More than 300 million years ago, during the Mississippian Period, Indiana was near the equator and was covered by a warm, shallow ocean. This tropical sea teemed with invertebrate organisms that used calcium carbonate to form their protective shells. Bryozoans, crinoids, and foraminifers were particularly abundant in the intracontinental sea. When the animals died, their shells and other hard body parts formed white sand on the ocean bottom. Waves and storms agitated this sand; clay and other mud-sized material was removed, and larger shells were broken up into smaller fragments. The sand also swept up into bars that stacked atop each other over time.

Once cemented into rock, the result was the Salem Limestone, an exceptionally pure, fine-grained, and very uniform limestone. The uniformity and thickness of the Salem Limestone makes it one of the best dimensional building stones in the world.