

Creating PDF Files Without “lines merge” Enabled? You Could Be In For a Big Surprise!

Most CAD users enable “lines merge” for their plotters when printing from AutoCAD. However, if you enable “lines merge” in your PDF creation software, does that mean it will work? Not necessarily.

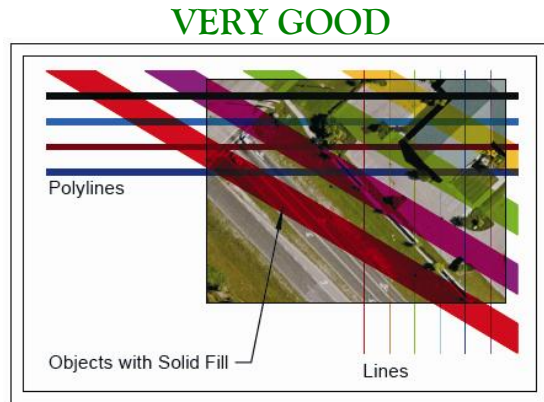


Figure 1. The “lines merge” function is enabled so overlapping CAD entities become transparent resulting in a PDF that will view and print exactly as it would from AutoCAD.



Figure 2. The “lines merge” function is not supported; overlapping CAD entities are not transparent when converted to PDF. This PDF will NOT view and print as intended.

Not all PDF's are created equally. The promise of creating a PDF file is so the information contained within it will view and print exactly the same as the native software application that created it. End users only need a PDF viewer and not the same costly software application required to view and print the information. “Lines merge” functionality is where overlapping CAD lines and solid fills are transparent when plotted (See Figure 1). Almost every CAD user will enable this function when installing a plotter and its AutoCAD driver. However, when an AutoCAD DWG file is converted to PDF using the current versions of Adobe Acrobat (versions 3 thru 8) the PDF does not always view and print exactly as it would from AutoCAD. This is because Acrobat does not support “lines merge” in the PDF files it creates from AutoCAD (See Figure 2). Most AEC companies need “lines merge” functionality on their plotters and in their PDF's. Since “lines merge” is available in PLT files most CAD users assume that it is also available with any PDF converter on the market, it's not. AcroPlot Pro software from CADzation supports “lines merge” in PDF files created from AutoCAD versions 2000 to 2008.

To enable “lines merge” in AutoCAD select **Plot** and then select the **Properties** button for the plot device. When the **Plotter Configuration Editor** dialogue box appears select the **Device and Document Settings** tab. Go down the list and span out the **Graphics** category. Select the **Merge Control <Lines Merge>** and choose the **Lines Merge** radio button. When you select the **OK** button a second dialogue box will appear asking if you want to save the setting for the **Current Plot Only** (One time use) or to the PC3 file for the **Plot Device** (remembers the setting). If

you enabled “lines merge” and the PDF looks like Figure 2 above, then your PDF driver does not support this functionality from AutoCAD. If you are using **AcroPlot Pro**, you can skip the above steps and just select the “lines merge” check box on the **Options** tab.

After you have created the PDF and are ready to plot it on a wide-format plotter, it is important to remember that processing time can be longer due to the additional calculations and flattening needed for all the instances where CAD entities overlap and create a new color. Applications like Océ ReproDesk, PLP PlotWorks, and KIP QuickPrint, usually use the free Ghostscript utility to convert the PDF to a temporary TIFF that is automatically deleted when the plot is complete. Ghostscript is not designed for “lines merge” enabled PDF files, and can take ten times longer to process the file. There is a solution. AcroPlot Repro software from CADzation is made for processing these types of PDF files and gives AEC, manufacturing, and reprographic firms a viable alternative to Ghostscript. AcroPlot Repro also has additional options for rendering patterns and offers different output options for line quality, solid fill patterns, and grayscale. PDF print quality is the same or better than a PLT when using AcroPlot Repro to process the PDF file for plotting. If your reprographer/blueprinter has any difficulty plotting your “lines merge” PDF's, then let them know about AcroPlot Repro. ◀

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