

Through Fix Vertical

Technical section

Through Fix Vertical

This is a common method for facade materials made from HPL, and fibre cement materials. Where the board are joined together, the 110mm and 80mm faced T rails provide the correct dimensions to all the major board manufacturers specification, relating to surface area in contact with the panel, and movement joint between the abutting panels.

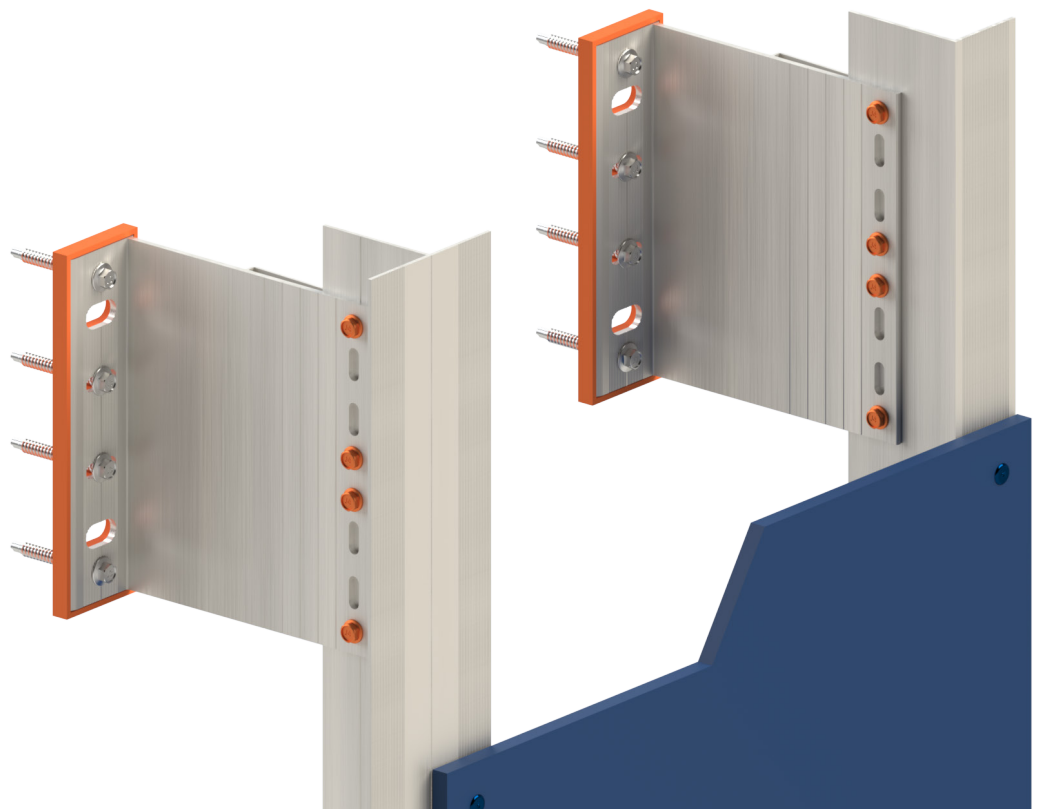
Typical bracket configuration uses the Fixed Point bracket at the highest position on the vertical rail to support the façade vertical dead loads. The Sliding Point bracket is used typically on all other positions on the vertical rail to absorb the project wind loading

The panel joints can be used with various sizes of T-profile to create the desired shadow joint based on project requirements and can also be powder coated.

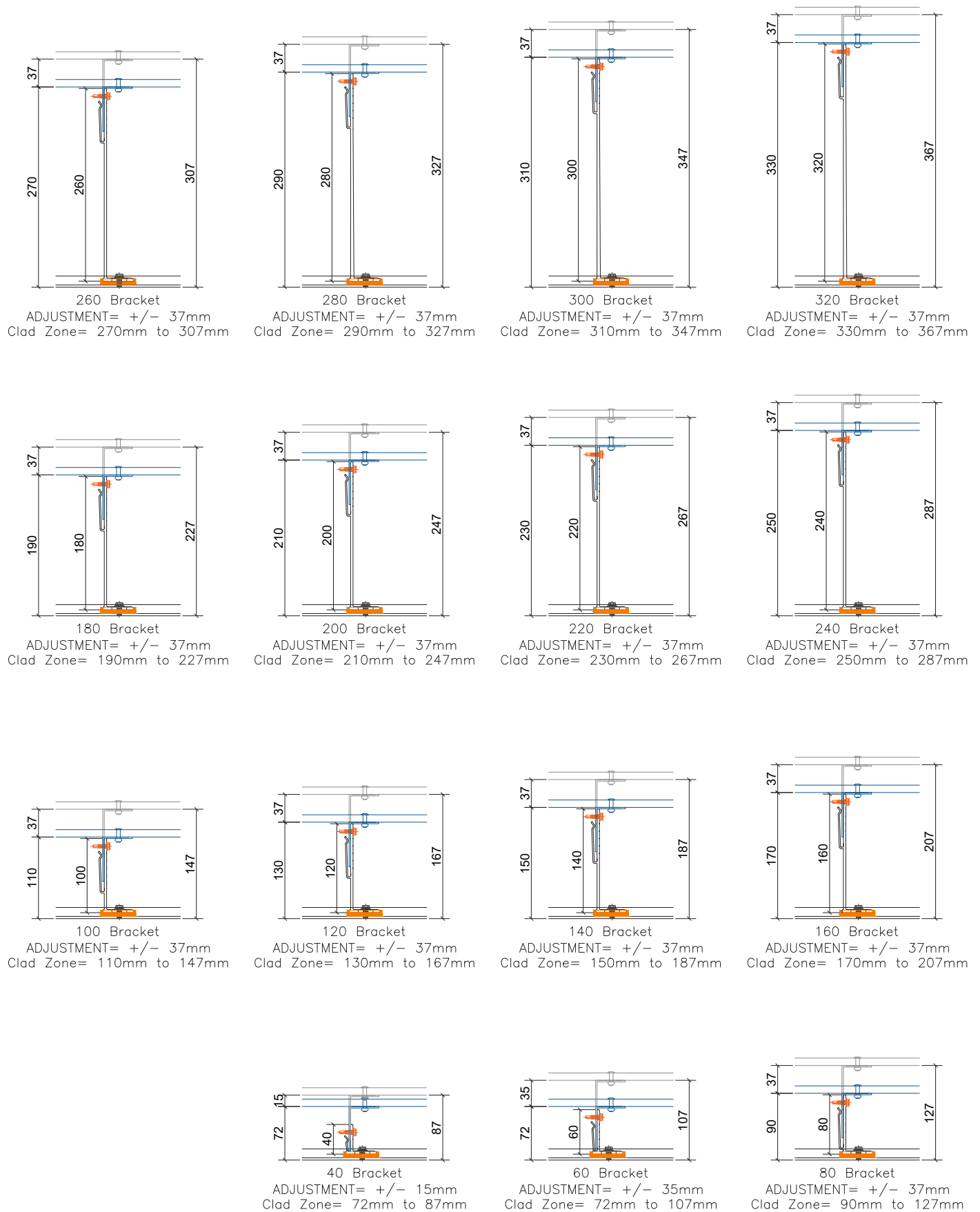
Depending on the material type, HPL / fibre cement panels require vertical support at 500mm to 600mm - for all vertical centre support generally use the 60x40 L-profile.

Cladding Materials

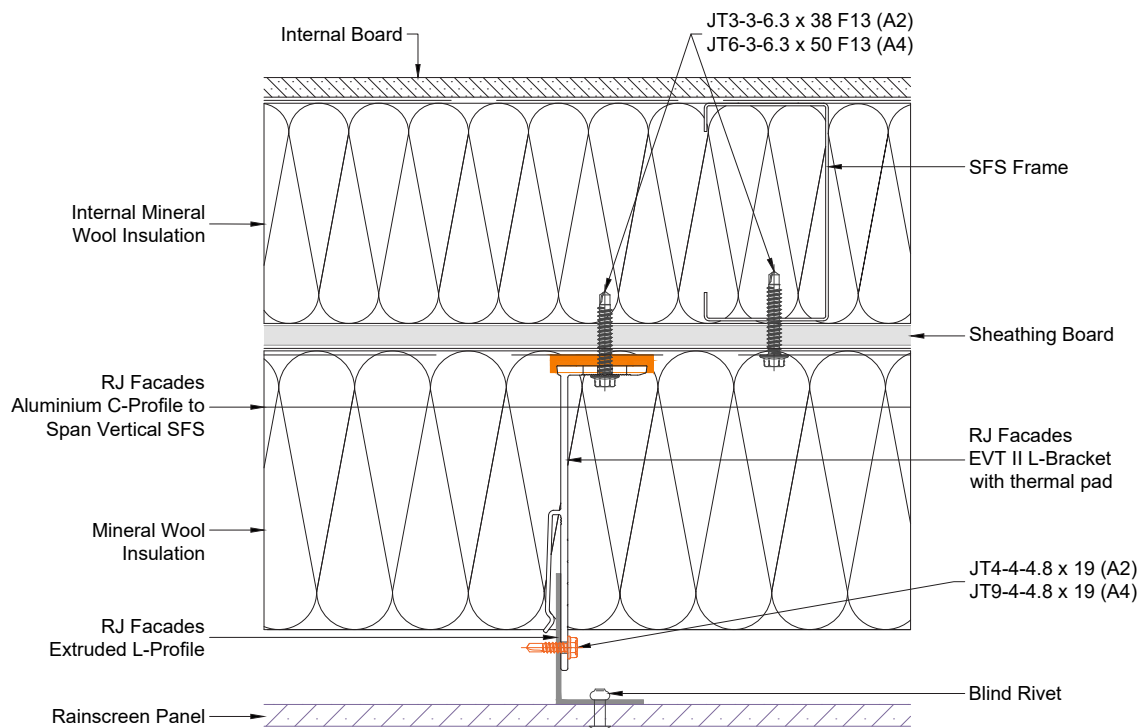
▮ High Pressure Laminates (HPL); Fibre Cement; Composite Mineral Material.



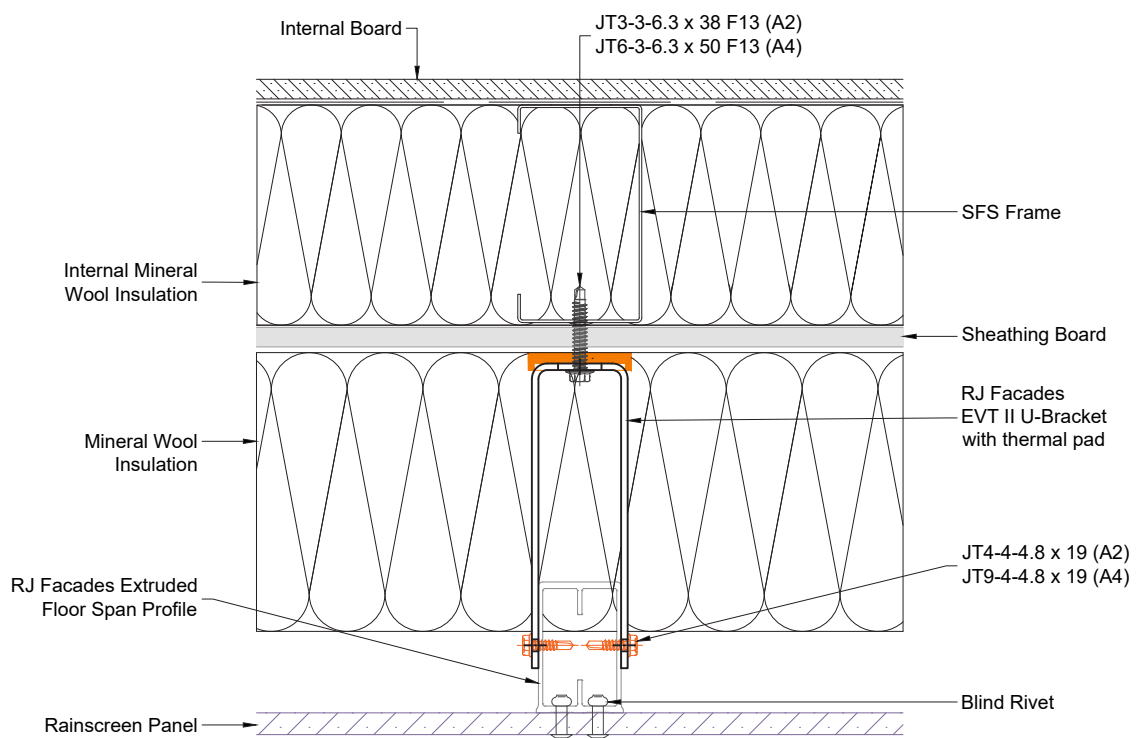
Through Fix Vertical - Cladding Zone



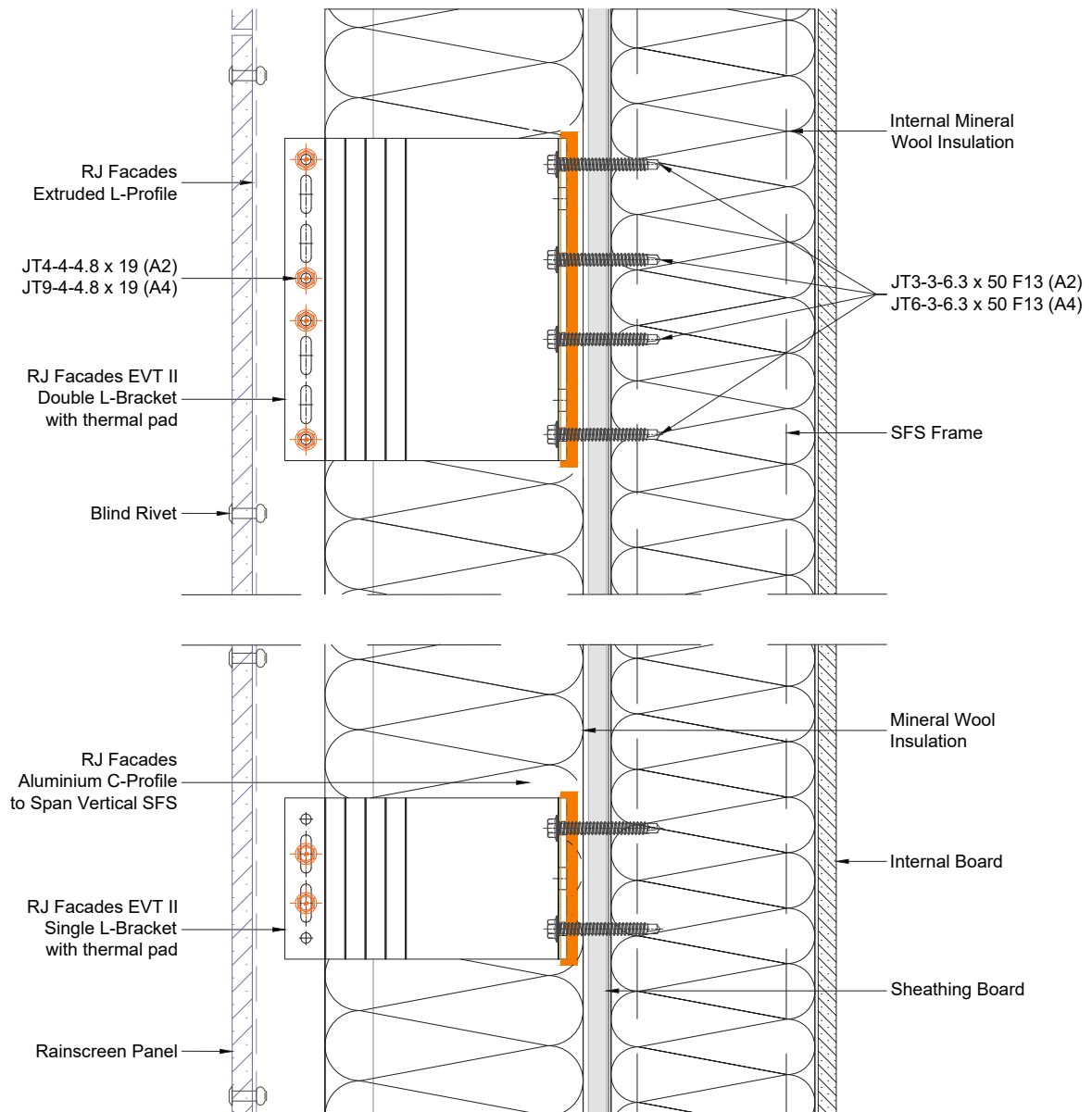
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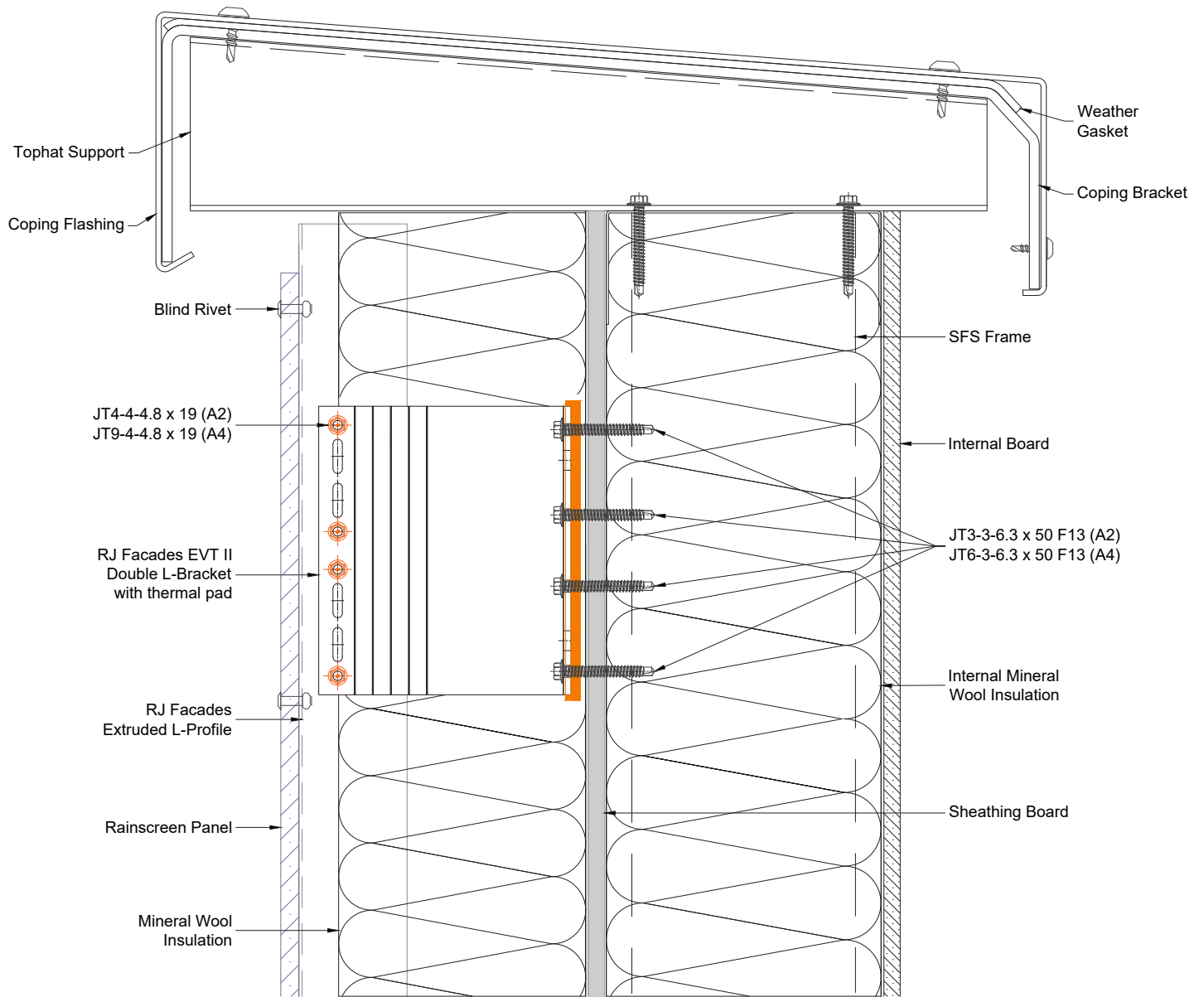
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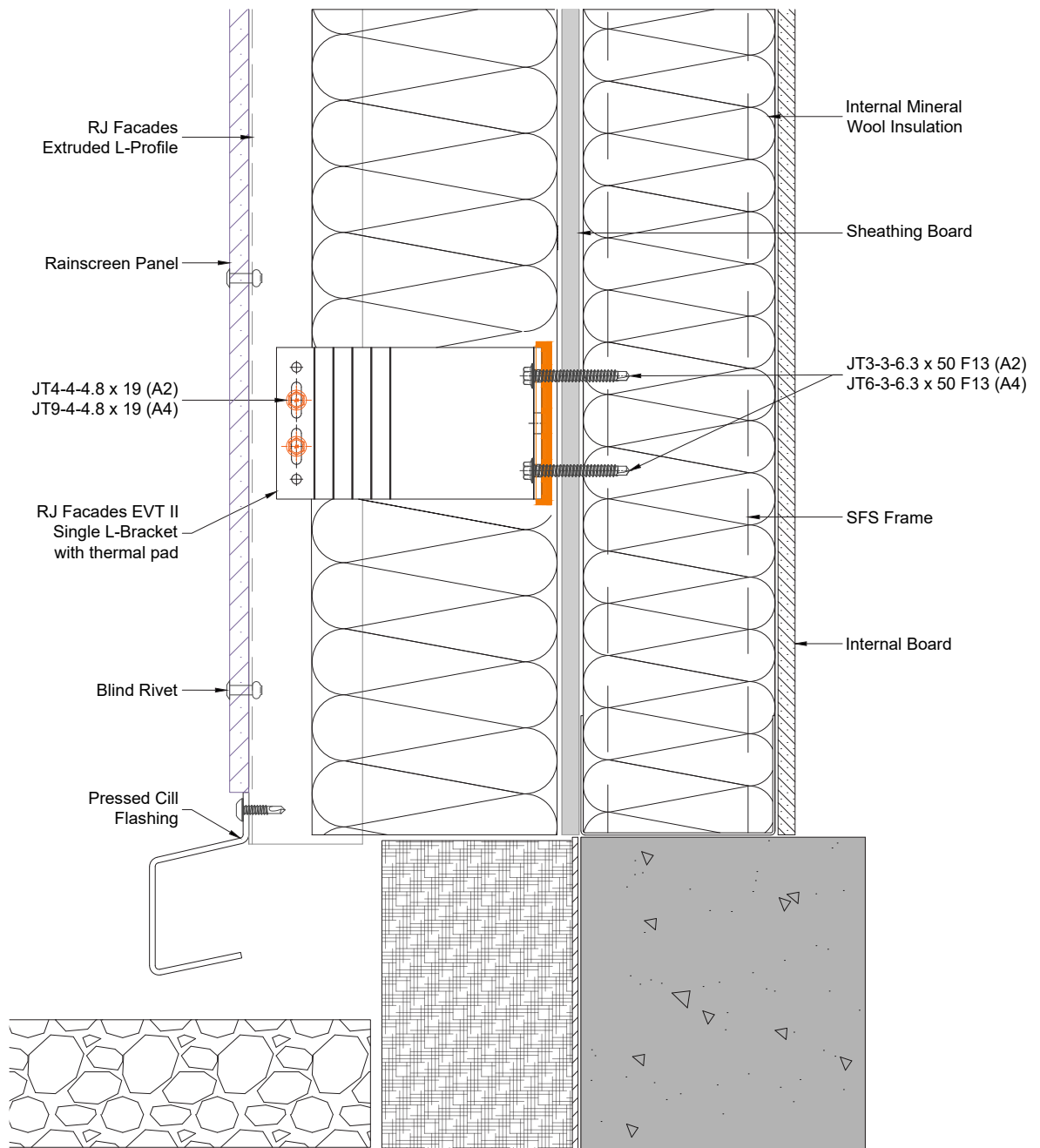
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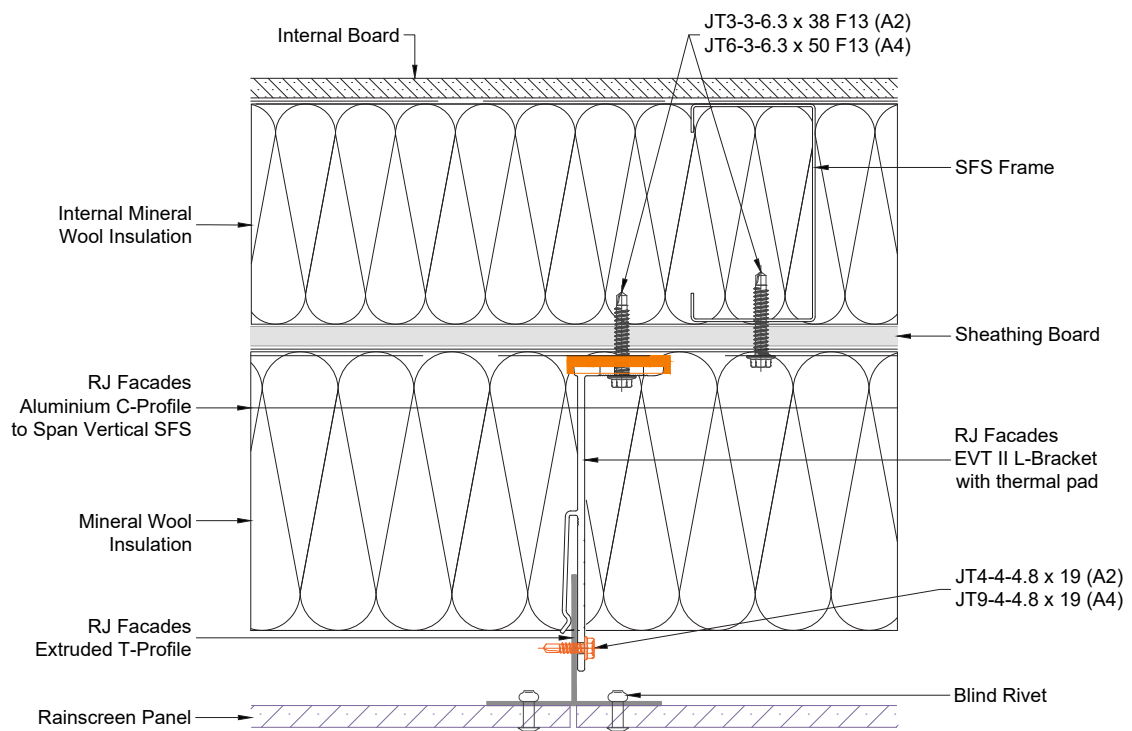
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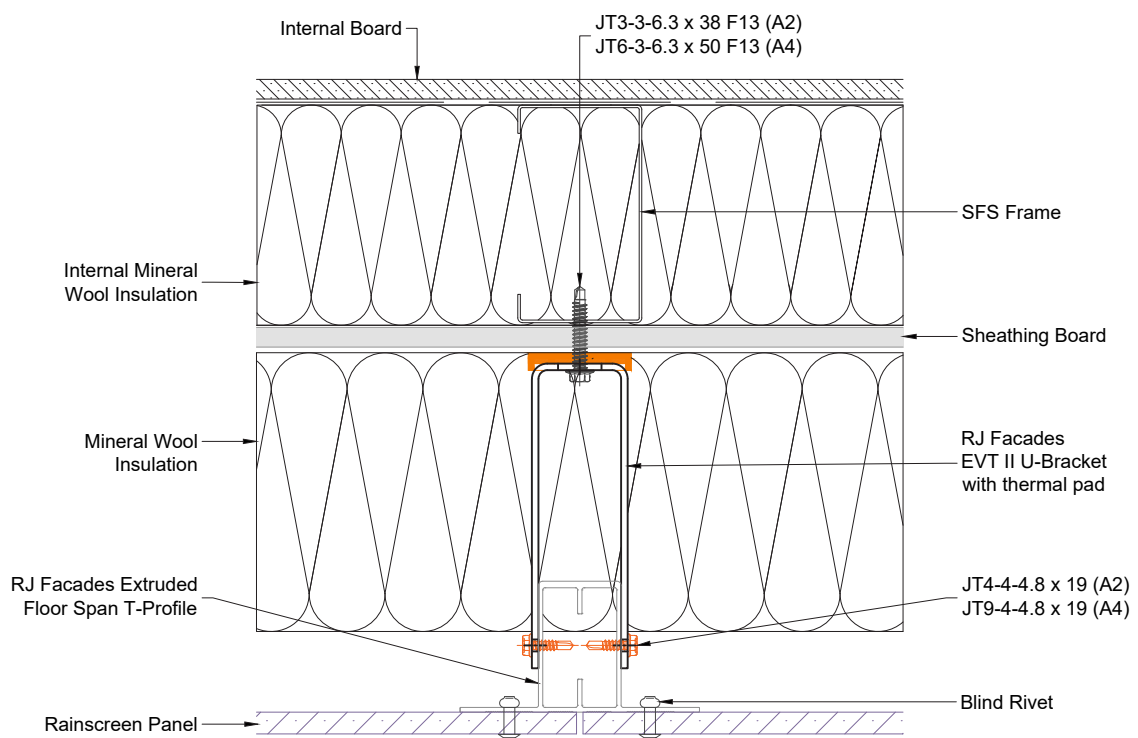
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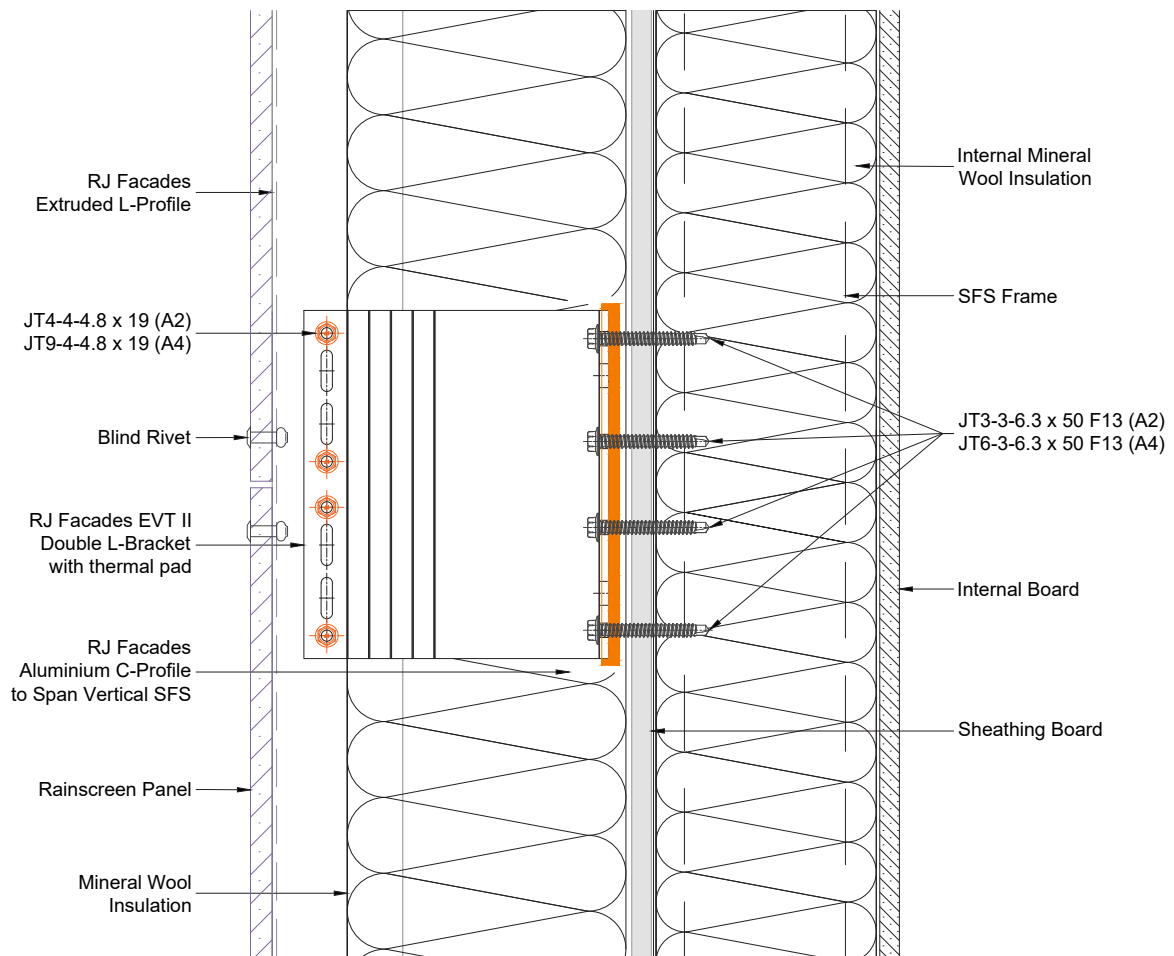
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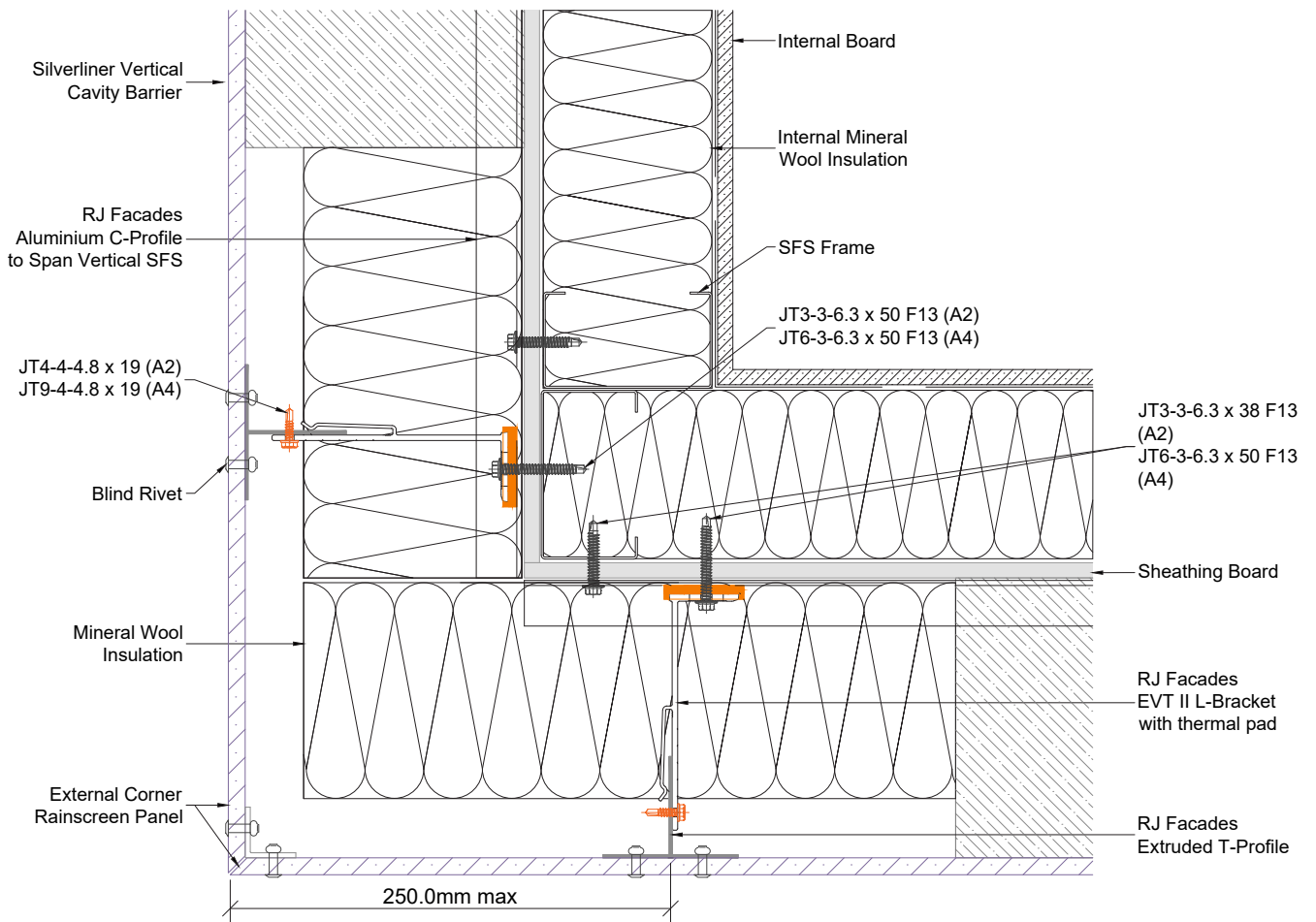
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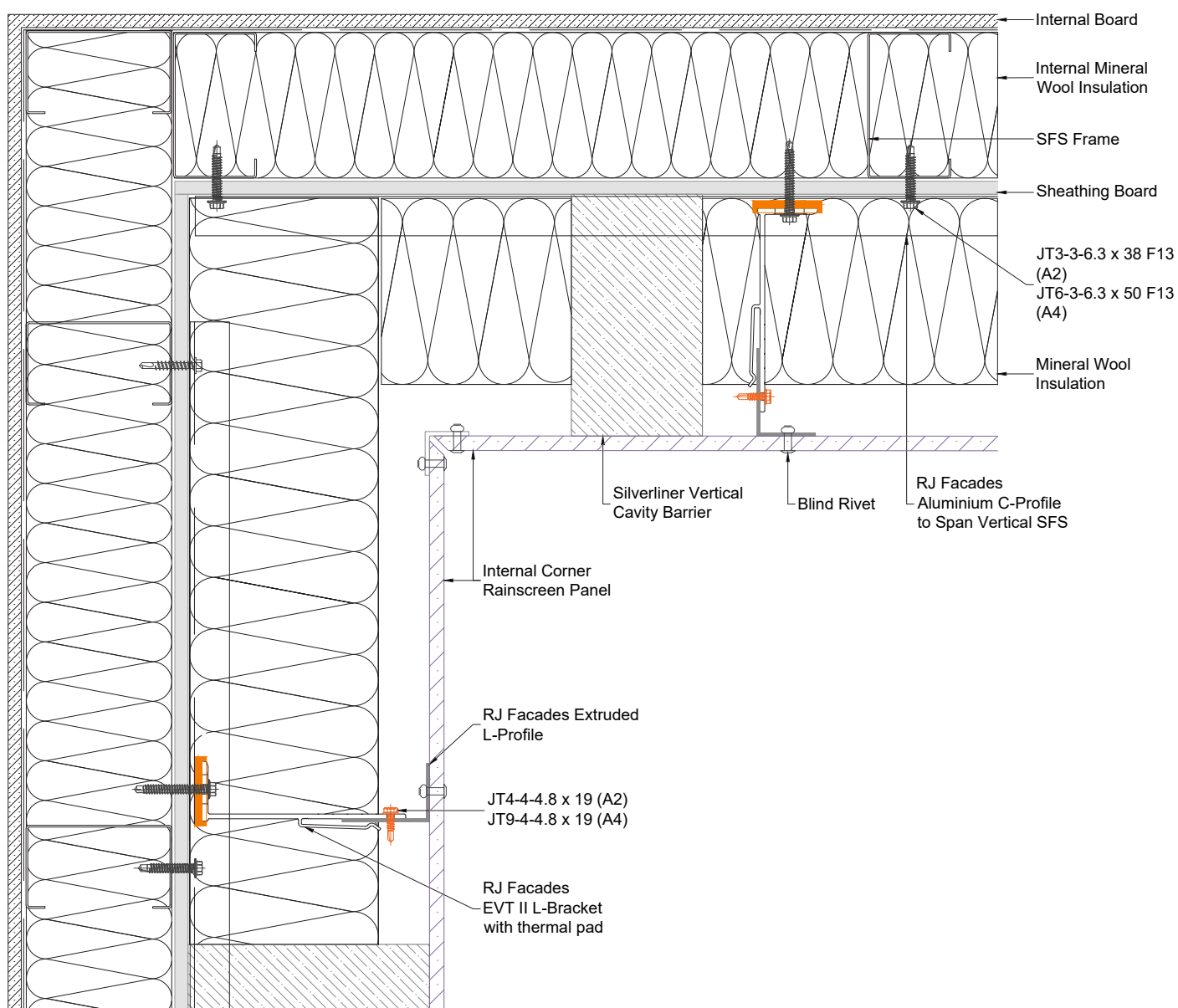
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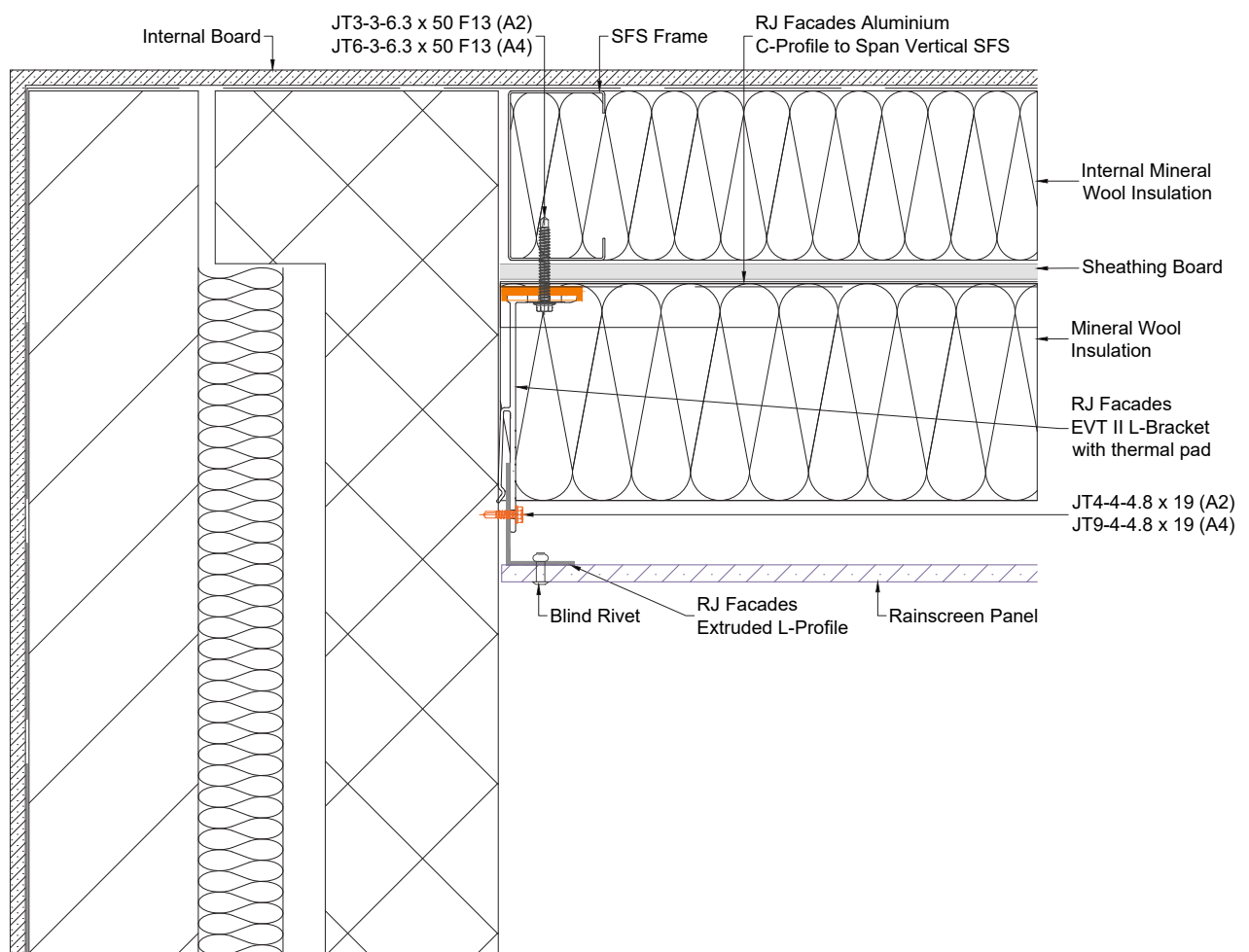
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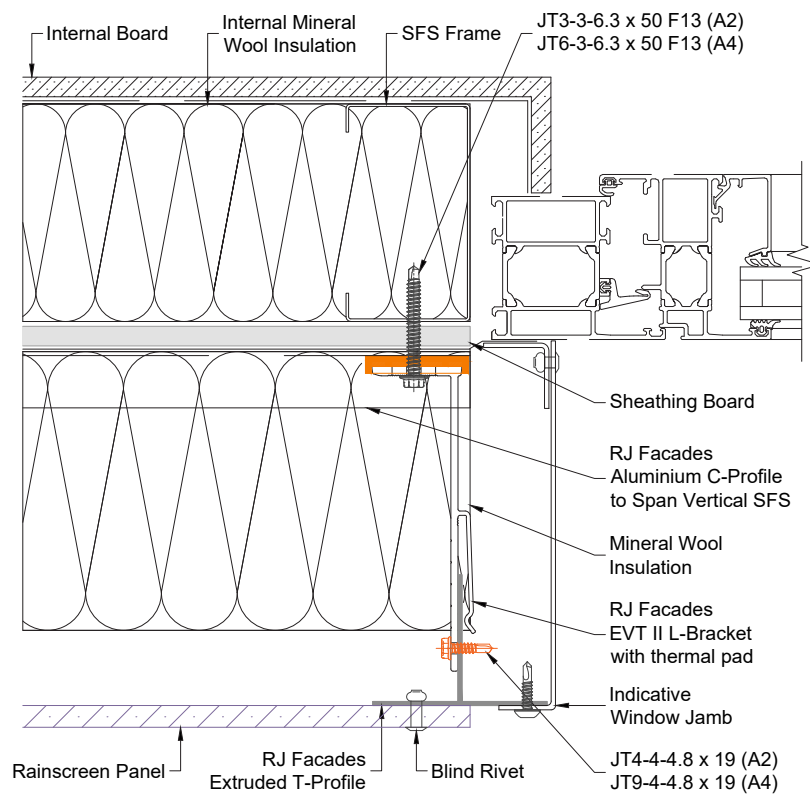
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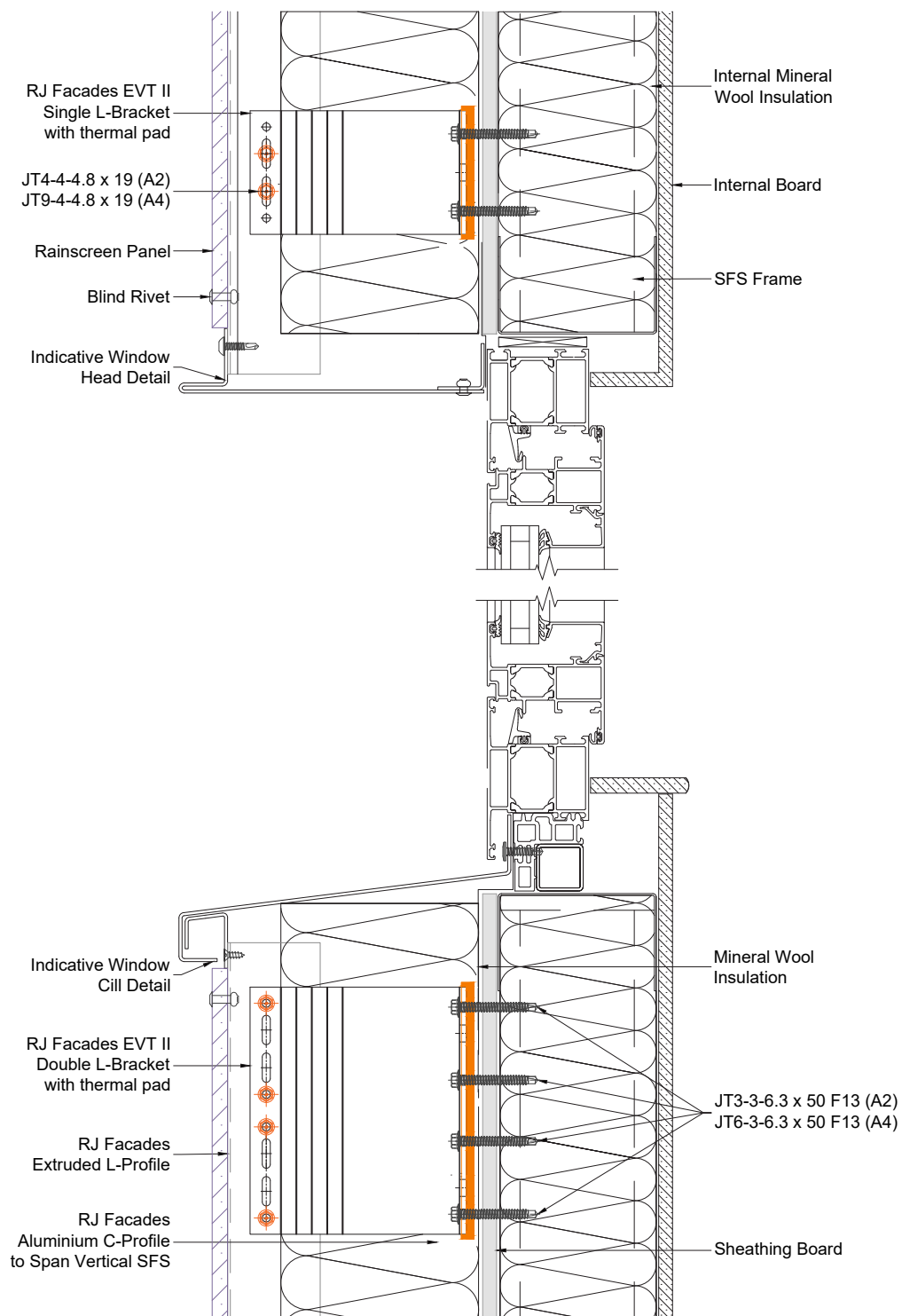
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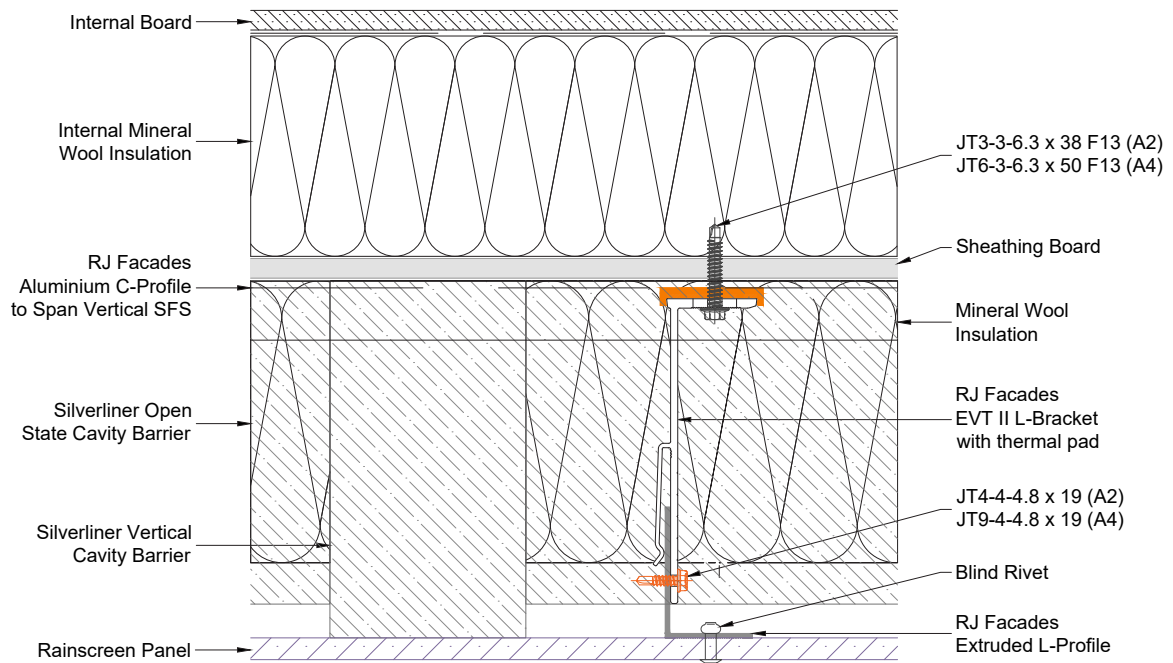
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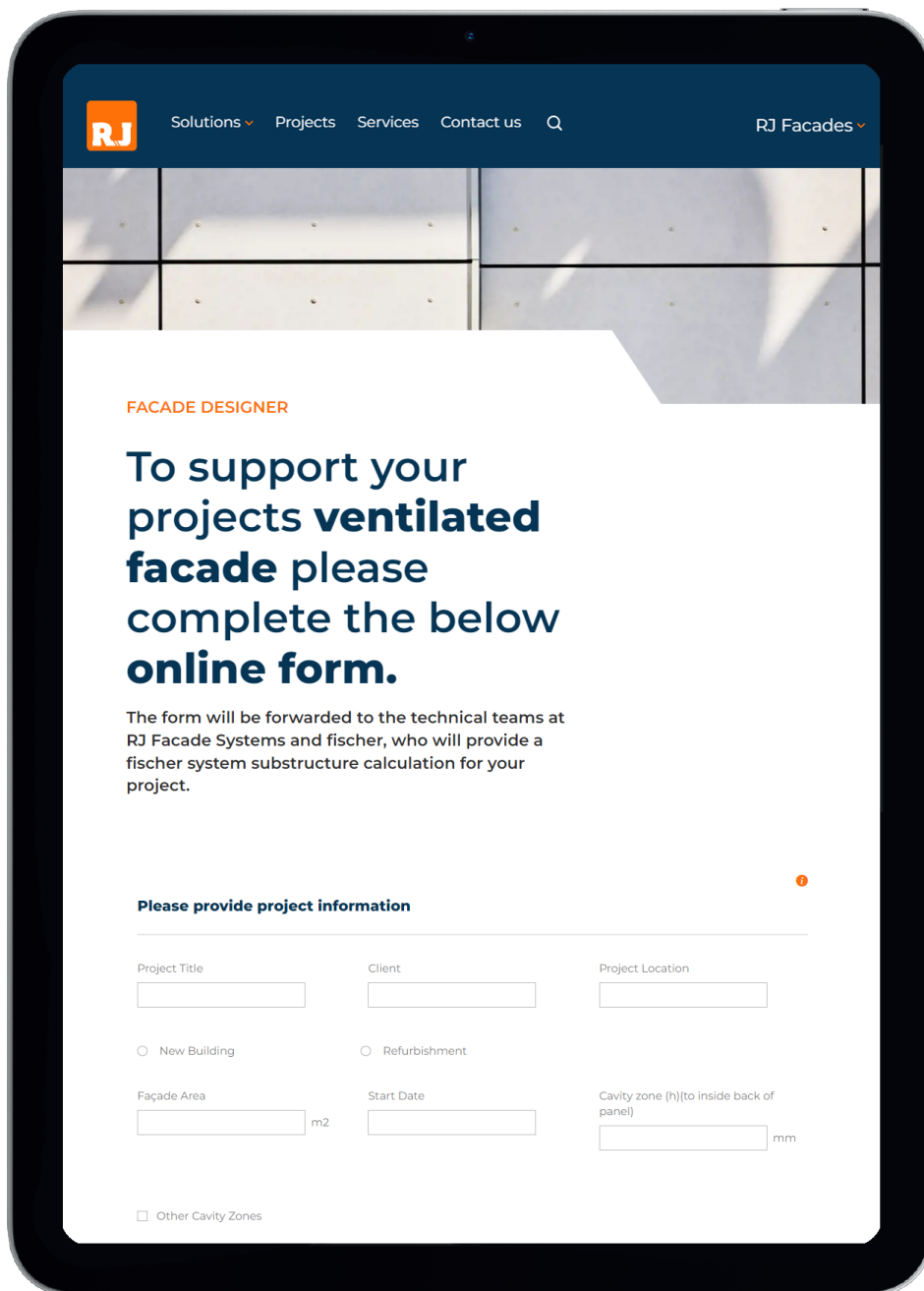
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Facade Designer

RJ Facade Designer

For each calculation of new projects by RJ Facades, it is necessary for a project checklist form to be filled. It includes detailed information, which helps customers to receive the most accurate and precise offer. The offers may vary depending on the cladding/facade material; the dimensions and weight of the material; wind load; floor heights; thickness of thermal insulation; structural base; raster of the facades; fixing methods; and different ventilated facade systems. In order to achieve a qualitative calculation, it is necessary for the drawings to be submitted via email/ courier in CAD format. If there are any specific features of the project, these are also taken into consideration.



Standards & liability

Standards

General

EN 12020 (1÷2) - Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063

EN 755 (1÷9)– Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles

EN 573 (1÷3) - Aluminium and aluminium alloys - Chemical composition and form of wrought products

EN 15088 – Aluminium and aluminium alloys – Structural products for construction works – Technical conditions for inspection and delivery

EN 1990 Eurocode - Basis of structural design

EN 1991 Eurocode 1 - Actions on structures

EN 1998 Eurocode 8 - Design of structures for earthquake resistance

EN 1999 Eurocode 9 - Design of aluminium structures

Ventilated facade systems

ETAG 034, part 1 – Kits for external wall claddings, Part I: Ventilated cladding kits comprising cladding components and associated fixings

ETAG 034, part 2 – Kits for external wall claddings, Part II: Cladding kits comprising cladding components, associated fixings, subframe and possible insulation layer

CWCT Standard for Systemized Building Envelopes

EN 13830 - Curtain walling - Product standard

EN ISO 6946 - Building components and building elements - Thermal resistance and thermal transmittance - Calculation method

EN ISO 10211 - Thermal bridges in building construction - Heat flows and surface temperatures - Detailed calculations EN

ISO 14683 - Thermal bridges in building construction - Linear thermal transmittance - Simplified methods and default values

EN 13116 - Curtain walling - Resistance to wind load - Performance requirements

EN 12179 - Curtain walling - Resistance to wind load - Test method

EN 14019 - Curtain Walling - Impact resistance - Performance requirements

EN ISO 10140 - Acoustics - Laboratory measurement of sound insulation of building elements

EN 20140 - Acoustics - Measurement of sound insulation in buildings and of building elements

EN ISO 717-1 - Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation

Liability

The stated data and calculating methods are provided by RJ Facades as a guideline only.

The information given in this catalogue does not substitute all applicable regulations – Eurocodes, harmonized European standard, national or regional building codes.

The specific conditions and technical details of every particular project have to be taken into consideration.

The right choice of all elements as well as any special requirements regarding stability of the structure must always be considered by the structural/facade engineer, responsible for the project.

The solution presented in these pages are indicative and cannot cover all possible project cases. Because of that every single project has to be evaluated by the structural/facade engineer in charge taking into consideration the specific features, such as climate conditions, location, orientation, etc.

RJ Facades is not liable for any calculation and conclusions made on the basis of the stated information. All calculations and specifications must be estimated, endorsed and guaranteed by architect, engineer, professional or legal entity authorized by law for such activities.

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