

Panelling Tools

Name:	Panelling Tools
Produced:	McNeel and Associates, USA, primarily Rajaa Issa
Operating system:	Windows
Native filetype:	
Description:	Panelling Tools is a Rhino plug-in for generating cellular patterns
Next version release:	Updated regularly (monthly)
Homepage:	http://en.wiki.mcneel.com/default.aspx/McNeel/PanellingTools.html
See also:	Rhino
	Plug-in
	Grasshopper
Link:	LEARN, The Catalogue
	Official Support Post a question to Media Centre
Introduction:	PanellingTools is a plug-in for Rhino . It is used to create 2D and 3D cellular patterns, panels, and components. The plug-in allows patterns or units of a system to be arrayed easily and quickly over a surface.
Primary functions:	<p>PanellingTools is primarily used to simplify design modelling for digital fabrication. Essentially, it takes any grid of points or surface created in Rhino, and populates the grid or surface with a specific geometry creating a net of panels. This process can be easily automated so that production for fabrication is greatly simplified.</p> <ol style="list-style-type: none"> Array 2D patterns on a grid of points or surface. This is especially useful for the creation of the likes of pavilions. Array 3D components on a grid of points or surface. There is special application here on achieving a high level of efficiency. The plug-in is especially good at maximising panelling efficiency. Unrolling patterned/populated surfaces for fabrication. <p>It is possible to achieve these functions with a combination of Rhino and Grasshopper. However, greater time and design efficiency can be had when using PanellingTools to perform these specific tasks. Remember, this plug-in has been designed with a very precise use in mind. It is excellent at performing this task.</p> <p>With this in mind, developers of the plug-in have suggested that soon it may simply appear as a component of Grasshopper.</p>
Primary outputs:	<p>PanellingTools accomplishes the functions above quickly and efficiently. In this way it facilitates rapid prototyping and output-generation in the following areas:</p> <ol style="list-style-type: none"> Printing of unrolled nets (panels) facilitates model making either by hand or as laser-cutting. Laser-cutting as above. 3D printing functionality is the same as in Rhino proper.
Usability:	<p>PanellingTools is pretty easy to use. Data is inputted using both line commands and graphic menus. Users of Rhino will have no difficulty picking up this software but for users new to Rhino and Rhino-related software the interface will not seem very intuitive. These users will find it easiest to get underway by using the graphic windows instead of the command line prompts.</p> <p>In terms of interoperability, this Rhino plug-in has the same export and save as functions as Rhino, - which is to say, it is very interoperable. Major output formats in 3D are 3DM, OBJ, WAV, and for 2D its DWG and AI for print and laser-cutting.</p>
Strengths/weaknesses:	<p>Over and above those strengths and weaknesses listed already, PanellingTools at present is:</p> <ul style="list-style-type: none"> + + Very well supported. McNeel and Associates' really knows how to listen to its users. Bugs are rapidly fixed. + + Very handy in that PanellingTools can number the arrayed panels making later assembly and navigation of the array far easier. + Easy and fast as a way to test out initial panelling ideas. Excellent for exploration. - Frustrating in that PanellingTools at present will only panel a surface/grid of points.
Learning support:	<p>McNeel and Associates' wiki and forum offer good resources including the plug-in itself, toolbars and manuals</p> <p>To get you started Media Systems suggest the following tutorials:</p> <ul style="list-style-type: none"> Beginner A Beginner B Beginner C Intermediate A Intermediate B Intermediate C Advanced A
Additional:	
References:	
External links:	
Published:	First published Mon. 1 Feb. 2010