

Ornamental Pro 2010

Rail Section and Picket Pattern Drawing Manual

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Picket Patterns

Overview

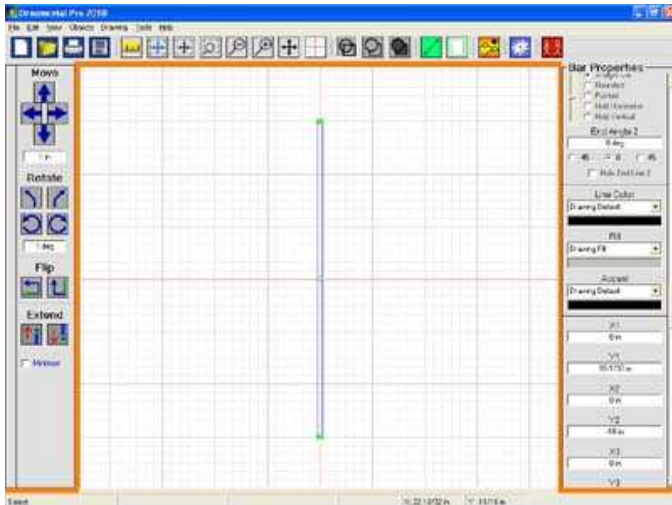
Picket patterns are basically any combination of objects attached to a vertical bar or bars. The vertical bar can automatically grow or shrink in length.


Picket patterns are saved into their own unique type of file and are stored in the picket pattern library. These pickets can then be inserted into a picket sequence and then the picket sequence is then inserted into a rail.

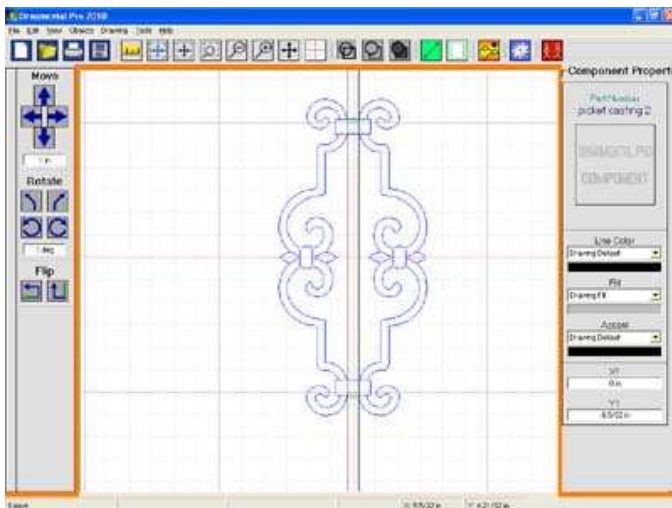
If you have not read the OP2010 Quick Start Guide, you must read it before attempting the operations in this manual.


Creating a Picket Pattern

Example 1



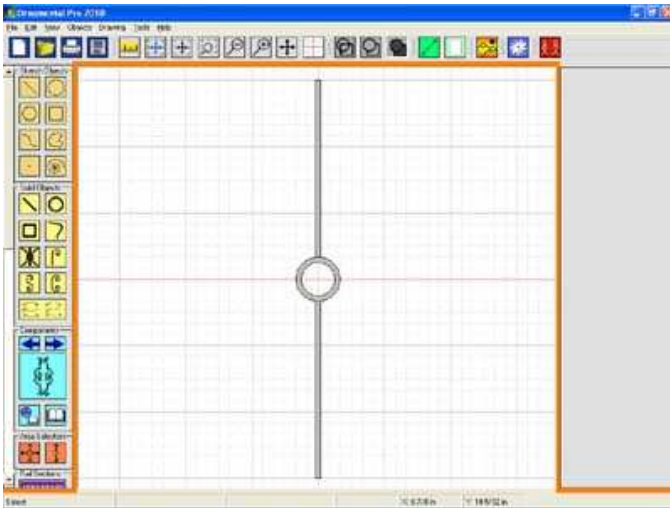
- Turn on the gridlines.
- Go to the menu (Drawing>Mode>Picket Pattern) and make sure it is checked.
- Draw a bar  over the top of the red vertical grid line.
- Extend the ends of the bar to a typical length. The bar in this example extends 18” up and 18” down for a length of 36”.
- In the XY cords properties on the right side of the screen, change X1, X2, X3 to 0 and press the “Enter” key each time. This will center the bar on the red vertical grid line.



- Go to the component library  and choose a picket casting.
- Click on the larger blue button of the left side of the screen to add the component to the drawing.
- Place the component the bar.
- Zoom in and move the component so that it is centered on the bar and centered with the horizontal grid line.
- Save the pattern in your picket library.

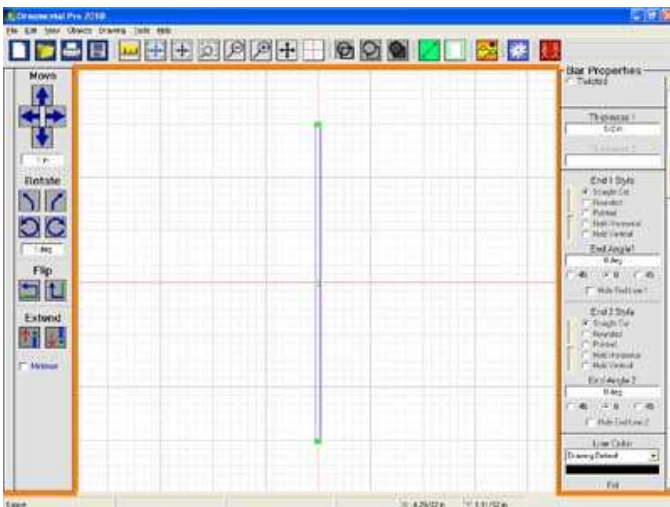
Vertical Bar Behavior


When saving as a picket pattern, OP2010 looks for bars in the drawing that are perfectly vertical and has an end point that is in the upper 5% of the drawing height and/or an end point that is in the lower 5% of the drawing height. These end points automatically move when placed into a rail section. Bars that are not vertical or do not have at least one end point in the upper or lower margins of the drawing, are treated as regular bars that do not change.

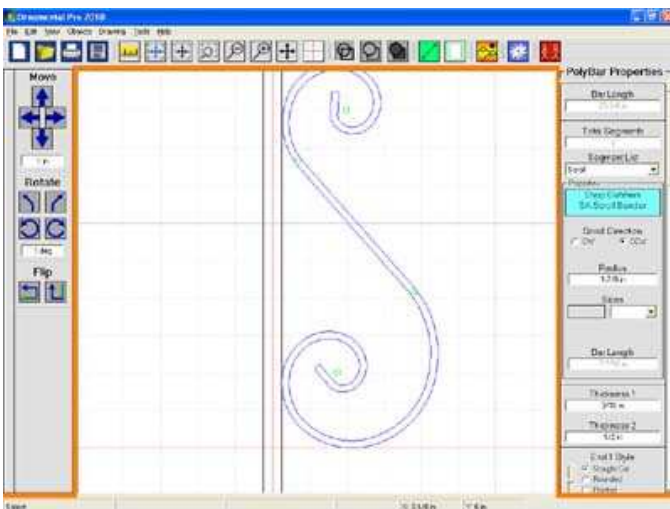



- You may have a vertical bar with only one end point in the upper or lower margins as shown in this image. That endpoint will automatically move and the other will not.
- The highest end point on the upper bar will automatically extend and the lower point touching the ring will remain fixed.
- The lowest end point on the lower bar will automatically extend and the higher point touching the ring will remain fixed.

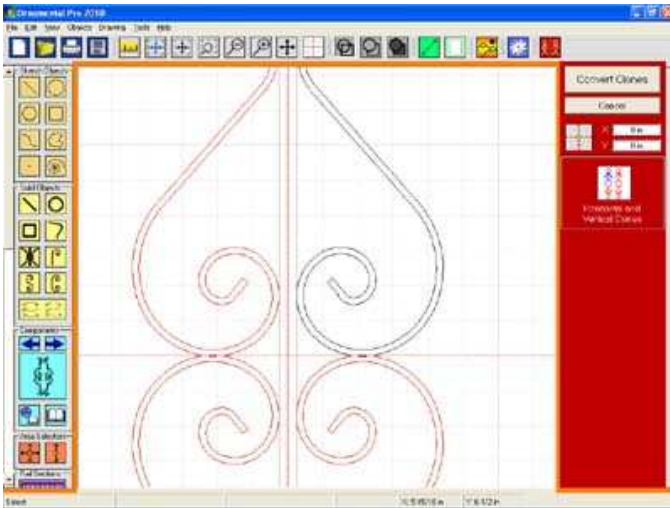
Example 2





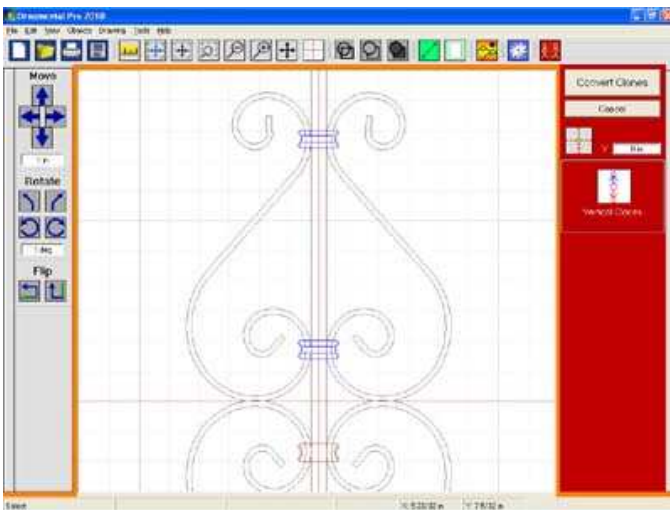
- Turn on the gridlines.
- Go to the menu (Drawing>Mode>Picket Pattern) and make sure it is checked.
- Draw a bar  over the top of the red vertical grid line.
- Extend the ends of the bar to a typical length. The bar in this example extends 18" up and 18" down for a length of 36".
- In the XY cords properties on the right side of the screen, change X1, X2, X3 to 0 and press the "Enter" key each time. This will center the bar on the red vertical grid line.






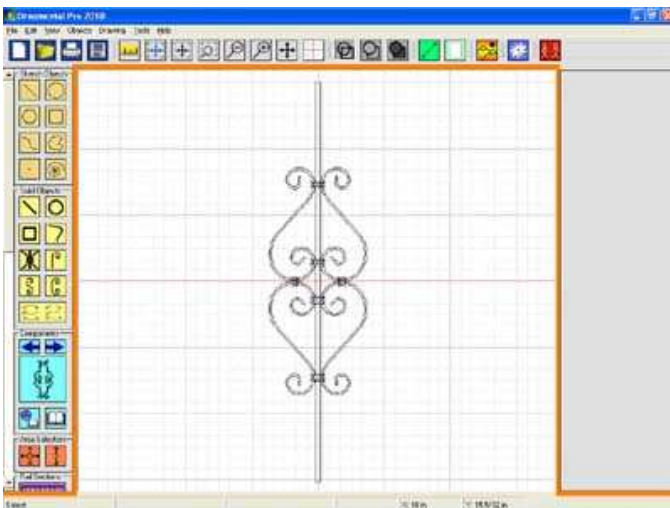
- Zoom in near the center of the red gridlines.
- Draw a scroll. 
- If you desire, adjust the scroll width and length.
- Move the scroll so it is touching the bar and the horizontal red gridline. Zoom in if you need to see it better.



- Click the Clone button. 
- Choose Horizontal and Vertical clones 
- Adjust the scroll if necessary.
- Click the “Create Clones” button.



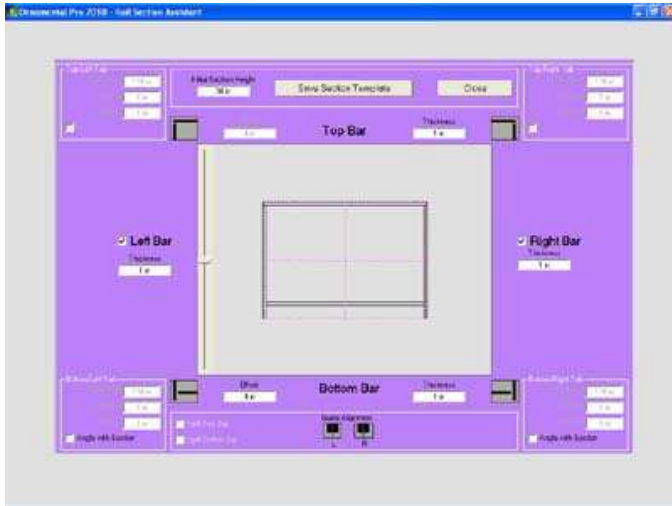
- Draw a band  over the top of the joints where the scrolls touch the bar.
- Select the two bands. You can select one band and hold the “Ctrl” key on your keyboard while clicking on the other to select both. Or go to menu (Edit>Select>Bands)
- Click the Clone button. 
- Choose Vertical clones 
- Click the “Create Clones” button





- Add a band to the place a top scroll touches a bottom scroll.
- Mirror using the Horizontal clones.
- Save the pattern in your picket library.

Rail Sections

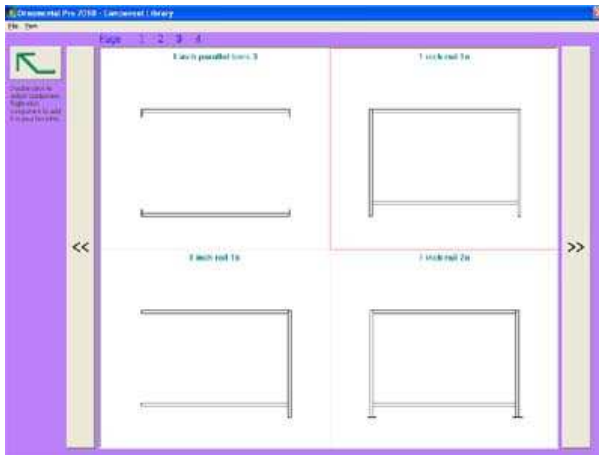
Creating a Rail Section Template




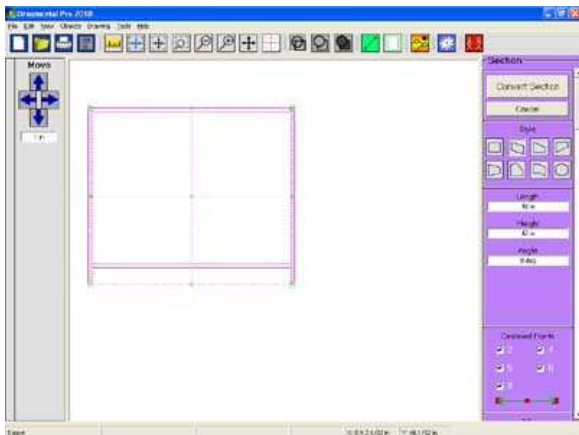
- Go to the menu (Tools>Section Assistant)
- Click the corner buttons  to change the corner styles.
- Click the guide alignment buttons  to center the posts on the dashed line.
- When you are finished with the basic look and behavior of the section template, click the “Save Section Template” button.
- Remember, you can alter the length, height, and angle of the rail section frame in your drawings.

Drawing a Rail Section Frame

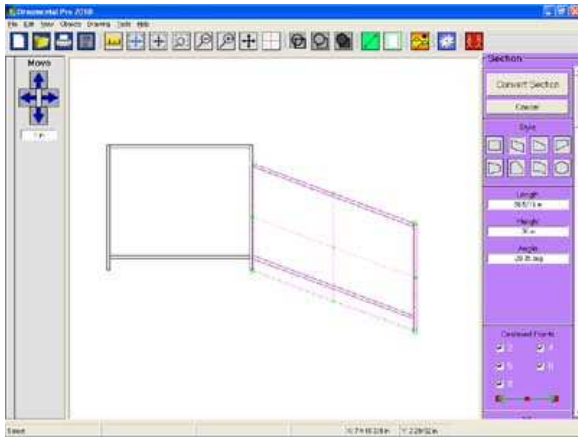
Example 1




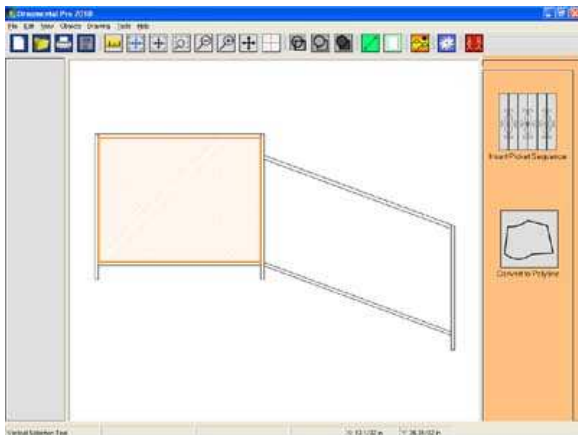
- In normal drawing mode, click the Rail Section button. 
- Choose a section frame style and double-click.




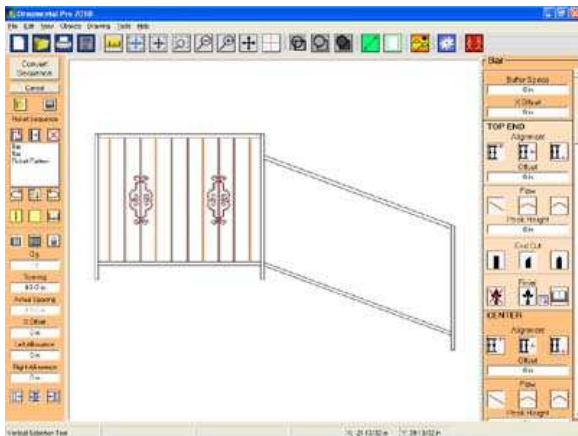
- Once you are back at the main screen, move the mouse pointer to the lower right or left side of the drawing area.
- Click down and drag to the side and the section frame will appear. Use the “Shift” key on the keyboard to force the section to be horizontal.
- Adjust the height if needed. This section was adjusted to 42”
- Click “Convert Section”






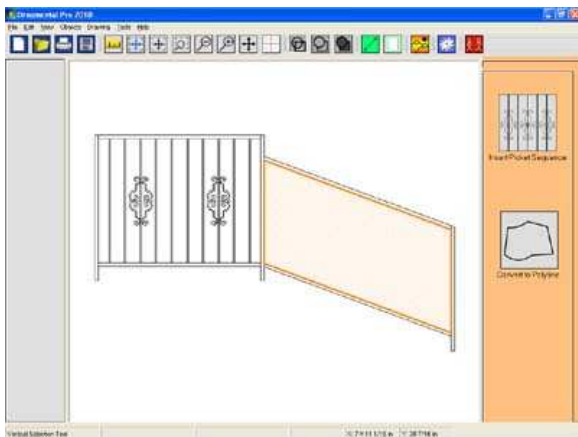
- Click the Rail Section button. 
- Choose a rail section that is missing a right or left post.
- Back at the main screen, hold the “Ctrl” key and move the mouse to the lower right post bottom until you see an orange square appear on the post bar. The new section will snap to that point.
- Click down and drag to the side and the section frame will appear.
- Click “Convert Section”




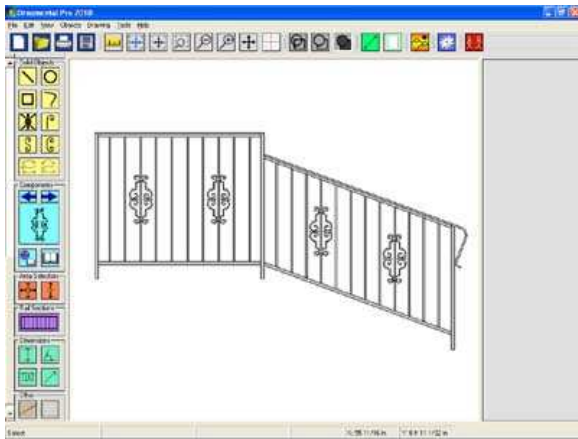
- Click the Vertical selection button. 
- Move the mouse pointer inside the first section frame opening.
- Click and the section opening will be highlighted in orange.
- Click the large “Insert Picket Sequence” button on the right side of your screen.






- Click the picket pattern library button. 
- When the library opens, choose a picket pattern and double click.
- Use the shuffle buttons  to rearrange the picket sequence order.
- Click the space evenly button  if you want the pickets spaced evenly.
- When you are done, click “Convert Sequence”

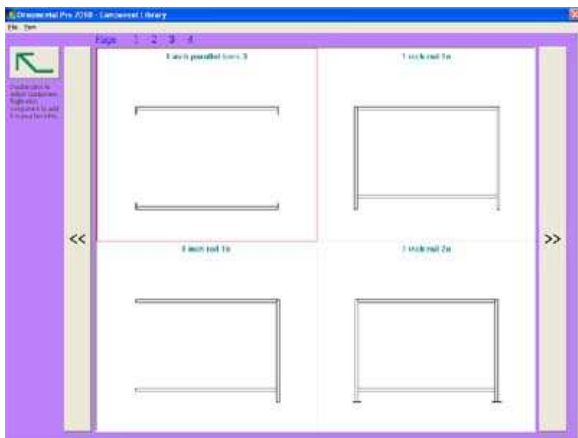



- Click the Vertical selection button. 
- Move the mouse pointer inside the second section frame opening.
- Click and the section opening will be highlighted in orange.
- Click the large “Insert Picket Sequence” button on the right side of your screen.

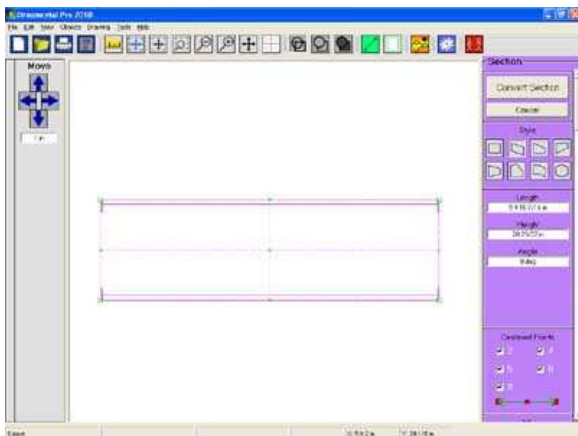


- Click the picket pattern library button. 
- When the library opens, choose a picket pattern and double click.
- Use the shuffle buttons  to rearrange the picket sequence order.
- Click the space evenly button  if you want the pickets spaced evenly.
- When you are done, click “Convert Sequence”
- On this drawing a lambs tongue was drawn over the top edge of the top bar.

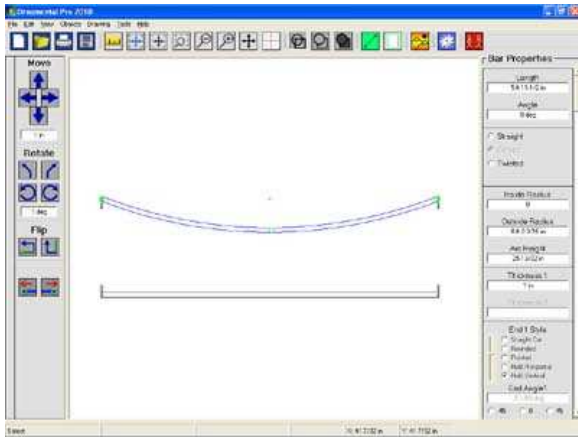
Example 2



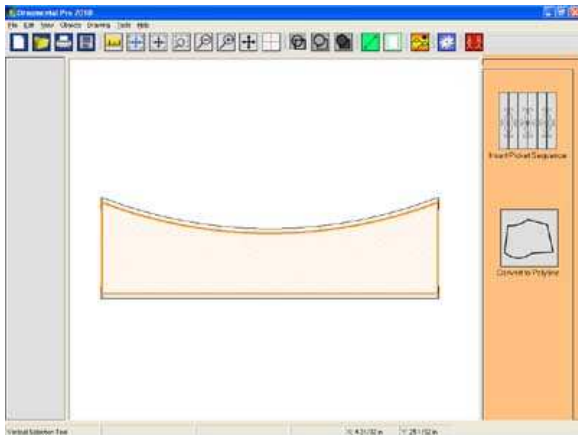
- Click the Rail Section button. 
- Choose a rail section that does not have a left or right post and double-click.



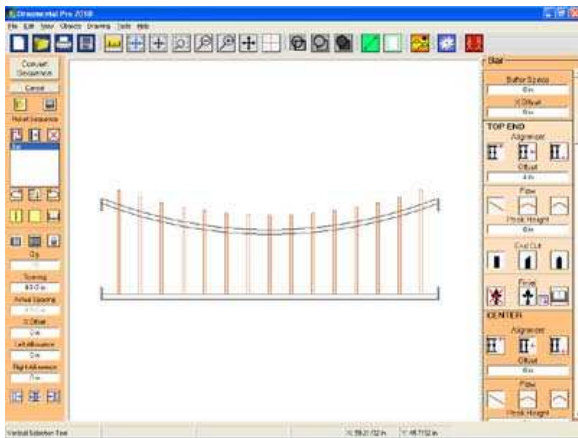
- Once you are back at the main screen, move the mouse pointer to the lower right or left side of the drawing area.
- Click down and drag to the side and the section bars will appear. Use the “Shift” key on the keyboard to force the section to be horizontal.
- Adjust the height if needed.
- Click “Convert Section”



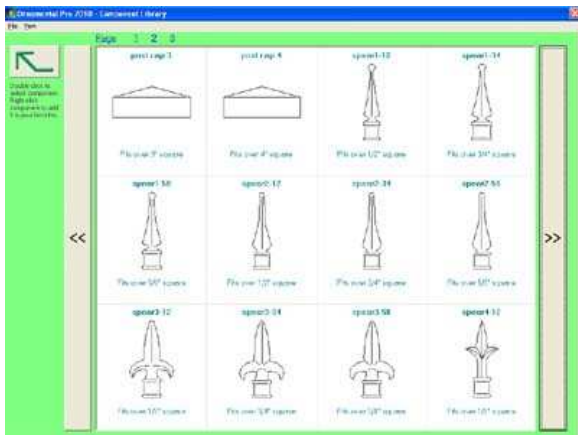
- Select the top bar so it turns blue.
- Move the mouse pointer over the middle point of the bar (green circle)
- Click on the green circle on the bar and drag it downward. The top bar will have a curve.



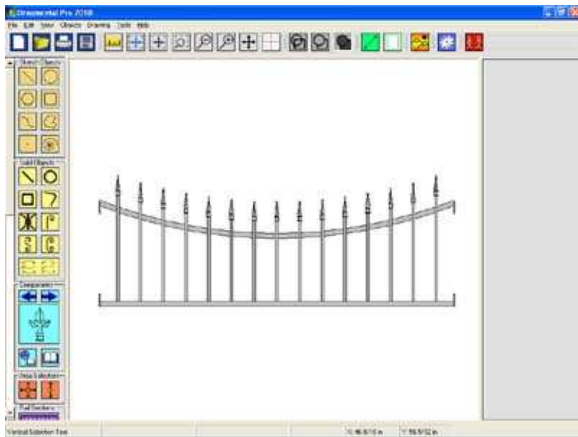
- Click the Vertical selection button.
- Move the mouse pointer between the top bar and the bottom bar.
- Click and the section opening will be highlighted in orange.
- Click the large “Insert Picket Sequence” button on the right side of your screen.



- Click on the word "Bar" in the picket sequence list on the left side of the screen. The bar properties will appear on the right side of the screen.
- In the bar properties, find the “Top End” properties and change the offset to 4 inches and press enter.
- Click the straight cut button (a vertical bar icon) so the tops of the bars are not angled.



- In the “Top End” properties, click the finial button (a finial icon).
- In the component library, double-click the finial of your choice.

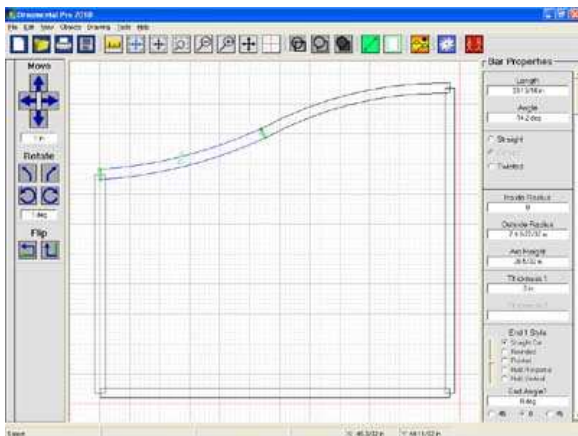


- When you are finished with the picket sequence, click “Convert Sequence”

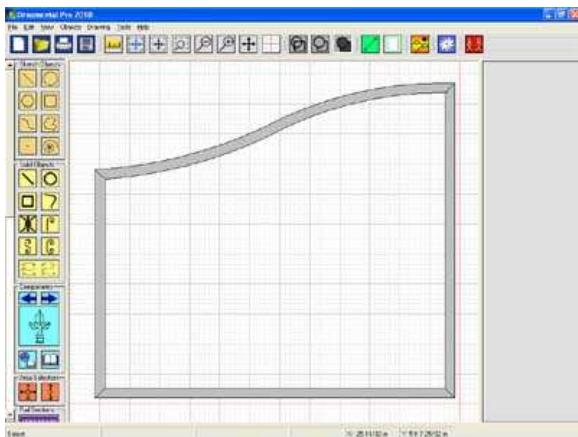
Drawing a Curved-Top Gate


One of the best ways to draw a curved-top gate is to construct the frame from individual bars connected together and mitered.

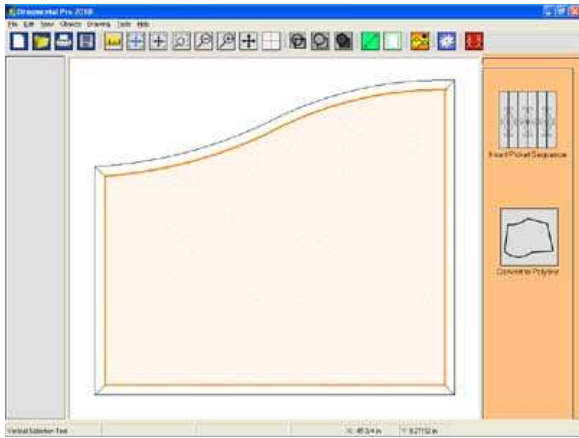
Example




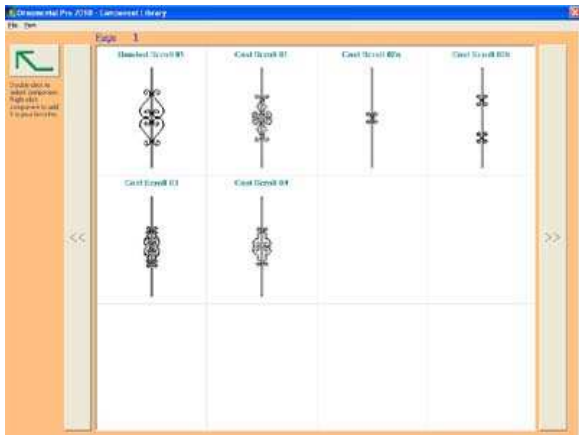
- Begin the gate half near the red vertical guideline. This will help you when cloning the other half.
- Draw individual bars. Connect their end points together by holding the “Ctrl” key on the keyboard while moving a bars end point.
- Curve the top bars. Click the green circle in the middle of the selected bar and drag.






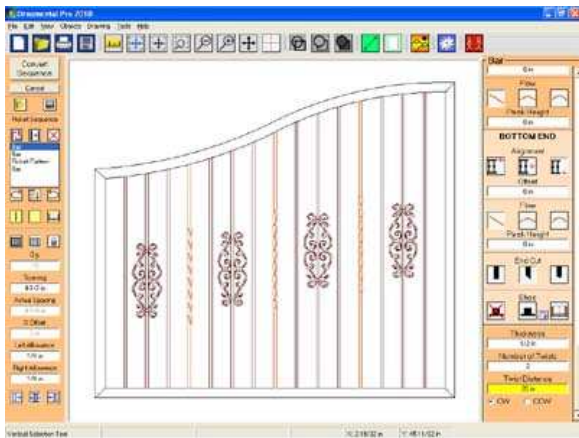
- Miter the bar ends together by selecting two bars with a common end point and clicking one of the miter buttons. 




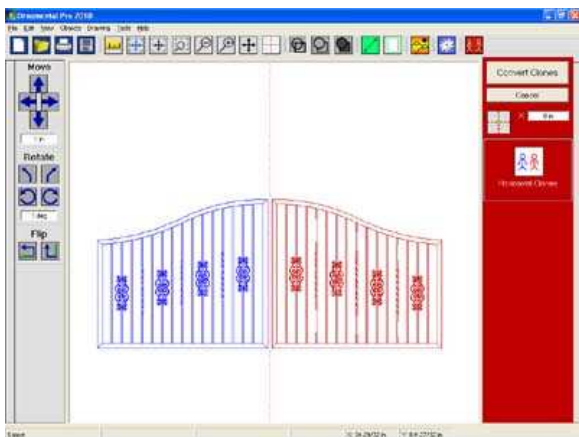
- Click the Vertical selection button. 
- Move the mouse pointer between the top bars and the bottom bar. Keep the mouse pointer close to the bottom bar because the selection will be based off of it.
- Click and the gate frame opening will be highlighted in orange.
- Click the large “Insert Picket Sequence” button on the right side of your screen.





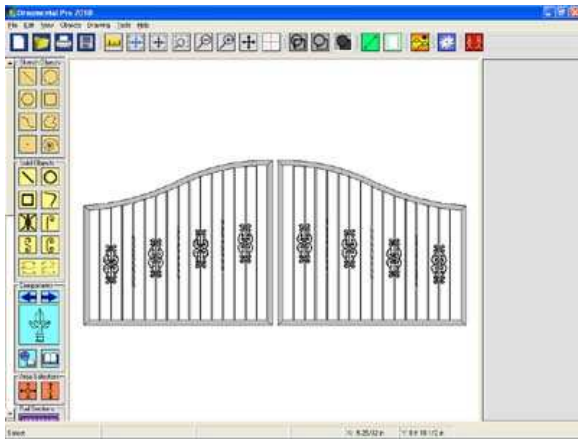
- Click the picket pattern library button. 
- When the library opens, choose a picket pattern and double click.
- Use the shuffle buttons  to rearrange the picket sequence order.
- Click the space evenly button  if you want the pickets spaced evenly.
- When you are done, click “Convert Sequence”



- Click on the “Add Bar” button  to insert another bar into the picket sequence.
- Click one of the bars in the picket sequence list box. The properties for the bar will appear on the right side of the screen.
- Use the scrollbar on the right side of the screen to scroll down to “Number of Twists”.
- Change the number of twists to 2 and the twist distance to 24”. This is how you twist an individual picket bar in the sequence.
- Click the “Convert Sequence” button when done.



- Zoom out and center the drawing.
- Press “Ctrl-A” on your keyboard to select everything.
- Click the Clone button. 
- Choose Vertical clones 
- Move the gate half or the clone guide if necessary.
- When you are done, click the “Convert Clones” button.



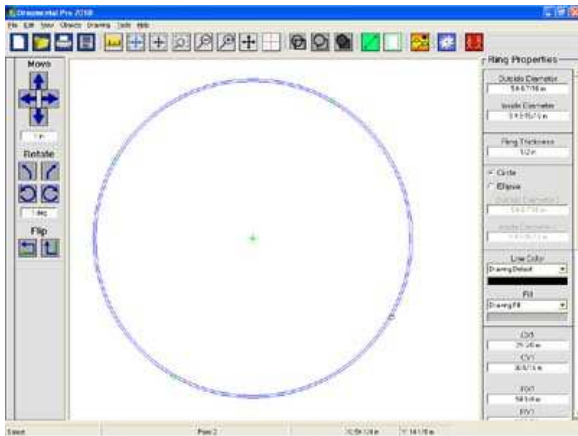
- At this point, you could draw hinges, latches and other items on the gate.

Picket Sequences

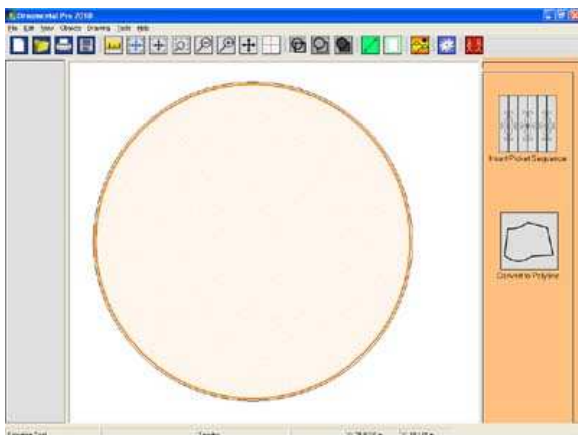
Overview


You can manually create picket sequences, save picket sequences and open picket sequences in the picket sequence library.

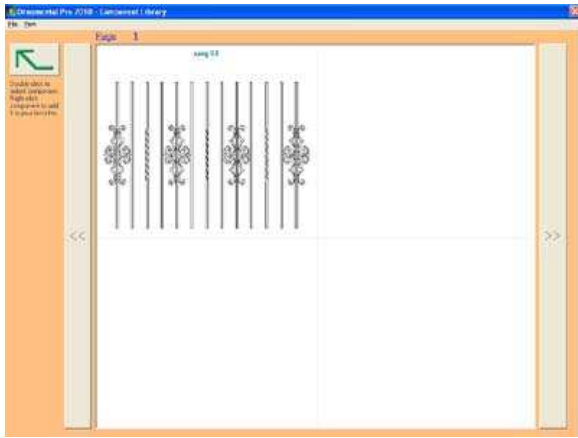
Example 1



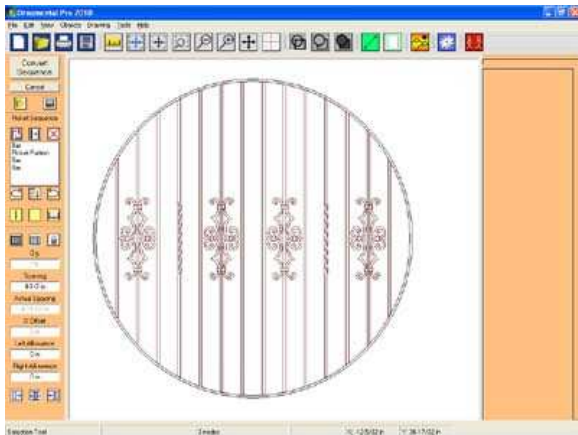
- For this example, we will draw a ring several feet across to show you that picket sequences can be added to just about any selectable space.





- Click the “Select Area” button.  This tool is helpful for selecting enclosed shapes.
- Click inside the ring.

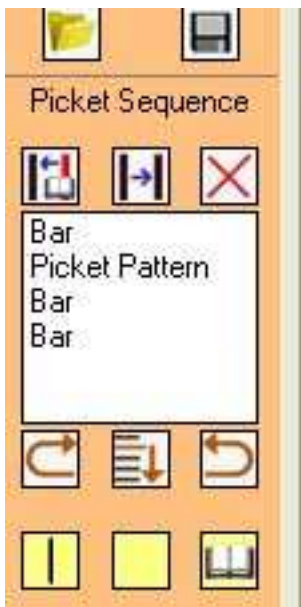



- Click the large “Insert Picket Sequence” button on the right side of your screen.
- Choose a picket sequence form your library and double-click.



- Use the shuffle buttons  to rearrange the picket sequence order.
- Click the space evenly button  if you want the pickets spaced evenly.
- When you are done, click “Convert Sequence”

Saving a Picket Sequence



- Once you have a combination of Picket Patterns and bars in a sequence you can **save** it in the Picket Sequence library by clicking the save button,  as shown in this image.
- You can open the picket sequence library by clicking the open button. 