South-Korea

Client: Naver

Country: South-Korea

**Execution time:** From Sept. to Dec. 2021.

**Project size:** 1,300 linear meters of combined solid & glazed partitions and 120 FIZZ BOX

Crystal Meeting Rooms.

South Korea's technology giant Naver creates the world's first building designed for human-to-robot convergence



In the heart of **Seongnam**, a major city on the outskirts of Seoul, Naver is actively working to create its vision of the future. A future where technology seamlessly blends into our daily lives thanks to mass deployment of 5G connectivity, Artificial Intelligence, and robot buddies. But before making this vision a reality, Naver needed a place to study the way people would interact in an environment where said technologies are ubiquitous and holistic.

Designed to be a blueprint for the future of the workplace, the **Naver 1784** building can also be seen as a grand experiment to prepare for a world where robots naturally blend into our daily lives. Its nickname - the "**Testbed**"- truly embeds the idea of being a giant playground for humans and robots, whilst offering cutting-edge work amenities and innovative energy-saving solutions.



Clestra South-Korea had previously worked for Naver on several workspace projects, including their flagship **Green factory building**, however this time the requirements for **Naver 1784** were drastically different. Since the building needed to accommodate both employees and robots, certain design principles had to be followed to ensure safe and smooth circulation of these different types of occupiers and facilitate interactions.



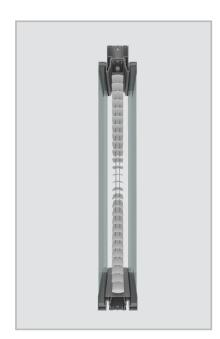
Interior view of NAVER 1784

Another core element of the design was the emphasis put on interiors flexibility and the need to enable easy space reconfigurations. Clestra was chosen to supply and install an upgraded version of our modular partitions to address Naver's specific challenges.

Modular interior partitions were indeed the ideal solution to create a flexible work environment while limiting VOC emissions within the building (another strong requirement from Naver). Our teams worked to further improve partition safety (in case a robot accidently collides into a glass wall), and integrate automatic venetian blinds to increase privacy.



Naver's robot buddies



Typical view of venetian blinds integration.



Naver teams' biggest requirement was the physical integration of their proprietary **network control system** across the building. This innovation was specifically designed for this project: it essentially grants occupiers control over some of the buildings' functions such as room privacy features, temperature and lighting, through a dedicated mobile app.

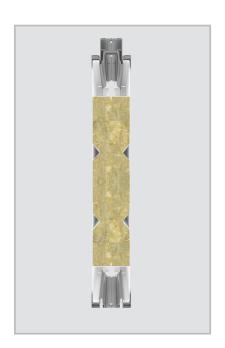


Interior view of NAVER 1784

Multiple sensors and wiring networks are required for the system to work seamlessly and most of them had to be directly integrated within the partition structure installed in all workspaces. Our in-house R&D teams and **prefabrication expertise** were key to address these challenges, delivering customized cabling conduits and reinforced panels at scale.



Interior view of NAVER 1784



Customized modular steel panel with upper and lower cable conduits.



Designing the workplace of the future also meant for Naver to ensure its facilities were future-proof, to avoid costly renovation work whenever space refurbishing is needed.

Modular floor-to-ceiling partition systems are essential to achieve full asset flexibility. But partition systems can also be upgraded with their own ceiling enclosures, turning them into modular meeting rooms, also called PODs. Naver deployed Clestra PODs with their own power supplied to them, lighting, acoustics and even HVAC controls.



Example of a typical POD installed at NAVER 1784

They will serve Naver's workspaces for the future and beyond, because modular meeting room systems can be repositioned, scaled-up or scaled-down whenever change is required.



Such modular systems make-up a dynamic office environment which will improve Naver employees' experience whilst saving **costs and time** on construction work. These pods can be arranged in an open floor layout, offering enclosure spaces to the open space. They can serve different functions within an open area, where a range of tasks can be carried out.

We delivered Naver's vision of connecting physical spaces to a digital environment thanks to our unmatched knowledge and capabilities in Modular partitioning. As a testimony of their commitment to this project, Naver teams closely supervised the work of all vendors involved to ensure they would deliver their vision for the future.



Typical modular meeting room at NAVER 1784



#### Clestra challenges for Naver 1784 "Testbed" project:

- >> Upgrading our partition design to accommodate the specificities of a building occupied by humans and robots.
- >>> Mass-customizing partitions to integrate the intricate cable and sensor infrastructure needed to deploy Naver's network control system.
- >>> Partnering with Naver to deliver future workspace modifications and improvements.

