# **Crinkle Crankle Walls**

By Gary Porter

#### This is for the history buff. We need this type of masonry to reemerge!

What is a crinkle crankle wall? This is the term for a brick serpentine garden wall also called a ribbon wall, wavy wall, radius wall or a crinkum crankum wall. There are not a lot of examples of these walls today, but most of them exist in England.

### English inspired construction

Thomas Jefferson designed several of these walls at the University of Virginia back in the 1800's. On campus, along both sides of the historic rotunda and extending down the length of the lawn are ten pavilions, each with its' own walled garden separated by crinkle crankle walls. Authorities at that time thought that Jefferson invented this design. However, he was merely adapting a wellestablished English style of construction. The reason for using the crinkle crankle wall was because the wall could be constructed using a single wythe brick and achieve the strength of a double or multi-wythe wall. If you can get the same strength and only use one wythe of brick, you are saving on material, labor and \$\$ in the end. The wavy wall is also more pleasing to look at.



#### Design a stronger wall

The ironic lesson learned here is that the crinkle crankle design was a stronger wall even though it was the thinner wall? The strength of this wall is achieved by arching action. This type of wall exhibits similar strength that an arch over a window or door opening obtains by spanning the opening without steel or other means of support. Different from the window arch, this type of wall has a different force to contend with, that being the wind, and it is pushing in a horizontal direction with the wavy walls acting like the arch.





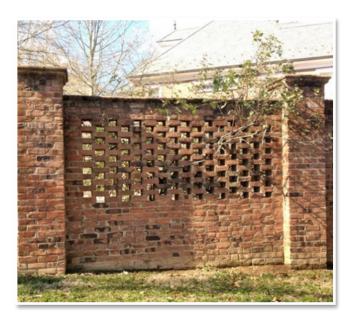


## Skilled masons deliver perfect technique

150 years ago, the construction of the crinkle crankle wall was utilized for the economics because it required less material and labor. This design was more stable to wind forces and it created an aesthetically pleasing beautiful brick wall. Using this design today would require more skill as the radius is more time consuming for the bricklayer to lay, more real estate with the winding footprint, resulting in more construction dollars required to build.

Many garden walls today are economically constructed with different kinds of reinforced concrete block, brick or stone. In Arizona there are probably more concrete block installed in fences, screen walls and decorative security walls than there are in concrete block buildings. If reinforcing is not an issue, there are many decorative concrete block options made of different geometric shapes, colors and sizes.







#### Concrete Block provide a Safe Barrier

Concrete block companies utilize raw materials and aggregates that are readily available to their geographic location to keep costs at a minimum. Concrete block walls do not get moldy, infested with termites or other insects and they do not dry out and rot. They supply a safe barrier.



We hope you have enjoyed looking at the historic crinkle crankle walls of the past and some of the new designs as well!



Do you have a question about crinkle crankle walls or other masonry topics? We've got answers!

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