



NEWS RELEASE

New Glass Panels Begin 520-foot Journey Skyward

First-of-its-kind Technology Incorporates Drone Motors, Giant Suction Cups and a Robot

SEATTLE, March 19, 2018 – Putting a modern twist on the ingenuity and innovation that brought the dream of the Space Needle to life in 1962, general contractor Hoffman Construction is using first-of-its-kind technology to address the unique challenge of transporting the Space Needle’s oversized glass panels to their new home 520-feet in the air.

A total of 48 glass panels – weighing more than a ton each – will be installed on the exterior perimeter of the Observation Deck forming a transparent barrier and creating a floor-to-ceiling glass viewing experience. The Space Needle renovation aims to reveal the iconic tower’s internal structure and harken back to the original conceptual sketches, all while expanding and improving the view with technology that simply wasn’t available in the early 1960’s.

To lift the large pieces of glass up to the Space Needle’s top house, the construction team is utilizing a unique system that combines a gantry crane, cart, and custom robotic glass placement machine with oversized suction cups to lift the glass into place. Positioned on the northeast side of the Space Needle to be sheltered from prevailing winds, which naturally come from the southwest, the gantry crane will remain in place throughout construction.

Attachable, remote operated drone motors fastened to the corners of the glass panels will control the glass movement and help keep the panels in a clear path during their trip skyward. Once the glass load arrives at the 520-foot observation level, it will be transferred to a rolling cart and positioned for pick up by the custom-built robotic glass placement machine.

Designed and fabricated specifically for this tremendous project by Breedt Production Tooling and Design in cooperation with Herzog Glass, the Space Needle’s robotic glass placement machine weighs 5,600 pounds, with no load. The entire machine is so large and heavy that it had to be assembled on site, on the Space Needle’s exterior Observation Deck. A total of eight 20 inches by 12 inches suction cups joined to a robotic arm will attach to the glass panel to create a lock-tight seal. Once secured, the robot moves each glass panel carefully into place where it is then secured to the base of the Observation Deck and held in place by stainless steel rods at the top.

“We’ve been planning this project for years,” said Robert Wallace, Glazing Foreman of Herzog Glass. “This is a once on a lifetime venture for our team. It’s a custom job that we are privileged to work on. I will never forget it.”

“The view has always been the main attraction at the Space Needle,” said Ron Severt, president and CEO of Space Needle, LLC. “When the current renovation project is complete, visitors will be able to experience the Puget Sound like never before with views that are thirty-five percent more expansive than the original construction project could accommodate. Moving the huge, 11-foot by 7-foot glass Observation Deck panels into place is the beginning of the most compelling part of the project.”

Construction teams are working 20 hours a day, six days a week, incorporating a unique approach that allows the Space Needle to remain open during renovation. Crews are working on the structure in 1/6th pie-shaped segments, allowing the other areas of the Observation Deck to remain open.

“This renovation is using first of its kind technology, just like when the Space Needle was originally built in 1962,” said Karen Olson, CMO of the Space Needle. “Ingenuity and innovation were key to how the Space Needle was originally designed and built for the World’s Fair, and are still key to how the Space Needle is being renovated for the future.”

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About the Space Needle

The Space Needle is the celebrated icon of Seattle, second only to the Eiffel Tower in Paris as the most easily-identified global skyline feature. Built for the 1962 Seattle World’s Fair, it continues to symbolize the leading-edge innovation and technology that the city is known for and serves as a beacon into the future.

For More Information

Please visit www.seewhatup.space

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