

Geometry Lesson

by Andrew Wormer



Best friends from elementary school, Keith Fry and Bill Wilson morphed a door and window company, which they had established shortly after graduating from college, into Amazing Decks in 1999. Now they build more than 100 deck projects a year, including this unique circular pergola that's part of an extensive backyard living project completed in 2016 in Mount Laurel, N.J. Fry says that his design was inspired by a Paul LaFrance-designed circular pergola that the homeowners had seen and admired.

To form the 14-foot-diameter pergola's laminated outer beam, the team at Amazing Decks used a beam compass to lay out round beam sections on sheets of 1/2-inch PT plywood, cut the sections

out with a jigsaw, then glued and screwed them together into a continuous 10-layer beam. The inner beam was custom-fabricated from 1/4-inch stainless steel and suspended from the curved outer beam with six 5/8-inch-diameter tension rods fastened to brackets welded to the inner ring. The tension rods are offset a few inches from each of the outer beam's six support posts, while 64 equally spaced select red-cedar 2x4s were glued to the inner beam and nailed to the outer beam to complete the pergola structure. First, though, the outer beam was trimmed with Trex fascia; the stock was simply bent around the inner and outer sides of the beam, but had to be heat-formed to finish the top and bottom.

Curves figure prominently on the rest of the project as well, including the picture-frame border around the pergola deck and the step leading up to it, all finished with Trex decking. Fry says that his company does a lot of heat-forming on their projects, and in fact owns two Trex ovens and has a full-time employee to do all their curved work in-house.

Finally, in keeping with the geometric theme, the pergola is warmed at night by Firegear Outdoor's 30-inch Line of Fire linear burner firepit, and by a pair of 31-inch-diameter copper Grand Effects Essex combination fire and water bowls. ♦

Andrew Wormer is the editor of PDB.

PHOTO: SHAWN MAY