


# CASE HISTORIES IN INDOOR RECREATION FACILITIES

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## CASE HISTORIES IN INDOOR RECREATION FACILITIES

# RIDING MOTOCROSS INDOORS

## For racing enthusiasts of all ages, the AMSOIL Sandbox Arena is the answer to a dream

It may be home to the hottest, up-and-coming extreme sport in one of the coldest parts of the country, but the temperature is always moderate and it never rains in the AMSOIL Sandbox Arena.

"Anybody who has ever ridden motocross has dreamed of running one indoors," says Donnie Vincent, executive vice president of the new indoor motocross facility in New Richmond, Wisconsin.

That had been the dream of Vincent's partner, Rob Murphy, for several years—creating a great space where motocross bikes and ATVs could run in a safe and weather-free environment. Both Vincent and Murphy were riders and had been friends for some time.

Vincent, a research biologist at the University of Minnesota, had become involved in a few successful business ventures and decided to invest in Murphy's dream.

"It's a unique project," he says. "That's what I like to find—something that doesn't have a lot of competition. I thought it really had potential. The money gave the project credibility and was the catalyst that got it going."

### Getting started

To start the business, however, they needed to build the right building. For that, they turned to Derrick Commercial Contracting, a Butler Builder® in New Richmond.

"Motocross is pretty big out here," says Neil LaBeree, Derrick project manager. "Out in the middle of nowhere you'll see a track some-one's put together in a field for family and friends to practice on. But this facility can be used for practice all year round, especially in winter."

Although motocross is a niche sport, Vincent estimates as many as 3,000 racers live in the immediate area, which includes the Twin Cities in nearby Minnesota. Reach out to the five-state region and that number climbs to around 30,000. "And that's just racers—not people who are riding for fun," he adds.

Pro-level supercross—the term for motorcycle racing taken indoors—has grown to be the second most popular form of motor racing in the world, right behind NASCAR, according to PowerSports Business. It now packs venues like Atlanta's Georgia Dome and the Daytona International Raceway. Last year, supercross

***"We just told them that we were looking for a giant box—they did a really good job of designing something more"***

***DONNIE VINCENT***


*The arena's heated pit area (left) is one of the building's popular features. It includes a lineup of rental bikes, and it is large enough to house around 300 motorcycles and quads (four wheelers). Two large doors allow riders easy one-way access to and from the tracks.*

events attracted 830,851 spectators, according to the American Motorcyclist Association. More than 14 million watched the races on television, an increase of 40 percent over 2005.

Sandbox Arena, however, touts itself as "indoor motocross," primarily to keep from scaring people away. "Too many people see 'supercross' and think, 'I'm an amateur—I can't race that.' We called it 'indoor motocross' because—while we still have jumps that are big and potentially dangerous—everything is much more forgiving," Vincent explains.

Vincent and Murphy found the perfect location for a large arena next to the Cedar Lake Speedway. Noise—one of the major concerns expressed by potential neighbors—wouldn't be a problem there.

## Designing the building

The site needed to be overhauled before construction could begin. Wooded and rugged, the land was logged and then filled and flattened to accommodate the 285- by 410-foot structure and a 350-space parking lot. Part of the land, once used as a dumping ground, had to be dug up, cleaned out and refilled to provide a stable foundation.

### AMSOIL SANDBOX ARENA

Butler Builder®: Derrick Commercial Contracting, LLC, New Richmond, Wisconsin
Size: 116,800 square feet
Butler® Systems:
Landmark™ 2000 structural system
Shadowall™ wall system
MR-24® standing seam roof system

Derrick's design-build team worked with the arena partners to decide how much building the budget would allow. "We just told them that we were looking for a giant box," says Vincent. "They did a really good job of designing something more. Everyone there was dynamite."

Kevin Derrick, who was site superintendent on the project, had some insight into the partners' needs. He is also a former motocross racer. "It was an unusual thing that they were trying to do," he says. "We advised them about where they should spend money and where we thought they shouldn't. In the end, they didn't have just a big box—they had a good-looking, functional 116,800-square-foot building."

Derrick Commercial Contracting used three Butler® building systems for the arena's envelope—the Landmark™ 2000 structural system, the MR-24® standing seam roof system, and the Shadowall™ wall system.

The Shadowall system provided an attractive and economical skin. One corner of the building serves as the entrance, with doors on two sides. By framing the entrance with a second color of Shadowall panels, Derrick created a simple yet effective focal point for visitors.

Derrick chose the Landmark 2000 structural

***"We called it 'indoor motocross' because—while we still have jumps that are big and potentially dangerous—everything is much more forgiving"***

***DONNIE VINCENT***


***Riders and spectators taking a break can enjoy food and drinks in the lobby, where they also have access to free Wi-Fi. With plenty of large windows looking onto the tracks, there's no need to miss any of the action.***

system as a more economical way to provide the large open space needed for the courses, using 56- by 90-foot bays. The columns were incorporated into the track design and later were disguised as oversized beverage cans for a soft drink sponsor.

And, Vincent says, the weathertight, proven performance of the MR-24 roof system—especially on a building so large—was a big plus. "We get a lot of expensive equipment in here."

## Including something for everyone

To accommodate riders of all ages and skill levels, the arena has two tracks.

The 15,000-square-foot mini-track gives beginners on small motorcycles and quads a place to ride. The main course encompasses 90,000 square feet and accommodates faster bikes, up to about 450 cc. Designed by Shane Schaefer of Schaefer Tracks, the courses challenge both novices and experts.

"One of the owners' criteria was 30-foot-high

***As shown in the photo at right, two huge tracks occupy the majority of the building, with the lobby and heated pit area in front. Track configurations change about once a month and offer challenges for riders of all ages and skill levels.***

****Features shown on inset drawing may not all be reflected in present building.***


*The building's spacious entrance lobby (above) is set off from the rest of the building by darker exterior wall panels (right). The huge building has 6 inches of insulation in the walls and 11 inches in the MR-24® roof system, helping it to stay comfortable inside during the most brutal winter weather.*


sidewalls—and they needed a clear height of 34 feet at the center of the building," LaBeree says. "The jumps were built so the riders don't jump that high, but it's good to know that if they ever do, they're clear."

The arena also features a concrete-floored heated pit area that can house around 300 motorcycles and quads. Two large, bay-style doors allow easy one-way entrances and exits to the track. At one end, offices occupy a small mezzanine over the restrooms for the riders.

A bank of bleachers seats up to 2,300 spectators. When they want to take a break, a large lobby with video games and complimentary Wi-Fi opens onto a concessions area served by a commercial kitchen. Spectators eating at tables can still view the action through large windows facing the courses. There is also a cycle supply store for those who need parts or riding gear.

## Controlling the environment

One of the biggest challenges was the design of the heating and ventilating system for the huge climate-controlled arena. "Getting state approval for the building was really tough, because the state had not ever seen a building like this, and no one had guidelines to follow. We had to prove that we could get the air exchange needed," says LaBeree.

The wait for approval also set the construction schedule back, forcing Derrick to wait until April to begin construction. "Winter isn't a good time to start construction in Wisconsin," LaBeree says, noting that temperatures often dip below 0 degrees Fahrenheit.

To keep Sandbox Arena at a 50-degree interior temperature in winter meant also insulating the building well—6 inches of insulation in the walls and 11 inches in the roof, for an insulating value

***"I wanted to look professional without spending $10 million and we really do"***

***DONNIE VINCENT***



of R-34. The building performed well the winter following its opening. "It was brutal, -10 to -30 degrees outdoors at times, but we were able to keep the building at 50 degrees," Vincent says.

## Getting the green flag

Despite the delay, Sandbox Arena opened on schedule October 1, to great reviews. Online discussion boards are filled with compliments. Roadracing World said they were "totally blown away" after spending a day at the track.

Open for practice 12 hours a day, seven days a week, Sandbox Arena also hosts competitions like Bob's Cycle Winter Classic and the Polaris Quad Racing Series. In April, the dirt course was flattened for a sprint midget car race. "We change the track about once a month anyway, just to keep it interesting, to try out different obstacles," Vincent adds. "It takes four days to create the new track."

Now the second largest indoor motocross facility in the country, the Sandbox Arena really is a dream come true. "We love it," Vincent concludes. "We get a ton of compliments on it. I wanted to look professional without spending $10 million and we really do. It's great."

*Youngsters prepare to race on the 15,000-square-foot mini track (top left). The metal bars in the foreground fall flat, allowing the riders to drive over them and assuring a fair start.*

*Donnie Vincent (left) and his partner, Rob Murphy, are pleased with the enthusiastic response to their new building. Vincent estimates as many as 3,000 racers live in the immediate vicinity alone.*

# The Ultimate Indoor Tennis Facility

## The USTA's new Indoor Tennis Center is a showplace worthy of the world's largest annually attended sports event

*The new Indoor Tennis Center contains 12 courts—nine on ground level, like those shown here, and three more on the second floor.*

*An observation corridor (see above) overlooks the ground floor courts on either side.*

Anyone visiting the USTA Billie Jean King National Tennis Center in New York City can play on the same courts as tennis stars Serena Williams and Roger Federer for 11 months of the year. For just one month, the center closes to public play to host the U.S. Open, the fourth and final tournament in the sport's grand slam.

"Nearly 750,000 people visit the center during the two weeks of the U.S. Open. It is the largest annually attended sports event in the world," says Daniel Zausner, managing director of the center.

To accommodate the mass influx of visitors, as well as the ever-expanding public programs, several years ago the USTA embarked on a mission to significantly increase the size and usage of its Indoor Tennis Center.

"When the original indoor court building opened in 1978, the U.S. Open was attracting a couple hundred thousand people," Zausner explains. "Over the past 10 years, it had to handle three to four times that volume in the same area. Our regular programs also had grown so much that the building could no longer meet our needs."

Butler supplied the steel for the building, with Butler Heavy Structures furnishing structural engineering. "We wanted to work with Butler," Zausner recalls. "We felt that Butler had a long, storied career in building pre-engineered steel structures that are the largest and the best of the indoor tennis facilities. As the governing body of tennis in this country, the USTA is certainly up to speed with what private tennis facilities are doing with new construction, and Butler has a good reputation."

### USTA INDOOR TENNIS CENTER

Butler Builder®: Indoor Courts of America (ICA), Inc.; North Salem, New York, and Kansas City, Missouri
Structural Engineering: Butler Heavy Structures, Kansas City, Missouri
Architects: Turner Meis + Associates, Los Angeles, California;
Perkins Eastman Architects, PC, New York, New York
Size: 249,000 square feet, including all floors
Butler® Systems:
Widespan™ / conventional hybrid structural system
StylWall® II flat wall system
Butlerib® II wall system
MR-24® standing seam roof system

***"It's so much more than the typical indoor tennis facility that you would find in communities across the country"***

***DANIEL ZAUSNER, USTA***

THE USTA BILLIE JEAN KING NATIONAL TENNIS CENTER

- Owned by the City of New York and operated by the U.S. Tennis Association.
- Opened in 1978 across the street from Shea Stadium, now called Citi Stadium, home of the New York Mets.
- Built on the grounds of the 1939 and 1964 World Fairs, today encompassing 46.5 acres.
- Open to the public seven days a week for 11 months of the year, closing only on Thanksgiving, Christmas and New Year's Day.
- Courts number 45, including 12 indoors.
- The complex's three stadiums are among the largest tennis stadiums in the world; Arthur Ashe Stadium tops the list with seating for 23,200.
- Court Number 2 is Louis Armstrong Stadium, which served as the main stadium until the completion of Ashe Stadium in 1997.
- All courts are surfaced with DecoTurf, a tennis hardcourt comprising layers of acrylic, rubber, silica, and other materials on top of an asphalt or concrete base.

## A multi-purpose facility

The building's footprint alone covers around 144,000 square feet. Through numerous meetings with strategic partners—including food service, merchandising, community tennis groups and staff—a design for the massive structure began to evolve. "It was a bit of a puzzle. We had to figure out how all these paths could cross in one building," Zausner says.

To meet the USTA's need for growth, the number of indoor courts increased from nine to 12—nine at ground level and three on the second floor. The new facility also houses a fitness center, retail shops, offices, classrooms, hospitality areas, a Kid Zone, locker rooms, a commissary and a future museum. After the initial design phase, a third floor was added for offices and mechanical rooms.

"It's so much more than the typical indoor tennis facility that you would find in communities across the country," adds Zausner.

## Complex engineering

Accommodating the diverse activities proved to be the biggest challenge for the project. "We were integrating multiple uses that have different design requirements within the same structure," explains Jeff Jones, the project engineering manager for Butler Heavy Structures. For instance, the load requirements on the second floor were different for the tennis courts, the offices and the fitness center. The column-free space needed for the courts required 120-foot clear spans that directly attached to the multi-level offices in one area.

To keep costs down, Butler Heavy Structures worked closely to integrate systems construction with customized, conventionally fabricated steel wherever possible. The building incorporates components of the Widespan™ structural system, and its walls are a combination of the Butlerib® II and StylWall® II wall systems, with the StylWall II panels installed horizontally above a masonry wainscot.

USTA chose the MR-24® standing seam roof system for the facility to ensure weathertight, virtually maintenance-free performance.

The skewed design of the massive 129,000-square-foot roof, however, was as unique as the

***"It was a bit of a puzzle—we had to figure out how all these paths could cross in one building"***

***JEFF JONES, BUTLER HEAVY STRUCTURES***

***The spacious entrance lobby welcomes visitors to the building's many functions. Along with the expanded number of indoor courts, the building contains a fitness center, retail shops, offices, classrooms, hospitality areas, a Kid Zone and more.***

rest of the building. "The roof is not square," explains Jones. "There's a step in the middle of it and it also has cutouts in the middle open to the floor below to hide the mechanical equipment from the view of people on the ground." In front, the roof extends into a truss-supported canopy over the main entrance.

Because of the roof's unusual configuration, the bracing required special attention. "A single change in one area meant all of the bracing had to be reviewed," Jones adds.

## Unusual conditions

With the extensive design process finished, demolition began. Most of the existing structures were removed. The concession

### More About the U.S. Open

- Though officially begun in 1968 with the merger of five contests, the U.S. Open traces its history back to 1881, making it the oldest tennis tournament in the world.
- Arthur Ashe won the inaugural U.S. Open as an amateur.
- Bill Tilden played in the most men's singles finals since 1881. Molla B. Mallory holds the record for women's singles finals.
- With his 2008 U.S. Open victory, Roger Federer became the first man to win five successive titles at two different Grand Slam events (the Open and Wimbledon).
- Serena Williams won the 2008 U.S. Open women's finals, her ninth career Grand Slam title.

***"Our programs have seen significant increases and our courts are playing great"***

***DANIEL ZAUSNER, USTA***

***The column-free space for the interior courts required 120-foot clearspans, and the courts had different load requirements than other areas of the building, making the initial planning process challenging.***

stands, however, furnish 40 percent of the food sold during the U.S. Open, and they were incorporated into the new design. "We worked around and over the top of them, so that everything looked like it was part of the same building," Jones says.

But before construction could even begin, the site and foundation preparation had to be complete. In the 1920s, the area of the present park had been an ash dump. The ground conditions are extremely poor, and all foundations need to include sunken pilings.

Butler shipped approximately 1,864 tons of steel to the site. Coordinating steel deliveries was an issue for this very tight site. Butler was able to deliver steel in sequence based upon the stages of erection.

Despite the many complications, USTA was able to continue regular activities throughout the construction phase. "We had to put bubbles over some of our outdoor courts, but to shut down any of our programs would have gone against the grain of what we do as an organization," says Zausner. "We even managed two U.S. Opens while under construction."

## A showplace

Once the ambitious project was complete, the impressive new building proved to be everything the USTA had hoped for. Its additional courts have allowed them to expand programming and pursue more national competitions. But also important is that it's once again a leading-edge venue for one of the world's most popular sporting events.

"We wanted the building to represent the USTA and the U.S. Open—and to be a building that is incredibly unique for tennis," says Zausner.

"We now have a building that helps us meet our needs. Our programs have seen significant increases and our courts are playing great. The building looks great, it operates well, and it is being incredibly well received."


# Building a Bridge to Faith-Based Adulthood

## The Bridge in Joplin, Missouri, provides wholesome entertainment for adolescents in a safe, faith-based environment

***The Bridge complex consists of three linked structures: The Autumn Ramp Park, left, is an indoor skateboard and BMX bike ramp facility and it also houses an alternative school for at-risk teens. The Bridge building, center, includes a basketball/ volleyball court, climbing wall, concessions, Internet café, and game arcade. The Foundry, right, is a concert venue.***

Over the din of the lawn mower one afternoon, youth minister Dan Mitchell heard the answer to his prayers. He wanted to connect with young people, the ones who don't necessarily go to church.

"I felt like the smartest direction would be to create a true attraction that had as diverse a cross-section of kids as any school—or more so," says Mitchell.

In 1999, with the support of more than a dozen churches, he started a nonprofit organization, Bridge Ministries Inc., in Joplin, Missouri. Located in an old supermarket, the new program was dubbed The Bridge, symbolizing the transition between childhood and adulthood, as well as the connection to a faith-based life. Mitchell's idea to provide wholesome entertainment evolved quickly, drawing hundreds of kids after school and on weekends.

By providing a fun place for teens, The Bridge aims to be the new Main Street—a place where youth can congregate. It's a place, too, where caring people and faith communities can connect with teens. "We don't force kids; we don't have big sermon times. We're the activities mall for teens—and we invite people from communities of faith to build relationships by participating in the activities alongside the kids," Mitchell explains.

Within just a few years, The Bridge's popularity demanded a new location. "We were having to open up to the outside of the building to meet fire code," Mitchell recalls. "That's when you know you need a new building."

### THE BRIDGE

Butler Builder®: JMH Construction, Joplin, Missouri
Architects: McElwee & Associates, Joplin, Missouri
Size: 61,694 square feet total
Butler® Systems:
Widespan™ structural system
Butlerib® II wall system
MR-24® standing seam roof system

### Getting the pieces

Mitchell tapped JMH Construction Inc., a Joplin-based Butler Builder®, for assistance. McElwee & Associates of Joplin was the architect of record. John Q. Hammons, the hotel and resort developer, donated 60 acres easily accessible to I-44 to build a new facility. Hammons grew up in nearby Fairview, Missouri, and has developed two hotels in Joplin. "Some pieces just came together," Mitchell says.

"We had gone around the country and looked

***"There were 100 vertical supports that JMH set with lasers around the site and they were all right on"***

***DAN MITCHELL***

at places—commercial and faith-based, new construction and remodels. We had some drawings we had put together after the tour. We were able to create a space based on the knowledge we'd gained of how kids work in an entertainment environment."

The design-build project called for three linked structures—a total of 66,000 square feet under roof. "They wanted a skate park, basketball and volleyball courts, a music venue, a rock-climbing wall, an Internet café and gaming space," says Ron Jones, president of JMH Construction. "We broke it into three different buildings with three different fronts, using The Bridge to connect in the middle."

The name inspired Jones to create an external bridge structure on the center building using exposed steel. "Butler bent the exposed structural steel to give the physical appearance of a bridge," he explains.

Mitchell and Steev Inge, a friend and co-worker at the time, came up with the basic design for the three buildings. "We wanted it to be cutting edge. We called it a techno-industrial look. It's pretty raw—concrete and exposed wires with really nice lighting and great technology pieces that bring color to an industrial palette," Mitchell describes.

Using Butler® building systems worked perfectly with the pair's vision. Exposed structurals would fit the design scheme, and the long clear-spans afforded by the Widespan™ structural system could provide the column-free space needed for a concert hall and basketball courts. "Ron really sold us on Butler. He always said Butler is the Cadillac of metal building systems. And he mentioned the roof system as a big selling point," Mitchell adds.

## Putting them together

The site work was extensive. JMH had to clear 25 acres of woods to accommodate the buildings, 2.5 acres of parking lot and exterior trails. Nonetheless, the $5.25 million project opened a year and three months later.

"It may have been the rainiest time we'd had in several years when they needed to do site work," Mitchell recalls. "They did an incredible job working through that. There were 100 vertical

***The Bridge's climbing wall—the tall orange shape at right—required 42 feet of vertical space. The builder dug down 10 feet and raised the building's eave space an extra 10 feet in the climbing area rather than raising the height of the entire building.***

## BUILDING A BRIDGE TO FAITH-BASED ADULTHOOD

***"We're the activities mall for teens—and we invite people from communities of faith to build relationships by participating in the activities alongside the kids"***

***DAN MITCHELL***

*Systems construction was ideal for the open spaces and the techno-industrial look that Bridge Ministries wanted. Here, Dan Mitchell, left, chats with a colleague in The Autumn Ramp building, with its indoor tracks for skateboarding and BMX bikes.*

supports that JMH set with lasers around the site and they were all right on."

The Autumn Ramp Park went up first. The 25,694-square-foot indoor skateboard and BMX bike ramp facility includes an equipment and apparel shop. Bridge Ministries rents the 5,694-square-foot mezzanine to an alternative school for at-risk teens established by 10 local school districts.

The Foundry, a 7,700-square-foot concert venue, was constructed next. It features a large performance stage, state-of-the-art sound and lighting systems, a juice bar, booth and bar seating, a box office and pool tables.

The Bridge—28,300 square feet—links the two outside buildings and was completed last. It contains a caged court for basketball and volleyball, a rock-climbing wall, concessions, an Internet café and videogame/network arcade.

"It was a challenge," Jones adds. "There were more than 500 imbedded bolts in the concrete to fit the buildings together. When everything finally went together perfectly, we could breathe easier," Jones says.

### Creativity and endurance

Accommodating The Bridge's climbing wall took some creativity. It required 42 feet of vertical space. Taking the entire building to that height would mean heating and cooling thousands of extra cubic feet of space. Instead, JMH dug down 10 feet and raised the building's 24-foot eave height 10 feet in the climbing area only. "That got us our 42 feet—and a better electric bill at end of the month," Mitchell says.

JMH also specified a well-insulated envelope to complement the building's energy-efficient air-source heat pump. All three buildings utilize the MR-24® standing seam roof system and Butlerib® II wall system, with 8 inches of insulation in the roof and 4 inches of insulation in the walls.

Shortly after the complex opened, an ice storm struck Joplin, leaving ice nearly 6 inches thick across more than an acre of roof. The roof held—without a leak.

"I think that's a testament to the Butler engineers. There were a lot of metal buildings in southwest Missouri that were gone after that ice storm," Mitchell says. "It's a critical deal. When you have a thousand kids in your building, even if it is the worst ice storm in 100 years, you want your building to be designed and built to take that on. Ours did."

### An ever-growing success

Today, The Bridge averages about 1,600 visitors a week. "We have more than 20,000 names on file. And, we know that 54 percent of the 12- to

***"When you have a thousand kids in your building, even if it is the worst ice storm in 100 years, you want your building to be designed and built to take that on—ours did"***

***DAN MITCHELL***


## WHAT'S IN A NAME?

Dan Mitchell appreciates subtlety. When he decided to start an organization to bring faith to teens, he knew a successful approach would have to be soft. So he built a program that allows faith communities to reach teens on their level—doing what they like to do in a safe environment.

When it came to naming the buildings, the team at The Bridge was determined to be subtle:

The Bridge came from the program's mission to help kids make a successful transition into responsible, productive adults. It also symbolizes the connection between teens and faith. The actual building with this name is the hub of the complex.

The Foundry drew its name from a place where metals are melted down and impurities taken out so they can be made into something useful.

The Autumn Ramp Park reflects the time of year when plants must die in order to live, and when harvests are reaped and festivals are celebrated.

24-year-olds in Jasper County have a release on file with us," Mitchell says. Since releases are only required for rock climbing and skating, that number doesn't reflect anyone coming just to concerts, gaming or the café.

Despite these numbers, parents know their kids are in good hands. Bridge Ministries' relationship with area churches has helped them recruit a large pool of adult volunteers to interact with the youth and provide needed supervision at large events. All volunteers are carefully screened and trained in The Bridge's mission and contemporary youth culture. A system of 60 surveillance cameras also enhances security.

Bridge Ministries plans to expand its successful venture when the time is right, both in Joplin and beyond. And the buildings in Joplin were built to expand. The end walls of the two side buildings can move out to add more square footage when needed. Even-tually, Mitchell says, they also want to develop the rest of the acreage, perhaps bringing in other attractions like a water park.

In the meantime, compliments continue to come in daily, as people drive up to take pictures of the facility. The buildings won an award from *Metal Construction News*, a magazine devoted to systems construction. Mitchell recently participated in a panel discussion at Pepperdine University about the project as well.

"I like it. It's beautiful, it's practical and—best of all—the people in it care about kids," he says.

***In addition to physical sports, kids can play video games or visit an Internet cafe. The end walls of the three buildings can expand to offer more attractions in the future.***

***Dan Mitchell's concept to connect with kids through safe, whole-some entertainment has been an incredible success. The Bridge averages around 1,600 visitors a week.***

# Packaging Energy and Excitement

## Hoops is a premier, multi-court basketball arena for kids

Seven fathers had a dream—one inspired by long hours on hard bleachers watching their children play competitive basketball.

"We thought we could provide a new facility that the market hadn't seen before," says Jeff Bennett, one of the original investors in Hoops, a premier multi-court basketball arena in Louisville, Kentucky. "We wanted a big, open environment where you don't feel cramped. A place where you can enjoy time with your basketball player and the rest of your family—a nice place to have lunch or breakfast, with activities for other kids who are not playing basketball."

The group looked at leasing space, but quickly decided that an existing building wouldn't meet their requirements. Bennett knew Lichtefeld Inc., a Butler Builder® in Louisville, through his own company, Bennett's Gas. The propane supplier often provides heat for buildings under construction. He asked Stan Lichtefeld, the firm's secretary/treasurer, to talk with the group about building a new facility.

"I got started on the front end as a contractor, helping them with site selection and budgeting for their business plan," Lichtefeld explains. "After working on it for five or six months, they could see the project was going to be a little more than they had anticipated, so they decided to look at adding two or three investors. That's when our company also became involved as a partner."

Lichtefeld Inc.'s experience in building recreational facilities made the company a perfect match for the project. And Stan Lichtefeld himself is a father with kids in competitive sports. He could relate to the need for a customer-friendly building.

Kentucky was once considered a mecca for basketball, but today its best athletes seem to be leaving the state to play for college powerhouses around the country. Hoops plans to be a training facility for Kentucky youth, helping to keep the state's talent at home.


*The building's design is appropriate to the business park where it is located and also reflects the energy of the program inside. The architect used tilt-up concrete walls, dynamic curvilinear shapes and forms, and an eye-catching black-and-orange exterior color scheme that implies "basketball."*

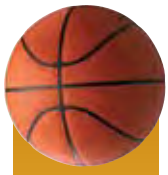
"For years we have all traveled around the country and been in and out of these kinds of facilities. We definitely had some strong ideas and direction," Bennett says. "There is nothing quite like this in Louisville. Our focus is basketball."

### An "awesome" exterior

Lichtefeld brought in Berry-Prindle Architects Inc., a Louisville firm, to work out the building design. Hoops had chosen an ideal 8-acre site in the Bluegrass Industrial Park, visible from I-64 near its intersection with I-265. The location, however, dictated a number of design requirements that had to be reconciled with the group's ideas for the new business.

"We had to maintain what the owners were going for, while pleasing the developer," recalls architect Mike Prindle. "There was a lot of back and forth while we worked it out."

The park wanted the building to look like more than just a big warehouse. The owners wanted



***"The flexible clear span capability was one of the driving factors in selecting Butler® building systems for this project"***

***MIKE PRINDLE***

to draw attention. "They wanted the exterior to reflect the energy of the program inside. We used some dynamic curvilinear shapes and forms to imply energy in motion," Prindle explains.

To add to the excitement and imply "basketball," Hoops chose an orange-and-black color scheme for the exterior. "Children can relate to orange," Bennett says. "The adults say, 'That's different.' The kids say, 'Wow. That's awesome.' They're blown away."

To make it look more like the park's office buildings, Prindle incorporated about 90 windows. "But the basketball courts couldn't have sunlight affecting players' shots," Lichtefeld adds. "We used Spandrel glass. It looks like dark, tinted windows from the outside and it doesn't allow sunlight to pass through."

## A customer-friendly interior

Inside, visitors enter a mall that funnels them to the main college-sized court with six VIP skyboxes and seating for 2,000. Retail outlets—including a game room—and a café and coffee shop line either side. "The 'wow' factor focuses on the main court. It looks like a small coliseum. Kids are going to play there, with the big cube scoreboard hanging down, and feel like they're big time," Bennett says.

"They had multiple interior requirements," recalls Prindle. "It was not just a building with courts."

Two regulation college courts and four high school courts occupy the main floor. An 11,000-square-foot mezzanine accommodates locker rooms with showers and restrooms, party rooms, a 5,000-square-foot fitness center, referee lounges and administrative offices. Wi-fi access throughout the building allows parents to work while their children play.

"When you're trying to be the best, you have to go the extra mile," says Bennett. "We have accommodated the customer in every way, from the café to the restrooms, to the seating area, to the

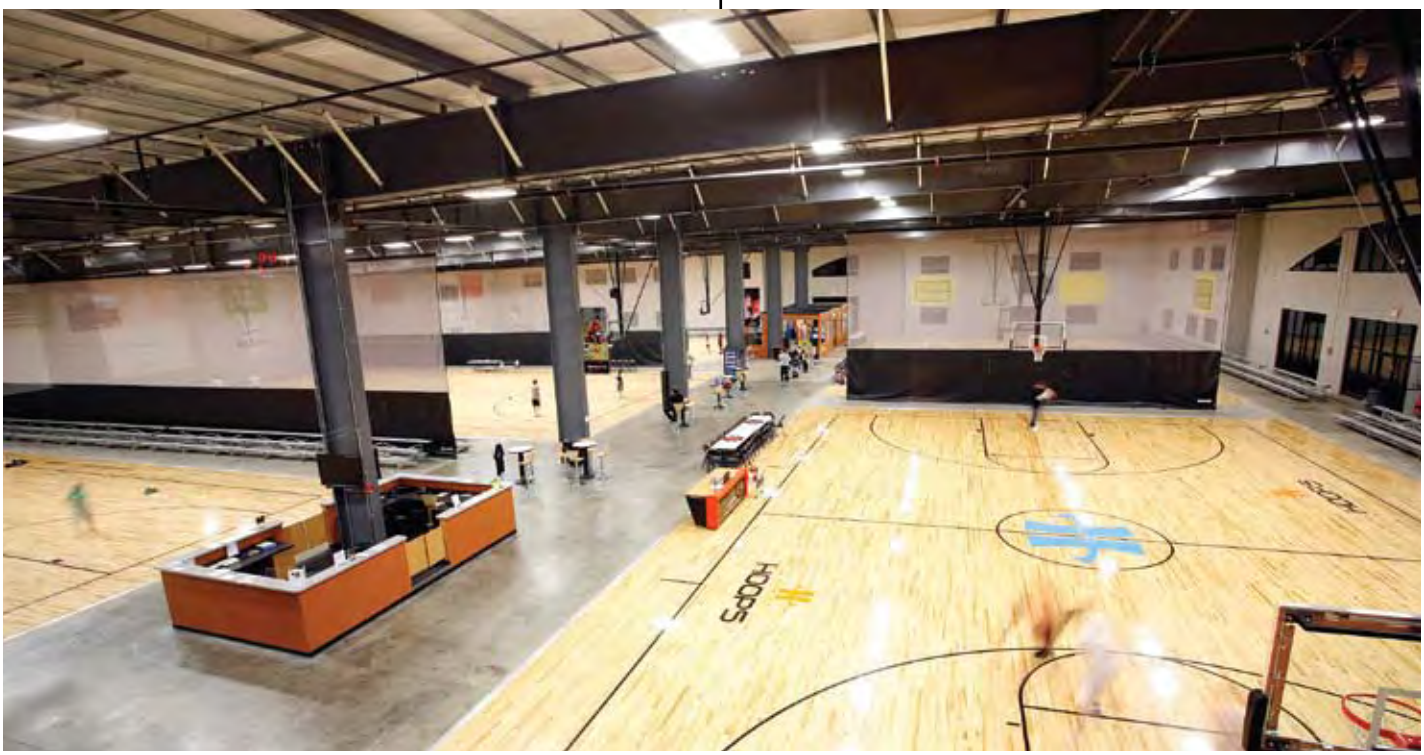
### HOOPS

Butler Builder®: Lichtefeld, Incorporated, Louisville, Kentucky
Architect: Berry-Prindle Architects, Inc., Louisville, Kentucky
Size: 90,000 total square feet
Butler® Systems:
Widespan™ structural system
MR-24® standing seam roof system

***Hoops' main college-sized court boasts six VIP skyboxes and seating for 2,000. Designed to look like a small coliseum, it delivers "big-time" ambience for the weekend tournaments.***

***"We have Conner Uniforce wooden floors—NBA-style floors, the best in the industry. It was critical to have a state-of-the-art roof system"***

***JEFF BENNETT***



***The Widespan™ structural framing system provides cost-effective space for the building's two regulation-sized college courts and four high school courts. And the state-of-the-art courts are protected by the equally sophisticated weathertight MR-24® standing seam roof system.***

sound and lighting systems, to the flooring, to the climate control and entertainment alternatives."

## Driving to the finish

Lichtefeld broke ground on the $4.5-million facility in May. "It was crucial to open the first of the year for the basketball season," he says. "And weather was a challenge. I heard it was the seventh wettest year on record."

The building has tilt-up concrete walls, a Widespan™ structural system and an MR-24® standing seam roof system. The easily assembled Butler® systems, Lichtefeld says, helped close in the project quickly so the subcontractors could get to work. "We started the roof and structural system over the offices first. We were actually hanging drywall in that area before the roof was finished at the other end of the building."

The Widespan structural system also provided economical, wide-open space for the courts. "The flexible clear span capability was one of the driving factors in selecting Butler building systems for this project," Prindle says. "We looked at clear-spanning the whole thing—nearly 300 feet—but the cost was prohibitive. So we were able to work in a center row of columns with the courts on either side. Butler has such a good system that it

## WE'VE GOT GAME

Hoops is a premier basketball destination for men, women and children of all ages. As its slogan proudly proclaims, Hoops is "where the game is."

"We have open gym during weekdays and leagues that run six to nine weeks on nights and weekends," explains Jeff Bennett, one of seven partners in the venture."We play tournament style. Teams come in from around the country and play Friday and Saturday with bracket play on Sunday."

The arena provides an attractive, affordable alternative for events too small for the bigger venues. Hoops will host other competitions as well, including gymnastics, volleyball and cheerleading.

"First, we want to raise the level of basketball competition here in Louisville and around the state," says Stan Lichtefeld."

***"When you're trying to be the best, you have to go the extra mile"***

***JEFF BENNETT***

can accommodate those kinds of needs."

The weathertight roof was extremely important to preserve the partners' investment, Bennett adds. "We have Conner Uniforce wooden floors—NBA-style floors, the best in the industry. It was critical to have a state-of-the-art roof system."

Architect Prindle agrees. "We used the MR-24 roof system on our own building, which tells you the level of confidence we have in it. Once you get it sealed and it's installed properly, it has been our experience that it functions well beyond the warranty."

Every detail of the building was finished to say "the best." The owners decided that they wanted a smooth transition from the wooden court floors to the surrounding concrete. In most arenas, a two-inch drop from court to sidelines presents a tripping hazard. To avoid this, Lichtefeld first poured the concrete slab, then formed the tilt walls, and returned once the roof was in place to pour a two-inch concrete topping around the courts.

## Nothing but net

Hoops opened just eight months after construction commenced. "We were all very, very happy with the time frame. We were on schedule and on budget, which is even better. To me, that's pretty rare," Bennett says.

Response to the facility has been tremendous. More than 4,000 people poured through the turnstiles the first weekend. Teams that travel all over the country claim Hoops ranks among the best.

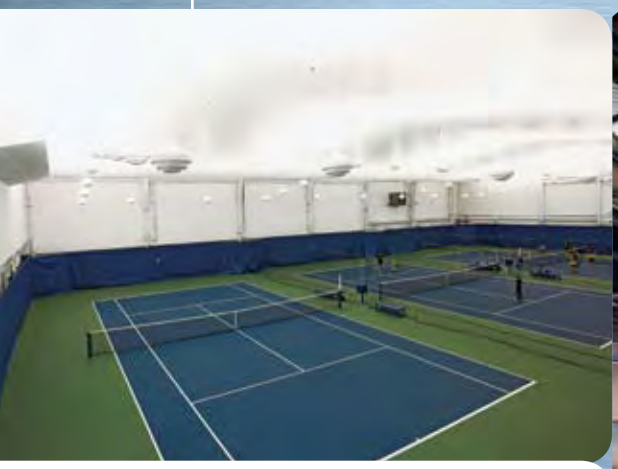
Hoops quickly gained status as an official U.S. Specialty Sports Association (USSSA) facility and a designated Amateur Athletic Union (AAU) tournament facility. The McDonald's All American Game named Hoops its Official Practice Facility for the 30th Anniversary games in March 2007. Hoops is also hosting the Kentucky Intercollegiate Athletic Conference (KIAC) men's and women's championships and the Adidas Boys Jr. Phenom 150.

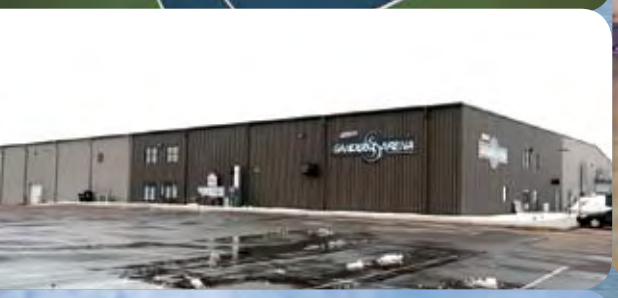
"We're adding to our customer base week by week. It's great," Bennett concludes.

"I don't know of anything different we could have done better."



***Hoops offers much more than its courts: its interior mall (top photo above) includes retail outlets, a café (above) and a game room. The second floor holds party rooms, a fitness center and much more, and there is wi-fi access throughout.***



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