THE VENUE AT RIVER CREE CASE STUDY

RIVER CREE

GAMING + EVENT



RIVER CREE RESORT + CASINO had a fabric structure on an open web truss system, used to host entertainment events including concerts. The structure regularly generated noise complaints from neighbors. When an inspection found a building code deficiency in the structure, the casino shut it down immediately – and needed a replacement as quickly as possible.

While casino management liked the versatility of the previous venue, the new building needed a sturdier frame that was engineered to withstand the elements. They chose a fabric structure by Legacy Building Solutions – another fabric structure, this one built on a rigid steel frame. Legacy also provided construction management services, overseeing subcontractors at every phase of the building project, including sitework, interior finishing and lighting. Design and construction of the building was completed in four months. The first act to appear in the new venue was a Beatles tribute band, The Fab Four, on New Years Eve 2015.



BUILDING NAME
The Venue at River Cree

RIVER CREE

building name **River Cree Resort + Casino**

LOCATION **Enoch, AB**

MARKET SECTOR
Entertainment

APPLICATION

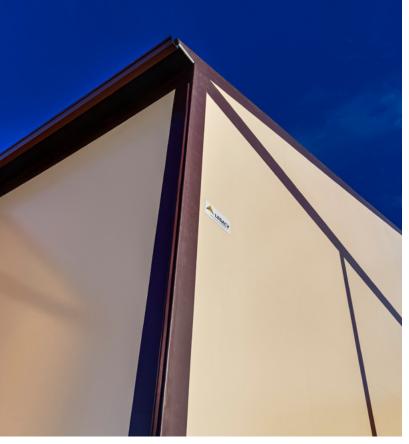
Casino Entertainment Venue

SIZE

140' x 200' with 12' x 60' and 12' x 80' lean-tos for bar service + storage

SPECIAL FEATURES

R-30 insulation, heating + cooling system, mezzanine level and stage lighting





The new venue is 140 feet wide by 200 feet long. Lean-tos measuring 12'x60' and 12'x80' are used for bar service and storage inside the building. More extra space is available in the mezzanine – a raised platform attached to the building frame that contains VIP boxes and seating for 300. With the mezzanine, the event center has seating capacity for up to 2,500.

Also added to the building frame was the stage, which is used for singers, comedians and theatrical events. While many venues of this type use a sloped floor to increase sightlines, the River Cree venue uses a flat floor – allowing them to host trade shows and kiosks that are not possible with a slanted floor. To accommodate guests in the back of the room, the stage is eight inches higher than usual – opening up clear lines of sight everywhere in the building.

The guest experience was another critical factor in the building design. The building is customized with multiple washrooms for use during events, as well as a foyer with a sealed connection to the main casino. Overhead doors facilitate moving equipment in and out of the building for performers and events.

As with any performance venue, the acoustics and interior conditions needed to be top-notch. "What you see here today is a double membrane, with a lot of insulation between the two layers," said Chief Operating Officer Vik Mahajan. The casino worked with TWS Engineering during the design and construction of the building. In a letter provided to Legacy after construction was completed, TWS said:

"The interior fabric skin of this structure allowed for minimal reverberation within the venue, providing the client with high quality acoustic attenuation in the entertainment space. This also allowed for the mechanical systems that were mounted on or beside the structure to be deadened by the internal/ external fabric lining."

Performers and audience alike are impressed by the building. "I think the actual acoustics are going to work better here with the actual walls being the way they are, rather than the tent which absorbs a lot of the sound," said Gavin Pring of The Fab Four.

The solid steel frames of the new Venue are designed to support point loads from the mezzanines, lighting and sound systems, as well as local building codes – including winds in excess of 60 miles per hour. This allows River Cree to book events without worry about the safety of occupants.