CREEL AND GOW



BRAZILIAN AGATE SLICE

SKU: SM211_BAS Categories: <u>Mineral</u>, <u>Natural Specimens</u>

PRODUCT DESCRIPTION

Brazilian Agate Slice: Measures: 13.5" x 4" x H13" Agate minerals have the tendency to form on or within pre-existing rocks, creating difficulties in accurately determining their time of formation. Their host rocks have been dated to have formed as early as the Archean Eon. Agates are most commonly found as nodules within the cavities of volcanic rocks. These cavities are formed from the gases trapped within the liquid volcanic material forming vesicles. Cavities are then filled in with silica-rich fluids from the volcanic material, layers are deposited on the walls of the cavity slowly working their way inwards. The first layer deposited on the cavity walls is commonly known as the priming layer. Variations in the character of the solution or in the conditions of deposition may cause a corresponding variation in the successive layers. These variations in layers result in bands of chalcedony, often alternating with layers of crystalline guartz forming banded agate. Hollow agates can also form due to the deposition of liquid-rich silica not penetrating deep enough to fill the cavity completely. Agate will form crystals within the reduced cavity, and the apex of each crystal may point towards the center of the cavity. The agates from Brazil are mined from decomposed volcanic ash and basalt from the late Permian age (248-275 million years old) around Rio Grande do Sul.