



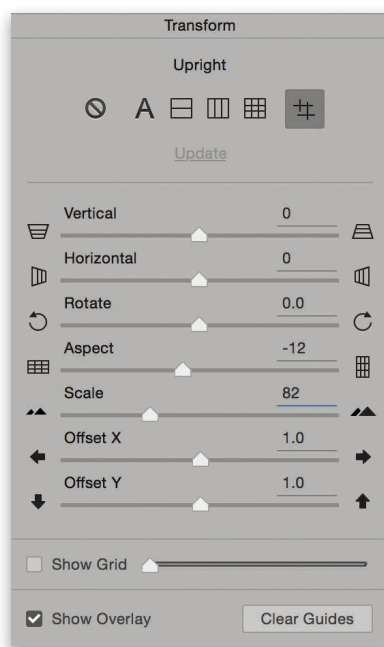
## Camera Raw 9.6 update

Welcome to the latest Adobe Photoshop CC bulletin update. This is provided as a free supplement to the *Adobe Photoshop for Photographers* book to ensure readers are kept up-to-date with the latest changes in Camera Raw.

This bulletin includes information about the main things that are new to Camera Raw 9.6 in Photoshop CC 2015. The features described here will be accessible to all Creative Cloud subscribers using Photoshop CC. For a complete description of how to use Camera Raw and the Photoshop tools, I recommend you buy the *Adobe Photoshop CC 2015 for Photographers* book by Martin Evening.

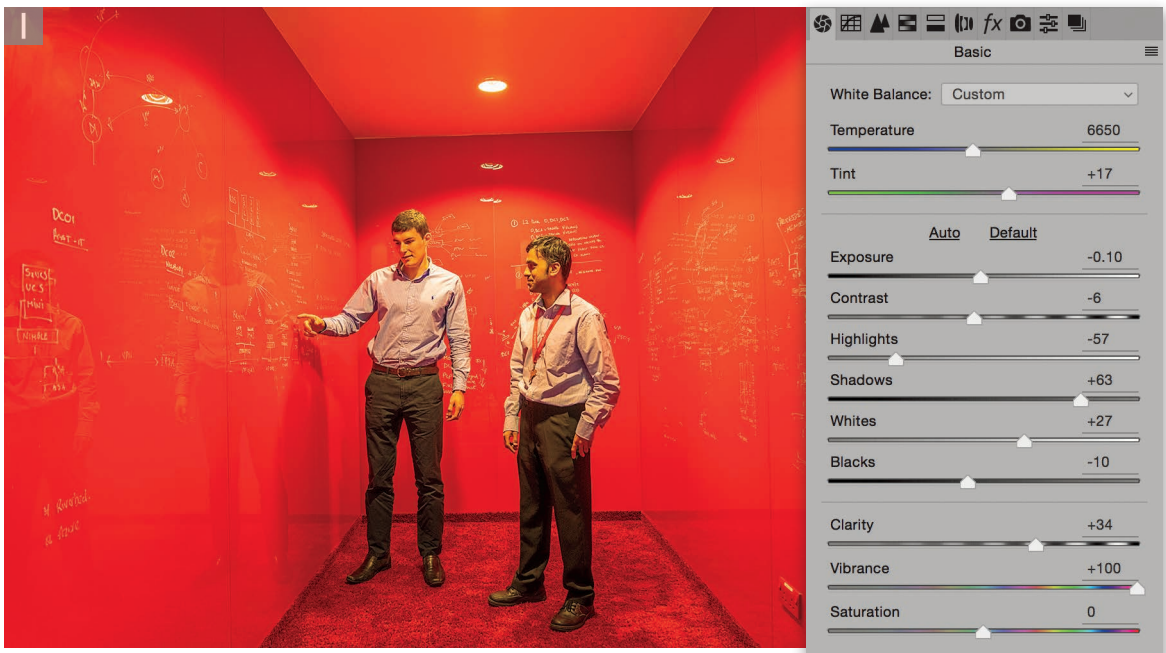
## Guided Upright adjustments

Guided Uprights offer a new, manual method of applying an Upright adjustment. To apply, click and drag on the image preview to add a guide that defines either a horizontal or a vertical angle and then click and drag to apply a second guide. You won't see any adjustment take place until you have applied a second horizontal or vertical line. In the Figure 1 example I first applied a horizontal guide to match the angle of the top of the building and then applied a second line along the edge of the pavement below. I needed to apply these two guides to achieve a guided horizontal transformation. Having done that I added a vertical guide to the left side of the building, followed by a vertical guide to the right. The addition of these two guides applied a guided vertical transformation to complete the Guided Upright transformation. You will notice in the accompanying screen shot of the Transform controls I also adjusted the Aspect, Scale and Offset sliders to fit the transformed image to the same cropped area as the before version.

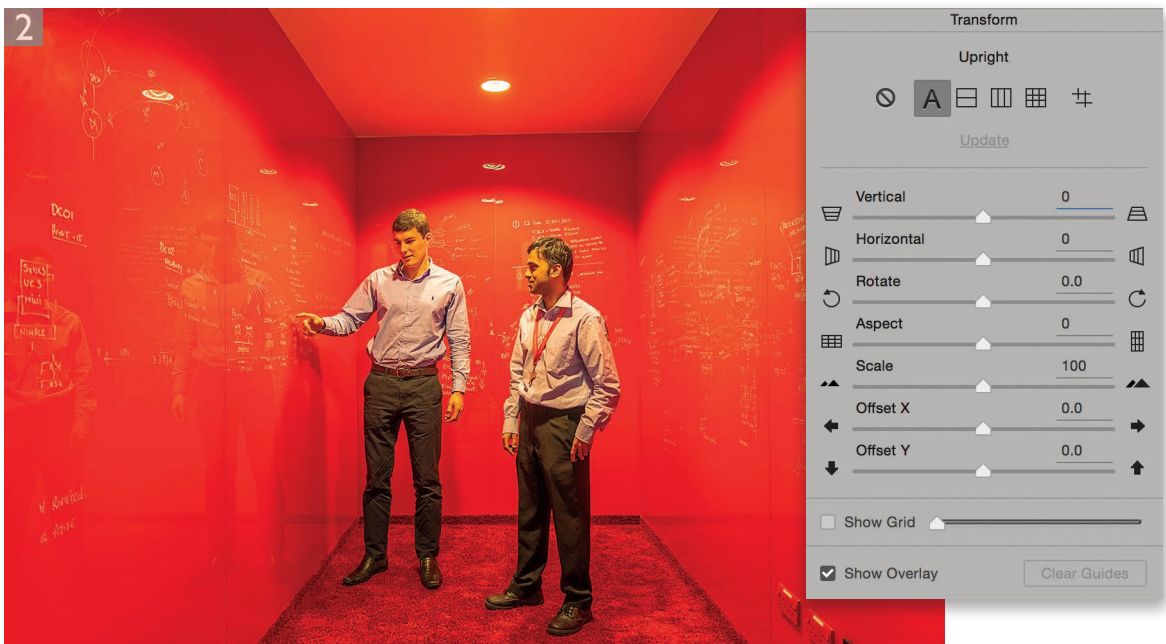


**Figure 1** On the left is the before image and on the right, a Guided Upright transformed version.

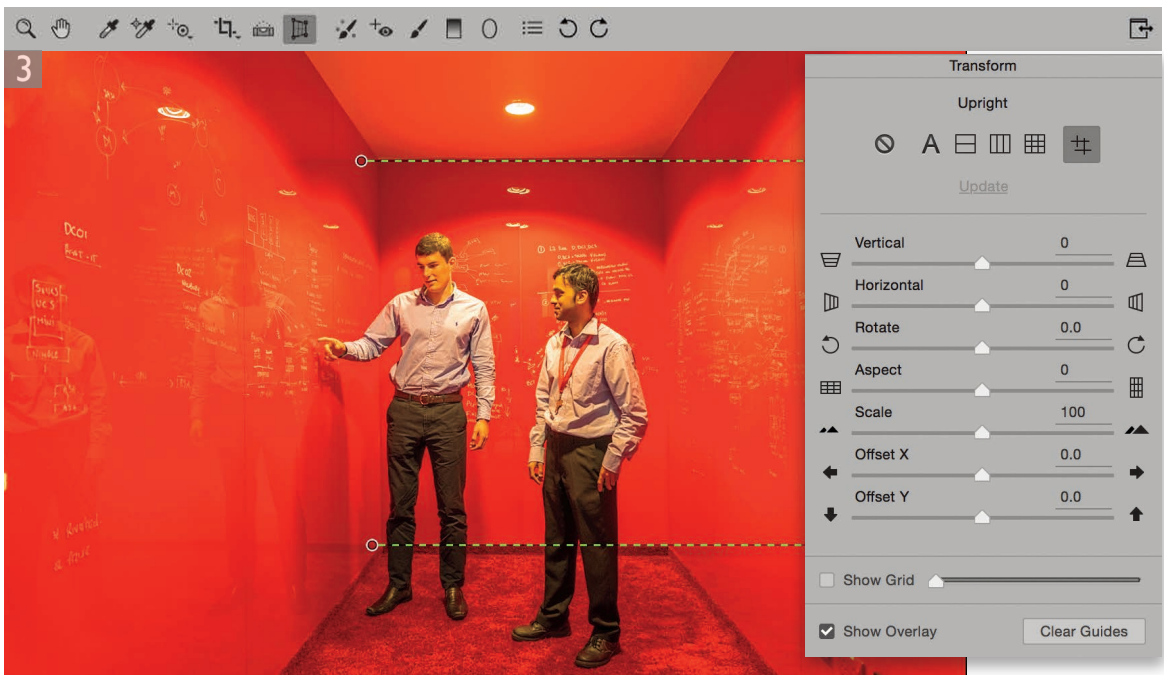




**1** This shows the before version, where I used the Basic panel to optimize the tone and colors. However, the angles in this photo were not perfectly straight.



**2** In this step I selected the Transform tool and in the Transform options clicked on the Auto button to apply an Auto Upright adjustment. This made the rear wall appear straighter, but not perfectly so.



**3** Instead, I clicked on the Guided Upright button and added two horizontal guides to apply a horizontal Guided Upright correction.



**4** For the final version shown here I also added two vertical guides to apply a full Guided Upright correction. I held down the **alt** key while adjusting one of the guides to reveal the loupe seen here.

## Camera Raw 9.4 update

### ***Photo Merge Boundary Warp***

When you use the Camera Raw Photo Merge feature to create a panorama image, in most instances you'll find the panorama preview will be an irregular shape. It can help to try using different projection methods, but ultimately you have to choose to either crop the image, use a content-aware fill to fill the outer edges, or warp the image. The Boundary Warp slider can be used to warp the shape of the panorama stitched image so that the boundary of the Photo Merge image fills to the edges of the canvas. You can look at this as a way of 'unwrapping' the image to make the most of the available image content and avoid having to crop.

The effectiveness of this approach is dependent on the type of subject. It works best on landscape subjects, such as the example shown over the page. It won't work well with photographs taken of buildings, or where the horizon line is visible and is likely to become bent. It is also dependent on the amount of distortion that's induced as a result of a Boundary Warp adjustment. This is why the Boundary Warp feature is offered as a slider, so you have complete control over the amount of warp adjustment you apply.

### ***Panorama Photo Merges and the Adaptive Wide Angle filter***

Camera Raw-generated panoramas now contain the metadata that allows them to be processed via Adaptive Wide Angle filter. This means you now have the option to take panorama DNGs that have been generated using the Panorama Photo Merge feature, save them as a TIFF variant and open them in Photoshop to apply the Adaptive Wide Angle filter.

The constraint lines you apply via the Adaptive Wide Angle filter are now able to access the required metadata information that allows you to align the constraints to the straight edges in a photograph. The lens profile metadata in a Boundary warp image that's made accessible to the Adaptive Wide Angle filter is not strictly correct. Nevertheless, having this metadata present does enable the Adaptive Wide Angle filter to work better with it than without.

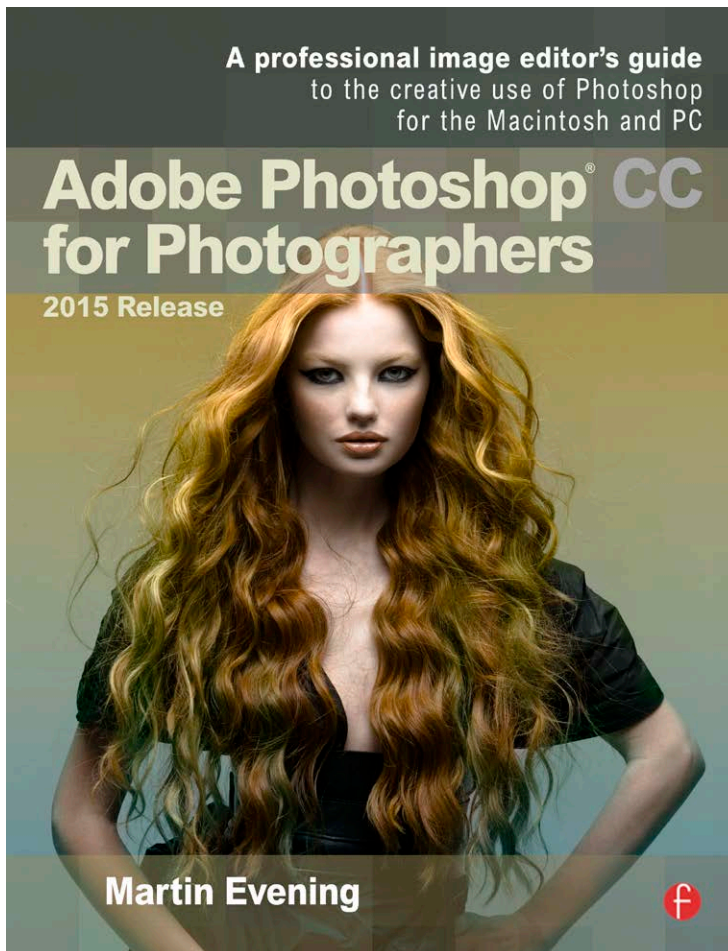




**1** This shows the Panorama Merge Preview dialog for a composite stitch created from three raw images. In this instance the Boundary Warp slider was left set at zero.



**2** In this step I set the Boundary Warp to 100, which warped the image such that the boundary filled to the edges of the frame.



Adobe Photoshop CC 2015 for Photographers is written by Martin Evening and published by Focal Press. Available from [Focal Press](#), [Amazon.com](#) and [Amazon.co.uk](#).