

Examples of Installation Method

As for the installation of Aluminum Composite Material (ACM), many advanced methods have been proposed and improved on for years. We will introduce some of the most common methods suitable for ALCADEX products below.

Examples of installation method:

Category	Application	Name of installation method	No.
Exterior	External wall cladding (1)	External wall cladding-wet sealant joint	1
	External wall cladding (2)	External wall cladding-hanging method	2
	External wall cladding (3)	External wall cladding-dry gasket joint	3
	External wall cladding (4)	External wall cladding-narrow open joint	4
	Roof covering	Roof covering	5
	Spandrel	Spandrel back panel of glass curtain wall	6
	Sunshade or cornice	Sunshade or cornice	7
Interior	Internal wall cladding	Internal wall cladding-hanging method	8
	Interior column cover	Interior column cover with Z-flange system	9
	Interior partition	Interior partition panel in factory	10
	Ceiling	Ceiling panel with non-penetrating rivet	11
Others	Roof panel	Roof of pedestrian passage	12
	Parapet	Parapet and soffit for renovation	13
	Signboard	Corporate shop front signboard	14



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1. External wall cladding - wet sealant joint

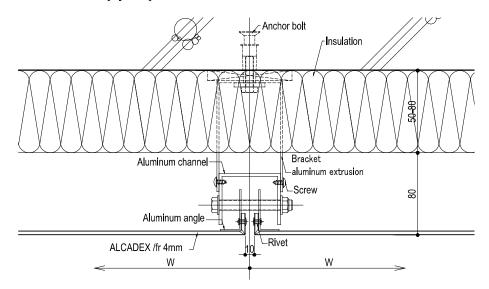
This installation system, with tray type (rout and return) panels and sealing joints, is one of the most common methods and it is available for a wide range of new buildings and renovation projects. After fixing ALCADEX panels on the substructure, we apply a suitable sealing material to the joints in order to ensure water-tightness.

Horizontal section Anchor bolt Fixing Bolt Steel angle--Rivet Aluminum extrusion - Aluminum extrusion Sealing material ALCADEX /fr 4mm W W Vertical section ALCADEX /fr 4mm \pm Steel angle Concrete Rivet Sealing material Fixing olt Steel angle Anchor bolt The determination of suitability for use, design, fabrication, installation, and interface with other products of the ALCADEX materials is the ェ 30 sole responsibility of the purchaser. The information contained on this 85 Technical Manualis for conceptual use only. ALCADEX shall have no responsibility or liability for the products usage or infringement of any patent or other proprietary right.

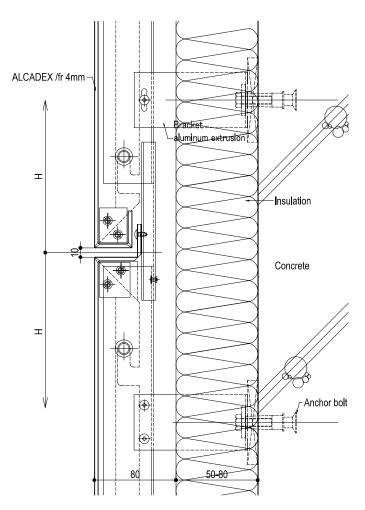
2. External wall cladding - hanging method

The hanging system is also one of the most common fixing methods. It simplifies the installation work at the construction site and hence we can shorten the installation period. It is easy to loosen the movement due to thermal expansion/contraction with this method, because panels are not tightly fastened to the sub-frame but are simply suspended.

Horizontal section



Vertical section



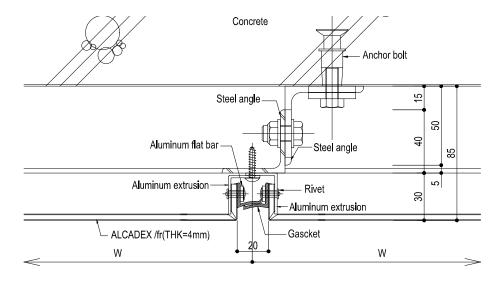
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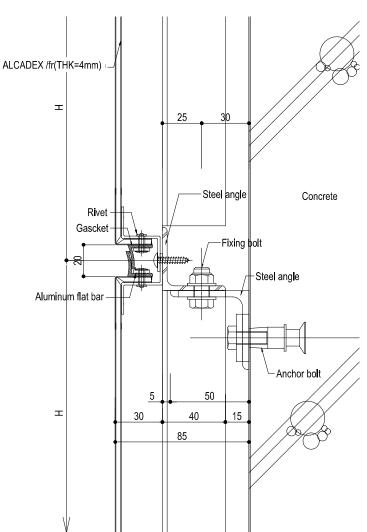
3. External wall cladding - dry gasket joint

In this method, we use gaskets in the joints instead of sealants. The durability of EPDM gaskets is comparable to that of the sealant, in addition, the gasket joint reduces the amount of dirt or stain on the ALCADEX surface.

Horizontal section



Vertical section



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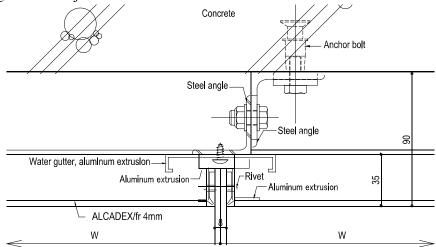
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4. External wall cladding - narrow open joint

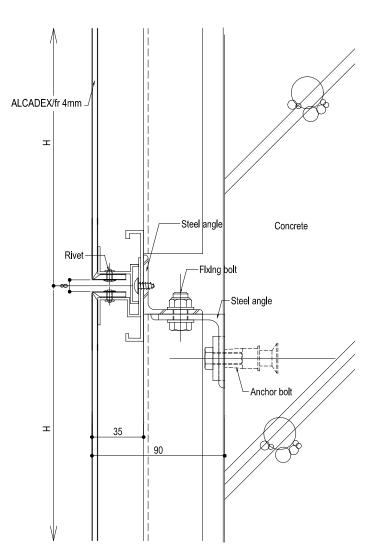
Generally, this kind of method is suitable for Stone and Timber-patterned ALCADEX panels in which narrow joints between the panels are aesthetically effective. According to need, we apply a sealing

material or EPDM gasket to the joints.

Horizontal section



Vertical section



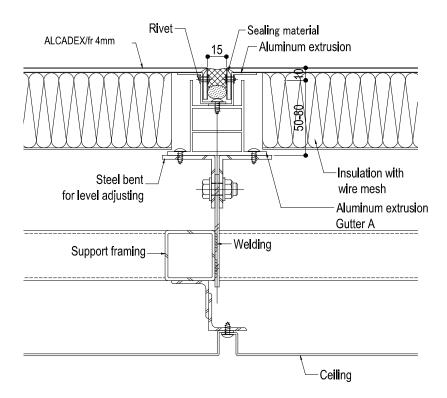
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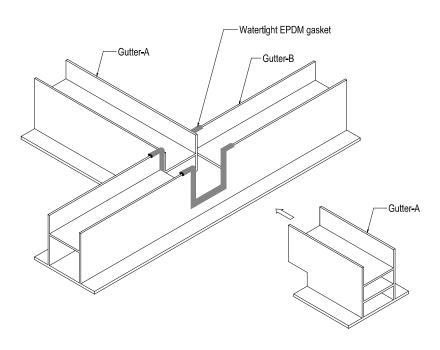
5. Roof covering

ALCADEX has been used for roof covering in prestigious projects such as airports and stadiums. In roof applications, we install a water gutter or waterproof sheets behind the ALCADEX panels so that leaked water can drain outside.

Typical section

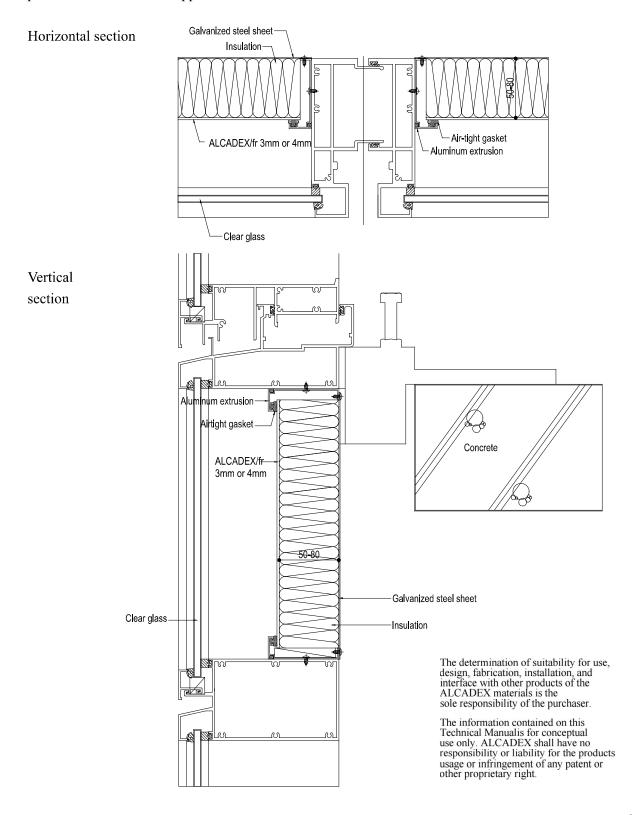


Gutter system



6. Spandrel back panel of glass curtain wall

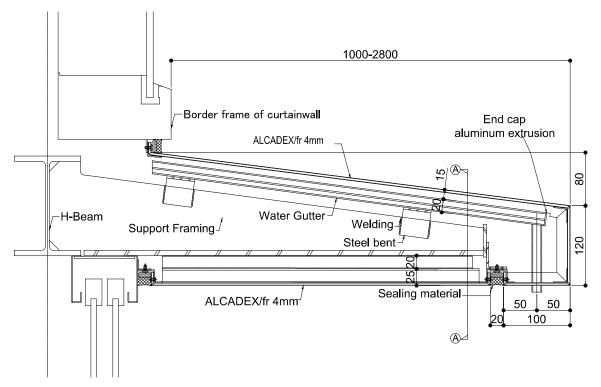
Glass curtain walls sometimes need an opaque spandrel panel (back panel) behind glass for aesthetic and energy-saving purpose. The spandrel back panels behind the glass must be very durable especially to UV exposure, because it is hard to replace them after the building is completed. ALCADEX is the perfect material for such applications.

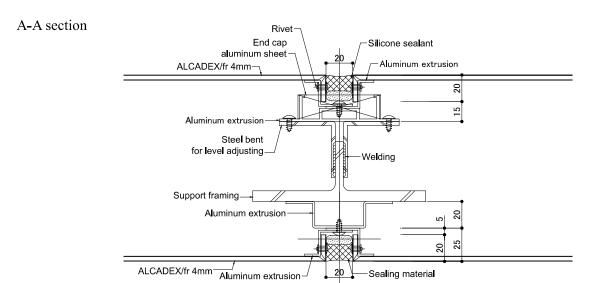


7. Sunshade or cornice

ALCADEX is sometimes used for the sunshade or the cornice of a building wall. In this type of application, normally steel or aluminum frames are used as

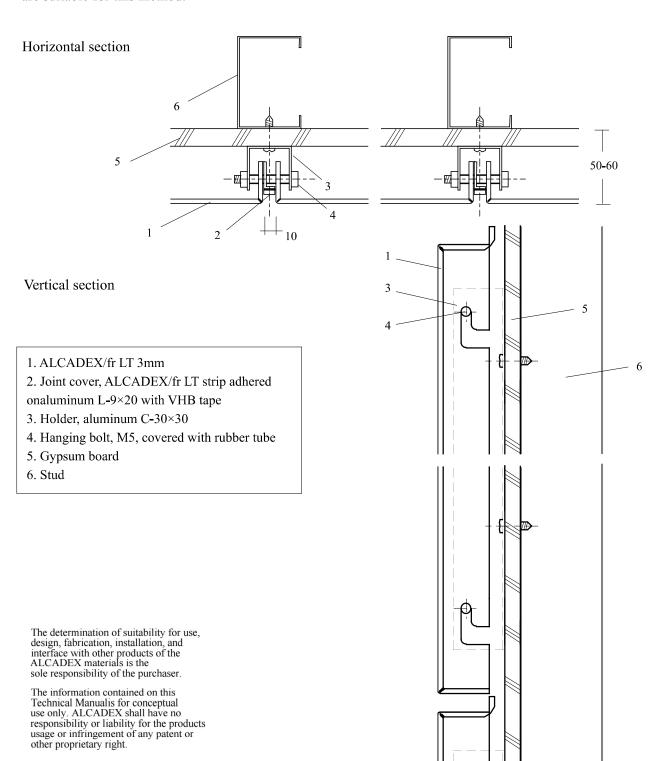
reinforcement behind ALCADEX. Typical section





8. Internal wall cladding-hanging method

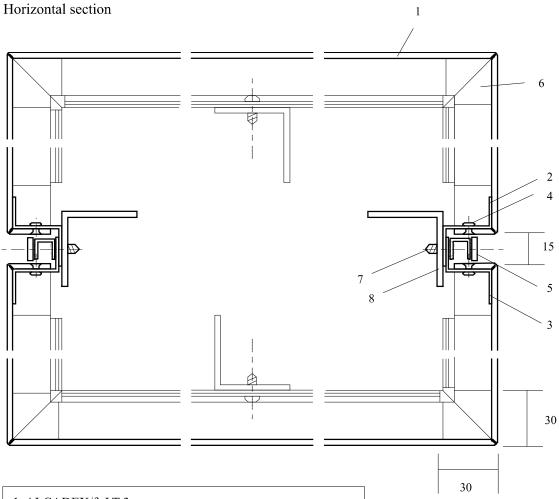
ALCADEX is installed on interior gypsum board with hanging method. Conceal the vertical joint with a joint cover of the same material. In renovation projects, "Stud Detector" will help you to find out the position of studding concealed behind gypsum board. Stud Detector is a small tool working with an electromagnetic sensor. Not only solid and metallic colors but also Stone and Timber-patterned panels are suitable for this method.



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9. Interior column cover with Z- flange system

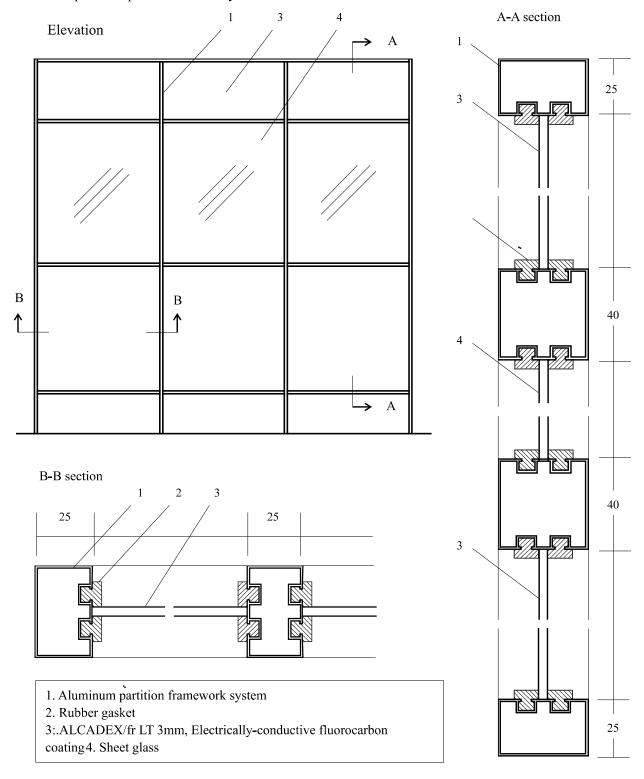
This is an example of rectangular column cover. Two Z-shaped flanges are overlapped and fixed to the sub-frame. Conceal the joint with joint cover slip of the same panel. Use countersunk rivet for assembling the panel.



- 1. ALCADEX/fr LT 3mm
- 2. Z-shaped flange (Large)
- 3. Z-shaped flange (Small)
- 4. Aluminum rivet, countersunk, 3mm diameter
- 5. Joint cover adhered to aluminum C-10×10 with VHB tape
- 6. Corner support plate, aluminum sheet
- 7. Tapping screw, M4
- 8. Sub-frame, aluminum L-30×30mm

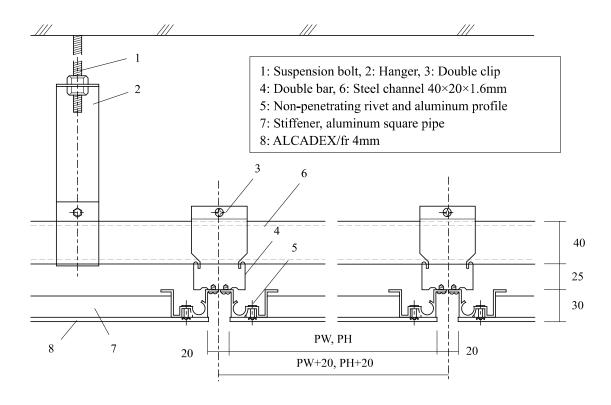
10. Interior partition in factory

In this example, electrically-conductive fluorocarbon-coated ALCADEX is used for interior partition panels in a factory.



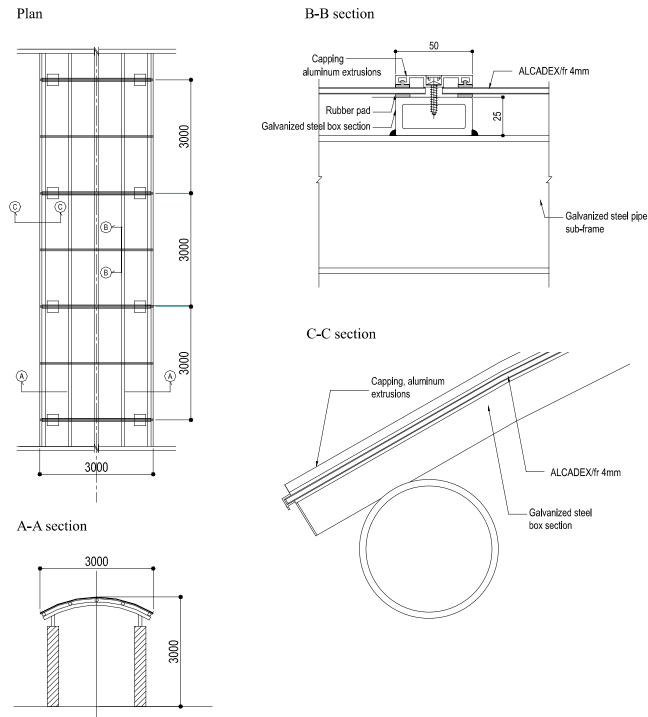
11. Ceiling panel with non-penetrating rivet

When we use ALPOLIC for indoor ceilings or soffits, non-penetrating rivets simplify the panel details. Non-penetrating rivets are usable **only on low-gloss finishes (30% or less)**. If we use these rivets on medium to high gloss products, the trail of the concealed rivet is visible from front. In this method, we install fabricated ALCADEX panels on a lightweight suspension bar ceiling system.



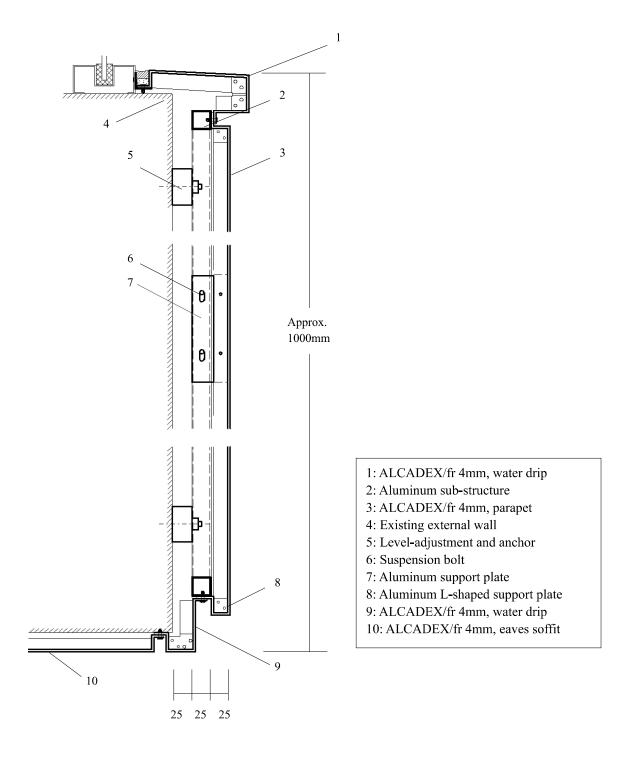
12. Roof of pedestrian passage

ALCADEX/fr has been used as roof panels of public pathways and bus stations. Refer to application photographs. ALCADEX panels are just clamped between sub-frames and aluminum extrusions. In most projects, the curving panels can be naturally curved without a mechanical bending.



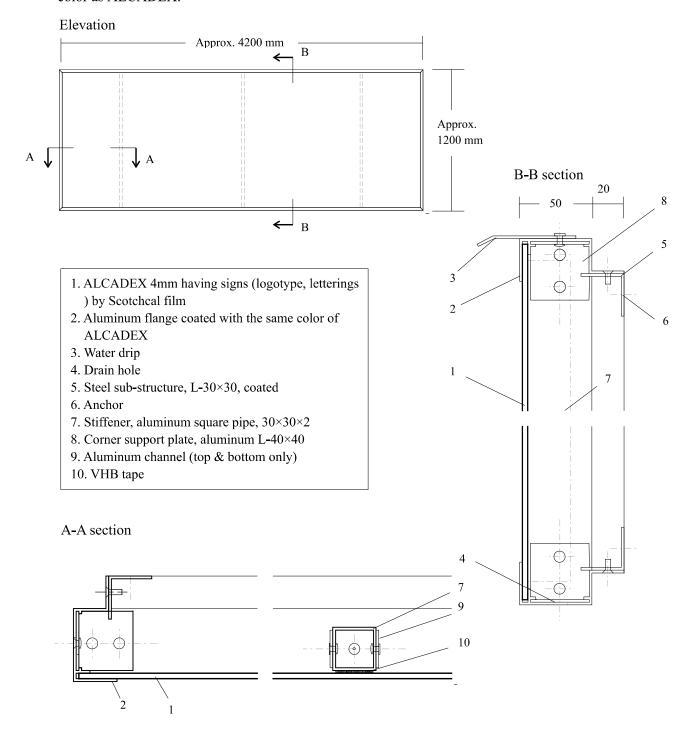
13. Parapet and soffit, renovation

ALCADEX has been widely used for parapets and soffits in building renovation. ALCADEX is used for the water drip, parapet and soffit in the following detail.



14. Corporate shop front signboard

This corporate signboard is a shop front sign of a countrywidenewspaper company in China. The signboard has signs by ALCADEX SIGNAGE film. The aluminum flanges are coated with the same color as ALCADEX.



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