

Breckon Sports Center

School: Park University

Location: Parkville, Missouri

President: Dr. Donald J. Breckon

Population: 1000+ Students

Facility: Twin Monolithic Dome gymnasiums, each 130' diameter, flanking a two-story, 3289-square-foot office complex

Design: Monolithic Dome Institute in Italy, Texas — Architect Rick Crandall

General Contractor: J E Dunn

Shell Construction: Dome Technology Inc. — Idaho Falls, Idaho

Completed: Summer 2000

Cost: \$107.00 per square foot

Front-entrance to the Breckon Sports Center at Park University in Parkville, Missouri. The twin 130-foot diameter domes provide a competition and a practice gym. The entire facility encompasses 31,891 square feet which includes a two-story office complex, locker rooms and a seating capacity for 1,000 spectators. Park University, nestled among the bluffs and wooded hills overlooking the Missouri River, has the largest underground campus in the world. Many of its much-used student facilities, such as the library, learning center, bookstore, computer lab and classrooms, were carved from the solid limestone, indigenous to this area. These rooms enjoy a steady, comfortable temperature of 70 to 72 degrees.

So, when university officials decided to replace their old, outdated and too-small gymnasium they began looking for structures that would provide some of the same benefits they already enjoyed, such as consistent and comfortable indoor temperatures, structural strength and stability, low maintenance, and affordable construction.

Dr. Paul Rounds, Executive Vice President for Administration, said, "We looked at what I call inflatable domes that were hung by tension wires. These tension wires are temporary and have to be replaced every 15 years. We just couldn't get comfortable with that. Then our athletic director brought us information on Monolithic Domes."

Athletic Director Claude English said, "Once we looked into all the features and the longevity of the Monolithic Dome, I don't think it had any competitors. Then we actually went to some completed school sites and liked what we saw."

"It all boiled down to this," Rounds added. "We found that by using the dome approach, we would end up with essentially twice as much space for the same amount of money. We could get two domes — two playing surfaces plus all the features we wanted — for the price of one playing surface."

Park University's new Breckon Sports Center includes twin Monolithic Domes, each with a diameter of 130 feet. They flank an ultramodern, two-story office complex of 3,289 square feet.







The school's 12, men's and women's NAIA (National Association of Intercollegiate Athletics, Region V) teams, competing in basketball, volleyball, soccer and softball, use both domes as gymnasiums. They use the one with two courts for practice and its twin — with 1000 spectator seats — for play.

Claude English said that he really likes the domes. "The actual facility is wonderful. You always look back and think about storage and things of that nature, but the actual facility — the office space, the locker rooms, the gyms — they're all very good.

"Normally, when you get into a dome situation the acoustics are pretty bad," he continued. "But in our performance gym they're really good. We put in special acoustical material and we will do that in the practice gym too."

Park University's coaches appreciate the practice gym as much — possibly more — than the performance gym. English said, "We now have a facility to practice in. No more cancellations because of bad weather. It's wonderful because we have terrible winters. It's been a dream come true."



Lighting along the dome's perimeter adds visual interest and depth. Scoreboard, lights and basketball goals are hung directly from the dome shell.

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The upper level of the gymnasium features a walking path around the entire perimeter. Please note that the second level is suspended directly from the Monolithic Dome. Lockers, painted with school colors, line the dome wall in the locker rooms.

