

**CERARL**

2022-2023

**Noncombustible Panels**



**AICA**

# CERARL

## Antivirus Type Virutect

In addition to antibacterial performance, “Virutect” high pressure laminates and “CERARL Virutect” noncombustible decorative panels with “antiviral performance” contribute to the maintenance of cleanliness with certain performance.



- Robust against heat and humidity  
(Ministry of Land, Infrastructure, Transport and Tourism Certification NM-2183)
- This solid, damage-resistance product is sturdy and robust when it comes to impact shocks.
- For use as a wall surface material at facilities involving medical equipment, nursing care, childcare, education, and other facilities where restroom spaces are found.



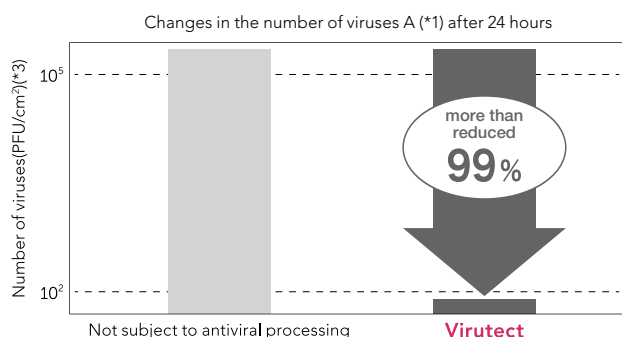
The SIAA brand mark is borne on products that are under quality control and information disclosure by the guidelines of the Society of Industrial Technology for Antimicrobial Articles based on the basis of the results evaluated by ISO 21702 method.

- Antiviral treatment does not cure or prevent disease.
- In compliance with SIAA safety criteria.



The SIAA brand mark is borne on products that are under quality control and information disclosure by the guidelines of the Society of Industrial Technology for Antimicrobial Articles based on the results evaluated by ISO 22196 method.

### Antiviral test



(\*1) : Because specific virus names cannot be shown for reasons related to the Pharmaceutical and Medical Devices Act of Japan on Securing Quality, Efficacy and Safety of Products including Pharmaceutical and Medical Devices, the virus is shown as Virus A and Virus B

(\*2) : Regarding membranous structure found in virus particles, it is said that if there is no envelop, resistance to disinfectants such as alcohol is stronger than having an envelope

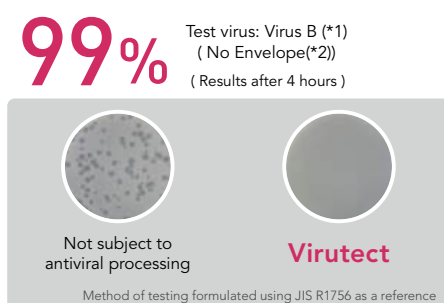
(\*3) : PFU ( Plaque-Forming Unit ) Virus count index measured by plaque assay

Test Laboratory : Japan Textile Products Quality and Technology Center

Test Method : ISO 21702 assay

Test Virus : Virus A(\*1) (No Envelope(\*2))

### Antiviral Performance



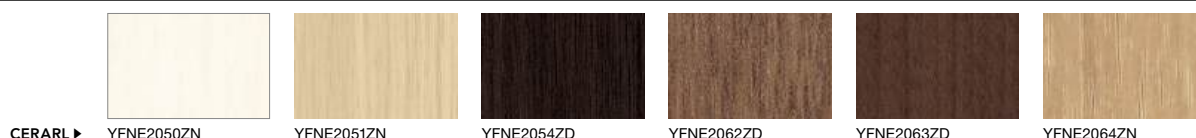
### Antibacterial

	Bacteria A	Bacteria B	Comparison of melamine decorative laminates for testing not subject to antiviral and antibacterial processing with “Virutect”.  <u>Melamine laminated sheets and noncombustible Melamine laminates have antibacterial specifications except for some items.</u>  Results of measurement using Bio-Checker (*4) measurement results ※ The above are the result under specific test conditions. ※ These are test result and are not guaranteed values. (*4) : Bio-Checkers are often used in hospital and nursing homes for self- management of bacteria. Bio-Checker : ( SAN-AI Bio-checker FC ( Food business use ) /SAN-AI Oil Co., Ltd.
Not subject to antiviral and antibacterial processing products			
Virutect			

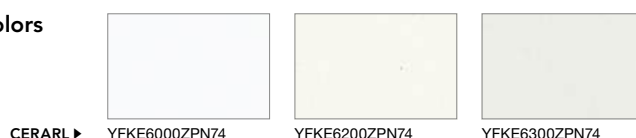
### The color variation

CERARL = noncombustible decorative panels

#### Woods



#### Solid colors

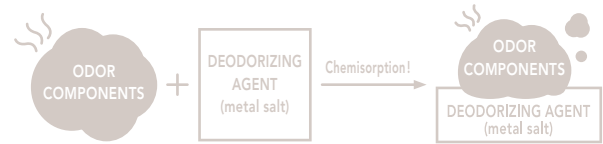


# Deodorization Type

The addition of new capabilities to the tough and beautiful CERARL allows customers to go about reducing amounts of substances behind the worrisome odors of everyday life.



- The product reduces amounts of substances behind the worrisome odors of everyday life, like those found in restrooms and hospital rooms.
- Its antibacterial specification supports creating clean spaces (SIAA-registered product).
- Optimal for applications such as hospital rooms and restrooms found at stations, schools, and other establishments.

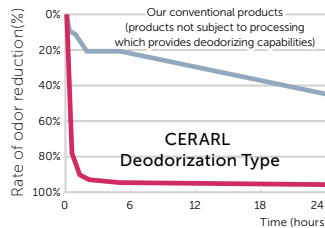


Chemisorption results from odor components coming into contact with the deodorizing agent on the surface layer of the product.

## Deodorizing capability test

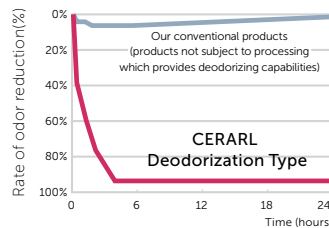
### Ammonia

Initial concentration: 100ppm



### Hydrogen sulfide

Initial concentration: 4ppm



\*Deodorization: Comparison with our conventional products. The deodorization effect does not mean the elimination of odors, but rather a reduction of them.

\*Testing was undertaken by our company. This does not constitute a guarantee as to the effect produced under actual environments. This also does not constitute a guarantee as to any semi-permanent effects.

\*1: This is a comparison with our conventional products. The product does not eliminate odors, but rather reduces them. Chemisorption results in the manifestation of deodorizing capabilities.

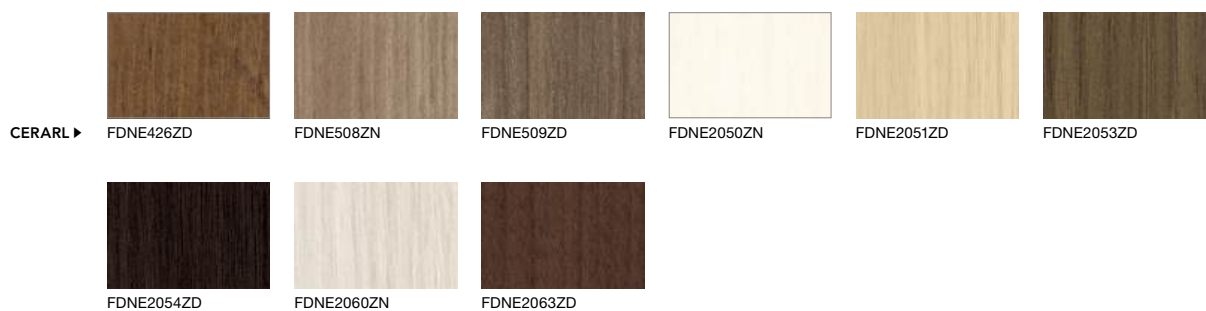
\*2: In comparison with our conventional products, this product inhibits the proliferation of germs.

\*SIAA mark numbers differ depending on the model number.

## The color variation

CERARL = noncombustible decorative panels

### Woods



### Solid colors



### Shower room / Bathroom



### 〈Cautions〉

- Antiviral processing is not intended to treat or prevent diseases.
- This product meets SIAA safety standards.
- This product does not guarantee the prevention of infection.
- Antiviral performance is not expressed against all viruses. In addition, the same test result cannot necessarily be obtained for all viruses.
- The data and pictures shown constitute the outcomes of testing. They are not representations of guaranteed performance. They also do not provide any guarantees of similar outcomes during actual usage.

- This is not a product intended for medical use such as pharmaceuticals or medical devices.
- If the surface wears to the extent that the gloss changes antiviral performance may decrease.
- If there is dirt attached to the surface, this product cannot exhibit its effect, so please take appropriate care of it.
- Even with the same item pattern, the color and gloss of the normal products and "Virutect" are different so please avoid using them together on the same item.

NONCOMBUSTIBLE



A WIDE VARIATION  
IN DESIGNS



CERARL noncombustible decorative panels are made with melamine resin-impregnated decorative layers and a specialized noncombustible core, formed by a high-temperature, high-pressure press.

Offering superb rigidity and strength, they're favored in public buildings as well as in the home.

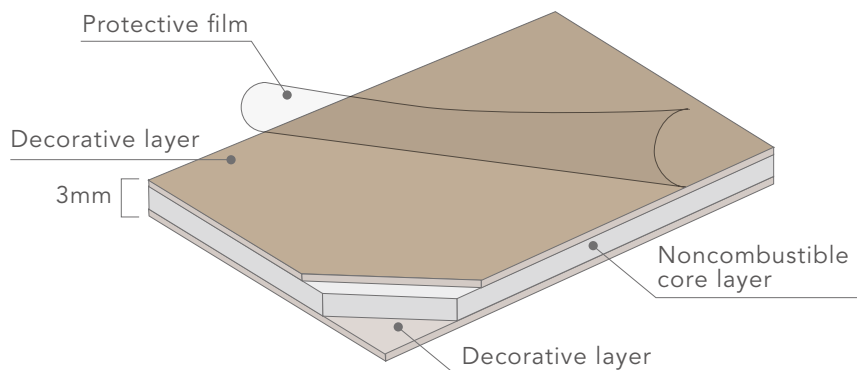
WHAT IS CERARL

WATERPROOF





## COMPOSITION OF CERARL



### Vast selection of designs

Solid colors, wood grain, stone, abstract patterns, and more!  
A myriad of variations to choose from.



### Heat and humidity-resistant

Won't discolor if splashed with hot water.  
Not even cigarette stains stick!



### Hygienic and sanitary

Maintains cleanliness by inhibiting growth of bacteria. Also suitable for bath and toilet areas.



### Easy to maintain

Resistant to set-in stains, and easy to wipe clean.



### Simple installation

Easy to cut smoothly and cleanly with woodworking carbide blades.



### Durable and impact /scratch-resistant

Rigid and strong melamine resin protects these panels from cracking, shattering, splintering, and scratching.



## PUBLIC FACILITIES

### TAIWAN CHIMEI MUSEUM

DESIGN / U-JOINT Design Construction Co., Ltd, Diamond Chen  
CONSTRUCTION / Long Tsai Corp





1 FE-1788ZGN



### Traditional design of Western art museum

Taiwan's representative Western art museum, which was renovated, opened on New Year's Day 2015. The large museum stores Western paintings, sculptures, and art from the 15th to the 19th centuries. CERARL is used for the majority of the walls inside the building. The material used, the durability, and expressive power reflect the depth that contributes to the museum's potential as a permanent facility. The decorative designs are smooth, and the museum gained popularity as it brings out the high standard of Western art and the dignity of the museum.



## KURE KIZUNA HALL

DESIGN / DAIKEN SEKKEI,INC. Hisashi Inoue, Shinya Tajima, Kyoshiro Enoki

CONSTRUCTION / PENTA-OCEAN CONSTRUCTION CO., LTD.

PHOTOGRAPH / Nacása & Partners Inc., Koji Fujii

Joint Photographs Haruki Hiyama



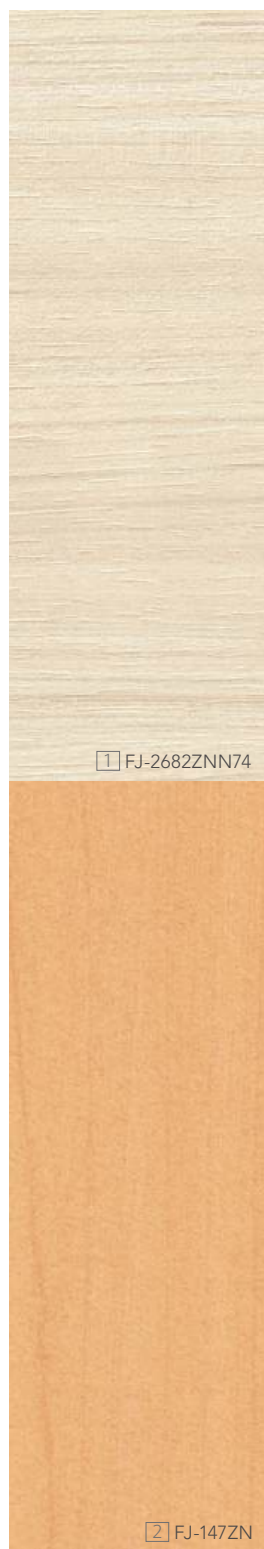
1 FKJ6000ZKN82



### Large curved wall is a symbol of relaxation

The new government building in Kure City is the center of civic life. The civic mall leading to the park is a three-story colonnade where people can walk and relax. The large curved wall is symbolic of a sea breeze and the ship of Kure, a popular shipbuilding port. In order to emphasize the continuity of the curved wall, the end was finished without joints by using incombustible JOLYPATE, which offers different finish variations and high crack followability. The wall uses CERARL (a noncombustible decorative board) except for the curved surface.

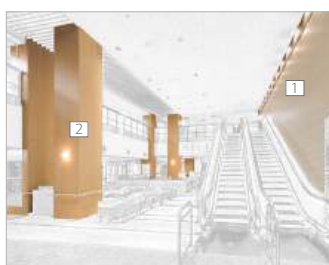
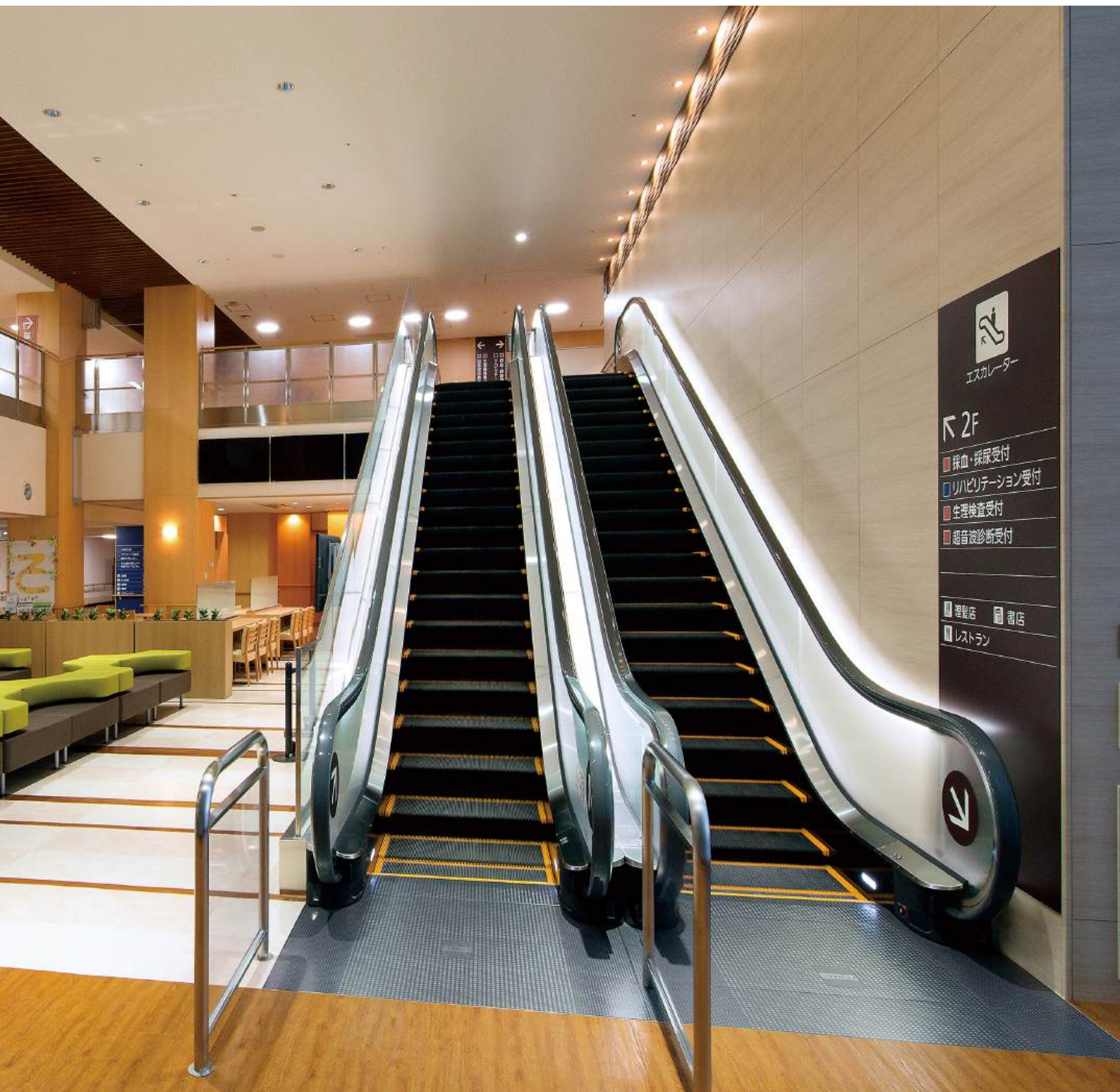




# HOSPITAL

## NARA MEDICAL UNIVERSITY HOSPITAL CENTRAL SURGERY BUILDING

DESIGN / Naito Architects Co., Ltd.  
PHOTOGRAPH / Fromage



### Warmth of wood and soft lighting create a heartwarming atmosphere

As a core medical hospital for disasters in Nara Prefecture, our intention was to create a space that would ease the minds of patients and offer functional aspects that could withstand hard use. By combining the warmth of wood and soft lighting, we created a heart-warming, peaceful atmosphere. By adopting CERARL for the corridor and waiting room wall, the wall is hard to scratch and easy to clean, making it a comfortable space for both patients and hospital personnel.



# SAITAMA PREFECTURAL CHILDREN'S MEDICAL CENTER

DESIGN / Kume Sekkei Co., Ltd.  
(Makoto Nambu, Motonobu Ogura, Risa Sonoda, Maho Imai)  
CONSTRUCTION / SHIMIZU CORPORATION





1 FTN489ZTN62



### The unique design suitable for the children's hospital looks attractive in bright and colorful colors

The Saitama Prefectural Pediatric Medical Center relocated and improved together with the adjoining special support school. Highly functional beds in the NICU and PICU account for about 1/3 of the total number of beds and are fully equipped with advanced pediatric medical functions. Because Saitama Red Cross Hospital is on the same site, the two hospitals will be maintained as an integrated building, so that the appearance of the floor height of the lower floors will align with each other and thus give a sense of unity in the horizontal line. By matching the shape of the wards and the landscaping, the design also has a sense of unity. By adopting mace art panels, we maintained the uniform, stable beauty of the hospital. We also considered ways to relieve anxiety and fear accompanying hospital examinations and treatment by using color, form, window views, and artwork to stimulate the sensitivities of children. Colorful melamine decorative boards that are used help create the atmosphere suitable for children's hospital. Designed to see the landscaping from all windows in the hospital, we achieved a bright, homey environment for the children. Bright fancy colors used in the nursing stations help form a child-friendly space.



### Interior space that offers both comfort and warmth

The new construction plan relocated the existing hospitals due to aging and insufficient space. Our goal was to improve the medical environment and the medical care environment for patients in response to local medical needs. The five-story hospital building consists of a seismic isolation structure, a hybrid structure of pillar RC structure, and beam S structure, and a two-story service building of S-structure, which is earthquake resistant. Consideration was given to BCP during a disaster by installing a seismic isolation structure and an oil tank that can generate emergency power for three days, a well water treatment facility, and an emergency drainage tank for dialysis. The facade has a curtain wall and a special RC exterior part in front of the background of the simple ward floor of the extruded cement board. The interior has a warm color tone to create a facility that gives comfort to patients, families, and hospital personnel. The CERARL waist wall system that is adopted has a sense of unity and durability by interlocking the handles on the wall finish. By creating an interior space that is comfortable and calming, it has become a widely accepted recuperative environment, and it gained popularity from hospital personnel and patients.





Medical Corporation Seijin-kai

## SEJINKAI-SHIROI HOSPITAL

**DESIGN** / DAIKEN SEKKEI, INC.

(Design: Yuji Fukushima, Ryoji Yazawa, Structure:  
Kazuto Yoshihara, Atsushi Tadokoro, Electric  
Facilities: Osamu Ikeda, Machine Equipment:  
Takeshi Kanazawa, Kazuki Aiba)

**CONSTRUCTION** / Fujita Corporation





1

## OPERATING ROOMS

INTERNATIONAL UNIVERSITY OF  
HEALTH AND WELFARE,  
MITA HOSPITAL

DESIGN / Yasui Architects & Engineers, Inc., Tani Homare, Higashizono Hirofumi  
CONSTRUCTION / TODA CORPORATION



## REFERENCE

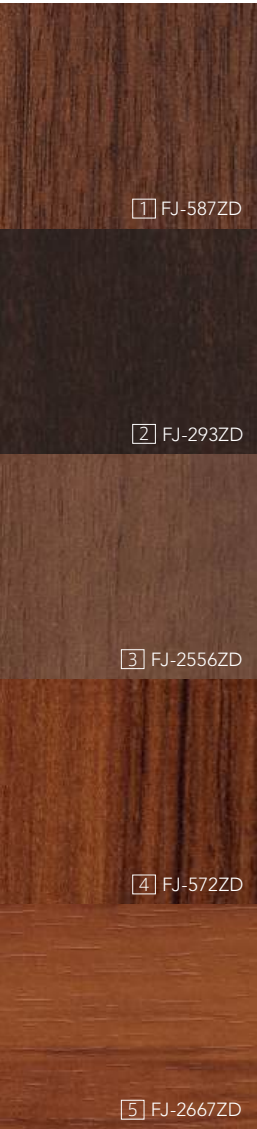


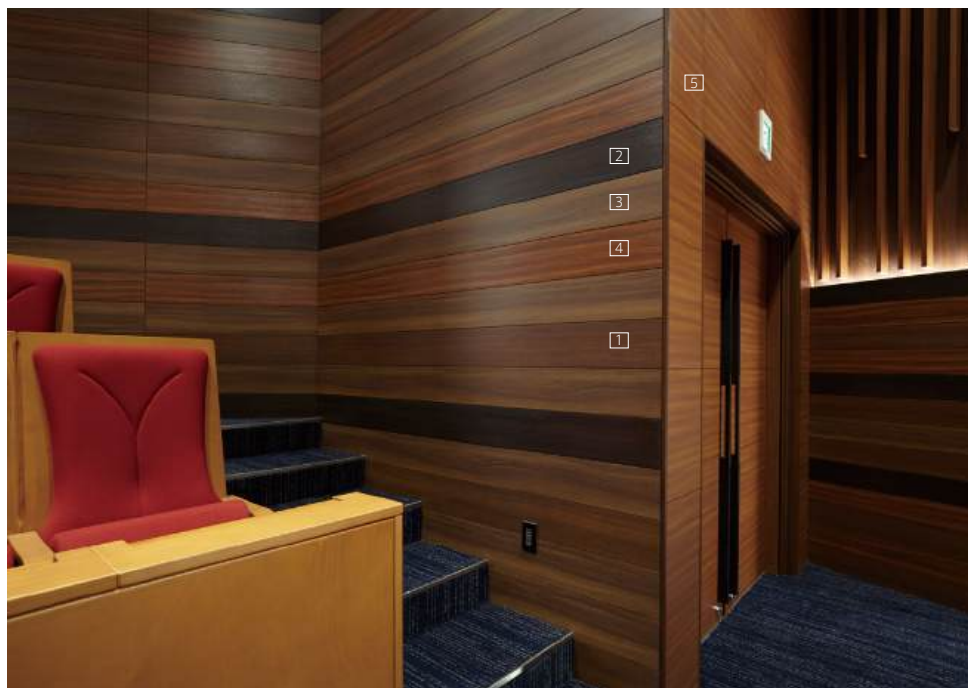


# EDUCATIONAL FACILITIES

## CHUKYO UNIVERSITY NAGOYA CAMPUS BUILDING NO.1 (SEIMEI HALL)

DESIGN / Sumitomo Mitsui Construction Co., Ltd.





### Elegance lies in the stacked wood grain pattern, academic hall of fame

The Nagoya campus development plan was carried out on the occasion of the 60th anniversary of Chukyo University. The Seimei Hall auditorium of Building No. 1 can house 500 people and was built with the intention of welcoming extracurricular lecturers and letting students have more connections to society. Wood grain CERARL gives a chic ambience to the stage wall and the auditorium chairs, using veneer plywood from prestigious natural wood. Woods in different shades of color are laminated to create striped patterns, eliminating any feelings of pressure from the wall. It is easy to process and has the characteristic melamine decorative boards with beautiful cross sections from the timber.



# SHANGHAI TECH UNIVERSITY

CONSTRUCTION / Shanghai Construction Decoration Engineering Group Co.,Ltd.

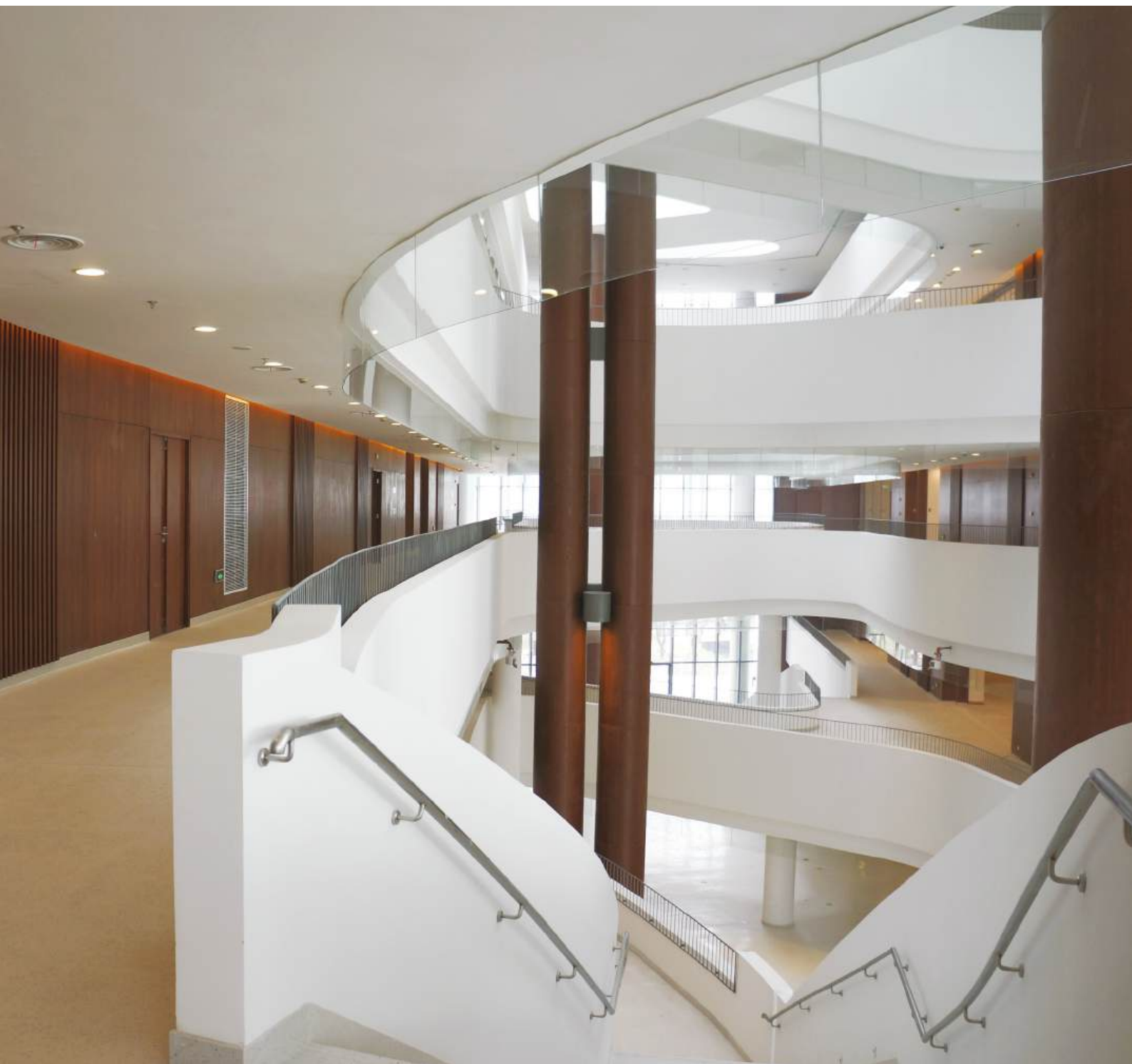


## Produces a solid feeling with woodgrain walls in different shades of colors

A new university was established in 2014 in Shanghai, which continues to develop as an international city. Aiming at a majestic space, we adopted wood grain CERARL and melamine decorative boards to highlight the wood shades and create an atmosphere with a profound impression. The sophisticated and beautiful space promotes student curiosity, and the high quality building materials made in Japan and the careful construction are highly appreciated.



1 FJ-2020ZJN67





1 FTN2054ZD

## TRANSPORTATION FACILITIES

### HANEDA AIRPORT JAL SAKURA LOUNGE

DESIGN DIRECTION/ A.N.D. Ryu Kosaka  
DESIGN/ A.N.D.  
DESIGN/SUPERVISION/ Azusa Sekkei Co., Ltd.

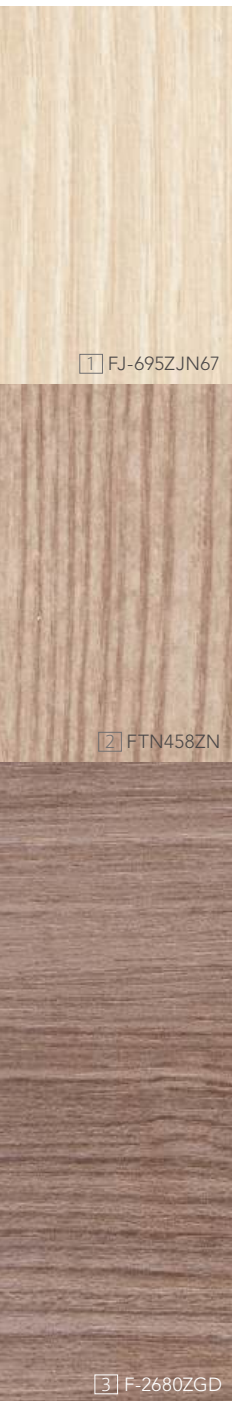


### A lounge embodying Japanese aesthetic sense

The lounge for first class and business class passengers is new for the Haneda terminal building, which has been expanding its international flights. Designed to be the heart of hospitality, the lounge encompasses the aesthetic sense of the Japanese as a convenient gateway to Japan. CERARL is adopted for the wall surface and harmonizes with the texture rich, functional beauty. The luxurious feeling is not superficial, but rather a design that deeply touches the heart in a Japanese way.



2 FTN2000ZN



1 FJ-695ZJN67

2 FTN458ZN

3 F-2680ZGD







# SENDAI SUBWAY TOZAI LINE AOBA-DORI ICHIBANCHO STATION

DESIGN / GUN ARCHITECT DESIGN OFFICE





1 FAN1983ZMN



### Bright space created by glare and reflection

Sendai Station of the Tozai Line opened in December 2015. From the image of Ichibancho crowded as the center, we emphasized the concept of a mirror that continues to reflect longing and aimed to create a bright space. The station adopted stone-tone CERARL for the ceiling and walls, so you can expect reflections on the finish material and visual effect due to the reflection of lighting. The material offers excellent incombustibility, durability, and moisture resistance. The space emphasized cleanliness and transparency and is gaining so much popularity that customers say, "It fits the image of the Ichibancho."







## NAGOYA RAILROAD HIGASHI OKAZAKI STATION

DESIGN / Meitetsu Real Estate Development Co., Ltd.



1 FKJ6000ZNN74

2 FKJ6305ZYD95



### At the core of a sunny modernist city

Okazaki City is the birthplace of Tokugawa Ieyasu. Many historical sites of the Tokugawa family remain. The station in the center has been reborn in keynote monotone, which is linked to the history and culture of the city. The relaxing space suppresses the reflection of light while increasing lighting efficiency from the heavy use of glass. CERARL is the foundation of the space. The high maintainability of antimicrobial specifications supports the durability and design of a station building crowded with visitors every day. The completion of modernism in the station building characterizes this simple and light city.

# RESTROOMS & LAVATORIES

## YOKOHAMA ARENA CUSTOMER RESTROOM

DESIGN EXECUTION / Takenaka Corporation



### Cleanliness: Focuses on the contrast of drifting white and dark gray

The multipurpose hall has a maximum area of 8,000 m<sup>2</sup> in the arena and a maximum capacity of 17,000 people. Since its opening in 1989, it has been used for concerts and sports, but in order to update the facilities, we closed for six months and made extensive renovations. The restrooms use clean white as the base color for all Western-style toilets. The booth doors open in the opposite direction to normal. By using the contrast of white and dark gray inside the booths, we made it easy to recognize vacant booths. We use CERARL as the embossment that fluctuates with light. By combining the same color as the LUNALIGHT COLOR and melamine decorative board, the space has a clean and fresh impression. Also, for events where most visitors are female, it is possible to temporarily switch the sign of the male toilets for women.









1 FAS1840ZMN

## DAINAGOYA BUILDING OFFICE RESTROOM

DESIGN / Mitsubishi Jisho Sekkei Inc.  
CONSTRUCTION / Shimizu Corporation



### Provide moisture and charm in front of Nagoya station

The concept of the office building is big trees on a green hill. Other than the interior and exterior, the building design pays attention to the landscaping, adding moisture and new charm to the scenery in front of the station. By unifying the pattern of the toilet booth and the wall, there is a sense of unity throughout. The aim of the design is a space wrapped in a tree's moisture amid big trees. By adopting a mirror finish, the room also expresses depth and luxury, as well as the height of the amenity.





Tamura Gakuen Educational Association

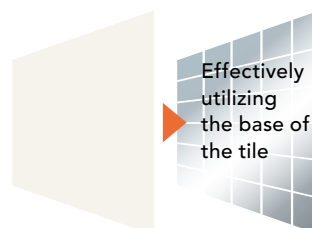
# TAMA UNIVERSITY (TAMA CAMPUS)

DESIGN / Yoshimi Ito, Tohata Architects & Engineers, Inc.



## CERARI ON tile construction method

Construction is possible without peeling off existing tiles. It is not necessary to establish a new base, so the construction term can be shortened.





### **Total coordination with natural color Clean toilet space with sense of unity**

Improve the image of the university by renovating the restrooms. Especially, the limited space of the toilet and the tile wall required improvement. But changing from Japanese to Western style, the area further narrows. So we used CERARL ON tile construction method and solved the problem. By arranging the whole space with AICA products, workability improved, and the design and function were upgraded. Designed for women's convenience, female students appreciate the new toilet space.

AICA OSAKA SHOWROOM SPACE Φ





# HOTEL NANPUSO

DESIGN / Ikeda-Design Office Co., Ltd.



[3] FTN2011ZN

## REFERENCE



[4] FAN892ZMD

# KITCHEN

## LIONS NERIMA HEIWADAI MASTER PLACE (CONDOMINIUM AND MODELROOM)

DEVELOPER / DAIKYO INCORPORATED



1 FAN1796ZMN



### High class space fascinates with its interlocking handle

Tokyo New Century Residence = A model room for a residence based on the concept of a proposal for Japanese family life in a new era. The interior finish is stylish and expresses brightness and modernity with the contrasting wallpaper and wood grain fittings. The living room is finished in woodgrain pattern melamine decorative board. By changing the mirror surface, mat, and texture, the design gives the texture variations to produce a fine space with unified patterns.



## LAGUNA TOWER



[2] FAN1796ZMN



[3] FTN499ZN

KITCHEN

## AICA FUKUOKA SHOWROOM SPACE Φ





# BATHROOM & SHOWER ROOM

## SHOWROOM





## SAMANI SOBIRASO

DESIGN / Docon Co., Ltd. (Fumihiko Saito)



# Table of physical properties of AICA CERARL

CERARL			HPL	Altyno [Architectural films]	Recommended joint color		Makeup corner material
Normal type	Virutect	Deodorization Type			silicon	Paint joiner	
FAKE75ZMN	–	FDKE6000ZMN	ASW13002KN74	VKK6000	8	45010	–
FAKE75ZGN	–	FDKE6000ZGN	ASW13002KN74	VKK6000	8	45010	–
FAKE90ZMN	–	–	ASW13004KM	–	OLO	45011	–
FAKE90ZGN	–	–	ASW13004KN74	VKK6006	OLO	45011	–
FTNE409ZD	–	–	AS-14109CS62	VW-409C	3	45034	–
FTNE426ZD	–	FDNE426ZD	AS-14122CS62	VW-426A	DBR	45030	ZKN426T62
FTNE508ZD	–	FDNE508ZN	AS-14015CS98	VW-508C	4	45028	–
FTNE509ZD	–	FDNE509ZD	AS-14110CS98	VW-509C	DBR	45033	–
FTNE568ZTN98	–	–	AS-14118CS98	VW-568A	5	45020	ZKH568N74
FYAE802ZGN	–	FDJE802ZN	AS-14144CG	–	7	45000	ZKH802H91
FYAE805ZGN	–	–	–	–	7	45003	–
FYAE936ZGN	–	–	–	–	7	6115	ZKH936H91
FQNE1700ZMN	–	–	–	–	8	45000	ZKN1700MQ
FQNE1701ZMN	–	–	–	–	7	6301	ZKN1701MQ
FYAE1776ZGN	–	–	–	–	OLO	45011	–
FYAE1788ZGN	–	–	–	–	OLO	45012	ZKH1788H91
FYAE1810ZGN	–	–	–	–	5	45013	–
FASE1838ZMN	–	–	–	–	8	45010	ZKN1838M
FASE1839ZMN	–	–	–	–	7	45003	ZKN1839M
FASE1840ZMN	–	–	–	–	4	6117	ZKN1840M
FYAE1960ZGN	–	–	–	–	5	45018	–
FYAE1983ZGN	–	FDAE1983ZMN	–	–	8	45044	–
FTNE2011ZN	–	–	AS-14119CS98	VW-2011A	4	45026	ZKH2011J67
FJKE2031ZD	–	–	AS-14120CS98	VW-2031A	4	45036	–
FTNE2050ZN	YFNE2050ZN	FDNE2050ZN	AS-14129CS16	VW-2050A	8	45011	ZKN2050T16
FTNE2051ZN	YFNE2051ZN	FDNE2051ZN	AS-14130CS16	VW-2051A	5	45017	ZKN2051T16
FTNE2052ZN	–	–	AS-14131CS16	VW-2052A	4	45025	–
FTNE2053ZD	–	FDNE2053ZD	AS-14132CS16	VW-2053A	DBR	45034	ZKN2053T16
FTNE2054ZD	YFNE2054ZD	FDNE2054ZD	AS-14133CS16	VW-2054A	DBR	45042	ZKN2054T16
FTNE2055ZD	–	–	AS-14134CS16	VW-2055A	DBR	45041	–
FTNE2060ZN	–	FDNE2060ZN	AS-14092CS98	VW-2060A	OLO	45011	ZKN2060T98
FTNE2061ZD	–	–	AS-14093CS98	VW-2061A	4	45028	–
FTNE2062ZD	YFNE2062ZD	–	AS-14116CS98	VW-2062A	4	45033	–
FTNE2063ZD	YFNE2063ZD	FDNE2063ZD	AS-14095CS98	VW-2063A	DBR	45040	ZKN2063T98
FTNE2064ZN	YFNE2064ZN	–	AS-14117CS98	VW-2064A	5	45018	–
FJKE2225ZD	–	–	AS-14121CS98	VG-2225A	4	45038	–
FTNE2555ZTN98	–	–	AS-14138CS98	VW-2555C	4	45033	–
FKJE6000ZUN85	–	–	–	–	8	45010	ZKH6000M
FKJE6000ZYN20	–	–	–	–	8	45010	ZKH6000G
FKJE6000ZNN74	YFKE6000ZPN74	YDKE6000ZNN74	ASW13002KN74	VKK6000	8	45010	ZKH6000N74
FKJE6000ZYN11	–	–	–	–	8	45010	ZKH6000M
FKJE6115ZYN24	–	–	–	–	3	45003	ZKH6115G
FKJE6117ZYD24	–	–	–	–	3	45014	ZKH6117G
FQNE6119ZMN	–	–	–	–	7	45003	ZKN6119MQ
–	YFKE6200ZPN74	–	–	VKK6200	OLO	45011	–
–	YFKE6300ZPN74	–	–	VKK6300	7	45002	–
FQNE6301ZMN	–	–	–	–	7	45000	ZKN6301MQ
FKME6400ZGD	–	–	AS-13009CG	VKK6400	DGR	45043	ZKH6400G
FKME6524ZGN	–	–	–	–	8	45016	–
FKME6600ZGN	–	–	–	VKK6600	8	45010	–
FKME6607ZGD	–	–	–	–	DGR	45006	–
FKME6608ZGN	–	–	–	VKK6608	8	45002	–
FKME6617ZGN	–	–	–	–	8	45002	ZKH6117G

※ HPL and Altyno : Product numbers for regular products without antiviral and odor-eliminating functions.



# SERIES LINEUP

## Noncombustible decorative panels

### CERARL

This is a wall material with high solidity and design. The material demonstrates its usefulness for various applications including repairs.

**Certificated by The Minister of Land,Infrastructure and Transport of Japanese Government** | NM - 2183

**SIZE** | 3×6 (935mm×1,855mm) ± 2mm    3×8 (935mm×2,455mm) ± 2mm

**THICKNESS** | 3mm

### CERALR Antivirus Type -Virtect-

The kind of HPL are also having Anti-Virus efficacy with Anti-Bacteria efficacy.

**Certified by The Minister of Land,Infrastructure and Transport of Japanese Government** | NM - 2183

**SIZE** | 3×8 (935mm×2,455mm) ± 2mm

**THICKNESS** | 3mm

### CERARL Deodorization Type

Life smells are absorbed and decomposed. A deodorization function is added to CERARL.

**Certified by The Minister of Land,Infrastructure and Transport of Japanese Government** | NM - 2183

**SIZE** | 3×8 (935mm×2,455mm) ± 2mm

**THICKNESS** | 3mm

### CERARL R edge

This is a panel for a wall surface with edges of Cerarl being rolled in. Storage is possible.

**Certificated by The Minister of Land,Infrastructure and Transport of Japanese Government** | NM - 2183

**SIZE** | 910mm×2,410mm ± 2mm

**THICKNESS** | 3mm

#### Main applications

Kitchen panel, sanitary wall, entrance wall, room wall, passage wall, toilet wall

## Decorative panels for bath rooms

### CERARL for bathrooms

This is a panel for bathrooms with easy maintenance. Suitable for renovations.

**Certificated by The Minister of Land,Infrastructure and Transport of Japanese Government** | NM - 2183

**SIZE** | 3×8 (935mm×2,455mm) ± 2mm

**THICKNESS** | 3mm

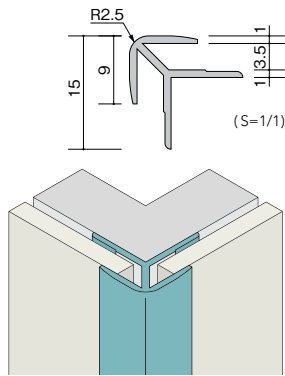
#### Main applications

Bathroom wall

# ACCESSORIE Aluminium joiner & Tool

## Corner Joint

Type-C

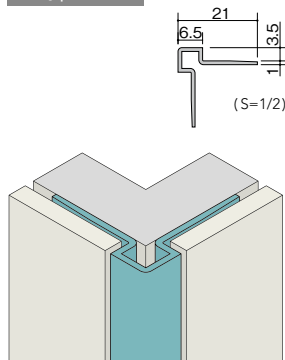


L: 3,075mm

### COLOR

	<b>1</b> Silver 2pieces 20pieces	ZK-1021C ZK-1201C		<b>3</b> Ivory 2pieces 20pieces	ZK-1023C ZK-1203C
	<b>4</b> Beige 2pieces 20pieces	ZK-1024C ZK-1204C		<b>5</b> Pale-Beige 2pieces 20pieces	ZK-1025C ZK-1205C
	<b>7</b> Ice white 2pieces 20pieces	ZK-1027C ZK-1207C		<b>8</b> Snow white 2pieces 20pieces	ZK-1028C ZK-1208C
	<b>OLO</b> Light orange 2pieces 20pieces	ZKC 102OLO ZKC 120OLO		<b>LRO</b> Light rose 2pieces 20pieces	ZKC 102LRO ZKC 120LRO
	<b>DGR</b> Dark gray 2pieces 20pieces	ZKC 102DGR ZKC 120DGR		<b>DBR</b> Dark brown 2pieces 20pieces	ZKC 102DBR ZKC 120DBR

Type-Q

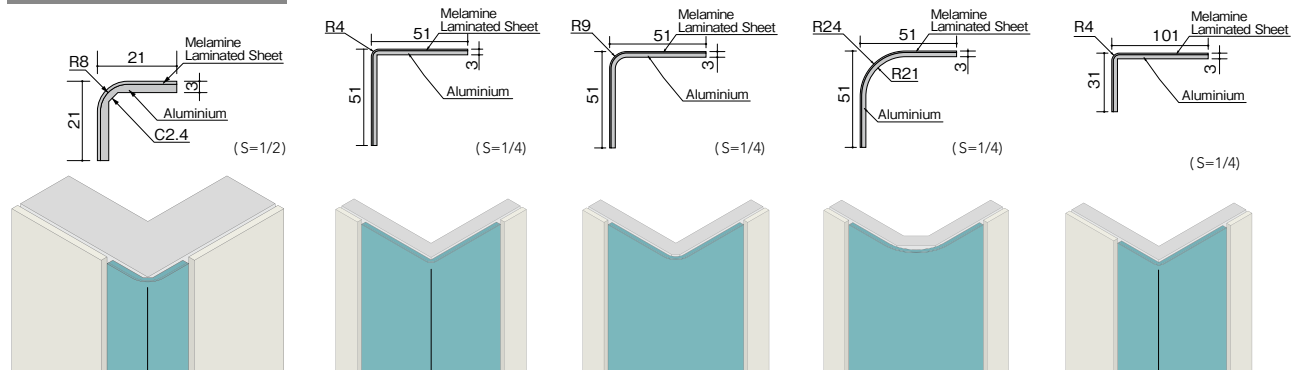


L: 3,075mm

### COLOR

	<b>1</b> Silver 2pieces 20pieces	ZK-1021Q ZK-1201Q
--	--	----------------------

HPL External corner



Standard Type  
ZKH ○○○○●  
ZKN ○○○○●

Type-J  
ZKJ ○○○○●

Type-F  
ZKF ○○○○●

Type-G  
ZKG ○○○○●

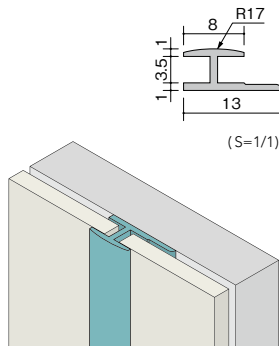
Type-L  
ZKL ○○○○●

L: 2,430mm

\* Please ask AICA staff regarding the item number of the HPL External corner.

## "I" Joint

### Type-A



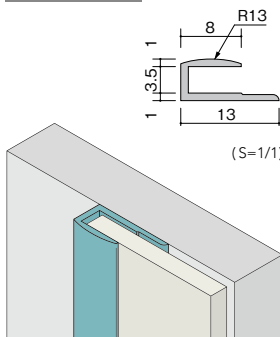
L:3,075mm

### COLOR

	1 Silver 2pieces 20pieces	ZK-1021A ZK-1201A		3 Ivory 2pieces 20pieces	ZK-1023A ZK-1203A
	4 Beige 2pieces 20pieces	ZK-1024A ZK-1204A		5 Pale-Beige 2pieces 20pieces	ZK-1025A ZK-1205A
	7 Ice white 2pieces 20pieces	ZK-1027A ZK-1207A		8 Snow white 2pieces 20pieces	ZK-1028A ZK-1208A
	OLO Light orange 2pieces 20pieces	ZKA 102OLO ZKA 120OLO		LRO Light rose 2pieces 20pieces	ZKA 102LRO ZKA 120LRO
	DGR Dark gray 2pieces 20pieces	ZKA 102DGR ZKA 120DGR		DBR Dark brown 2pieces 20pieces	ZKA 102DBR ZKA 120DBR

## Terminal Joint

### Type-B



L:3,075mm

### COLOR

	1 Silver 2pieces 20pieces	ZK-1021B ZK-1201B		3 Ivory 2pieces 20pieces	ZK-1023B ZK-1203B
	4 Beige 2pieces 20pieces	ZK-1024B ZK-1204B		5 Pale-Beige 2pieces 20pieces	ZK-1025B ZK-1205B
	7 Ice white 2pieces 20pieces	ZK-1027B ZK-1207B		8 Snow white 2pieces 20pieces	ZK-1028B ZK-1208B
	OLO Light orange 2pieces 20pieces	ZKB 102OLO ZKB 120OLO		LRO Light rose 2pieces 20pieces	ZKB 102LRO ZKB 120LRO
	DGR Dark gray 2pieces 20pieces	ZKB 102DGR ZKB 120DGR		DBR Dark brown 2pieces 20pieces	ZKB 102DBR ZKB 120DBR

## Tool Used List

### CERARL Dedicated Adhesive

Aica Eco-Eco Bond Modified Silicone Resin Type

**SE-1**

Packs: 20 tubes/case (333 ml cartridge/tube)

[Standard application amount]

M Construction: 1 tube/3 x 8 size (One piece)

ON Tile Construction: 2 tubes/3 x 8 size (One piece)

Standard possible application amount: 16 m/tube



### CERARL Adhesive for Bathroom Construction

Aica Eco-Eco Bond Modified Silicone Resin Type

**SE-8**

Packs: 20 tubes/case (333 ml cartridge/tube)

[Standard application amount]

Unevenness under 5 mm – 4 tubes/3 x 8 size

(Amount for one piece)

Unevenness under 1 mm – 1 tube/3 x 8 size

(Amount for one piece)

\*The amount applied differs from general-use products since the product is used for bathrooms.

**ON Tile Construction**  
When unevenness is under 5mm and water-resistance is required



### Antibacterial/Anti-Mold Silicone

Aica Joly Seal Silicone Resin Type

**JK-57T** (COLOR STOCK: 3 4 5 7 8)

**JK-57T** (COLOR STOCK: OLO LRO DGR DBR)

Packs: 10 tubes/case x 2,320 ml cartridge/tube

Standard possible application amount: 12-15 m/tube

\*Please place your order with the color stock listed in □ or ■ within the color stock field.



### Aica Eco-Eco Bond (Polyurethane Resin Type)

**JW-900N (SOLVENT TYPE)**

Packs: 2 cans/case (1kg/can)

[Standard application amount]

1 can/size 3 x 8 (3-4 pieces)

Applications: Required for mortar surfaces, calcium silicate boards, and plywood sub-flooring.



### Temporary tacking tape

Acrylic Type

**ZK-31**

40 rolls

**ZK-32**

5 rolls

1 mm thickness x 20 mm width x 10 m/roll

[Standard application amount]

M Construction: 1 roll/3 x 8 size (Amount for one piece)

ON Tile Construction: 1 roll/3 x 8 size

(Amount for 3.5 pieces) [Used in combination with ZK-5A]



### CERARL Bathroom Construction Dedicated Waterproof Tape (Used for Joints/Edge Portions)

Waterproof Tape for Flat and Smooth Ground (Under 1 mm of Unevenness)

**ZK-2B**

[Waterproof tape for frames, windows, edge portion break lines, external corners and internal corners]

3 rolls (1 mm thickness x 15 mm width x 15 m/roll)

Standard possible application amount: 16 m/tube

[Waterproof tape for flat joint portions]

1 roll (1 mm thickness x 30 mm width x 15 m/roll)

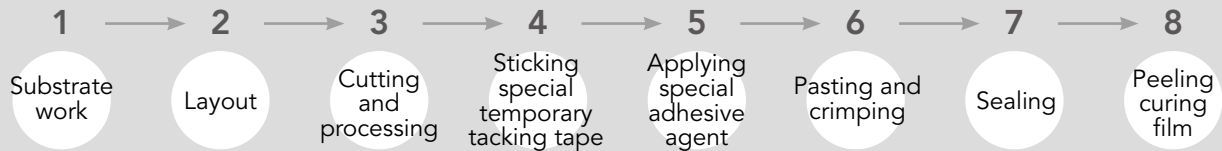
[Standard application amount] 1tsubo (approx. 3.3 m2) bathroom/1 pack



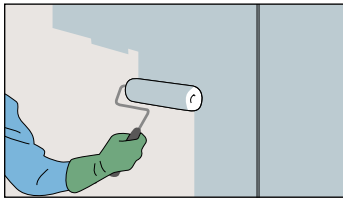
\* When you purchase SE-1, SE-8, JK-57T □, or JW-900N, please confirm related regulations, such as the Chemical Substances Control Law, of the import country beforehand.



# Construction Manual for CERARL



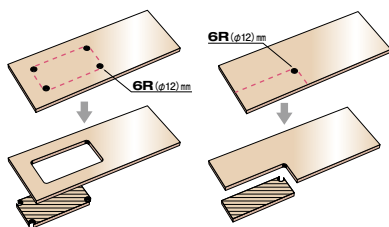
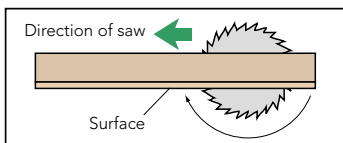
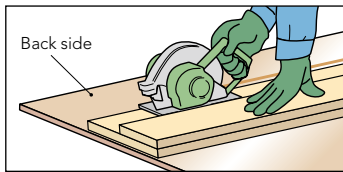
## 1 Substrate work



## 2 Layout

Position CERARL so that it does not overlap the Substrate material joints.

## 3 Cutting and processing



### Drilling for socket

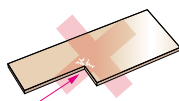
- ① Drill a hole in all four corners.
- ② Cut with small multi-tool or jigsaw.
- ③ Sand the cut surface smooth.

### Notching

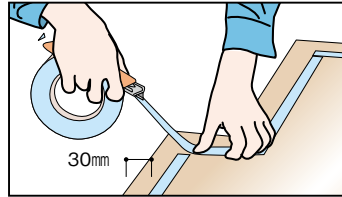
- ① Drill a hole in the corner.
- ② Cut with small multi-tool or jigsaw.
- ③ Sand the cut surface smooth.

### Caution

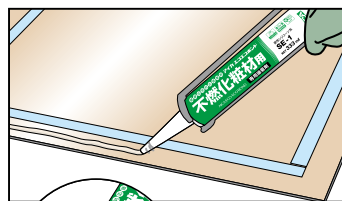
When cutting at a sharp angle as shown at right, cracks may occur.



## 4 Sticking special temporary tacking tape



## 5 Applying special adhesive agent

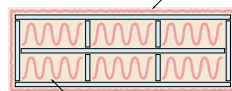


### 【Standard Application Pattern】

— Temporary tacking tape  
— Adhesive

#### <Standard>

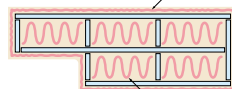
Apply lines of tacking tape at edges.



Apply wavy lines of adhesive around the center.

#### <Notching>

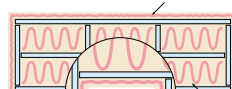
Apply lines of tacking tape at edges.



Apply wavy lines of adhesive around the center.

#### <Drilling for socket>

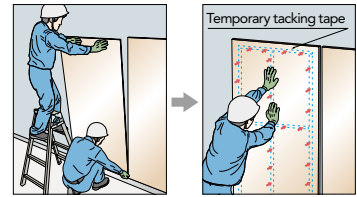
Apply lines of tacking tape at edges.



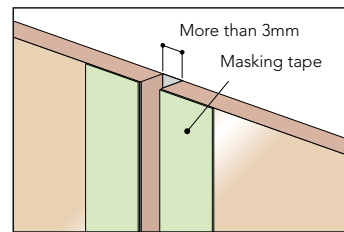
Detailed view of hole.

Apply wavy lines of adhesive around the center.

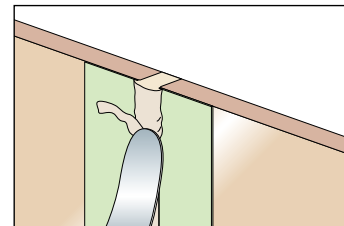
## 6 Pasting and crimping



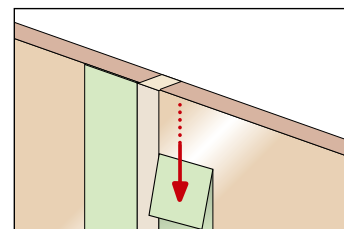
## 7 Sealing



Cover edges with masking tape and apply a bead of silicone the full length.



Smooth silicone and remove excess using a spatula.



Remove masking tape gently toward the inside.

## 8 Peeling curing film

Completion

```

graph LR
    1((1)) --> 2((2))
    2 --> 3((3))
    3 --> 4((4))
    4 --> 5((5))
    5 --> 6((6))
    6 --> 7((7))
    7 --> 8((8))
    1 --- S1[Surface preparation]
    2 --- S2[Layout]
    3 --- S3[Cutting and processing]
    4 --- S4[Adjustment of unevenness using temporary fastening tape]
    5 --- S5[Applying special adhesive agent]
    6 --- S6[Pasting and crimping]
    7 --- S7[Sealing]
    8 --- S8[Peeling curing film]
  
```

1 → 2 → 3 → 4 → 5 → 6 → 7 → 8

Surface preparation

Layout

Cutting and processing

Adjustment of unevenness using temporary fastening tape

Applying special adhesive agent

Pasting and crimping

Sealing

Peeling curing film


When the Substrate is convex: Measure gaps using a flat ruler. The diagram shows a convex substrate with a flat ruler placed against it. Gaps are indicated by red arrows and labeled '4a' and '2b'. A red line segment is labeled 'Reference position 0a'.

When the Substrate is concave: Measure gaps by having a string stretched out. The diagram shows a concave substrate with a string stretched across it. Gaps are indicated by red arrows and labeled 'Unevenness'.

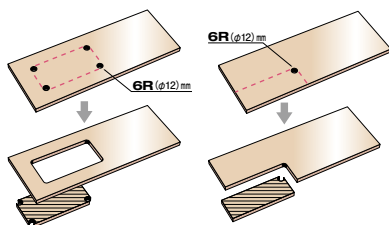
Position CERARL so that it does not overlap the Substrate material joints.

Back side

Direction of saw



Surface



- ① Drill a hole in all four corners.
- ② Cut with small multi-tool or jigsaw.
- ③ Sand the cut surface smooth.

- ① Drill a hole in the corner.
- ② Cut with small multi-tool or jigsaw.
- ③ Sand the cut surface smooth.

When cutting at a sharp angle as shown at right, cracks may occur.

Unit (mm)

Dedicated temporary fastening tape

Approx. 300

30 30 30 30 30 30 30 30

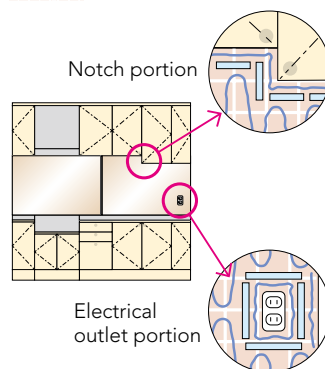
E.g. 4 mm of unevenness: 3 mm thickness + 1 mm thickness

Ensure that application to the edge portion takes place in a straight line

Ensure that application to the internal portion takes place in a wavelike fashion

Dedicated adhesive SE-1S

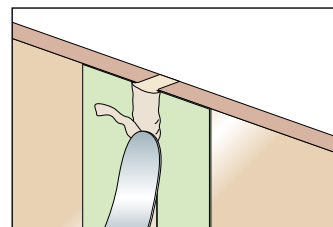
The diagram illustrates the application of adhesive to a panel. The panel is divided into a central internal portion and outer edge portions. The edge portions are marked with dashed lines forming a border. The internal portion is marked with dashed lines forming a grid of diamond shapes. A blue wavy line represents the adhesive application pattern. The adhesive is applied in a straight line along the edge and in a wavelike fashion across the internal portion. A syringe icon labeled 'Dedicated adhesive SE-1S' is shown applying the adhesive to the edge portion.



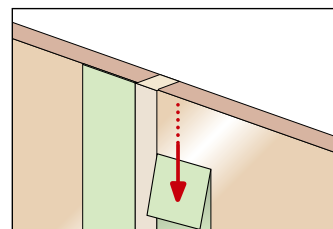
Temporary tacking tape

More than 3mm  
Masking tape

Cover edges with masking tape and apply a bead of silicone the full length.



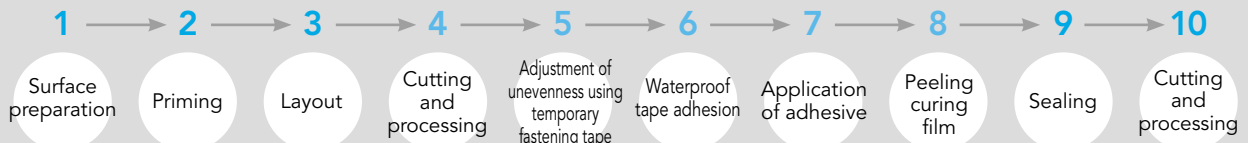
Smooth silicone and remove excess using a spatula.



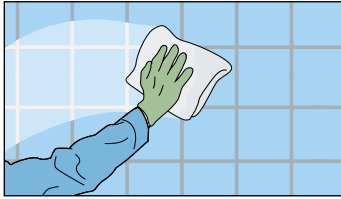
Remove masking tape  
gently toward the inside.

## Completion

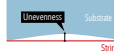
# Construction Manual for CERARL [BATHROOM]



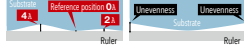
## 1 Surface preparation



**When the Substrate is concave**  
Measure gaps by having a string stretched out.



**When the Substrate is convex**  
Measure gaps using a flat ruler.



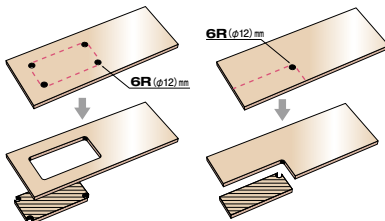
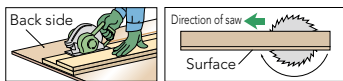
## 2 Priming

Apply primer [Aica Eco-Eco Bond JW-900N (Solvent Type)] to the entirety of the surfaces of the Substrate material produced using mortar placement, plywood and calcium silicate boards.

## 3 Layout

Position CERARL so that it does not overlap the Substrate material joints.

## 4 Cutting and processing



**Drilling for socket**

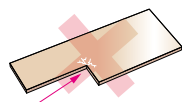
- 1 Drill a hole in all four corners.
- 2 Cut with small multi-tool or jigsaw.
- 3 Sand the cut surface smooth.

**Notching**

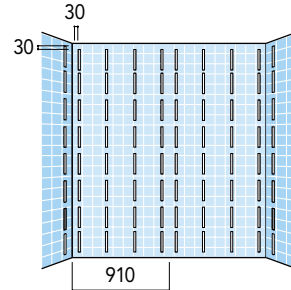
- 1 Drill a hole in the corner.
- 2 Cut with small multi-tool or jigsaw.
- 3 Sand the cut surface smooth.

### Caution

When cutting at a sharp angle as shown at right, cracks may occur.

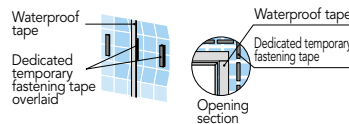
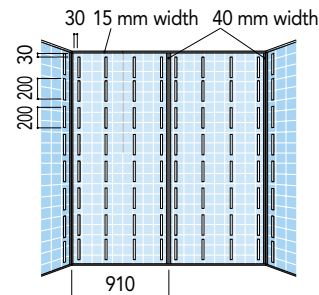


## 5 Adjustment of unevenness using temporary fastening tape

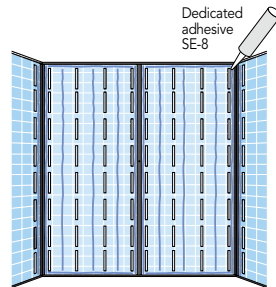


E.g. 4 mm of unevenness: 3 mm thickness + 1 mm thickness

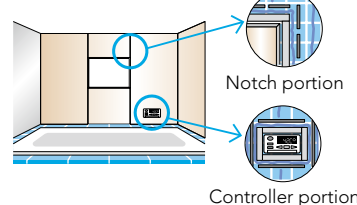
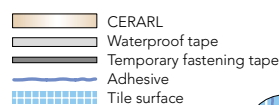
## 6 Waterproof tape adhesion



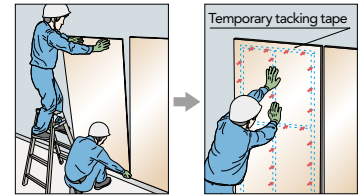
## 7 Application of adhesive



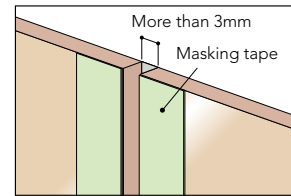
**[Application Pattern for Corner Parts etc.]**



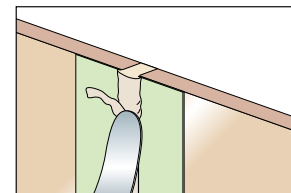
## 8 Pasting and crimping



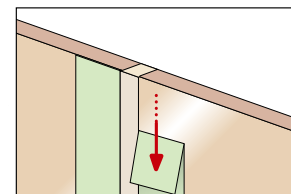
## 9 Sealing



Cover edges with masking tape and apply a bead of silicone the full length.



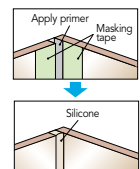
Smooth silicone and remove excess using a spatula.



Remove masking tape gently toward the inside.

### Caution

Silicone does not adhere well to CERARL for Bathrooms. When applying silicone to CERARL surfaces, make sure that primer (JW-900N) is used.



## 10 Peeling curing film

## Completion



# CERTIFICATE OF COMFORMITY

CERARL is a product with its nonflammability widely recognized internationally.



## China



## Taiwan



## Singapore



\*Class A fire rating under the ASTM E84 test is given to CERARL. All certificates are valid as of Apr., 2022.

# Table of physical properties of AICA CERARL

Product name		FKM6000ZMN (Plain color)	FJ-2011ZJN67 (Patterned)	Test method	
Test items					
Certified by the Minister of Land, Infrastructure, Transport and Tourism		NM-2183		Building Standard Law Article 2 Paragraph 9 Non-combustible material	
Thickness (mm)		3.0	3.0	JIS K 6902	Mean value of measurements of four points on the circumference obtained by a micrometer with 1/100 mm resolution.
Appearance		Free of any defect	Free of any defect	JIS K 6902	Visually assess irregular color and irregular luster.
Bulk specific gravity		1.77	1.68	In-house test	Measure mass in water and mass at the time of water absorption and compute based on a specified calculation formula.
Heat resistance		Class 5	Class 5	JIS K 6902	Place a flat-bottomed pan containing 180°C vegetable oil on the test specimen and let it stand for 20 minutes.
Hot water resistance		Class 5	Class 5	JIS K 6902	Spill a small amount of boiling water on the test specimen, place a flat-bottomed pan containing boiling water on the test piece and let it stand for 20 minutes.
Wear resistance	Wear value (rotations)	643	260	JIS K 6902	Examine wear conditions of color and pattern every 25 rotations by a Taber abraser with the load of each abrasive wheel adjusted to 5.20±0.2N. Endpoint: When the color of facial-powder paper first disappears for the plain color. When 50% of printed patterns disappear for patterned material.
Dimensional stability (high temperature)	Longitudinal direction (%)	0.22	0.22	JIS K 6902	Find the rate of change at the time of contraction when dried at 70°C for 24 hours and at the time of expansion when letting it stand at 40°C 90% RH for 96 hours.
	Lateral direction (%)	0.24	0.23		
Impact resistance (large ball)	Falling ball height (cm)	70	70	In-house test	Fix a 230±5 mm test specimen to a support stand, allow a 325±5 g steel ball to fall, and check the surface for any sign of cracking.
	Cracking on the surface	None	None		
Contamination resistance		(Minor change) 14, 15	(Minor change) 14, 15	In-house test	Add the contaminated material stipulated under this table dropwise to the test specimen surface or allow it to adhere to the specimen surface, cover with a watch glass, and let it stand for 16 to 24 hours. Then wash with water/alcohol and check the surface for any sign of change.
Light resistance	ΔE (48 hrs)	1.5	0.3	JIS K 6902	Expose the test specimen by UV carbon fade meter and express changes in color tone by Lab.
	Appearance after test	Class 3	Class 5		
Elastic modulus (longitudinal/lateral) (GPa)		15.0/12.7	14.3/13.7	JIS K 7171	Compute from the tilted portion of the breaking/deflection curve by the specified calculation formula.
Bending strength (longitudinal/lateral) (MPa)		77.0/56.8	92.5/66.7	JIS K 7171	Apply load to test specimen at a loading rate of 1 mm/min with the 3-point bending method by the material test machine and compute from the breaking load.
Pencil hardness		8H	8H	In-house test	Under a 1000-g load, conduct a scratch hardness test using a pencil of each hardness. Visually confirm the appearance after the test.

\* The data in the table are not guaranteed values but reference values.

## (Contamination resistance Contaminated material)

1. Tea, 2. Coffee, 3. Milk, 4. 1% alcoholic iodine solution, 5. Vinegar, 6. 10% aqueous solution of citric acid, 7. Gasoline, 8. Acetone (for industrial use), 9. Olive oil, 10. 10% ammonia water, 11. Crayon (red, black, and blue), 12. Shoe cream (black), 13. Dyestuff (food dye red), 14. office ink, 15. 2% aqueous Mercurchrome solution, 16. 5% aqueous carbolic acid solution, 17. Aqueous acid sodium sulfite solution, 18. Soy sauce

## (Description on the class)

### Heat resistance and hot water resistance

Class 5: No change; Class 4: Slight change in luster and/or color change as viewed at a specific angle.; Class 3: Moderate change in luster and/or color change; Class 2: Apparent change in luster and/or color change; Class 1: Damage and/or blister generated on the surface.

### Light resistance

Class 5: No change in color or surface finish; Class 4: Slight change in color or surface finish at a specific angle and in a specific direction; Class 3: Moderate change in color or surface finish at all angles and in all directions; Class 2: Apparently identified at all angles and in all directions; Class 1: Blister and/or cracking on the surface.

\*This table of physical properties of AICA CERARL is English translated version of the Japanese language original.

# AICA GROUP

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### Safety precautions

Please observe the following points to use the product safely.

- 1.Put protective gloves on when carry / treat the product.
- 2.Wear protective goggles and a dust mask during work.
- 3.Please prevent a dust explosion when collect dust which made by processing.
- 4.As for the panel with adhesive, please do not let an adhesion side come in contact with skin.
- 5.Handling
  - Avoid direct sunlight
  - Avoid wetting
  - Handle with care

### Emergency care

- If dust adheres to your skin or it is involved in your eyes, nose or mouth, immediately wash it fully off with water. If you feel something strange in yourself, receive medical treatment immediately.
- On the occasion of a fire, please extinguish a fire with water, fog, a bubble, and a chemical fire extinguishing agent.



