

Career and the profession

An AIA Member Shares How His Work in the Unique Field of Space Architecture is Taking Design to New Heights

About Ross-Alan Tisdale, AIA: Ross joined Traction Architecture in 2012 after working for the Tampa office of HOK, where he specialized in healthcare, science and technology projects. He was most recently involved in the design and construction of a 220,000 square foot ambulatory out-patient clinic for the Veterans Administration. After graduating from Yale University with a Bachelor of Arts in Architecture, he moved to Albuquerque, New Mexico to join the office of award-winning architect, Antoine Predock, FAIA, whose iconic work has remained a touchstone. Ross spent several years in Boston at an architectural and engineering firm specializing in commercial and retail projects. He has had a lifelong passion for Space Architecture and has worked at the NASA Ames Research Center designing human habitation for the Moon. Before moving to Tampa, Ross received a Master of Architecture from SCI-Arc, the Southern California Institute of Architecture in Los Angeles. He recently received a Design Honor award from the AIA, Tampa Bay chapter and his work has been featured in the Wall Street Journal, Sarasota Magazine, and the first textbook on Space Architecture - Out of this World - The New Field of Space Architecture.



Member Spotlight

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Traction Architecture believes in design for thoughtful living. Whether incorporating solar panels to harness the sun's energy, exposing a historic building's hundred-year-old beams, or carefully locating a window to frame a distant view, each element of their architecture is purposeful.

What inspired you to become an Architect?

Growing up, like a lot of people, I wanted to be an astronaut. I started college in the Air Force as a cadet at the United States Air Force Academy. The buildings on campus by Walter Netsch of SOM had a strong impact on me. The confluence of the architecture, the geography and the academy's mission was very powerful. The Air Force wasn't the right place for me so I went to Yale and took architectural history classes with Prof. Vincent Scully that awoke a nascent interest in architecture. My father was an architect working for the city of Pittsburgh so I was familiar with the profession.

Your career has been varied and includes healthcare, space, science and technology, residential and commercial and retail. What areas of architecture interest you the most?

I'm interested in architecture that can look both forward and back. In our projects, we keep in mind the big picture and consider the long view - how will this building read and work over time? We strive to make work that taps into the spirit of a place. For example, the Seagrape house is situated on a barrier island where the shape of the site shifts with each passing storm. We designed the house to be a physical anchor along that blurred edge between land and sea, a tool to understand the landscape and one's place within it. The house can shield you from a raging storm but it can also conjure notions of man's limits. Staring out into the watery horizon, what is through that blue line? Like looking at an old map, "Beyond here there be monsters", I'm interested in architecture that makes you wonder.

You've done work in the Space Architecture field and also coauthored a chapter in the book *Out of this World - The New Field of Space Architecture*. Can you explain this field of work?

Space Architecture can be loosely defined as design to support human habitation outside the confines of Earth. When you think about our planet and the direction we are going, at some point, life in space will seem like a pretty good option. Currently, all of our eggs are in one basket and that may not be a safe bet for our lasting survival. More information on the field of Space Architecture can be found at www.spacearchitect.org.

Are there major challenges and similarities in designing for the environment in space as compared to more traditional architecture?

Obviously conditions are severe above Earth's atmosphere, but once the basic needs of survival have been addressed, it is important to remember architecture's potential. Down on Earth you could erect a simple hut to keep the rain out, but what is the building doing for your soul? Before July of 1969 we had small ideas and small dreams. Walking on the moon shattered the limits of what we could imagine as achievable. Whether designing on or off of the planet, an architect needs to keep in mind the occupant's aspirations which reach beyond survival and comfort.



AIA

Traction Architecture recently received a Design Honor Award for Architecture from the AIA, Tampa Bay Chapter for the Seagrape House project which features several storm resilient elements. With recent major storms like Hurricane Sandy, Rita and most recently Typhoon Haiyan, what recommendations would you give for storm resilient design?

The topography of flood prone areas in coastal regions is low-lying. By significantly elevating the habitable spaces you can create a buffer zone where storm surge waters are free to run underneath the building. We like to support these spaces with strong, often exposed concrete, pilotis that read as legs braced for impact. Wind action must also be taken into account, particularly when considering roof shapes. After the storm event, site produced energy (from solar or wind sources) can help to speed up recovery efforts when the power grid is down.

Your Seagrape House was also awarded LEED Platinum certification by the United States Green Building Council. Can you talk about the combination of building a storm resilient home that also meets LEED standards?

The two go hand in hand. Storm resistant homes need to be designed for durability and longevity. Designing a building for the long-term is inherently sustainable. If the life expectancy of the building is double that of your neighbor, then you save yourself the trouble of building twice.