020 (rev.b) UR-1

Updates incorporated within (rev.b) MagiCAD version 2020 UR-1.

Revit Template UK-MCREV-2020\_b\_r2018.rte

UK-MCREV-2020\_b\_r2019.rte UK-MCREV-2020\_b\_r2020.rte

### **General Configurations**

- Updated System names and colours in line with new Society of Digital Engineering (CIBSE) Guidance. (Documentation can be found from the CIBSE website here: https://www.cibse.org/knowledge/cibse-publications/cibse-digital-tools and in the MagiCAD UK localisation pack C:\ProgramData\MagiCAD-RS\2020\_r2018\Documents\UK\)
- Updated Electrical View Templates in lune with the abovementioned guidance.
- Added Example BS1192 Parameters and added a label to all Sheet templates from A3 to A0 to demonstrate how parameters like these can be used in conjunction with the Sheet Manager tool.
- Updated view templates to allow for new functions and to improve existing functions.
  - 1. Automatic Sketch Dimensions in Lighting View Template to improve Wire Tool Functionality.
  - 2. Builderswork View Templates now include Mechanical Equipment tags as well as Generic Model Tags.
  - 3. Builderswork View Templates now have the View Range adjusted to -350mm below the associated level to allow for new insertion points for Builderswork Provisions and 2D symbols.

#### **Tags & Annotations**

Standardised fonts to use Arial across all MagiCAD tags in the UK Localisation Pack.

#### **Builderswork Schedule**

• Added a filter to the Builderswork schedule so that only Builderswork Provisions are shown and not all Mechanical Equipment.



**Dataset** 

UK-MCREV-2020\_b\_r2018.mrv UK-MCREV-2020\_b\_r2019.mrv UK-MCREV-2020\_b\_r2020.mrv

# **Duct, Pipe & Cable Route Series**

- Amended and updated DW144 duct fittings to address a bug with certain reducers causing erroneous error messages in the Sizing Calculation Report.
- Added examples of "N-Branch" (aka Multi-Port) fittings to PVC-U Drainage Pipework.

# **Electrical Systems**

 Added example of new Connection Node components. (electrical connections for Mechanical Equipment)



# MagiCAD 2020 Main Release (MR) for Revit

MagiCAD version 2020 (rev.a) MR

Updates incorporated within (rev.a) MagiCAD version 2020 MR.

Revit Template UK-MCREV-2020\_a\_r2018.rte

UK-MCREV-2020\_a\_r2019.rte UK-MCREV-2020\_a\_r2020.rte

### **Settings**

- Updated filters for Electrical systems to match CIBSE (SDE) system colours
- Updated Duct and Pipe Systems to match CIBSE (SDE) System names, colours and abbreviations
- Changed colours in Schematic View Templates to match CIBSE (SDE) system colours

### **Tags & Annotations**

- Added Pipe Heating & Cooling Power (Cumulative Load) Tag into Annotations folder and Revit template
- Added Pipe Sprinkler Pressure Drop Tag into Annotations folder and Revit template

### **Builderswork**

- Builderswork Provision families have changed from Generic Models to Mechanical Equipment, the following elements of this template have been updated to accommodate this change.
  - 1. View Templates updated
  - 2. New Filters created for visibility of Builderswork Provisions
  - 3. Existing Filters updated
  - 4. Redundant Families removed from Revit Template
  - 5. Tags for Builderswork updated in Annotations Folder and Revit Template
  - 6. Added new tag to show timestamp of Builderswork Provision to Annotations folder and Revit Template
  - 7. Added new tag to show height of circular provisions at the centre of the provision to the Annotations Folder and the Revit Template
  - 8. Builderswork Schedule updated



**Dataset** 

UK-MCREV-2020\_a\_r2018.mrv UK-MCREV-2020\_a\_r2019.mrv UK-MCREV-2020\_a\_r2020.mrv

### **Duct, Pipe & Cable Route Series**

- Amended and updated DW144 duct fittings to latest components into dataset
- Amended and updated PVC plastic duct fittings to latest components into dataset
- Added example Mixing (Shunt) Units into dataset
- Added example Air Distribution Boxes into dataset

### **Electrical Systems**

- Updated Circuit Numbering Rules to include Way Only (TP&N)
- Updated Electrical Power Circuit Types to include Current Protective Devices on all circuit types
- Updated Electrical and Communication & Data Systems naming and IFC colours to match CIBSE (SDE) Guidance

### **Symbols**

• New Symbols for Builderswork Openings added into dataset

#### **Builderswork**

- Builderswork Provision families have changed from Generic Models to Mechanical Equipment, the following elements of this dataset have been updated to accommodate this change.
  - 1. Legend template for Builderswork Provisions
  - 2. Report Template for Bill of Materials
  - 3. Running Index updated



# **MagiCAD 2019 for Revit**

# MagiCAD version 2019 (rev.c) UR-2

Updates incorporated within (rev.c) MagiCAD version 2019 UR-2.

Revit Template UK-MCREV-2019\_c\_r2017.rte

UK-MCREV-2019\_c\_r2018.rte UK-MCREV-2019\_c\_r2019.rte

### **Settings**

• New noise calculation filter set to default as NR

Dataset UK-MCREV-2019\_c\_r2017.mrv

UK-MCREV-2019\_c\_r2018.mrv UK-MCREV-2019\_c\_r2019.mrv

# **Settings**

• Example offsets provided in the dataset for new product defined Builderswork opening / recess function for certain electrical, drainage and water services products



### MagiCAD version 2019 (rev.b) UR-1

Updates incorporated within (rev.b) MagiCAD version 2019 UR-1.

Revit Template UK-MCREV-2019\_b\_r2017.rte

UK-MCREV-2019\_b\_r2018.rte UK-MCREV-2019\_b\_r2019.rte

### **Tags & Annotations**

- New Tags added for Diversified Ventilation Flow Rates
- Set BWO tags to support rectangular and circular automatic detection and selection
- Configured new line styles for improved Operating Area feature (MC Electrical Operation Area 1,2 & 3)

#### **Views**

- Added new BWO filter into Builderswork view templates to display openings more clearly
- Fixed broken filters for Electrical System colour overrides
- Minor changes to Electrical View Templates
- Modified Cable Packet tags to improve visibility
- Created new Electrical Distribution Strategy view
- Created new Electrical Distribution Strategy View Template
- Created Electrical Phase Areas Colour Fill Legend

### **Settings**

- Modified Cable Packet tags to improve visibility
- Minor additions to Ground Conductor Ampacity tables in the Electrical Settings to allow new Cable Calculations to function properly

Dataset UK-MCREV-2019 b r2017.mrv

UK-MCREV-2019\_b\_r2018.mrv UK-MCREV-2019\_b\_r2019.mrv

### **Duct, Pipe & Cable Route Series**

- Updated National Code to Uniclass 2015 for Drainage Pipe Series in Dataset
- Added standard conduit series to Dataset
- DW144 Flanged Ductwork Series updated within the dataset

# **Provision for Builderswork Openings**

Added example BWO Custom Size Range in Dataset to support new feature

# **Bill of Materials**

Set new sorting definitions in Bill of Materials templates

# MagiCAD version 2019 (rev.a) MR



### Updates incorporated within (rev.a) MagiCAD version 2019 MR.

Revit Template UK-MCREV-2019\_a\_r2017.rte

UK-MCREV-2019\_a\_r2018.rte UK-MCREV-2019\_a\_r2019.rte

#### **Families**

Uniclass 2015 system codes updated in line with update (February 2018 Ss-v1.9) the
Uniclass codes will be automatically populated when bringing products in from the
dataset.

# **Tags & Annotations**

- A tag has been added for piping Loading Units for DWS and Discharge Units for Drainage
- A new tag has been added for Cable Packet for Overall Cable Width
- Cable Packet Size tag has been replaced with Cable Packet Weight tag

### **Configurations**

Updated Schematics Parameter Map .xml file with connection nodes example

#### **Shared Parameters**

Added Running Index Parameter to commonly used Schematic Symbol types

#### Schemes

 Added Electrical Phase Areas Colour Fill Scheme for use with linking Spaces to Switchboards

# **Electrical Systems**

Added UK aligned Conduit Series to dataset

Dataset UK-MCREV-2019\_a\_r2017.mrv

UK-MCREV-2019\_a\_r2018.mrv UK-MCREV-2019\_a\_r2019.mrv

# **Duct, Pipe & Cable Route Series**

Pipe thermal conductivity added to dataset

# **Electrical Systems**

• Added UK aligned Conduit Series to Revit template

# **MagiCAD Templates**

 Updated Bill of Materials templates to incorporate new features and refine existing features

# **MagiCAD 2018 for Revit**



# MagiCAD version 2018 (rev.d) UR-3

# Updates incorporated within (rev.d) is made for MagiCAD version 2018 UR-3

Revit Template UK-MCREV-2018\_d\_r2017.rte

UK-MCREV-2018\_d\_r2018.rte

No updates

Dataset UK-MCREV-2018\_d\_r2018.mrv

UK-MCREV-2018\_d\_r2018.mrv

# **Symbols**

Connection nodes schematic symbols

### **Parameters**

• Parameters added to dataset for ventilation and piping

# **Electrical Systems**

- Added electrical distribution systems typically used in the UK
- Added UK aligned voltage definitions

### **Product Content**

Added typical containment types to dataset

# **MC Running Index**

Added standard UK aligned circuit numbering systems to dataset

# **Insulation Series**

Pipe Insulation data updated and thermal conductivity added to dataset



### MagiCAD version 2018 (rev.c) UR-2

# Updates incorporated within (rev.c) is made for MagiCAD version 2018 UR-2

Revit Template UK-MCREV-2018\_c\_r2017.rte

UK-MCREV-2018\_c\_r2018.rte

#### **Cables**

- 90°C Thermosetting BS7671 compliant cable types and wire sizes added to Electrical Settings.
- Renamed cable types to enable easier cable selection based on BS7671 cable descriptions rather than BS code numbers.
- Updated Electrical Installation codes which now include (HL) high level (LL) low level (CV) ceiling void.

### **Electrical Systems**

- Added default IFC export colours for Electrical Systems.
- Updated default circuit ratings and symbols by circuit type

#### **Views**

 Revised default view templates to show linked elements in schematics and user review views

#### **Tags & Annotations**

Duct and pipe data tags updated for improved display purposes

# **Schematics**

- Added further schematic line types (as detail items) for duct, pipe, elec & comms
- Updated Switchboard Schematic template to suit new cable naming convention.
- Updated Switchboard Schematic symbols to suit new cable naming convention.

**Dataset** 

UK-MCREV-2018\_c\_r2017.mrv UK-MCREV-2018\_c\_r2018.mrv

# **Symbols**

• 2D Symbols updated for Air Terminals within the dataset

#### **Insulation Series**

Insulation series now has Uniclass 2015 codes in Dataset for ducts, pipes (water & drainage)

# **Duct, Pipe & Cable Route Series**

Flange types added to Dataset and added into duct series

#### **Product Content**

Access panels added to Dataset



- Updated Standard Electrical and Data products in Dataset
- Updated default parameters for Electrical and Data products in Dataset

# MagiCAD version 2018 (rev.b) UR-1

Updates incorporated within (rev.b) is made for MagiCAD version 2018 UR-1

Revit Template UK-MCREV-2018\_b\_r2017.rte UK-MCREV-2018\_b\_r2018.rte

#### **Cables**

- 90°C Thermosetting BS7671 compliant cable types and wire sizes added to Electrical Settings.
- Renamed cable types to enable easier cable selection based on BS7671 cable descriptions rather than BS code numbers.
- Updated Electrical Installation codes which now include (HL) high level (LL) low level (CV) ceiling void.

Dataset UK-MCREV-2018\_b\_r2017.mrv

UK-MCREV-2018\_b\_r2018.mrv

# **Symbols**

- 2D Symbols added for Air Terminals in dataset
- Schematic symbols added to dataset for ventilation, piping and electrical

# **Duct, Pipe & Cable Route Series**

Plastic duct and fittings added to dataset duct series



### MagiCAD version 2018 (rev.a) MR

# Updates incorporated within (rev.a) MagiCAD version 2018 MR

Revit Template UK-MCREV-2018\_a\_r2017.rte

UK-MCREV-2018\_a\_r2018.rte

### **Tags & Annotations**

Added, amended and condensed MagiCAD Tags and added to the template

# **Duct, Pipe & Cable Route Series**

Rectangular and circular flex ducts added to dataset and loaded into Revit template

### **Product Content**

More Drainage Devices added with EN 12056 Discharge Units in dataset

#### **Views**

- Home Run arrows added to Wires in Lighting View templates
- Builderswork View Template added
- Combination Boxes filter added to Power & Data view template. Allows turning off/on of individual components within the combination box assembly

#### **Shared Parameters**

• Updated Ventilation Tags to include new MC Flow parameter for ducts

# Dataset

UK-MCREV-2018\_a\_r2017.mrv UK-MCREV-2018\_a\_r2018.mrv

### **Symbols**

Updated symbols for mechanical and electrical items in dataset

### **Product Content**

- More DWS dummy outlets types defined with LUs in dataset
- Added example combination boxes / face plates to dataset

# **Duct, Pipe & Cable Route Series**

- Updated pipe series for carbon steel for use with different size ranges and tee branches in dataset
- Updated Mapress pipe series in dataset with new fittings in dataset
- Domestic Water Roughness matches Hydronic Roughness for all pipe series in dataset

# **Design Data**

Added new balancing methods to dataset



# MagiCAD 2016.11 for Revit

# MagiCAD version 2016.11(rev.b) UR-1

# Updates incorporated within (rev.b) MagiCAD version 2016.11 UR-1

Revit Template UK-MCREV-2016\_11b\_r2015.rte UK-MCREV-2016\_11b\_r2016.rte

### **Tags & Annotations**

Added, amended and condensed MagiCAD Tags and added to the template

### **Duct, Pipe & Cable Route Series**

Rectangular and circular flex ducts added to dataset and loaded into Revit template

#### **Views**

- Builderswork View added to Template
- Home Run arrows added to Wires in Lighting View templates

**Dataset** 

UK-MCREV-2016\_11b\_r2015.mrv UK-MCREV-2016\_11b\_r2016.mrv

#### **Product Content**

- Additional Drainage Devices added with EN 12056 Discharge Units into the dataset
- Additional DWS dummy outlets types defined with LUs in dataset

### **Duct, Pipe & Cable Route Series**

- Rectangular and circular flex ducts added to dataset and loaded into Revit template
- Updated Mapress pipe series in dataset with new fittings in dataset
- Domestic Water Roughness matches Hydronic Roughness for all pipe series in dataset

#### **Symbols**

- Updated symbols for mechanical and electrical items in dataset
- Updated pipe series for carbon steel for use with different size ranges and tee branches in dataset



# MagiCAD version 2016.11(rev.a)

# Updates incorporated within (rev.a) MagiCAD version 2016.11

Revit Template UK-MCREV-2016\_11a\_r2015.rte UK-MCREV-2016\_11a\_r2016.rte

# Shared Parameters

All shared parameters now update with MC prefix loaded into template

# **Tags & Annotations**

New cable packet tags included for new wiring and cable packet circuit features:
 MC\_Cable\_packet\_CableIDs & MC\_Cable\_packet\_CircuitIDs

### **Symbols**

Water outlet symbols have been updated and added to the dataset

# **Duct, Pipe & Cable Route Series**

- Mapress pipe series updated within dataset along with new fittings
- Amended pipe roughness in dataset for DWS systems in dataset

# **Product Content**

- Added a selection of new electrical content in sockets, switches and data categories
- Added more DWS water outlet types in dataset
- Added example heating, cooling, DWS substations (Heat Exchangers) into dataset

# **Legend Templates**

 Added No. of similar to Legend definitions in dataset. Added new elec example Legends definitions.