

Sliding Doors

- A SLIDING DOOR IS A TYPE OF DOOR WHICH OPENS HORIZONTALLY BY SLIDING, WHEREBY THE DOOR IS EITHER MOUNTED ON OR SUSPENDED FROM A TRACK.



History

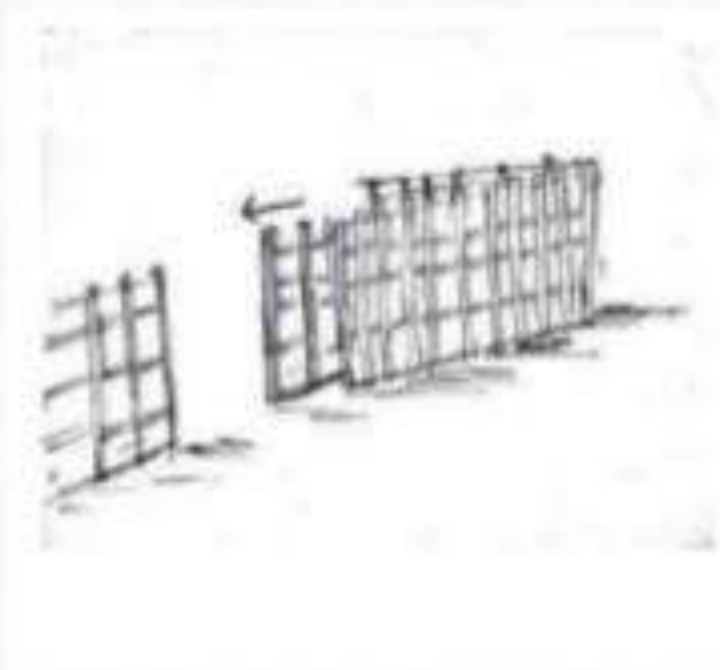
- SLIDING DOOR WERE USED AS EARLY AS THE FIRST CENTURY CE IN ROMAN HOUSES AS EVIDENCE BY ARCHAEOLOGICAL FINDS IN POMPEII , ITALY



Roman sliding door tracks at Pompeii, Italy (1st century AD)

History In Kerala

- IN KERALA THERE IS NO EVIDENT HISTORY OF SLIDING DOOR IT MAY HAVE CAME FROM THE ROMAN AND EUROPEIN COUNTRIES IN KERALA BOUNDRY GATE HAD SLIDING MECHANISM



Sliding Door Gears

- THE MECHANISM USED TO OPERATE A SLIDING DOOR IS CALLED DOOR GEAR. THERE ARE TWO STANDARD TYPES SLIDING DOOR GEAR

SLIDING DOOR GEAR



TOP HUNG

BOTTOM ROLLING

Top Hung System

- THE DOOR IS HUNG BY TWO TROLLEY HANGERS AT THE TOP OF THE DOOR RUNNING IN A CONCEALED TRACK
- ALL THE WEIGHT IS TAKEN BY THE HANGERS
- AT EACH END IS A TRACK STOPPER TO ABSORB ANY IMPACT MADE IF THE DOOR IS SLAMMED AND TO HOLD THE DOOR IN THE OPEN OR CLOSED POSITION.
- ALL TOP HUNG SLIDING DOOR GEAR SYSTEMS HAVE A MAXIMUM WEIGHT LIMIT PAIR OF TROLLEY HANGERS
- AS THE DOOR IS HUNG AT THE TOP FROM TWO POINTS, IT NEEDS ADDITIONAL GUIDES AT THE BOTTOM TO PREVENT IT FROM SWINGING SIDWAYS.

Top Hung Sliding Doors



Bottom Rolling

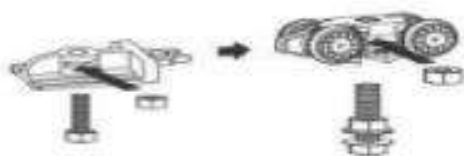
- SOMETIMES A TOP HUNG SYSTEM CANNOT BE USED, AS THE WEIGHT OF THE DOOR CANNOT BE SUPPORTED FROM ABOVE; IN THIS CASE BOTTOM ROLLING SYSTEM IS RECOMMENDED
- IT CONSISTS OF TWO ROLLERS AT THE BOTTOM OF THE DOOR RUNNING ON A TRACK AND TWO GUIDES AT THE TOP RUNNING IN A GUIDE CHANNEL
- ALL THE WEIGHT IS CONCENTRATED ON THE TWO BOTTOM WHEELS, MORE FORCE IS NEEDED TO MOVE THE DOOR.

Bottom Rolling Sliding Door

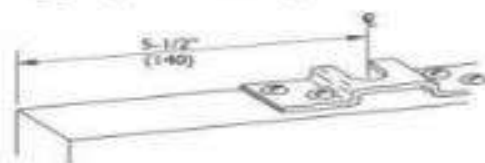


INSTALLATION INSTRUCTIONS

- 1** Assemble hangers and retaining stops.



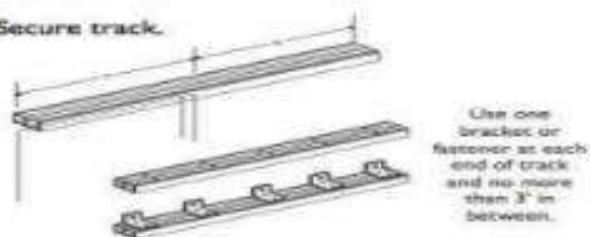
- 2** Fit hanger apron to door panel.



- 3** Insert hangers and retaining stops.

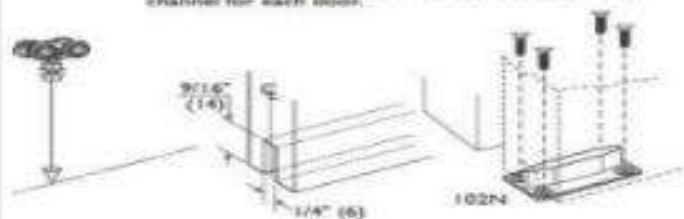


- 4** Secure track.

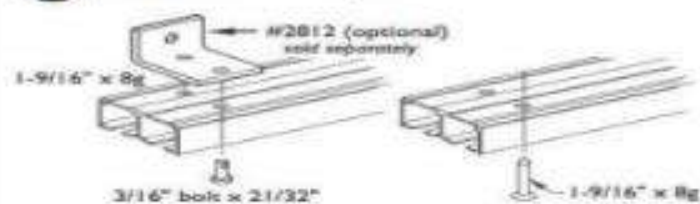


- 5** Mortise doors and fit door guides.

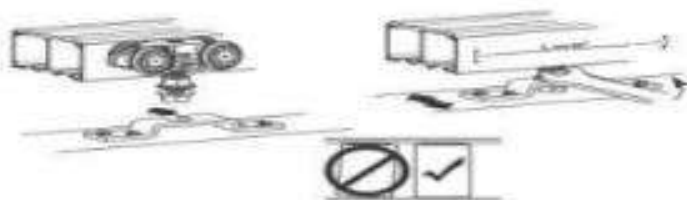
Attach a plumb line to hanger. Place hanger inside track. Using plumb line, mark the centerline of floor channel for each door.



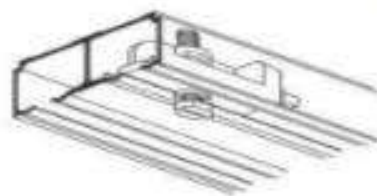
- 6** Face & Soffit Fix Options



- 7** Attach door panel and adjust until level.



- 8** Position and secure retaining stops.



Types Of Sliding Doors

- **BYPASS SLIDING**
- **SURFACE SLIDING**
- **POCKET SLIDING TYPE OF SLIDING DOOR**
- **BIFOLD DOORS**

Bypass Sliding

- Doors Slide on overhead track and along guides or track on the floor .
- Requires no operating space but is difficult to seal against weather and sound.
- Offers access only through 50% of doorway width .
- Used on exterior as sliding glass door.
- Used in interiors primarily for visual screening.



SURFACE SLIDING

- SIMILAR TO A BYPASS SLIDING DOOR BUT PROVIDE ACCESS THROUGH FULL WIDTH OF DOORWAY.
- NO OPERATING SPACE REQUIRED BUT IS DIFFICULT TO WEATHERPROOF.
- DOOR IS SURFACE-HUNG ON AN EXPOSED OVERHEAD TRACK.



POCKET SLIDING

- DOOR SLIDES ON AN OVERHEAD TRACK INTO AND OUT OF A RECESS WITH IN THE WIDTH OF A WALL.
- DOORWAY HAS FINISHED APPEARANCE WHEN FULLY OPEN .
- USED OFTEN WHERE A NORMAL DOOR SWING WOULD INTER FACE WITH THE USE OF A SPACE.



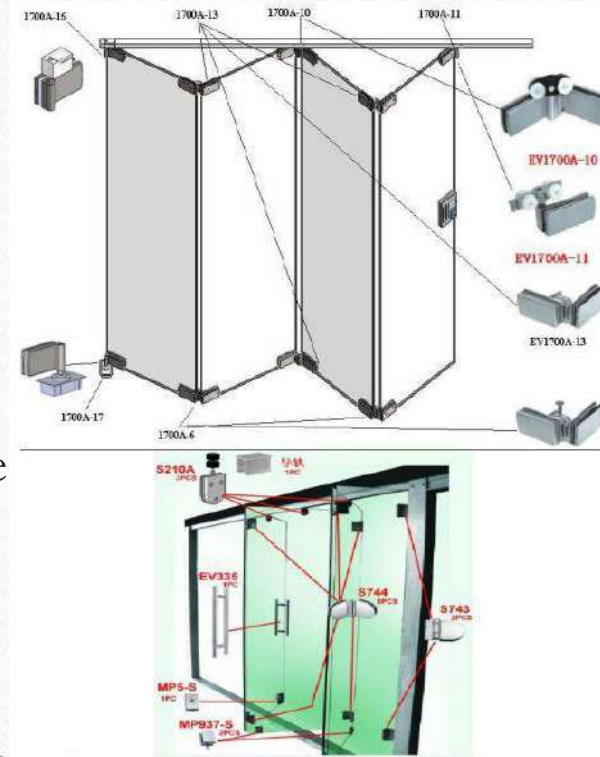
BIFOLD DOOR

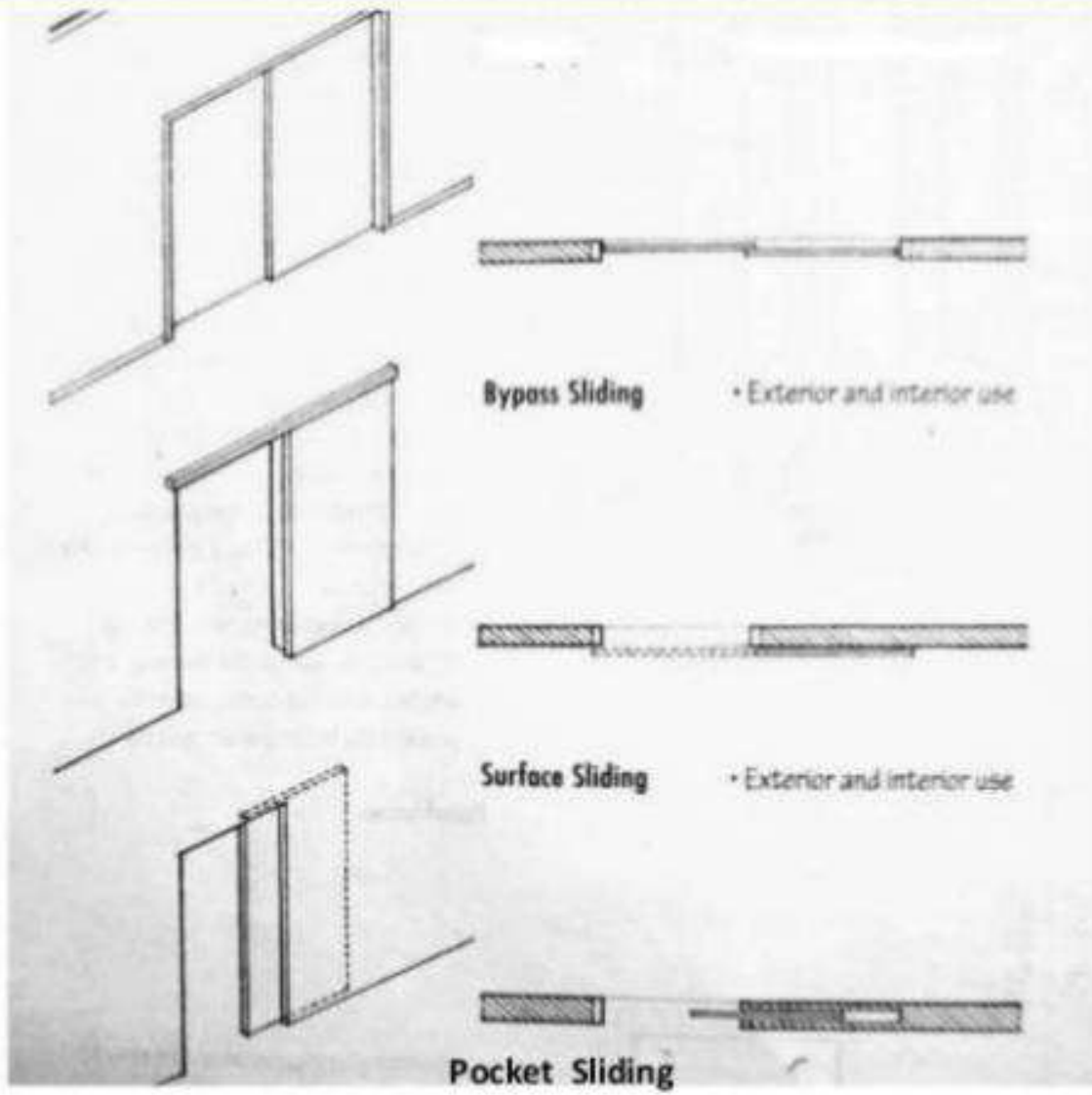
- HINGED DOOR PANELS FOLD FLAT AGAINST ONE ANOTHER WHEN OPENED .
- BIFOLD DOORS DIVIDE INTO TWO PARTS , REQUIRE LITTLE OPERATING SPACE , AND ARE USED PRIMARILY AS A VISUAL SCREEN TO ENCLOSE CLOSET AND STORAGE SPACES.
- ACCORDION DOORS ARE MULTILEAFED DOORS THAT ARE USED PRIMARILY TO SUBDIVIDE INTERIOR SPACES .

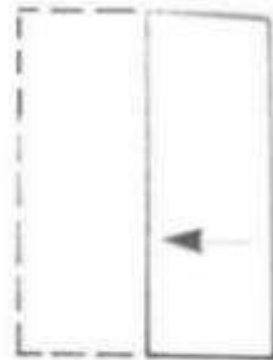
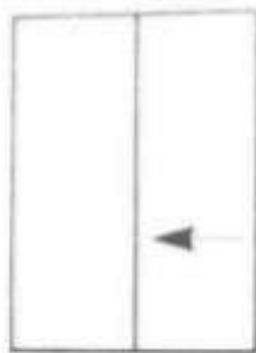
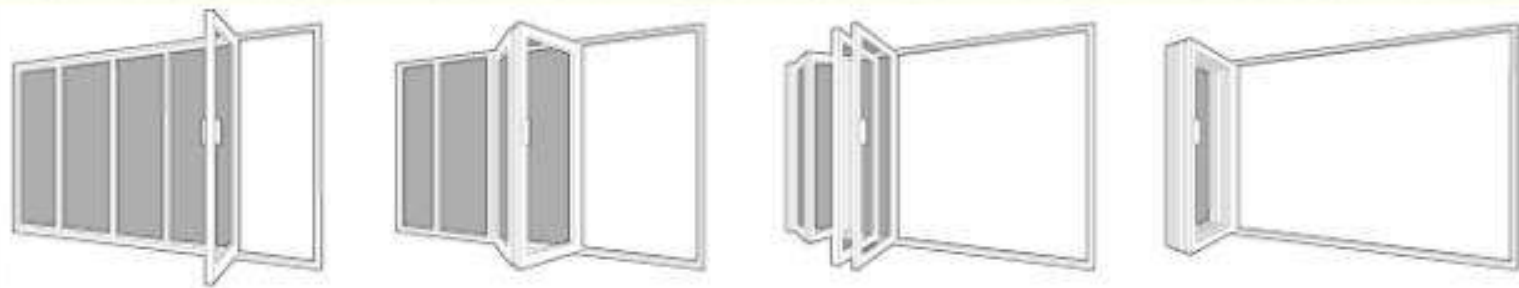


Accordion door:

Accordion doors have resemblance in shape to the musical instrument, these doors are both interesting-looking and practical. Although not as common or as popular as the classical types, accordion doors are sometimes the best option for certain types of settings or decors. They usually go from floor to ceiling and are used as separators between indoor and outdoor spaces, allowing these areas to become one by eliminating the physical barrier with ease. They can also be used indoors in certain spatial configurations.







Bifold

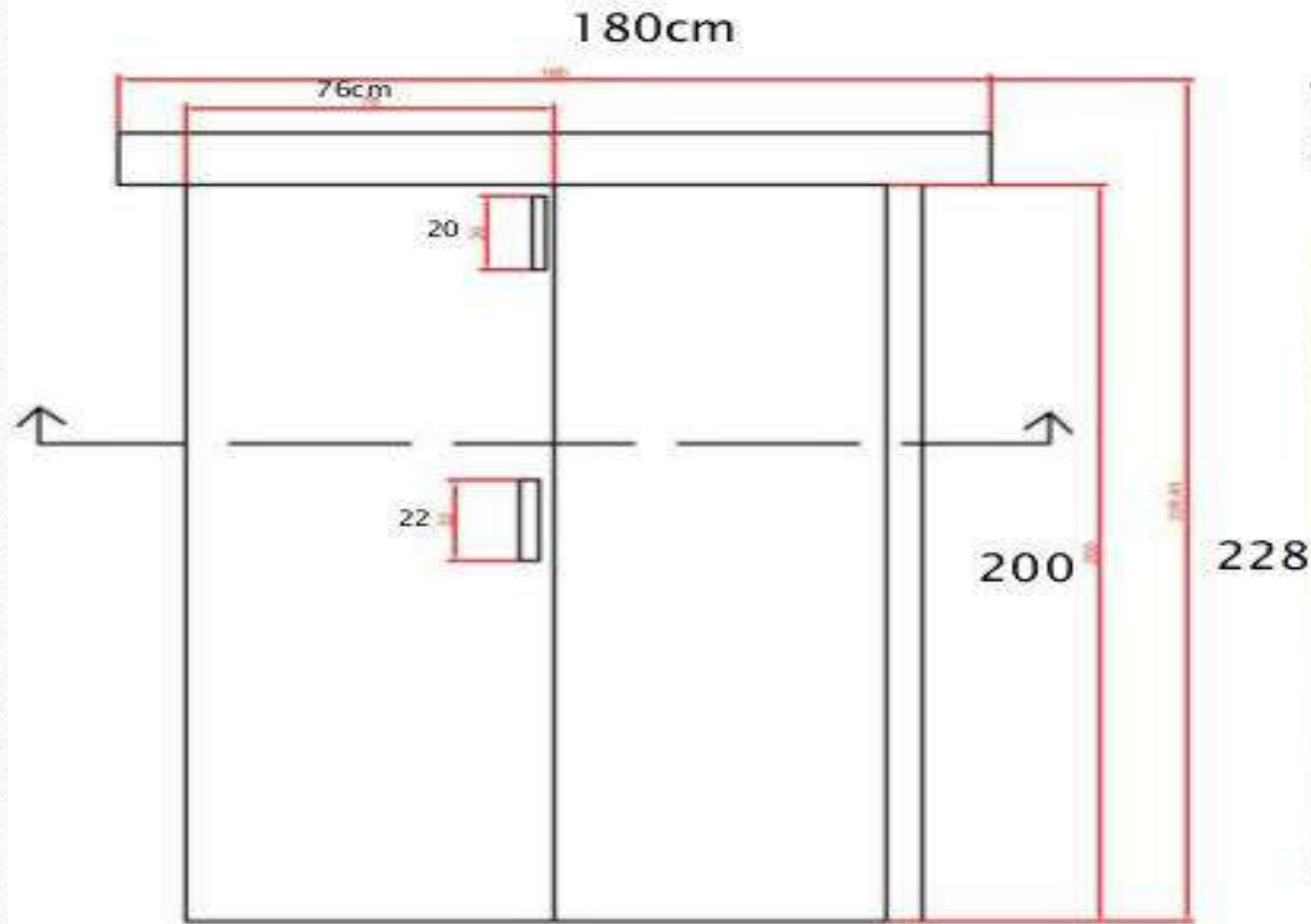


Sliding



Pocket

➤ **CASE STUDY**

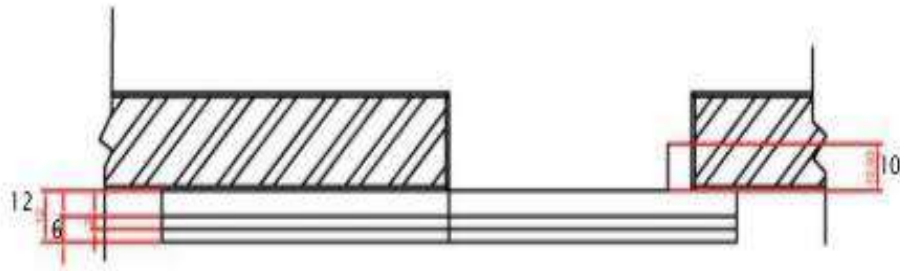


ELEVATION OF
TOP HUNG
SLIDING DOOR AT
ANANTYA



➤ **CASE STUDY**

TOP HUNG
SLIDING DOOR AT
ANANTYA



PLAN

DIMENSIONS IN CM



- SOME PHOTOS OF SLIDING DOOR IN RESEDENTIAL HOUSE



Sliding window

A sliding window is a horizontal window pane with a belt to slide to and fro. Slider window is one of the most popular today and is also known as glider or slider. It is especially similar to a double-sided hung window turned on its side.



WHAT ARE THE TYPES OF SLIDING WINDOWS?

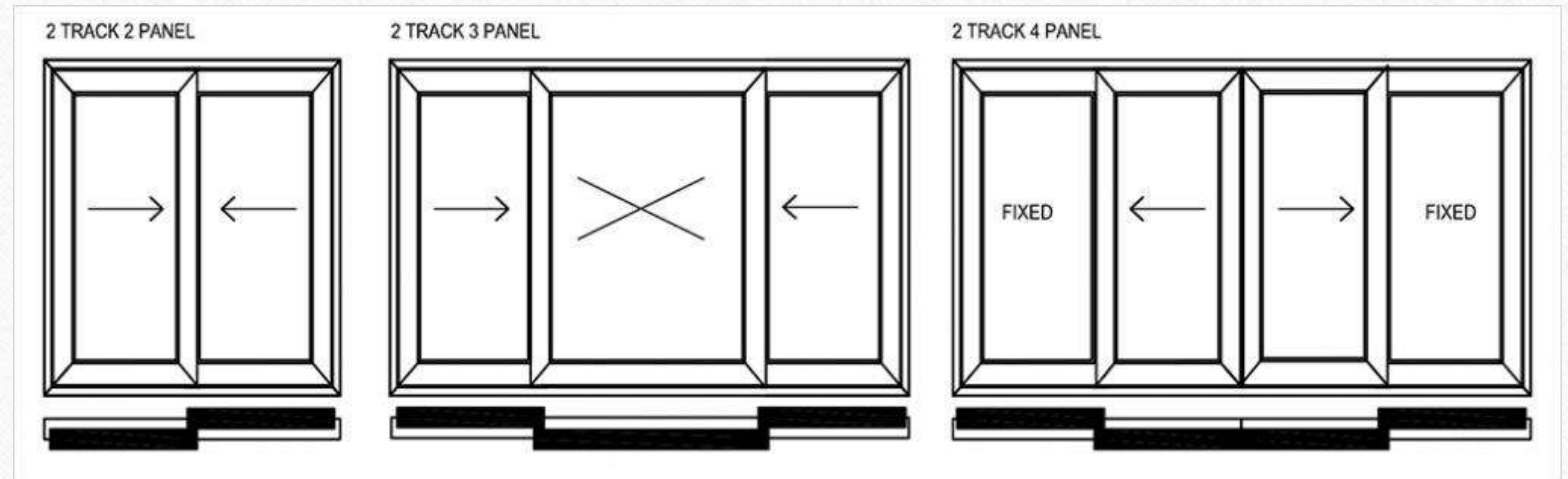
One fixed-one sliding: The most common configuration is to have one fixed pane of glass and one sliding pane. Another is to have one fixed pane of glass in the middle and a sliding pane on one or either side of the fixed pane.

Two sliding: This type has two sliding panes of glass within the one window frame that slide past each other.

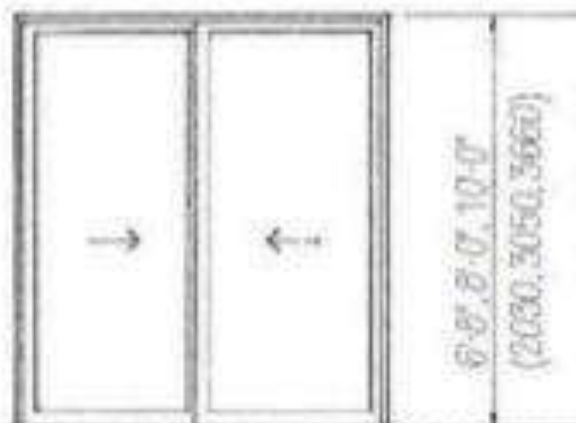
Timber sliding windows: look great and you can showcase the natural beauty of timber.

Aluminium sliding windows: are low maintenance, durable and can be powder coated to any colour.

PVC sliding windows: are incredibly low maintenance, will last for years, are energy efficient and look like painted timber.



2 TRACK 2 PANEL



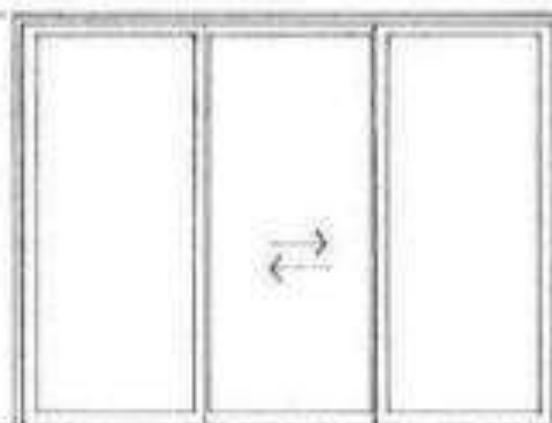
6'-0", 8'-0", 10'-0"
(1830, 3050, 3660)

6'-2", 8'-2", 10'-2"
(1880, 2480, 3100)

6'-0", 8'-0", 10'-0"
(1830, 3050, 3660)

Wood
Aluminum

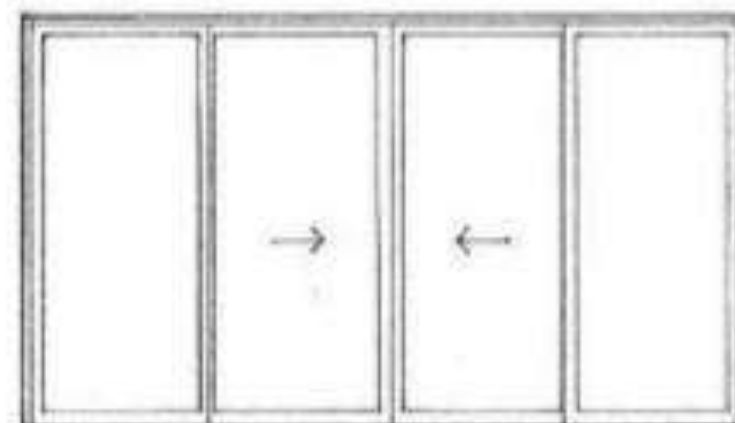
2 TRACK 3 PANEL



9'-5", 12'-5", 15'-5"
(2870, 3785, 4700)

9'-0", 12'-0", 15'-0", 18'-0"
(2745, 3660, 4570, 5485)

2 TRACK 4 PANEL



12'-2", 16'-2", 20'-2"
(3710, 4930, 6145)

12'-0", 16'-0", 20'-0"
(3660, 4875, 6095)



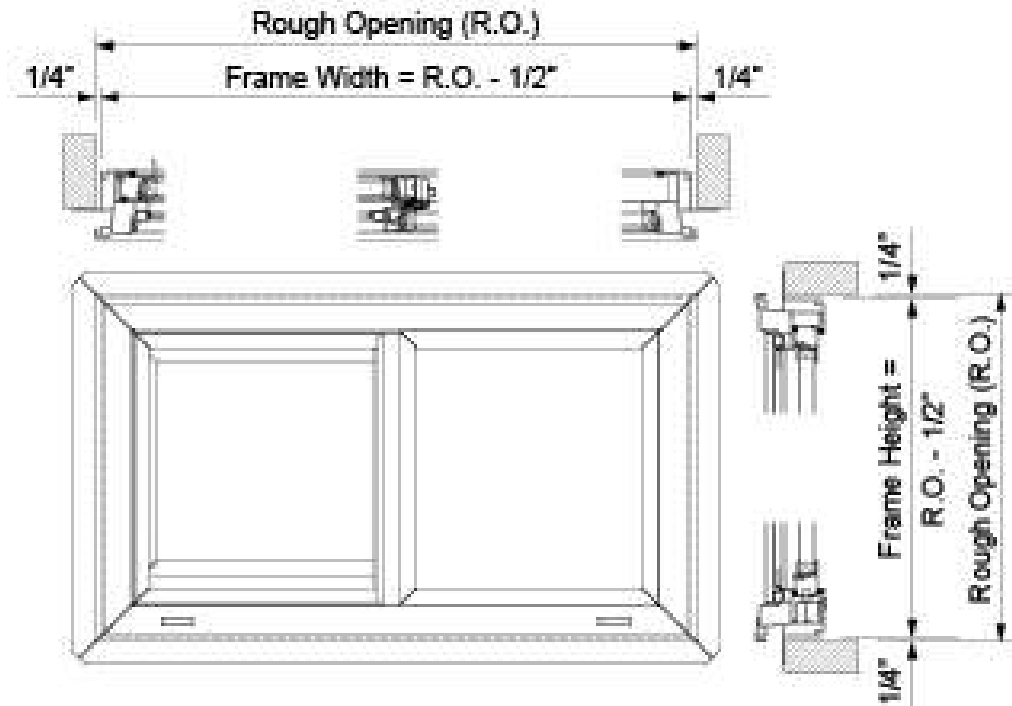
- Dimensions are nominal stock sizes; consult manufacturer for stock sizes, required rough or masonry openings, glazing options, and installation details.
- As a guide, add 1" (25) to nominal width for rough framed openings and 3" (75) for masonry openings.

Opening type:

The sliding window solution represents a version suitable for medium and small sized openings, the majority of which are windows. The hardware used does not provide adequate thermal and acoustic insulation on large openings.

This sliding solution allows for:

both openings can be sliding
upon request, a version with a sliding door and one fixed.



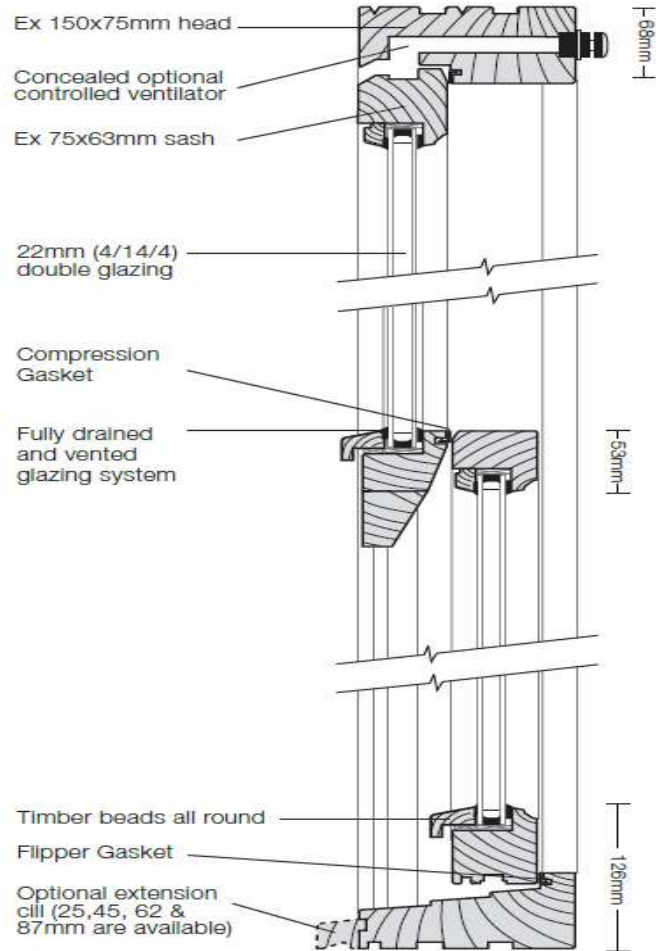
DETAIL 1

VERTICAL WINDOW

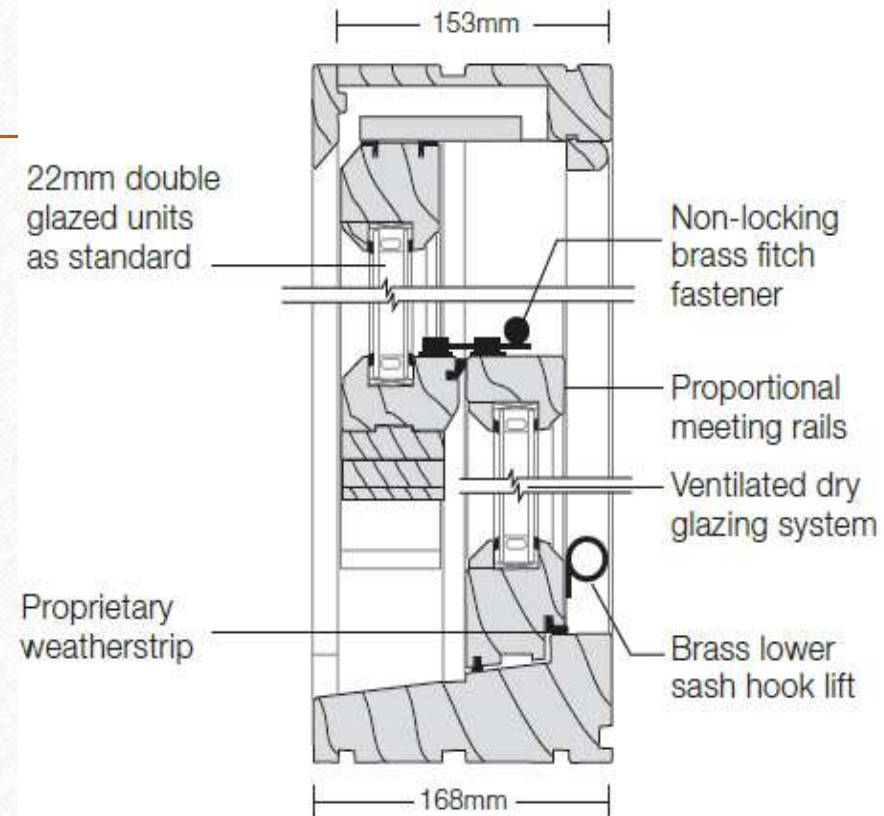
Vertical window options are taller than they are wide. Choose a vertical sliding window with either a double-hung or single-hung window. For a crank operation, casement options are a great choice.



VERTICAL WINDOW DETAILS



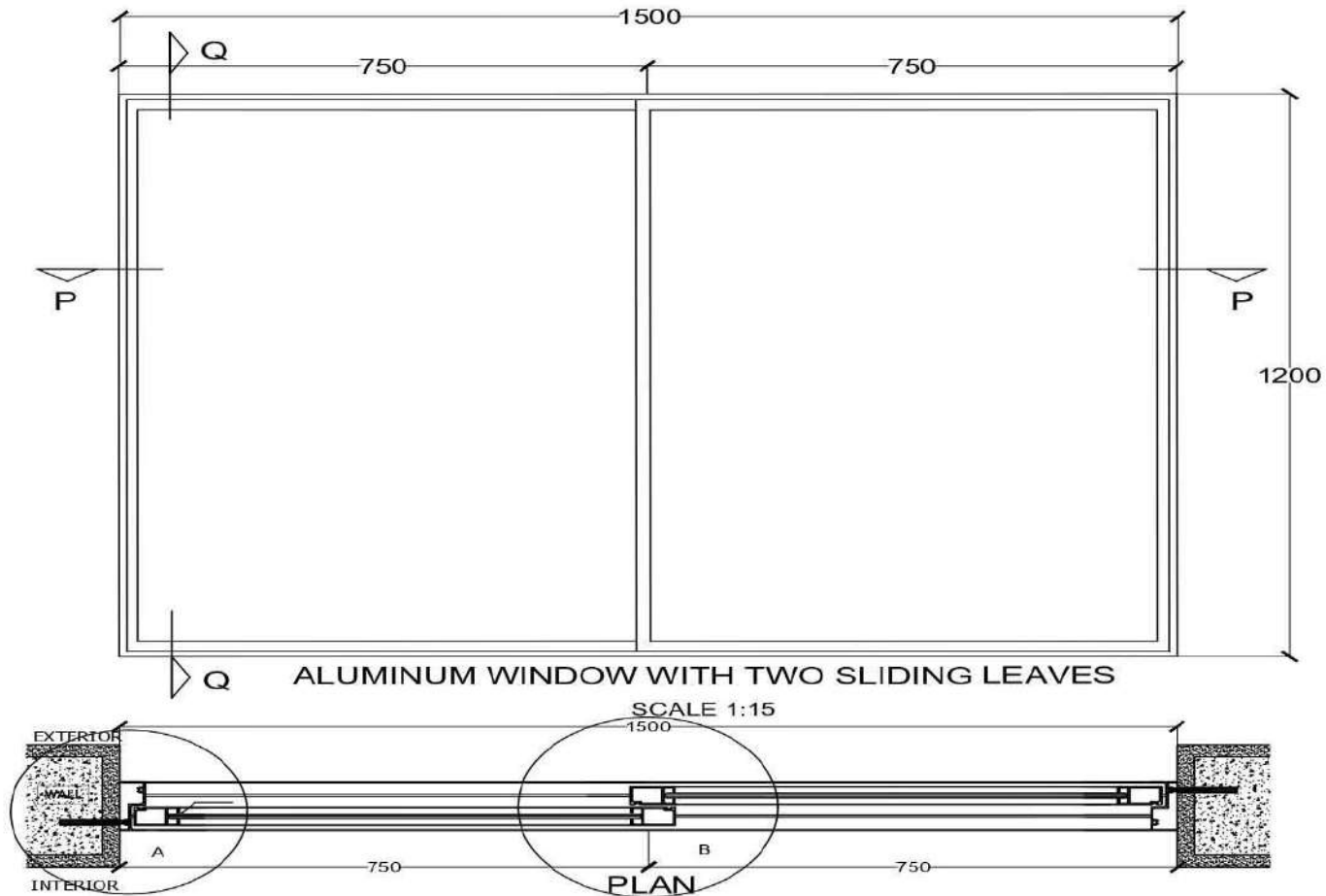
Vertical Section



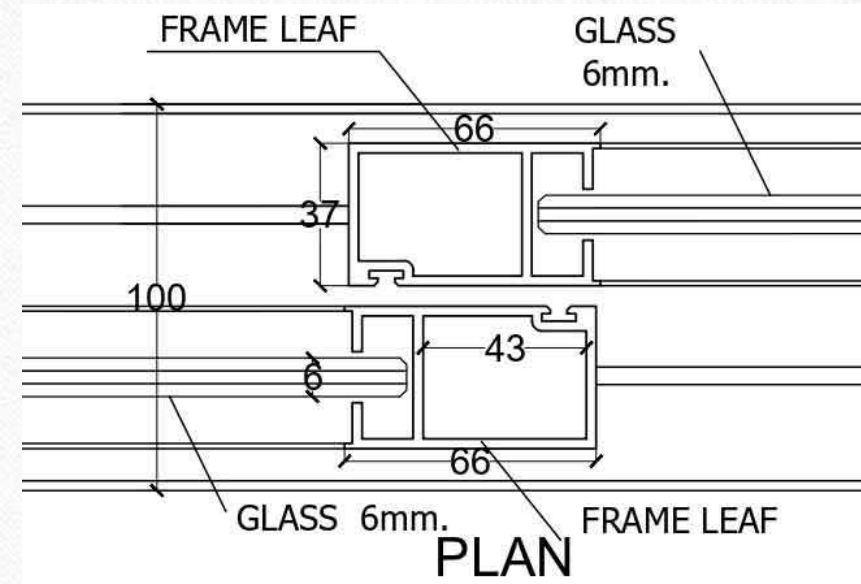
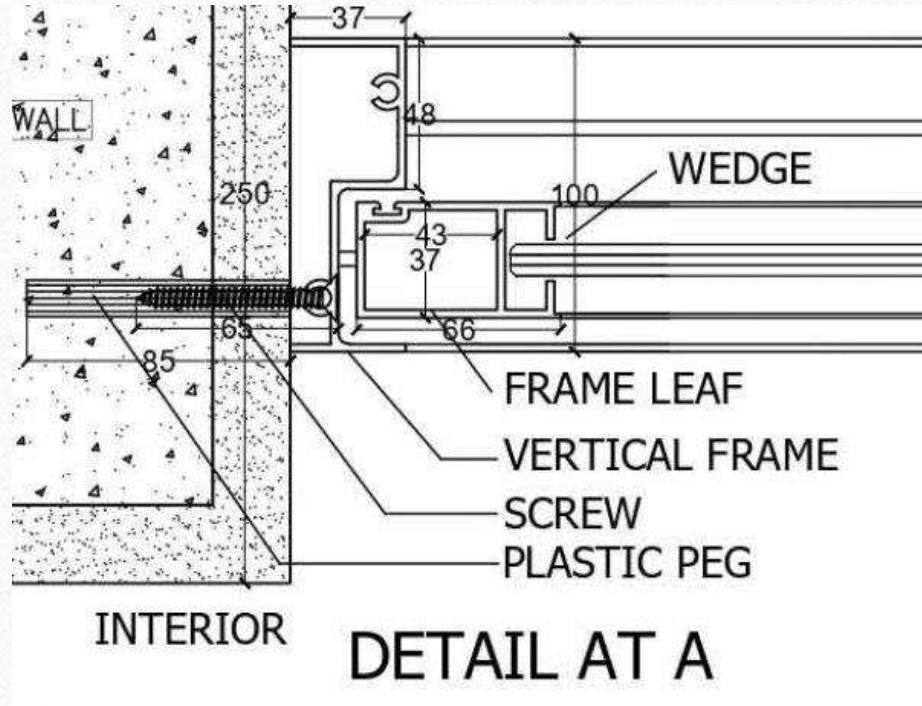
Vertical Section

CASE STUDY:-

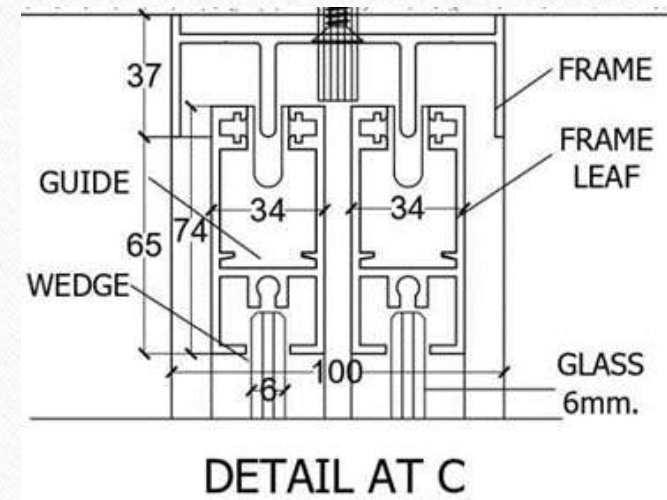
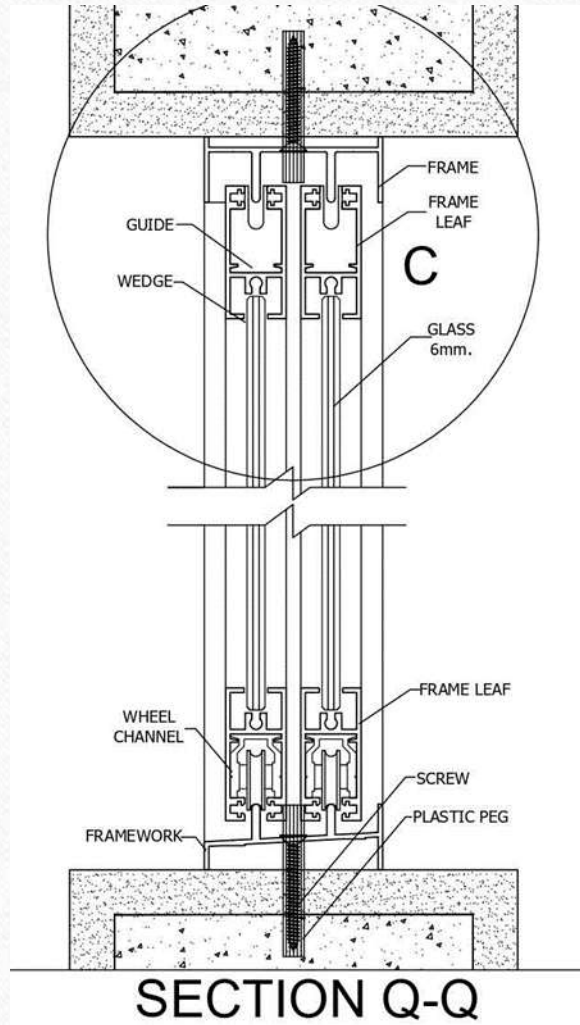
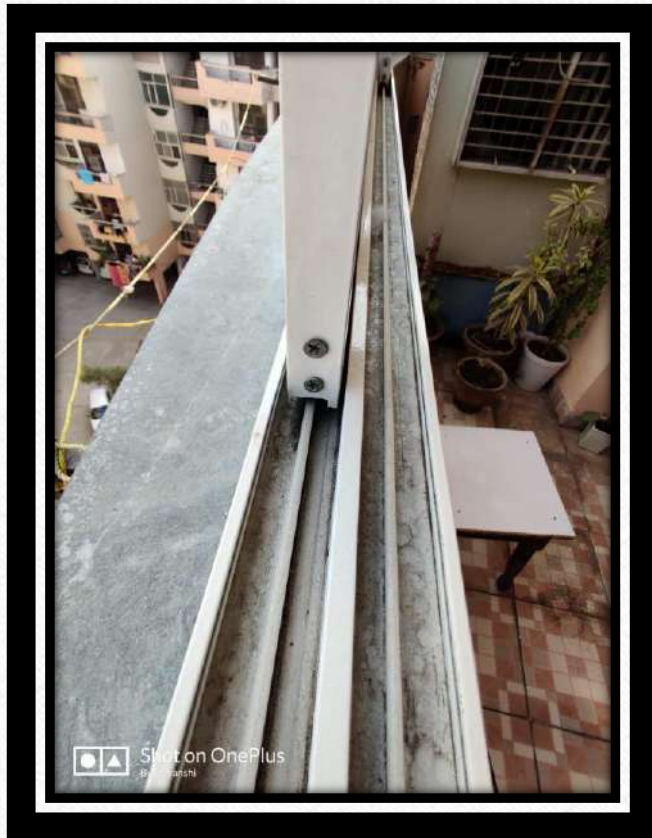
- **Aluminum window with two sliding leaves plan, elevation, sections and fixing details**



➤ **Aluminum window with two sliding leaves plan, elevation, sections and fixing details**



➤ **Aluminum window with two sliding leaves sections and fixing details**



Advantages

Minimal maintenance: Sliding windows have fewer parts than conventional windows, and so are low-maintenance.

Durable: because they do not rely on springs and pulleys which wear or fail over time.

Economical: Sliding windows are more cost effective than other types of windows. They will last for much longer with much less maintenance and so the cost of repairing or replacing your windows is reduced.

Functional: You can easily fit Sliding windows with flyscreens so you can keep the bugs out while still letting the fresh air in.



Energy efficiency: Sliding windows accept a variety of glazing, from the standard single glazing to safety glass and double glazing. **Double glazing** greatly improves the insulation and energy efficiency of the window and reduces the need to use heating or cooling inside your home thereby lowering your energy bills.

Easy to use: Sliding windows are not heavy and require very little effort and dexterity to open and close.

Does not protrude out: Sliding windows do not project outward, so they work well next to walkways and patios.

Escape: Normally, the sliding window opening is big enough for an emergency evacuation.

Disadvantages

Half opening: You can open only one half of the window at a time.

Fitting: Sliding windows fit less hermetically, so they are generally less water and air-tight and their sound and thermal insulation properties are generally poorer than in **casement windows**.

Cleaning: Unlike other types of windows (**double hung sash window**) that can be tilted inside for easy cleaning, it is challenging to clean the outside of Sliding windows, especially during the winter months.



Horizontal vs vertical sliding window

Horizontal:

This window type is the most common, with sashes that can be operated by sliding left or right within a single frame. Both sides can be opened simultaneously, allowing fresh air into your home.

Vertical:

Also known as the double hung window, it is likewise a common choice among homeowners looking for replacement windows. It can still provide increased ventilation for your home; the only difference is that both operable sashes are slid up and down.

Sliding Windows and Their Ideal Fit

The horizontal sliding window is your best choice if you are pursuing a modern look for your home. You can have it installed in your kitchen or bathroom where it can be hard to reach. Your bedroom can have a sliding window like this since it gives you enough ventilation, allowing you to sleep soundly at night. Meanwhile, the vertical sliding window is great for areas of your home like the patio or deck.

