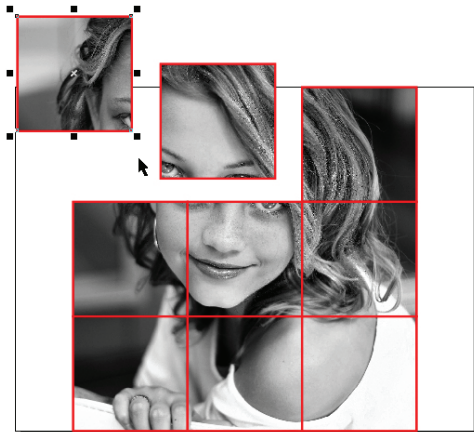
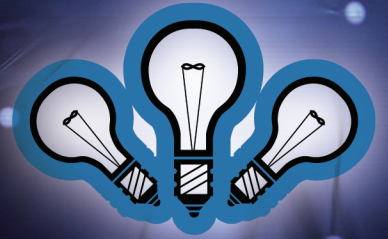


APPLICATION TIPS



Creating Multi-Tile Murals: Engraving Images and Artwork with Your Universal Laser System and CorelDRAW®

Introduction

Not very long ago, commissioning a personalized, multi-tile wall mural was a costly undertaking reserved for the relatively wealthy. Today, however, thanks to CO₂ laser technology, one-of-a-kind engraved murals are available at prices nearly anyone can afford.

A large and beautifully-engraved multi-tile wall mural can bring a living space alive and add a touch of elegance to any room. In addition, smaller multi-tile murals can be installed anywhere regular tile is used – on bathroom backsplashes, inside shower stalls, around bathtubs – as well as in less obvious locations, such as stair risers and fireplace surrounds.

Creating multi-tile murals on your Universal laser system is fast, easy and fun. In this easy-to-understand, step-by-step tutorial we will show you how to quickly and easily create beautiful, multi-tile murals using CorelDRAW and your Universal laser engraving system. We think you will find the process to be both rewarding and profitable.

Creating Multi-Tile Murals

Section 1: Getting Started

1.1: Before you start creating a mural, there are some important choices you must make:

- Choose a suitable photograph or artwork to engrave;
- Choose the type of material to engrave, such as marble, granite, acrylic, wood or laser tile;
- Choose the engraving tile size and finished mural size.

1.2: Some important questions to ask yourself:

Is the image a good candidate for engraving?

Getting high-quality images and artwork from customers has always been a challenge for engravers. The image your customer provides must be capable of 250 dpi resolution at the actual size in which you plan to engrave it.

Note: 250 dpi provides optimal quality engraving on Universal laser systems.

In addition, look for a well-composed and well-photographed image for best engraving quality. This will not always be the norm in the images your customers supply, but remember: you can always use graphic software programs such as Photoshop on lesser-quality photographs to crop borders, adjust brightness and contrast, remove scratches and blemishes, eliminate unwanted objects or backgrounds and add text or borders to enhance the overall image quality.

At what distance will the observer typically be located when viewing the tiled mural?

If the viewer will be standing just a few feet away, a smaller engraving tile size should suffice; if the viewer will be standing farther away, a larger size tile may be more appropriate.

If in doubt, create paper templates and hang them where the mural is to be located to ensure that the tile size is appropriate for that particular space.

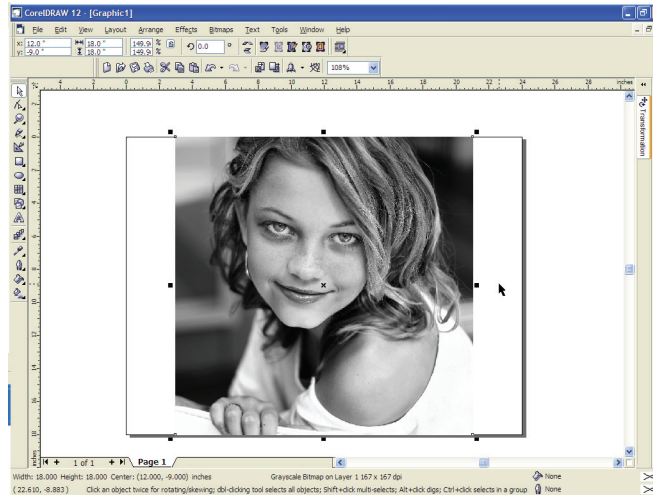
Will the mural be located indoors or will it be exposed to the elements?

If the mural is to be located indoors, you can safely engrave on materials such as soft acrylic (invert the image and engrave on the back side of the acrylic to provide scratch protection), wood and even mat board.

However, if the mural is to be located outdoors, you may want to consider using granite, marble, travertine or other lasting materials to provide long-term protection from the elements.

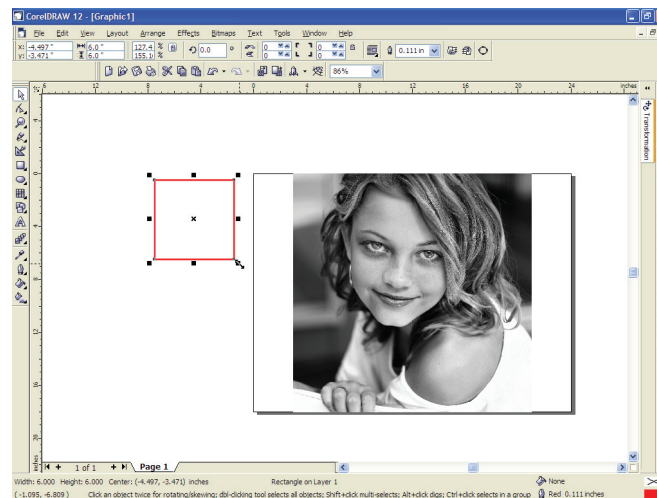
Okay... you've made your choices... now it's time to create the mural!

Section 2: Making the Multi-Tile Mural



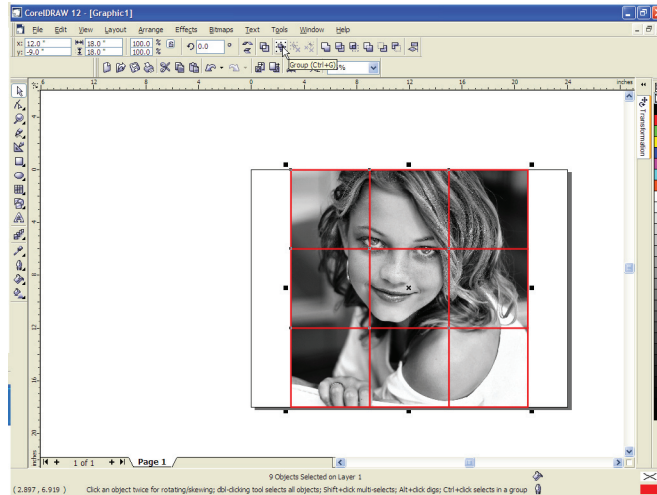
2.1: Import and size the image to be engraved.

- For the purpose of this exercise, the finished size of the tile mural is 18 x 18 inches.
- Keep in mind that the finished size of the mural must be an exact multiple of the tile size that you will be engraving; for example, if you are engraving a 6 x 6 inch tile, the finished mural size can be 18 x 18 inches, 24 x 24 inches, etc.
- Save the image at the size you intend to engrave @ 250 dpi/8 bit grayscale.
- If you are planning to process the image with image-enhancing software, such as PhotoGrav, you must save the image in the exact size you intend to engrave it @ 250 dpi/8 bit grayscale **BEFORE** importing it into CorelDraw.



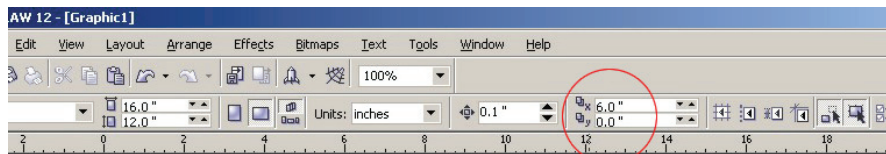
2.2: Draw a box-shaped outline the same size as the tiles you will be engraving.

- For the purpose of this exercise, we will engrave the image on tiles that are 6 x 6 inches square.
- Use the Rectangle tool in CorelDRAW's toolbox to create a box-shaped outline.
- Set the size of the outline box to **HAIRLINE**.

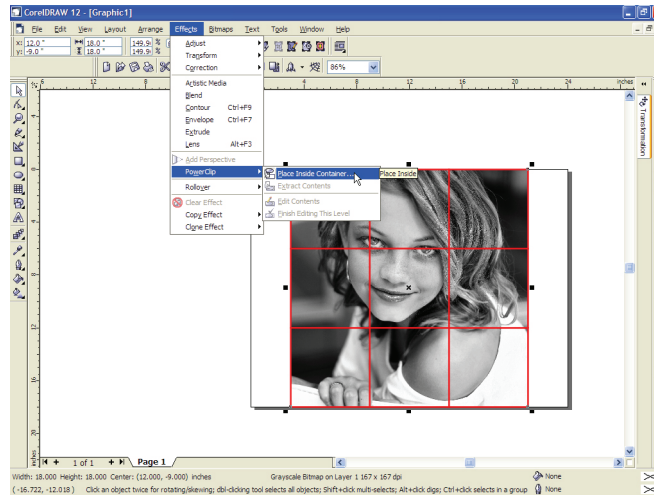


2.3: Duplicate the box-shaped outline to cover the entire graphic, then group the boxes together.

- Duplicate the box-shaped outline as follows: Make sure the box is de-selected. Change to the **PICK** tool and enter “6” (inches) in the “X” coordinate box in the Menu Bar and “0” in the “Y” coordinate.
- Now **LEFT CLICK** on the box to select it and press **CONTROL + D** to create another same-size box.
- Continue to press **CONTROL + D** until three boxes have been created.
- Again using the **PICK** tool, lasso the three boxes and group them together by selecting **ARRANGE ⇒ GROUP** from the Main Menu Bar.

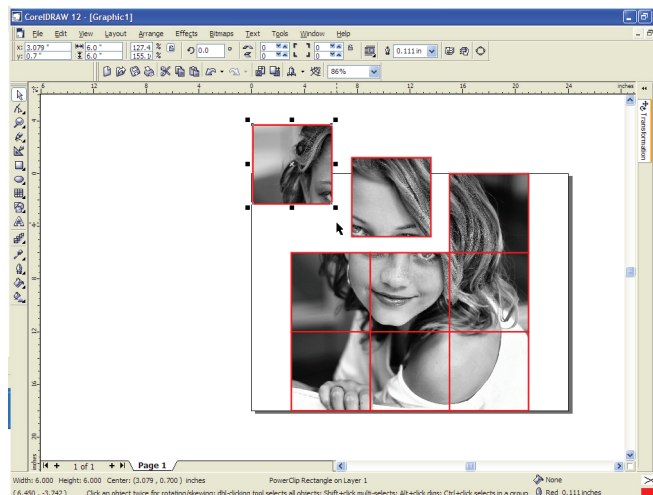


- Next, enter “0” (inches) in the “X” coordinate box in the Property Bar of the main menu and “-6” (minus 6) in the “Y” coordinate and press enter.
- Again click on the boxes and press **CONTROL + D** to create an entire row of same-size boxes precisely below the selected group.
- Continue to press **CONTROL + D** until three rows of boxes have been created.
- Finally, using the **PICK** tool, lasso and group **ALL** of the boxes you have created by selecting **ARRANGE ⇒ GROUP** from the Main Menu Bar.



2.4: Place the graphic inside the grouped box.

- First, move the six grouped boxes off to the side of the image you are planning to engrave.
- Next, click on the image to select it and, from the Main Menu, select **EFFECTS ⇒ POWERCLIP ⇒ PLACE INSIDE CONTAINER**.
- An arrow will appear; move it over one of the lines in the set of grouped boxes and **LEFT CLICK**. The graphic should move into the center of the grouped boxes.



2.5: Select **UNGROUP** to break the graphic into individual tile elements that you can process on the laser.

- Using the **PICK** tool, lasso the boxes and then ungroup them by selecting **ARRANGE ⇒ UNGROUP** from the Main Menu Bar.
- Now you should be able to click and drag any box and the portion of graphic that it contains away from the other boxes for individual laser engraving.
- Be sure to remove the black hairline rule around each box by **RIGHT CLICKING** on the color "invisible" at the very top of CorelDRAW's color palette.
- That's all there is to it! Congratulations, you've just learned how to create individual tiles that you can laser engrave into a mural.

Section 3: Finalizing the Multi-Tile Mural Project

3.1: Install a multi-tiled mural.

Once you (or your customer) decide on where the finished mural will be located, lay out the tiles on a large flat surface to judge how far apart they should be spaced and carefully measure both the finished size and the exact center point.

Next, using a pencil, mark a spot on the wall that coincides with the mural's center point and, using a laser level and a pencil, draw an installation grid from the center point outward.

Now you're ready to start installing the tiles. Some installers recommend starting from the bottom row center and working your way outward and upward.

It can also be helpful to temporarily affix thin wood furring strips to the wall to align the bottom of each row of tiles.

From this point on installing a tile mural is the same as installing any other type of tile -- the same adhesives and surface preparation methods may be used.

3.2: Promote your business.

When you deliver a finished mural to your customer, consider including a small matching tile engraved with your business name, signature and phone number that can be displayed with or near the mural – it can be an effective way to promote your business.