

Installing the Colossal Sculpture Roads of Arabia At the Asian Art Museum

Lead Mount-maker: Vincent Avalos

The San Francisco Bay Area is notorious for regular seismic activity.

Traveling shows with sensitive rare antiquities are especially problematic.





Roads has already traveled through Europe and many other parts of the United States. Even though it is what might be thought of as a prepackaged show it had not been made ready for a potential earthquake. So we decided to augment the old mounts and select a few objects for new mounts. The colossi were a very particular problem which we ultimately solved by base isolating individual pedestals.







Why We Used EQX Base Isolation

The mass and geometry of the sculpture push the boundaries of what can be done with ordinary mounts.

The existing mounts had visible wear, distortions and design flaws.

Using this particular system was actually more cost effective than creating a new form fitting mount.

Even though base isolated pedestals don't generally go in base isolated buildings, this system was advanced by our building's engineer Paul Rodler due to its specific design.

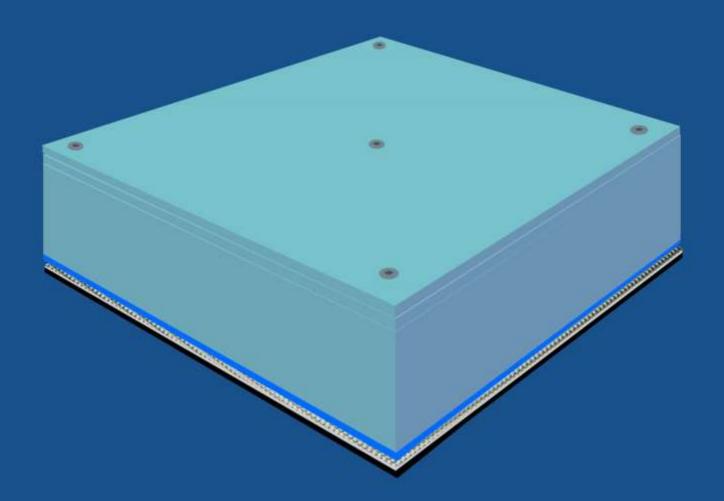
The size and mass of the sculptures approach architectural proportions which I feared would lead to problems related to harmonics i.e. resonating with our building's inherent frequency.

The head engineer at EQX Global Don Cyde for over 20 years ran the testing at the shake table of the Berkeley Richmond laboratory, which is arguably the best earthquake testing facility in the world.

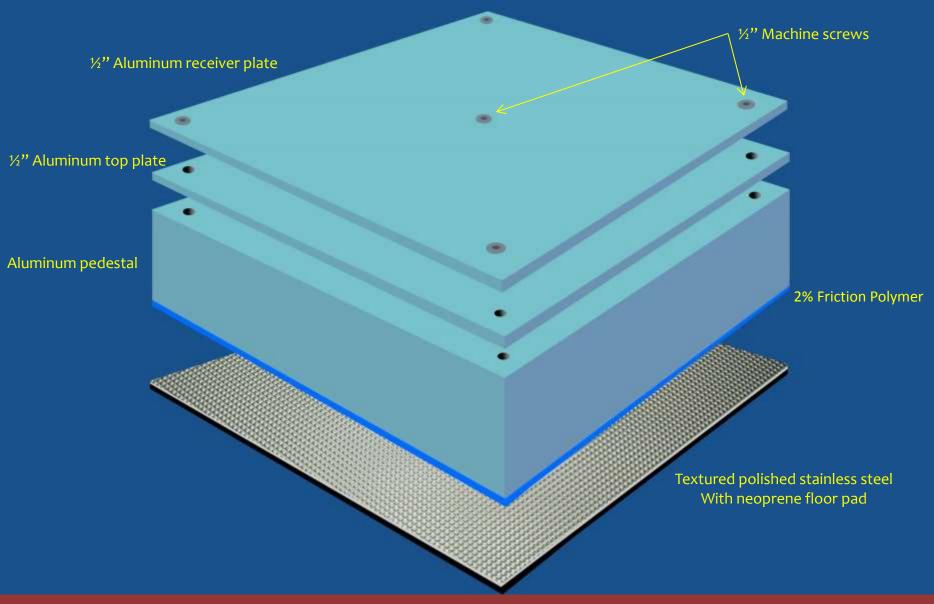
The system was further tested with our sculpture's attributes at the testing facility at UCSD as part of a doctoral thesis on the effects of earthquakes on large sculptures. This further substantiated my fears related to the colossi's susceptibility to seismic forces.

The system is streamlined, passive, failsafe, versatile and can be calibrated at time of fabrication for specific design scenarios.

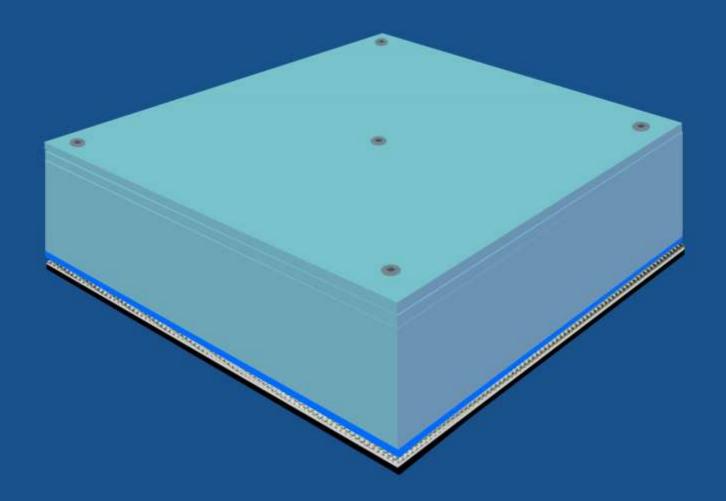
EQX Global Pedestal Base Isolation System

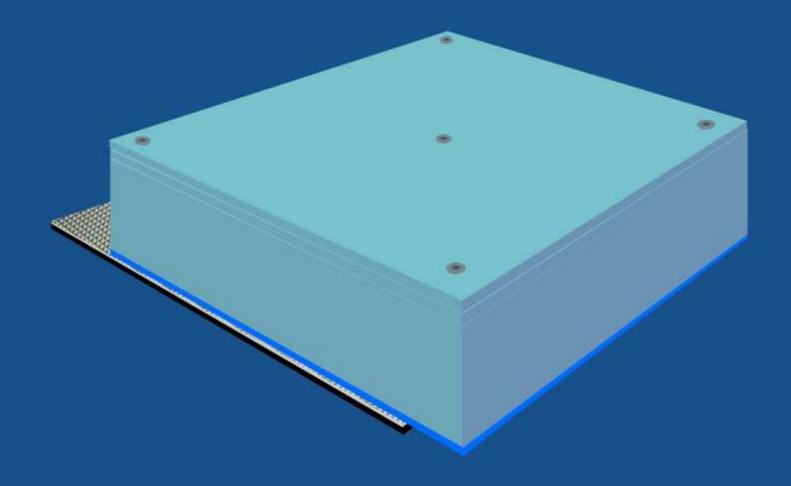


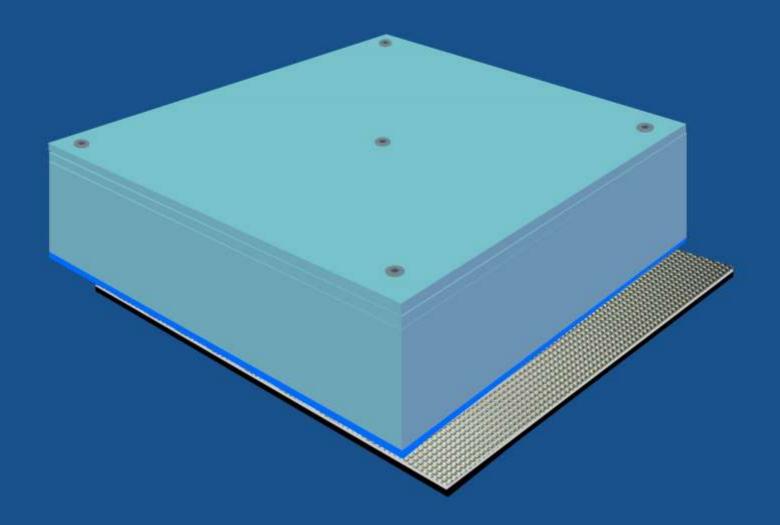
EQX Global Base Isolator Sections

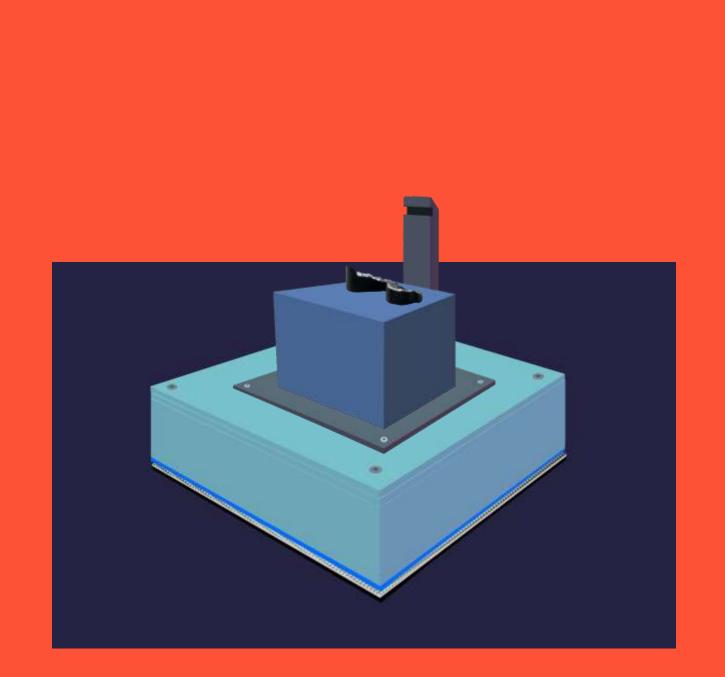


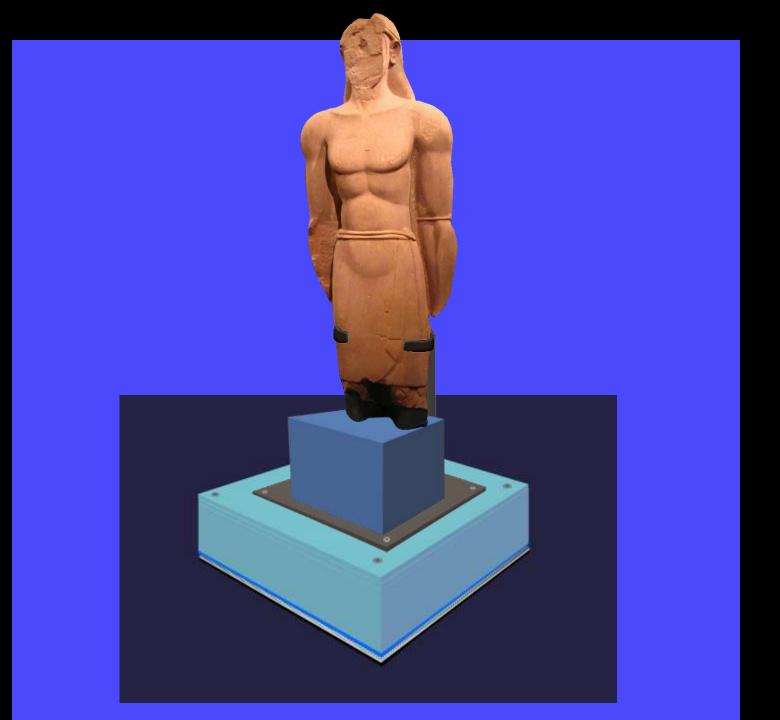
All parts bolted together except stainless steel



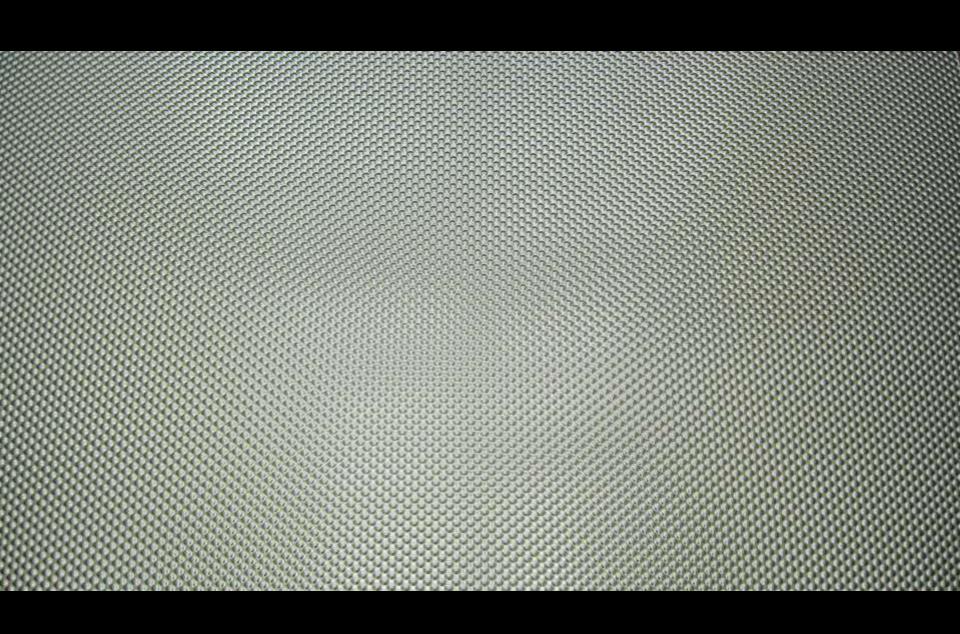


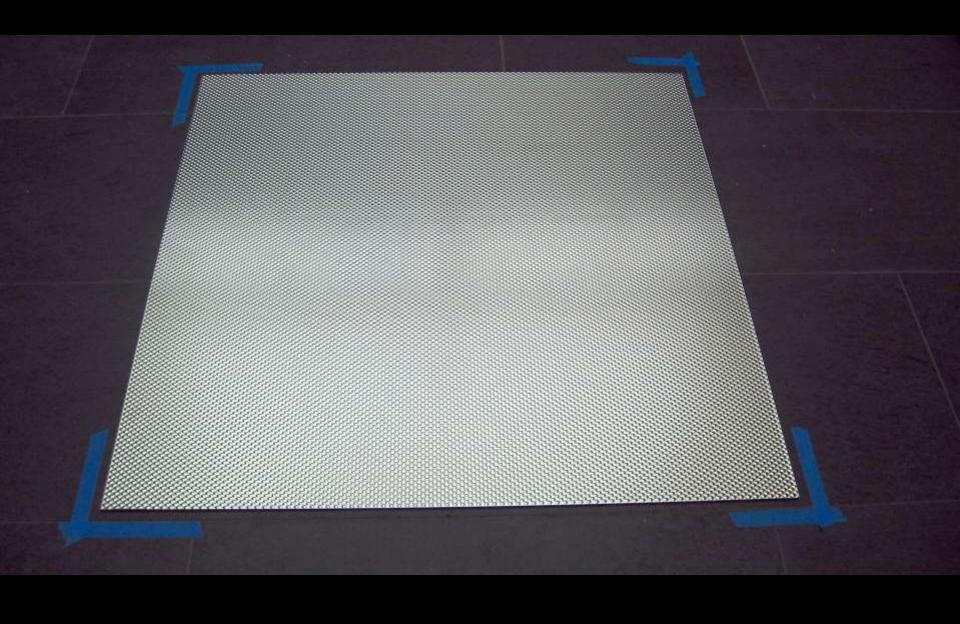




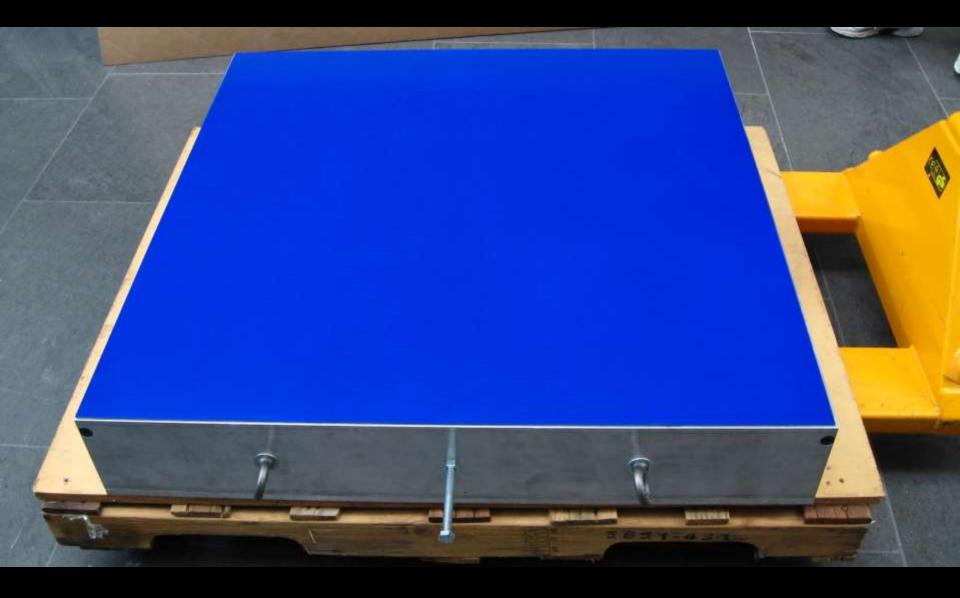












Pedestal sliding on steel plate.



Pedestal sliding on steel plate.



Don Clyde Principal Engineer EQX Global

Finished pedestal ready for receiving the colossus.



Colossus being lifted toward its pedestal.



Positioning the colossus



Lowering the colossus onto molded foot and pedestal.









Testing for the sculptures inherent frequency or oscillating period.





