



Trimble EC-CAD

This document contains summary information on new features, late-breaking product information, updates, and troubleshooting tips not covered in the Trimble® EC-CAD documentation.

Introduction

These release notes describe the features and enhancements that are new in version 9.1 of Trimble EC-CAD. For further support information, go to mep.trimble.com/support/.

Trimble EC-CAD

Trimble EC-CAD Version 9.1 is a full installation for new customers and applies software enhancements and corrections for customers who are upgrading from an earlier release (V9.0 or earlier version) of all the Trimble EC-CAD software components, including MEP Design to Fabrication, Trimble EC CAD, PartManager, and DuctMaker. Your license and specific installation may include some, or all, of these components.

Quick Links

[Trimble EC CAD Specific Features and Changes](#)

[Trimble EC-CAD Upgrade Procedure](#)

Trimble EC-CAD New features and changes

The following improvements have been made to the Trimble EC-CAD Product:

New Features

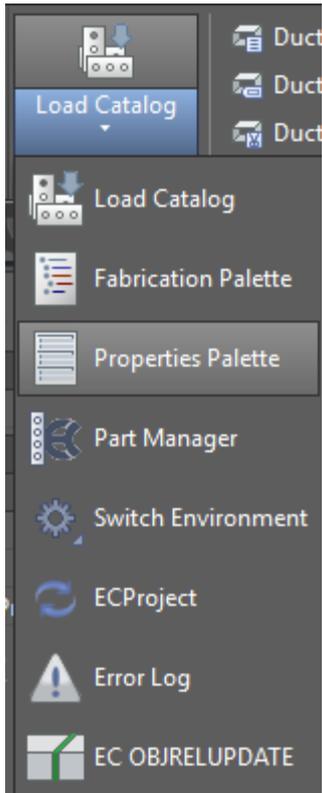
- Properties Palette

Trimble EC-CAD now has a new Properties palette that can be used to easily view or edit all the information for each fitting. Prior to Version 9.1 the Extended Data tab or the DuctSpecOverride button was used to view the information on your fittings. Various ribbon tools were then used to edit the information on each fitting. Trimble EC-CAD now has all the fitting's information for viewing or editing in a single location.

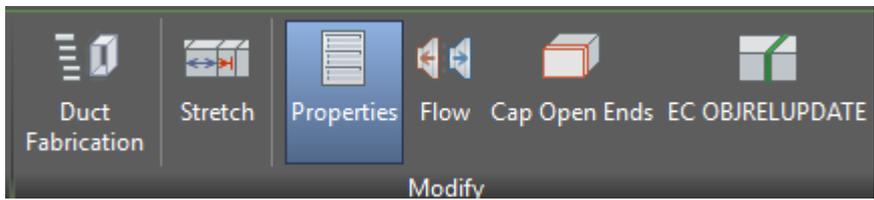
The Properties palette can be turned on or off via the Ribbon. On the Home Tab it is found here:

Version: 9.1

Date: April 2019



And it can also be toggled on the Modify section of the Duct Fitting ribbon as shown here:



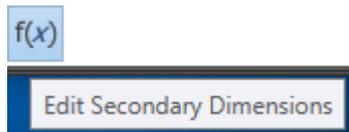
The new Properties palette has four sections to it, General, Dimensions, Specifications, and Fabrication.

General		⤴
Name	Rectangular Elbow, Radius	
Alias	ER	
System	Supply - Medium Pressure	⌵
Layer	M-Duct-Mpd-Supp	⌵
Routing Preference	2WG TDC x 10 WG POS SLIP (MP)	⌵
Defaults	Rectangular Defaults	⌵
Specifications	2 wg 5 ft TDC	⌵
Double Wall	No	⌵
Acoustic Lining	NO ACC LINING	⌵
Acoustic Lining Thickness	0	
Insulation Thickness	0	
Elevation	19'-1 3/32"	
Dimensions		⤴
Width In	36	
Depth In	18	
Width Out	36	
Depth Out	18	
Straight In	0	
Straight Out	0	
Angle	90	
Radius	36	
Top Change	0	
Bot Change	0	
Specifications - General		⤴
Connector 1	TDC	⌵
Connector 2	TDC	⌵
Gauge	24	⌵
Lock	SM Pitts	⌵
Material	Galvanized	⌵
Special Instructions	NO SP. INSTRUCTIONS	⌵
Status	Fabricate	⌵
Specifications - Accessories		⤴
Dampers	NO DAMPERS	⌵
Number Of Vanes	0	⌵
Radius Vane	NO RADIUS VANE	⌵
Specifications - Reinforcement		⤴
Connector Reinforcement	NO STIFFENER ~ NO STIFFENER ~ NO	⌵
Connector Reinforcement	NO STIFFENER ~ NO STIFFENER ~ NO	⌵
Intermediate Reinforcement	NO STIFFENER ~ NO STIFFENER ~ TieR	⌵
Fabrication		⤴
Piece Number		
System Number		
PickoffId		
DuctSpoolId		



General Section: Within the General Section you can view a fittings Name, Alias, System, Layer, Routing Preference, Defaults, Specifications, Double Wall, Acoustic Lining, Acoustic Lining Thickness, Insulation Thickness, and Elevation. While the fitting's Name and Alias are read only (Alias is setup in the Defaults), the rest of the parameters can be modified from the Properties palette.

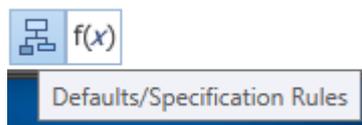
Dimensions Section: Within the Dimensions section you can edit the dimensions of your fittings. If a fitting's dimensions are normal font then they are "Free" dimensions and can be easily edited. If a fitting's dimensions are greyed, then these are "Secondary" dimensions that have been setup in your defaults to either be a default value or to be driven by a formula. If driven by a formula these values will update as you modify the "Free" dimensions on your fittings. You can still edit Secondary dimensions if you first select the Edit Secondary Dimensions button at the bottom of the Properties window.



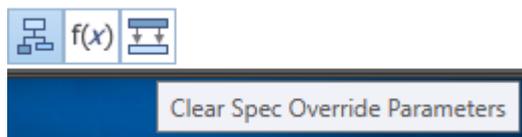
If you select the Edit Secondary Dimensions button, then the grey parameters will turn to regular font and let you override their values. If you edit a Secondary dimension, then this dimension will remain bold to indicate that it has been changed from its standard value. Also, if you unselect Edit Secondary Dimensions then the secondary parameters will revert to their original values.

Specifications: The specifications section has three sub sections, General, Accessories, and Reinforcement. The General section is where you will view and edit your Connectors, Gauge, Lock, Material, Special Instructions, and Status. The Accessories section will allow you to place add, remove or edit accessories depending on the fitting type. Dampers and Vanes are good examples of this. The Reinforcement section is where you will view and edit any of the reinforcement on the fitting.

Note: Using the Edit Secondary Dimensions button will allow you to edit all your fitting's dimensions. While using this button your specifications will still update based on the fitting's new dimensional values. If you wish to override a fitting completely and no longer have it driven by your defaults or your specifications than you can toggle the Defaults / Specifications Rules button.



If you make a change to one of the specification parameters, then a new icon will appear.



If you press this button it will clear any specification overrides that you applied and revert the fitting back to being driven by its specifications.

Fabrication: The fabrication section displays a fitting's Piece Number, System Number, Pickoff Id, and Duct Spool Id.

Note: To move from cell to cell in the Properties palette you can use the up/down arrow keys on your key board or the Tab key.

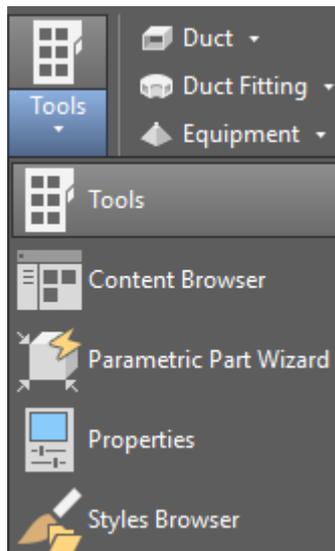
- **Fitting Add Palette**

Trimble EC-CAD now has a new Fitting Add Palette that can be used to easily place your fittings piece by piece. Trimble EC-CAD has always been quite good at routing fittings but placing your non routable fittings was not as easy. Now in Trimble EC-CAD V9.1 routing fittings and placing fittings piece by piece are both quite easy and you can easily swap between methods.

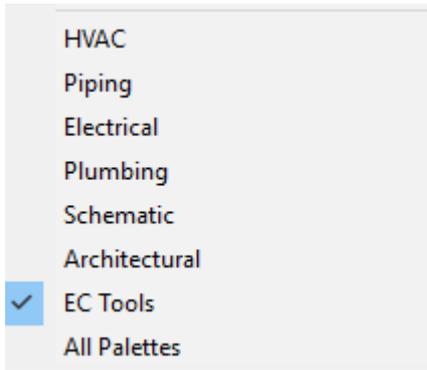
Setting Up the EC Tools Tool Palette

First you will need to Build the EC Tools tool palette. To do this type ECTOOLPALETTE at the command line and hit enter. The new EC Tools tool palette will now be built and added to your existing list of available tool palettes.

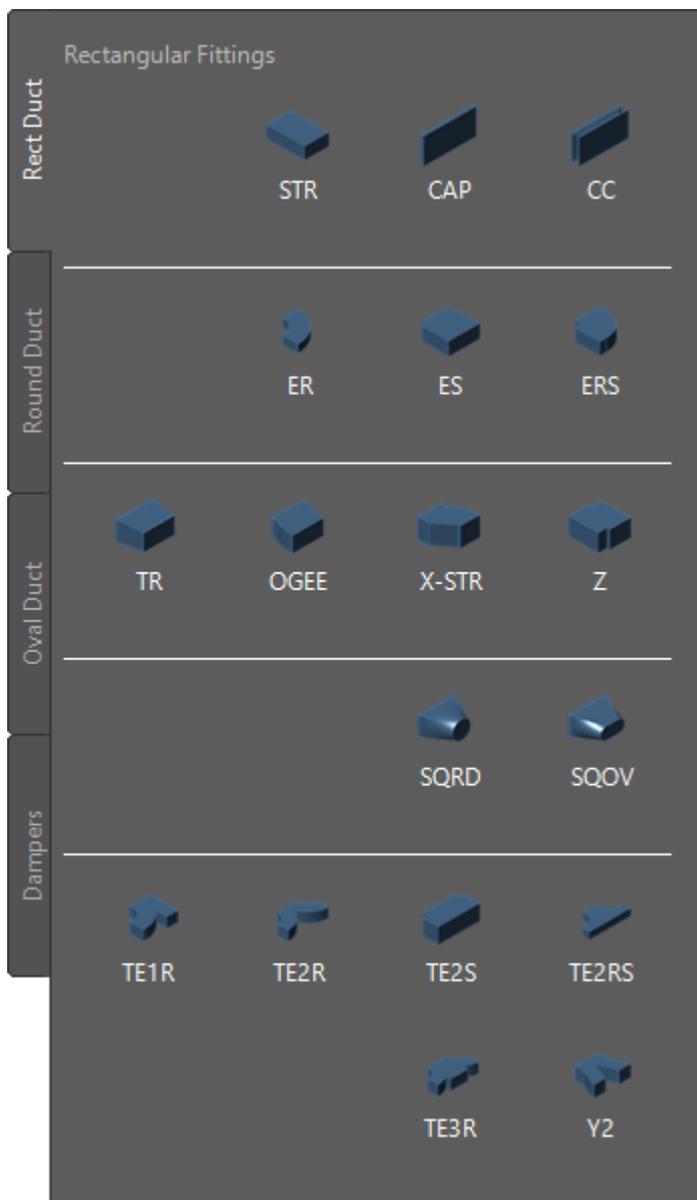
Next turn on your tool palette from the AutoCAD MEP Home Ribbon:



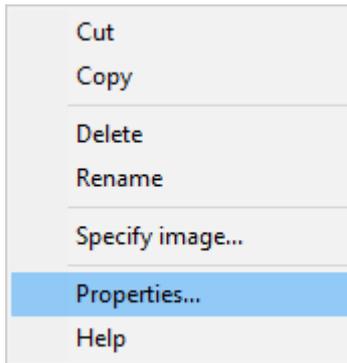
Next make sure the EC Tools tool palette is active:



With this palette active you have four tabs on your palette: Rect Duct, Round Duct, Oval Duct, and Dampers.



Each of the tabs will have your fittings organized and separated by dividers for clarity. Each icon has a default Name associated to it, but you can change the default Name to better suit your needs if desired. To do this you right click on the icon and select Properties:



You can then edit the Name of the fitting from the Tool Properties.

You can also edit the display and organization of the EC Tools tool palette. To do this you right click on a location of the tool palette that does not have a fitting icon. From there you can change other display items like the Icon's image size for example. These are standard AutoCAD MEP commands and you can refer to the AutoCAD MEP documentation for more details.

If you are going to make changes to the EC Tools tool palette you may consider renaming this palette so that if you at some point wish to rebuild the system EC Tools tool palette you will not overwrite your changes.

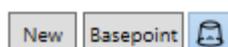
Using the EC Tools Tool Palette

To add fittings using the EC Tools tool palette, you simply select the fitting that you would like to place from the tool palette. At this point the fitting will automatically snap and size itself to the last fitting placed in your drawing. It will also automatically inherit the general properties and size from the fitting that it snapped to. You will also notice a green box appear at the inlet connection of the new fitting that you are placing. This box indicates that you are in the process of placing this fitting but that you have not yet placed the fitting.

A new Properties dialog box will open and will display the new fitting's General and Dimensions information. From here you can edit the fitting's General or Dimension information prior to placing the fitting. You also will have additional options depending on the fitting that you are placing. If you place an elbow for example you will want to specify whether you are placing a left, right, up or down elbow by selecting its orientation:



Or if you place a Transition for example you can specify if you want it to be concentric by selecting this button:



Your options during placement may change a bit depending on the fitting that you are placing.

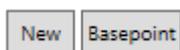
When you have made the General and Dimensions edits that you want and are ready to place the fitting you simply select in the CAD screen to finish the placement. At this point you will have different behavior depending on whether you are placing a duct or a duct fitting.

If you are placing a duct fitting, then the fitting will place, and another similar fitting will appear on your cursor. At this point you can place that fitting again anywhere in your drawing or you can select a new fitting for placement from the EC Tools tool palette.

If you are placing duct, then another piece of duct will automatically connect to the one you just placed, in case you want to place more than one piece of duct. You can continue to place duct by clicking the mouse and when you are ready for a fitting you can just select it from the palette.

If you are finished placing duct and fittings from the EC Tools tool palette and would like to route duct and duct fittings then you can select the Esc key from your key board, and then either use plus grips or the Duct Add command to start routing duct.

There are a few more things to know about adding fittings. When you select to add a fitting from the EC Tools tool palette the fitting will snap to the last placed fitting in your drawing. If you wish to place the fitting somewhere else, you can select the New button from the Properties dialog that opens, and this will place the fitting on your cursor and allow you to place it anywhere in the drawing. Additionally, if you want to change the hold point of the fitting on your cursor you can select the Basepoint button to toggle between the various hold points for each fitting.



- **Placing and Modifying Taps**

EC-CAD now has additional functionality for modifying tap placement in your duct drawings. We recommend that you continue to route taps as you have always done to get the tap placement close to what you would like for your final placement, but now we have some additional functionality to modify or adjust a tap for final placement.

Step 1: Route the tap for initial placement using the Duct Add or by using the AutoCAD MEP Grips.

Step 2: Select the tap for further adjustment or modification via the Properties palette.

When you select the tap for further adjustment or modification you will notice in the Properties palette a section called Tap Position. From here you can adjust the following parameters:

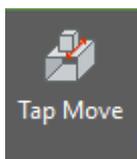
- Tap Face – For Rectangular and Oval duct select which face the tap should be attached to
- Tap Roll Angle – For Round and Oval duct select the desired roll angle for the tap
- Tap Angle – Select the tap angle
- Tap Distance to Center – Select this box if you would rather see inset and outset to the

- center of the tap rather than to the leading and trailing edge
- Inset – The distance from the inlet of the duct to the leading edge of the tap
- Outset – The distance from the outlet of the duct to the trailing edge of the tap
- Top Offset – Distance from Top face of duct to Top face of tap for taps placed on the Left or Right face of the duct
- Bottom Offset – Distance from Bottom face of duct to Bottom face of tap for taps placed on the Left or Right face of the duct
- Left Offset – Distance from Left face of duct to Left face of tap for taps placed on the Top or Bottom face of the duct
- Right Offset – Distance from Right face of duct to Right face of tap for taps placed on the Top or Bottom face of the duct

Note: The orientation for the Offset parameters is to look down the barrel of the duct from C1 to C2 with the top of the duct at the top.

Using these steps and additional parameters should make it much easier to place, adjust and modify your tap placements.

We have also added the ability to drag taps along a duct run and allow the tap to drag past duct connectors. To use this functionality, select the tap from your drawing, and then select the Tap Move icon from the Modify section of the Duct Fitting Ribbon.



You will now be able to move your mouse to re-place the tap on any duct in that portion of the duct run. You will not be able to drag the tap past any fitting in a duct run. This tool should help with coordination changes and help to avoid placing taps too near duct connections.

When using the new tap positioning options certain movements like changing the face of the duct that the fitting is attached to will cause any duct that is attached to the tap to become disconnected. Other movements like adjusting the Inset and Offset values will keep the duct attached to the tap. These movements that keep the duct attached to the tap will also work in conjunction with the Stretch command.



Adjusting tap positions with Stretch turned on will shift all duct coming out of the tap by the same adjustment amount.

Adjusting tap positions with Stretch turned Off will keep the outlet of the duct coming out of the tap at the same location and adjust duct dimensions to allow for this new configuration. For

example, if you have a tap, duct, elbow, and more duct coming out of the tap, the end point of that duct run will remain fixed if the Stretch command is turned Off.

- **Duct Break and Duct Merge**

A new command Duct Merge has been added to EC-CAD. This will allow you to select multiple duct fittings in a run and merge them into a single longer piece of duct.

Additionally, Duct Break can now be run on a selection set within a duct run. If you have already configured a portion of your duct run but have made some changes to a portion of it and would like to Re-Break just that portion, make your selection set and select the Duct Break command. Duct Break will now only affect duct that is within your selection set.

- **EC-CAD Connector Minimum Straight**

If you look at your Rectangular Connectors in Part Manager, you will notice that they have a Min Straight parameter. This parameter is now recognized by EC-CAD. When this is setup EC-CAD will make sure that any fitting with this connector applied has at least the minimum amount of straight specified. If the fitting does not have enough straight EC-CAD will adjust the straight values for that fitting to make sure that there is enough straight on the fitting for the assigned connector.

A good example of the implementation of this is:

Setup the defaults for your Rectangular Transition to have Straight Out = 0. Setup your Min Straight for your S&D connector to 0. Setup your Min Straight for your TDC connector to 2. Now draw a transition in EC-CAD with S&D connectors and notice that your transition defaults to a Straight Out = 0. Now change the connector out on the transition to TDC and notice that Trimble EC-CAD automatically adjusts the straight out for your fitting to 2. This should make it easier to setup your fitting defaults with typical values and then adjust those values automatically depending on the connector that is applied to ensure that you have enough straight on your fitting to fit the fitting through the connector machinery.

- **EC-CAD Items Removed** – As a result of the new features and improvement made in this release some user interface elements have been removed from the ribbon.

DuctSpecOverride no longer appears in the ribbon when you select a single fitting or duct as we now expect you to override a fitting's specifications via the new Properties palette. The DuctSpecOverride ribbon button still exists and should be used if you wish to override the specifications of a selection set of multiple ducts or duct fittings.

The ability to apply Specifications and Defaults from the ribbon has been removed as we now expect you to modify a single fitting's specifications and defaults via the new Properties palette. The Duct Fabrication ribbon button still exists and should be used if you wish to override the assigned specifications and defaults of a selection set of multiple ducts or duct fittings.

The ability to add and remove dampers from fittings has been removed from the ribbon as this is now done via the new Properties palette.

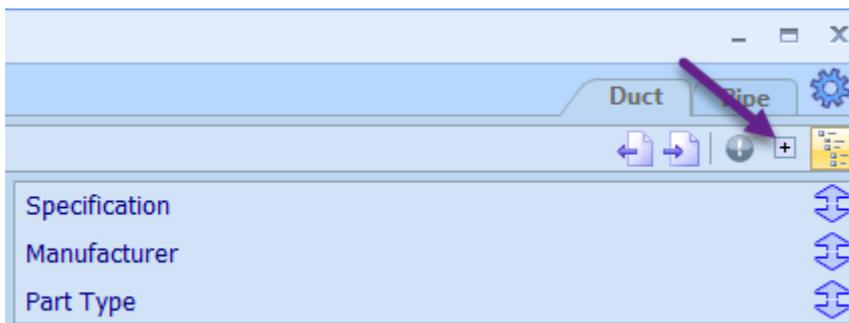
The ability to modify a fitting's dimensions from the Autodesk Properties Palette, Design Tab has been removed as this should now be done via the new Properties palette.

While Viewing a fitting's specification properties and overrides was typically done via the Autodesk Properties Palette, Extended Data tab, this should now be done via the new Properties palette.

The ribbon command for Tap Anchor Update has been removed as modifying tap positions is now handled via the new Properties palette.

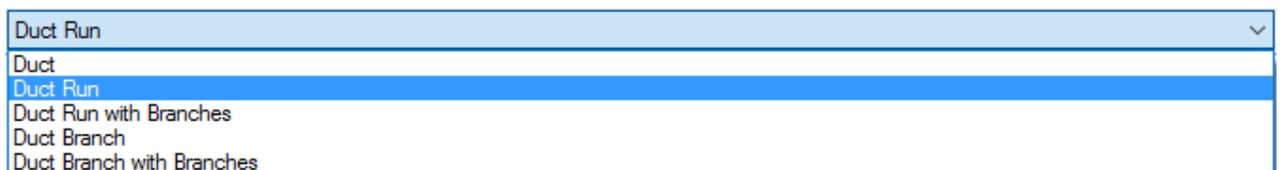
- **PartManager Improvements**

PartManager – The Collapse/Expand Tree icon has been added to make it easier to collapse all or expand all elements in the tree.



PartManager – The Tree View now displays all items in alphabetical order.

- Trimble EC-CAD Duct Numbering – Each of the numbering options:



Now have the Special Options available for selection:

Special	
Cap	False
Tap	False
Couplers	True
Adapters	False

- EC Project Improvements – EC Project is the software tools and database for transferring As-built Sheet Metal drawings into Revit as native Revit objects. This version now has full support for EC-CAD Oval Duct and Fittings.
- EC Design to Fabrication Improvements – Some improvements have been made to the MEP Design to Fabrication component of the software tools that reside inside of Revit.

Filters – Filters can be used inside of Revit to more easily create selection sets of your Trimble EC-CAD as-built models for scheduling purposes.

Filter Manager – Allows you to create and store different filter sets based on the fabrication level of detail data applied to the Trimble EC-CAD fittings that are sent back to Revit as a native Revit as-built.

To create a new filter, select the New Filter Icon



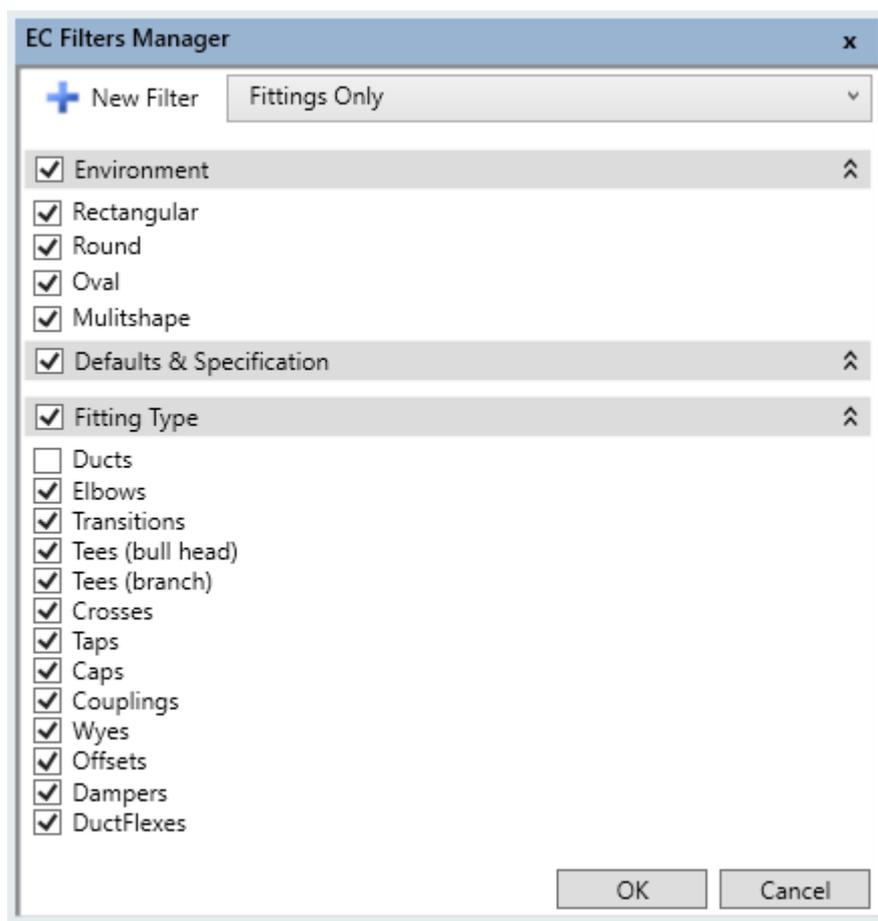
You can then select the drop-down list to find your newly created filter and select the Edit button to rename the filter.



As an example, we will rename the system created “Filter 2” to “Fittings Only”



Then with your newly created filter active in the drop-down box you can use the check boxes to determine how you would like to filter your selection sets. In this example we will select everything except “Ducts”



That way this Filter Set will include all duct fittings but not include duct.

Now we can apply this filter in one of two ways:

Apply by Filter – Create a selection set in Revit, then select EC Tools, Apply Filter, select the desired Filter from the drop down, and hit OK to apply the filter.

Select by Filter – Select “Select by Filter” from the EC Tools tab, select the desired Filter from the drop down, and hit OK, next drag a window and/or use ctrl + left mouse to create your selection set and then press Finish from the tool options bar below the Revit Ribbon.

Either method will create you a filtered selection set.

- EC-CAD Rebranding

EC-CAD has been renamed Trimble EC-CAD

Control Panel – You will now find EC-CAD listed under the new name Trimble EC-CAD and you will find all components of the Trimble EC-CAD software now listed as Publisher, Trimble Inc.

Name	Publisher
 Trimble EC-CAD for AutoCAD MEP 2019	Trimble Inc.
 Parametric Part Wizard Templates for AutoCAD MEP 2019	Trimble Inc.
 Trimble EC-CAD for Autodesk Revit 2019	Trimble Inc.
 Manufacturer-Specific Catalogs for AutoCAD MEP 2019	Trimble Inc.
 DuctMaker	Trimble Inc.
 PartManager	Trimble Inc.

Documents – The documents folders and files for Trimble EC-CAD and all Trimble EC-CAD components are found in this location: Documents\EastCoast

Program Data – The program data folders and files for Trimble EC-CAD can now be found in this location C:\Program Data\Trimble EC-CAD

Known Issues

- AutoCAD MEP Object Viewer Liner and Insulation Display

Liner and insulation will not display correctly on Round and Oval Gored Elbows, Radius Elbows, and Ogee Transitions when viewing them via the AutoCAD MEP object viewer.

- Duct Routing Performance

You may experience some jumpy cursor movement when routing depending on the complexity of your duct specs and the performance of your computer hardware.

- Insulation Display on Attached Views and XREF Files

Insulation will not display correctly on Round and Oval Gored Elbows, Radius Elbows, and Ogee Transitions on attached views and XREF files.

Languages

This release of the product is available in the following languages:

- English

Upgrade procedure

Trimble EC-CAD

Trimble EC-CAD Version 9.1 is a full installation for new customers and applies software enhancements and corrections for customers who are upgrading from an earlier release (V9.0 or earlier version) of all the Trimble EC-CAD software components, including MEP Design to Fabrication, EC CAD, PartManager, and DuctMaker. Your license and specific installation may include some, or all, of these components.

General Release Information

This release is being provided as a full installation (via the setup.exe) so that both new and upgrading customers can apply the latest software to their system using the Trimble EC-CAD Setup user interface.

Software Distribution

This software update is available for download from the [Customer Portal](#) as a **Trimble EC-CAD V9.1 2019** Installation zip file.



Design To Fabrication Setup



[Install DuctMaker](#)



[Install PartManager](#)



[Install Trimble EC-CAD for AutoCAD](#)



[Install MEP Design to Fabrication](#)

Customer Portal Access

The [Customer Portal](#) is an area of the web site available to Subscription Customers, providing software updates, documentation and video resources. To gain access, simply fill out a short registration form to requests access. Once approved, you can then log in with your user name and password at any time. To register, copy the link below into your Internet browser:
<http://eccustomerportal.worldsecuresystems.com/register.htm>

Prior Release Notes Documentation

This document describes the enhancements and updates when moving from Version 9.0 to Version 9.1. For customers upgrading from a release earlier than Version 9.0, you can access and review new features and functionality for each prior release on the [Customer Portal](#).

Trimble EC-CAD Components Overview

The Trimble EC-CAD software system provides a streamlined workflow that allows users to move from design to fabrication with one set of products.

MEP Design to Fabrication is the tool for converting MEP engineering designs (duct and pipe systems from Revit, or generic AutoCAD MEP duct systems) to Fabrication-ready drawings using automated routines, saving significant fabrication detailing resources and time. MEP Design to Fabrication works inside both Autodesk's Revit and AutoCAD MEP software. Customers have the choice of purchasing their CAD seat(s) with or without an **MEP Design to Fabrication** license.

Trimble EC CAD includes several software components. **Fabrication for AutoCAD MEP** software is integrated directly inside AutoCAD MEP, to give users enhanced detailing capability and tools to work with real-world specifications and sizing for duct, and real manufacturer mechanical content. Customers choose to install only the elements of Fabrication for AutoCAD MEP that they are licensed for and plan to use - Pipe, Duct, or Combo (for both Pipe and Duct functionality). **PartManager** is the user interface to the manufacturer library and database that is used by Fabrication for AutoCAD MEP, providing easy access and organization and management of all parts, fittings, valves and shop defaults being used for project design. **EC Project** is the software tools and database for transferring As-built Sheet Metal drawings into Revit as native Revit objects.

EC DuctMaker is the CAM software tool, providing a fabrication interface used to build a highly-customized duct library that can be shared with design team colleagues, via Fabrication for AutoCAD MEP Sheet Metal. DuctMaker contains a comprehensive library of Oval, Round and Rectangular fittings and duct as well as specialty parts. It accepts Fabrication for AutoCAD MEP pickoff lists, estimating downloads, and allows for more editing if required. The software downloads fittings directly to the shop floor plasma cutters, liner cutters and coil lines, and uses barcode scanners to track the inventory of items during fabrication.

Compatibility

Operating System

The software was primarily tested under the Windows 10 64-bit operating system. It is also supported under Windows 8.1.

Microsoft SQL Server

The software was primarily tested with Microsoft SQL Server version 2016. It is also supported under Microsoft SQL Server Versions 2008 R2, 2012, and 2014.

Prior to Version 8.0, the Trimble EC-CAD software was only supported with Microsoft SQL server Version 2008 R2. While there is no immediate need to upgrade to a later version of SQL server to work with Version 9.1 we do recommend planning your upgrade to a newer version of SQL server.

Note: Microsoft SQL Server is not backwards compatible. The database that ships with our program is version 2008 R2. Once you attach it to a newer version of SQL server you will not be able to attach or use it with an earlier version of SQL. Make backups of your database and plan accordingly before moving to a newer version of SQL.

Trimble EC-CAD software now ships with the installer for SQL Server Express 2016. This version is recommended for all new installations.

For those customers migrating to a newer version of SQL Server, we recommend that you first upgrade your software completely to Version 9.1 and then migrate your Version 9.1 database to the newer version of SQL Server.

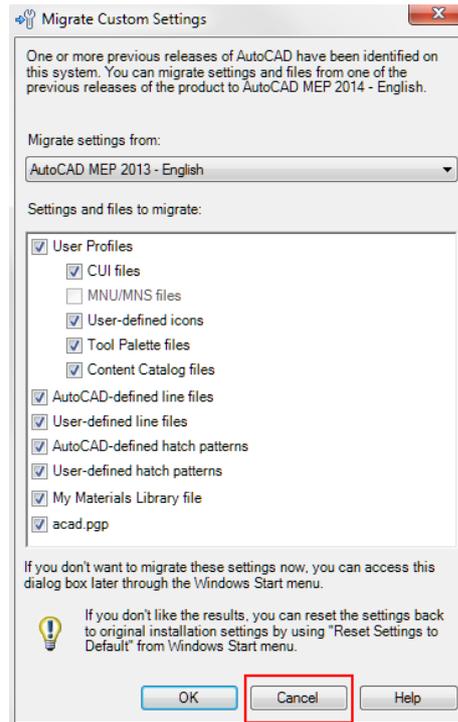
Autodesk Software

This release supports Autodesk **AutoCAD MEP 2019** and **Autodesk Revit 2019** software.

AutoCAD MEP Migration Assistant Issue

Autodesk has reported that verticals of AutoCAD, including AutoCAD MEP, should NEVER use the Migration Assistant. Use of the Migration Assistant will cause problems with the software, requiring a complete uninstall and reinstall.

When upgrading AutoCAD MEP, if you are prompted with the Migrate Custom Settings dialog box shown at right, click **Cancel**.



Autodesk Learning Resources

In addition to this document, be sure to review the Autodesk resources listed below to learn more about the features and functionality of the base software which Design to Fabrication runs within:

- [AutoCAD MEP Support and Learning](#)
- [Revit MEP Support and Learning](#)

http://knowledge.autodesk.com/support/autocad-mep/?p=BLDSYS&p_disp=AutoCAD%20MEP&sort=score

http://knowledge.autodesk.com/support/revit-products/?p=RVT&p_disp=Revit%20Products&sort=score

Upgrade Preparation

HASP Key License Update

A HASP key license may be required for use with this version. The HASP key update must be done first, before updating the software components. Refer to the Upgrade Installation Guide or contact Customer Support for information on how to obtain and apply HASP key license updates before upgrading the software.

Backing Up Your Data

IMPORTANT NOTE TO ALL UPGRADE CUSTOMERS: Before installing, remember to create a backup of your database, and any custom content you may have added to the **Styles** and **Template** folders used by Fabrication for AutoCAD MEP, located in the following directories, to retain any customization you may have applied to these files:

C:\Program Data\EastCoast\Fabrication for AutoCAD MEP <version#>\Styles

C:\Program Data\Trimble EC-CAD\EastCoast\Fabrication for AutoCAD MEP \Template

For more detailed information on database backup procedures, refer to the following technical document for assistance:

Backing up your SQL Database

<http://eccccustomerportal.worldsecurerest.com/LiteratureRetrieve.aspx?ID=94855>

Upgrade Installation Documentation

Customers who have Version 8.0 or higher can upgrade to this version using the instructions in the *Upgrade Installation Guide*, which can be viewed or downloaded from the [Customer Portal](#).

Once logged into the Customer Portal, to access Installation documentation, click **Installation & Migration** on the left, and then on the right, select the installation guide that pertains to your installation.

- **Trimble EC-CAD Upgrade Installation Guide** - For customers who are using one or more components in the Design to Fabrication software system.
- **DuctMaker Upgrade Installation Guide** - For customers who are only using and upgrading EC DuctMaker

NOTE: If you are upgrading from an earlier version than Version 8.0, please contact Customer Support for assistance.



The image shows a dark blue navigation menu with white text. It is organized into four sections: 'Welcome', 'Downloads', 'Support Resources', and 'User Guides'. Under 'Welcome', there are links for 'Getting Started' and 'Resources for Customers'. Under 'Downloads', there are links for 'Software', 'Content', and 'Developer Tools'. Under 'Support Resources', there are links for 'Installation & Migration' (highlighted in red with a mouse cursor), 'Open Forums', 'Release Notes', 'Tech Docs & Videos', and 'User Guides'.

- Welcome**
 - Getting Started
 - Resources for Customers
- Downloads**
 - Software
 - Content
 - Developer Tools
- Support Resources**
 - Installation & Migration
 - Open Forums
 - Release Notes
 - Tech Docs & Videos
 - User Guides

Legal notices

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Release notice

This is the April 2019 release (Revision A) of the Release Notes. It applies to version 9.1 of the Trimble EC-CAD software.