



# GRANROOF

-CARPORT CANOPY-

**JUL  
2024**

**PT YKK AP INDONESIA**  
ENGLISH VERSION

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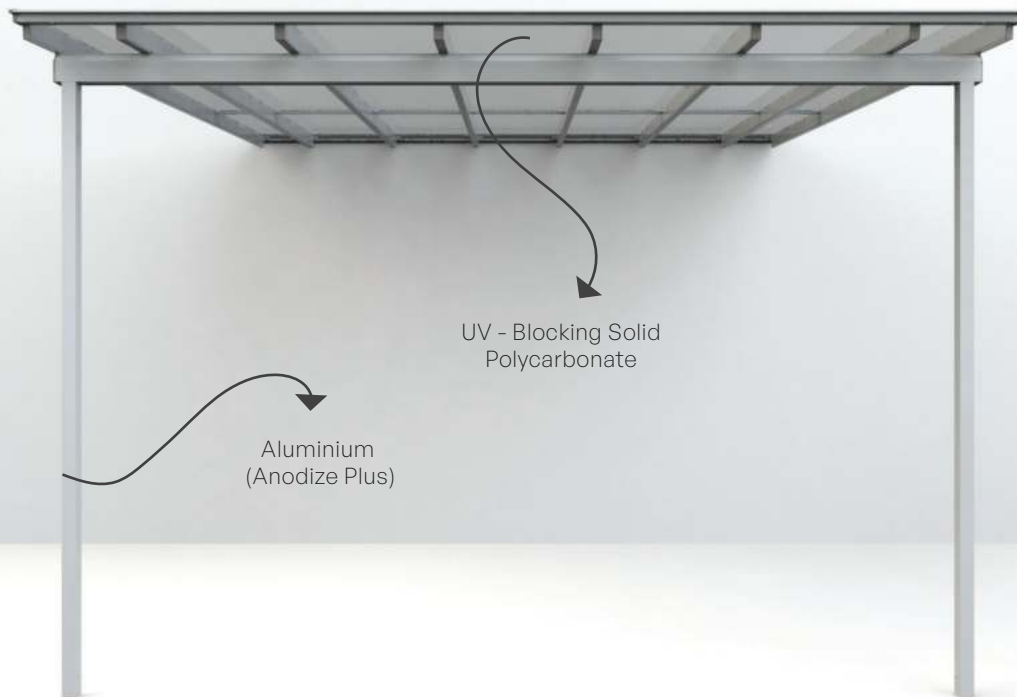
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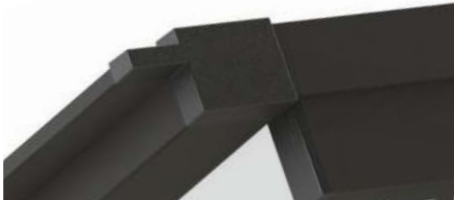
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# WHAT IS GRANROOF

Long Life Design With Modern Shapes and High-Performance Materials

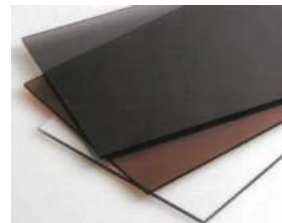


## 1 Aluminium Structure



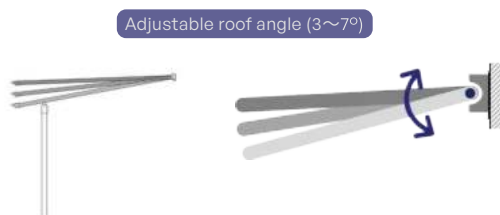
YKK AP Aluminium finishing color use **ANODIZE PLUS** trusted for exterior uses

## 2 Roof panel



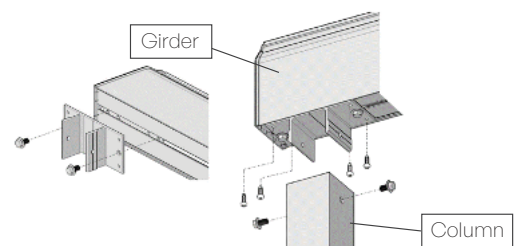
UV-blocking solid polycarbonate by PT SBP Indonesia(Sumitomo Bakelite) with Japan quality, creating a bright space.

## 3 Adjustable Structure



Roof angle is adjustable between 3~7° thanks to the adjustable yet stable structure.

## 4 Easy and Clean Installation



Designed & created for easy on-site assembling doesn't need welding. No need to worry about rusting

# PRODUCT FEATURES

## Functionality

High functionality to protect your car & family

### • Non Rusting

Anodized aluminum finish that can be used for a long time without rusting



### • Certain Quality (Processed by API)

Processed by manufacturer, and delivery with knock down style to maintain the quality.



### • High Durability

Design Load: Up to wind speed equivalent to **32.1 m/s**, tested & passed



\*Design load above: No consideration for seismic force

\*With wind speed 20 m/s, human cannot keep standing

Load Capacity Test: For load capacity reaches **31.8kg/m²**

\*But **"don't climb on top of carport"**

There is a risk of roof material being damaged or falling.



## Quality & Performance

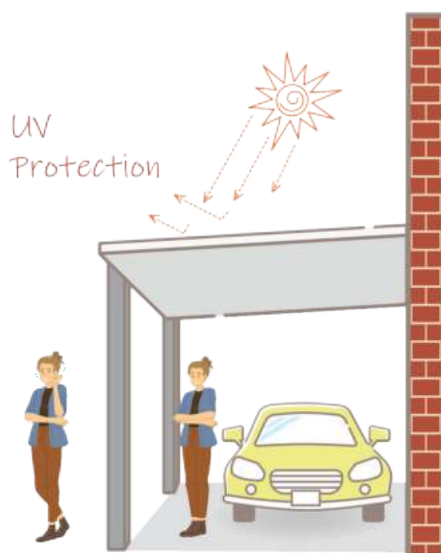
Higher performance and durability ever

### • UV - Blocking

UV-blocking solid polycarbonate roof that protects your car from the sun.

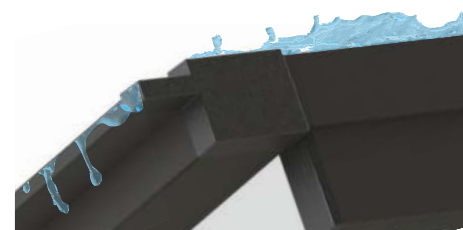
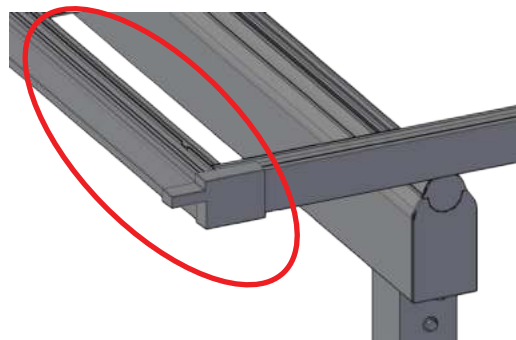
	Clear	Bronze	Gray
Color image			
Light Transmission	85%	27%	28%
UV Transmission	Almost 0%	Almost 0%	Almost 0%

\* Polycarbonate by PT. SBP Indonesia SUNLOID Solid Flat Sheet



### • Stylish Drainage Roof Fin

The roof shape also serves as a drain to prevent rain drips and water splash from making stains on cars or objects.



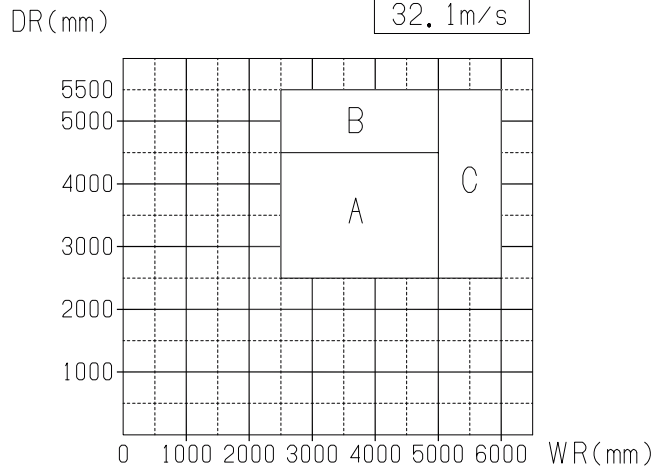
Do you know?!  
This is the advantage  
of our products



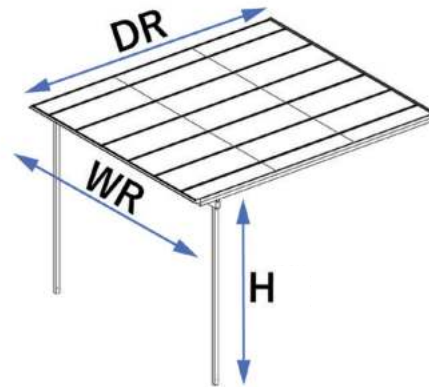
# PRODUCT SPECIFICATION

Maximum size :WR6000×DR5500

H=3000, H=3500 (Wall Mounted)



	RAFTER	BEAM
A	Small	Small
B	Big	Small
C	Big	Big

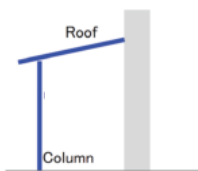


## Specification

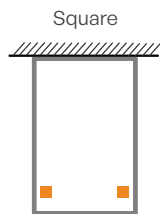
Keep your options open, because we have wide variations to choose

## Product Line Up

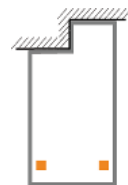
### Wall Mounted



\*Side View



\*Above View



\*Above View

Wall depth difference Left (L)

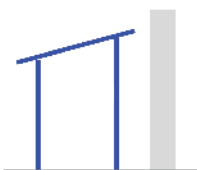


Wall depth difference Right (R)

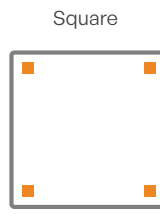
\*Please Consult with Sales PIC

On site Adjustment

### Free Standing

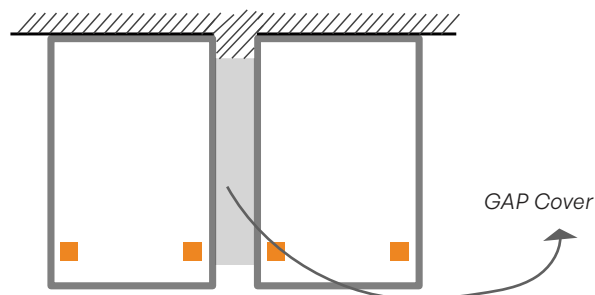


\*Side View



\*Above View

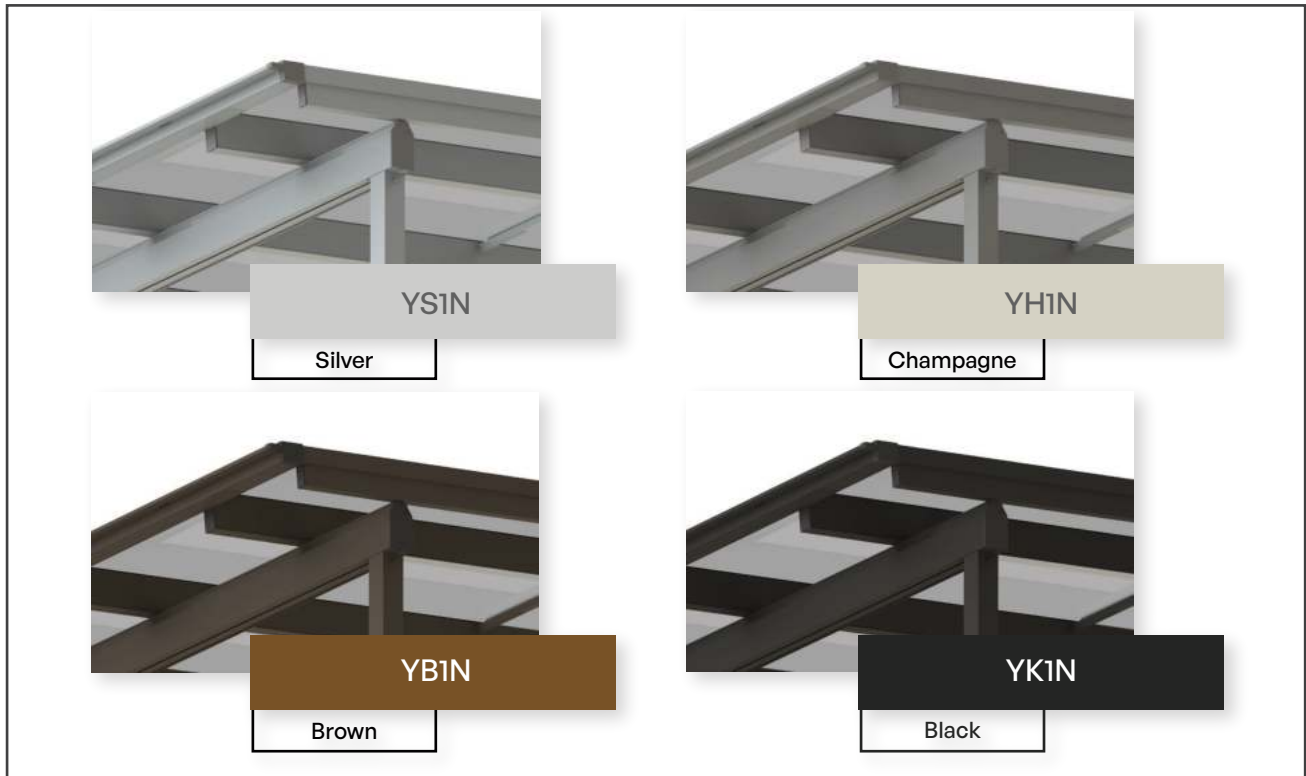
## GAP Cover (Option)



## COLOR VARIATIONS

### Aluminium Structure : 4 options

**ANODIZED PLUS** is another innovation from **YKK AP**. Anodizing with Electro Deposition process create two types of appearance, glossy and non glossy which provides an extra layer of protection on the anodized layer. Its anodized coating combined with an organic protective coating offers the dual benefit of increased resistance to stain and color degradation.



### Roof Polycarbonate : 3 Options

**UV - blocking solid** polycarbonate by PT SBP Indonesia (Sumitomo Bakelite) with Japan quality, creating a bright space.



\*Illustration Image



## GENERAL CARPORT PRODUCT

To support our GRANROOF development, we conducted survey to see actual carport in various locations with different materials.

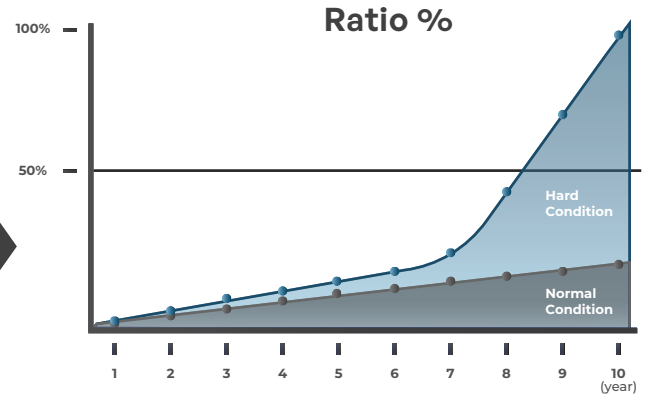
### Structure (Steel)



From the survey, most of carport that use Steel got rusted, cracks, and the paint peeled at welding joint

Result Summary

### Bad Structure material condition



After around 8 years passed with steel structure, especially in hard conditions, the ratio of bad condition goes **nearly 90%**

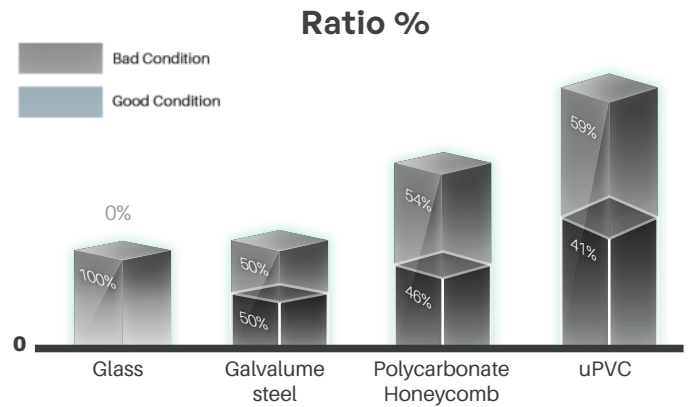
### Structure (Roof)



Most of Roof material that we surveyed got rusted and look dirty after several years installed

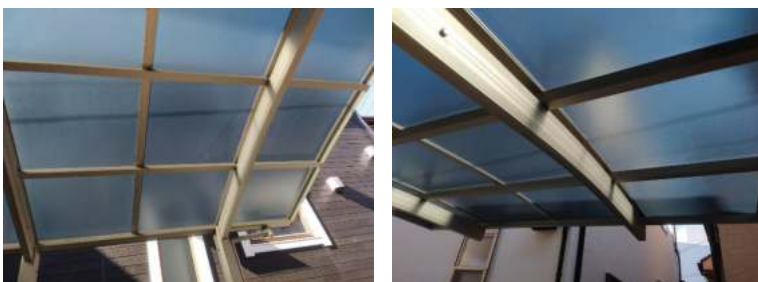
Result Summary

### Bad roof material condition



Roof materials expect glass have bad condition for **more than 50%** rate.

In Japan, Carport using Aluminium as structure and Solid Polycarbonate as roof materials, is already proved to have long life without rust and molding. Still feels like new, even after 20+ years passed.



# PRECAUTIONS

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## • About the Price List

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- The prices listed in this catalog include polycarbonate, installation fees, and assembly fees
- The price list is listed in units of WR, and less than DR should be rounded up
- Ex) WR 4650 x DR 3800 = The price will be 5000 x 4000

## • Delivery Destination

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Only DIS warehouse or workshop, on-site delivery is not possible (Can be picked up at the factory upon request)

## • Quality Assurance

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2 years for the product GRANROOF

10 years for aluminium surface treatment of profile, 2 years for parts

\*Please check below for disclaimers

YKK AP Indonesia's official distributors guarantees for the quality of assembly, installation, and sealing request)

## • Disclaimer

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**Even within the warranty period, repairs will be charged in the following cases :**

- Problems when installed in a place that requires performance that exceeds the performance of this product
- Defects caused by processing, assembly, construction (foundation work, installation work, sealing work, etc.), management, maintenance, etc. by a third party that is not arranged by our company (Example: Corrosion due to using sea sand or mortar using accelerator materials. Corrosion due to the use of cleaning agents other than neutral detergents. Discoloration and corrosion due to poor curing during construction, etc.)
- Product defects caused by defects other than the product, such as deformation of the building frame
- Defects such as changes in products or parts over time (wear and tear due to use, etc.) or deterioration over time (changes in quality of resin parts, discoloration, etc.)
- Corrosion or other defects caused by the natural environment or living environment around the product (for example, corrosion caused by salt damage, dust in the atmosphere, soot, various metal powders, sulfurous acid gas, ammonia, corrosion caused by car exhaust gas, abnormal high temperature, low temperature, high humidity etc)
- Problems caused by natural disasters or other force majeure (for example, windbreaks, heavy rains, storm surges, earthquakes, lightning strikes, floods, land subsidence, fires, tsunamis, eruptions, etc)
- Problems caused by small animals such as dogs, cats, birds, and mice
- Problems caused by operational errors after delivery, improper adjustment, or improper maintenance
- Problems caused by customer's own assembly, processing, installation, repair, modification
- Defects caused by use for purposes other than the intended purpose, or defects caused by use in a manner different from the intended use.
- Damage or malfunction caused by illegal acts such as crime

\* Fee will be charged for replacement after the warranty period has expired

\* This document does not limit customer's legal rights. If customers have any questions about repairs after the warranty period has expired, please contact our sales office

WALL MOUNTED

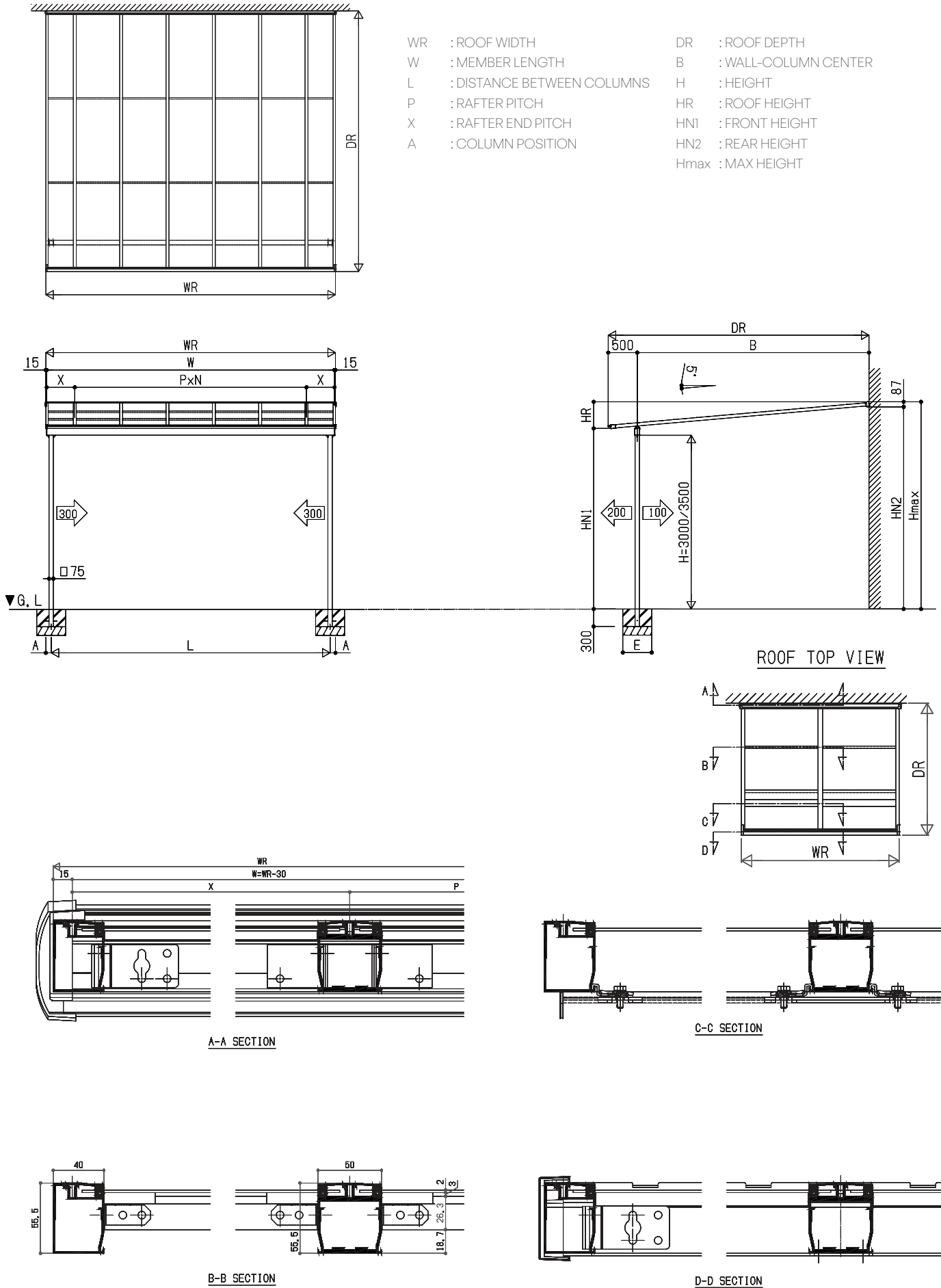
SQUARE

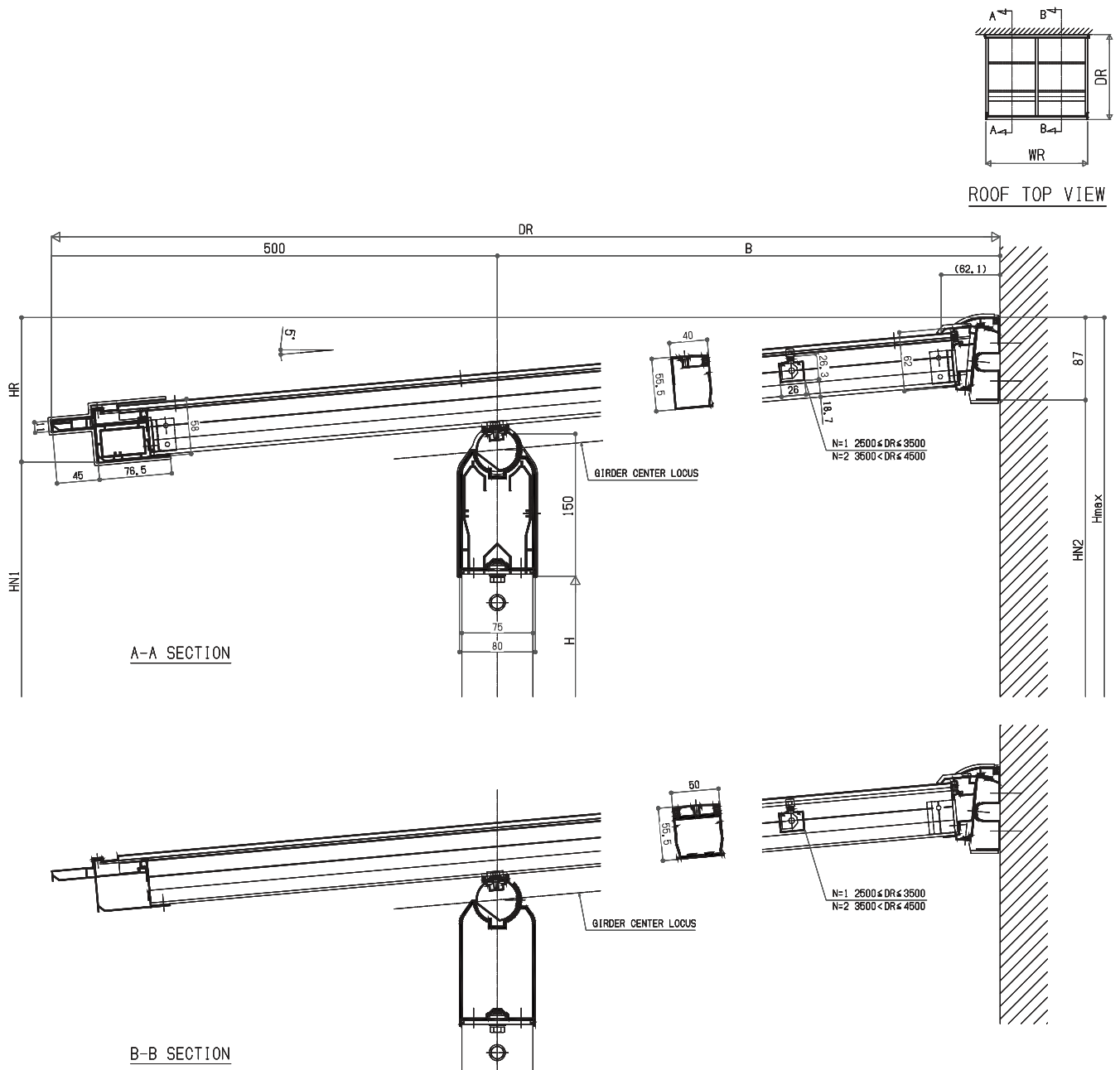


# WALL MOUNTED (TYPE A)

## SQUARE

### SYSTEM DRAWING





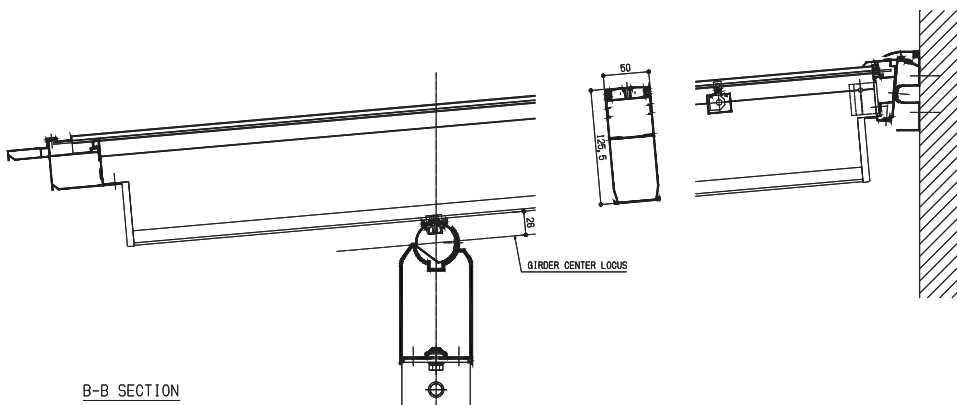
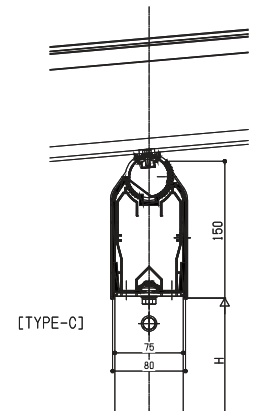
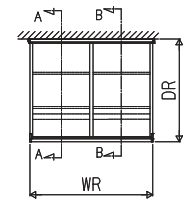
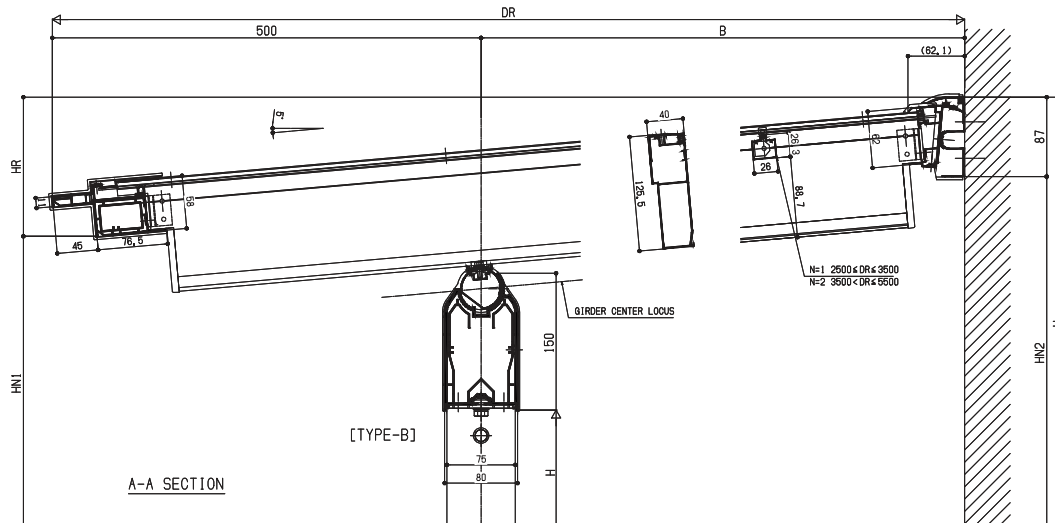
## SYSTEM DRAWING

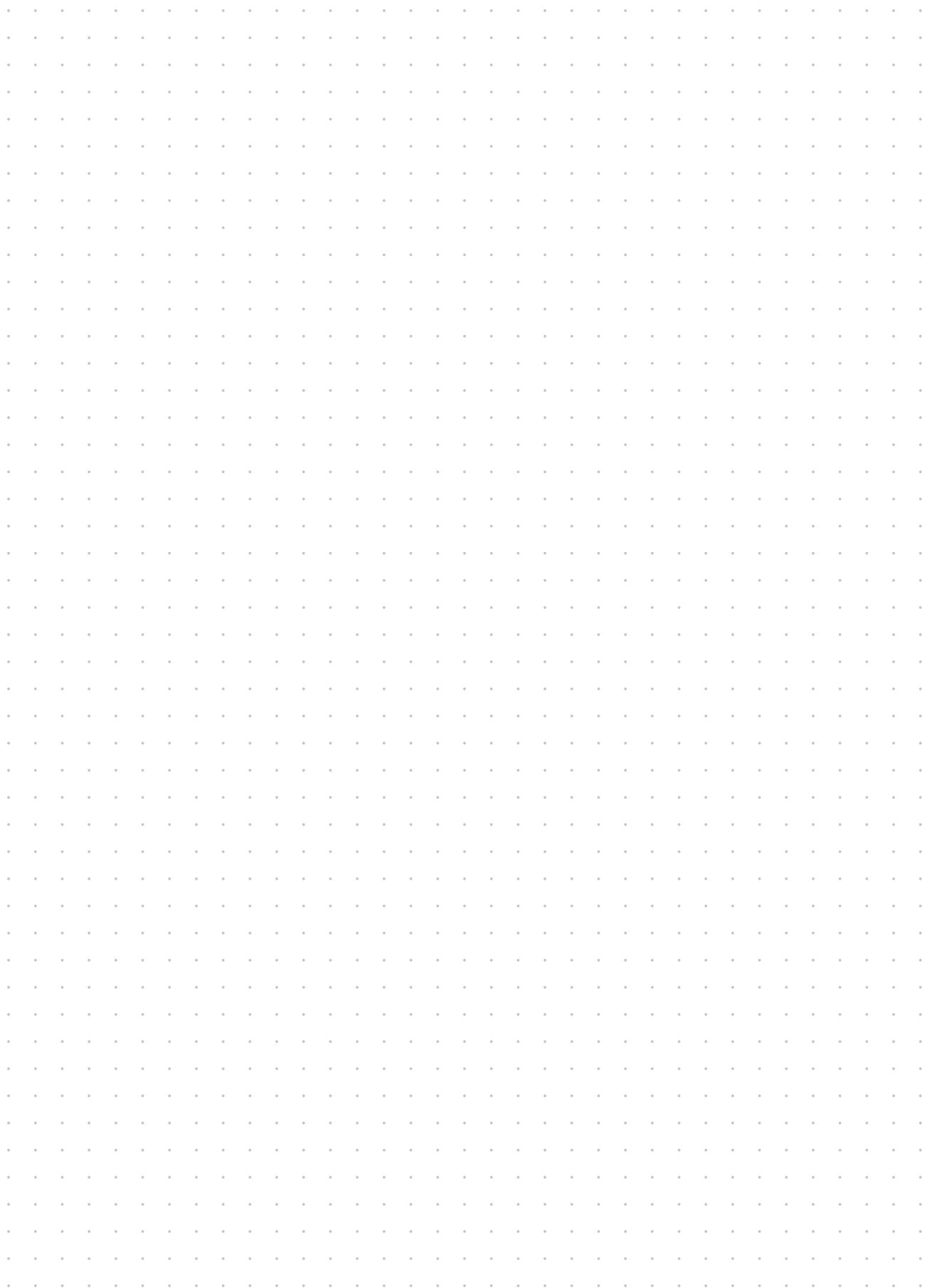


# WALL MOUNTED (TYPE B & C)

## SQUARE

SYSTEM DRAWING





**\*Please Consult with Sales PIC**

WALL MOUNTED

L - SHAPE

**On site Adjustment**

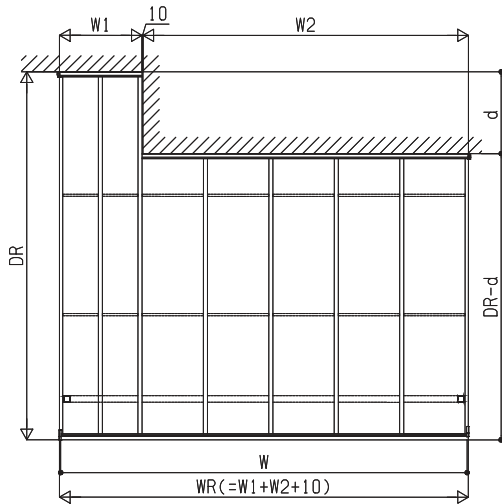


# WALL MOUNTED (TYPE A - RIGHT)

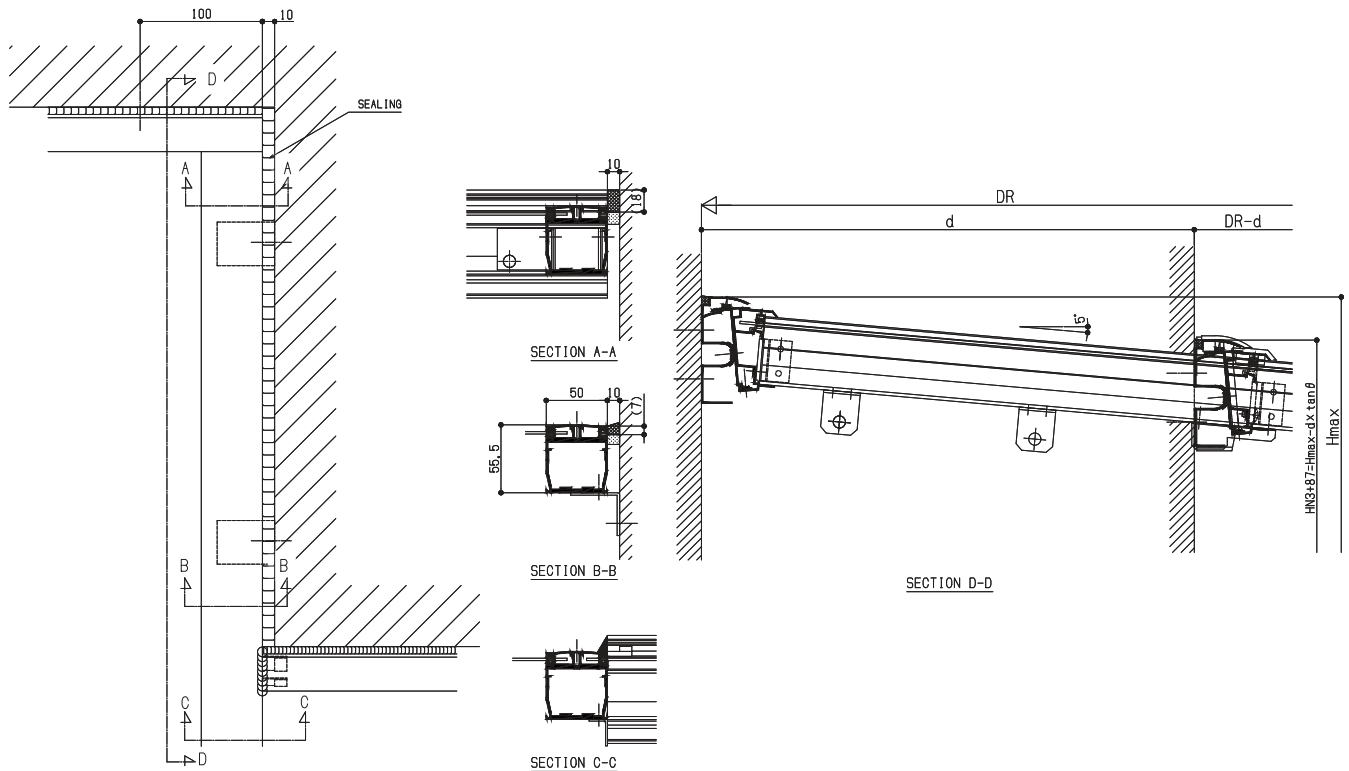
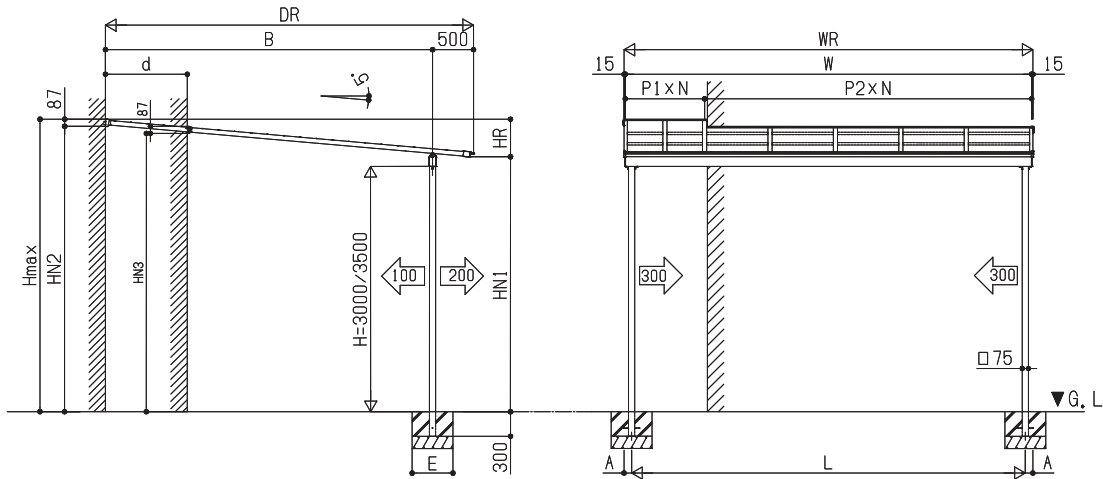
## L - SHAPE

SYSTEM DRAWING

**\*Please Consult with Sales PIC**



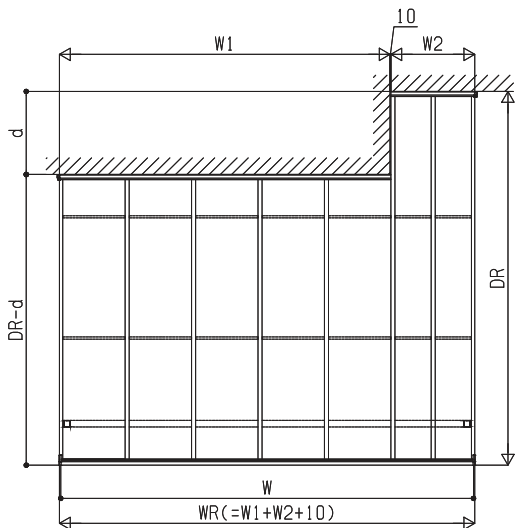
WR	: ROOF WIDTH	DR	: ROOF DEPTH
W	: MEMBER LENGTH	B	: WALL-COLUMN CENTER
W1	: WALL STEP~END RAFTER(L)	d	: ROOF DEPTH(R)~ROOF DEPTH(L)
W2	: WALL STEP~END RAFTER(R)-10	H	: HEIGHT
L	: DISTANCE BETWEEN COLUMNS	HR	: ROOF HEIGHT
P1	: RAFTER PITCH(L)	HN1	: FRONT HEIGHT
P2	: RAFTER PITCH(R)	HN2	: REAR HEIGHT(R)
A	: COLUMN POSITION	HN3	: REAR HEIGHT(L)
		Hmax	: MAX HEIGHT



## L - SHAPE

## SYSTEM DRAWING

**\*Please Consult with Sales PIC**



WR : ROOF WIDTH

W : MEMBER LENGTH

W1 : WALL STEP~END RAFTER(L)

W2 : WALL STEP~END RAFTER(R)-10

L : DISTANCE BETWEEN COLUMNS

P1 : RAFTER PITCH(L)

P2 : RAFTER PITCH(R)

A : COLUMN POSITION

DR : ROOF DEPTH

B : WALL-COLUMN CENTER

d : ROOF DEPTH(R)~ROOF DEPTH(L)

H : HEIGHT

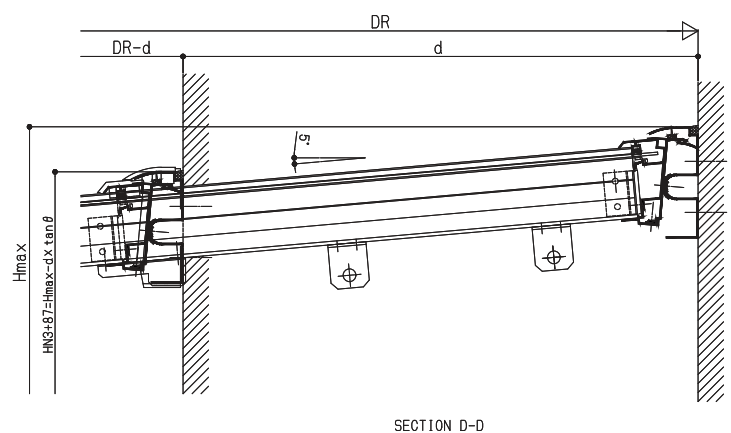
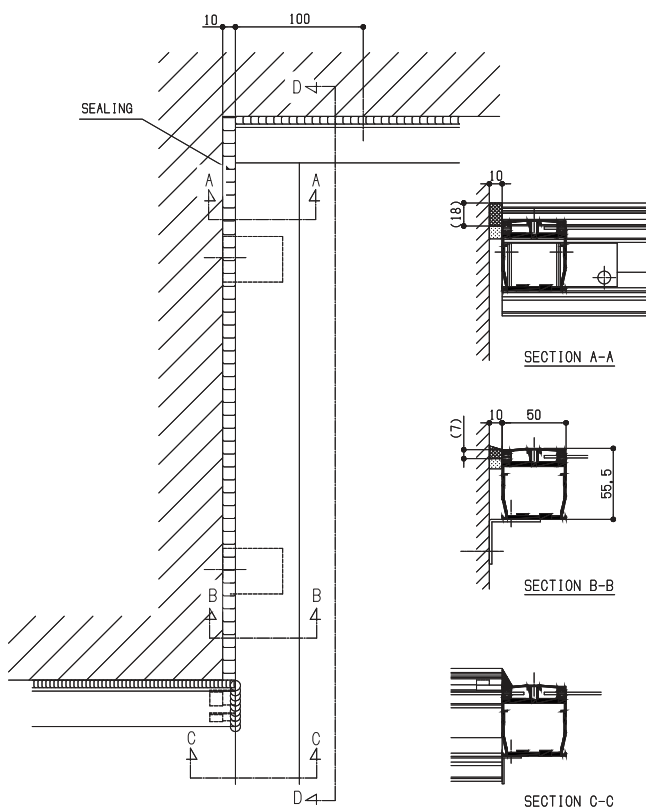
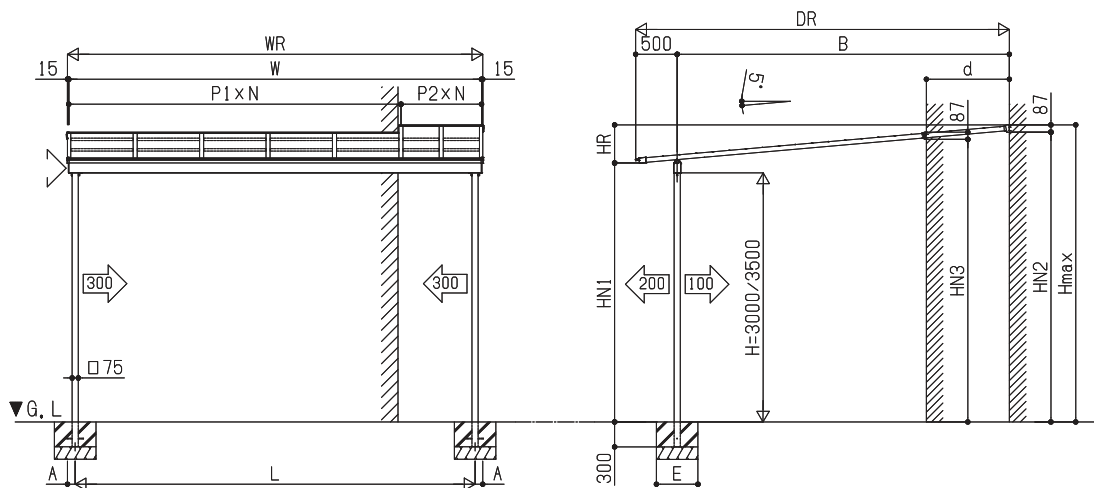
HR : ROOF HEIGHT

HN1 : FRONT HEIGHT

HN2 : REAR HEIGHT(R)

HN3 : REAR HEIGHT(L)

Hmax : MAX HEIGHT

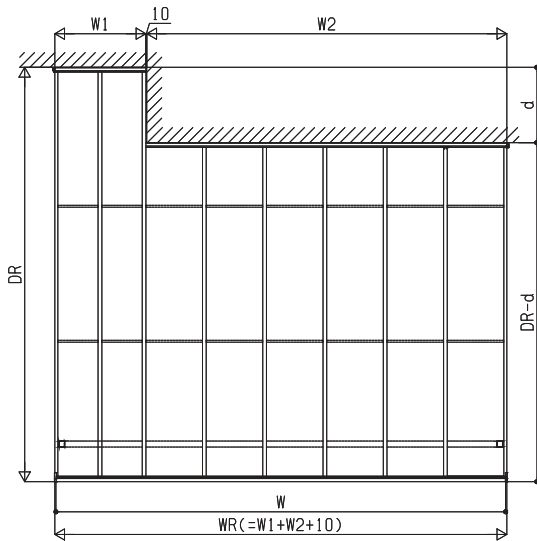


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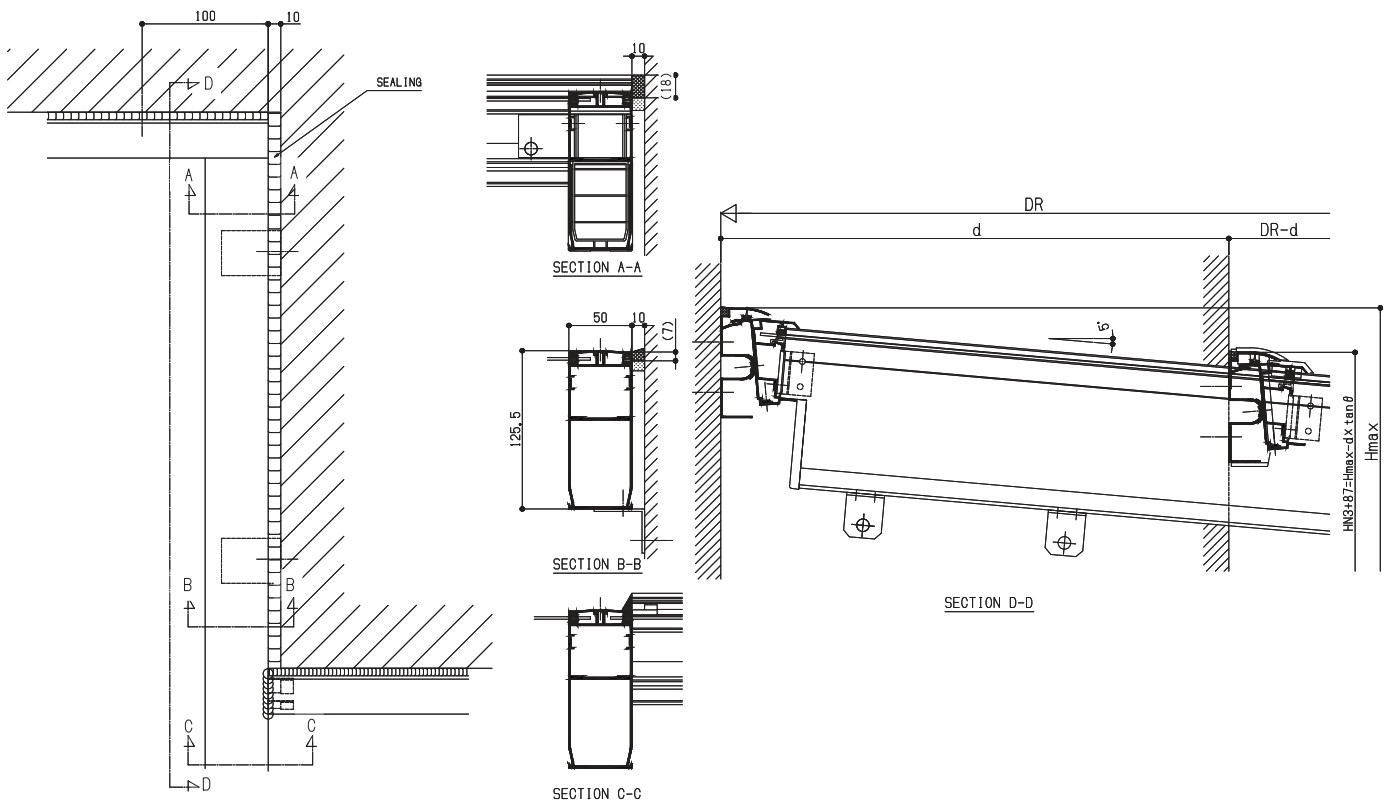
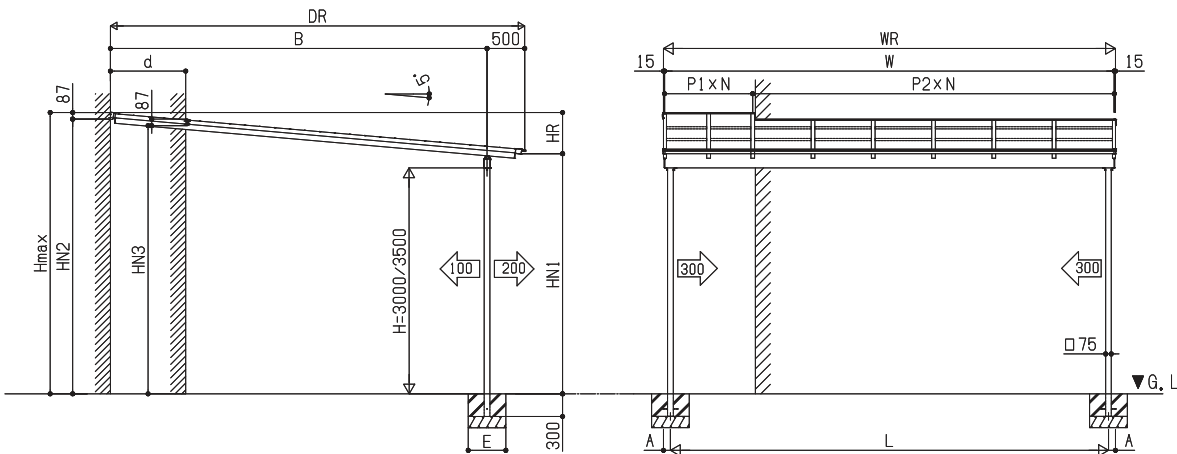
## L - SHAPE

SYSTEM DRAWING

**\*Please Consult with Sales PIC**



WR	: ROOF WIDTH	DR	: ROOF DEPTH
W	: MEMBER LENGTH	B	: WALL-COLUMN CENTER
W1	: WALL STEP~END RAFTER(L)	d	: ROOF DEPTH(R)~ROOF DEPTH(L)
W2	: WALL STEP~END RAFTER(R)-10	H	: HEIGHT
L	: DISTANCE BETWEEN COLUMNS	HR	: ROOF HEIGHT
P1	: RAFTER PITCH(L)	HN1	: FRONT HEIGHT
P2	: RAFTER PITCH(R)	HN2	: REAR HEIGHT(R)
A	: COLUMN POSITION	HN3	: REAR HEIGHT(L)
		Hmax	: MAX HEIGHT

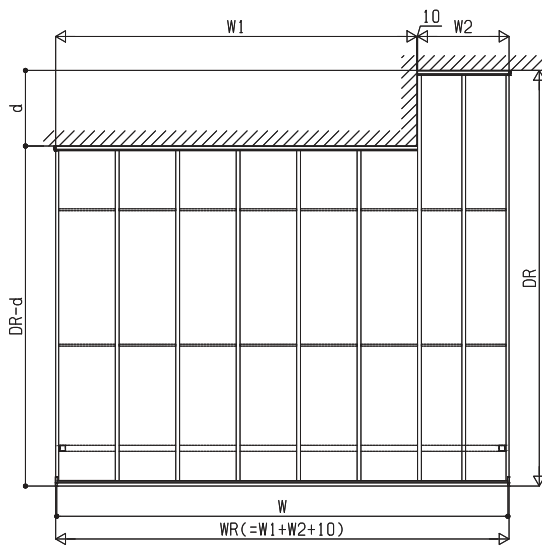


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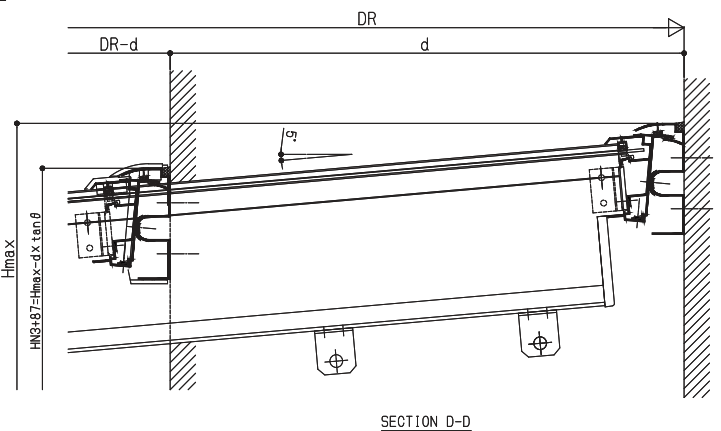
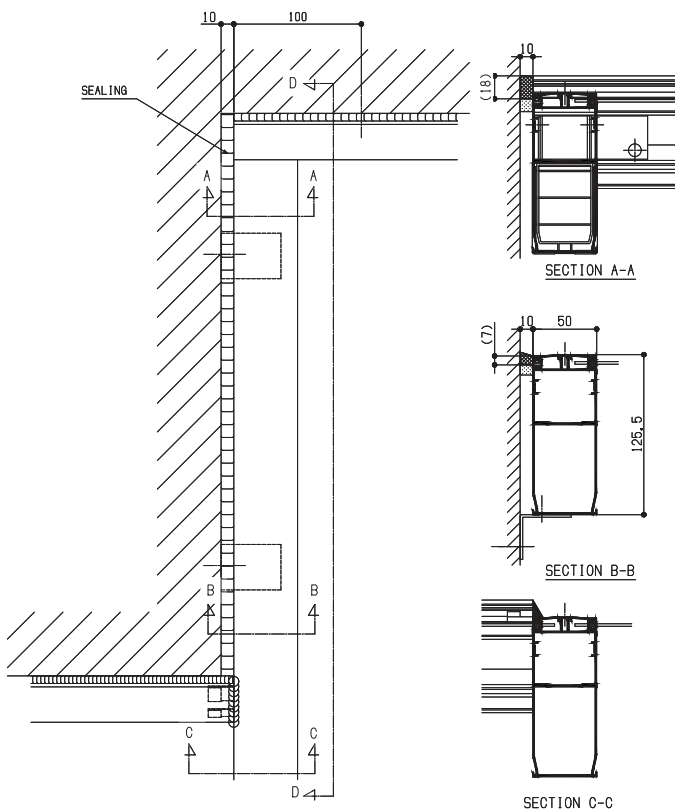
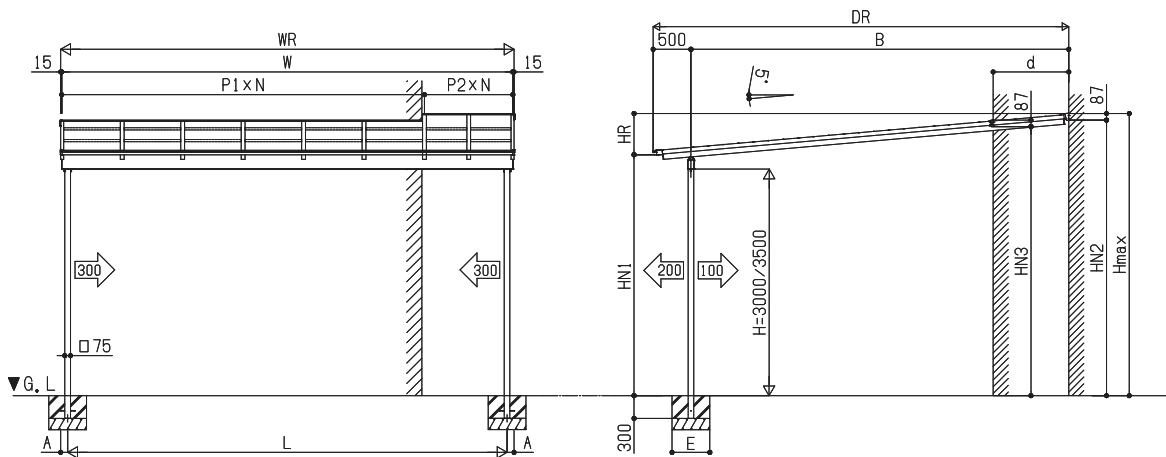
## L - SHAPE

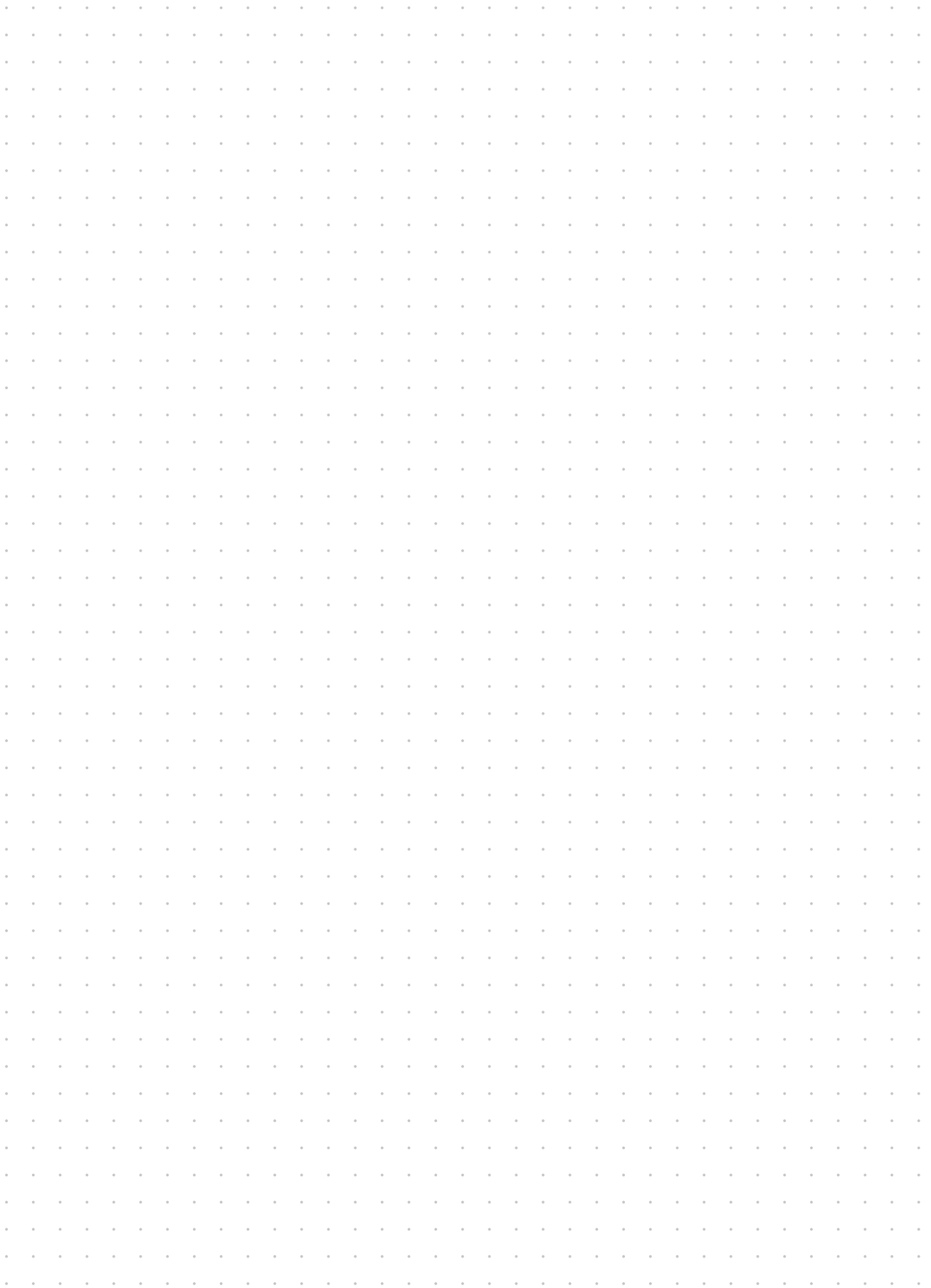
SYSTEM DRAWING

**\*Please Consult with Sales PIC**



WR	: ROOF WIDTH	DR	: ROOF DEPTH
W	: MEMBER LENGTH	B	: WALL-COLUMN CENTER
W1	: WALL STEP~END RAFTER(L)	d	: ROOF DEPTH(R)~ROOF DEPTH(L)
W2	: WALL STEP~END RAFTER(R)-10	H	: HEIGHT
L	: DISTANCE BETWEEN COLUMNS	HR	: ROOF HEIGHT
P1	: RAFTER PITCH(L)	HN1	: FRONT HEIGHT
P2	: RAFTER PITCH(R)	HN2	: REAR HEIGHT(R)
A	: COLUMN POSITION	HN3	: REAR HEIGHT(L)
		Hmax	: MAX HEIGHT





FREE STANDING

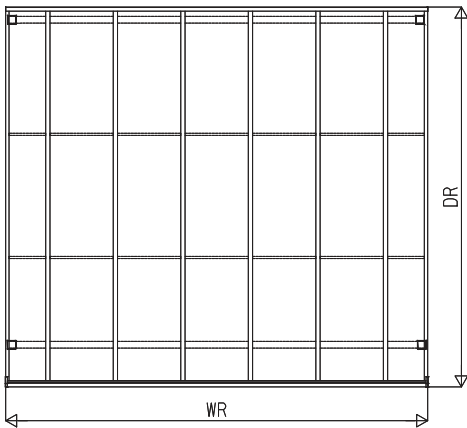
SQUARE



# FREE STANDING (TYPE A)

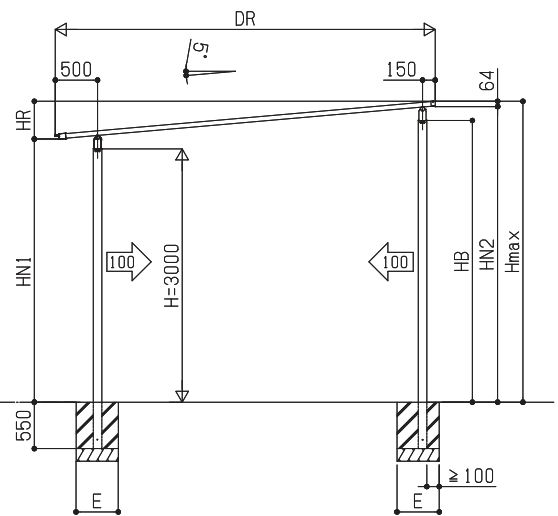
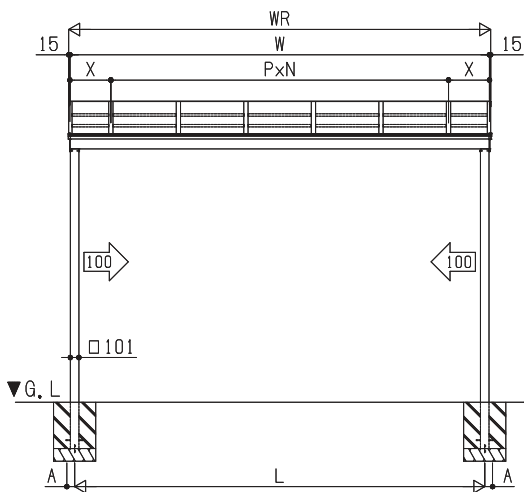
## SQUARE

### SYSTEM DRAWING

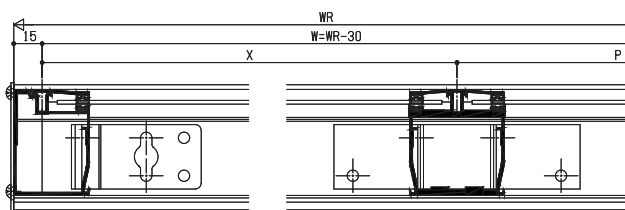
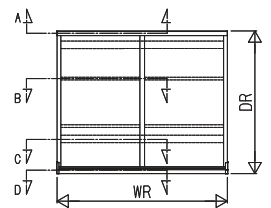


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W : MEMBER LENGTH  
L : DISTANCE BETWEEN COLUMNS  
P : RAFTER PITCH  
X : RAFTER END PITCH  
A : COLUMN POSITION

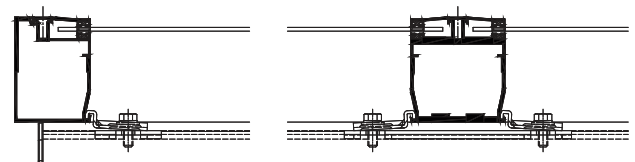
DR : ROOF DEPTH  
B : WALL-COLUMN CENTER  
H : HEIGHT  
HR : ROOF HEIGHT  
HN1 : FRONT HEIGHT  
HN2 : REAR HEIGHT  
Hmax : MAX HEIGHT



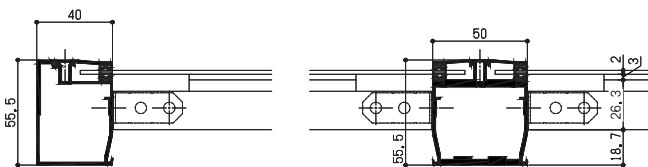
ROOF TOP VIEW



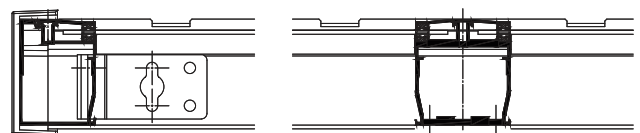
A-A SECTION



C-C SECTION



B-B SECTION



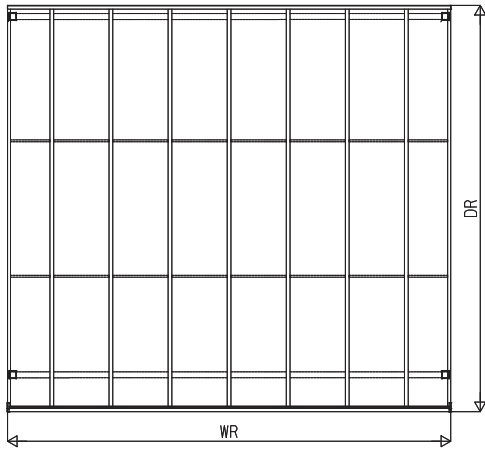
D-D SECTION



# FREE STANDING (TYPE B & C)

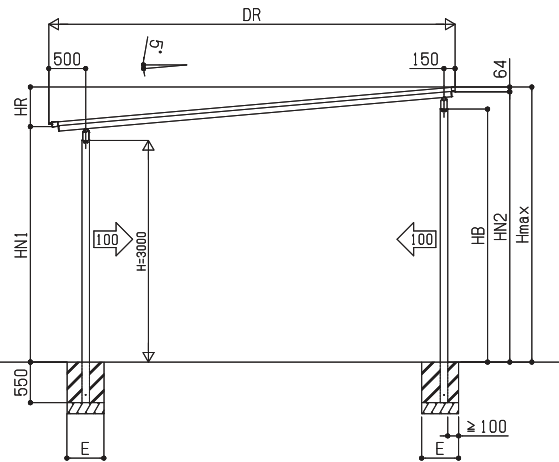
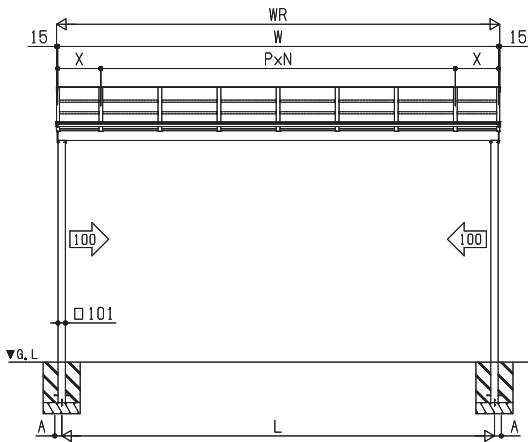
## SQUARE

### SYSTEM DRAWING

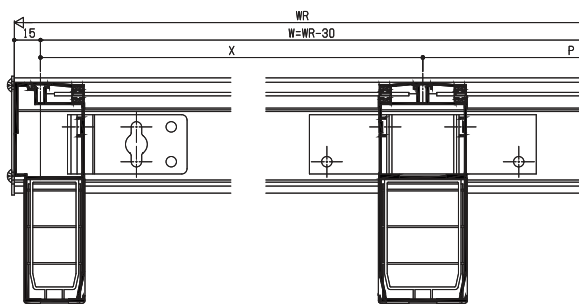
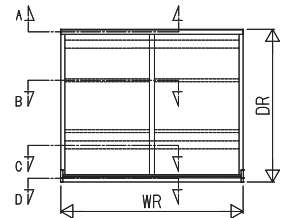


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L : DISTANCE BETWEEN COLUMNS  
P : RAFTER PITCH  
X : RAFTER END PITCH  
A : COLUMN POSITION

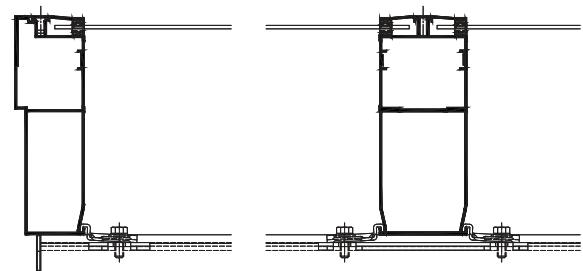
DR : ROOF DEPTH  
B : WALL-COLUMN CENTER  
H : HEIGHT  
HR : ROOF HEIGHT  
HN1 : FRONT HEIGHT  
HN2 : REAR HEIGHT  
Hmax : MAX HEIGHT



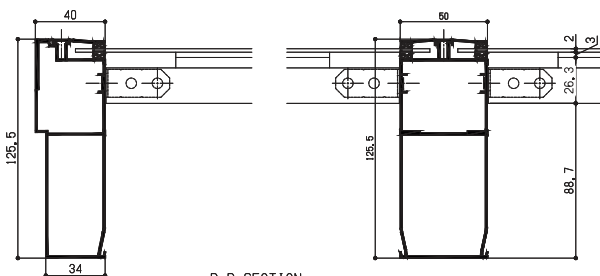
ROOF TOP VIEW



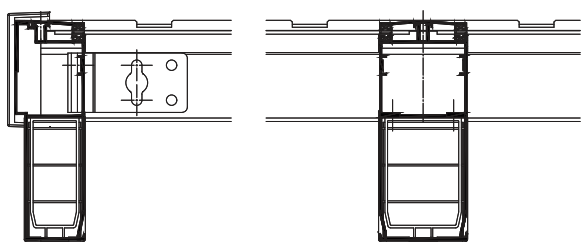
A-A SECTION



C-C SECTION



B-B SECTION

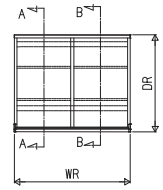


D-D SECTION

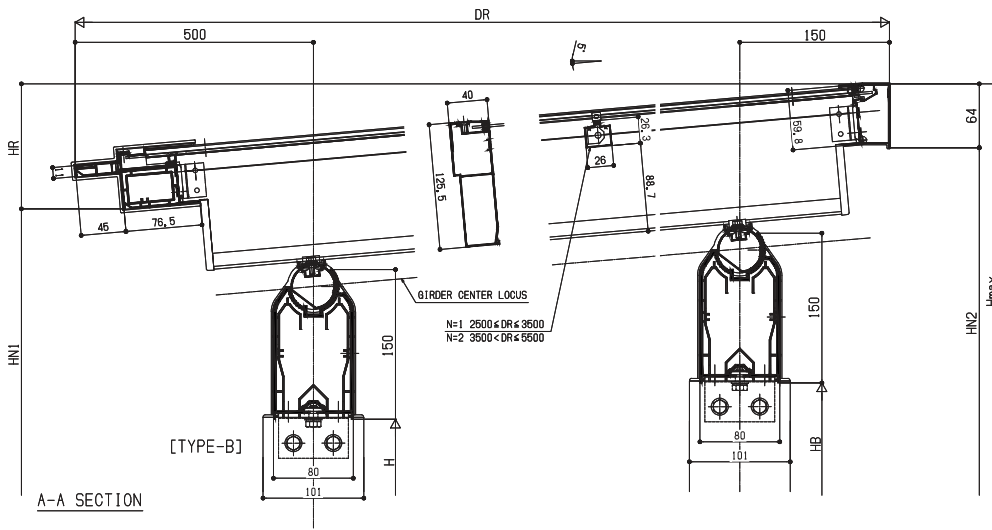
# FREE STANDING (TYPE B & C)

## SQUARE

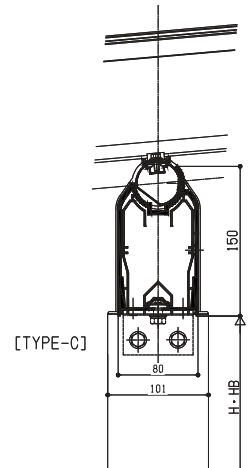
### SYSTEM DRAWING



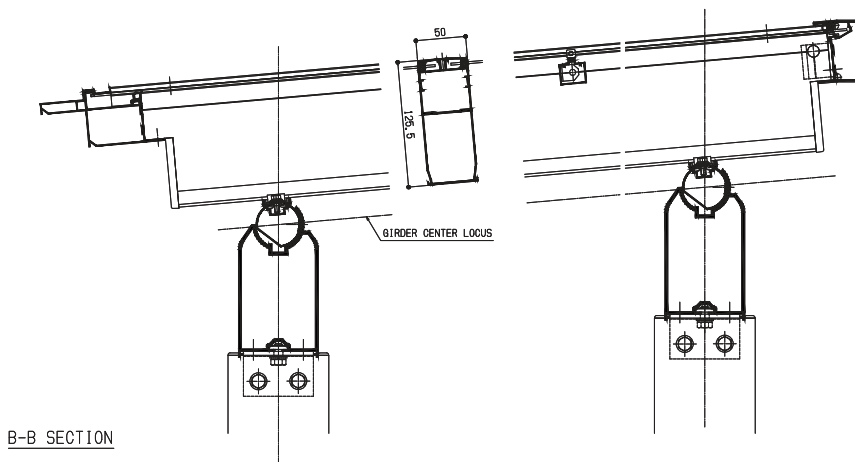
ROOF TOP VIEW



A-A SECTION



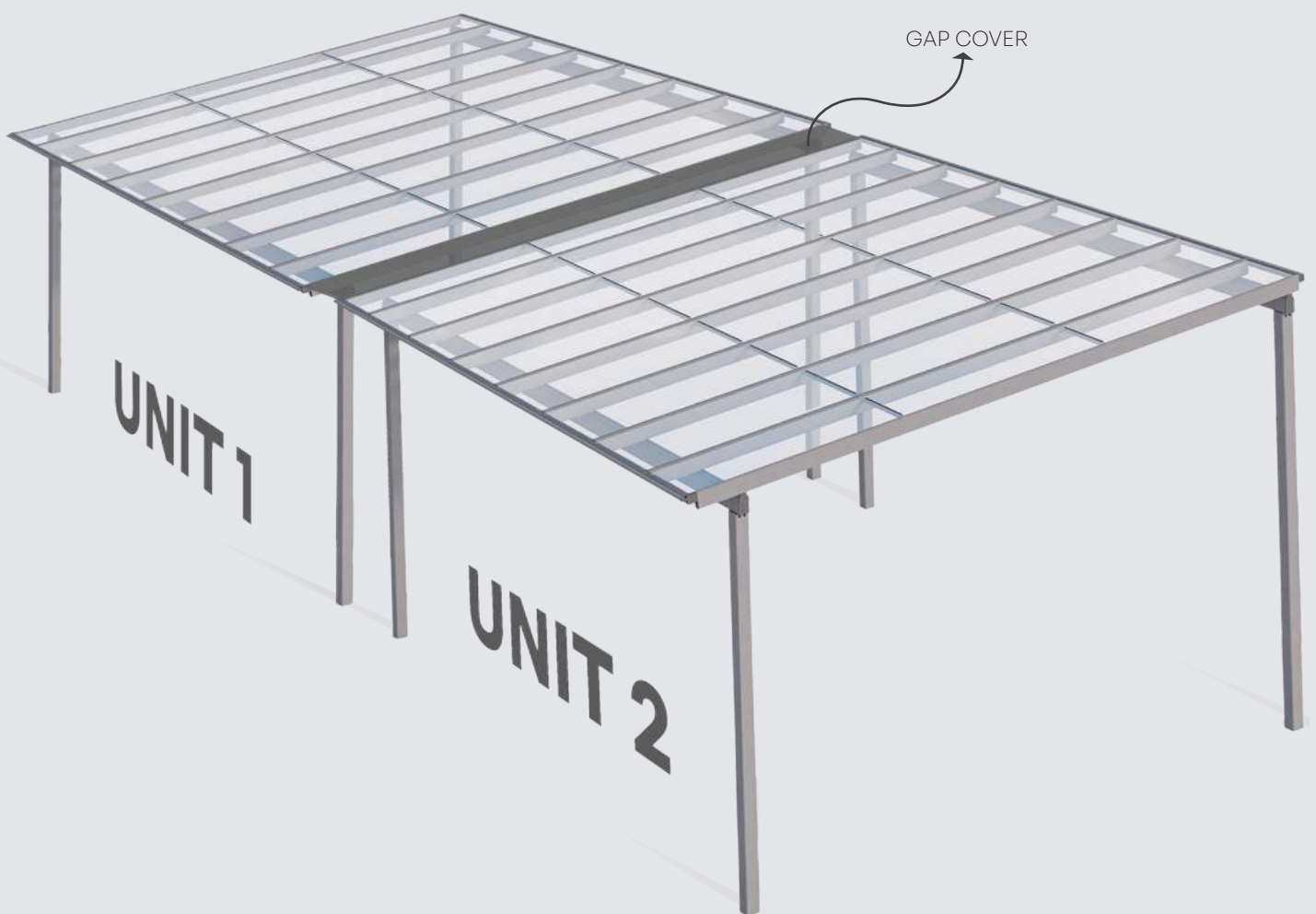
[TYPE-C]



B-B SECTION

# OPTIONAL PARTS

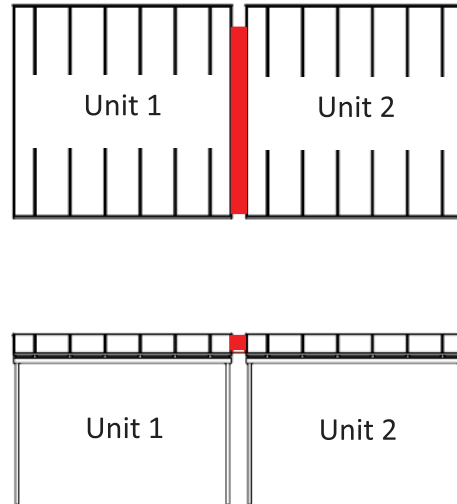
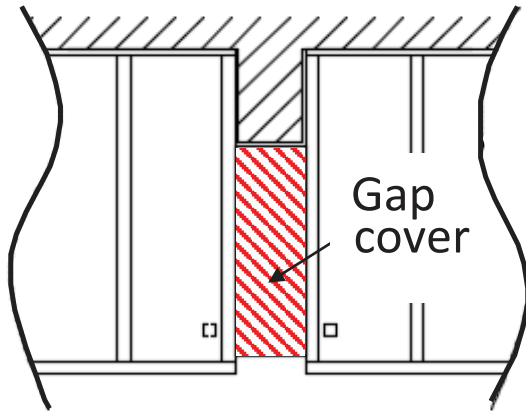
## ROOF GAP COVER



## OPTIONAL PARTS

### ROOF GAP COVER

In case series of building, we provide ROOF GAP COVER to avoid rain drips splash in the between.

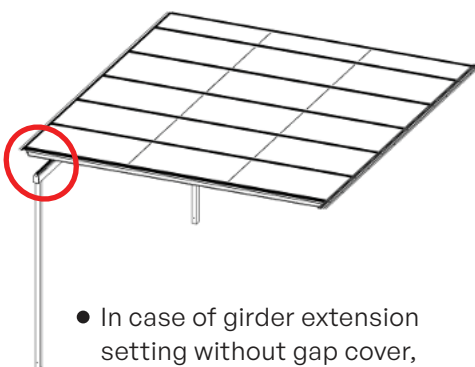


#### Allowable GAP to install ROOF GAP COVER

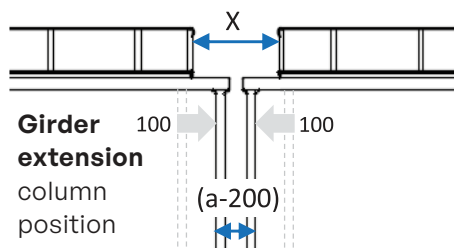
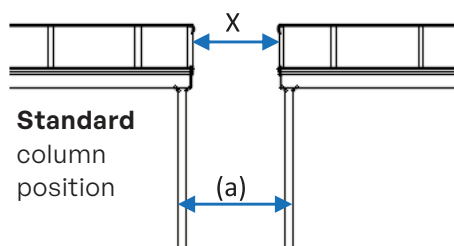
Minimum Size : 200 mm  
Maximum Size : 500 mm

### GIRDER EXTENSION

The construction of column position from end rafter side can be adjust with Girder Extension



- In case of girder extension setting without gap cover, seal is required



#### Note :

x = gap between end rafters  
a = standard distance between column

## Maintenance Methods

### Aluminium Products' Maintenance

#### Washing the product with water once or twice a year will greatly extend its life.

There are various causes of corrosion on aluminum and painted products, but the best way to protect aluminum and painted products from corrosion and maintain their beauty for a long time is to remove dirt from the surface as soon as possible. It's easy to clean dirt while it's still light, and since it's not just everyday dirt, all you need to do is wipe it lightly. Furthermore, you can greatly extend the life of aluminum and painted products by washing them regularly once or twice a year.

#### Cleaning Method

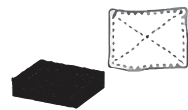
**1. Wash off dust, dirt, etc. with water.**

Aluminum (extruded shape material) has "stripe lines" depending on the direction of extrusion. Cleaning is most effective if you follow the direction of it.



**2. Remove surface dirt and wash thoroughly with a soft sponge.**

\*Please do not use a metal scrubbing brush as this may scratch the surface

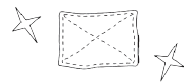


**3. For dirt that cannot be removed by washing with water, gently wash with a neutral detergent (1-2% aqueous solution).**



**4. Finally, wipe off any moisture with a dry cloth.**

After using water-soluble detergent, rinse thoroughly with water and wipe off moisture with a dry cloth



#### About Cleaning Agents

Acidic or alkaline cleaning agents may cause corrosion or discoloration, so please use a neutral detergent.

\*Do not use chlorine-based chemicals (bleach, mold remover, etc.).

#### About Light Color Profile Products

For white profile products, dampen a soft cloth or tissue with liquid cleanser and water, then wipe gently and evenly until all dirt is removed.

\*When using a commercially available detergent, please be careful of its properties.

### Plastic Sheets' Maintenance

- Remove any adhering dirt with running water or a soft cloth dampened with water.
- Wipe off dirt with a sponge or soft cloth dampened with neutral detergent (1-2% water solvent), and then wipe thoroughly with a soft cloth dampened with water.
- Never use glass cleaners containing organic solvents. Cracks may occur.

### Usage Precautions

- Please do not do the following as this may lead to unexpected accidents such as product damage or falling.
  - Putting things on the roof
  - Climb or hang from the roof pillar
  - Lean a ladder against the roof.
- Do not use it as an evacuation or standby area during an earthquake. This may lead to an expected



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
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