

In Rome, A Coruna in Spain and Ikaruga in Japan are three of the oldest buildings in the world that are still in use. We show you which ones they are. And what makes them so durable. Old, well-preserved buildings are windows into the past. Their walls contain clues to earlier cultures.

And particularly spectacular are those buildings

from days long gone that are still used by people today. These are our top 3.

The Pantheon: the largest concrete dome in the world



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The eternal city of Rome is known for its countless impressive buildings. The Pantheon, built in the second century, is one of the most famous. Built as a temple under Emperor Hadrian, it became a Christian church in the sixth century. The building consists of the rectangular anteroom of the temple and the famous dome. The 43 metre dome is made of volcanic rock and is considered the largest unreinforced concrete dome in the world. Because the building has no windows, sunlight can only enter through the 9 metre hole in the centre of the dome. In earlier times, the ceiling of the church was painted dark and decorated with stars. Together with the round window that represented the moon, it recreated the starry night sky. And this was not only beautiful to look at, it also had a structural background: the construction was supposed to withstand earthquakes particularly well. In 2023, another secret of the Pantheon was revealed. Scientists discovered that the concrete used in its construction was hot-mixed. The use of this technique gives it its special stability to this day.

The Tower of Hercules: a lighthouse with history



A Coruna in north-west Spain is home to the oldest functioning lighthouse in the world. The Romans built the Tower of Hercules in the second century to help merchant ships navigate the dangerous route from the Mediterranean to the North Atlantic. The tower has a square floor plan and is 68 metres high. 242 steps lead to the highest point, from where you can enjoy a marvellous view of the city and the coast of La Coruña. The restoration of 1788-1791 by the Spanish King Charles IV gave it its well-known external appearance. In the meantime, the tower was used as a defence tower and quarry. Today, it is once again a signpost for sailors and emits a beam of light across the sea every 20 seconds. As one of the oldest active buildings in the world, the Tower of Hercules has been a UNESCO World Heritage Site since 2009.

Hōryū-ji: the temple of the Buddha's teachings

The Hōryū-ji temple is located in the Japanese city of Ikaruga and is the oldest surviving wooden building in the world. The building was commissioned by Prince Shotoku Taishi and completed in 607. The wood comes mainly from Hinoki cypress trees. This tree species, which was widespread in Japan at the time, is durable, stable and flexible. Thanks to these properties, it could also be worked with very simple tools. The entire area of the Buddhist temple covers an impressive 180,000 square metres. The main buildings contain several

altars and ritual statues depicting Buddha and his attendants, for example. The temple's famous pagoda is a five-storey wooden structure with a height of 32.45 metres. Pagodas are multi-storey, tower-like buildings that are usually separated from each other by eaves. They were used as tombs for the remains of enlightened Buddhist monks, as navigation points and viewing platforms. Since 1993, Hōryū-ji has been listed as a popular tourist attraction.

Conclusion: Building on past knowledge

The oldest active buildings in the world have a long and fascinating history. However, the question of what makes these buildings so long-lasting is at least as fascinating. In some cases, it is due to special construction techniques, in others to

unusual materials. The innovative solutions that were realised with the technical means of the time still inspire us today. And: all three buildings for eternity can be visited. We wish you lots of fun and a pleasant journey.