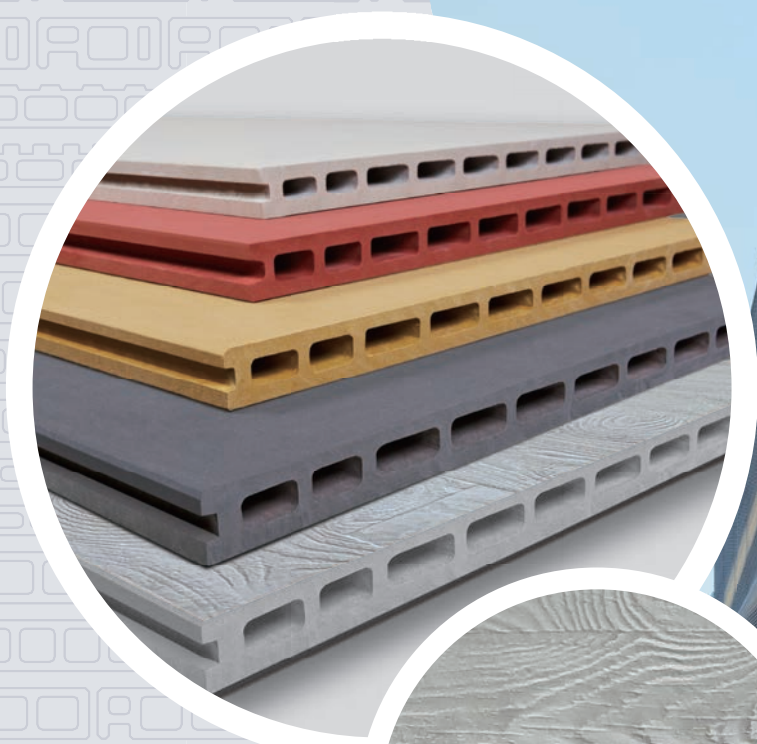




Creating Eco-Friendly Living Space

BYUCKSAN BACE PANEL[®]



BYUCKSAN

Features of BACE Panel



Non-combustibility

Excellent Inflammability to prevent fire propagation



Durability

High durability and anti-dissolution property with good strength



Light weight

40-60 kg per m2 for saving structure costs.



Safety

Steam cured under high pressure to prevent shrinkage, expansion or distortion after installation



Seismic capability

Ideal design and installation for seismic analysis to protect properties and lives from earthquake



Design

Diverse design of panel surfaces suitable for various shapes of buildings



Finishing

Smooth and elegant finishing

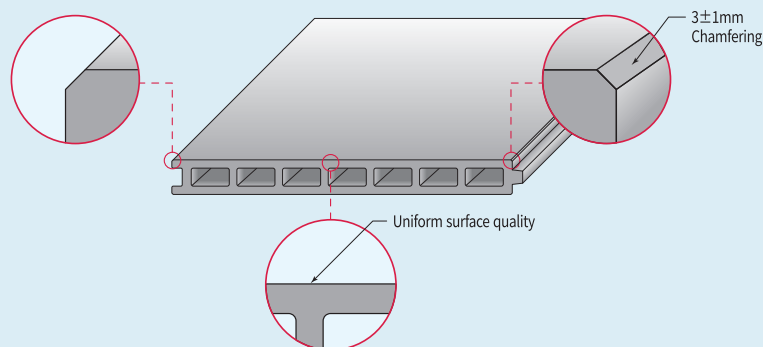


Eco-friendliness

Asbestos-free for natural environment and human beings

Features of BACE Panel

1 Corner chamfering provides better finishing for aesthetic design

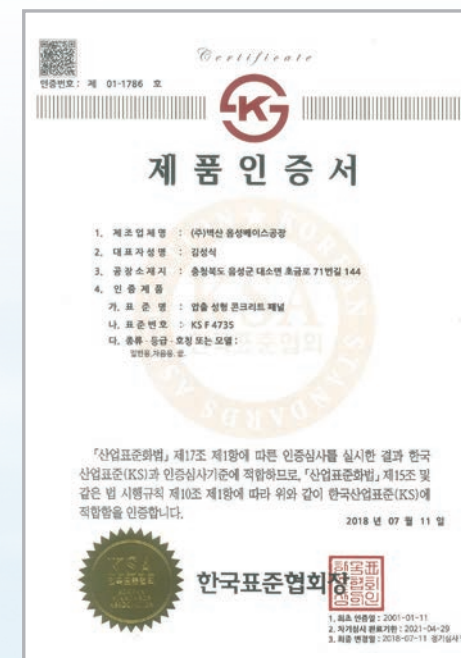


2 Sanding processed surface offers clear and uniform feeling of BACE Panel

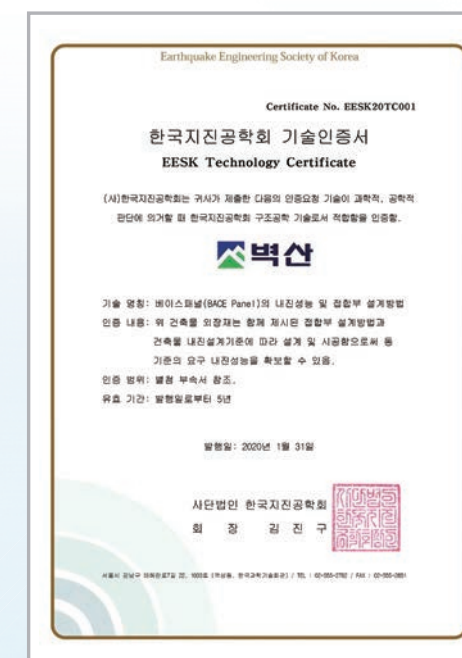
Properties of BACE panel

Item	Inspection item	Unit	Requirements	Remarks
Weight	Specific gravity	g/cm ³	2.0 or lower	KS F 4735
Physical capability	Flexural strength	N/mm ²	14.0 or higher	KS F 4735
	Freezing/thawing resistance	—	No change of apparent shape and middle peeling	KS F 4735
Properties for water	Absorption rate	%	18 or lower	KS F 4735
	Length change by water absorption	%	0.12 or lower	KS F 4735
Acoustic isolation	Sound insulation	Rw	24 or higher	KS F 4735
	Max. displacement	mm	Elastic displacement: 50 or lower, permanent residual displacement: LA/500 or lower	KS F 4735
	Load resistance grade	kPa	No. 1 (1970 mm) : 3.4 or higher, No. 2 (3970) : 2.8 - 3.4	KS F 4735
	Shock resistance	—	No penetration	KS F 4735

Certificates of BACE Panel



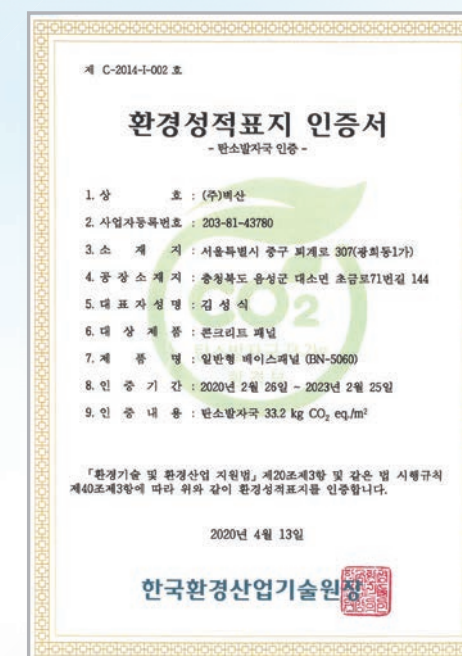
KS Certificate for product



Seismic Performance Certificate



Healthy Building Material Certificate

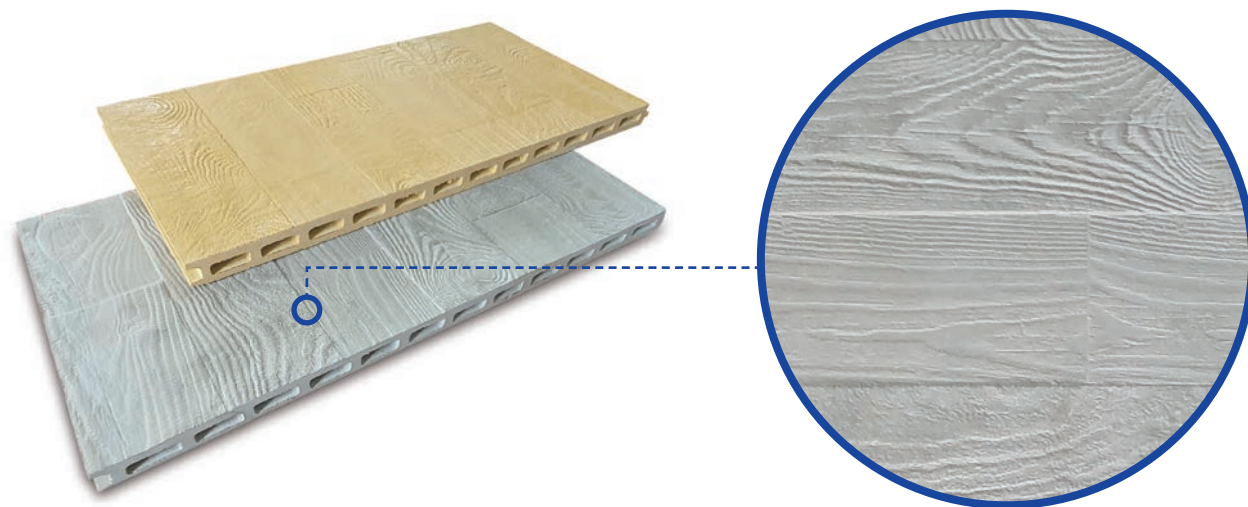


Certificate of Environment Product Declaration

※ Certifications may vary by each product. Please consult with the sales staff.

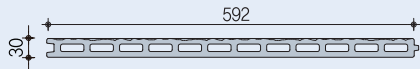
Pine board patterned BACE Panel

Pine board patterned BACE Panel



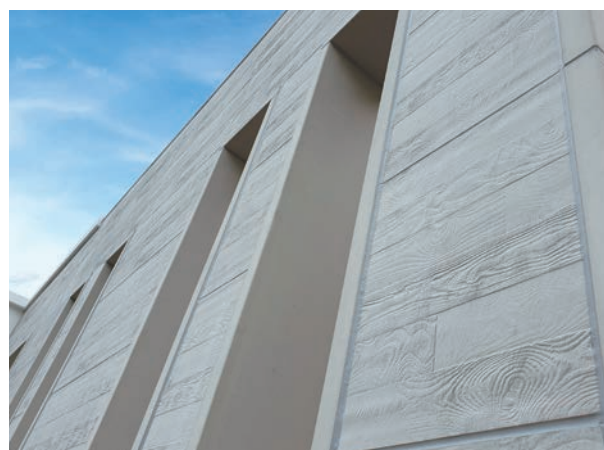
- Convenient, cost-effective and safe dry installation compared to conventional complicated exposed concrete wet construction.
- Pine board patterned BACE Panel is a new product applied with high end compression technique of Byucksan, and renders natural pine board patterns.



Specifications	Sectional view	Standard width (mm) (Inc. masonry joint)	Max. length	Weight		Application
				kg/m	kg/m ²	
Pine board pattern (30T)		600	2,400	24.6	41	Exterior/ interior



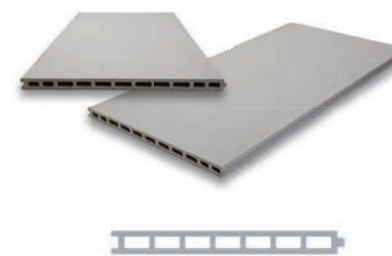
Gunsan Napo Elementary School



Iksan Sinheung Elementary School

Types of BACE Panel

Flat Type



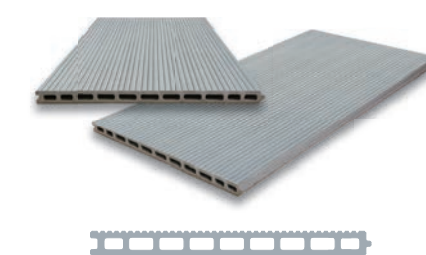
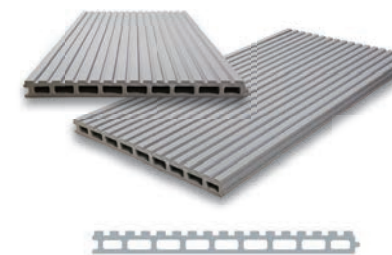
Rib Type



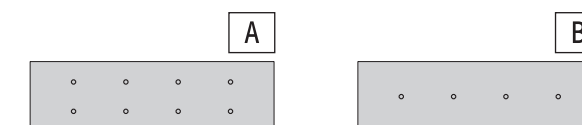
Corner Type



Stripe Type



Exposed Concrete Type

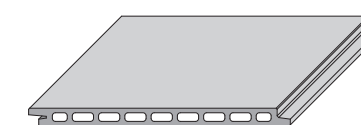


Cone configuration and size : Ø30 / Ø40mm | Depth : 3mm
Up to max. length for 35T and 50T available. Cone
interval and number are adjustable (upon request)

Pine board pattern



Clip Type (Non-welding)



Feature

- Minimize risk of fire from welding
- Fast installation with clips

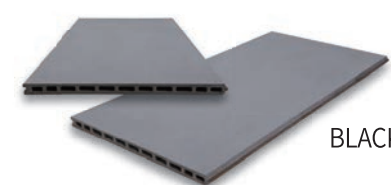
Color panel



RED



YELLOW



BLACK

※ The colors above may be different from actual colors.

Standard Size of BACE Panel

Standard Dimension of BACE Panel

Specifications	Sectional view	Standard width (Inc. masonry joint)	Max. length (mm)	Weight		Application
				kg/m	kg/m ²	
Pine board pattern (30T)		600	2,400	24.6	41	Exterior/interior
BNC-3550		500	2,700	19.7	39	Exterior/interior/floor
BNC-3560		600	2,700	23.1	39	Exterior/interior/floor
BN-3550		500	2,700	19.7	39	Exterior/interior/floor
BN-3560		600	2,700	23.1	39	Exterior/interior/floor
BN-5050		500	4,000	24.5	49	Exterior/interior/floor
BN-5060		600	4,000	30.5	51	Exterior/interior/floor
BN-6050		500	5,000	29.5	59	Exterior/interior
BN-6060		600	5,000	33.7	56	Exterior/interior
BN-7560		600	4,000	39.6	66	Exterior/interior
BNS-5050		500	4,000	24.5	49	Exterior/interior / sound-proof wall
BNST-5060		600	4,000	29.7	49	Exterior/interior
BNST-7560		600	4,000	53.7	90	Exterior/interior
BNST-5060		600	4,000	32	53	Exterior/interior
BNTL-5060		600	4,000	31.2	52	Exterior/interior

Standard Dimension of Green BACE Panel

Specifications	Sectional view	Standard width (Inc. masonry joint)	Max. length (mm)	Weight		Application
				kg/m	kg/m ²	
BN-1830		300	2,400	7.5	25	Interior/exterior/ Basement wall
BN-2040		400	2,400	11.3	28	Interior/exterior/ Basement wall
BN-2330		300	2,400	9.2	31	Interior/exterior/ Basement wall

Standard Dimension of Corner Type BACE Panel

Specifications	Sectional view	Standard width (Inc. masonry joint)	Max. length (mm)	Weight		Application
				kg/m	kg/m ²	
L-145		60 × 145	4,000	10.7		Exterior/interior /corner/ lintel
L-190		60 × 190	4,000	12.7		Exterior/interior /corner/ lintel
L-300		60 × 292	4,000	17.5		Exterior/interior /corner/ lintel
L-430		60 × 430	5,000	25.0		Exterior/interior /corner/ lintel/ top beam/stair
L-600		60 × 592	5,000	35.0		Exterior/interior /corner/ lintel/ top beam

Corner Standard Specifications (Common colors)

Specifications	Sectional view	Standard width (Inc. masonry joint)	Max. length (mm)	Weight		Application
				kg/m	kg/m ²	
L-145		60 × 145	4,000	9.5		Exterior/interior/ corner/lintel
L-190		60 × 190	4,000	12.0		Exterior/interior/ corner/lintel
L-300		60 × 300	4,000	18.3		Exterior/interior/corner/ lintel/ top beam/stair
L-430		60 × 430	4,000	29.0		Exterior/interior /corner/ lintel/ top beam/stair
L-600		60 × 590	4,000	37.0		Exterior/interior /corner/ lintel/ top beam

※ The standard specifications of BACE Panel may be changed without notice in advance depending on the situation of the site.
※ Please do not use the panels for floors subject to have frequent contact with moisture. (Such conditions may cause surface contamination or discoloration.)

※ BACE Panel uses natural mines for raw materials, and may have some differentiated colors.
※ The corner BACE Panel is a product registered of a utility design on the Korean Intellectual Property office, and protected by the Industrial Design Protection Act. Common colored corner products

Reference – Public Facilities



- ① • Project : Dormitory of Wonkwang Health Science University
 • Address : 514, Iksandae-ro, Iksan-si, Jeolabuk-do
- ② • Project : Gwangju Jeonman Branch of Korea District Heating Corp.
 • Address : 65, Sindosandan-gil, Sanpo-myeon, Naju-si, Jeollanam-do
- ③ • Project : Jangpyeong-dong Community Service Center
 • Address : 10, Jangpyeong 3-ro, Geoje-si, Gyeongsangnam-do



- ① • Project : Natural Science Pavilion 5, Changwon National University
 • Address : 20, Changwon National University-ro, Euichang-gu, Changwon-si, Gyeongsangnam-do
- ② • Project : Im-dong Fire and Rescue Center
 • Address : 5, Seorim-ro, Buk-gu, Gwangju-si

Reference – Public Facilities



① • Project : Daekyeung Univ. Namyangju Campus
 • Address : San 64-1, Palya-ri, Jinjeop-eup, Namyangju-si, Gyeonggi-do
 ②③ • Project : Geoje Community Sports Center
 • Address : 3485-17, Geojenamseo-ro, Geoje-myeon, Geoje-si, Gyeongsangnam-do

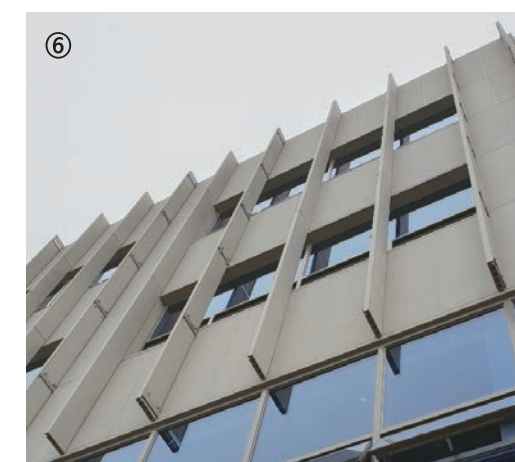


①② • Project : Gunsan Napo Elementary School
 • Address : 23, Gyodong 1-gil, Napo-myeon, Gunsan-si, Jeollabuk-do
 ③④ • Project : Iksan Sinheung Elementary School
 • Address : 10, Hanaro 3-gil, Iksan-si, Jeollabuk-do

Reference – Public Facilities



- ① • Project : Gyeonggin Port Passenger Terminal of Gyeonggin Ara Waterway • Address : 41, Jeongseojin 1-ro, Seo-gu, Incheon
- ② • Project : Wanjū Health Center • Address : 590-6, Sugye-ri, Samrye-eup, Wanju-gun, Jeolabuk-do
- ③ • Project : YBM Training Center • Address : 317, Seja-ro, Jeongnam-myeon, Hwaseong-si, Gyeonggi-do

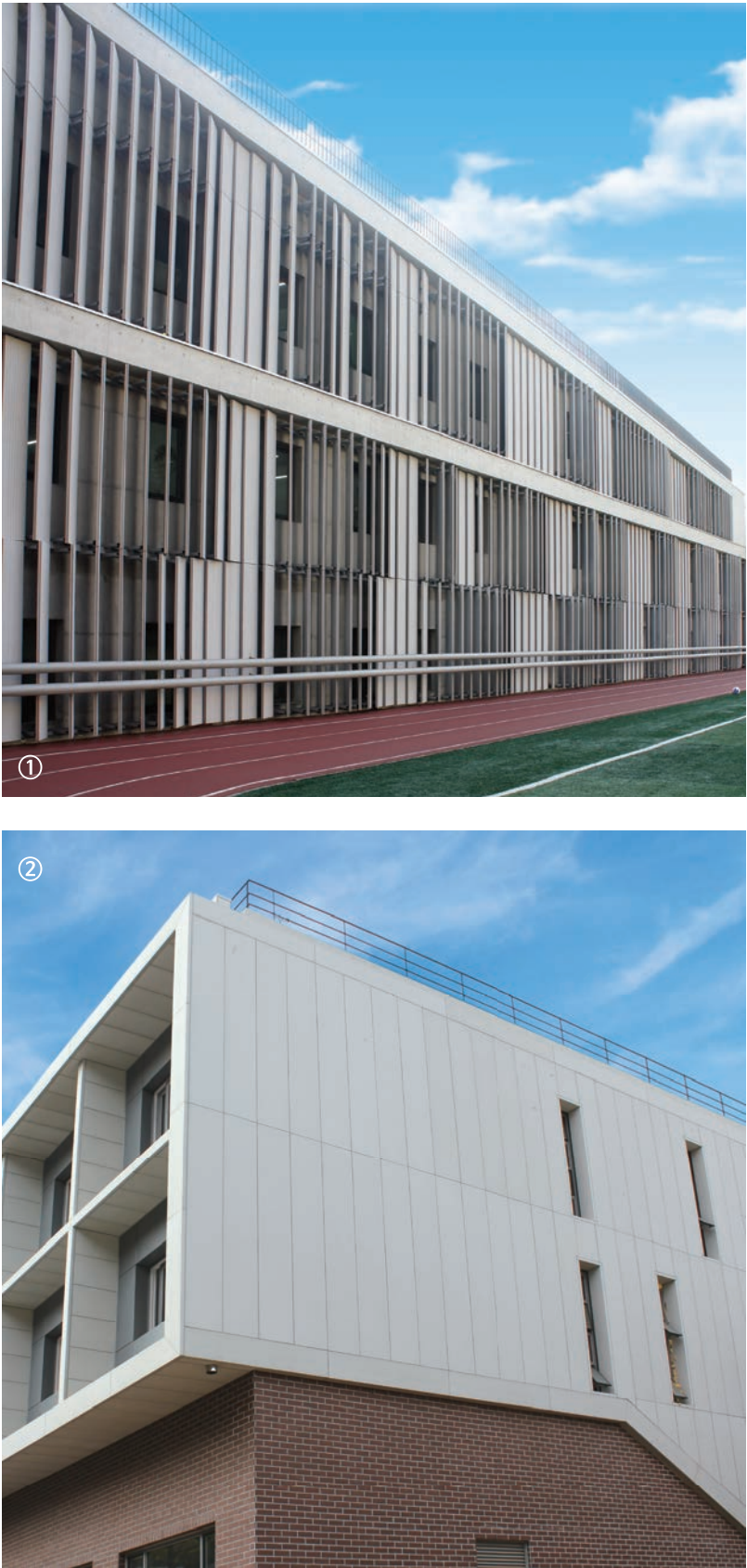


- ①② • Project : Gungsan Substation • Address : 135, Pyeongjeon-ro, Gimhae-si, Gyeongsangnam-do
- ③ • Project : Dining hall of Gimhae Naedong High School • Address : 56, Magokseo 1-ro, Gangseo-gu, Seoul
- ④ • Project : South and North Korea Reunification Culture Center • Address : 330, Banghwadae-ro, Gangseo-gu, Seoul
- ⑤ • Project : Banghwa 1-dong Community Service Center • Address : 558, Daehak-ro, Gungsan-si, Jeollabuk-do
- ⑥ • Project : Kunsan National University

Reference – Public Facilities



①②③ • Project : New Reusable Energy Center of Kunsan National University • Address : 68, Miryung-dong, Gunsan-si, Jeolabuk-do



① • Project : Student Hall of Soongsil University • Address: 511, Sangdo-dong, Dongjak-gu • Design : Ga-A Architect
② • Project : Building 34, Engineering College, Seoul National University • Address: Gwanak-ro, Gwanak-gu, Seoul

Main Projects on Public Facilities

- Yuseong Culture Center
- Korea Institute of Fire Industry and Technology
- Multi-media lecture building, Humanities and Social Science Division of Seoul National University
- Multi-media lecture building of the natural sciences and engineering division of Seoul National University
- Seongho Lee Ik Memorial Hall
- Research and lecture building and club practicing rooms of Kyonggi University
- Industry-academy cooperation hall of Hongik University (Jochiwon)
- Medicine College of Soonchunhyang University
- Nammyeong Hall of Gyeongsang National University
- Information Center of Muhak Girls High School
- Information Center of Gwanak High School
- Kaywon High School of Arts
- Gukak National High School
- Gumi Bonggok Middle School
- Ulsan Hwaam Middle School
- Jeolanam-do Government Building
- Seodaemun Juvenile Training Center
- Korea International Exhibition Center
- Ulsan Stadium
- Gimhae Culture & Art Center
- Gwangmyeong Dome Velodrome
- Nowon Information Library
- Dalseong-gun Government Building
- Engineering College of Mokpo National University
- Javier International School
- Gapyeong Community Sports Center
- Gapyeong Fire Station
- Gangnam-gu Disabled Rehabilitation Center
- Gaeseong Occupation Training Center
- Fire Station in Mt. Geumgangsant Sightseeing Zone
- South and North Korea Sightseeing Exchange Center
- Geopo Multi-purpose Gymnasium
- Gusong Elementary School
- Hyupsung University
- Jangam Middle School
- Suwon Maewon High School
- Gupo City Library
- Geumcheon-Gu Government Building
- Anyang Hogye Gymnasium
- Eastern Wide Area Resources Recovery Facility
- Bogwang Polytech University
- Ansoen Women's Polytech University
- Korea Nazarene University
- Daewon Foreign Language High School
- Ewha Girl's Foreign Language High School
- Sandul High School
- Wabu High School
- Academic Information Center of Yonsei University
- Yongin Post Office
- Gimpo Community Health Center
- Wolgye Information Library

Reference - Commercial Facilities

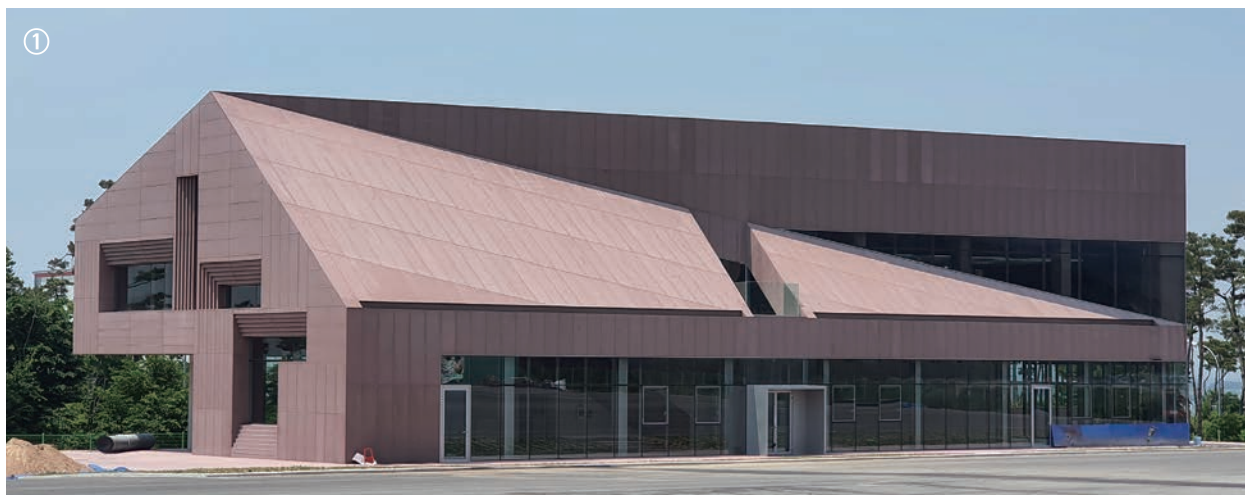


①② • Project : K2 Tower, Daechi-dong • Address : 28, Tehran-ro 70-gil, Gangnam-gu, Seoul • Design : Jo Jin-Man Architect Firm



①② • Project : Anyang RFHC Building • Address : 41-14, Burim-ro 170-gil, Dongan-gu, Anyang-si, Gyeonggi-do
③④ • Project : Haman Expressway Reat Area (for Suncheon) • Address : 205-1, Hyeonpo-ro, Gunbuk-myeon, Haman-gun, Gyeongsangnam-do
• Design : New Town Architect

Reference – Commercial Facilities



①② • Project : Byucksan Hongseong Factory
 • Address : 100, Sandan-ro 388-gil, Gansan-myeon, Hongseong-gun, Chuncheongnam-do
 ③④ • Project : Goyang Samsung Star Field
 • Address : 1955, Goyangdae-ro, Deokyang-gu, Goyang-si, Gyeonggi-do



① • Project : Georim Medical
 • Address : 29, Yulha 3-ro, Gimhae-si, Gyeongsangnam-do
 ② • Project : Dongbu Fire Insurance Data Center
 • Address : 61, Digital Valley-ro, Suji-gu, Yongin-si, Gyeonggi-do
 ③ • Project : Seocho Sebarun Hospital
 • Address : 47, Seocho Jungang-ro, Seocho-gu, Seoul
 ④ • Project : Songpa Munjeong-dong Partners
 • Address : 90, Beopwon-ro, Songpa-gu, Seoul

Reference – Commercial Facilities



- ① • Project : Dental Clinic Building of Chonbuk National University Hospital • Address : 20, Geonji-ro, Deokjin-gu, Jeonju-si, Jeolabuk-do
 • Design : Open/Heesang Architect
 ②③ • Project : Incheon Nanuri Hospital • Address : 485, Injudae-ro, Nam-gu, Incheon



- ① • Project : LG Champions Park • Address : 69, Daepyeong-ro 255-gil, Icheon-si, Gyeonggi-do
 ② • Project : Imjingak Gondola Track • Address : 148-53, Imjingak-ro, Munsan-eup, Paju-si, Gyeonggi-do
 ③ • Project : Cheongsae, Jinhye, Gimhae • Address : 279-65, Pyeongji-gil, Jilye-myeon, Gimhae-si, Gyeongsangnam-do

Main Projects on commercial facilities

- The Open Books company building
- Cheongdam-dong 93-8 Building
- Simone company building
- Ilsan La Festa Shopping Mall
- Beon-dong Glory Tower
- Nau Building, Dunsan-dong, Daejeon (Pyeongyang Noodle)
- Wall Mart (Bucheon, Seo-myeon, Masan, and Bisan in Anyang)
- E-Mart (Bundang, Jinju)
- Gumi Agricultural Products Wholesales Market
- Mok-dong Plaza
- Miraero 21 Hospital
- MSPIA Gynecology Clinic
- Buan St. Mary Hospital
- Huh Yu-je Gynecology Clinic
- Shinyoung Waco Logistics Warehouse
- Asia Publication, Culture and Information Center
- Ilsan MOANA Building
- Insan Hanaro Communication Information Center
- Ilsan Western Dome
- Paju Ichae Shopping Mall
- Pyeongtaek Prime KINEX
- Boston Gynecology Clinic
- Anyang Hansol Central Park
- Busan Jagalchi Market
- Hamyang Hanmaum Hospital
- Daegu Fatima Hospital
- Haeundae Acroviev
- Daegu Dong-A Department Store
- Ganghwa Youth Hostel
- Gimpo Gochon Hyundai Apartment Annexation Facility
- NH Bank, Dangjin-gun Branch
- Doseon Officetel
- Dongtan P&P Medical Plaza
- Baebang NH Bank
- Bundang EN Tech Building
- Cycrotron Building
- Sungmi LamiTech
- Suwon Wave Electronics
- Asan Yonghwa-dong Hospital
- Asan Punggi-dong Outlet Mall
- Anseong Bus Terminal
- Anyang Samyuk Printing Plant
- Yangpyeong KFLC Cow Plaza
- Student Welfare Center of Korea Military Academy
- Incheon Shinyoung Arcade
- ILDONG FOODIS Chuncheon Factory
- Jeju Phoenix Island
- Cheonan Samsung SDI Factory
- Cheongju Bukmun-ro Culture Complex
- TSE Complex 4
- Paju Hakji Company
- Paju Korea Academy Information factory

Reference – Other Facilities



①② • Project : Gangnam GWELL Homes • Address : 204-5, Jagok-ro, Gangnam-gu, Seoul Design : Junglim Architecture



① • Project : Wolnam-dong Cathedral • Address : 79, 3.15 Daero, Masan Hapo-gu, Changwon-si, Gyeongsangnam-do
② • Project : Changwon LG Electronics • Address : 170 Seongsanpaechong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do

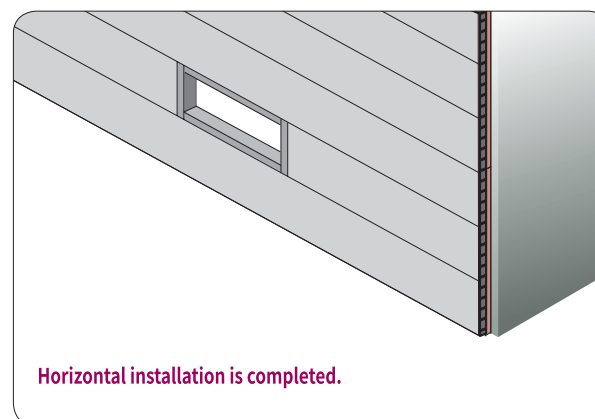
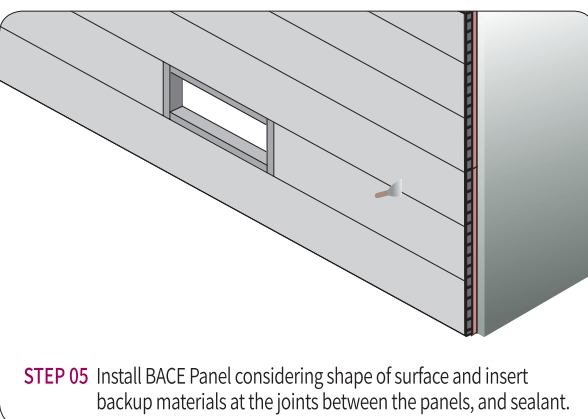
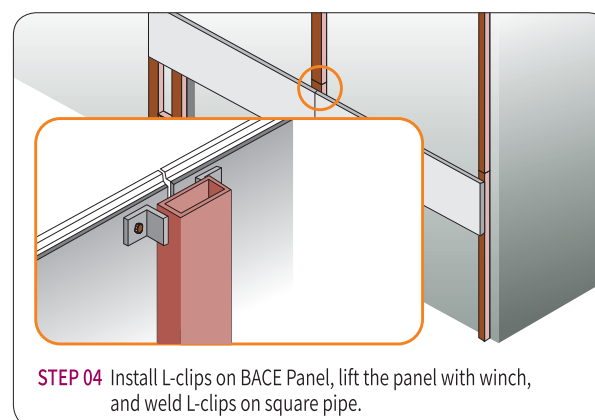
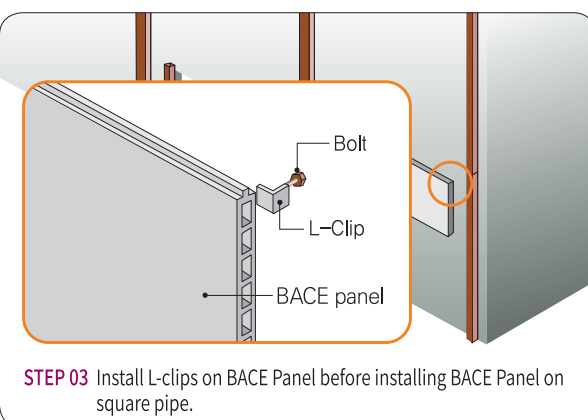
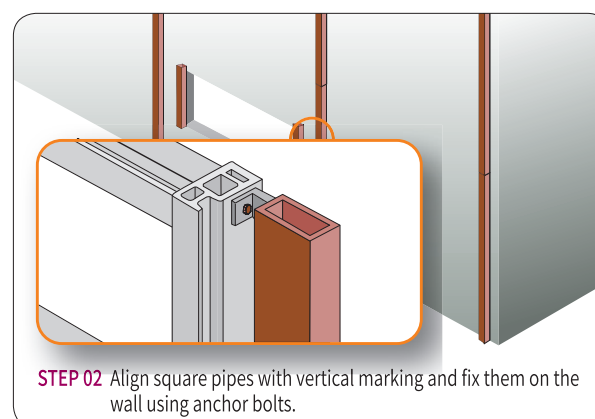
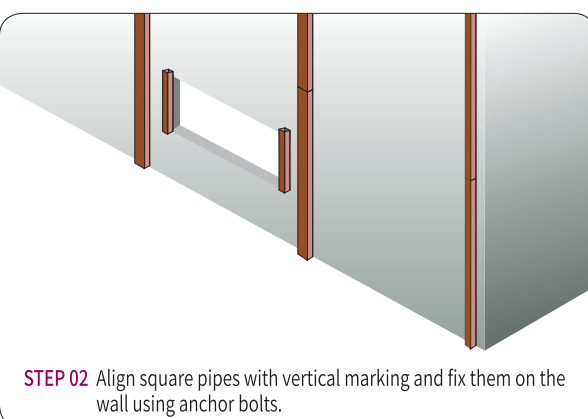
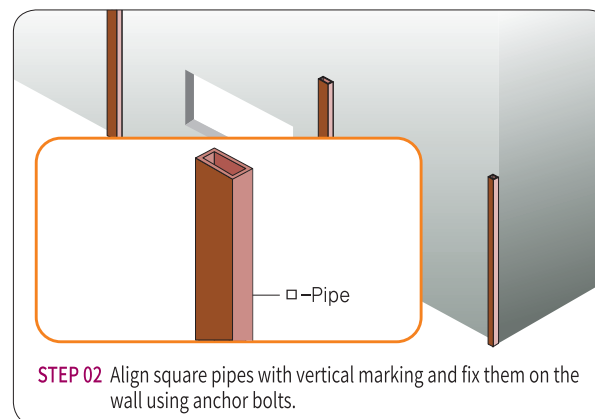
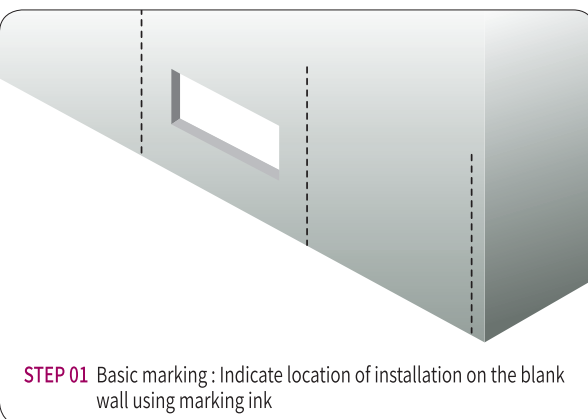
Main Projects on other facilities

- Uijae Museum
- Seonyudo Park Exhibition Hall
- Saemteo Gallery
- Wondang Full Gospel Church
- Seojong Gallery
- Bucheon Theme Park
- Banpo Gallery
- Danam Telecommunication
- Daewoo Shipbuilding & Marine Engineering
- Model houses (Hyundai, POSCO, Daeri, Kumho)
- Daily waste incineration facilities (Incheon, Milyang, Cheonan)
- Terminal disposal plants of sewage (Uljin, Seonghwan, Mokpo, Cheonan, Samcheok)
- Buhwal Church
- Poi-dong Cathedral
- Industrial Design Center
- Sampio Foods
- Yongin Automobile Exhibition Center
- Iranian Embassy
- Icheon Ceramics Expo
- Opto-Magic Ansan Factory
- CONIC System factory
- Pyeongchon EL Studio
- Otsuka Korea
- LT Metal
- LG INNOTECH Plant
- LG Electronics Chamber Building
- Insun ENT factory
- Yongdungpo First Methodists Church
- Daehakro Hyemyeong Church
- Pupyong Sangok Church
- Sujin Youngrak Church
- Cheonan Seongam Church
- Cheongju Baptist Church
- Dangjin Steam Power Plant
- Boryeong Steam Power Plant
- Youngheungdo Combined Cycle Power Plant
- Ganwon-do Jeongseon Factory
- Korea ONE-TECH Factory in Gwangju, Gyeonggi-do
- Air Force Academy Church
- Gwacheon Wangseong Church
- Dangjin First Church
- Mirae Company Hwaseong Factory
- Bucheon Saegwang Church
- Underground double wall of Southeast Distribution Complex
- Asan Tangpyeong Wastewater Disposal Plant
- Yeongwang Church
- Yongin Church
- Ulsan SK FCC
- Cheolsan-dong Public Parking Lot
- Chungcheon Dongsan Church
- Hwagok-dong Unam Church
- Gwangju Joseon White Porcelain Data Pavilion
- Yongin Songjeon Sewage Treatment Plan
- Yongin Namsa Sewage Treatment Plan
- Museum of Korea Immigration History

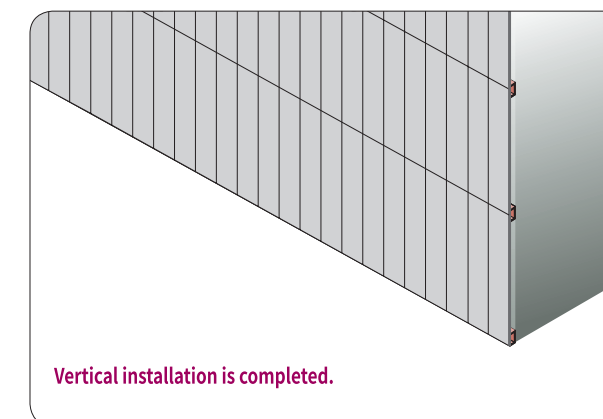
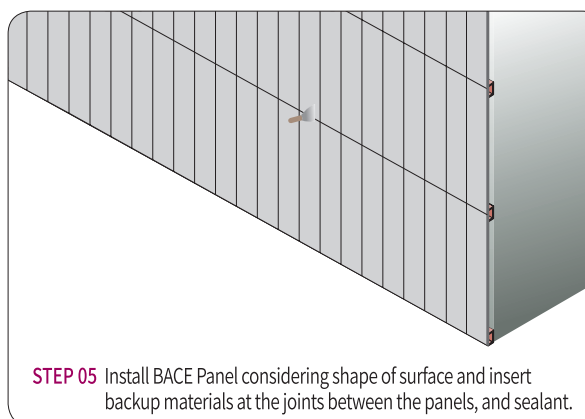
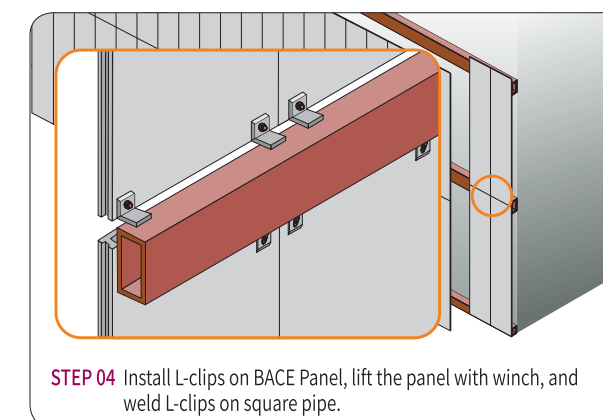
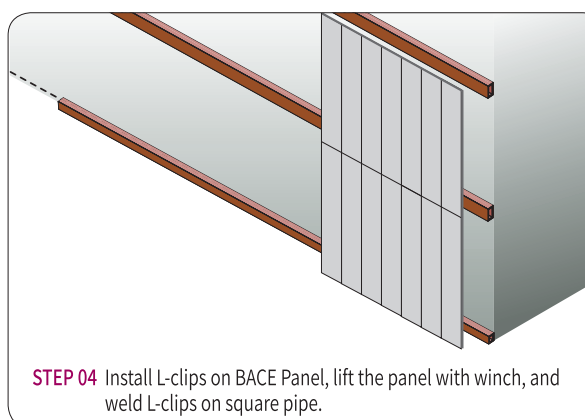
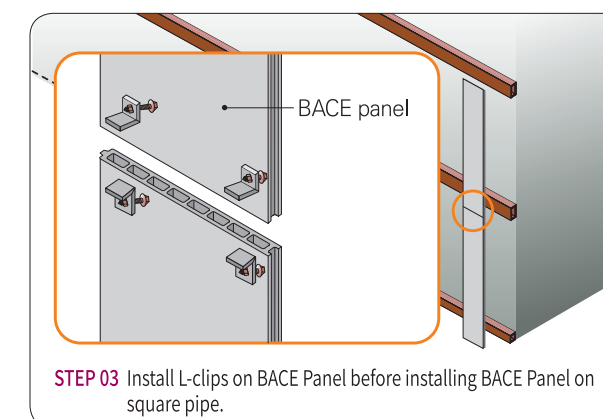
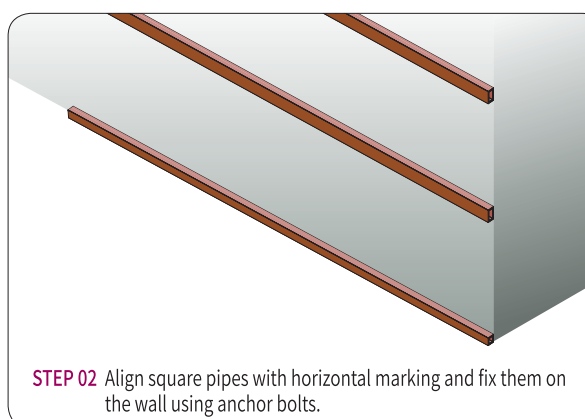
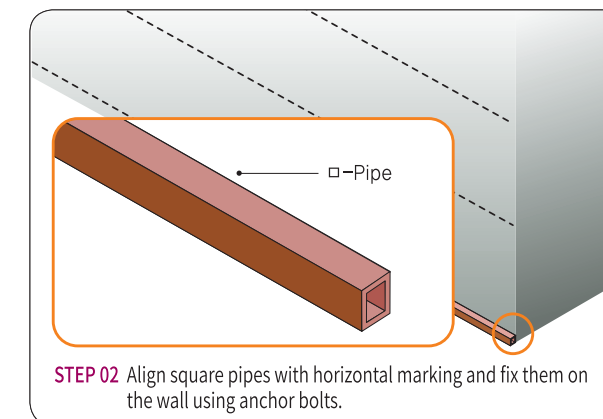
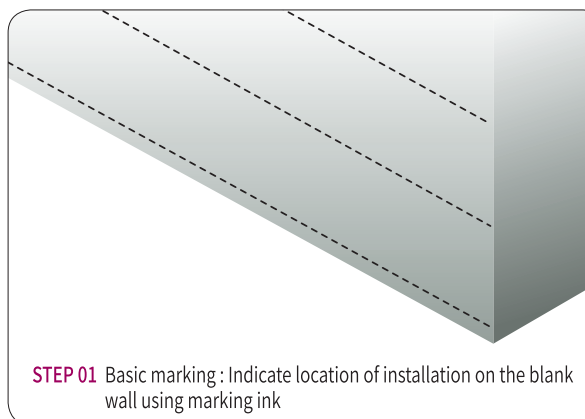
BACE Panel Installation

※ Visit Byucksan website (www.byucksan.com) for BACE Panel installation simulation.
 ※ The simulated installation is standard and may vary depending on the situation of sites.
 (Various installations are available)

Horizontal installation

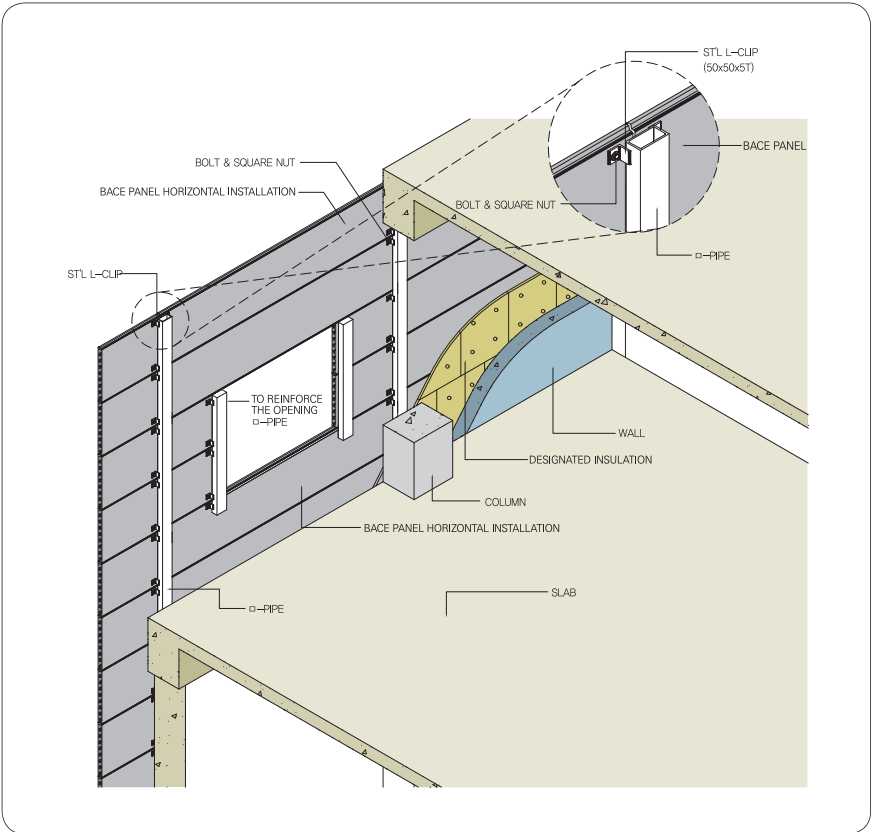


Vertical installation

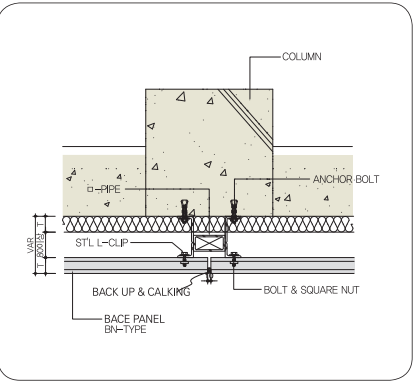


Detailed drawing of installation

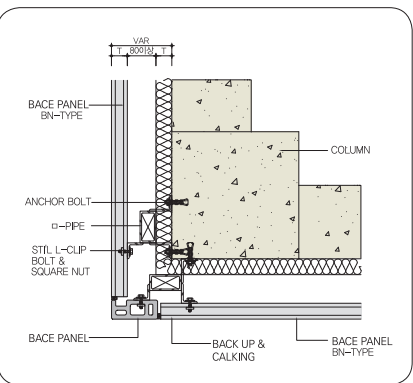
Horizontal installation Structure



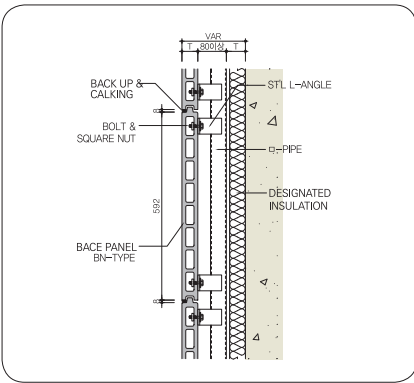
Partial floor plan of horizontal installation



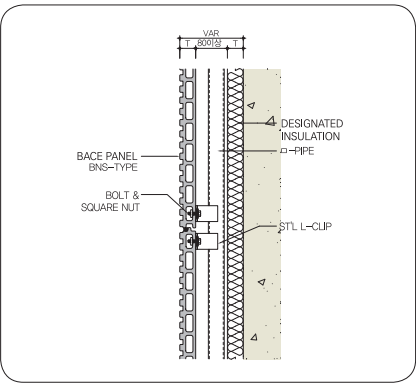
Corner floor plan of horizontal installation



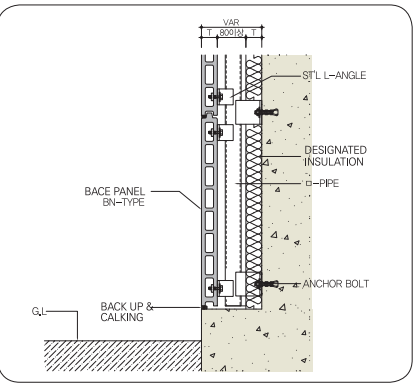
BN-Type section



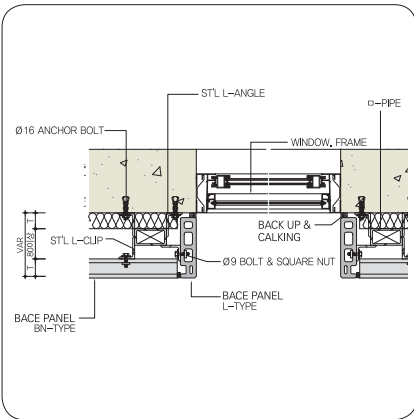
BNS-Type section



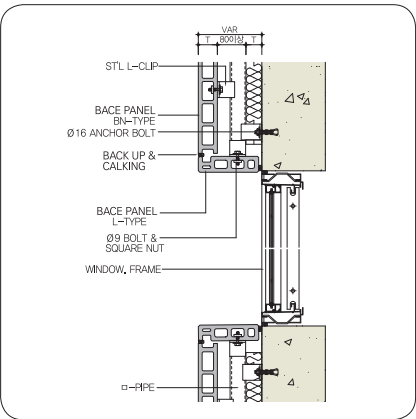
BN-Type bottom section



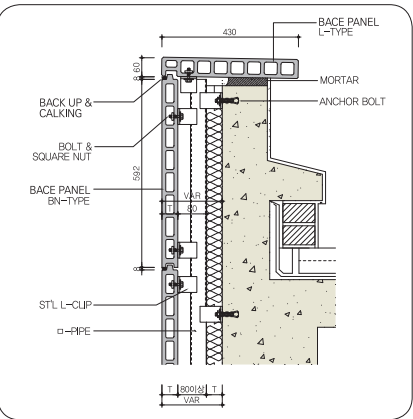
Floor plan of window and door – RC structure



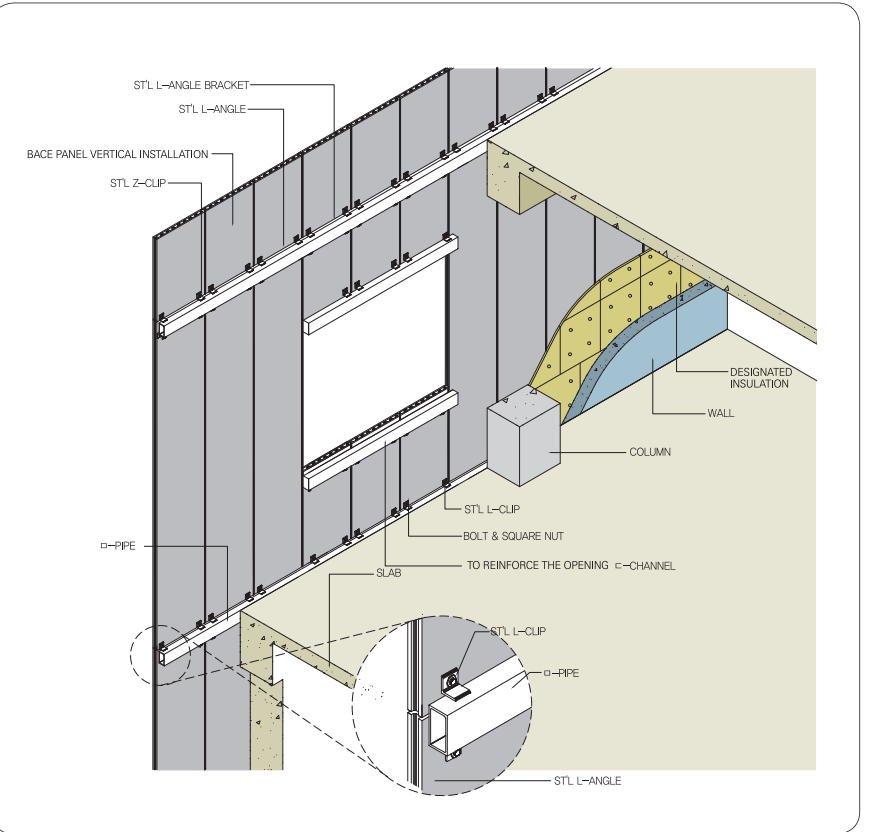
Section of window and door - RC structure



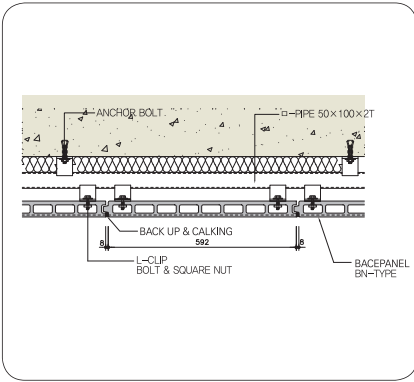
Parapet section – Horizontal installation



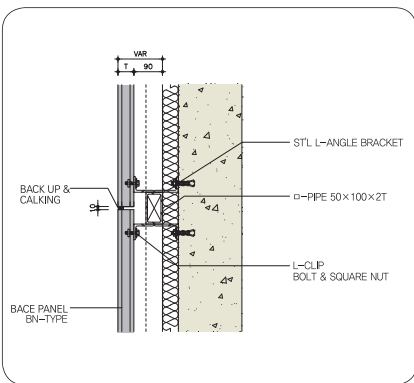
Vertical installation Structure



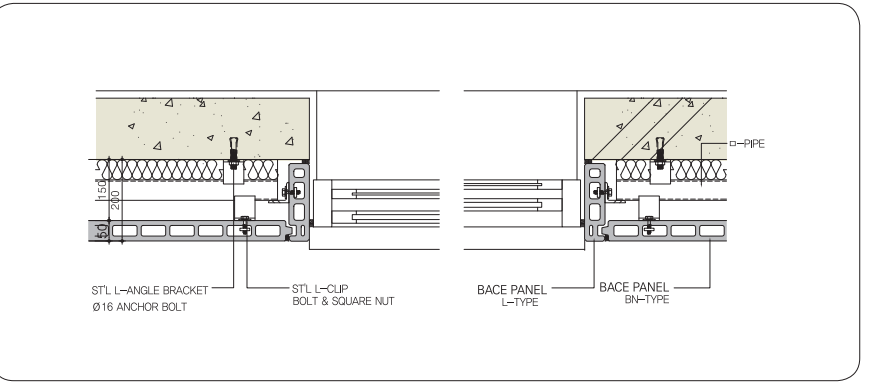
Partial floor plan of vertical installation



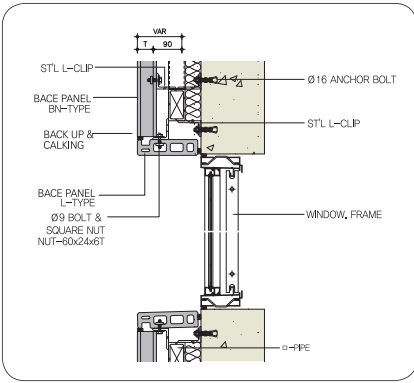
Partial sectional plan of vertical installation



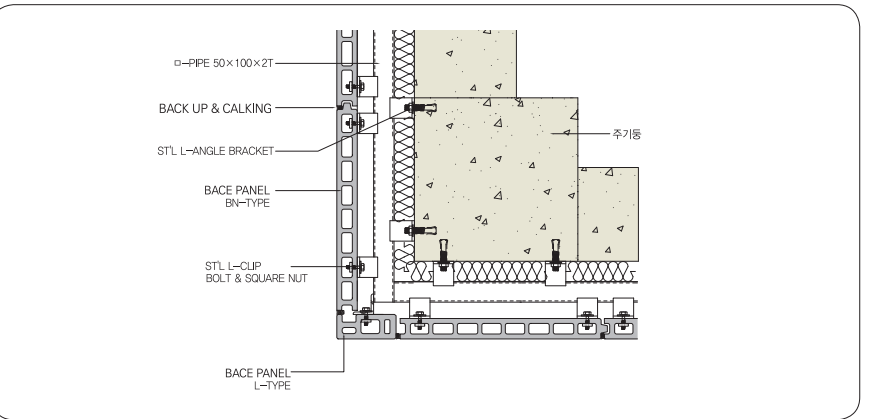
Detail floor plan of window and door – RC structure



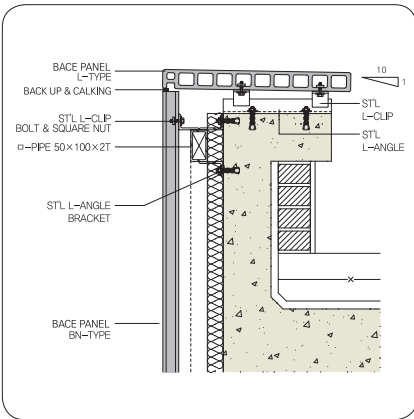
Detail sectional plan of window and door – RC structure



Corner floor plan of vertical installation



Parapet section – Vertical installation



※ The simulated installation is standard and actual installation may vary depending on the situation of sites. (Various installation methods available)

TS-CLIP (FOR 35T)

BACE PANEL THK35
(BNC-3550T CLIP TYPE)

1250

35

TS-CLIP (FOR 35T)

TS-CLIP (FOR 35T)

L-BRACKET (75×125×6T)

WEDGE-ANCHOR φ12

□-PIPE (100×50×3,2T)

WEDGE-ANCHOR $\phi 12$
L-BRACKET (75 \times 125 \times 6T)

TS-CLIP (FOR 35T)

DIRECT SUS PIECE ($\phi 6 \times 19$)

BACK PANEL TH \times 35
(BNC-3550T CLIP TYPE)

BACK UP & CALKING

The diagram illustrates a cross-section of a roof assembly. At the top is a concrete slab. Below it is a drainage layer with a wavy profile. A base panel, labeled 'BACK PANEL TH \times 35 (BNC-3550T CLIP TYPE)', is installed over the drainage layer. The panel is secured by 'TS-CLIP (FOR 35T)' and 'DIRECT SUS PIECE ($\phi 6 \times 19$)'. A 'WEDGE-ANCHOR $\phi 12$ ' is used to secure the 'L-BRACKET (75 \times 125 \times 6T)' to the concrete slab. The 'BACK UP & CALKING' is shown as a layer between the base panel and the drainage layer.

WEDGE-ANCHOR (ø12)
L-BRACKET (75x125x6T)

ø-PIPE (50x50x3,2T)

DIRECT SUS. PIECE (ø6x19)

BACE PANEL TH#35
(BNC-3550T CLIP TYPE)

TS-CLIP (FOR 35T)

BACK UP & CALKING

Diagram illustrating the cross-section of a wall assembly with the following components labeled:

- PVC PAD (FOR HEIGHT CONTROL)
- BACK PANEL THK50 (BN-5060 FLAT TYPE)
- ST'L H-CLIP 70×70×1.6T
- BACK UP & CALKING
- PIPE (100×50×2T)
- L-BRACKET (75×125×6T) WEDGE-ANCHOR ϕ 12

A cross-sectional diagram of a concrete slab construction. The slab is shown with a textured surface and several vertical reinforcement bars. Labels with leader lines point to various components: 'L-BRACKET (75x125x6T)' and 'WEDGE-ANCHOR 6 12' point to the top reinforcement; 'C-PIPE (100x50x2T)' points to a vertical pipe; 'STL H-CLIP 70x70x1.6T' points to a horizontal clip; 'BACK UP & CALKING' points to the space between the slab and the base panel; and 'BASE PANEL THK50 (BN-5060 FLAT TYPE)' points to the bottom panel.

BACK UP & CALKING

BACK PANEL THK30
(BN-5060 FLAT TYPE)

STL H-CLIP
70x70x1.5T

PIPE (100x50x2T)

L-BRACKET (75x125x6T)

WEDGE-ANCHOR Ø12

FLOOR

Diagram illustrating the cross-section of a wall assembly. The components and labels are as follows:

- L-BRACKET (75 × 125 × 6T)**: A bracket mounted to the wall.
- WEDGE-ANCHOR $\varnothing 12$** : A wedge anchor securing the bracket to the wall.
- P-FE (100 × 50 × 2T)**: A plate or flange.
- BACK UP & CALKING**: Material used for sealing and support.
- STL H-CLIP 70 × 70 × 1.6T**: A clip used for securing the back panel.
- BACK PANEL THK50 (BN-5060 FLAT TYPE)**: The back panel being installed.

Diagram illustrating the connection between a back panel and a concrete wall using STL S-CLIP and ANCHOR BOLT.

Labels in the diagram:

- BACK PANEL BR-TYPE
- STL S-CLIP
- ANCHOR BOLT
- SUPPORTING CLIP
- BACK UP & CALKING
- GL
- CONCRETE WALL

Ø12mm ANCHOR BOLT

CON'C COLUMN

Ø-PIPE

90

90+T

BACE PANEL BN-TYPE

STLS-CLIP L=50x50x20x5T

Ø19 BOLT & SQUARE NUT NUT=60x20x5T

STL S-CLIP
L-60×50×20×5T

BACK PANEL
BN-TYPE

BACK LIP &
CALKING

BACK PANEL
L-TYPE

Ø9 BOLT & SQUARE NUT
NUT-60×20×5T

Ø12 ANCHOR BOLT

STL S-CLIP
S-50×50×5T

WINDOW, FRAME

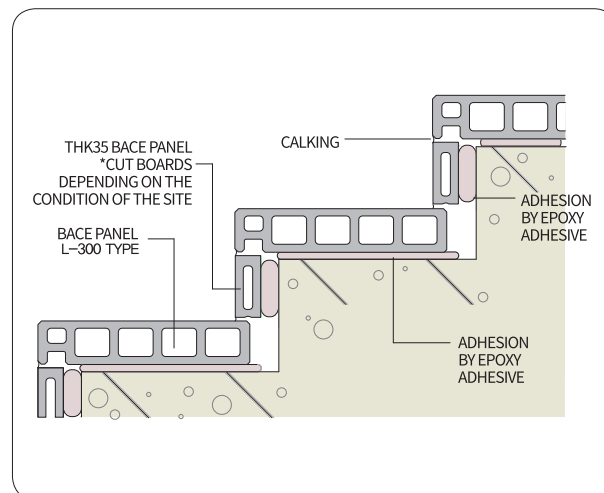
Ø-PPE

Diagram illustrating the components of a fire-rated wall assembly:

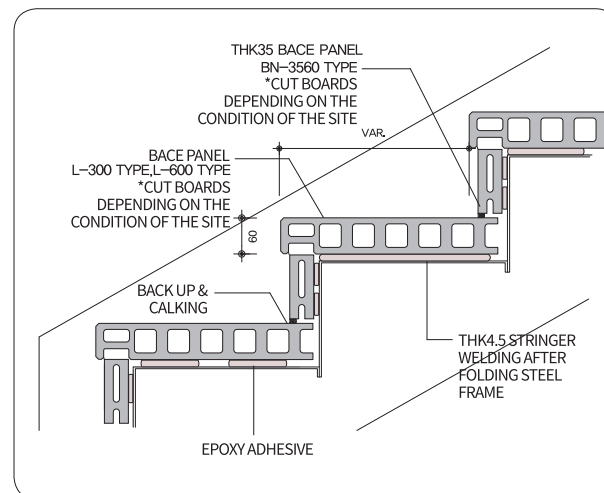
- S-CLIP
- BACK UP & CALKING
- BACK PANEL BR-TYPE
- GYPSUM BOARD
- INSULATION
- FIRE RATED COVERING

Detailed drawing of Clip Type installation

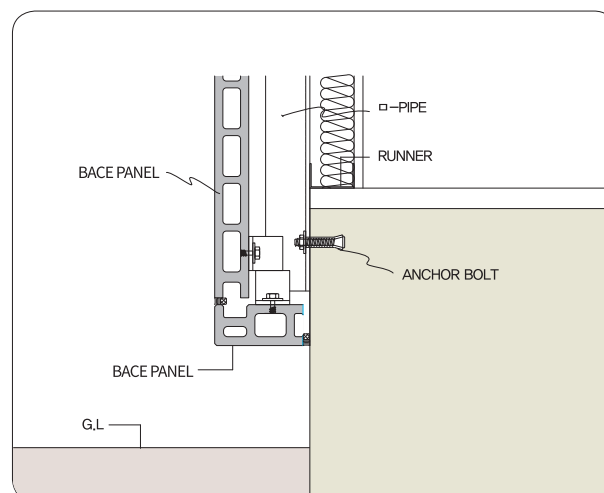
● Detailed stair section – 1



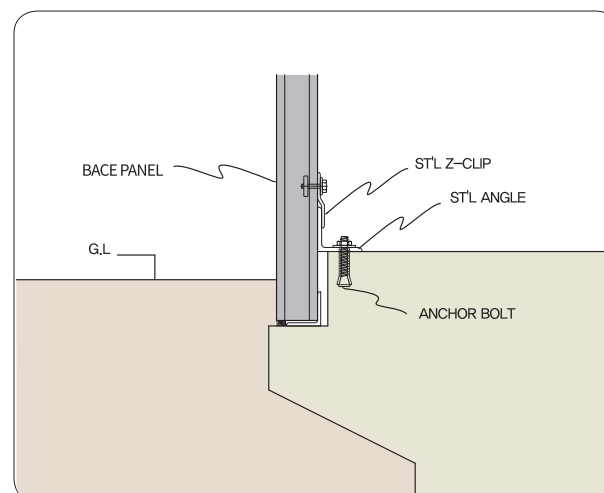
● Detailed stair section – 2



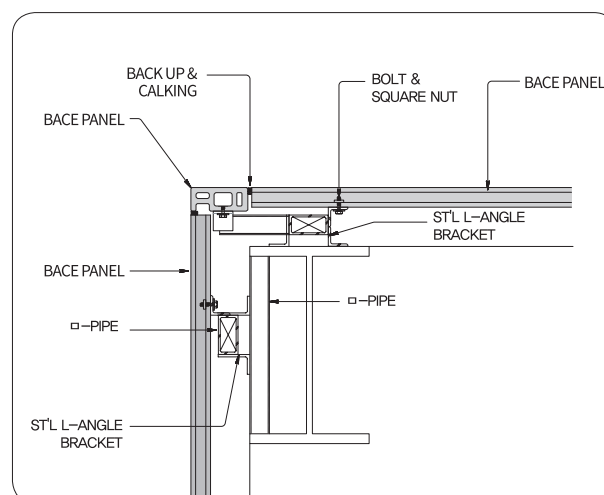
● Bottom section



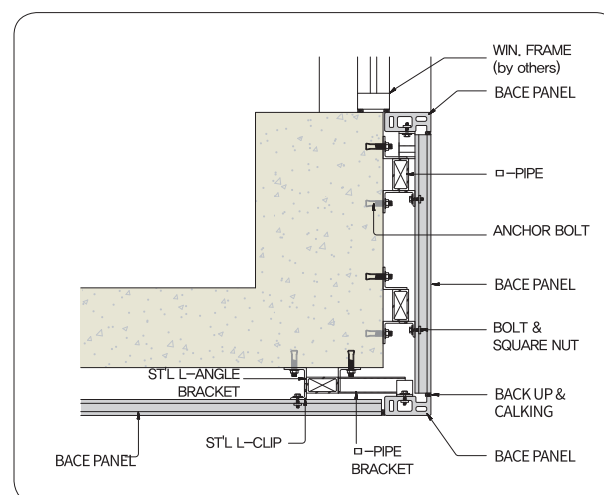
● Bottom section



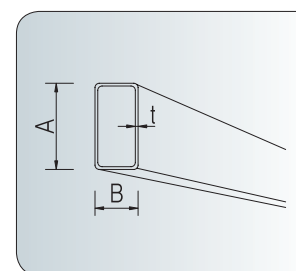
● Floor plan for Corner – Steel frame structure



● Floor plan for Corner – RC structure

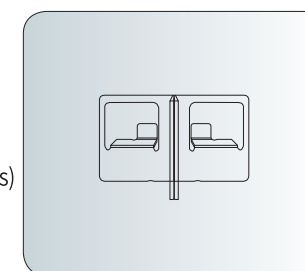


∴ Examples of Accessories



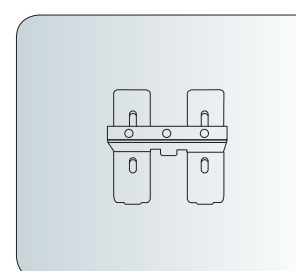
Square pipe

- Dimension $A \times B \times t$
Ex.) $100 \times 50 \times 2T$
 $50 \times 50 \times 2T$
- Tolerance (length, thickness)
 $\pm 0.30 \text{ mm}$
- Length
6 m



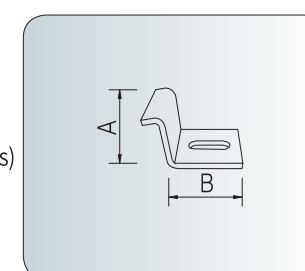
TS clip

- Dimension $A \times B \times t$
Ex.) $70 \times 100 \times 2T$
- Tolerance (length, thickness)
 $\pm 0.50 \text{ mm}$



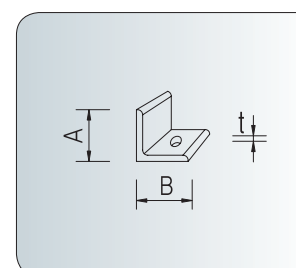
H clip

- Dimension $A \times B \times t$
Ex.) $70 \times 70 \times 1.6T$
- Tolerance (length, thickness)
 $\pm 1 \sim 2 \text{ mm}$



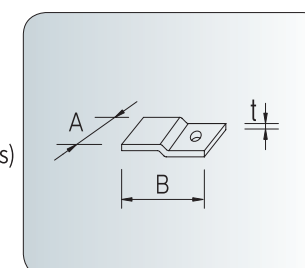
S clip

- Dimension $A \times B \times t$
Ex.) $55 \times 55 \times 5T$
- Tolerance (length, thickness)
 $\pm 0.50 \text{ mm}$



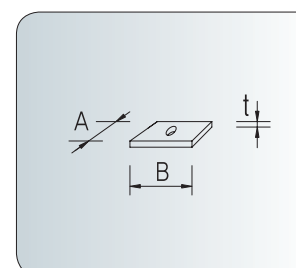
L clip

- Dimension $A \times B \times t$
Ex.) $50 \times 50 \times 5$
- Tolerance (length, thickness)
 $\pm 0.50 \text{ mm}$



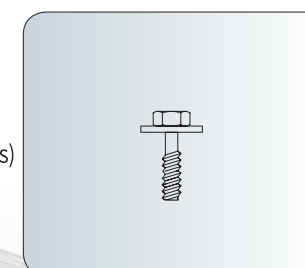
Z clip

- Dimension $A \times B \times t$
Ex.) $50 \times 50 \times 5$
- Tolerance (length, thickness)
 $\pm 0.50 \text{ mm}$



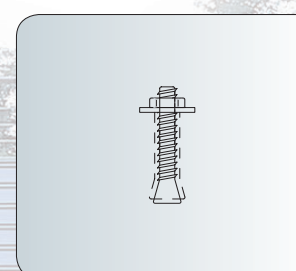
Square nut

- Dimension $A \times B \times t$
Ex.) $25 \times 60 \times 5$
- Tolerance (length, thickness)
 $\pm 0.50 \text{ mm}$



Hexagonal bolt

- Dimension
M10 \times 32
- Tolerance (length, thickness)
 $\pm 0.50 \text{ mm}$



Anchor bolt

- Dimension
Ex.) $\varnothing 12$
- Length
100 mm

■ Quality assurance

1. Please contact the customer service center of the head office or distributors of the company if you have any requirements or complaints regarding the quality of the products.
2. The warranty of the products is for 1(one) year. (Note : The warranty will not be valid in case of defects caused by careless storage or handling of the products by customers or those resulting from erroneous installation.)
3. Reports on complaints about the product should be accompanied by relevant documents.

■ Cautions on handling and storage

1. Store the products on pallets with proper covers (e.g., tarpaulin) on a flat floor when storing them outdoors.
2. Do not stack pallets on the other pallets.
3. Use a forklift when loading and unloading the products onto and from trucks.
4. Take care to protect the corners from damage during handling and storage.
5. Protect the products not to be contaminated during storage and handling.
6. Do not place heavy objects on the products. The product may be damaged.

■ Cautions on installation

1. Please consult us when you wish to use the products for different applications other than those specified here.
 - Do not use the products for other purpose with heavy weight load which may cause breakage.
 2. Discarded BACE Panel is a common industrial waste and should be disposed complying with relevant regulations.
 3. Observe the following instructions when cutting or processing the products:
 - Workers should wear protective gear such as face mask and goggles; workers not wearing such gears should not be allowed to access the work site.
 - Maintain good ventilation condition at the work site.
- ※ Please refer to the MSDS at the head office, branches, and website of the company for additional information.



Safety Glasses Safety Helmet Filter Mask Gloves

- ※ MSDS (Material Safety Data Sheet) – Manual describing the hazards, first-aid actions, and handling method of chemicals for the safe use of products.

■ Warning



1. Tighten the wrist section of the long sleeves and wear protective gear such as goggles, safety helmet, face mask, and gloves when handling the product.
 - Inhalation of dust may cause stimulus on the respiratory system.
2. If dust directly comes in contact with skin or eyes, do not rub; instead, wash off with water.
 - Scratching skin may cause stimulus on skin.
3. Do not use the product for grill plate.
 - The product may cause airborne particles or have damage when exposed to flame.
4. If you feel sick during the handling and installation of the product, consult a doctor immediately.

※ The contents of this booklet may be subject to change without notice. Please consult us if you want to use the products for different applications other than those described here.
※ ® indicates the registration of trademark of Byucksan.



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