

## Scope of Work

- Value engineering
- Structural engineering
- Mechanical engineering
- Electrical engineering
- Civil engineering
- Foundation construction
- Dome construction
- Additional steel & concrete construction
- None  Some  All



A dome's geometry, coupled with steel-reinforced concrete, give the structure its brute strength.



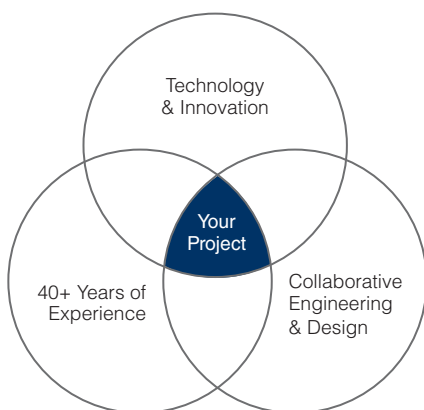
Each storm shelter can be designed with features like large windows and multiple entrances.

## Dimensions

53.3m (175ft) wide x 6.7m (22ft) dome roof + 7.6m (25ft) stem wall

## Qualifications

- ACI-certified shotcrete nozzlemen
- Type 1 (fire-resistant) construction



## Overview

Dome Technology has built a storm shelter on the Tupelo High School campus that is also the largest community storm shelter in the state of Mississippi.

At 175 feet in diameter, the low-profile dome can withstand an EF5 tornado. The 24,000-square-foot shelter is designed to accommodate 2,000 students in a wind event, and though a large building, it is being engineered to meet city restrictions on height.

“Due to a height restriction on the site, the dome needed to be a 1:8 ratio—that means (the dome) has a very low profile. Being the only dome builder that promotes and builds domes with this low of a profile, we were able to provide the solution for this project,” said Dome Technology sales manager Daren Wheeler.

FEMA and Mississippi Emergency Management Agency grants funded the majority of the project. Federal regulations specified the height of the shelter based on its proximity to a national park. “Because of the sightlines and scenic vistas, we had to keep the height down,” said principal architect Will Lewis of JBHM Architecture. “That low-profile curvature of the dome was what made (the storm shelter) feasible for that location.”

Although intended to serve as command center and storm shelter for the student population at Tupelo High School, the building was finished as a gym and can function as a multipurpose building also. Students will take priority during storms, but on the weekend, the shelter will be open to the public should a tornado be likely.

In an interview with local news station WCBI, Tupelo district athletic director Eddie Moore said, “We’re just proud to have it on our campus. We are the biggest high school in the state, and this reflects another plus for Tupelo High School and Tupelo Public School District.”

*“For nearly four decades we’ve relied on a collaborative approach with companies—they’re in the driver seat, and we help navigate. In every project Dome Technology incorporates innovative technology to maximize system performance with an economical solution.”*

*Bradley Bateman, Dome Technology CEO*

