**Building with Strong Formwork in Paradise**

LITTLE FERRY, N.J. (Month, Day, 2014) – When Doka began work on a $1.12 million, 13,627-sq.-ft. high rise building in Honolulu, Hawaii, in early January 2013, it was the perfect opportunity to expand into the Hawaiian market.

The already sold-out Waihonua at Kewalo (http://www.waihonua.com) planned 341-unit, 45-floor upscale condominium high-rise will provide contemporary one-, two- and three-bedroom residences. Features include a recreation deck with an infinity edge pool, a spa, barbecue dining pavilions, a fitness center, a private movie theater and two visitor guest suites. Adding to luxurious amenities in the tropical paradise is the close proximity – just one block away – from the Ala Moana Center, the largest shopping mall in Hawaii, and the 15th largest shopping mall in the United States and largest open-air shopping center in the world. The project is slated for completion in September 2014.

Waihonua, a Hawaiian name that translates as “waters of the earth,” is described as a community where everything is in symmetry: earth and water, old and new, work and play. This includes not only the surrounding community achieving symmetry, but making sure the building itself is in balance and meets precise standards.

**Excellence in formwork**

Constructing this high-end building came with very specific quality requirements from the contractor Hawaiian Dredging Construction Co., which has helped construct 8,500 condominium units since 1985, in terms of material control. Doka was able to offer a full package of material for each part of the jobs, including columns, core walls and shoring, making the formwork manufacturer attractive as a supplier for this project.

The specific Doka formwork used includes Frami, ready-to-use tables can be designed to meet all geometry of a structure; Super Climber, a self-climbing core system designed with single-stroke cylinders that support and climb all formwork, allowing all of the formwork for an entire story to be raised independently of the crane; SKE **[on the website there is info on the SKE 50 and SKE 100, but the project sheet does not indicate which SKE system is used. Later on there is** reference to SKE 50, but we need to confirm.]; K Platforms, extra-high load-bearing capacity (max. 75 psf) preassembled platforms; and Dokaflex Tables and Table Lifting System (TLS), for jumping the floor-slab formwork to the next story independently of the crane.

This project was the first time Doka used the SKE50 plus shaft system, which, along with using the SCP Super Climber, allowed for a reduction in crane picks for the cores

**Distinct formwork**

Doka supplied the majority of formwork from perimeter walls to shear walls. This is notable because it is the first project in Hawaii that has been awarded slab and vertical solution with only one supplier – i.e. Doka.

Fifteen-story towers back up to either side of the center podium. At some point during construction, there will be more than 36,000 sq. ft. of trusses on the project. This is a huge footprint when compared to a typical building at 15,000 sq. ft. Although not an extremely tall building, it is a significant footprint.

Framax was used at the beginning of this high-profile condo project to help the contractor erect the panels quickly for the 15,000-sq. ft. of vertical framework. Doka’s aluminum Super-Prop was also used for reshorings on this project, the first jobsite in the area for which this had been used. This is noteworthy because Super-Prop has a 20-percent higher capacity than competitive products. Extension is longer which ultimately means fewer props are needed. This translates to savings on money and labor and less equipment being handled, and in turn, benefits Doka’s customers.

**Meeting, overcoming challenges**

Among other challenges was shipping. Hawaiian Dredging Construction Co. arranged to send shipping containers to Doka's yard in Riverside, Calif., and then Doka helped the contractor send the correct amount of material, which was paramount because of limited space in the containers and on the site. Port restrictions also only allowed containers to be shipped once per week, which made organization and material control extremely important.

Once the material was onsite, Doka kept field service on the site for about 40 working days to ensure the material was used safely.

In addition to the shipping material challenges on this project, customer communications also had to be addressed to make sure the working relationship was successful, especially because the contractor was a first-time Doka user.

Clear communication was facilitated by setting up conference calls to ensure all parts of the project team were on the same page and aware of the project progress. To provide additional context, Doka also set up a drawing registry and sent pictures and sketches to help the communications challenge. User information was sent, followed by normal pictures and the by a detailed drawing and field service information to help with the fist-time user challenge. A shipping log detailing dates, cargo and flat rack numbers keep the project team apprised of material coming in and out of the jobsite.

**[NEED A QUOTE OR TWO FROM THE CONTRACTOR ABOUT THE PROJECT OR MATERIALS BEING USED. OTHERWISE, WE NEED SOME KIND OF GOOD QUOTE FROM DOKA.**

**About Doka**

Doka is one of the world leaders in developing, manufacturing and distributing formwork technology for use in all fields of the construction sector. With more than 160 sales and logistics facilities in over 70 countries, the Doka Group has a highly efficient distribution network which ensures that equipment and technical support are provided quickly and professionally. An enterprise forming part of the Umdasch Group, the Doka Group employs a worldwide workforce of more than 5,600 employees. For more information, visit [www.doka.com](http://www.doka.com).

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**Facts:**

**Locatio**n: Honolulu, Hawaii

**General Contractor:** Hawaiian Dredging Construction Co.

**Type of project**: Upscale condominium high rise

**Start date and scheduled end of date**: January 2013 – September 2014

**Products**: Frami, Superclimber, SKE, K Platforms, Dokaflex Tables and Table Lifting System (TLS) were used as formwork in the Waihonua project

**Square footage of material used:**

* **Frami**: 6,780 sq. ft.
* **Superclimber (SCP) Top 50**: 1,900 sq. ft./four SCP brackets
* **SKE50 Top 50**: 2,660 sq. ft./two shafts with four brackets
* **Floor shoring area**: 13,500 sq. ft.

**Photo Captions:**