

# DAIKYO, Anabuki Win Two 2020 Good Design Awards Ninth consecutive win for DAIKYO and its subsidiaries

Oct 5, 2020

TOKYO, Japan – October 5, 2020 - DAIKYO INCORPORATED ("DAIKYO") and Anabuki Construction Inc. ("Anabuki Construction") won two 2020 Good Design Awards for The Towers Frontier Sapporo condominium and the Mask OK! Facial Recognition Operation Home Parcel Delivery Locker, an apartment building access system that uses a proprietary facial recognition system.

Since winning a Good Design Award for the Lions Machida Marks Fort (located in Machida City, Tokyo) in 2012, DAIKYO and its subsidiaries have won awards in nine consecutive years.

# ■ 2020 Good Design Awards Award-Winning Projects

1. Energy Center and Condominium
The Towers Frontier Sapporo



2. Mask OK! Facial Recognition Operation Home Parcel Delivery Locker

Apartment building access system using a proprietary facial recognition system



The Towers Frontier Sapporo

The Towers Frontier Sapporo, which was completed in September 2019, was recognized for its efforts to use energy effectively throughout the entire urban redevelopment project with measures such as encouraging the development of communities where local residents can live in harmony with the natural environment (smart energy network).

In addition, the Mask OK! Facial Recognition Home Parcel Delivery Locker, which was jointly developed by Anabuki Construction, is a further advancement of an apartment building access system that uses facial recognition developed in 2017, achieving even higher performance. It can recognize faces even when a user is wearing a mask and operates parcel delivery lockers when entering the building. This system was commended for meeting the need for contactless services during the novel coronavirus pandemic.

Going forward, DAIKYO and Anabuki Construction will continue to offer comfortable housing in harmony with the local community and contribute to generating prosperity for the district.

#### 1. North 4 East 6 District Type 1 Urban Redevelopment Project: The Towers Frontier Sapporo





The Towers Frontier Sapporo

Entrance hall of The Towers Frontier Sapporo

## **■** Property Overview

The North 4 East 6 District Type 1 Urban Redevelopment Project: The Towers Frontier Sapporo was jointly developed by Daiwa House Industry Co., Ltd., , and DAIKYO. The project is a large-scale complex redevelopment project that includes the Towers Frontier Sapporo, twin tower high-rise condominiums, as well as an energy center, commercial facilities, social welfare facilities, a plaza, a gymnasium, and other facilities on a site that exceeds 34,000 m<sup>2</sup>.

Location: 5-357 and 5-364 Kita 3-jo Higashi, Chuo-ku, Sapporo,

Hokkaido

Access: 10 minutes' walk from the Sapporo Station on the

Namboku and Toho Subway Lines

8 minutes' walk from the Bus Center-Mae Station on

the Tozai Subway Line

14 minutes' walk from the JR Sapporo Station

Site area: 7,667.98 m²
Building area: 2,348.32 m²
Total floor area: 31,089.92 m²
Structure & number of floors:

Reinforced concrete construction with partial steel frame

21 stories and 1 basement level

Business owner: North 4 East 6 District Type 1 Urban Redevelopment Project Association

Sellers: Daiwa House Industry, Sumitomo Realty & Development, DAIKYO

Design and supervision:

Fujita Corporation and Hokkaido Nikken Sekkei and Design Community, Fujita Corporation

Sapporo Branch Senior Registered Architect Office

Contractors: Specified construction consortium comprising Fujita Corporation, Iwata Chizaki Inc.,

Tanaka Gumi Co., Ltd.

Construction start: April 2017
Construction end: September 2019

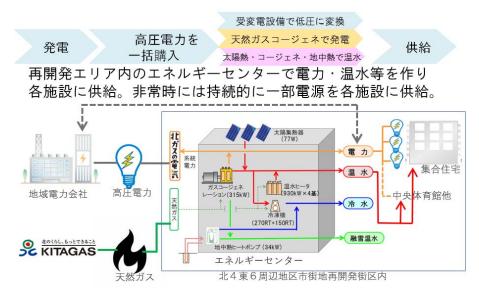
## ■ Features of the North 4 East 6 District Type 1 Urban Redevelopment Project

- Achieves energy savings and low-carbon through the introduction of natural gas cogeneration and renewable energy.
- Excess electric power is used throughout Hokkaido by Hokkaido Gas Co., Ltd. (reverse power flow), enhancing electric and thermal efficiency in the region.



The Towers Frontier Sapporo

- Load leveling is achieved through integrated supply to multiple buildings with different demand curves, realizing cost savings through efficient operation of installed capacity and supply facilities.
- Electric power, heating and cooling can be supplied to part of the district even in the event of a power outage, contributing to the resiliency of the project as a whole and the development of a disaster-resistant city.
- The energy network has been optimized through the use of a community energy management system (CEMS\*) that includes district-wide energy forecasting and optimal operation planning, visualization of energy, and implementation of demand response.
  - \* A system that manages energy for an entire community.



Conceptual Diagram of the Energy Network

## **■**Evaluation Comment from the Judges

This project is an excellent attempt at distributed energy supply. Of particular note is the higher efficiency achieved by making use of the differences in peak energy use of the three facilities that are supplied energy by the central energy center. The smaller the system, the more difficult it is to achieve balance in distributed energy supply, but this project overcomes this superbly. It will be quite interesting to see how this plan is able to adjust if one of the three facilities is put to different use in the future.

# 2. Mask OK! Facial Recognition Operation Home Parcel Delivery Locker

# ■ Product Overview

The Mask OK! Facial Recognition Operation Home Parcel Delivery Locker is a security service that integrates auto-locks with parcel delivery lockers that uses facial recognition technology. The system is a further advancement of the Surpass Escort Service Face<sup>1</sup> facial recognition apartment building access system won a 2018 Good Design Award and developed in 2017 by Anabuki Construction and Fulltime System Co., Ltd. Earlier systems were unable to authenticate users if they were wearing masks, but the new system enhances comfort while maintaining security.

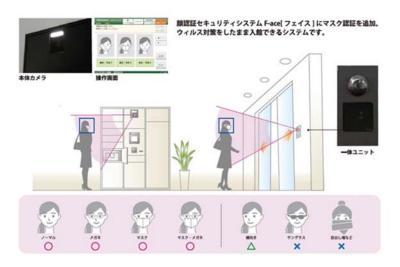
With the spread of the novel coronavirus, awareness of hygiene has increased and it has become commonplace to wear a mask during day-to-day activities. The Good Design Award was presented in recognition of efforts to meet the demands of the time when contactless measures have become part of common practice.

<sup>&</sup>lt;sup>1</sup> Surpass Escort is a registered trademark of Anabuki Construction Inc.
Related news release: Daikyo Group Wins Two 2018 Good Design Awards, October 3, 2018
<a href="https://www.daikyo.co.ip/dev/files/20181003.pdf">https://www.daikyo.co.ip/dev/files/20181003.pdf</a> (Japanese)

## ■ Key Points of the Mask OK! Facial Recognition Operation Home Parcel Delivery Locker

- Enhanced visibility by the AI recognition system allows access to the secure area of the entrance hall even while wearing a mask without the use of a key or card.
- Since no key or card is used, there are no worries about losing, forgetting or spoofing of keys.
- Automatic notice can be provided by email when a child returns home.
- Parcel delivery lockers also use a facial recognition system (touchless and hand-free receipt of parcels is possible).
- Conventional key and cards can also be used.
- The facial recognition system uses world-leading facial recognition technology.
- The system can be used not only for access and parcel delivery, but also for all services associated with lockers such as service requests and bicycle rental.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> The available services vary depending on the details of the contract.



Recognition image

# ■ Facial Recognition System Adopts World-Leading NEC Facial Recognition Technology

The facial recognition system uses the NeoFace facial recognition system introduction set from NEC Corporation. This system uses a facial recognition engine that received the highest ranking in the FRVT 2018<sup>3</sup> facial recognition technology contest conducted by a U.S. government agency and achieves high security and convenience in a variety of scenarios.

https://pages.nist.gov/frvt/html/frvt1N.html

The evaluation results are not a guarantee by the U.S. government of the products (accuracy) of the participating venders.

# **■**Evaluation Comment from the Judges

As online purchasing increases, installation of parcel delivery lockers in apartment buildings is becoming common to the reduce stress and difficulties associated with the receipt of parcels. In 2020, the spread of the novel coronavirus has raised awareness of hygiene, and the ability of this system to recognize faces and unlock a locker even if a user is wearing a mask meets the demands of a time when contactless measures have become part of common practice.

<sup>&</sup>lt;sup>3</sup> Face Recognition Vender Test 2018. The speed and accuracy of recognition was evaluated used large-scale data comprising tens of millions of people. This was a global benchmark test with top venders from various countries participating.

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#### **About ORIX:**

ORIX Corporation (TSE: 8591; NYSE: IX) is a financial services group which provides innovative products and services to its customers by constantly pursuing new businesses.

Established in 1964, from its start in the leasing business, ORIX has advanced into neighboring fields and at present has expanded into lending, investment, life insurance, banking, asset management, automobile related, real estate and environment and energy related businesses. Since entering Hong Kong in 1971, ORIX has spread its businesses globally by establishing locations in 37 countries and regions across the world.

Going forward, ORIX intends to utilize its strengths and expertise, which generate new value, to establish an independent ORIX business model that continues to evolve perpetually. In this way, ORIX will engage in business activities that instill vitality in its companies and workforce, and thereby contribute to society. For more details, please visit our website: <a href="https://www.orix.co.jp/grp/en/">https://www.orix.co.jp/grp/en/</a> (As of March 31, 2020)

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These documents May contain forward-looking statements about expected future events and financial results that involve risks and uncertainties. Such statements are based on our current expectations and are subject to uncertainties and risks that could cause actual results that differ materially from those described in the forward-looking statements. Factors that could cause such a difference include, but are not limited to, those described under "Risk Factors" in the Company's annual report on Form 20-F filed with the United States Securities and Exchange Commission and under "(4) Risk Factors" of the "1. Summary of Consolidated Financial Results" of the "Consolidated Financial Results April 1, 2019 – March 31, 2020."