

2020 Fusion

What's New in Version 5?

(Up to and including Version 5.7)



Introduction

Welcome to 2020 Fusion Version 5!

Crossing several disciplines, the common theme of Version 5's feature set is improved user experience, speed and optimisation; this follows on directly from one of Version 4's goals to make the overall design process quicker and more intuitive.

The most significant enhancement to the application lies in the areas of printing, exporting, movie creation and 360° panorama generation, in which 2020 Fusion is now able to take advantage of multi-core processing and place these time-consuming tasks on the 'background', thereby saving designers a significant amount of time and freeing them up to create or edit other designs in the meantime.

Continued attention has also been applied to the already highly regarded '360° Panorama' feature, with further enhancements delivered throughout the lifecycle of Version 5 and its Service Packs.

Other key areas of development relate to dimensioning, annotation, linking and the 'Connect' customer management database.

Designers will benefit from several enhancements to the application's user interface and user experience, including further use of the real-time 'status bar' assistance for specific functions, improvements to the existing 'mirror design' functionality and a more direct means of managing invalid style options.

Many additional preferences have also been introduced across a range of areas, giving designers even greater flexibility in configuring the application to operate in the best way possible for their working environment.

Outside of general development, 2020 Fusion has also been tested and fully validated as being supported under new Microsoft environments, as well as having achieved the latest in a series of Microsoft certifications.

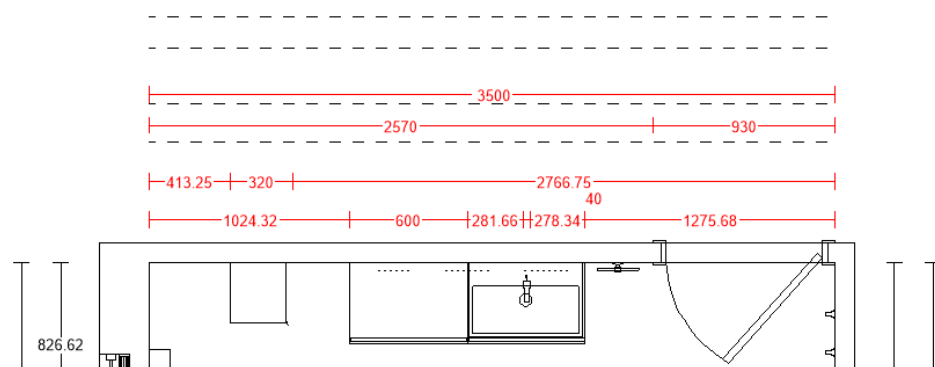
Details of the new features and enhanced functionality in 2020 Fusion Version 5 are listed under a series of general headings, as follows.

Dimensioning

Ability to Move Multiple Dimension Rails (5.0)

2020 Fusion already has the ability for a designer to select multiple dimension rails which, for example, allows them to all be deleted via a single action.

Version 5 builds upon this functionality by now also allowing a designer to select and reposition (i.e. move in the same plane) multiple dimension rails, thereby avoiding the need to repeat the same action several times over.



Island Dimensioning: 'Minimum Distance from Wall' Value to Also Apply to Elevation Views (5.1)

Fusion possesses a preference relating to island unit dimensioning called 'Minimum Distance from Wall'. This value is, essentially, a tolerance used to determine the minimum distance from a wall before which items placed in the middle of a design are treated as an island unit configuration and, as such, are then subject to different dimensioning rules to those placed on a wall.

In earlier versions of the application this value only affected plan view dimensioning; effective from Version 5, this preference will also apply to elevation views.

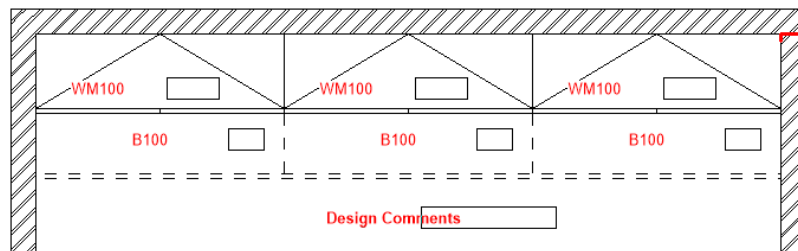


Annotation

Ability to Move (Drag & Drop) Multiple Annotations (5.0)

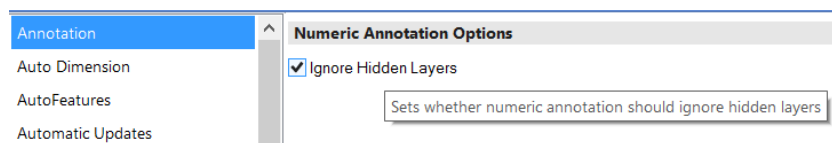
2020 Fusion already has the ability for a designer to select multiple annotations, which – for example - allows them to be rotated or deleted collectively via a single action.

Version 5 builds upon this functionality by now also allowing a designer to select multiple annotations and reposition them in any direction.

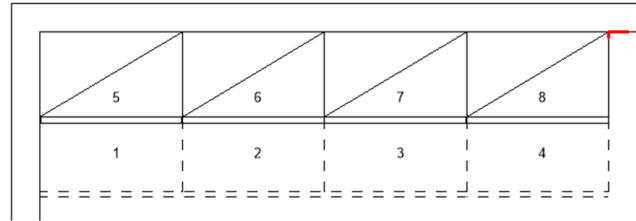


Numeric Annotation to Ignore Hidden Layers (5.2)

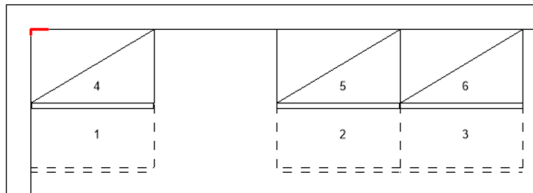
Following the addition of a new preference in the 'Annotation' section of 2020 Fusion's 'Options', it is now possible for numeric annotation to either consider (or ignore) the fact that some design items are currently residing in a hidden layer. The following example shows the effect of the preference:



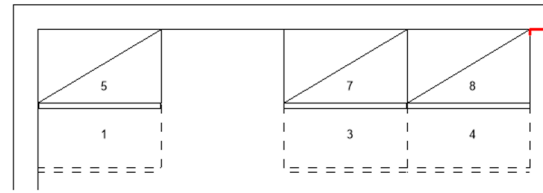
All Items (Layers) Displayed:



Consider Hidden Layers (Unchecked)



Ignore Hidden Layers (Checked)



The default state of the preference reflects existing functionality – i.e. for hidden layers to be considered and annotation of items to change dependent upon what is hidden or not.

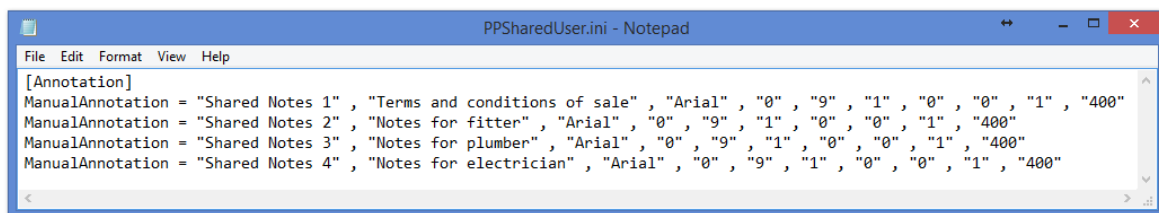
Shared ‘Non-Editable’ Manual Annotations (5.3)

Fusion currently allows an end user to create, save and apply their own user-defined manual annotations; these are displayed in the ‘Manage’ area of the ‘Annotations’ section in the ‘Annotate’ tab.

This new requirement reflects a desire for some organisations to standardise their use of manual annotations, operating to a consistency of language and content.

It is now possible for Fusion to present predefined annotations across a variety of installations, emanating from a single, central, source.

To achieve this, solution providers/configurators will need to create a new file called “PPSharedUser.ini”, the format of which is identical to the existing “PPUser.ini” file (used to store user-defined annotations).

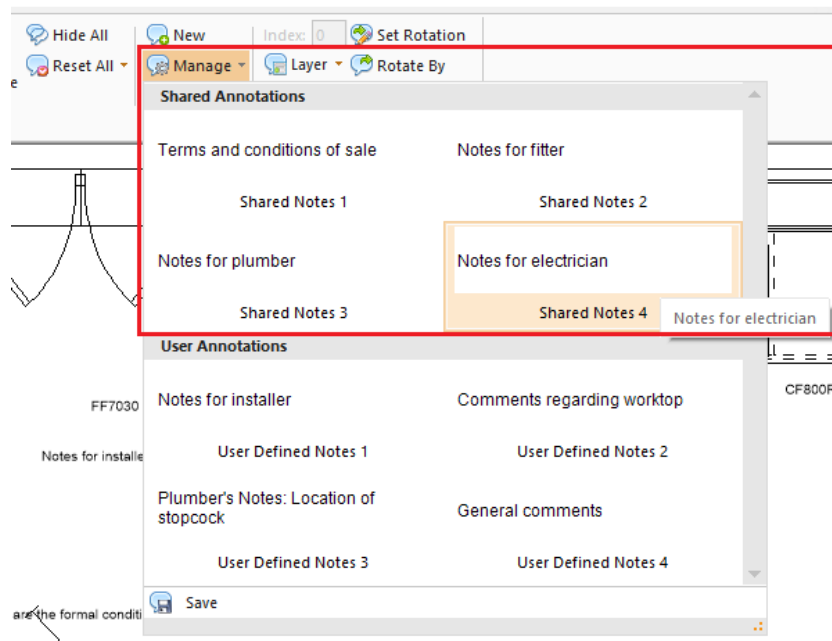


They will also need to reference the location of the PPSharedUser.ini in the PPPrefs.ini file, which could be stored locally (as per the following example) or at a central (i.e. network) location:

[Customise]

SharedAnnotationLocation = "C:\2020 Fusion 5_3"

Within Fusion itself, the annotations themselves are displayed in their own, dedicated ‘Shared Annotations’ section of the gallery and it will not be possible to add, modify, or delete these via the user interface in the gallery itself:



Please note that, once such an annotation has been added to a design, it will still remain possible to alter it using the 'Modify' (annotation) option.

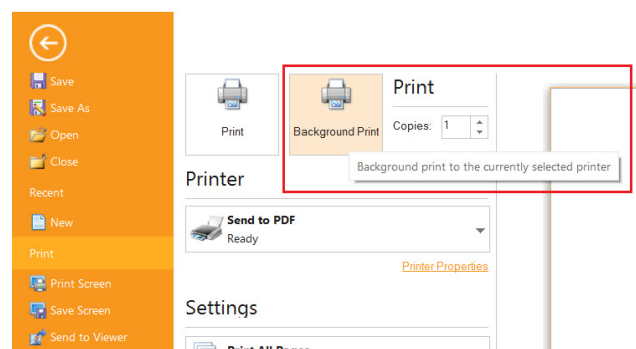
Printing & Export

Background Processing System: Printing, Export, Movie Generation & 360° Panorama (5.1)

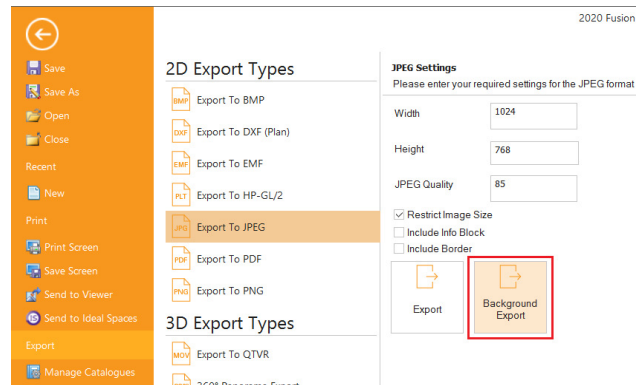
Printing designs, exporting images, generating movies and 360° panoramas within 2020 Fusion takes time, especially when performing these functions using higher quality render settings. In previous versions, these activities would fully occupy the application until they were completed; only afterwards would a designer be free to continue using 2020 Fusion for other tasks.

Version 5 introduces the concept of 'Background Processing' – this allows 2020 Fusion to take full advantage of multi-processor machines and for a designer to choose to generate any print, export, movie, or 360° panorama that is expected to take a long time as a background process - thereby allowing them to work on other design activities in the meantime.

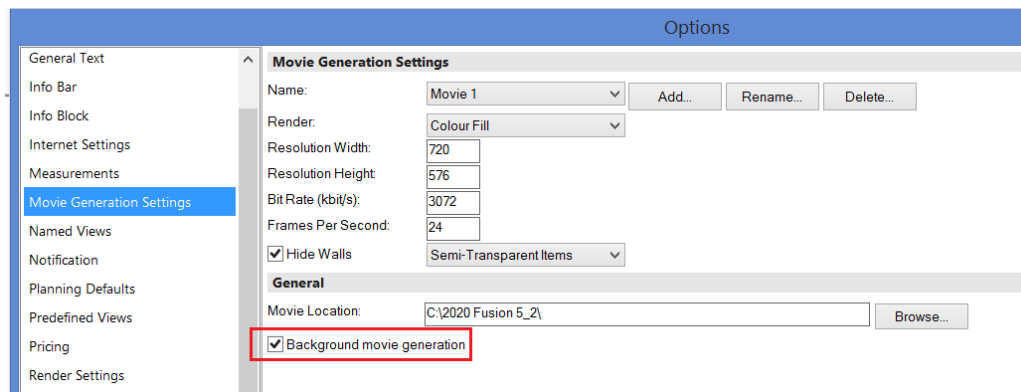
In the case of printing, an additional 'Background Print' button has been added to the backstage view and can be applied to all print types (standard, tiling, worktop, installation symbol and batch print sets (including on-demand batch prints).



The same approach has been applied to image exports, with an extra button being added to the 'Export' backstage view for all relevant export types:



For movie generation, this will now be processed in the background by default, although a preference can be unchecked in 2020 Fusion's 'Options' ('Movie Generation Settings') to make this run in the foreground, if preferred.

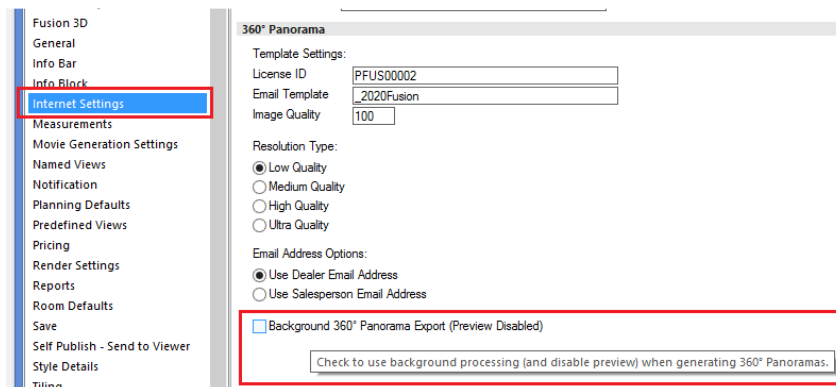


For 360° Panorama generation, the default is for foreground processing to apply. Between Version 5.0 and 5.2, a hidden preference could be added to the PPPrefs.ini file to always make this process operate in the background. This needed to be entered under the [Customise] heading:

[Customise]

Background360Panorama = "1"

Effective from Version 5.3, user interface has been added for this preference, the functionality of which is also linked to the 360° Panorama 'preview' functionality also delivered in this version:

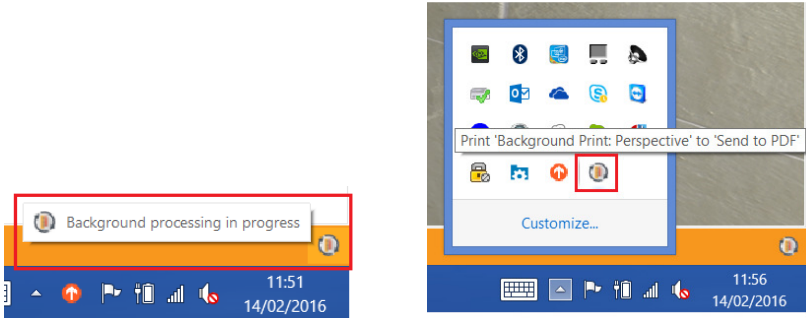


For Quick Print, the default is also for foreground processing to apply; however, a hidden preference can be added to the PPPrefs.ini file to always make this operate in the background. This will need to be entered under the [Customise] heading:

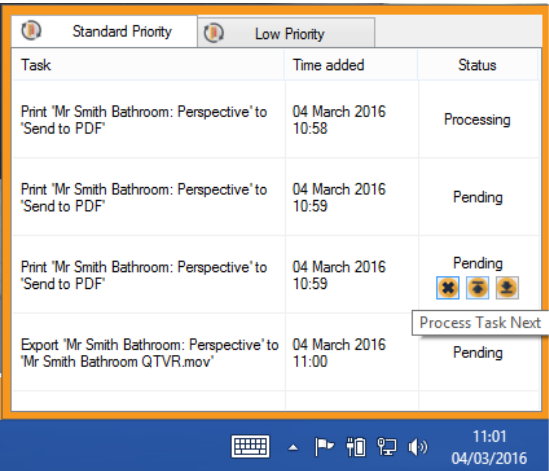
[Customise]

BackgroundQuickPrinting = "1"

Designers will be able to keep track of the progress of all prints, exports, movies and 360° panoramas via a complementary System Tray application found on the right hand side of the Windows taskbar. This can also be launched from within Fusion itself via the status bar at the bottom of the application.



If several background processing requests have been sent by the designer, the designer can manage the order in which they are processed via this interface – either moving tasks up or down the queue or deleting them altogether.

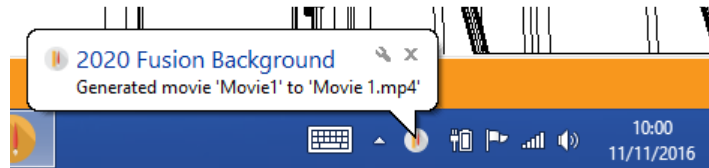


2020 Fusion automatically ranks some background processing tasks as higher than others: printing, exporting and 360° panorama tasks will be added to the 'standard priority' task queue; movie generation tasks will be added to the 'low priority' task queue.

Background Processing Notification System Enhancements (Windows Balloons) (5.3)

Background processing notification balloons presented to a user will now appear only when a task has been completed, as opposed to when it has started.

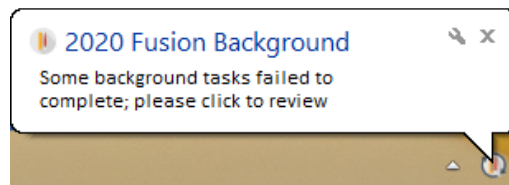
In the case of printing, the balloon will appear when the print job has spooled to the printer; in the cases of exporting, movie generation and 360° panoramas, the balloon will appear when the resulting file is fully generated.



Notify User (Upon Fusion Launch) of Tasks in Background Processing Queue with an Error State (5.3)

It is sometimes possible that printing, exporting, movie and panorama generation activities being run as a background task could stall based upon a given error state or condition. Unless the user specifically checked the corresponding list of tasks in the Systray app, they may not even be aware of these error states and the failure to generate the required output.

Now, whenever the application is launched, 2020 Fusion will check the state of any pending background processing tasks and report to the user if any return an error state. With this information, the end user can then (manually) launch the task queue in the Systray app and take any necessary action.



360° Panorama: Support for '2020 VR (Virtual Reality) Viewer' (5.0)

The 2020 Fusion 360° Panorama Export feature has been updated to in order to accommodate support for '2020 VR Viewer' glasses. 360° Panorama exports from 2020 Fusion will now be fully compatible with this new technology, which means that - when viewing a 360° Panorama on a qualifying smartphone – there will be an additional viewing option that will allow customers an even more immersive experience when viewing a representation of their newly designed space, using 2020 VR Viewer glasses, or equivalent.

There is no change in the means of generating 360° Panorama exports in 2020 Fusion, only the resulting panoramas themselves will possess the additional viewing functionality.



The minimum requirements to be able to take advantage of the 2020 VR Viewer functionality for Android, iOS or Windows-Phone mobile devices are as follows:

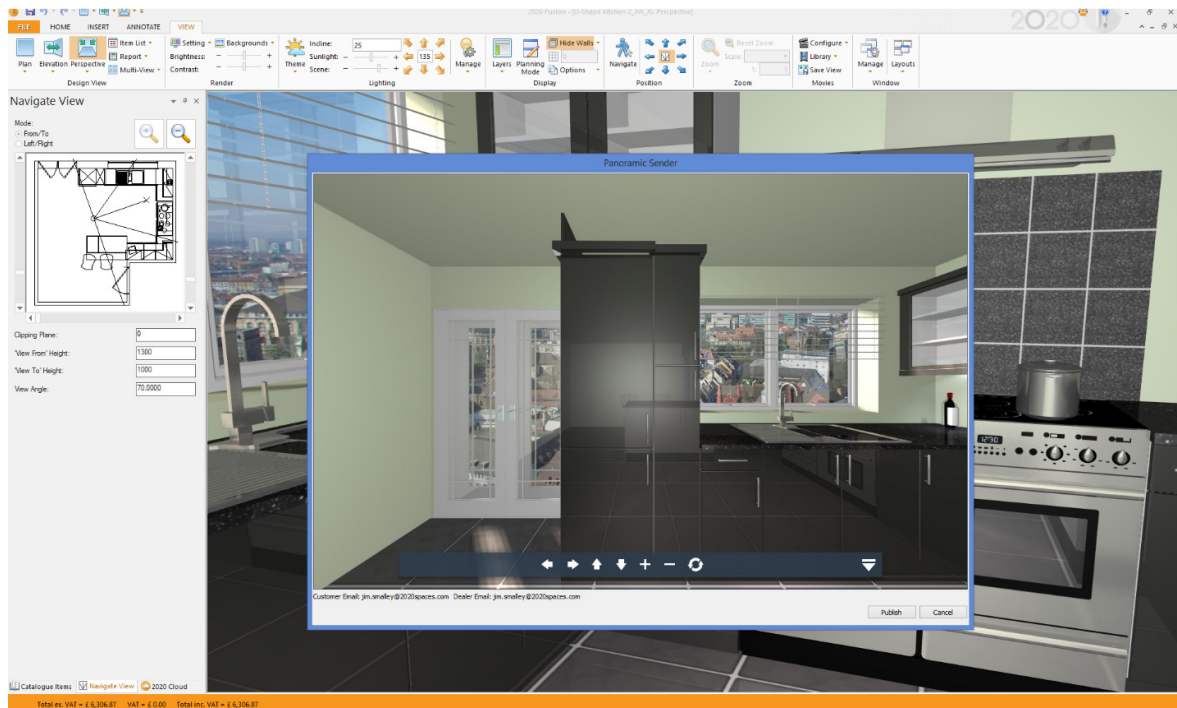
- The mobile device/browser must support WebGL.
 - Only Android Browser V5 onwards supports WebGL.
 - Only iOS Safari V8 onwards supports WebGL.
 - Only Windows IE mobile V11 onwards supports WebGL.
- The device needs to have accelerometer and gyroscope sensors.

If the minimum requirements listed above are not met, then the panoramic image will still be available to view and navigate on the mobile device, but the specific '2020 VR Viewer' option will not be accessible.

Ability to 'Preview' a 360° Panorama Prior to Publishing (5.3)

Following the introduction of the 360° Panorama feature, many designers expressed a view that they would like to be able to preview the panorama before sending it to a customer. This is now possible, as long as the background generation of 360° Panoramas is not in operation.

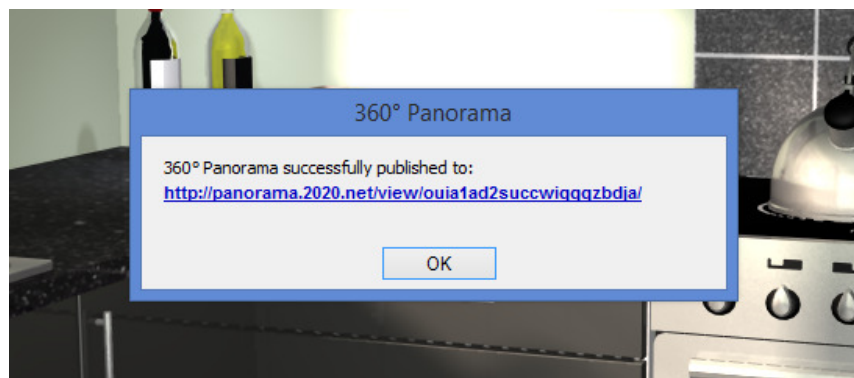
When a request to create a 360° Panorama is made with the above preference unchecked, the following preview window is displayed. The preview itself possesses exactly the same navigation controls available as when viewing using a browser. At the bottom of the preview, details of the customer and dealer/salesperson email addresses to which the panorama will be sent are also included.



360° Panorama: 'Successfully Published' Dialog to Include Hyperlink to HTTP Address of Published Design (5.3)

When a 360° Panorama is successfully published, the confirmation dialog presented to the end user now contains a hyperlink to the same URL as will be sent to the designer and customers by email.

This allows designers to immediately view the generated image without the need to wait for the email to arrive.



360° Panorama: Dealer Email - Ability to Choose Either Organisation Email or Salesperson (Resource) Email (5.3)

In previous versions of 2020 Fusion, it was only possible for the organisation's copy of the 360° Panorama email to be sent to the dealer email address held in 'Manage', 'System', 'Dealer Details' (Connect) or 'File', 'Options', 'Dealer Details' (Fusion standalone). For businesses with a large number of designers or salespersons, this was not always desirable.

As such, an additional preference has now been added, allowing either the dealer email address to continue to be used, or that of the specific salesperson associated with the customer/design.

360° Panorama Export: Improved and Less Restrictive Error Notifications (5.3)

A number of optimisations have been made in order to consolidate multiple error messages into a single dialog in the event of more than one error being identified. This will allow designers to identify and address all issues at the same time.

It is also no longer compulsory for both the customer AND the salesperson/organisation email address to be populated; a 360° Panorama can now be generated as long as EITHER email is present for the design.

360° Panorama Export - 'Higher Resolution' Options (5.3)

Since its initial implementation, 360° Panorama images were all generated to a fixed resolution of 1024 x 1024 pixels. This allowed the panoramas to be generated quickly and to a reasonable quality level. However, some customers also wanted the possibility of generating panoramic images to a higher quality level, with the understanding that this would, of course, result in longer generation times.

Consequently, Fusion now offers four quality levels which can be set in its preferences as follows:

The resolution options are as follows:

- Low Quality (1024 x 1024 pixels), delivering the same level of quality as in previous versions.
- Medium Quality (1440 x 1400 pixels)
- High Quality (1920 x 1920 pixels)
- Ultra Quality (2880 x 2880 pixels)

Example: Low Quality



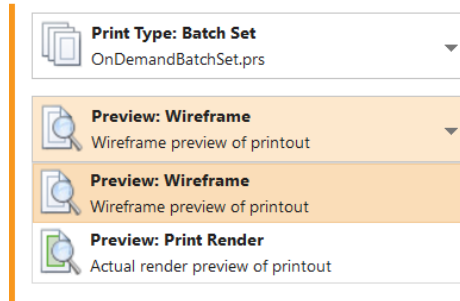
Example: Ultra Quality



Batch Printing: Ability to Show a Wireframe Preview of a Batch Print Set (5.2)

Previously, 2020 Fusion's 'Print' Backstage View only allowed the end user to view a batch print set showing the actual renders used in the views themselves. This had the potential for batch print previews to take a very long time to generate, especially if the print set contained a number of HQ renders.

Now, designers can apply the same functionality as already exists for standard views, which is to show a wireframe preview of the batch print set (both predefined and on-demand), but still giving the option to display the actual renders used, if required.



The default state of this option will be controlled by the same (existing) hidden preference used for standard print previews:

[fnRoom]

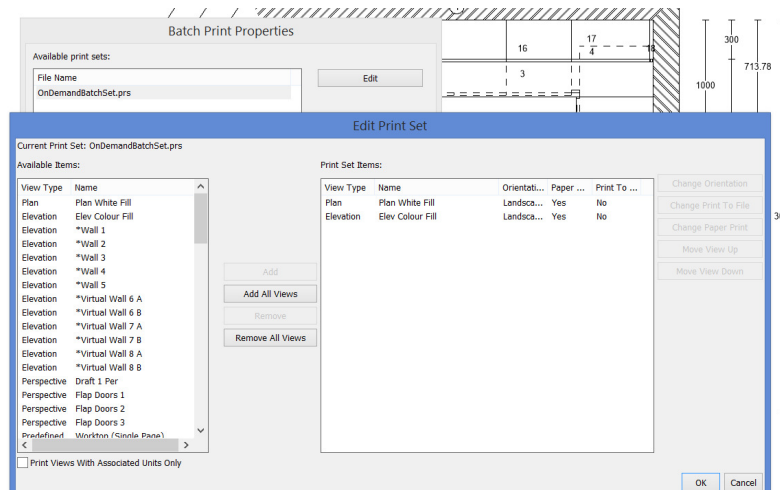
PrintPreviewWireframe = "0" or "1"

If the preference is not present in PPPrefs.ini, then the behaviour will default to displaying a wireframe preview (equivalent to PrintPreviewWireframe = "1").

'Per Design' On Demand Batch Print Sets (5.2)

In Version 4 of 2020 Fusion, the original 'On Demand Batch Printing' feature was implemented. This allows the creation of a temporary, user-defined, batch print set that remains valid (i.e. available) for the duration of the session of the design in which it was created; when the design is closed, the on demand batch set is discarded.

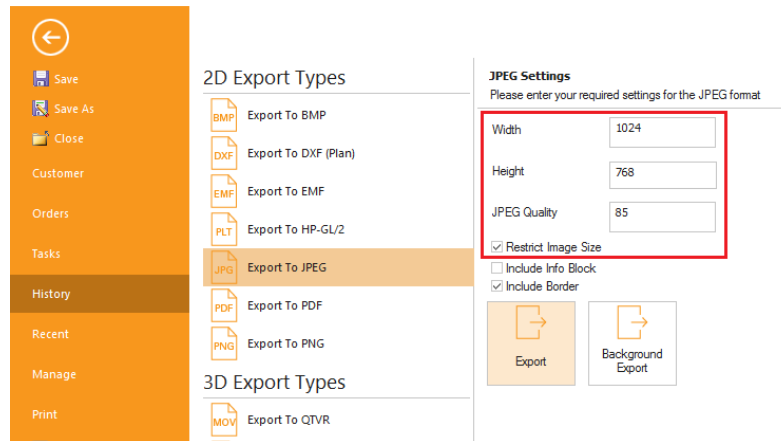
Version 5 delivers an extension to the original feature which allows an on-demand batch print set to be created and retained for each design currently open, thereby making each on-demand batch print set design-specific, as opposed to (previously) having a single on-demand batch print set being shared across all open designs.



Export Backstage View: 'Sticky' Settings (5.3)

It is possible to export a 2020 Fusion design in a wide range of formats, each with their own settings – some unique and some shared. It had previously been the case that, for each respective export type, hard-coded default settings would be offered whenever the option was selected. For many users, this was a source of frustration as they would have to continually enter their preferred settings every time they performed such an export.

Now, each respective export format will have its own, dedicated settings. Fusion will not only save (to hidden preferences) any changes made to the settings for each format, it will also recall the export format most recently used when the user returns to the Export backstage view.



Note: some settings (such as 'Include Info Block' and 'Include Border') are already governed by existing preferences. This feature enhancement is only in respect of those settings that could not previously be defined.

Retirement of QuickTimeVR (5.3)

Following Apple's announcement in April 2016 withdrawing its support of QuickTime on Windows-based platforms and the subsequent identification of associated (potential) security threats, 2020 has made the decision to retire the QuickTimeVR export feature in Fusion, effective from Version 5.3.

Movie Generation – Replacement Export Format (5.3)

Apple's (April 2016) support position regarding QuickTime for Windows has also meant that changes were necessary in respect of 2020 Fusion's movie generation feature.

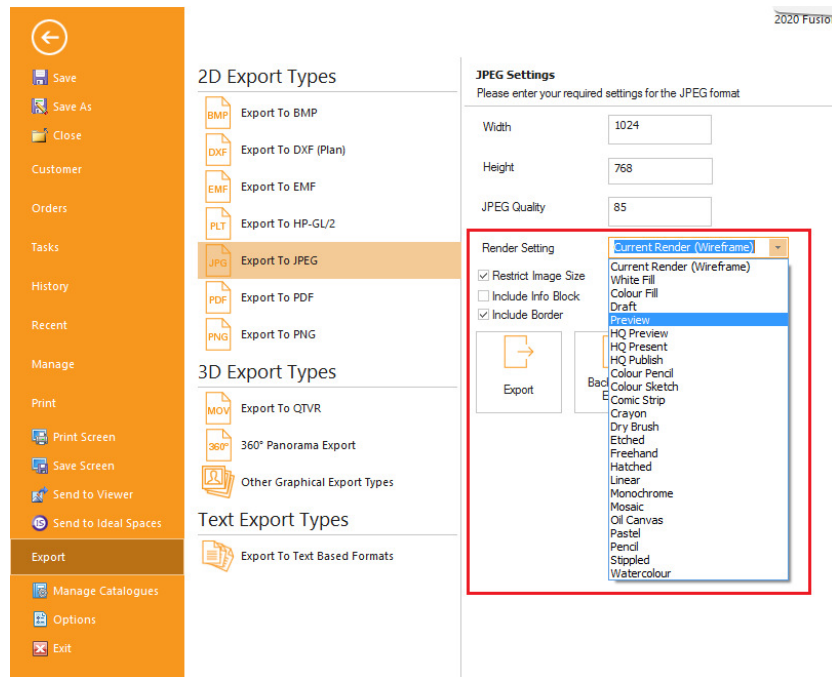
For the end user, the movie creation and generation feature will operate in exactly the same way, with the only difference being in the actual output file – instead of a .mov file, Fusion movies will now be created in the .mp4 format.

With the removal of the QuickTime dependency from the application, Fusion's SysChecker will no longer check for and report against the installation of QuickTime.

Ability to Define Image Export Render Setting (5.4)

2020 Fusion has the ability to export a design to a variety of formats. In version 5.4, this functionality has been further enhanced through the addition of an option to select the specific render type for qualifying export formats (BMP, JPEG, PDF, PNG and 360° Panorama) independent of that shown in the 'design area' of the active design.

This time-saving measure means that it is no longer necessary to initially render the 'design view' before exporting the image. For example, the active design can be quickly rendered in 'Wireframe' in the design view and then a higher-quality render (e.g. 'Preview') can be selected at the point of export.



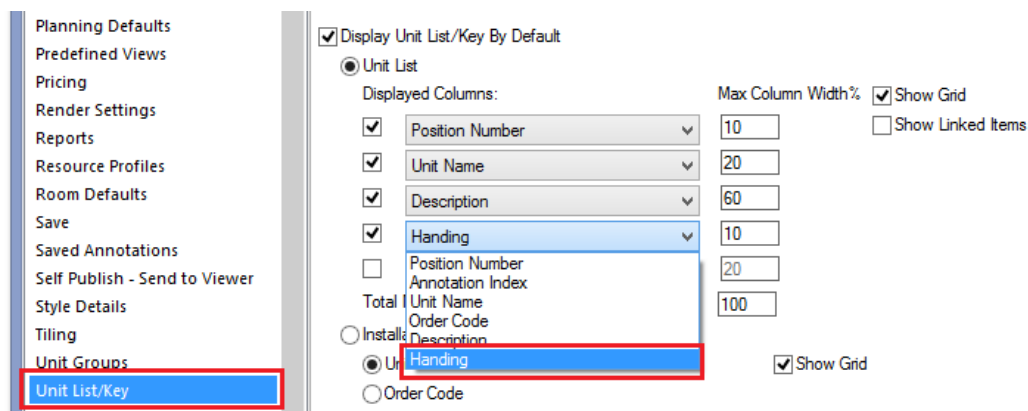
Support for Trimble SketchUp 2017 (64-bit Version Only) (5.5)

In line with Trimble's release of SketchUp 2017, 2020 Fusion now supports the import of models created using this version of SketchUp in the 64-bit variant of the application only.

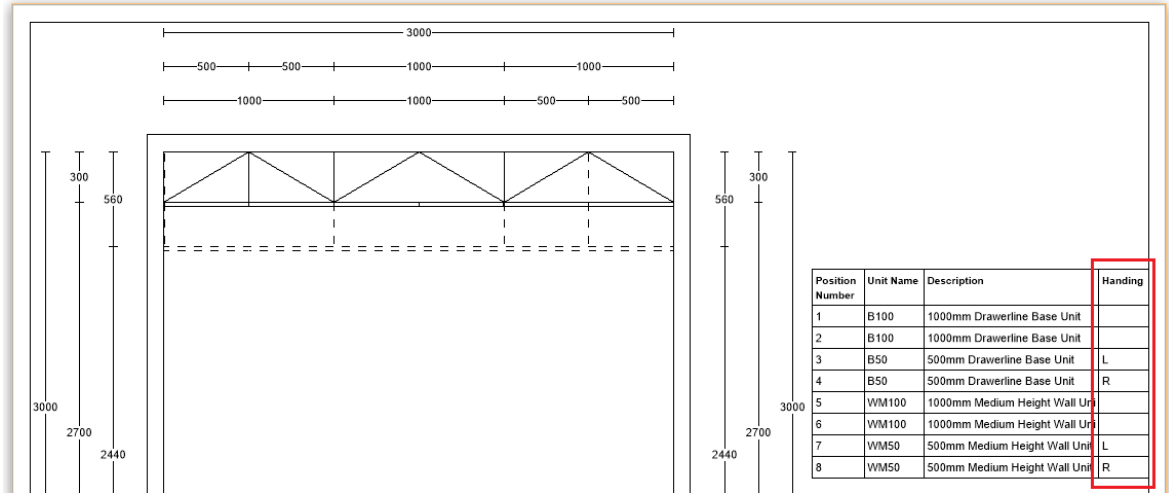
In addition, 2020 Fusion's 'Export to SketchUp' has been upgraded to export to this latest edition when using the 64-bit variant of 2020 Fusion.

Unit List/Key: Option to Display 'Handing' (5.7)

This existing feature, enabling a user to display a unit listing on plan and elevation printouts, has been further enhanced to also allow the handing of all displayed design items to be presented. In terms of the corresponding section in Fusion's 'Options', 'Handing' now appears as an additional choice in the drop-down:



If chosen, then this will then be shown as an additional column in the list of displayed items in the print preview/printed output:



Unit List/Key: Unit List/Key: Ability to Exclude Specific Catalogues (5.7)

Some customers who use the unit list/key feature find that the list of displayed items can become over-populated with entries from catalogues that are not relevant to the design. To work around this, they generally have to take measures (such as temporarily hiding certain items) in order to produce a unit list key as desired.

In Version 5.7, the use of a (hidden) preference allows a user to define any catalogues whose items that need to be excluded from the Unit List Key. This is achieved by entering the unique ID of the catalogues concerned in the following section of the PPPrefs.ini or PPPrefsOverride.ini files. Example:

```
[UnitListKey]
ExcludedCatalogues = "1449138522", "1472559975"
```

Network Printer Optimisation (5.7)

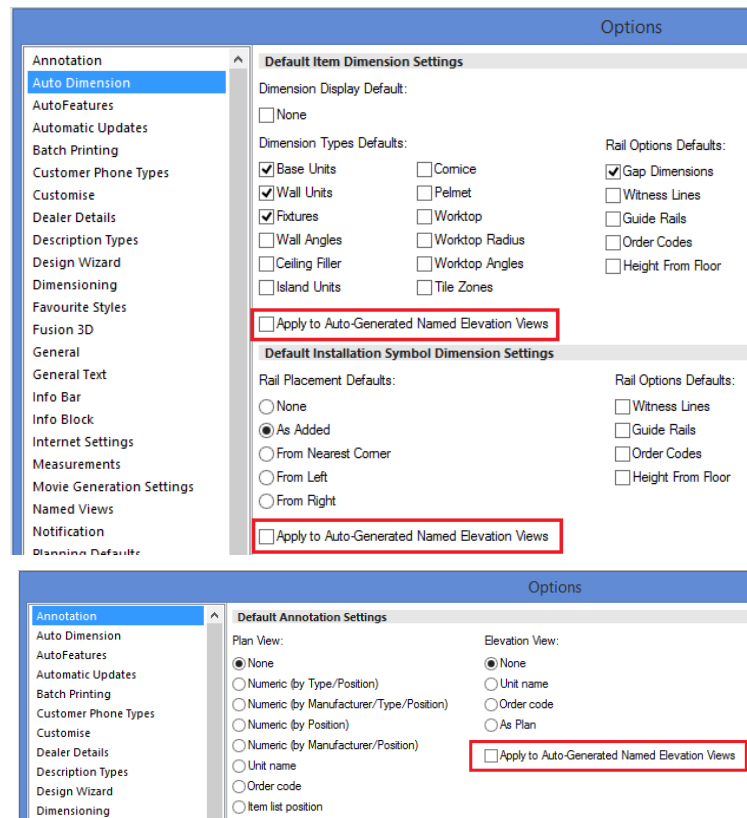
A new caching mechanism to capture the printer name, the page size and page orientation has been introduced. This optimised approach, using the cached information, will therefore improve the speed of 2020 Fusion's general interaction with network printers.

Viewing, Lighting & Rendering

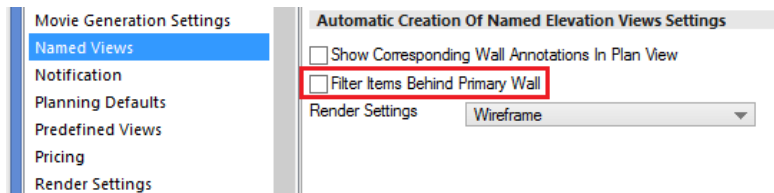
Predefined Settings for Print Views - Named View Enhancements (Virtual Walls) (5.0)

New behaviour has been introduced for virtual wall named views, with newly created virtual wall named views now being effectively regarded as automatically generated named views and therefore behaving in a similar way to these.

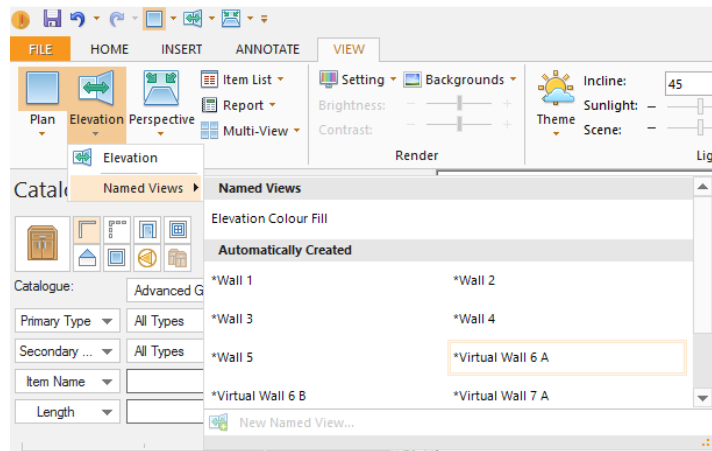
As such, the virtual wall names (numbers) will now be generated automatically and the numbers themselves synchronising with the numbering of 'real' walls. Virtual wall annotation and dimensioning will now follow the same preferences used for automatically generated named views (the previous virtual wall specific preferences have therefore been retired).



A new preference has also been added which applies to all automatically generated named elevation/virtual wall views - 'Filter Items Behind Primary Wall', which allows the user to not display items behind the automatically generated named view. The default is for this preference to be turned off.



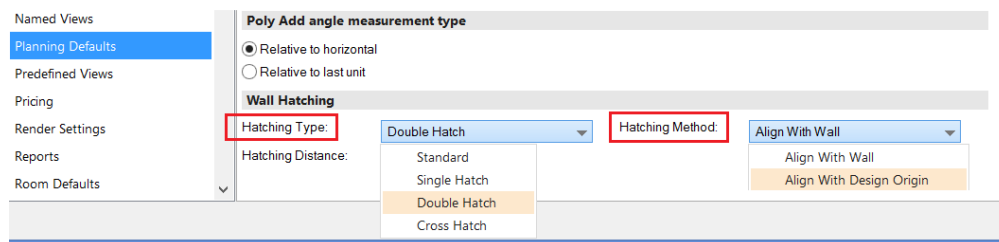
In the elevation named views area, the virtual wall named views are now listed in the 'Automatically Created' section, directly underneath the auto generated named elevation views:



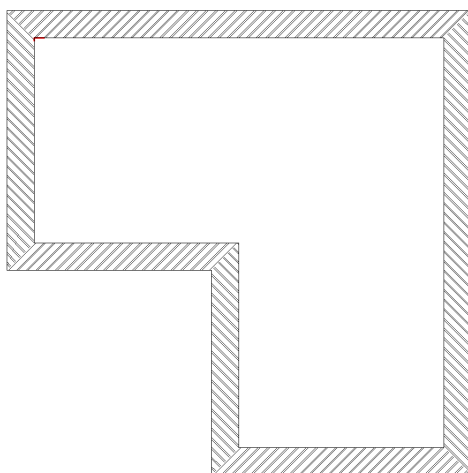
Design Creation

Hatched Walls Enhancements (5.0)

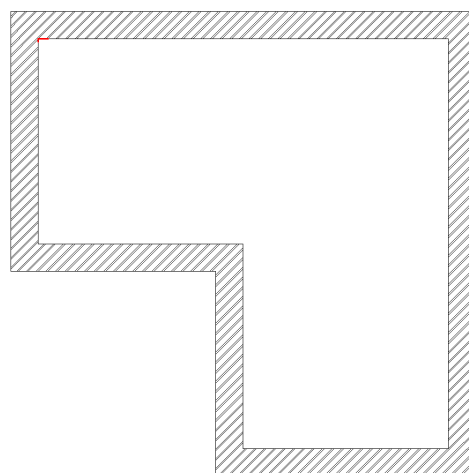
Further enhancements have been made to the existing hatched walls feature, as a result of which the designer is now able to define the default wall hatching type for a new design (standard, single hatch, double hatch, cross hatch), as well as the default hatching method - either to align the hatching to each individual wall (existing functionality) or to align all wall hatching to the design origin (new functionality).



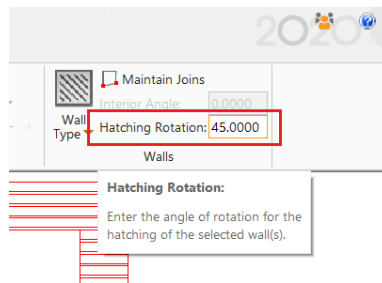
Align to Wall



Align to Design Origin



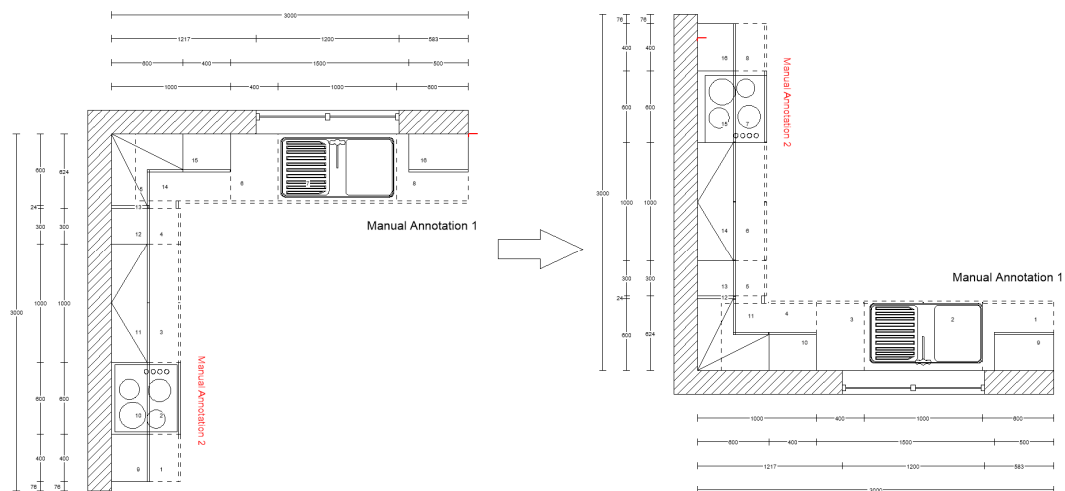
In addition, the designer can now change the hatching angle within any given design – simply type the desired angle into the ‘Hatching Rotation’ field and press ‘Enter’.



Mirror Design Enhancements (Print Areas, Annotations, Dimensioning) (5.0)

2020 Fusion already allows a designer to create a mirrored version of an existing design - either vertically or horizontally. In previous versions of the product there have been several limitations as part of this process and, as such, some aspects of the design were not transferred during the mirroring process.

In Version 5, the mirror design process is now also able to automatically mirror all ‘Print Areas’, ‘Dimensions’ and ‘Annotations’ present in the design, thereby eliminating the need to reapply these elements in the mirrored design.



Note: it remains the case that ‘autofeature’ items are not transferred as part of the mirror design process; the designer will therefore still need to reapply autofeatures to the new version of the design after the mirroring process is complete.

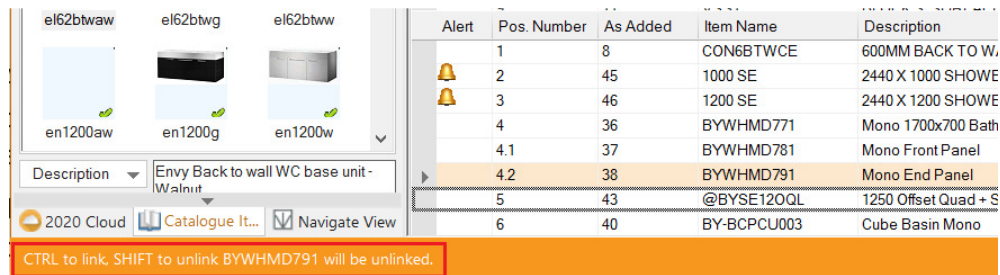
Ability to Un/Link Existing Design Items (5.0)

2020 Fusion possesses a variety of methods of linking one (or more) item to another (compulsory links, prompted links, manual links), but these only operate at the point of addition to a design. However, once any given item is present in a design, it has not been previously possible to select it and un/link it from/to another.

2020 Fusion Version 5 allows the designer to achieve this via new functionality available in the item list view.

Provided items are listed with ‘Group by Links’ turned on, any existing design item can be selected and linked to any other (at any selected point in the item list hierarchy). Or, if the design item is already linked to another - it can be unlinked from its existing parent to either become a main item in its own

right, or it can even be linked to a completely different parent item.



The designer is assisted during this process by the 'real time' guidance displayed on the status bar at the bottom of the screen.

Clicking and holding the CTRL key whilst dragging an entry in the item list allows the designer to link it to another item; clicking and holding the SHIFT key allows the designer to unlink an item from another.

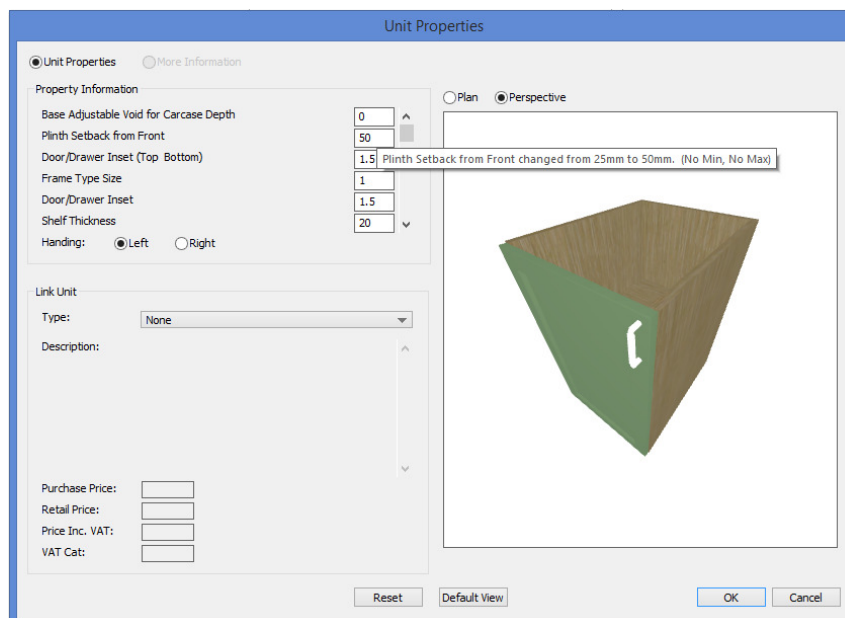
When the linking/unlinking action is complete, the item list is rearranged according to the sorting method currently in use (e.g. type/position, order code, etc.).

Minimum/Maximum Parameters (Unit Properties) (5.1)

In 2020 Fusion, it is possible to change the parameters of many items within the 'Properties' dialog.

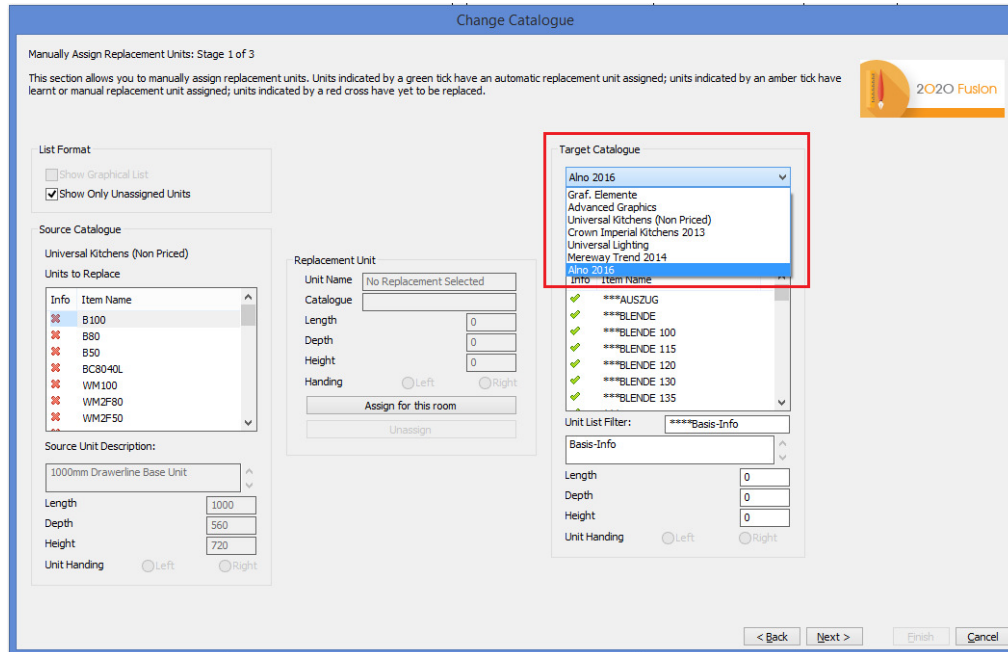
In Version 5, it is now possible for minimum or maximum limits for these parameters to be defined at the point of catalogue creation. This means that - within the existing Edit Unit Properties dialog - a parameter's value would be restricted to an amount between the minimum and maximum values (if) defined in the manufacturer's catalogue.

In terms of user-interface, the tooltip indicating both the original and the modified values will now also advise of the minimum and maximum values permitted, if defined.



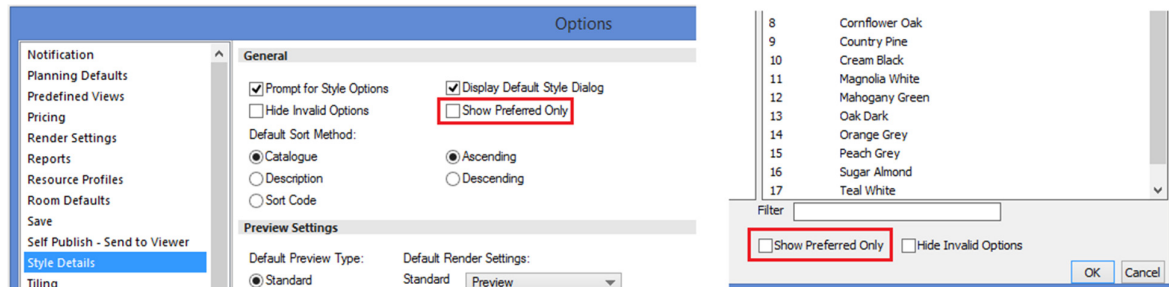
Change Catalogue: Optimised Display of Catalogues (5.1)

The 'Change Catalogue' mechanism has been made significantly more efficient by now only adding the source (non-mapped) and target catalogues to the new design. As a result, the 'add palette' in the replacement area now only shows the new target and any non-mapped source catalogues, as opposed to all 'installed' catalogues, making the process much quicker and easier to navigate.



Ability to Set Default for 'Show Preferred Only' Checkbox in Style Details (5.0)

A new preference has been added to the 'Style Details' section of 2020 Fusion's 'Options' which allows users to set the default state of the 'Show Preferred' checkbox in the 'Style Details' dialog.



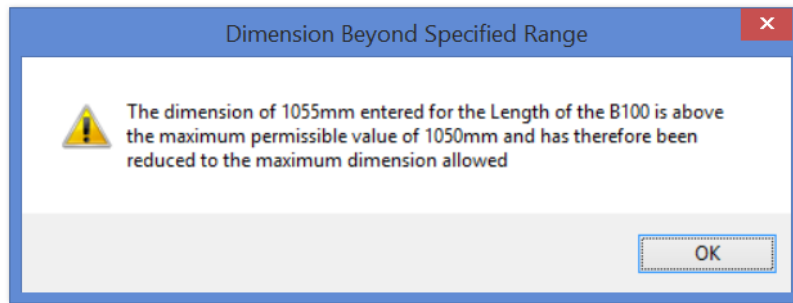
Notification if minimum or maximum dimension for units is exceeded (5.2)

Within 2020 Fusion catalogues, some items will have minimum and maximum dimensions defined. If the user enters values outside of those limits the application automatically modifies the values to be within the valid range specified – i.e. it restricts them to the upper or lower limit of the range.

Although useful functionality, some users might prefer to always be notified on the occasions when this happens. Version 5 now includes a hidden preference that, when set, will result a notification dialog appearing every time such an automatic modification is made by 2020 Fusion in the Add Palette or the 'Items' tab:

[Customise]

NotifyIfDimensionExceedsRange = "1"



2020 Fusion's default behaviour is not to use this notification mechanism; customers will therefore need to add this preference to the PPPrefs.ini file if they wish to use this functionality.

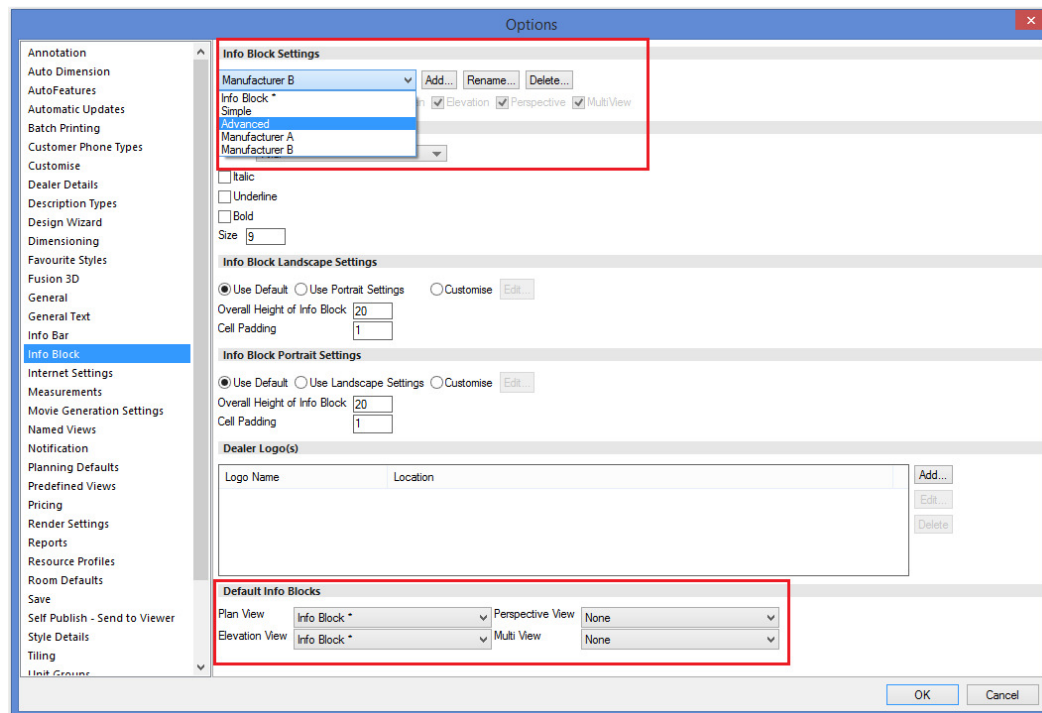
Please consult the 2020 Fusion Support Team if you require further guidance.

Multiple Info Blocks (5.2)

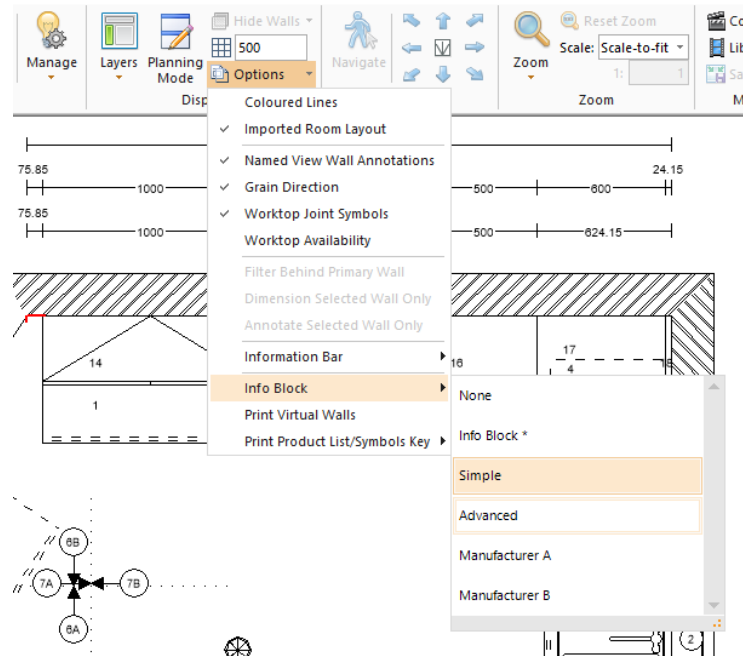
2020 Fusion already allows designers to create a customised Info Block for printouts in portrait and landscape but, until now, they have been restricted to creating and applying only a single instance of an Info Block.

Inspired by the existing user interface for the creation and management of Info Bars, Version 5 now allows a designer to create as many Info Block variations as they require – allowing them to configure Info Blocks for specific manufacturers or markets, or to create ones either displaying just basic or more detailed information.

Preferences have also been added allowing the designer to define the default Info Block to be displayed for each graphical view.



The user also has the ability to quickly and easily select between any of the available Info Blocks in each graphical view (Plan, Elevation, Perspective and Multi-View) in a given design. The selection made will be saved with the design and with any named views that are created using that specific Info Block.

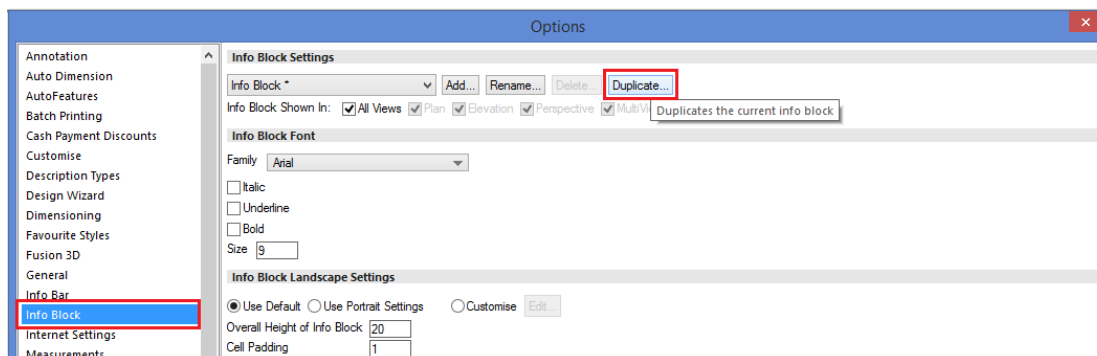


Note: the process of creating customised Info Blocks themselves remains unchanged from previous versions.

For further guidance on creating customised Info Blocks please consult the 2020 Fusion Support Team.

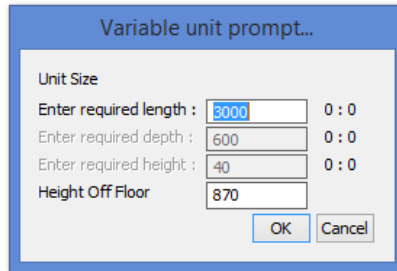
Duplicate Info Blocks (5.3)

Following the introduction of the 'Multiple Info Blocks' feature in Version 5.2, the feature has been further extended to also allow Info Block duplication. This allows users to be able to select an existing Info Block and more easily produce variations, such as multiple copies each including different manufacturer's logo, and therefore removing the need to create each new Info Block from scratch.



'Prompt for Variable Units' to Also Apply for Linked Items (5.3)

2020 Fusion has an existing preference called 'Prompt for variable units' (found in 'Options', 'Room Defaults', 'General') which, if enabled, presents the designer with a dialog allowing them to easily enter any variable values for length, depth and height. However, this functionality previously only extended to the addition of 'parent' items only.



A screenshot of a dialog box titled "Variable unit prompt...". It contains four input fields with labels: "Enter required length :", "Enter required depth :", "Enter required height :", and "Height Off Floor". The values entered are 3000, 600, 40, and 870 respectively. To the right of each input field is a "0 : 0" label. At the bottom right are "OK" and "Cancel" buttons.

With the implementation of this requirement, the variable unit prompt dialog will now appear for all graphically variable units, regardless of the method in which they have been added. This includes addition of units as a parent item, via any form of linking, as replacements, or as alternative items.

NEW! 211012 Optimisation of Drawing Updates (5.6)

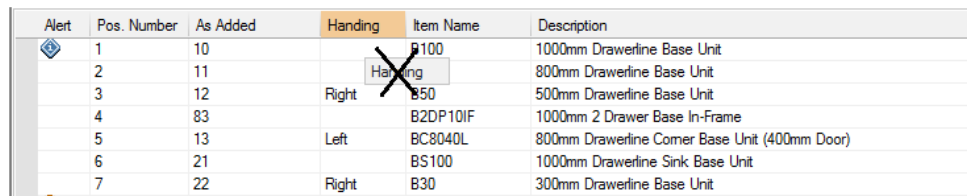
A major optimisation of Fusion's redraw code has been undertaken, resulting in a significantly improved refresh speed when adding, removing, or repositioning when design items and/or their dimension rails/annotations.

User Interface/User Experience

Item List View: Simplified Column Removal (5.1)

Historically, the addition and removal of Item List column headings has only been possible by launching the 'Field Chooser' pop-up and dragging the column headings between this and the Item List view itself.

In version 5 it is now possible to remove unwanted column headings without the need to recall the field chooser first – simply click and drag the option no longer required away from the other headings and release the mouse once a cross appears on top of the heading name.



A screenshot of the Item List View table. The table has columns: Alert, Pos. Number, As Added, Handing, Item Name, and Description. A mouse cursor is hovering over the 'Handing' column header, and a small 'X' icon is visible over the 'Handing' header, indicating it can be removed.

| Alert | Pos. Number | As Added | Handing | Item Name | Description |
|-------|-------------|----------|---------|-----------|--|
| | 1 | 10 | | B100 | 1000mm Drawerline Base Unit |
| | 2 | 11 | | | 800mm Drawerline Base Unit |
| | 3 | 12 | Right | B50 | 500mm Drawerline Base Unit |
| | 4 | 83 | | B2DP10IF | 1000mm 2 Drawer Base In-Frame |
| | 5 | 13 | Left | BC8040L | 800mm Drawerline Corner Base Unit (400mm Door) |
| | 6 | 21 | | BS100 | 1000mm Drawerline Sink Base Unit |
| | 7 | 22 | Right | B30 | 300mm Drawerline Base Unit |

Note: it is still necessary to launch the field chooser in order to add column headings.

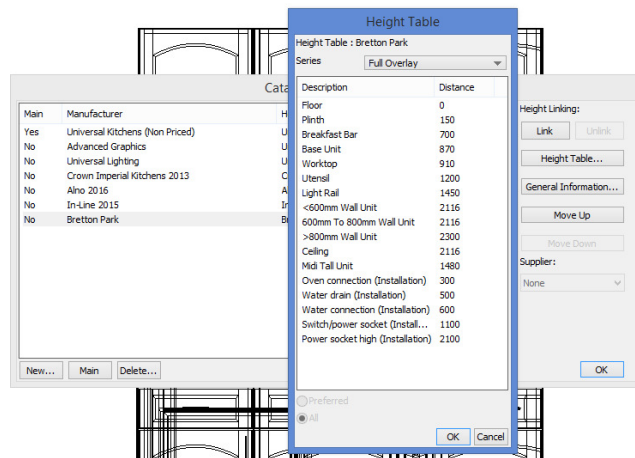
Speed and Stability Optimisation (5.0/5.1/5.2)

A number of activities have been undertaken in Version 5 that collectively contribute towards an improved general operating speed as well as higher levels of stability and performance. Among other areas, users should experience the following:

- Designs opening more quickly
- Improved methods of allocating free memory
- Faster Block Evaluation
- More efficient import and export of 3D models, with some export file sizes reduced
- Optimisation of saving designs

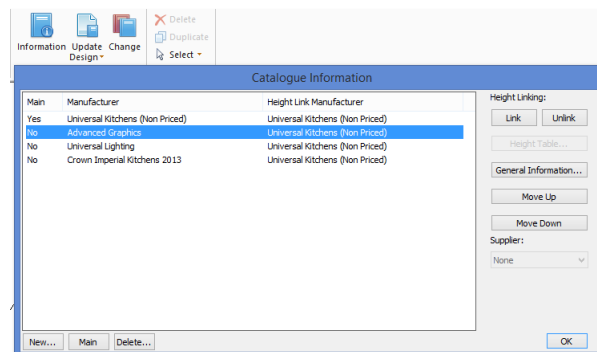
Height Table Dialog: Display Current Series from Default Style Block for Each Manufacturer (5.1)

When the Height Table dialog is opened from 'Catalogue Information', 2020 Fusion will now initially display the default series applicable to the selected style block. In addition, the dialog has been made wider in order to clearly display all information both in the drop-down menu and in the description/distance areas of the table itself.



Catalogue Info/Height Tables Dialogs - UI/UX Improvements (5.2)

A number of minor changes were made to this dialog in order to improve the user interface and user experience of managing catalogue information. Most significantly, the height link manufacturer is now always displayed, as opposed to (previously) only being shown when clicking on a checkbox.

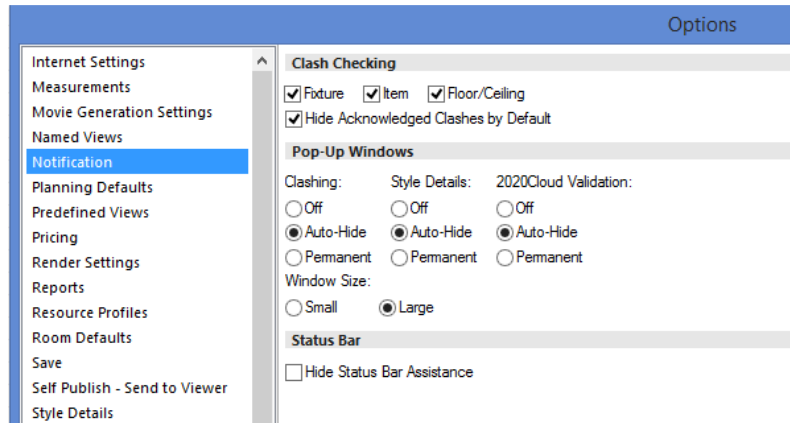


Enhancements to Pop-Up Notifications Mechanism/Access Style Options Alerts via Style Details (5.2)

Several changes have been made to 2020 Fusion's notifications system to provide the user with greater control and flexibility in managing and responding to clashing and product availability alerts. These are as follows:

Options: New 'Notifications' Section

This new section of 2020 Fusion's 'Options' allows the user to specifically define the way in which pop-up notifications are presented for each of clashing, style details validation and 2020 Cloud item validation; three options are available in each case – 'Off', 'Auto-Hide' or 'Permanent'.



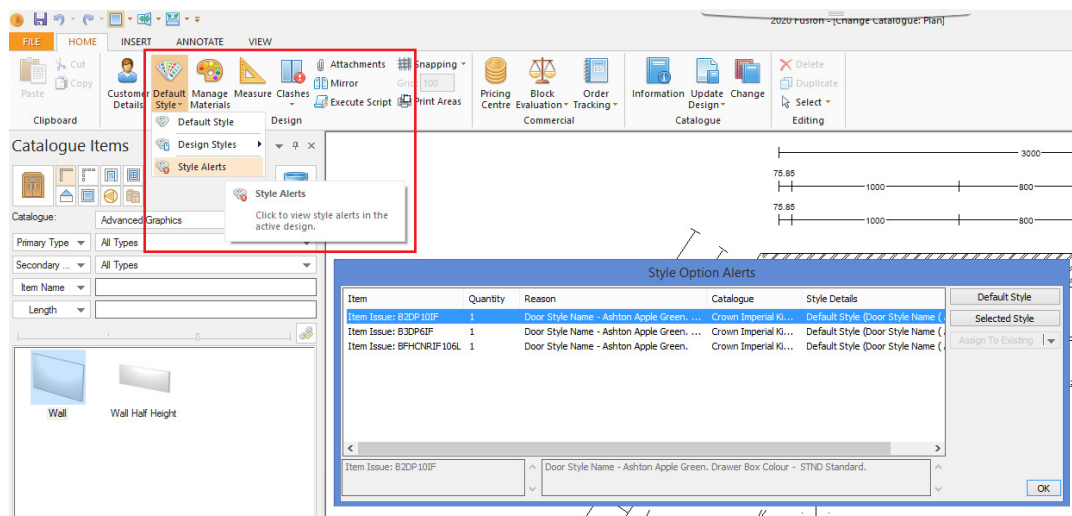
The notifications pop-ups can also be set to be large (providing more detail) or small (providing just summary information).

The new notifications section now also contains the existing preferences relating to clash checking and status bar assistance, both previously found in the 'General' section.

Style Options Alerts via Style Details

The style options alerts dialog was previously only accessible when clicking on the corresponding pop-up notification, there was never an alternative means of generating this in the same way as is possible for the other notification types.

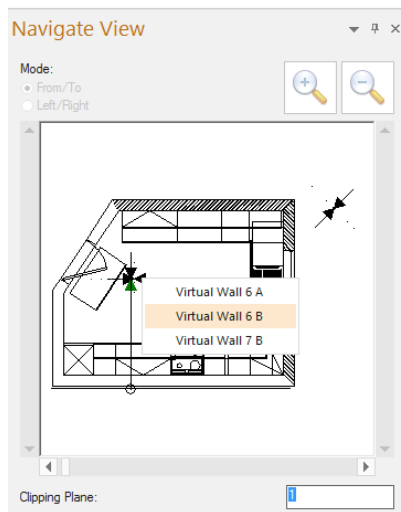
In Version 5, a new option under the 'Default Style' heading allows this dialog to be displayed on demand, allowing the designer to address issues relating to unavailable items as and when most convenient.



Navigation Palette Mini-Plan: Improved Means of Selection of Virtual Walls in Elevation (5.2)

In designs containing several intersecting Virtual Walls, it is sometimes difficult for the user to select the exact wall required using a left-click in the Navigation Palette – this can lead to the incorrect wall being displayed in the Elevation View.

Version 5 introduces right-click functionality allowing a list of the intersecting walls to be presented; the user can then click on the required wall number and the elevation view of the corresponding virtual wall will be displayed.



Customer Management

Connect Support for SQLite/Retirement of MS-Access (Including Version 5 Installer Enhancements) (5.0 & 5.3)

As part of the installation process for existing customers when upgrading to Version 5, the format of the Connect customer database will be automatically converted from MS-Access SQLite. SQLite is a more robust platform and is not limited in terms of its maximum size.

To the end user, the user interface and user experience when using Connect will be no different to before. Indeed, customers can expect improved speed of accessing records and opening/closing designs, as well as a greater underlying level of stability and robustness.

Please consider the following important points when performing the MS-Access to SQLite migration:

- Ensure that no users are currently logged into the database (i.e. ensure that no one is currently using Connect/2020 Fusion).
- Ensure that nothing is currently checked out of the database.
- When migrating a multi-user database, it is recommended to initially migrate just one user, validate that the process has been successful and then, once confirmed, update the rest of the users.
- For older (and, by extension, larger) databases, the process may take a long time.
- Once the installation/migration is in progress, the installer should neither be interrupted, nor should the database utility tool be launched, nor should Connect/2020 Fusion be used at all.
- In the event of any doubts or concerns, please contact your local Support Team for advice.

Please note that any archived customers/designs can still be restored after a migration has taken place, so no specific action is required in this respect.

In Version 5.3, the SQLite solution was further enhanced with speed improvements to the user login process and the design preview mechanism.

Display Multiple Telephone Numbers in Customer Details (5.0)

Users of 2020 Fusion in 'Standalone Mode' (i.e. those not using the 'Connect' customer management system) now have the ability to enter multiple telephone numbers for their customers. The telephone numbers required can be defined in a new section of the 'Options' area, called 'Customer Phone Types'; the phone types available are identical to those offered in Connect mode.

The phone types selected in the Options are displayed as 'drop-down' menu entries in the Customer Details dialog, allowing designers to enter all required telephone contact information in this single dialog.

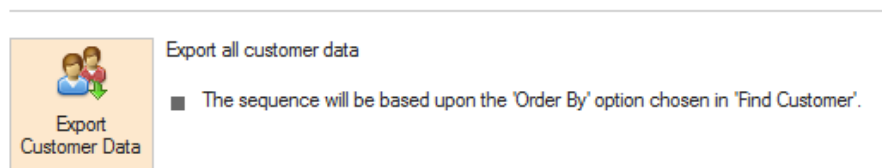
The image shows two screenshots from the 2020 Fusion software. The left screenshot displays the 'Options' menu with 'Customer Phone Types' selected. The right screenshot shows the 'Customer Details' dialog box. In the 'Customer Details' dialog, the 'Telephone' field is highlighted with a red box, showing a drop-down menu with the following options: Home, Business, Company, Home2, Mobile, Delivery, and Installation. The 'Home' option is currently selected.

In addition, any of the phone types can be referenced in Info Blocks and Report Wizard reports.

For Connect users, any phone types defined for the customer in Connect will also be displayed against the drop-down menu, but as read-only entries.

Export Customer Information From Connect (5.3)

2020 Fusion now has the capacity to export all customer information from Connect via a new 'Export Customer Data' option available in the 'Manage', 'Customer' backstage view area.



In the case of Phone Numbers and Email Addresses, the file will contain entries for all those that have been set as 'active' (i.e. checked) via the 'Phone Types' and 'Email Types' configuration areas of Connect.

The export process will generate a .csv file, which can be saved to a location of the user's choice and the customer sort order will be based upon that which is currently set in the 'Find Customer' dialog.

| ID | FirstName | Surname | 2nd FirstName | 2nd Surname | Ref | Sales Person | HomeAdd1 | HomeAdd2 | HomeAdd3 |
|----|-----------|---------|---------------|-------------|-------|--------------|----------------|------------|----------|
| 1 | John | Smith | | | ADM/2 | Admin | 15 High Street | Ashford | |
| 2 | Anthony | Johnson | | | ADM/3 | Admin | 66 The Halt | Herne Bay | |
| 3 | Tom | Clark | | | ADM/4 | Admin | 23 London Road | Canterbury | |
| 4 | Joe | Johnson | | | ADM/5 | Admin | 23 The Halt | Canterbury | |

The .csv file can then be opened, edited and manipulated in other software such as Excel, for example.

NEW! Connect: Improvements to Database Management (5.6)

The following changes have been implemented effective from Version 5.6.0 onwards to improve the operating speed and general robustness of the Connect database:

New Rules for Creation of Client Databases:

- For Connect users who do not use the customer check out/check in functionality, only a Master Database will be required from Version 5.6.0 onwards.
- A Client Database will now only be generated in the following scenario:
 - One or more customers are checked out by a logged in Connect user.
 - The same user logs out of Connect.
 - A Client Database is generated locally for the specific user.
 - Client Databases will then also be generated (updated) locally for all other users of a shared Connect system upon their own respective log outs, assuming customers remain checked out at that point.
- Whenever a given user logs out of Connect, 2020 Fusion will check to see if any checked out customers are still present; if there are no checked out customers, then the Client Database will be deleted for that particular user.
- Existing Client Databases will be unaffected by the process of upgrading to Version 5.6.0 or later. Only after a Connect user logs out following the upgrade will 2020 Fusion follow the process above and potentially delete a redundant Client Database.

Note: It is generally recommended that upgrades to new versions of Fusion are only undertaken when all customers are checked in.

‘Find Customer’ Preferences Storage (also known as ‘Customer Lookup’):

- The preferences for the ‘Find Customer’ dialog have been moved from the master (and client) databases and will now be stored within the standard PPPrefs.ini.
- As part of the upgrade process to Version 5.6.0 or later, the settings held in the database will be automatically removed from the Connect database when the Find Customer dialog is first opened and then copied into individual users’ Fusion preference files when the dialog is closed, taking into account any changes made in the meantime whilst open.

Pricing, Reporting & Ordering

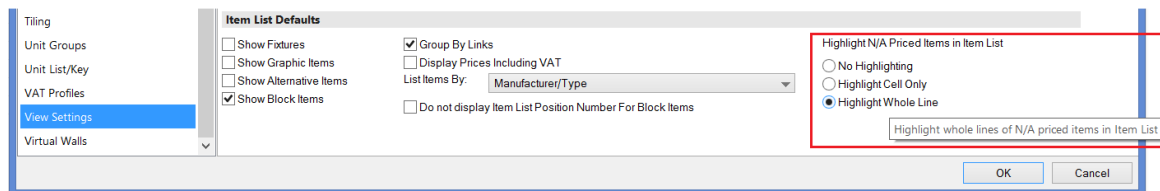
Item List View: Highlight Whole Line When Item Has Price of 'N/A' (5.2)

Following on from the functionality previously implemented to highlight an individual N/A (Not Available) 'price cell' in the Item List view, a further enhancement now gives the user the ability to highlight the entire row for such items.

This draws even greater attention to items that may require changes to ensure that a price is correctly applied and also overcomes scenarios in which the 'Price' column may be hidden by the end user.

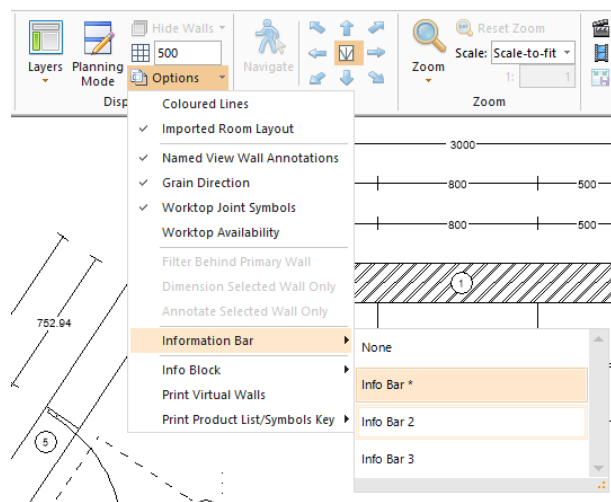
| Pos. Number | As Added | Item Name | Handing | Description | Price |
|-------------|----------|-----------|---------|--|--------|
| 1 | 10 | B100 | | 1000mm Drawerline Base Unit | £ 0.00 |
| 2 | 11 | B80 | | 800mm Drawerline Base Unit | £ 0.00 |
| 3 | 12 | B50 | Right | 500mm Drawerline Base Unit | £ 0.00 |
| 4 | 83 | B2DP10IF | | 1000mm 2 Drawer Base In-Frame | N/A |
| 5 | 13 | BC8040L | Left | 800mm Drawerline Corner Base Unit (400mm Door) | £ 0.00 |
| 6 | 21 | BS100 | | 1000mm Drawerline Sink Base Unit | £ 0.00 |
| 7 | 22 | B30 | Right | 300mm Drawerline Base Unit | £ 0.00 |

The existing preference in 'View Settings' has also been extended to reflect this enhancement – changes made to the preference results in a 'live' update for all designs:



Enhancements to Info Bar (5.2)

The existing Info Bar selection interface has been updated to also include a 'None' option, making it easier for a designer to turn Info Bars on or off for given views.



In addition, the asterisk used to denote the default Info Bar has now been made a non-editable element of the Info Bar name to ensure that this indicator is always displayed. An asterisk is now also, itself, an invalid character when entering an Info Bar name.

Recognition & Classification of 2020 Cloud Decorative Items (5.5)

A previous issue with the recognition and classification of decorative items emanating from the 2020 Cloud has now been rectified – now meaning that such items will now be managed (filtered) in the item list view and the report view in the same way as graphic items added from file-based catalogues.

Miscellaneous

Operating System-Specific Installers (5.0)

Once Version 5 installed on an end user's system, for subsequent updates, they will be directed to the correct download location based upon the automatic detection of their operating system.

Support for Windows Server 2016 (5.0)

Following a full process of testing and validation, active support is now provided for the use of 2020 Fusion on Windows Server 2016 'with Desktop Experience' (64 bit). Please note that Windows Server 2016 'Nano-Server' is not a supported variant of this platform.

For full details of all supported operating systems for use with 2020 Fusion Version 5, please refer to the [Installation Support](#) page on 2020spaces.com.

Support for SQL Server 2016 (5.0)

Following a full process of testing and validation, active support is now provided for the use of 2020 Fusion with SQL Server 2016 (Standard & Express editions), 64-bit.

For full details of the conditions of SQL Server support for 2020 Fusion, please contact your local Support Team.

Windows 10 Certification (5.1)

2020 currently enjoys the position of being a 'Microsoft Gold Certified Partner' and, as such, we continuously endeavour to pursue and attain all relevant testing certification from Microsoft for the 2020 Fusion product.

As a previous recipient of Windows XP, Windows Vista, Windows 7 and Windows 8 certifications, 2020 Fusion has also been submitted for, and has achieved, the status of 'Windows 10 Compatible'.

