

Building in a Bubble

by David Morgan

Ask any owner of a construction business what his biggest headache is, and chances are the answer will be scheduling — scheduling around permit issues, client indecision, and that least controllable of all contingencies,



the weather. In the warm months, it's rain, and in the wintertime, it's snow, rain, or just miserable cold.


It has always bothered me that we couldn't improve winter working conditions. I have vivid memories of sleepless nights in bed, listening to the cold wind howling outside, dreading the moment I would have to get up and face another miserable workday.

For years, I dreamed of building a temporary shelter over a job. The opportunity to do something about my idea came last year, with a project in Weston, Mass., that involved a small sunroom addition. To complete the job by late May, we had to begin work in midwinter. So I decided to erect a geodesic dome over the site.

After an Internet search, I found a Canadian company, Littlewood Geodesic Domes (780/352-2569, www.edmc.net/domes/), that provided me with an instruction manual for building a dome of virtually any size and complexity.

The dome can be built from inexpensive, readily available parts — plywood, 2x4 studs, carriage bolts — and enclosed with ripstop poly. My total material cost was roughly \$1,200, plus \$130 for the manual. It took about two man-days of labor to make the parts and about a day and a half for a five-man crew to assemble the dome on site.

The finished structure — 38½ feet in diameter and 19 feet high at the crown — allowed us to work continuously from foundation pour through all exterior trim, siding, and paint. Painting in particular was a treat, because even with little or no supplemental heat, the dome maintained a 50- to 60-degree interior temperature. And, of course, everything stayed nice and dry at all times.

The geodesic shape, composed of many triangles, is one of the strongest man-made structures there is. Our dome withstood several severe “nor’easters” with 60-mph winds and heavy snow. We were the talk of the neighborhood and finished the job on time and on budget. Best of all, the crew kept warm and cozy, snuffle- and flu-free through what turned out to be a long, cold, snowy winter. 

David Morgan owns DRM Design Build in Southborough, Mass.



PHOTOS: DAVID MORGAN