Great Wall of China
Progress of the Wall over Major Eras

Great Wall Structure

Ming Dynasty Wall

Warring Kingdom Wall

Han Dynasty Wall

History of the Great Wall

Warring States: Development on the Great Wall of China began for two purposes. Expansion control and defense from invasion were those purposes. Each state during this time period created walls to defend their territory and most importantly, their capitals. A large portion of the wall still standing today was the Northern Yan wall, created to defend against invasions from Danggu Barbarians.

Han Dynasty: Development of the Great Wall in this era was focused primarily on both protecting the unified China under the new dynasty, and protecting from northern invasion along their trade routes. Walls in the north were created to help against invasions from the Huns until peace was struck through political marriages. A long stretch of walls were also created in the Gobi Desert to protect the Silk road, an important trade route that allowed trade between east and west Asia.

Ming Dynasty: The last era of importance in wall development was the Ming Dynasty. Construction resumed due to increased aggression from the Mongols, resulting in a wall being built along the southern edge of the Ordos Desert. The Dynasty also effectively used the wall defending against the Manchu Invasion until they were able to succeed in 1644. Once the new empire was established, the country borders extended beyond the wall and it lost its purpose. The walls are maintained today for historic reasons.

Map Key

Water
Greensland
Forest
Sands Desert
Rock Desert
Mountains

Important Cities
Silk Road
Country Border
Dynasty Border
Destroyed Great Wall
Old Great Wall
Great Wall Construction

Warring States | 475 BC – 221 BC

Han Dynasty | 206 BC – 220 AD

Ming Dynasty | 1368 AD – 1644 AD

Sources

https://images.google.com/
https://en.wikipedia.org/wiki/Great_Wall_of_China
www.travelchinaguide.com
www.chinahighlights.com
www.chinatour360.com
www.topchinatravel.com
www.jiaotongxuejia.org
www.statuensuny.edu

The top room of the garrison tower was mainly used as a sleeping area for guards. While on patrol if an invading force would be near, they would set off a smoke signal to warn nearby villages. Every 3-1 miles there was another tower that would send the message.

The garrison tower itself was used as the primary system of defense along with patrolling sentries along the wall. There were also beacon towers that would be closer to the villages to warn faster.

The spaces in the wall were called Ramparts. They enabled the guards and archers to have an upperhand. There were also holes in the wall used as windows to watch outside.

The wall is built in layers consisting of a stone surface and brick for a walkway. A tamped layer of earth and rubble beneath it. Kiln fired bricks and mortar underneath mixed with local rock along with limestone and gravel.

The wall itself was built with sand and gravel mainly. Gravel and loess (Yellow Gobi Desert Soil) were used for the base level while the upper levels of the layer was filled with sand.

The Desert walls were formed by stacking layer upon layer using rose yellow and Hu papier frames to rise up in height. They also used ground water with high salinity to compact the layers and prevent destruction due to erosion.

Development on the Great Wall of China began for two purposes. Expansion control and defense from invasion were those purposes. Each state during this time period created walls to defend their territory and most importantly, their capitals. A large portion of the wall still standing today was the Northern Yan wall, created to defend against invasions from Danggu Barbarians.

Han Dynasty: Development of the Great Wall in this era was focused primarily on both protecting the unified China under the new dynasty, and protecting from northern invasion along their trade routes. Walls in the north were created to help against invasions from the Huns until peace was struck through political marriages. A long stretch of walls were also created in the Gobi Desert to protect the Silk road, an important trade route that allowed trade between east and west Asia.

Ming Dynasty: The last era of importance in wall development was the Ming Dynasty. Construction resumed due to increased aggression from the Mongols, resulting in a wall being built along the southern edge of the Ordos Desert. The Dynasty also effectively used the wall defending against the Manchu Invasion until they were able to succeed in 1644. Once the new empire was established, the country borders extended beyond the wall and it lost its purpose. The walls are maintained today for historic reasons.

Sources

https://images.google.com/
https://en.wikipedia.org/wiki/Great_Wall_of_China
www.travelchinaguide.com
www.chinahighlights.com
www.chinatour360.com
www.topchinatravel.com
www.jiaotongxuejia.org
www.statuensuny.edu

The top room of the garrison tower was mainly used as a sleeping area for guards. While on patrol if an invading force would be near, they would set off a smoke signal to warn nearby villages. Every 3-1 miles there was another tower that would send the message.

The garrison tower itself was used as the primary system of defense along with patrolling sentries along the wall. There were also beacon towers that would be closer to the villages to warn faster.

The spaces in the wall were called Ramparts. They enabled the guards and archers to have an upperhand. There were also holes in the wall used as windows to watch outside.

The wall is built in layers consisting of a stone surface and brick for a walkway. A tamped layer of earth and rubble beneath it. Kiln fired bricks and mortar underneath mixed with local rock along with limestone and gravel.

The wall itself was built with sand and gravel mainly. Gravel and loess (Yellow Gobi Desert Soil) were used for the base level while the upper levels of the layer was filled with sand.

The Desert walls were formed by stacking layer upon layer using rose yellow and Hu papier frames to rise up in height. They also used ground water with high salinity to compact the layers and prevent destruction due to erosion.

Development on the Great Wall of China began for two purposes. Expansion control and defense from invasion were those purposes. Each state during this time period created walls to defend their territory and most importantly, their capitals. A large portion of the wall still standing today was the Northern Yan wall, created to defend against invasions from Danggu Barbarians.

Han Dynasty: Development of the Great Wall in this era was focused primarily on both protecting the unified China under the new dynasty, and protecting from northern invasion along their trade routes. Walls in the north were created to help against invasions from the Huns until peace was struck through political marriages. A long stretch of walls were also created in the Gobi Desert to protect the Silk road, an important trade route that allowed trade between east and west Asia.

Ming Dynasty: The last era of importance in wall development was the Ming Dynasty. Construction resumed due to increased aggression from the Mongols, resulting in a wall being built along the southern edge of the Ordos Desert. The Dynasty also effectively used the wall defending against the Manchu Invasion until they were able to succeed in 1644. Once the new empire was established, the country borders extended beyond the wall and it lost its purpose. The walls are maintained today for historic reasons.

Sources

https://images.google.com/
https://en.wikipedia.org/wiki/Great_Wall_of_China
www.travelchinaguide.com
www.chinahighlights.com
www.chinatour360.com
www.topchinatravel.com
www.jiaotongxuejia.org
www.statuensuny.edu

The top room of the garrison tower was mainly used as a sleeping area for guards. While on patrol if an invading force would be near, they would set off a smoke signal to warn nearby villages. Every 3-1 miles there was another tower that would send the message.

The garrison tower itself was used as the primary system of defense along with patrolling sentries along the wall. There were also beacon towers that would be closer to the villages to warn faster.

The spaces in the wall were called Ramparts. They enabled the guards and archers to have an upperhand. There were also holes in the wall used as windows to watch outside.

The wall is built in layers consisting of a stone surface and brick for a walkway. A tamped layer of earth and rubble beneath it. Kiln fired bricks and mortar underneath mixed with local rock along with limestone and gravel.

The wall itself was built with sand and gravel mainly. Gravel and loess (Yellow Gobi Desert Soil) were used for the base level while the upper levels of the layer was filled with sand.

The Desert walls were formed by stacking layer upon layer using rose yellow and Hu papier frames to rise up in height. They also used ground water with high salinity to compact the layers and prevent destruction due to erosion.
The top room of the garrison tower was mainly used as a sleeping area for the guards. While on patrol, if an invading force would be attacking, the guards would set off a smoke signal inside the tower to warn the villages nearby. Every 3.1 Miles there was another tower that would set off their smoke signal as well when they saw the warning, thus triggering a chain reaction.

The garrison tower was used as the primary system of defense along with patrolling sentries along the wall itself. There were two kinds of towers, ones attached to the wall and others distant away from the wall used to signal further towards the town with smoke signals when trouble arose with invaders.

The space separated in the wall are called Ramparts, which enabled guards and archers to defend against invaders with the upperhand advantage. They also used small holes in the wall as windows keeping an eye out for invaders along with shooting arrows at them.

The wall is built in layers consisting of A surface of stone slabs and brick for a walkway. A tamped layer of earth and rubble underneath it. Bigger rocks and stones underneath that, and Kiln fired bricks and mortar of limestone underneath mixed with larger locally found rocks. Material the wall was built with was heavily influenced by local building materials in the area.

Between the Warring State period and the Han Dynasty, (where most wall progress was completed), the Kingdoms built the wall based on local resources. This usually resulted in the wall being built on stamped earth or stacked rocks that were simply drywall. Mortar was later added to keep sturdy. 3.2m tall.

Walls formed in the desert like the one shown below were made with gravel and sand that were packed into frames, then stacked in layers. The frames were made of rose willow & reeds. Groundwater with high salinity was also used to strengthen the layers so they could withstand the forces of erosion over time on arid land.

Perhaps the most famous legends of the wall is the Legend of Meng Jiangnu. It tells a story occurring in the Qin Dynasty where her husband Fan Qiliang was sentenced to work on the Great Wall. After his departure she didn’t hear from him so she went out looking for him. By he time she reached the wall, he had already died. Upon hearing the news she cried her heart out, her tears caused a portion of the wall to collapse, thus discovered bones of her lost husband in the wall.

Another legend is of the Jiayuguan Pass. It tells of Yi Kaizhan, an arithmetic worker, in the Ming Dynasty who calculated this project would need exactly 99,999 bricks to build. His supervisor didn’t believe him so he stated that if that prediction was miscalculated by even one brick, they would be punished for 3 years of work. Upon completion, one brick was left in the Xiwong city gate. He said it was left deliberately by a supernatural entity and if moved it would collapse the wall. Thus the brick remains there to this day.
The walls were called Changcheng, translated to “Great Wall”. They were mostly created by tampering earth with some areas made of stone. Some areas included garrisons, beacon towers and watch towers in order to counter invading forces with Shock tactics and signal the cities of intruders.

This series of walls was created mainly for two purposes: Expansion control and Defense from invasion. Major aggressive forces such as the Qin and Yan state built walls upon further conquest of their neighboring states. This would ensure protection from push back. Walls were also built to defend, such as the Wei state building to the west of the Yellow River in order to combat the increasing aggression from the growing Qin power. Building walls such as Zhao and Qi also guaranteed protection for their state capitals, enhancing their ability to combat invading forces. Long rivalries such as Zhao and Yan also resulted in walls being built to protect Yan’s border as well as northern state line in order to prevent invasion from the migrant Donghu Barbarians from the North.
The walls built within the Qin and Han Dynasty were primarily focused on unifying China’s new borders and protecting from Mongolian invaders in the north. It was also used to protect the Silk Road and other important trade routes from being pillaged.

Considering most of the wall was being built on desert arid areas, they needed to build differently than in the past. In order to build the wall they wove out frames by using rose willow and reeds, then filled the frames with gravel and sand. After which they could pile up in layers to raise the height. Other main types of construction was ramming loess (Gobi Desert Soil) in layers and using reed adobe when clay soil that would bind became available. They also implemented beacon towers every 3.1 miles that were guarded by soldiers in case of emergencies. In such cases, they would trigger smoke fire signals to warn the town of invasions.

Most of the Northern walls were built as a result from wars with the Huns. While peace had been maintained through marriage, Emperor Wu struck back as the national economy grew stronger, reclaiming previously lost territory and reinforcing borders with walls. A large majority of walls were built to reinforce the silk road as well. This would be used to guarantee safe trade between East and West China. A large portion of the previous walls were also torn down to take down the divisions in the empire.
The Great Wall stopped being constructed for the most part until the Ming Dynasty where they made several additions to it. Unlike earlier dynasties, construction under the Ming Dynasty was a lot stronger and elaborate due to use of stone and brick. The wall was routinely repaired and reinforced along with the area near Beijing being the strongest walls.

The construction of more walls resumed primarily due to Mongolian tribes gaining the upper hand against the empire in combat. Considering the Mongols controlled the Ordos Desert, the wall was constructed along the southern edge of the desert. A more simple wall was also built around the Liaodong Province to aid from the invasions of the Jianzhou Jurchen and Jurched-Mongol Oriyanghan from the north, along with further fortifications near their capital.

In the early 1600’s, the wall effectively helped against Manchu invasions, even after Liaodong was compromised. It wasn’t until 1644 when the Manchu were able to cross the wall and overthrow the empire, shortly being replaced by the Qing Dynasty. After which the wall lost it’s purpose. The borders were extended north beyond the walls as Mongolia was annexed and there was no reason to rebuild along their new borders. Most of the remaining walls today serve as tourist exhibits and are maintained for historic reasons.