

masonry walls strengthened with FRP systems.” 6th Int. Conf. on Fibre-Reinforced Plastics for Reinforced Concrete Structures, K. H. Tan, ed., World Scientific, Singapore, 1189–1198.

UDC 624.012

*N.M. Pinchuk, PhD, Associate Professor
Opoku Ameyaw Michael, Student of the group 402-BII
National University “Yuri Kondratyuk Poltava Polytechnic”*

UNIQUE MASONRY STRUCTURES

Stone has been used in the architecture of many buildings for centuries. This timeless building material still remains a wonderful, durable choice for homes and buildings. If you are building or renovating a house, consider adding a few architectural elements to the design. Be inspired by some of our favorite elements of stone architecture from around the world.

Angkor Wat Temple. Cambodia. This temple was built during the reign of Suryavarman II, which took place in 1112-1152. Along the perimeter of the territory of Angkor Wat is surrounded by a 4.5-meter wall. Its total length is more than 3.5 km - the smaller side of the rectangle formed by the walls - 802 meters, and the largest - 1025. 30 meters separates the wall from the ditches filled with water, their width - 190 meters.

Machu Picchu. Spain. The city was founded by the Inca ruler Pachakutec in 1440, and functioned until 1532. The city is located on top of a mountain range at an altitude of 2057 meters above the valley of the Urubamba River in modern Peru.

Temples of Tamil Nadu. All temples were built 1000-1200 years ago. Every column in the temple, several human heights, is made of a single piece of stone, and it is made in the form of some mythical creature. And there are hundreds of such columns in any temple, and hundreds of huge statues from huge boulders, and they are all carved out of stone.

Brihadeswarar Temple. The central temple consists of two parts. The first is located in a low building, the second in a high. There is a staircase leading to each part. Inside are two small rooms, without a single window measuring 5 by 5 meters, 4 meters high. The floor, walls and ceiling are made of large stone blocks. No paint or plaster. The total height of the temple is 65.4 meters. The top is crowned with a monolithic stone weighing 80 tons. It is said that this stone was taken from a distance of 6 km.

Mausoleum of Theodoric. Ravenna. Italy. Built in 520 from Istrian limestone on two ten-sided tiers, crowned by a ten-meter dome carved from solid 300-ton stone.

Pyramid of Kukulkan. Mexico. The base of the pyramid is a square, each side of which is 55.5 meters and its height is 25 meters. The pyramid consists of 9 ledges. There is a staircase on each side from the foot of the pyramid to the top. Each of them consists of 91 steps, if you add them all and take into account the upper platform, you get exactly 365 steps.

All of them are the unique landmarks of our civilization.