



SunFrame

Facade System One Stop Solution

Curtain Wall/Window Wall System

SF-UN150

Content

System overview

Description of curtain wall system features

System performance

Mechanical, waterproof, sealing, and thermal insulation performance of the curtain wall system

System Functions

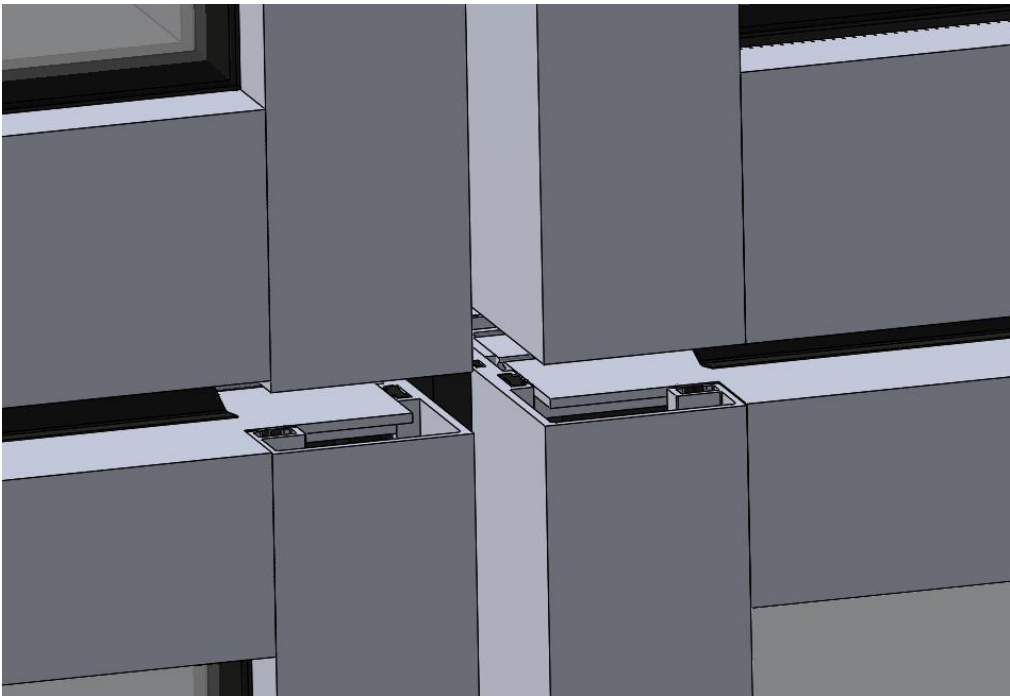
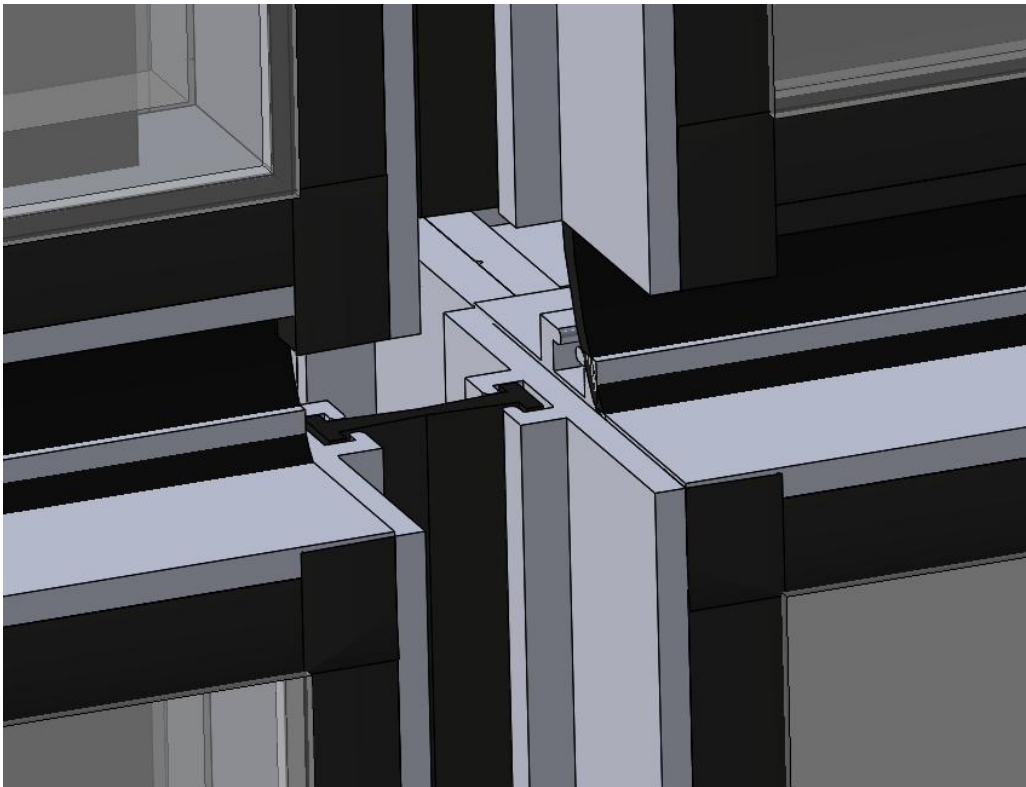
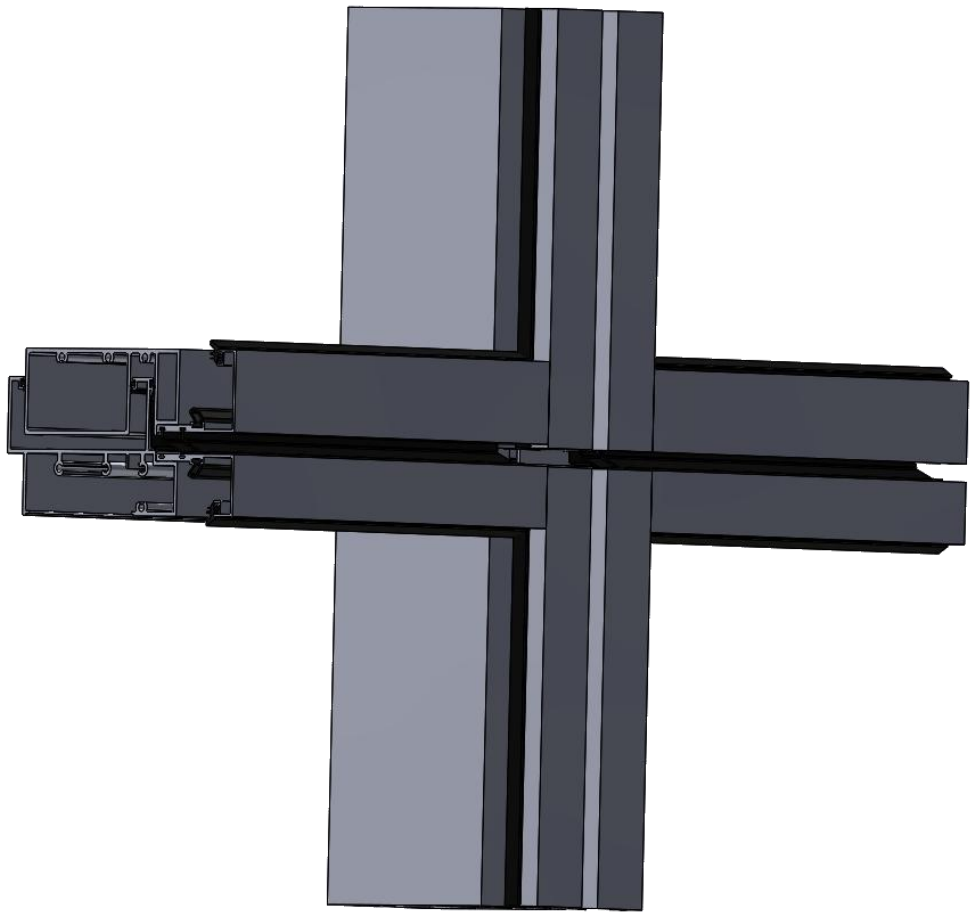
Display of curtain wall system profiles and examples of application

We reserve the right to make technical changes without prior notice.
We have made every effort to ensure the accuracy of the information contained in this document. However, we assume no responsibility for the use of our recommendations and data.



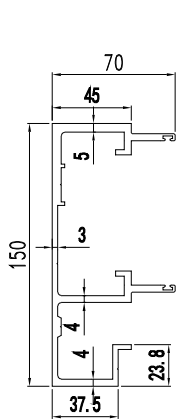
Structure of unit curtain wall

The vertical left and right frames, as well as the horizontal upper and lower frames of unit components, are inserted into adjacent unit components, forming a connecting rod through this insertion, thereby creating indirect connections between the unit components. The embedment plate of the unit component is directly fixed to the main structure, and the loads it bears are transmitted directly from the unit component's embedment plate to the main structure.

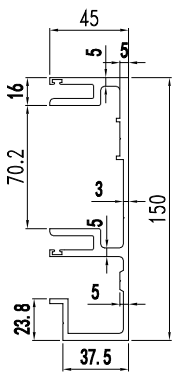


Definition of unitized curtain wall

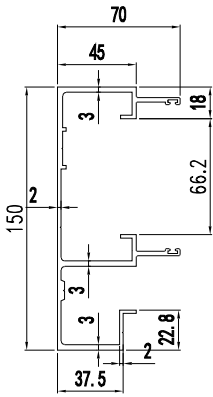
A unitized curtain wall is composed of many independent units. All panel installations and the sealing of joints between panels are processed and assembled in the factory for each individual unit. Following the project's installation sequence, these units are classified and numbered and then transported to the construction site for installation. Installation can be integrated with the main structure, allowing construction to proceed simultaneously.



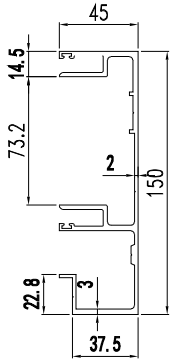
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DMQ15001B

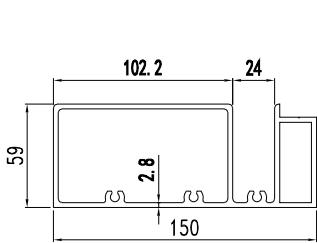


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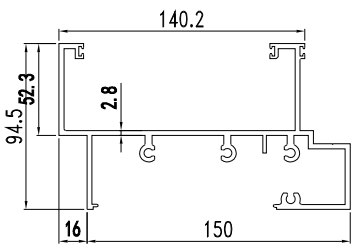


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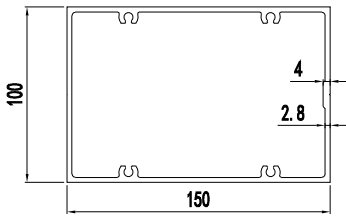
Profile No.	Ix moment of inertia (mm ⁴)	Iy moment of inertia (mm ⁴)	Wx1 section modulus (mm ⁴)	Wx2 section modulus (mm ⁴)	Cross-sectional area (mm ²)	Moment of Area (mm ³)	Weight (kg/m)
DMQ15001A	401.977	58.925	57.207	50.416	1476.66	35.023	4.061
DMQ15001B	373.628	28.643	51.681	48.083	1418.88	32.751	3.902
DMQ15001AP	281.075	43.617	38.573	36.441	1021.633	24.176	2.809
DMQ15001BP	260.56	20.514	34.999	34.487	952.545	22.343	2.62



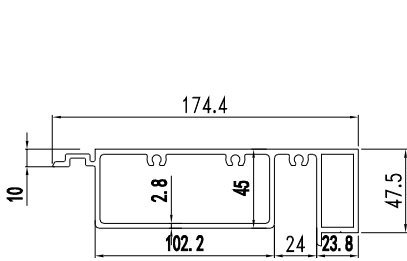
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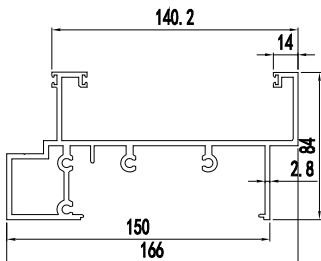
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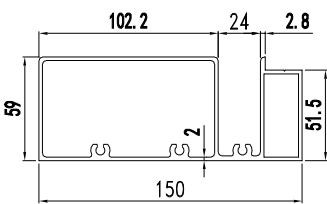
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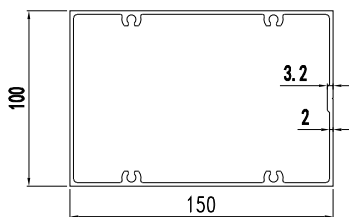
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DMQ15002A



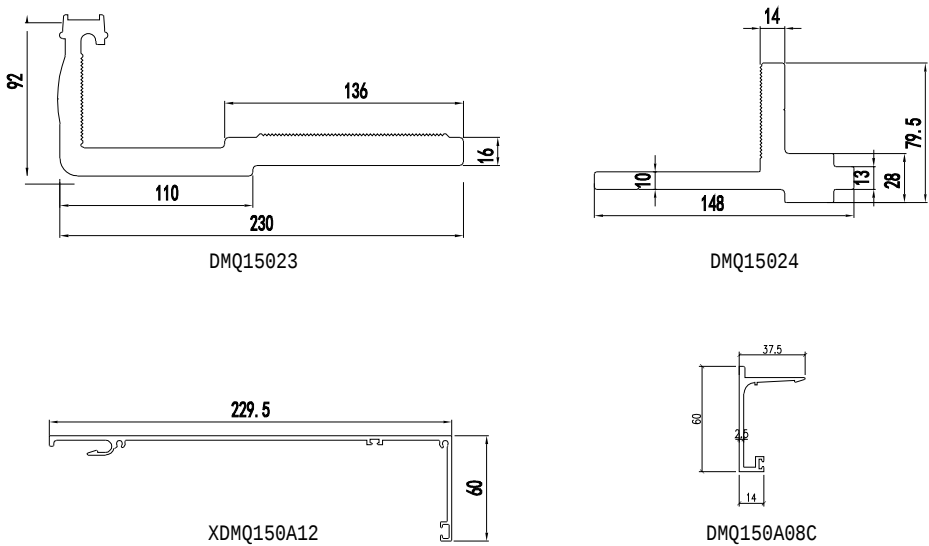
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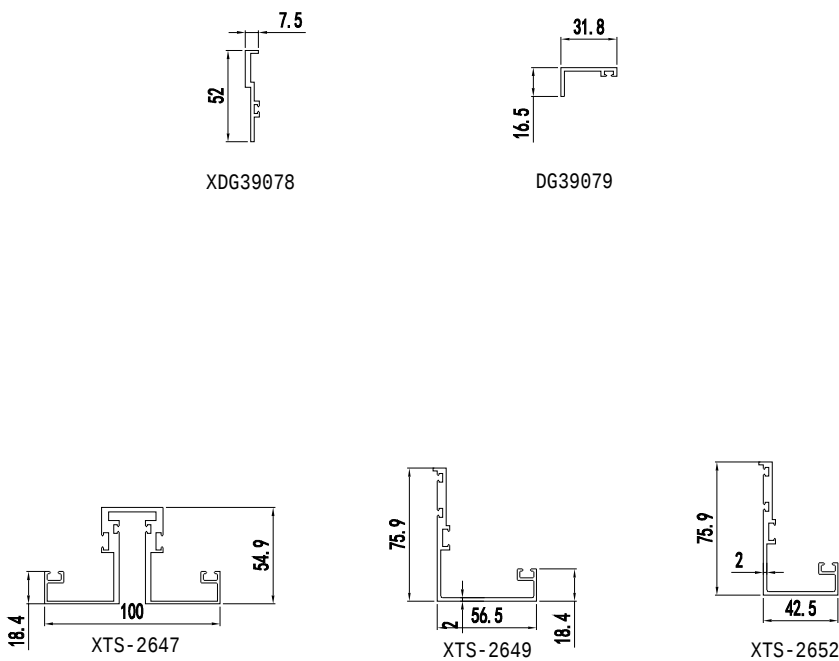
DMQ15003P

Profile No.	IX MOI & IX MOI (mm ⁴)	IX MOI & IY MOI (mm ⁴)	Wx1 section modulus & IX MOI (mm ⁴)	Wx2 section modulus & IX MOI (mm ⁴)	Wy1 section modulus & IX MOI (mm ⁴)	Wy2 section modulus & IX MOI (mm ⁴)	Cross-section al area (mm ²)	Moment of Area Sx (mm ³)	Moment of Area Sy (mm ³)	Weight (kg/m)
DMQ150A02	95.519	480.776	18.321	22.547	62.261	54.153	1484.295	13.61	38.395	4.082
DMQ150A01	77.056	360.393	23.045	30.144	51.778	44.827	1481.306	15.6	31.954	4.074
DMQ15003	271.389	482.39	54.244	54.314	65.064	63.59	1557.89	30.478	39.355	4.284
DMQ15002A	72.56	458.188	16.142	18.582	50.496	60.879	1464.811	12.211	37.001	4.028
DMQ15002B	48.2777	396.865	24.3	13.741	53.39	39.66	1466.71	12.373	33.521	4.033
DMQ15003P	208.146	361.236	41.643	41.617	48.918	47.434	1171.803	23.171	29.589	3.222
DMQ150A01P	60.655	272.223	17.57	24.779	39.425	33.627	1145.839	12.166	24.33	3.151

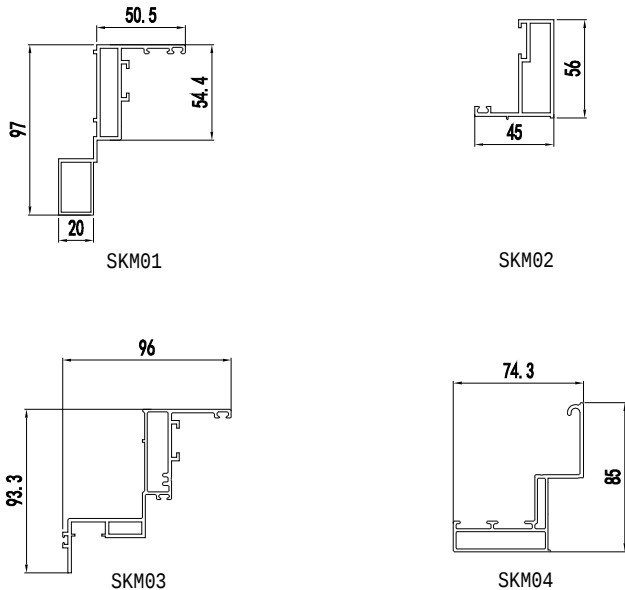
Profile No.	Cross-sectional area(mm ²)	Weight (kg/m)
DMQ15023	4958.628	13.636
DMQ15024	2858.609	7.861
XDMQ150A12	158.824	0.432
DMQ150A08C	543.998	1.480



Profile No.	Cross-sectional area(mm ²)	Weight (kg/m)
DG39078	46.568	0.127
DG39079	56.000	0.152
XTS2647	105.629	0.287
XTS2649	459.671	1.250
XTS2652	474.810	1.291



Profile No.	Cross-sectional area(mm ²)	Weight (kg/m)
SKM01	332.133	0.903
SKM02	140.729	0.383
SKM03	108.233	0.294
SKM04	158.265	0.430



To provide you with better service
Bring beauty to your life

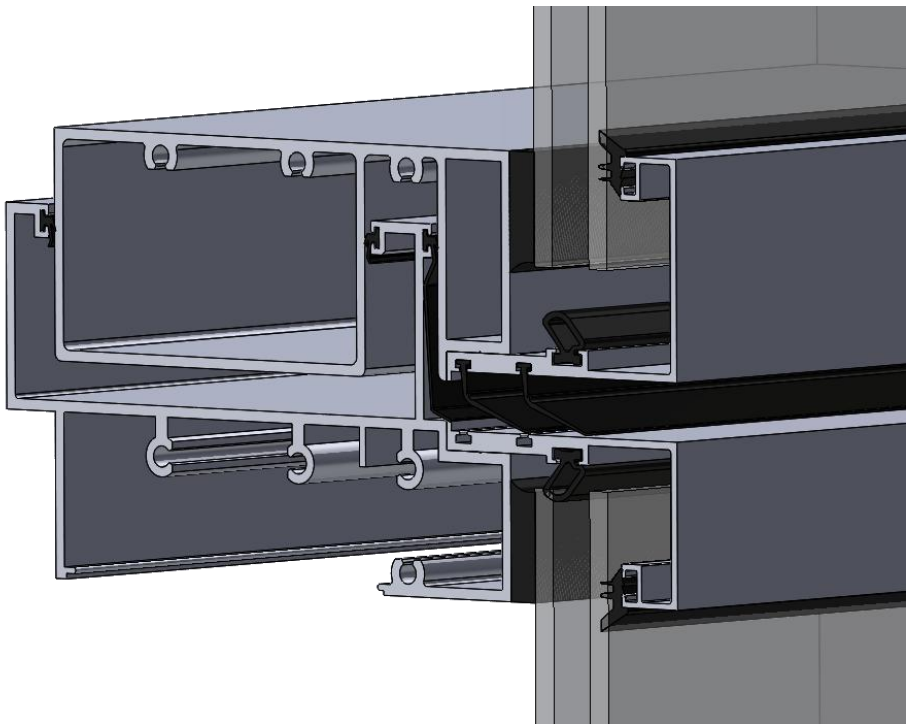
Industrial production Reduce labor costs

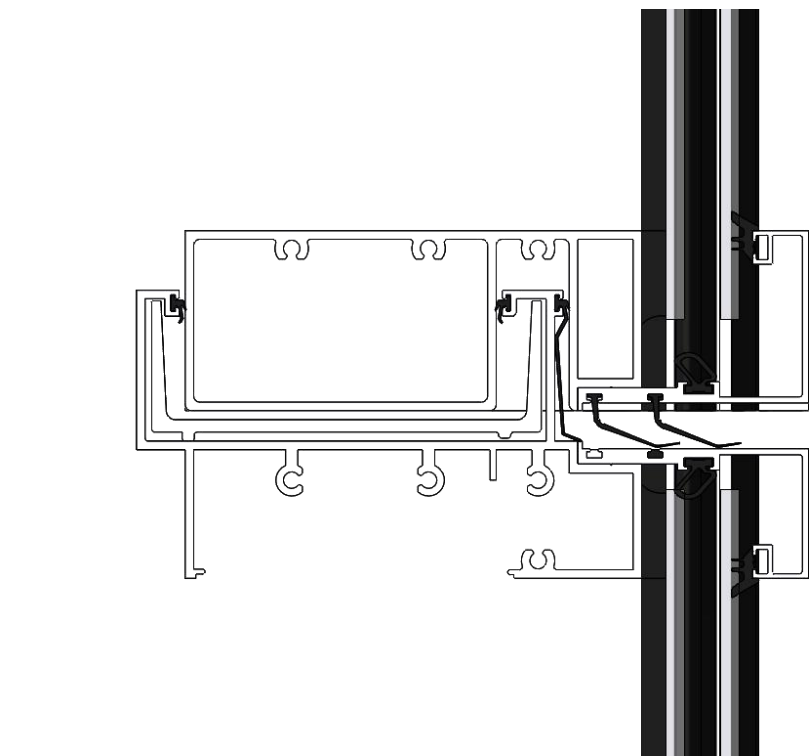
Convenience

A large amount of processing and preparation work is completed in the factory, thereby shortening the curtain wall on-site construction period and project construction period, and bringing greater economic and social benefits to the owners.

Stability

The dovetail interlocking connection between units possesses a strong capability to accommodate the displacement of the main structure. It effectively absorbs the effects of earthquakes, temperature fluctuations, and inter-story movements



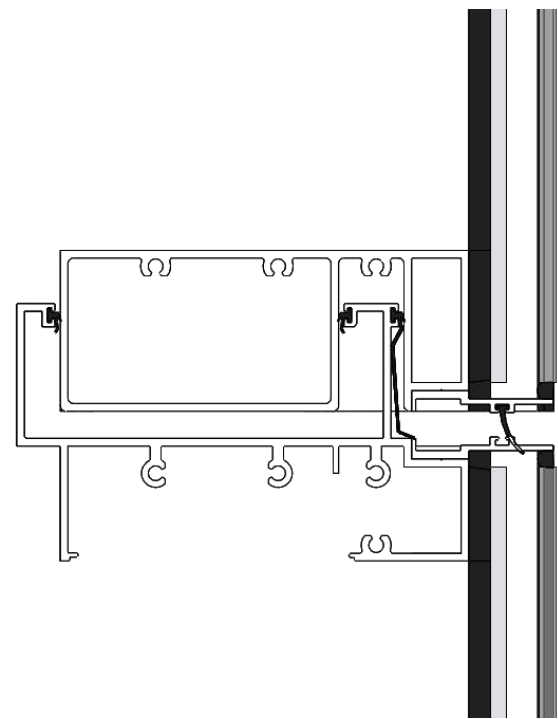


High quality solution

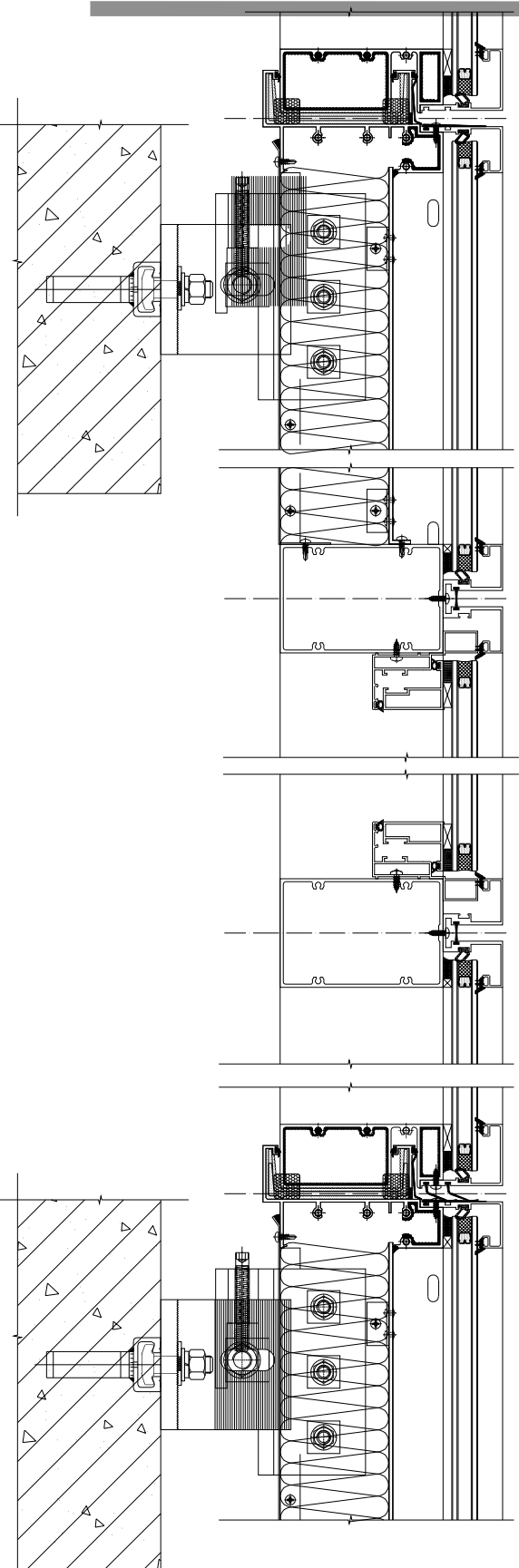
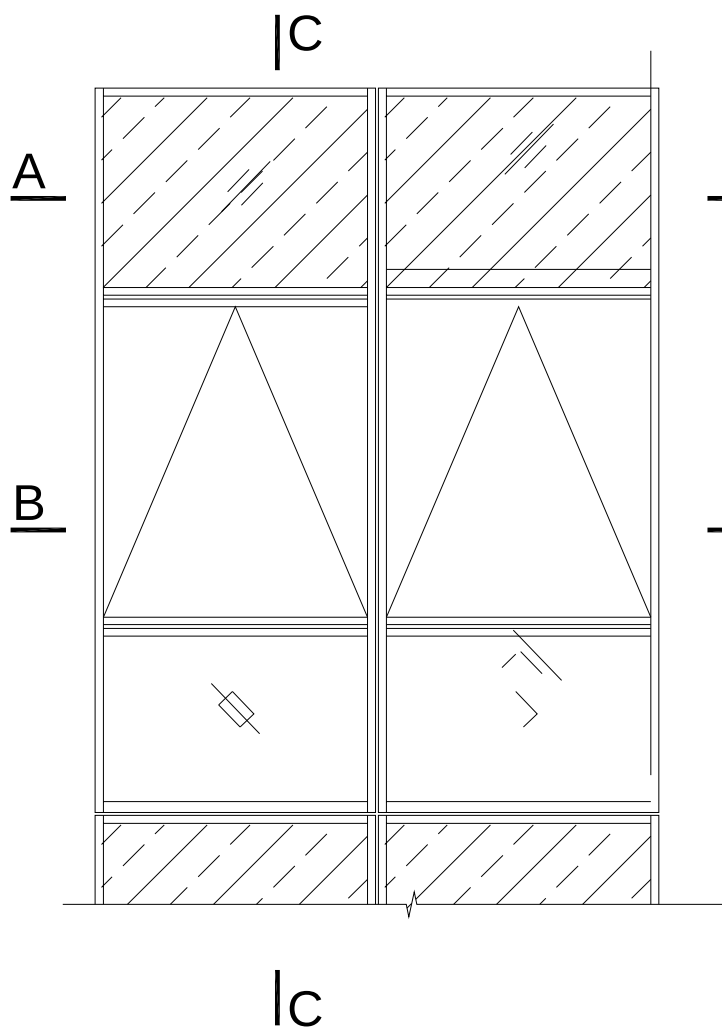
Unitized curtain walls offer efficient installation, customizable designs, superior performance, aesthetic appeal, structural stability, ease of maintenance, and wide applicability. By utilizing these high-quality solutions, you can create a comfortable and sustainable indoor environment for your architectural design.

Waterproof design

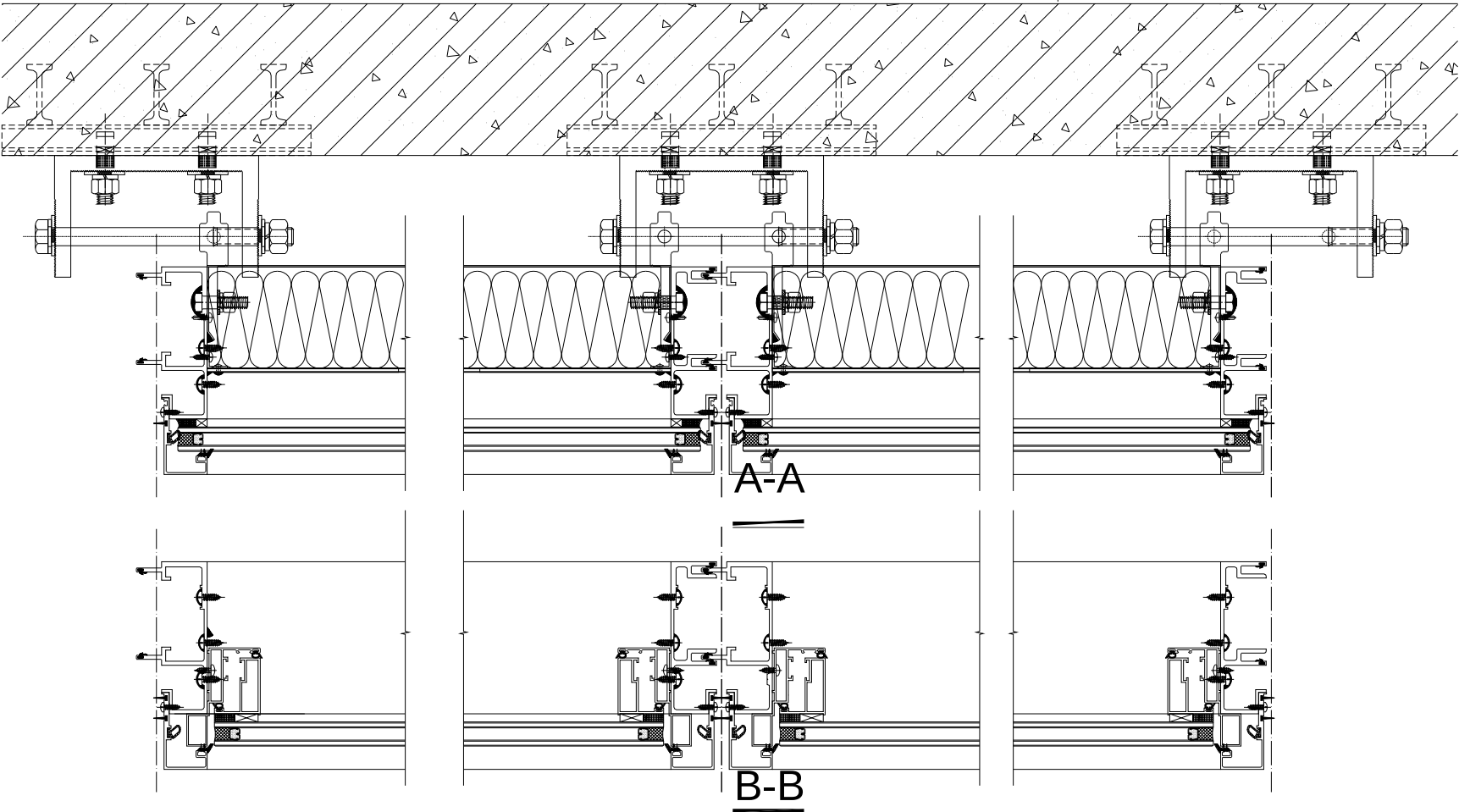
The water-retaining gasket should have a certain level of compressibility under normal conditions to ensure that it maintains a sealing capability when the curtain wall panels experience displacement due to factors such as temperature changes or external forces.



Air Infiltration Test -(ASTM E283)	The rate of air leakage at +300 Pa was within allowable value
Water Penetration Test -Static (ASTM E331)	No water leakage was observed
Water Penetration TestDynamic(AAMA501.1)	No water leakage was observed.
Structural Test at 50%and 100% of DesignPressure -Static(ASTM E330)	The deflection of framing members was smaller than span/175Deflection of glass was smaller than span/60.No breakage was observed under the specified pressure of+2.31 kPa/-2.31 kPa.
Structural Proof Test at75% and 150% of Design Pressure -Static(ASTM E330)	The residual deflection of frame members was smaller thanspan/1000.No breakage was observed under the specifiedpressure of+3.47kPa/-3.47kPa.
With double-insulated glass, the U-value can reach up to 1.5W/(m2·K).	
With double-laminated insulated glass, the sound insulation performance can reach up to 52dB.	



C-C



Mature structure, superior performance, Simple processing and low processing cost

Exposed frame cross story unit curtain wall

Aesthetics

Advantage 1

The visible frame multi-story unitized curtain wall uses large-sized glass units to make the building appearance more transparent, modern and high-end. It can provide a seamless appearance, enhance the overall beauty of the building, and give the building a unique visual effect

Saving

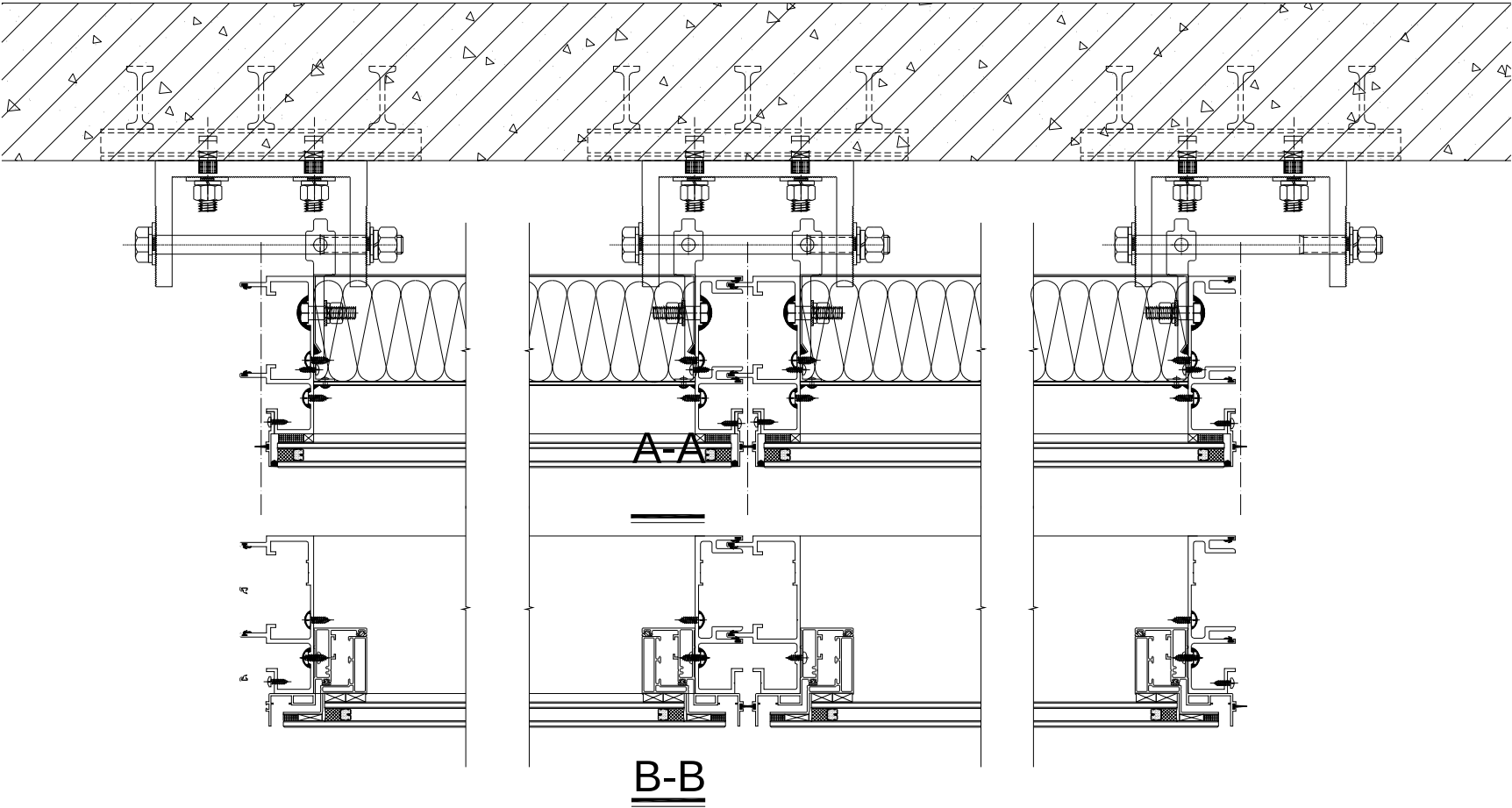
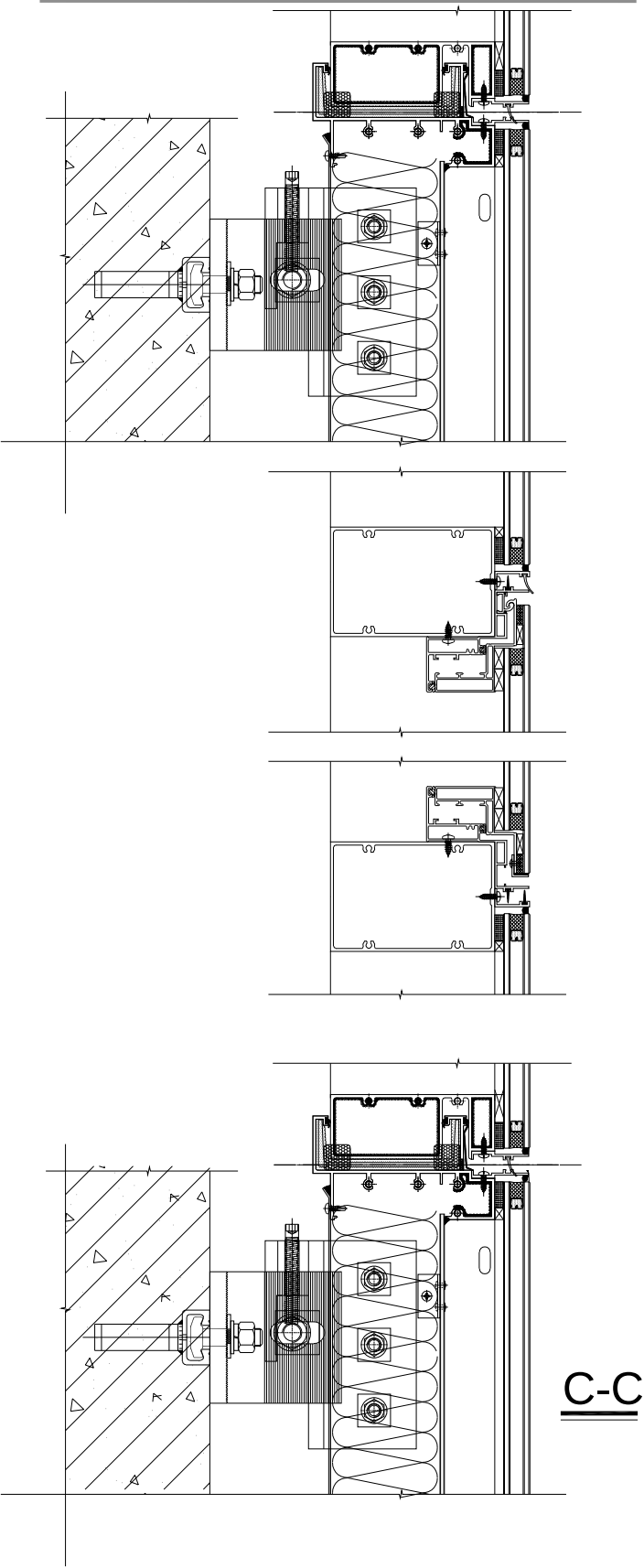
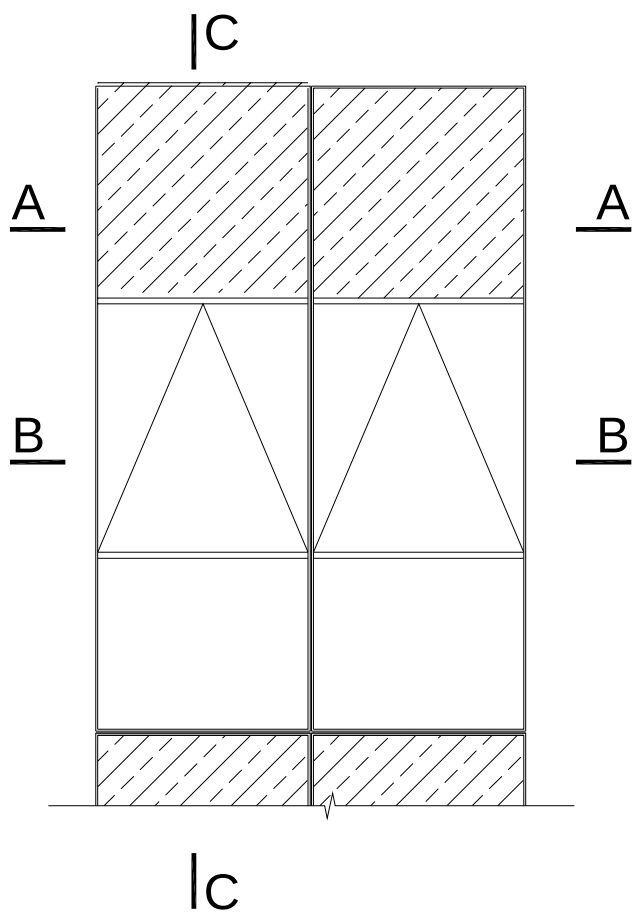
Advantage 2

The visible frame multi-story unitized curtain wall systems typically offer excellent thermal insulation performance and energy efficiency. High-quality glass, insulation, and sealing systems can reduce energy losses, thereby decreasing the energy required for controlling indoor temperatures through heating or air conditioning systems

Maintain

Advantage 3

With a modular design, each unit is prefabricated at the factory. This makes installation, maintenance and replacement easier and faster. Due to the modular design, if a specific part needs to be repaired or replaced, only the affected unit needs to be dealt with, without affecting the entire curtain wall system.



Hidden frame unitized curtain wall is a comprehensive technology product

Invisible Frame Curtain Wall

Exterior

Advantage 1

Invisible frame multi-story unitized curtain wall use frameless or minimal-frame designs, leaving almost no visible borders between glass panels. This design creates a clearer, seamless and modern appearance, giving the building a highly refined visual appearance.

Capacious

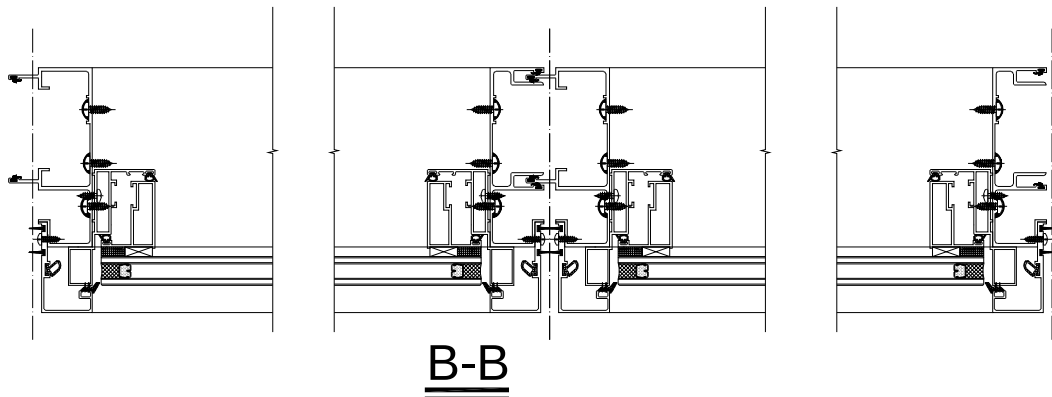
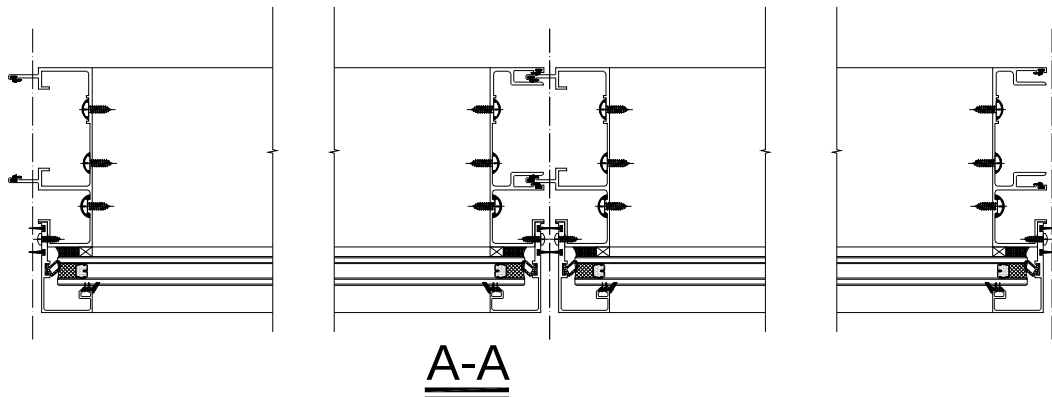
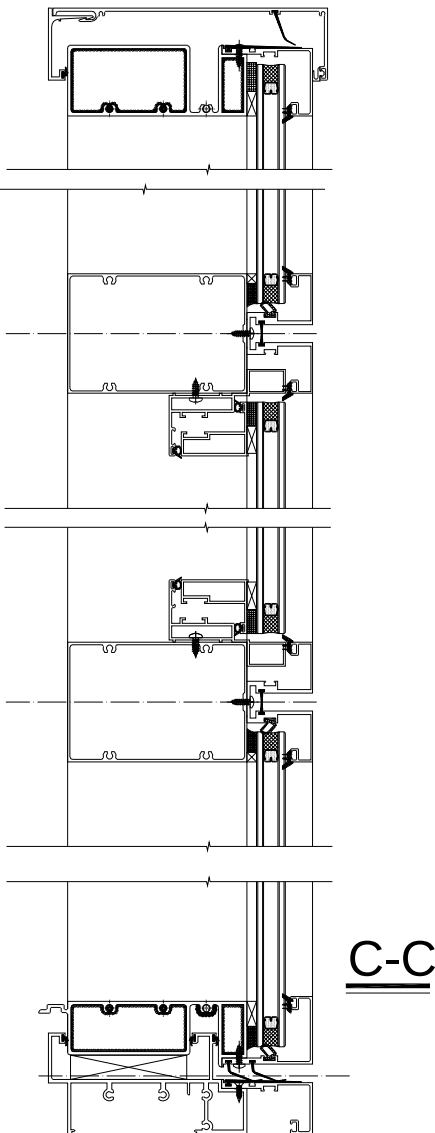
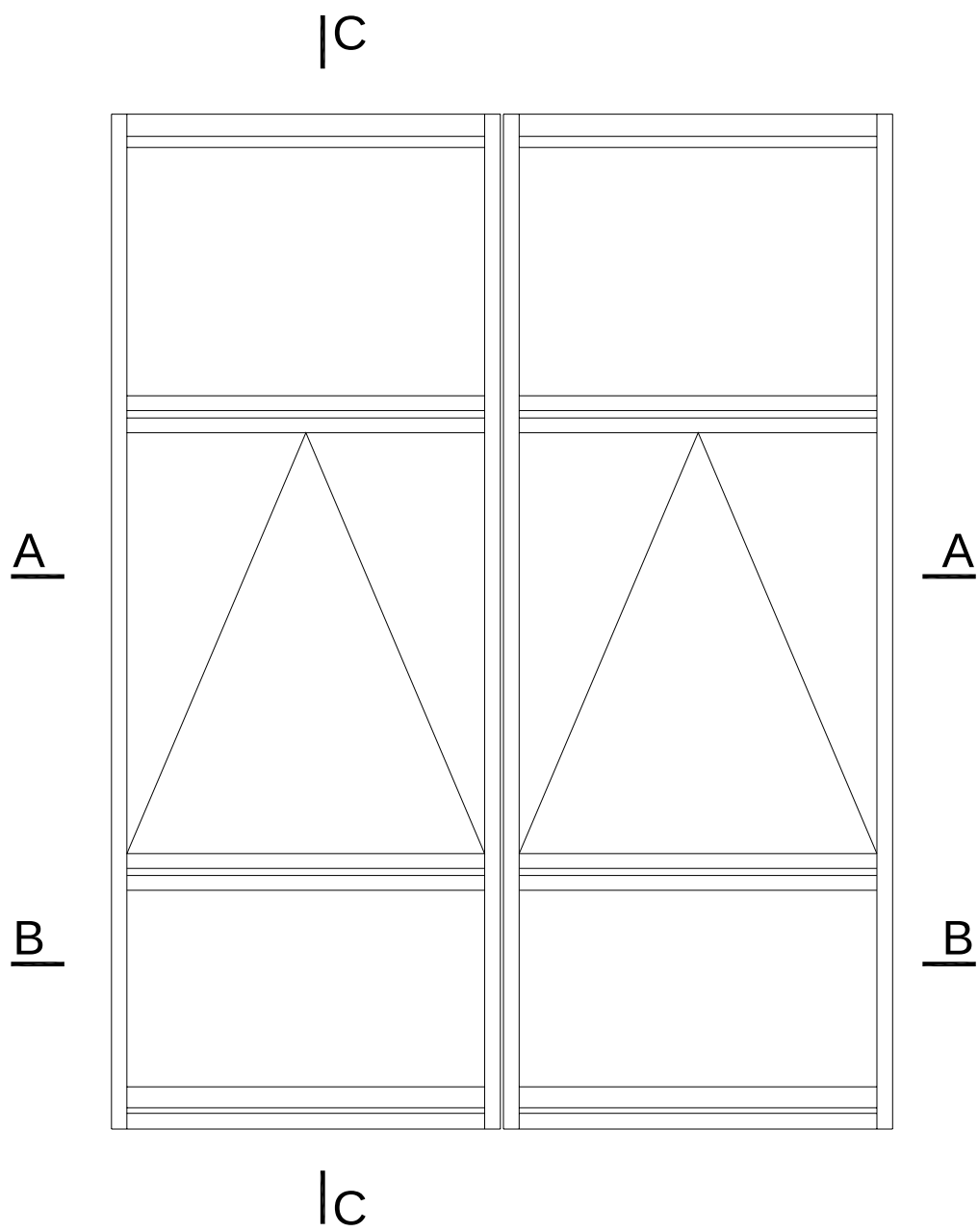
Advantage 2

Invisible frame multi-story unitized curtain wall provide wider, open and unobstructed views due to reduced visibility of frames and supporting structures. It maximizes the use of glass panels and provides a continuous and seamless appearance by eliminating vertical structures.

Translucent

Advantage 3

Invisible frame multi-story unitized curtain wall can effectively introduce natural light and disperse it into the indoor space. Larger and seamlessly connected glass panels allow more sunlight to penetrate into the building, providing a good natural lighting environment.



customization, quick
installation and superior
functional performance

Exposed frame non cross layer curtain wall

Modular

The unitized curtain wall that does not span floors adopts a modular design, dividing the entire curtain wall system into smaller units. Each unit is composed of prefabricated or pre-assembled components. This modular design makes the manufacturing and installation process efficient and precise.

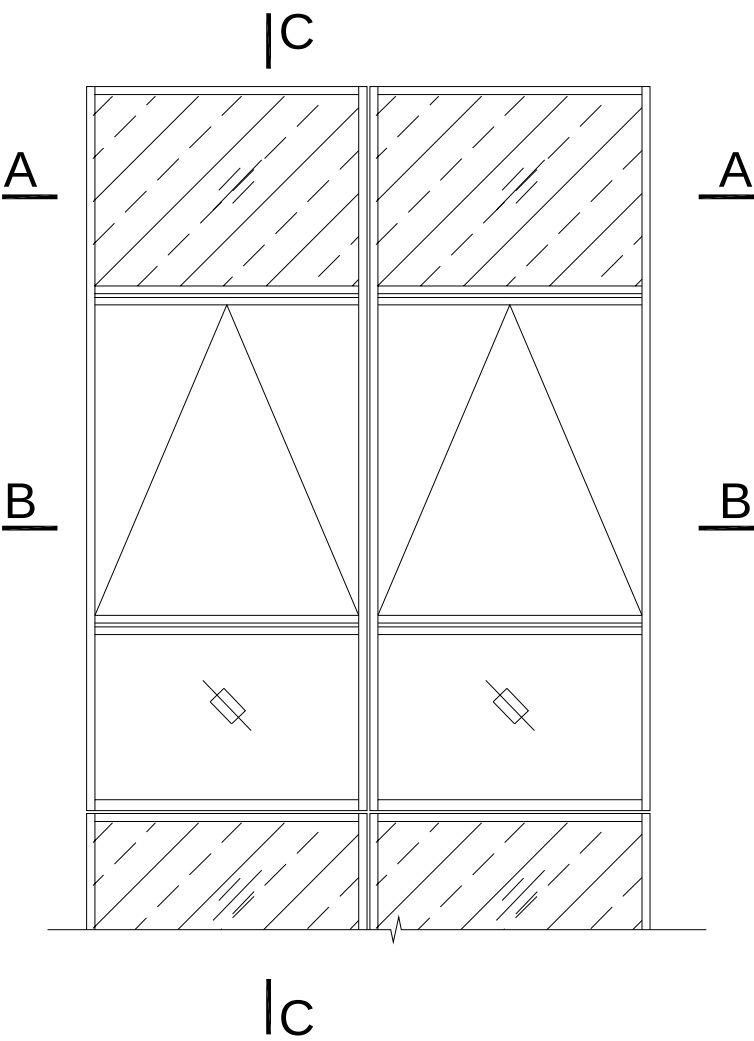
Dexterity

Unitized curtain walls that do not span floors can be customize to meet the needs of architectural design. Different types, colors and shapes of glass panels can be selected to achieve a variety of appearance effects and design requirements

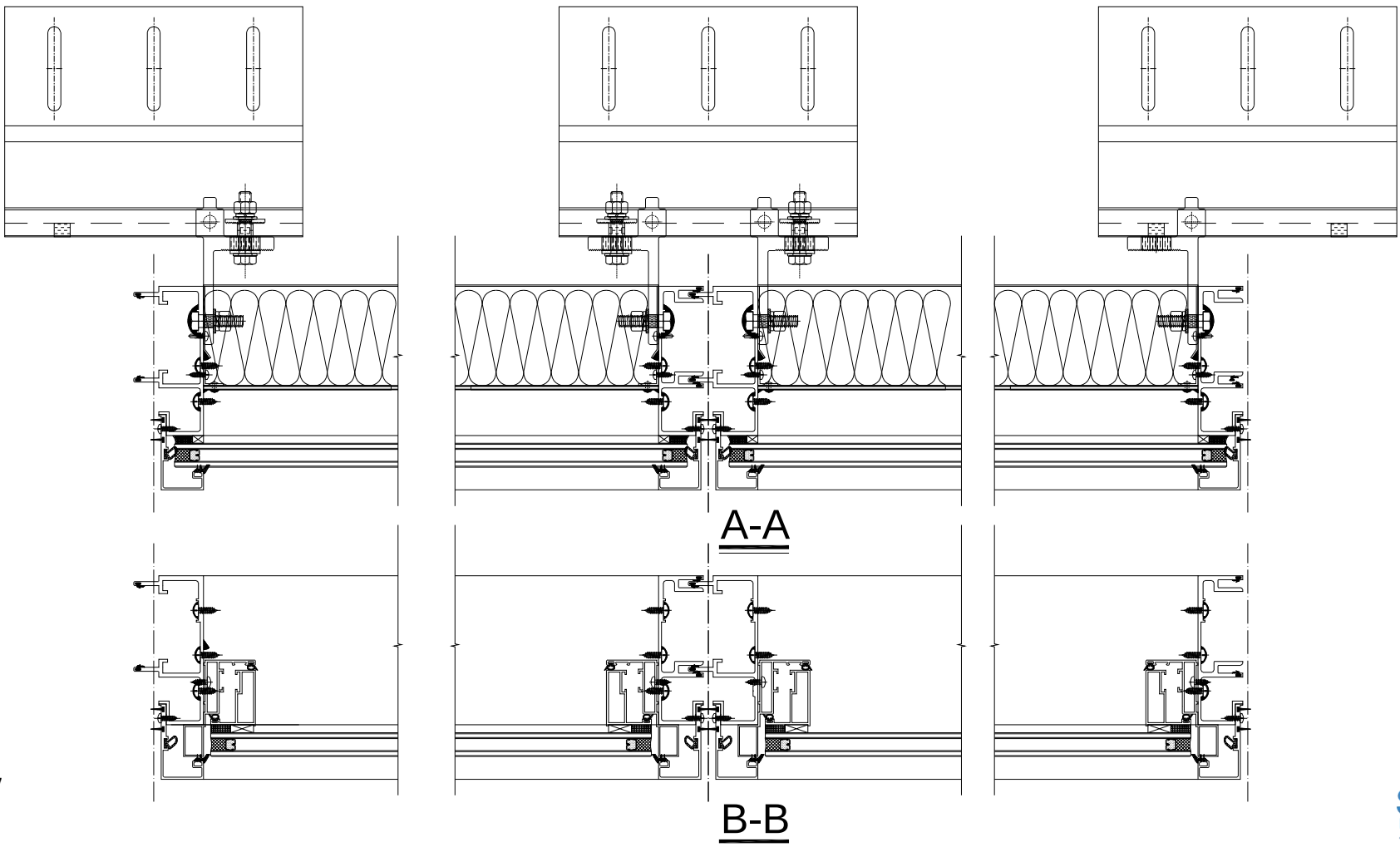
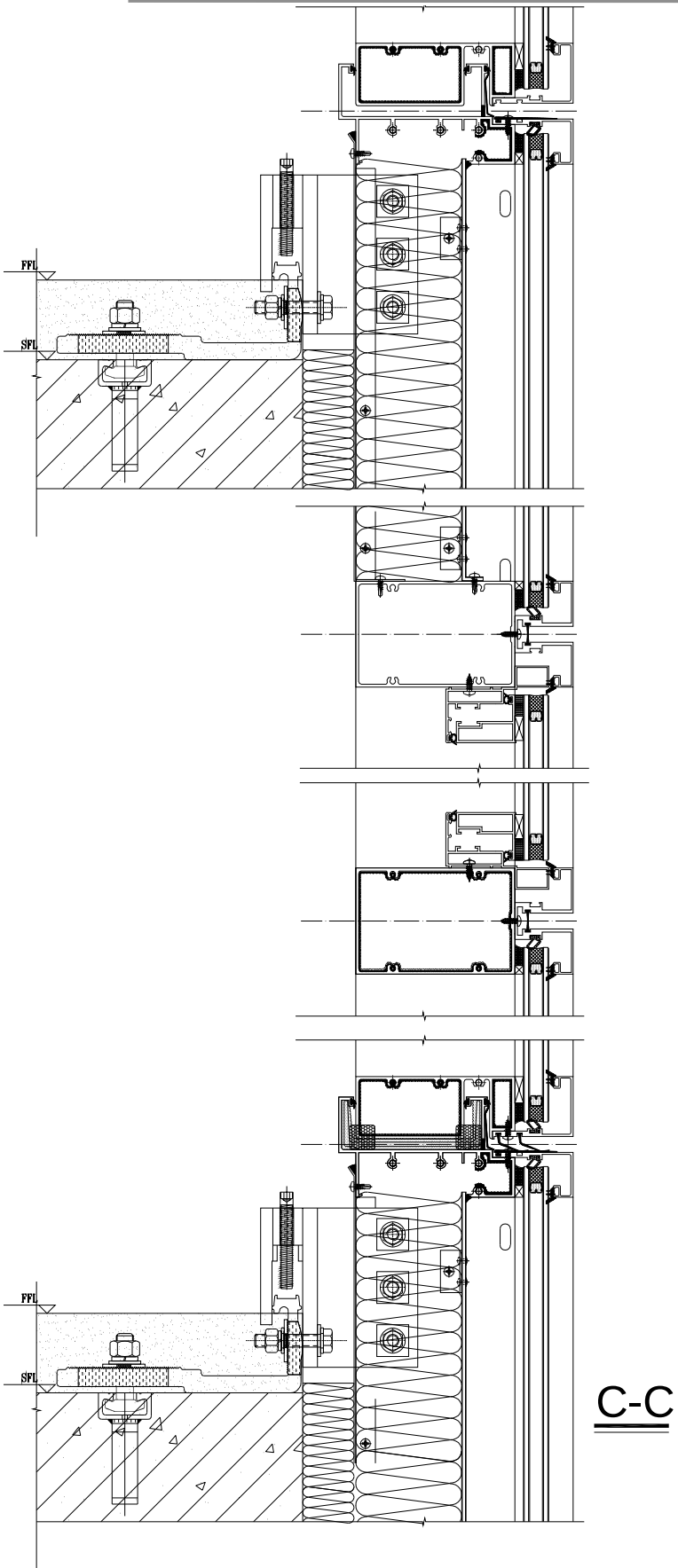
Flexibility

As each unit is an independent component, the modular curtain wall can be adjusted and adapted to the requirements of the building structure. It is compatible with different types of structural systems and can cope with a wide range of complex building forms and geometric requirements.

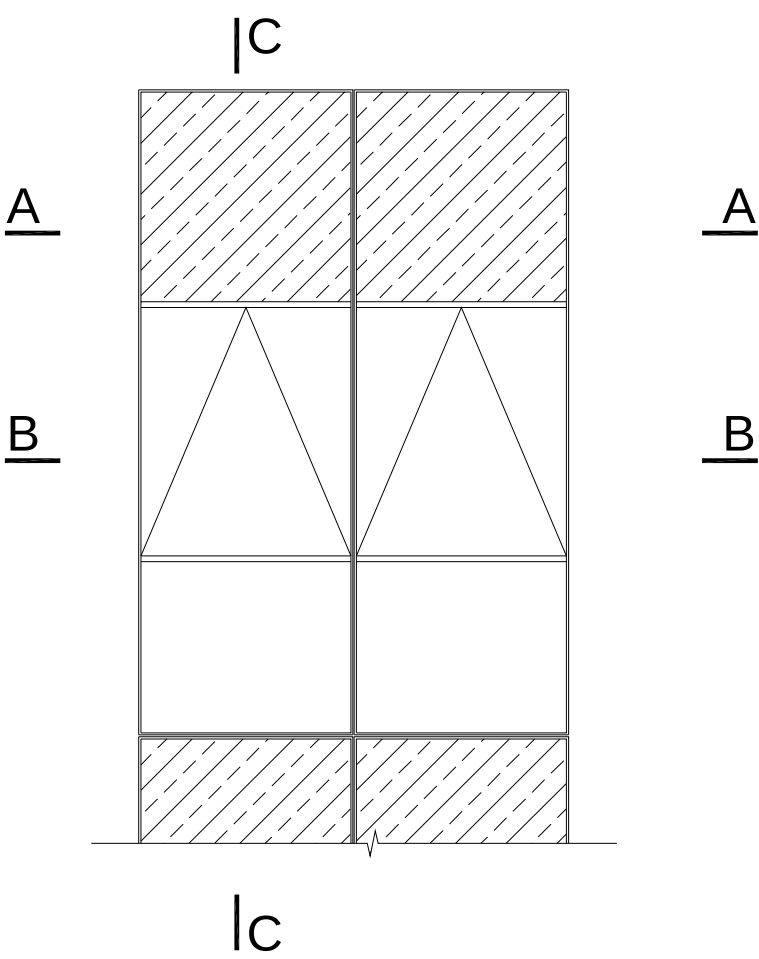
Crutain Wall/Window Wall System



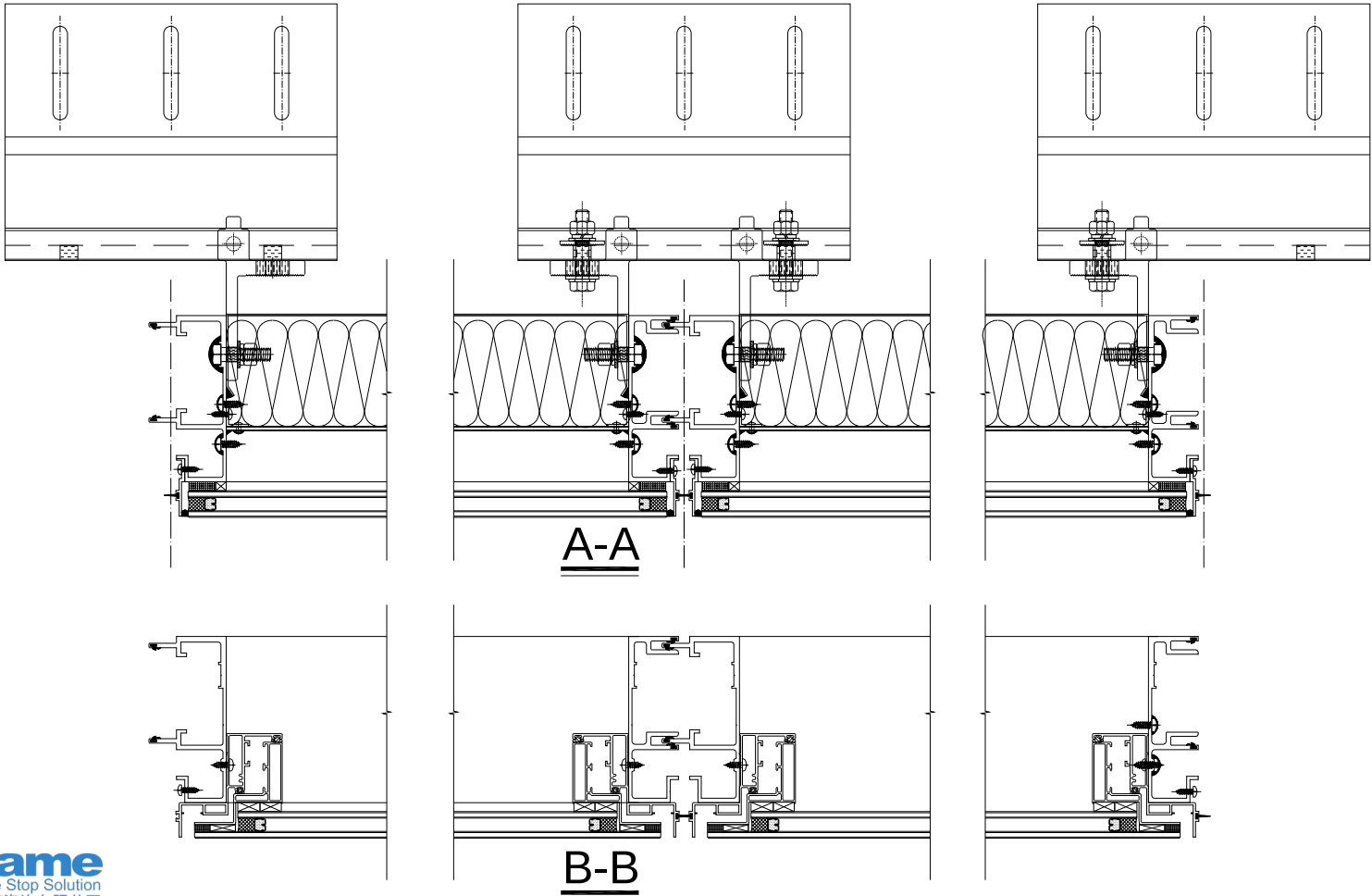
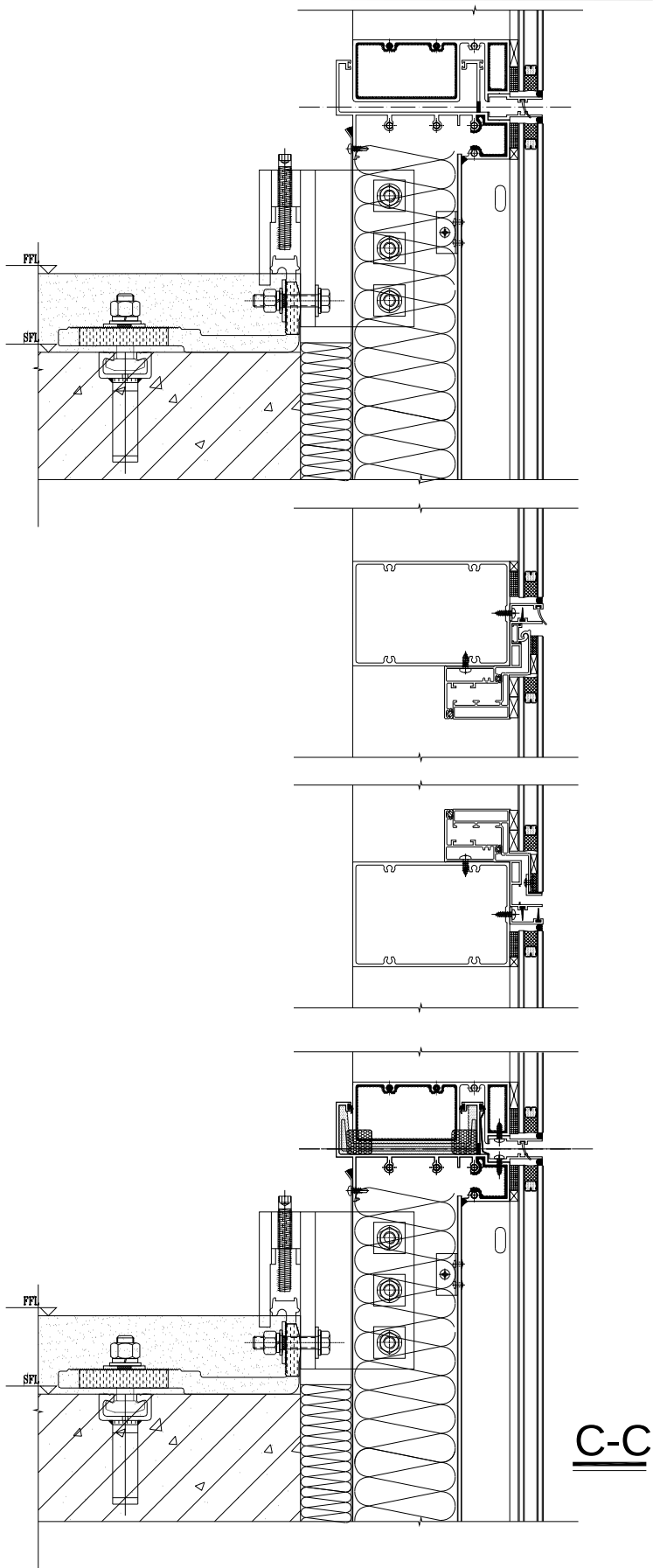
Exposed frame cross story unit curtain wall



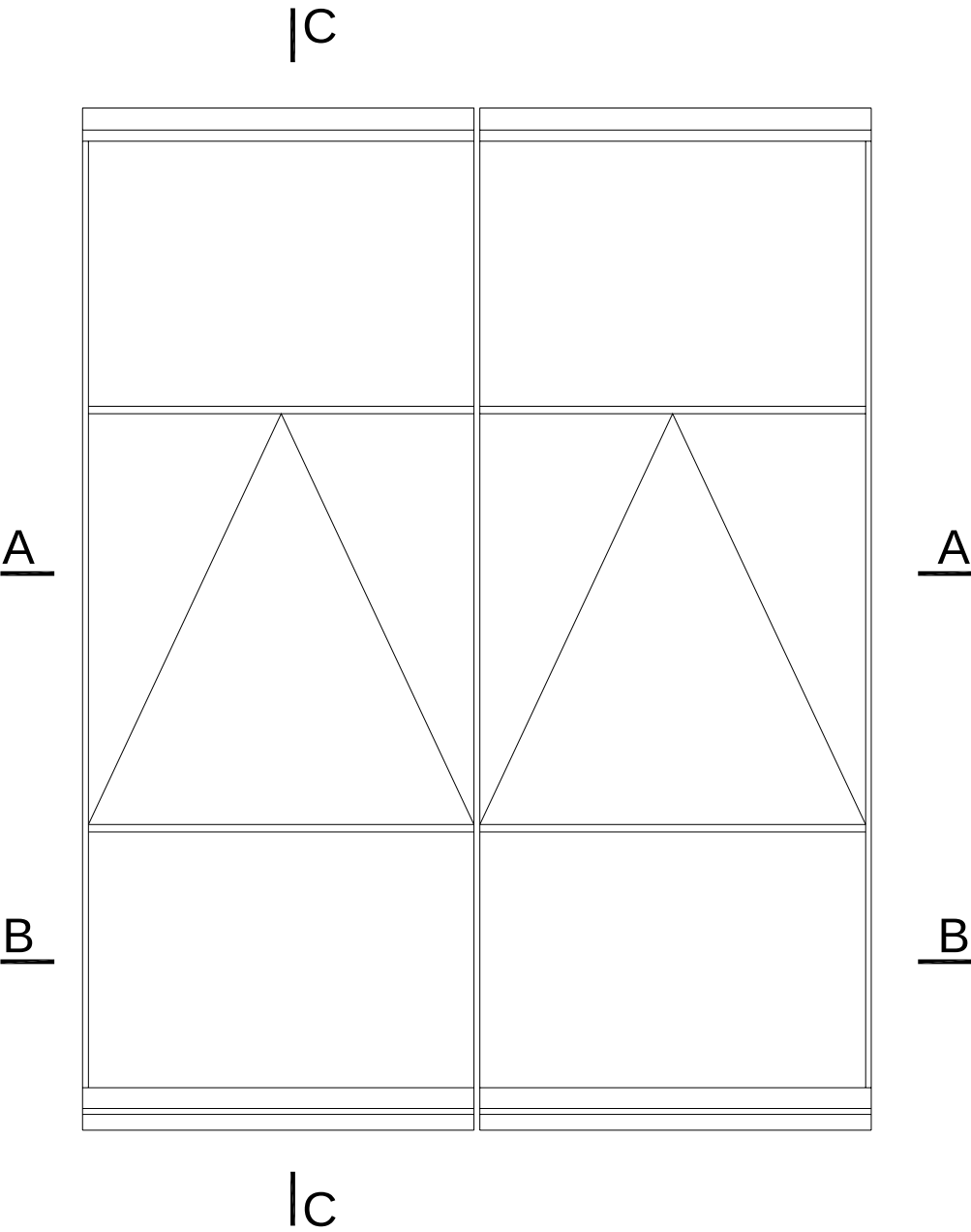
Crutain Wall/Window Wall System



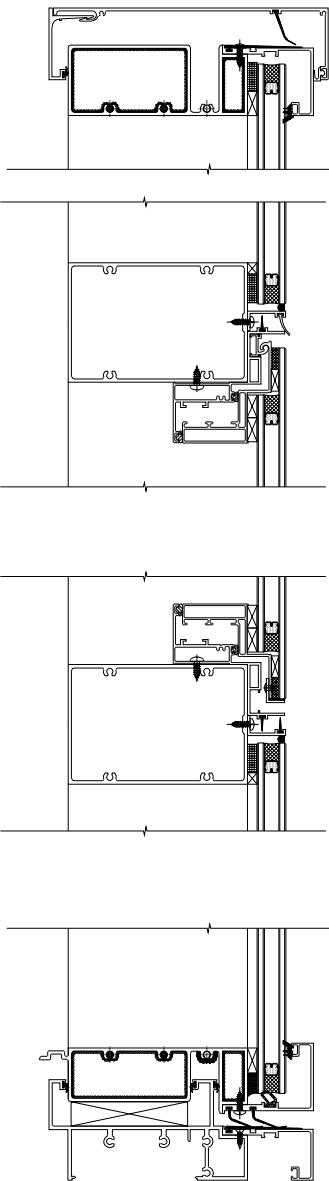
Hidden frame Curtain Wall



Crutain Wall/Window Wall System



Exposed frame non-cross layer curtain wall



C-C

