



SKANSKA COMPLETES INSTALLATION OF 60,000-POUND OCULUS AT THE PATRICIA AND PHILLIP FROST MUSEUM OF SCIENCE IN MIAMI

MIAMI - October 21, 2016 – The Gulf Stream Aquarium at the Patricia and Phillip Frost Museum of Science is coming to life now that the Aquarium’s 31-foot wide, 13.5-inch thick, 60,000-pound oculus that will hold about 4 million pounds of seawater has been successfully installed.

Skanska USA, the construction firm leading the project, spearheaded the installation of the colossal oculus lens, marking an important milestone for the science museum project as it nears completion. The oculus lens serves as the massive viewing portal into the Gulf Stream Aquarium, the centerpiece of the museum’s three-level Aquarium. The Gulf Stream Aquarium itself is a 100-foot wide, 500,000-gallon, cone-shaped vessel with a corner-less design allowing open-water marine species such as tuna and sharks to swim continuously as they would in the actual Gulf Stream.

The installation process began with securing a crane big enough to lift the oculus over 100 feet in the air, while monitoring weather conditions. Once Skanska had the oculus rigged and lifted, installers carefully guided it into place to guarantee optimum viewing for the museum’s visitors.

"Looking up through the 30-foot oculus into the Gulf Stream Aquarium, visitors will have an immersive experience that takes them into the depths of the ocean. This habitat is now prepared to support over four million pounds of sea water and marine life," said Frank Steslow, Frost Science President. "This was a momentous construction milestone for the museum, which takes us one step closer to the opening. I am incredibly thankful to the dedicated museum team, along with our partners at Skanska. Hill International, Acrylic Tank Manufacturing and Clax Italia for completing this incredible task."

Getting the lens to the construction site was almost as difficult as installing it. The oculus was manufactured in Italy by Clax Italia, and shipped out from Livorno to the Port of Miami. Given that the total weight of the oculus and shipping cradle was 80,000 pounds, a unique motorized platform - similar to the ones NASA uses to move space shuttles – was used to transport the lens to the museum site in downtown Miami’s Museum Park.

“Installing the oculus was one of the most technically challenging aspects of this project. The oculus is round and extremely heavy, making the crane and rigging logistics difficult. The oculus needed to be tilted to a 21-degree angle to match the precise angle of the opening and then, we needed to make sure it was placed and sealed properly to allow future museum visitors to enjoy an optimum viewing experience,” explained Andy Allen, Project Executive for Skanska USA Building. “Our team has been planning this installation for over two years now and it is rewarding to see the results of all the planning become a reality as the oculus takes its place as the centerpiece of the museum.”

Now that the oculus has been installed, the Skanska team will begin installing the silicone sealant that forms the final seal between the oculus and the fiber glass liner, which should take about three weeks to complete, followed by filling the Gulf Stream Aquarium with seawater.

“With each and every construction milestone we achieve, we move closer to opening our doors to the community. We thank Miami-Dade County for their continued support and the residents for believing in this project,” Mr. Steslow added. “We hope Frost Science will inspire generations to visit and be the nucleus of science and technology within our community.”