Alibre Design V12
Release Notes
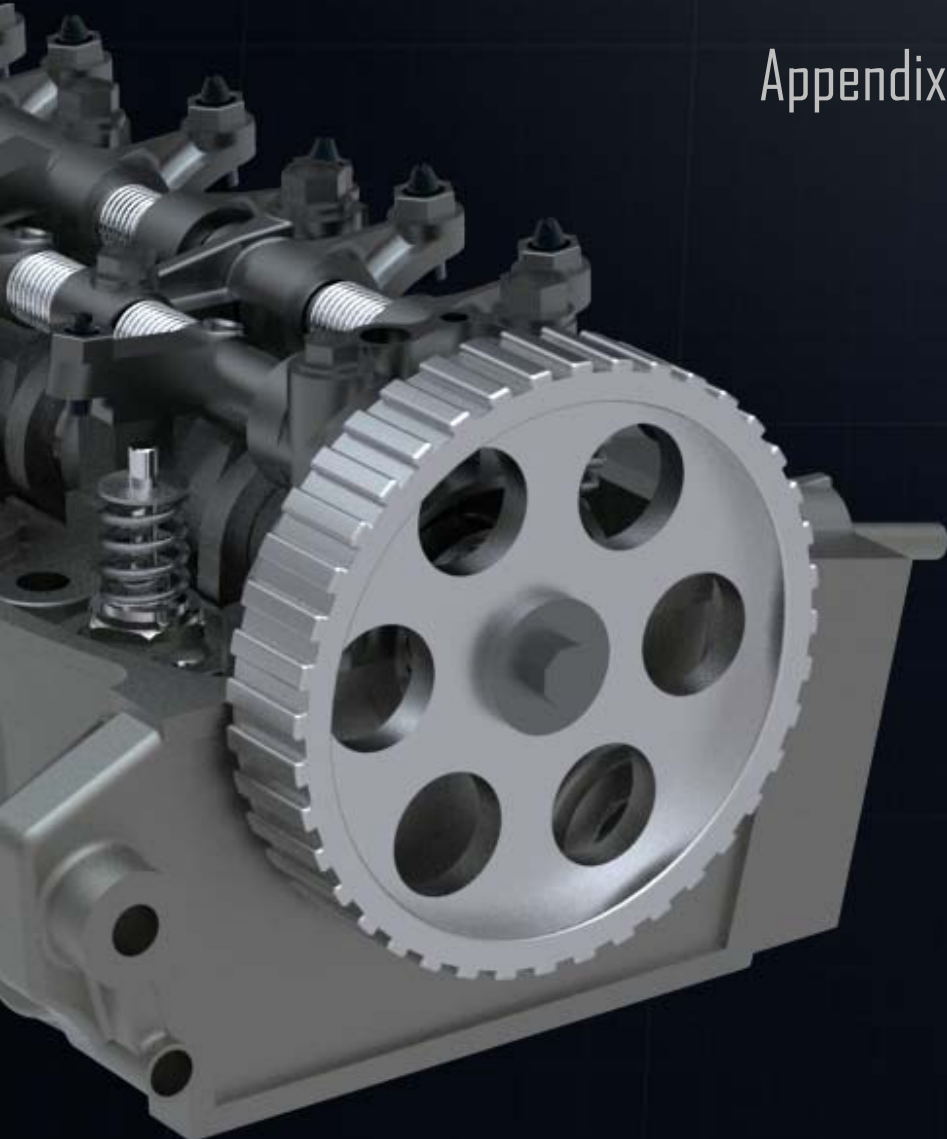
New Features in v12 >

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System Requirements >
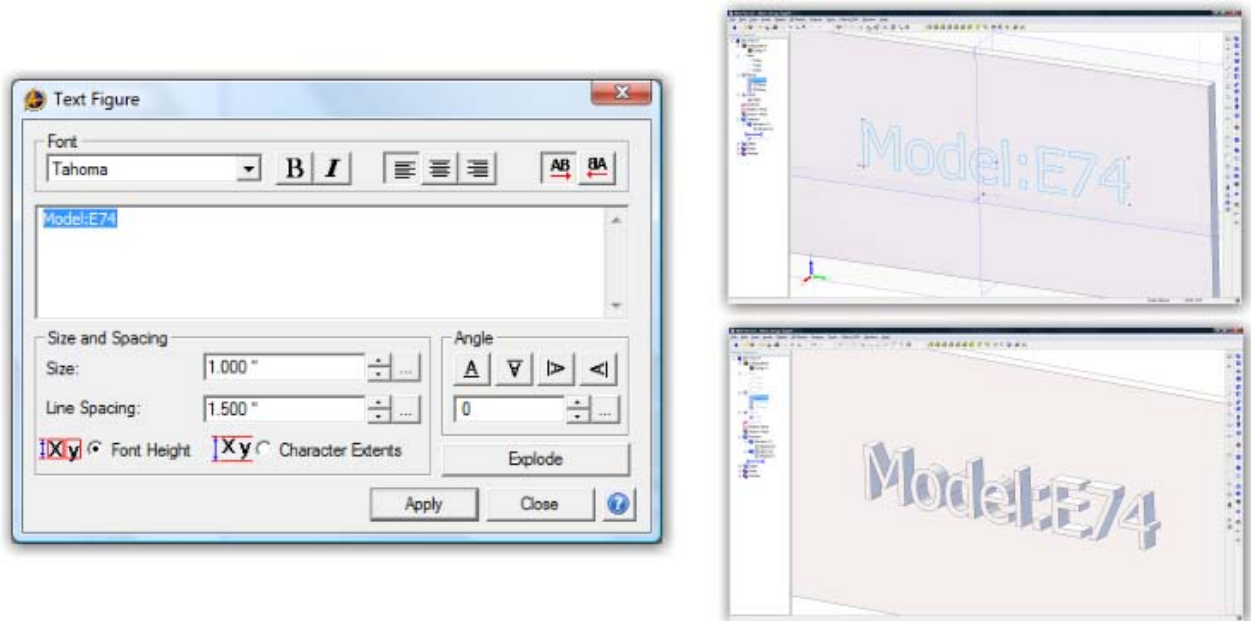
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New Features in V12 >

Text Tool

**Description**: Allows the automatic creation of text-based sketches for use in features
Usage: Enter into a 2D sketch, press the text tool button, and enter the text, and format it. After applying the text, create a feature as normal.

Color by Feature

**Description**: Allows you to color parts of a model based on features
Usage: Create a feature. In the Design Explorer, right click on the feature and select Feature Color. Select Specify Feature Color and define the color you would like.
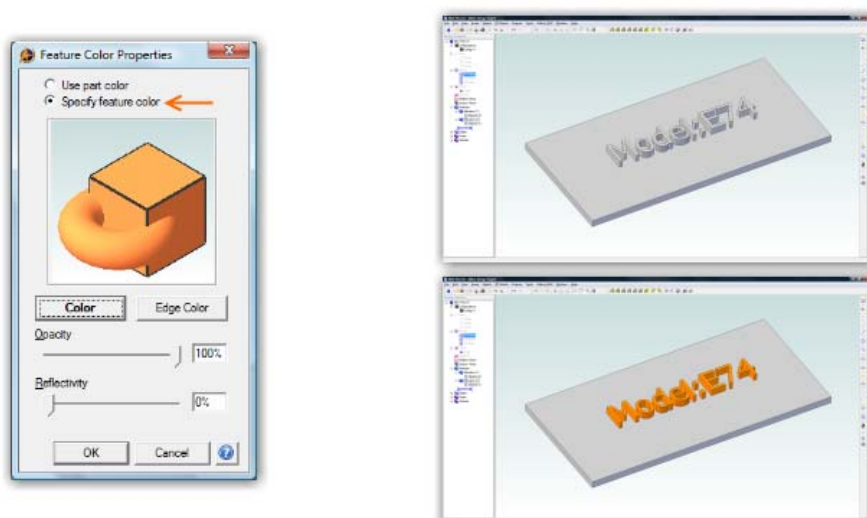
Set the Default Part Color

Description: Allows you to select a default part color for all new parts
**Usage**: Open a new part. Go to Edit > Color Properties. Choose a color, then click Make Default.
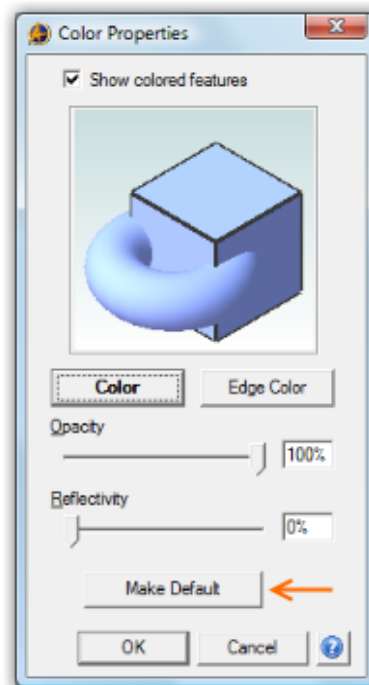
Copy / Paste Stamper

Description: Allows you to paste multiple copies of a copied item exactly where you want them. Works across workspaces.
Usage: Copy something. Go to Edit > Paste Stamper. Begin clicking the mouse - the preview will show you where the item will be pasted before you click the mouse to apply.
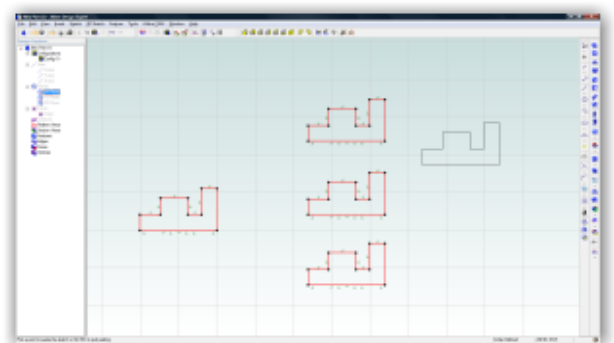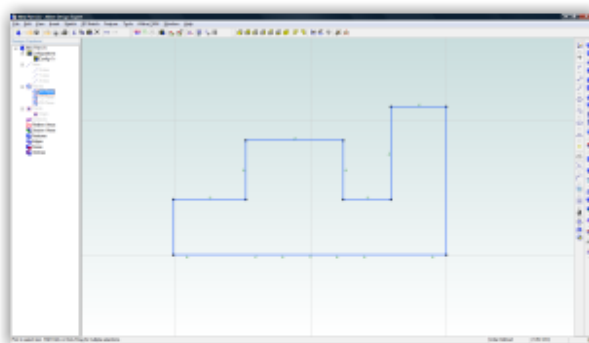
Customizable Toolbars

Description: Create custom toolbars
Usage: Right click on a toolbar. Select Customize Toolbars. Select New, name it, and then add the items you want.
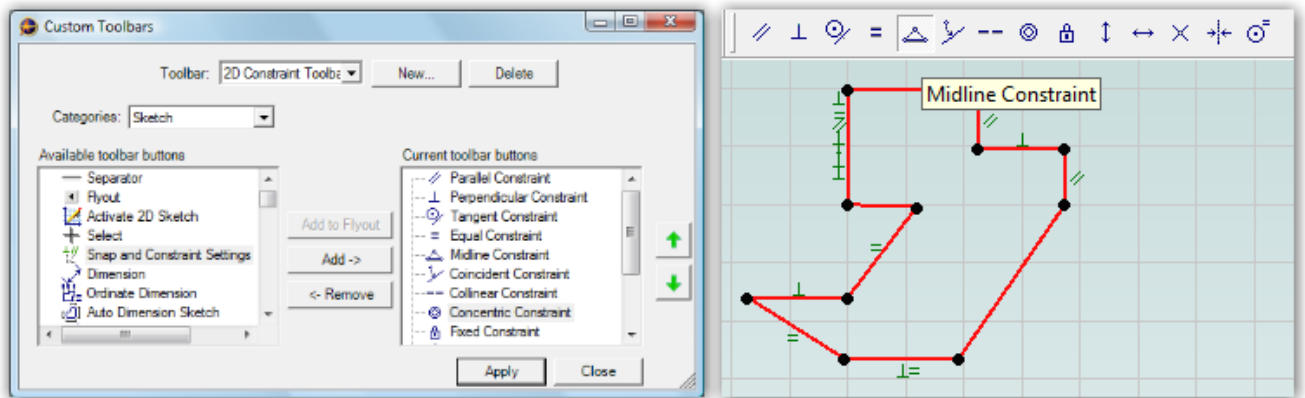
New Box Selection Methods

Description: Dragging a box select from left to right selects only fully enclosed figures. Dragging from right to left selects fully and partially enclosed figures.
Usage: See Description above

Degree of Freedom Callouts - Sketching

Description: When sketching, visual callouts can be turned on to notify you where you haven't defined the magnitude of figures (but not where you have not defined their position). Helps you to visually determine what remaining dimensions are required.
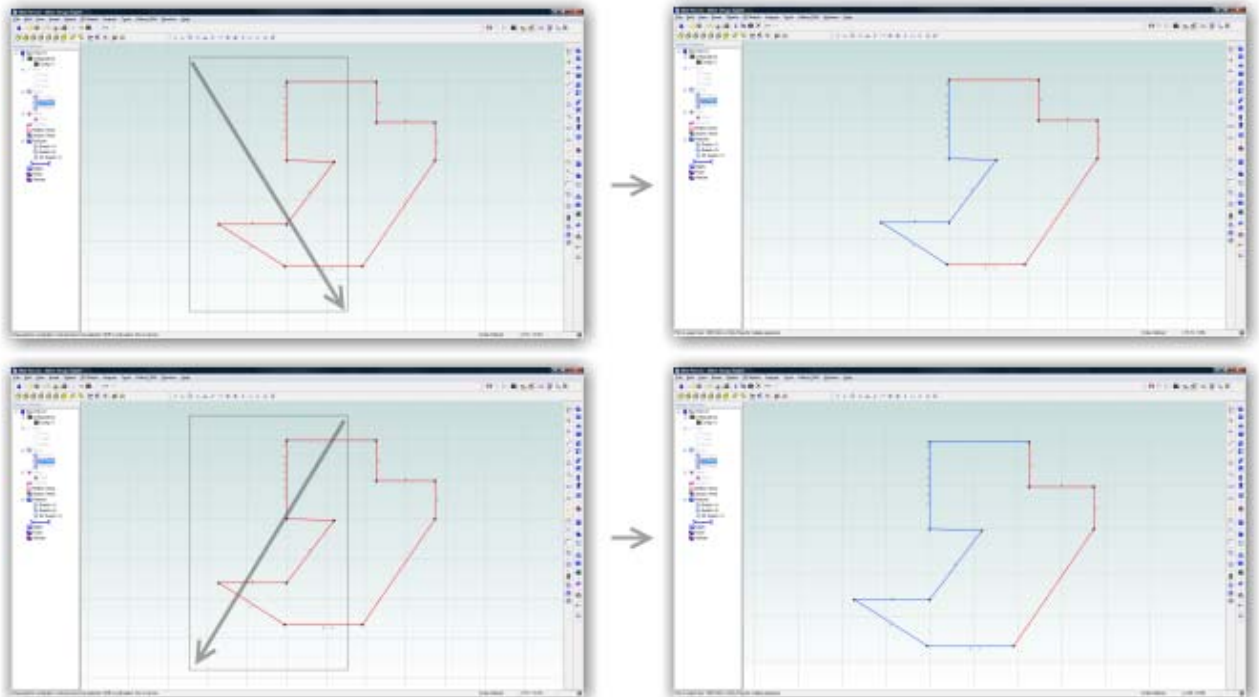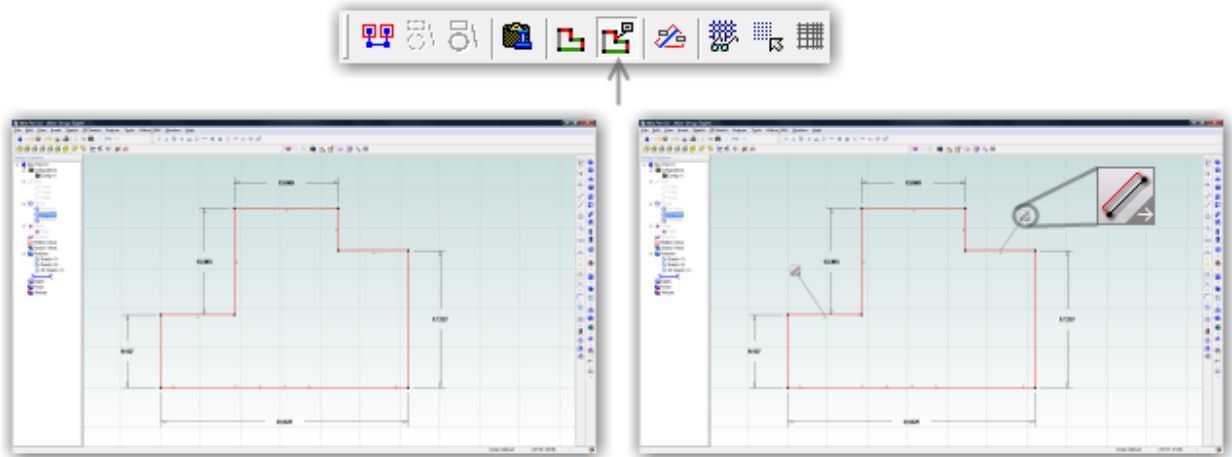
Usage: Enter sketch mode and begin sketching. Turn on the DOF Callouts tool on the Sketching Options toolbar (new). You will see callouts on figures that do not have explicit magnitude dimensions. Click the callout to place a dimension without going into the dimension tool.

Degree of Freedom Color Coding - Sketching

Description: When sketching, figures can be color coded on the fly to visually represent whether they are fully defined, partially defined, or completely undefined. Use this to help you determine where a sketched profile requires more definition.
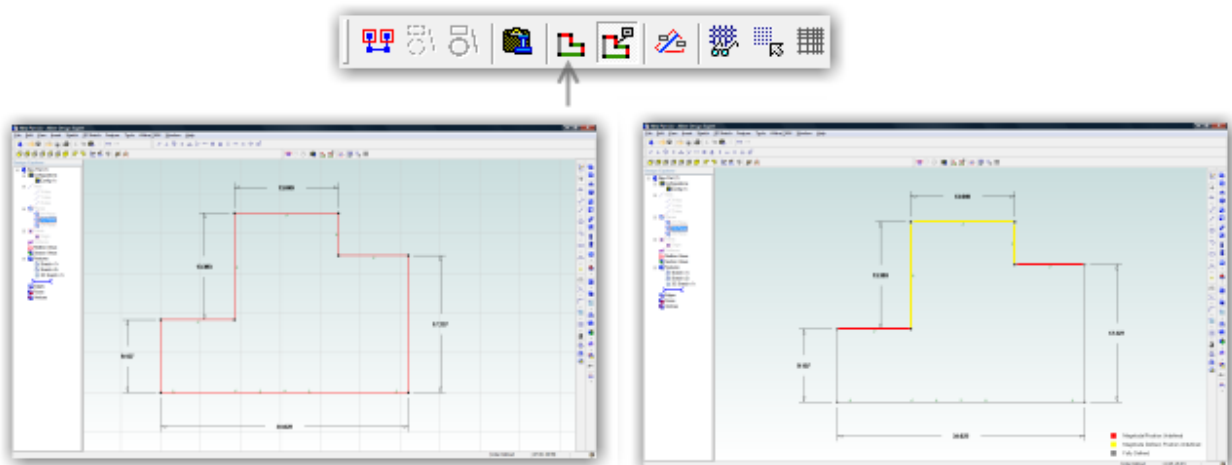
Usage: Enter sketch mode and begin sketching. Turn on the DOF Colors tool on the Sketching Options toolbar (new). You will see your figures are now color coded per the legend at the bottom right of the screen.

Real-time Dimensioning

Description: When on, you can input dimensions for sketch figures while you are sketching to save time instead of sketching figures first and then dimensioning them later.

Usage: Enter sketch mode. Turn on real-time dimensioning from the Sketching Options toolbar (new). While you sketch, you will see two boxes follow your cursor. To enter the boxes, press Tab. Switch between the boxes with Tab also. Tabbing out of a box also updates the preview to reflect the new change. Complete the figure by single clicking the mouse. A dimension is automatically applied.
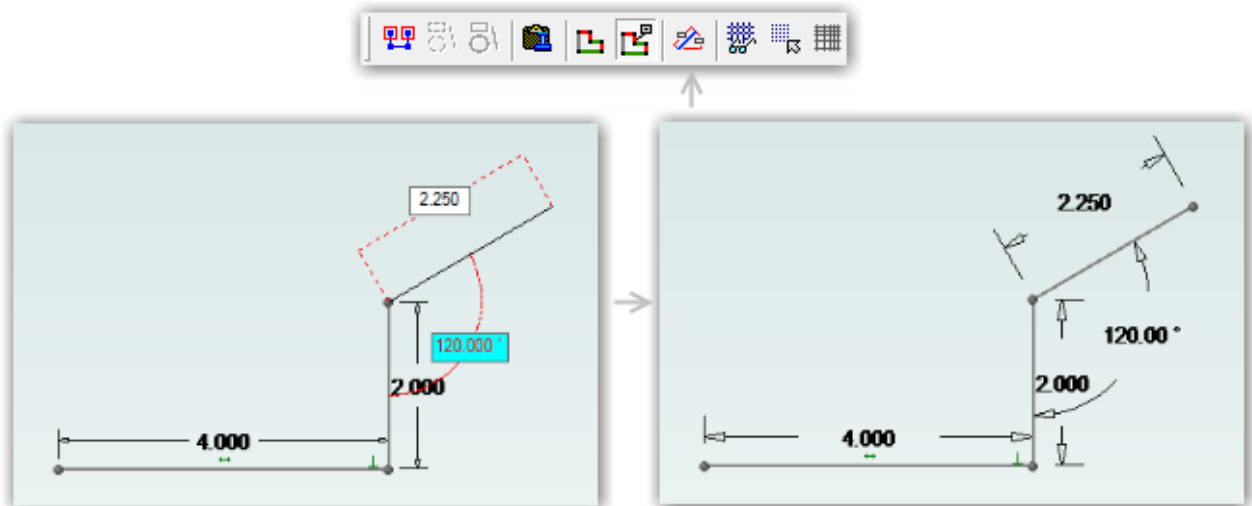
Quick Conversion Between Figures and Reference Figures

Description: Previously only one figure could be converted at a time between being a reference figure and a regular figure. Now, you can convert multiple figures simultaneously.

Usage: Select the figures you want to convert. They will turn blue as shown below. On the Sketch Options toolbar, select the appropriate button for converting the figures to Regular or Reference figures. The example below shows converting regular figures to reference figures.
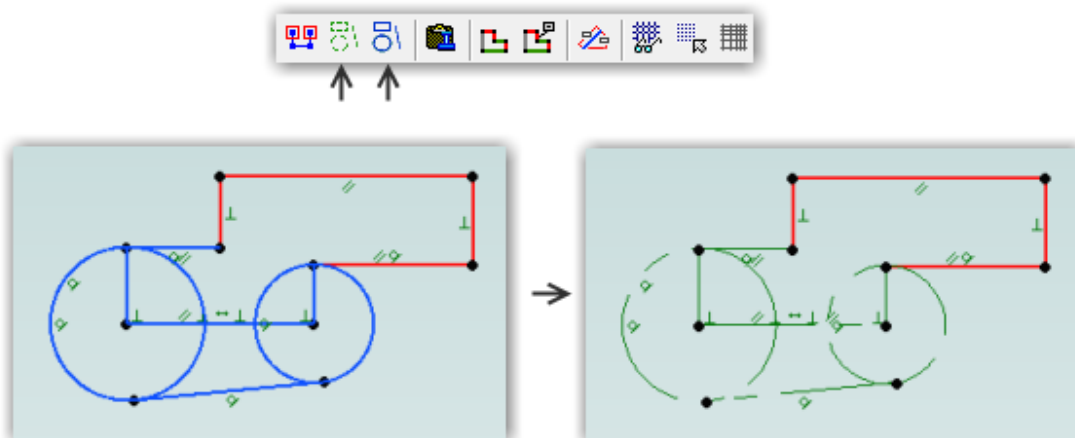
2D Constraint and Snapping Options

Description: You can now set preferences for which constraints Alibre Design automatically places and polar snapping options.

Usage: In a part workspace, select Sketch > Snap and Constraint Settings. Select or unselect which constraints you would like to be placed as you sketch. Set options for polar snapping as well.

Note: Regardless of the options you define for constraint snapping, Alibre Design will *always* infer them. If a checkbox is off, Alibre Design simply will not place the constraint. You will get a visual indication that the constraint is being inferred, but the preview of the constraint will be light gray instead of the normal color. You can override the non-placement of a constraint by holding Shift before you finish the figure.
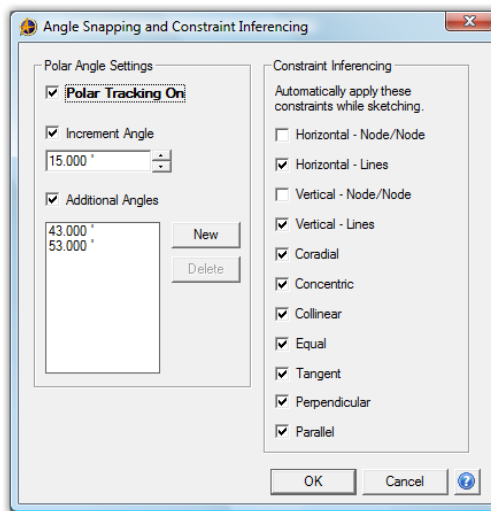
Dimension Box (OK, Cancel)

Description: You can now confirm or cancel dimensions without using the keyboard.
Usage: When a dimension box is open, press the check mark or the cancel button.
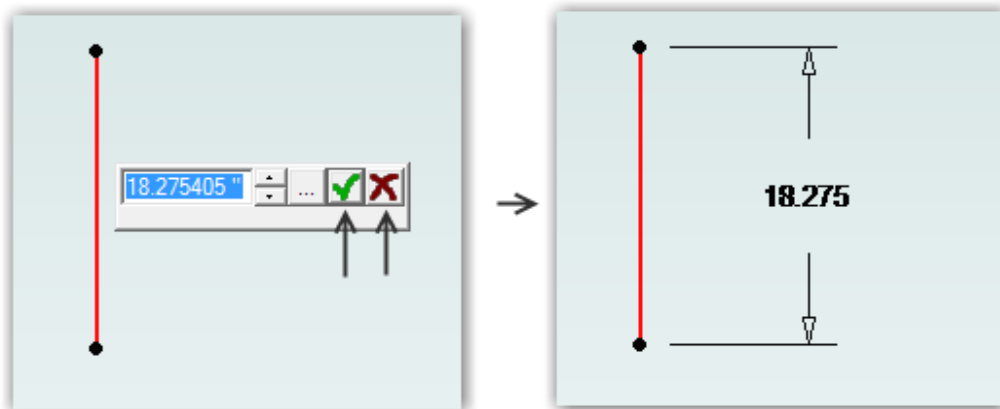
Mirror Over Axis (sketching)

Description: You can now mirror figures directly over an axis without creating a reference line first
Usage: Sketch some figures. Open the Sketch Mirror tool, select an Axis for the Mirror Axis, and press OK.

Ability to Edit 3D Section Views

Description: You can now change the properties of a section view instead of being forced to create a new one
Usage: Right click on an existing section view in the Design Explorer. Select Edit.

Animated View Transitions

Description: When turned on, any time the view changes (going into sketch mode, reorienting on extrusions, and selecting view orientation buttons) the view transition will be gently animated instead of immediately snapping.
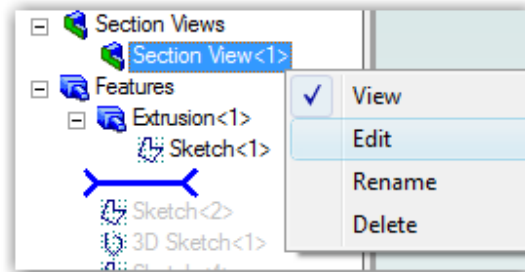**Usage**: This function works in the background. No specific usage is required.

Default Color Scheme

Description: A new default color scheme has been created.
Usage: If you would like to use the default color scheme, and have previously defined a custom color scheme, simply select it from the list in the Color Schemes dialog. If you have never installed Alibre Design before, this scheme will be the default.

Multiple Lights in 3D Workspaces

Description: The model will never be black (overly shaded) any more. Up to 3 lights can be used, available in Tools > Options. The single light option has been tweaked to also prevent black areas. The model looks much nicer as well.
Usage: Set the light number to 1, 2, or 3 in Tools > Options.

Combined Move/Rotate Tools (Assembly)

Description: The previous Move and Rotate tools have been combined into a single tool
Usage: Select the Toggle Triad tool on the Assembly Modeling toolbar. Click on a part and the Triad pops up. Select portions of the triad based on what you want to do. You can perform several operations in a row.
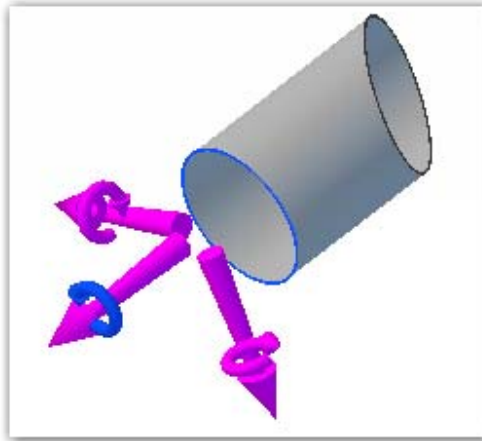
Reworked Assembly Pattern Dialogs

Description: The linear and circular assembly pattern dialogs have been changed to be more consistent with pattern dialogs elsewhere in the product.
Usage: N/A

Contour Flange (Sheet Metal)

Description: You can now automatically create a tab and multiple flanges using a single profile sketch
Usage: In a sheet metal workspace, create a profile sketch. The sketch must contain at least one line (since there must be at least one tab), and can only contain lines and tangent arcs. After the sketch is created, select the Contour Flange tool and input the variables. You can also override individual bend radii after the Contour Flange has been created. Note that tangent arcs must have a tangent constraint applied. This would not be automatic, for example, if you projected a sketch from a solid that had a tangent arc.
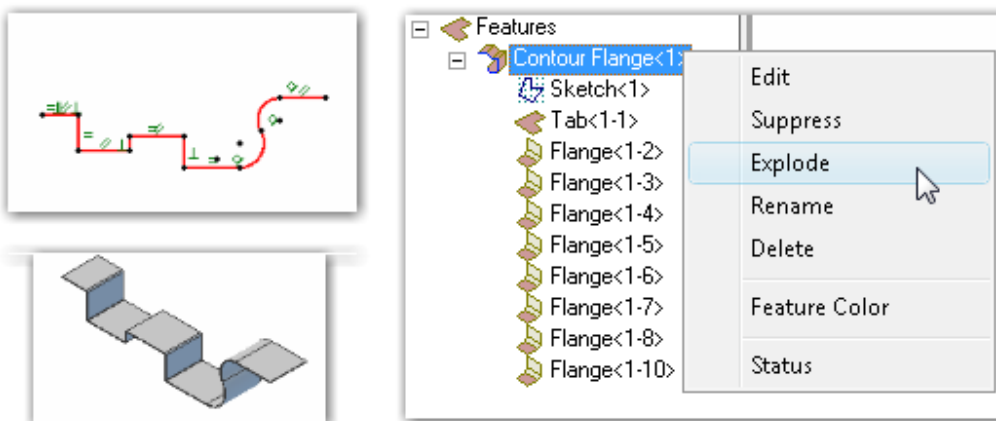
Lofted Flange (Sheet Metal)

Description: You can now create lofted flanges between: circles/ellipses and squares/rectangles using a wizard
Usage: In a sheet metal workspace, click the Lofted Flange tool. Determine which transition type you want, fill in the values, and press OK.
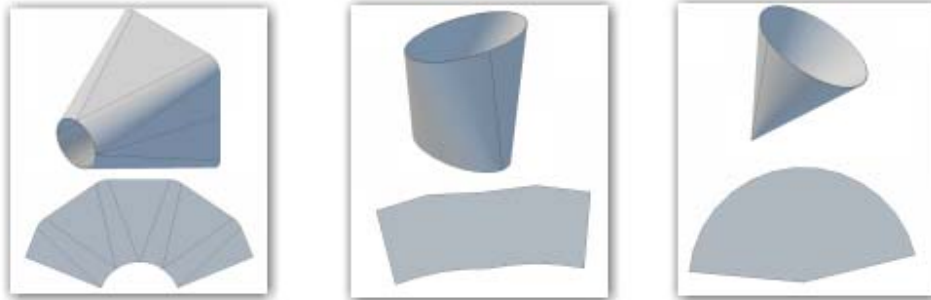
Freeform Table Creation (2D Drawings)

Description: You can now add tables to 2D drawings in a quick and efficient manner
Usage: In a 2D drawing, select the General Table tool. Input the initial options for row and column count. Then, click on the table and click a field to edit it. You can format the text in the cells, drag the rows/columns around, merge cells, etc.
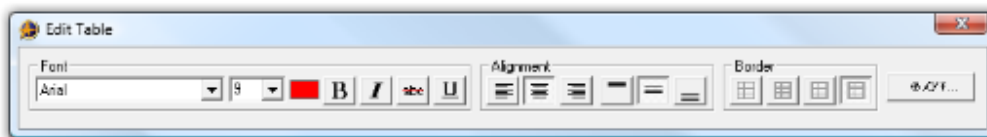
Cabling Style	Length	IA Index
E339	60'	1
E449	27'	1
A449	15"	2
A870	97'	1

Shaded and Visible Edges Mode Now Default

Description: Previously the Shaded and Visible Edges display mode was not the default due to some performance issues on complex assemblies. This issue has been corrected and there is now almost no difference between Shaded and Shaded and Visible Edges performance.
Usage: N/A

Icon Previews for Parts/Assemblies/Drawings in Windows/Vault

Description: Windows Explorer and the Alibre Vault will show icon previews for files saved in v12.
Usage: Ensure that your Windows folder settings are set to display thumbnail previews.

Substantial View Performance Increase for Large Assemblies

Description: View interaction (rotate/pan/etc) has been substantially improved for large assemblies. Now, only the visible portion of the model is rendered – if you are zoomed in to a subsection of a large assembly, the subsection will have the same response as if you were viewing a single part.
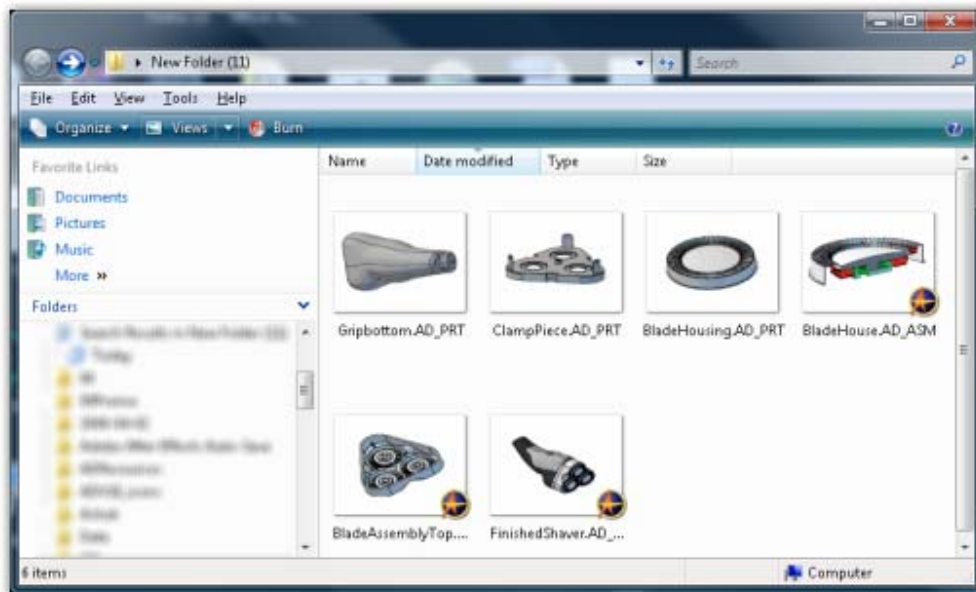**Usage**: N/A

Substantial 2D Drawing Import Performance Improvement

Description: After importing DWG/DXF files, when you tried to edit the sheet on a large or very data intensive import some people experienced extreme performance degradation or crashes. This issue has been fixed. The most notable visual difference will be that nodes (endpoints) of figures are no longer all visible at once – they become visible when the mouse is hovered over a figure, but only for that figure.
Usage: N/A

Trim operation performance improvement for complex B-splines

Description: Trimming operations used on complex B-splines during sketch mode could at times be slow. The performance has been much improved.
Usage: N/A

Assembly patterns have a preview

Description: Linear and circular assembly patterns now have a preview in the workspace
Usage: N/A
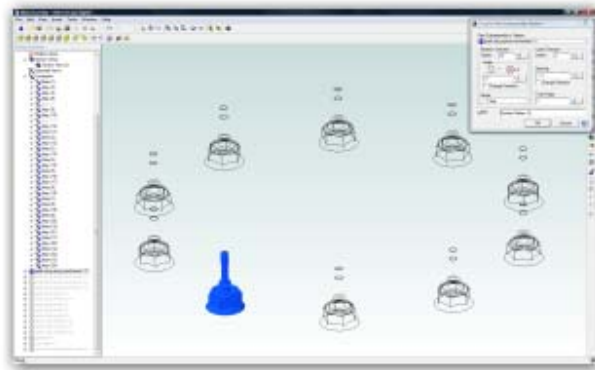
New Home Window look

Description: The Home Window now has a new graphical appearance
Usage: N/A

Equal angle option for circular patterns

Description: Often you will want to create circular patterns in a complete circle. This option makes it so you are not required to manually calculate the angle based on the number of items in the pattern.
Usage: When making a circular pattern of any type, select the Circular option under the Angle area of the dialog.
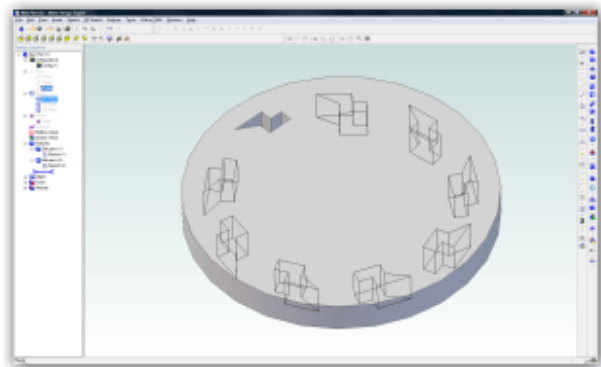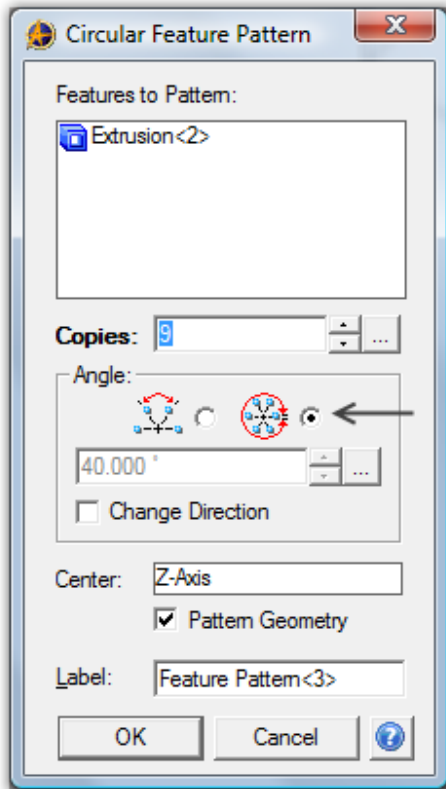
Horizontal and vertical constraints now show on reference points

Description: Horizontal and vertical constraints now appear on reference points that have them applied.
Usage: Create horizontal and vertical constraints between nodes in the same way as usual. You will now be able to see the constraints and delete them.
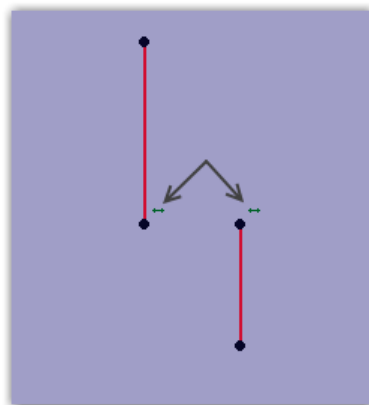
The default workspace size for a new sketch is now identical for all units

Description: The default viewing area is now consistent between units. Those using mm will no longer have a very small starting workspace.
Usage: N/A
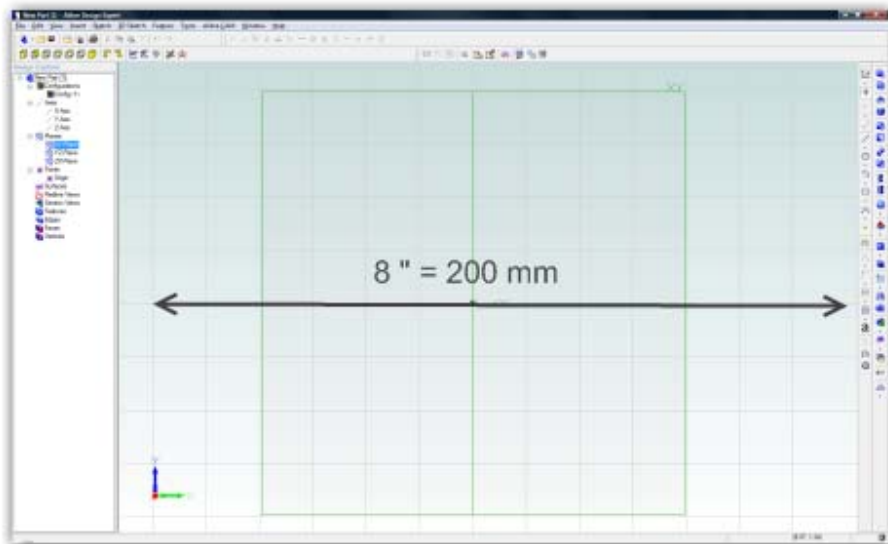
Open a 3D model directly from a 2D drawing

Description: You can now open 3D models from a 2D drawing
Usage: Right click on an item in the Drawing Explorer or on the edge of a projected item in the 2D workspace. Select Edit 3D Model.
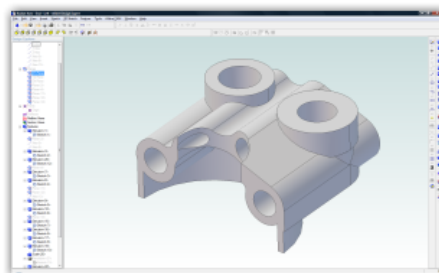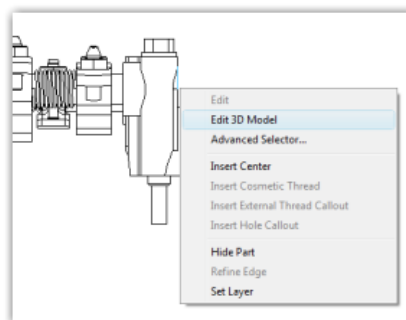
Picking the 2D section view direction before creating the view

Description: You now pick the direction of the section view before creating it
Usage: Select the figure you want to use to section the view. You will notice the arrows will change depending on what side of the figure your mouse is on. When satisfied, single click again to confirm the direction and the section view is created.
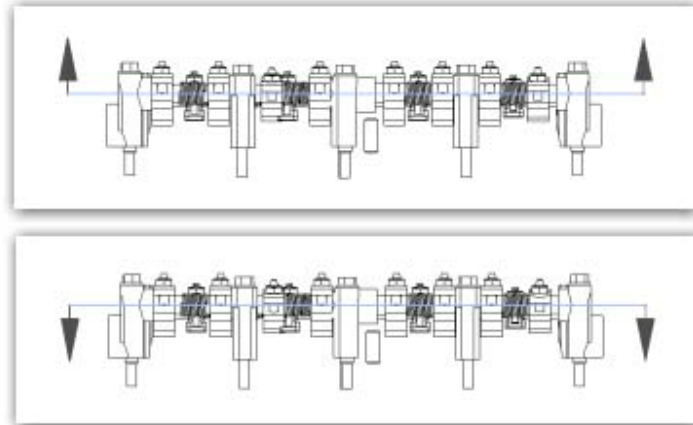
Upgrading to v12 >

Alibre Design Expert and Alibre Design Professional customers will need to update add-on applications according to the following guidelines.

Add-on Application	Add-on update required when moving to...		Update Instructions
	v11 SP1	v12	
Alibre Vault	N/A	No	Click here to view installation guidelines when installing for the first time. **Note:** The migration tool and instructions are located in the Program folder of your Alibre Design installation directory. **Note:** Do not uninstall the Alibre Vault when upgrading it. Choose the Simple Upgrade option from the installer.
ALGOR DesignCheck	No	No	Two versions are available; 32-bit OS / 64-bit OS.
Alibre Design for Rhino 3.0/4.0	No	No	Uninstall via Add/Remove Programs; install new version. The Rhino 4.0 add-on can be found on the Downloads page.
Alibre Motion	No	No	Uninstall via Add/Remove Programs; install new version.
Alibre Part Library	No	No	None
Alibre PhotoRender	No	No	Uninstall via Add/Remove Programs; install new version.
Engineers Toolbox	No	No	None
Machinist Toolbox	No	No	None

Add-on Application	Add-on update required when moving to...		Update Instructions
	v11 SP1	v12	
Alibre CAM	No	No	Uninstall via Add/Remove Programs; install new version.
Trace Parts	No	No	None
SolidWorks Reader	No	N/A	None
Sheet Layout	No	No	None
Free Dimension	No	No	None
PDF Creator	No	No	None
Red Eye RPM Instant Quote	No	No	None
Invent Better Suite 2008	No	No	None
Excel Add-on	No	No	None

Note: During install of any add-on, if presented the choice to Modify, Repair, or Remove the current installation, always select Remove.

Minimum System Requirements >

Supported Operating System

Windows XP Professional Edition or Home Edition
Windows Vista Basic, Business, Home, or Ultimate
Windows 7 Basic, Business, Home, or Ultimate

32-bit and 64-bit systems supported

Hardware Requirements

Intel Pentium or equivalent processor: 2 GHz or faster
RAM: 2 GB minimum
Screen Resolution: 1024 x 768 minimum, 1280x1024 or greater recommended
Video Card: 64 MB or higher, 128 MB minimum for Vista
  - Card must support DirectX 9.0c
Hard Disk Space: 500 MB
DVD-ROM Drive (If installing from DVD)
Mouse or pointing device

Software Requirements

Internet Explorer 6.0 or later
.NET 2.0 Framework
J# Redistributable
DirectX 9.0c or later

Note: If you do not have these, they will be installed automatically.

Known Issues and Fixes >

This section lists known issues. Workarounds are provided when available.

Reinstallation of Alibre Design may be required after upgrading operating system

When upgrading from Windows NT or Windows 98/ME to Windows XP, an un-installation and re-installation of Alibre Design may be required. No data will be lost in the process. This also applies to some of the add-ons, like Algor DesignCheck and VisualMill.

To ensure Alibre Design is installed correctly after upgrading from Windows Vista to Windows 7, uninstalling Alibre Design and reinstalling is recommended. No data will be lost in this process. This also applies to some of the Add-ons, like Algor DesignCheck and VisualMill.

My screen is mostly just gray, and I can't see any planes or model geometry

If your workspaces are gray, ensure you have DirectX 9.0xc or greater. This will solve the problem the vast majority of the time.

If you have DirectX 9.0c or greater and the problem persists, it is because your video card does not support a particular feature called Stencil Buffering. Nearly all video cards made in the last several years support this feature, but if yours does not there is a way to disable Alibre Design's reliance on it. This disabling process will mean that you cannot use the new 2D Fast View mode when making a 2D drawing.

To continue to use Alibre Design without this feature, in the Alibre Home Window go to Tools > Options > Display tab and select "Disabled" for the Advanced 2D Rendering combo box. After changing this setting Alibre Design will need to be restarted for the changes to take effect.

Mouse-wheel zoom seems broken

The Alibre Design graphics work area may not respond to mouse wheel input while other areas of Alibre Design will respond to mouse wheel input. This occurs frequently when a PS2 mouse is plugged in after the operating system has booted or the mouse driver is outdated. If using a Logitech mouse and the Logitech SetPoint software you will need to remap the mouse wheel in the software.

Menus have graphical anomalies, disappear, or lag

If experiencing issues with menu dropdowns such as the menu disappearing, or not refreshing correctly, this is most likely occurring because of the Microsoft Intellipoint mouse control software. Check your task manager for imouse.exe. If this is running you will need to uninstall this software or remove the startup process.

Alibre Part Library is inaccessible

The Alibre Part Library is a catalog of standard parts available to all Alibre Design Professional and Alibre Design Expert users. The Alibre Part Library requires an Internet connection to download requested parts.
If you are experiencing intermittent problems accessing parts, please verify that you have an active and working Internet connection.

If you do have a good Internet connection and still are unable to download parts, please check to see if you are connecting through a proxy-server. The Alibre Part Library will not download parts if your system is configured to use a proxy-server. To test, run the program *ProxyServerTest.exe* located on the Alibre Design product CD.
If you are running through a proxy-server, please contact Technical Support for assistance.

If you are unaware of what a proxy server is, then chances are this is not the case and you should call Alibre Support.

PhotoRender crashes when I close it

Note: PhotoRender does not apply to you if you purchased Alibre Design v12 or later

PhotoRender may crash when closing it if you are using an ATI graphics card and your graphics card driver is not up to date. Download and install the latest graphics card driver for your card.

Overlapping sheet metal tab features change thickness

All sheet metal algorithms assume the sheet metal stock has constant thickness throughout. The software uses this thickness value for a variety of purposes including offsetting dimple sketches, creating chopping blades in unbend/re-bends, calculating several flange parameters, etc. Creating two or more flanges that overlap in space results in a non-uniform sheet thickness. Once this happens, several formulae and assumptions made in sheet metal algorithms become invalid. This is a limitation in the current software. Still, multiple tab features are valid as long as the uniform thickness is maintained.

This is typically not an issue because sheet metal parts with overlapping tabs cannot be manufactured out of normal sheet stock to begin with and are rarely designed intentionally.

Unable to create section view of broken view

Creating a section view of a broken view results in a section view of the unbroken view to the extents of the defining section line. This is a limitation of the current software.

My startup screen goes blank during a license update or update check

Alibre Design can check for license updates automatically when you start the program. This is useful for example if you buy an upgrade and want the new functionality to reflect in your currently installed version of Alibre Design immediately. Occasionally, there may be a blank or non-responsive screen for a few seconds.
This is simply a failure to update the visual progress; however the license update process is continuing in the background. Please allow the update to continue without interruption. If you do not want to perform license checks upon starting Alibre Design, please turn this option off in Home Window > Tools > Options.

A sheet metal dimple is failing when my profile has B-Splines

Alibre Design can create sheet metal dimples with closed B-spline profiles provided the sketches are tangent continuous at the start-end location. 'B-spline by Interpolation Points' does this automatically when you make the start and end locations coincident. You must ensure this manually if you are using B-spline by Control Points by defining the 2nd last control point to lie on the start location tangent line at the provided location hint. You do this while sketching the spline's last two control points; it cannot be done after finishing the spline.

Limitations mirror and pattern features in part workspaces

- Shelled features cannot be mirrored or patterned.
- Local operations such as remove, move, or offset face cannot be mirrored or patterned.
- Sheet metal flange features cannot be mirrored or patterned.
- Imported geometry such as IGES and SAT bodies cannot be mirrored or patterned.
- Mirrored or patterned features of parts that have been scaled will be created to the original scale.
- Topology Pattern features cannot be patterned or mirrored.

How do I get back an instance of an assembly pattern I deleted

When an instance of an assembly pattern is deleted, and needs to be restored, the pattern will have to be recreated.

I changed some appearance options for sketching and they aren't reflected

Some visual options such as constraint icon size, sketch color, or node size will not be reflected immediately if you are active in a sketch when you make the change. Simply exit your sketch and re-enter it and the changes are reflected from that point onwards.

I get section view hatching problems when using Fast Views and un-sectioned parts

If you are using Fast Views there may be some issues when creating section views that contain specifically un-sectioned parts. If you have overridden a part's section status so it does not appear as sectioned within the view, anything that is sectioned begin in the view will show through.

This is a limitation of Fast View mode, and converting the view to a Precise View mode will solve the problem.

Alibre CAM 1.x won't generate toolpaths for sketches made by the text tool

Alibre CAM 1.x cannot interpret a text symbol, which is created by default when using the text tool in 3D modeling. To create toolpaths based on sketches that contain text, you must explode the text symbol. To do this:

Edit the sketch that contains the text
Double click the text
The Text dialog pops up
Select the Explode button

Alibre CAM 2.x and later will not have this issue.

Known Issues in Windows Vista

I get some graphical anomalies occasionally, such as a temporary gray screen

This can occasionally be an issue when you are using the Windows Aero Theme in Vista and do not have a sufficient computer to run Windows Vista with the Aero Theme and Alibre Design simultaneously.

The first thing to check is that you have the most current graphics driver for your video card. If that does not fix the issue, you should consider upgrading your hardware (RAM, Video Card). If you need help determining what area of your system is likely causing the problem, you can contact Customer Support.

Note that this problem can be eliminated by turning off the Windows Aero Theme in Windows Vista, though you may prefer to upgrade your system so you can keep the slick visuals it brings.

The Excel add-in isn't working properly

Microsoft Excel has to be run "As Administrator" in order for the Excel add-in (Spreadsheet driven design) to work correctly. Before working on Spreadsheet driven design, right click on the Excel icon and choose to "run as Administrator" and then open a file manually.

I can't run the MSI file to install Alibre Design

When installing from the DVD, you will not be able to run MSI file for installing the product on Vista. Always use Setup.exe to install the product. This will always work and is the normal recommended way in general to install Alibre Design.

ETBX is not able to use Vista Aero visual theme

Sprutcam 4.0 (legacy) does not work in Vista

SprutCAM 4.0 will have to be explicitly run as Administrator when running it from outside of Alibre Design.

Algor Designcheck or VisualMill doesn't work after upgrading from XP to Vista

After upgrading from XP to Vista, if you had already installed Algor DesignCheck or VisualMill on XP you will have to uninstall and re-install these add-ons on Vista.

My 3D Connexion device isn't working on Vista

In order to run the 3D Connexion driver, you may have to explicitly run the driver as an Administrator by right clicking on it and choosing to run as Administrator.

VisuallMill will not install on Vista 64

VisualMill will not install on 64 bit Windows Vista. Please contact Customer Support for updates. Alibre CAM does install on 64 bit machines.

Machinist Toolbox Help doesn't work on Vista 64

Help may not work in Machinist Toolbox with 64-bit Vista. This is a limitation of Machinist Toolbox.

APPENDIX – Useful Information

Tips for Dimensioning to Holes with Cosmetic Threads

When dimensioning to holes with cosmetic threads displayed, be sure to select the hole geometry instead of the cosmetic threads.

Alibre Design and Windows XP Remote Desktop

Standard Microsoft Windows XP Remote Desktop configurations do not support DirectX accelerated displays and Alibre Design will not display correctly in a Windows XP remote desktop window. Consider switching to a different remote access application such as VNC or GoToMeeting or installing Alibre Design locally.

Versioning is not available when using the Windows File System

The Alibre Vault provides file management capabilities not available in the Windows file system, such as versioning, sharing and security, and caching. If you do not have a version of Alibre Design that supports the Alibre Vault and you need file management capabilities, please contact your sales representative.

How to Contact Alibre Customer Support

Alibre is committed to ensuring that customer support issues and technical questions are handled as efficiently and promptly as possible. For all issues related to sign-in, launch and general technical problems, contact Alibre Customer Support:

Phone 972-671-8492, press 4 for Support or ext. 300

Email support@alibre.com

Online Incident Entry
The Alibre web site - http://www.alibre.com/ - offers additional support options. After you sign in at the web site, click the Support & Training link at the top.

Now, expand the Support link on the left side to reveal options to enter a new Support Incident online or to check the status of existing incidents.

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