

**ANTARANG**

Interior design and decor

[www.antarang.space](http://www.antarang.space)



# ANTARANG

An innovative interior design and decor

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## INTERIOR DESIGN PROCESSES



- 1) Strategic planning phase
- 2) Conceptual development phase
- 3) Design development phase
- 4) Construction documentation phase
- 5) Construction maintenance & administration phase

## 7 ELEMENTS OF INTERIOR DESIGN



1. **Color:** influences a space's mood and overall ambience
2. **Form:** It's all about balance and natural shapes.
3. **Light:** Creating a balance of natural light and artificial light.
4. **Line:** It brings structure and creates direction.
5. **Pattern:** Patterns add interest and excitement to a room.
6. **Texture:** It creates the sense of feeling after touch.
7. **Space:** It's important to the positive and negative space.





## 7 PRINCIPLES OF INTERIOR DESIGN

1. **Balance:** Involves an understanding of stability, which is either Symmetrical, Asymmetrical or Radial.
2. **Harmony:** A sense of belonging and unity that anchors the interior design and style of a room.
3. **Rhythm:** Use of colours, patterns and textures in repetition or contrast to create visual interest and movement that in turn guides your eyes through the room.
4. **Scale & Proportion:** Compliments or contrasts the size of all objects in the space or even in relation to human scale.
5. **Emphasis:** Creating a focal point in the room that draws attention as soon as you enter it. Either way, emphasis commands attention and spices up a space.
6. **Contrast:** Contrast is the perfect way to add intrigue to a space. It plays to the strengths of pitting together polar opposites to establish its unique power.
7. **Details:** A well designed room without finishing touches will always feel impersonal and incomplete.





## Wall Paneling



| WOODEN                                                                                                                                                                                              | VINEERED                                                                                                                                                                       | MDF PANEL                                                                                                                                                                                                      | LAMINATED                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ₹ 150-250 per sqft.                                                                                                                                                                                 | ₹ 300-400 per sqft.                                                                                                                                                            | ₹ 150-250 per sqft.                                                                                                                                                                                            | ₹ 200-300 per sqft.                                                                                                                                         |
| Wooden panels are one of the popular choices when it comes to wall panelling. The panels can impart a feel ranging from classical to rustic, elegant to ripped depending on the taste of the users. | Veneers can be used to create an elegant focal point in space. The choices today are immense when it comes to colour, finish, textures and prints when it comes to aesthetics. | MDF material gives a lot of flexibility to explore decorative techniques such as cutting, embossing, engraving, etc. This is a very versatile material and can match any theme or achieve any look you desire. | Laminates panel gives an ideal choice for giving a chic vibe, traditional look, or added elegance to your home. laminates give rooms a more upscale appeal. |

## Wall Paneling



| CHARCOAL                                                                                                                                                                                                               | LEATHER TILES                                                                                                                                                                                                                                            | UPHOLSTERED                                                                                                                                             | NATURAL STONE                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ₹ 250-350 per sqft.                                                                                                                                                                                                    | ₹ 350-450 per sqft.                                                                                                                                                                                                                                      | ₹ 150-250 per sqft.                                                                                                                                     | ₹ 200-300 per sqft.                                                                                                                                                                                                                 |
| A charcoal sheet wall is a way to add natural style and texture into your space. These sheets provide an earthy feel as well as being durable and easy-to-install, making them perfect for any room with high traffic! | Leather boards with elegant texture and grains. Their range of patterns and finishes can beautify walls, ceilings and furniture. They complement Luxe Tiles beautifully by providing a neat panelling around the tiles, in the same faux leather finish. | Our upholstered wall panels add a surprising touch of charm and texture. Leather used vertically creates interest, depth, and a unique warmth anywhere. | Natural stone wall panel tiles are used extravagantly for interior and exterior stone wall applications. The lavish colors and patterns with elegant interlocks or straight cuts make these an ideal choice for indoor décor ideas. |

## Wall Paneling



| METALIC                                                                                                                                                                                                                         | 3D-TILES                                                                                                                                                                                                | GLASS                                                                                                                                                                                                        | GRASS                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ₹ 350-450 per sqft.                                                                                                                                                                                                             | ₹ 250-350 per sqft.                                                                                                                                                                                     | ₹ 300-400 per sqft.                                                                                                                                                                                          | ₹ 200-300 per sqft.                                                                                                                                                                                  |
| Metal wall panels take the visual appearance of traditional paint to a new level by offering a unique look that is both cost-efficient and eco-friendly. These metal panels can lend an aesthetic touch to your home interiors. | The innovative 3D WALL Panel System collection is a modular system in its own unique shapes and designs. 3d Wall decorative panels create a new level of wall decoration in the modern interior design. | Glass wall panels enhance the visual flow of a house while still creating separations and also award household members privacy . These structures can completely transform a space that earlier looked boxy. | Artificial grass walls not only create a lush environment but also offer a peaceful and lush place for you and your loved ones. It brings a unique design to your gardens with its aesthetic design. |

## Wall Paneling



| PVC                                                                                                                                                                                                                     | WPC-Louver                                                                                                                                                                                                                                                  | OSB                                                                                                                                                                              | UV-Marble                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ₹ 200-300 per sqft.                                                                                                                                                                                                     | ₹ 250-350 per sqft.                                                                                                                                                                                                                                         | ₹ 150-250 per sqft.                                                                                                                                                              | ₹ 200-300 per sqft.                                                                                                                                                                             |
| PVC wall panel design has gained popularity over the last few years as it offers luxuriousness and elegance to your rooms. You just have to ensure these wall coverings blend perfectly with the ambience of your room. | A remarkable combination of nature and technology, that offers a highly Superior, Resilient & Cost Effective alternate to real wood Paneling. It is pre finished, ready to Install, completely Water & Termite Proof and durable enough to last a lifetime. | OSB panels as visible design features in modern residential interiors, giving the widely-used engineered board a new meaning. OSB panels as a beautiful design feature in homes. | UV marble Sheets One of the best Renovation Product till yet which looks Like a Italian Marble. Marble polypropylene is a popular material because it is low in maintenance, and easy to clean. |



### GYPSUM

Gypsum false ceiling is a hydrated sulfate of calcium. This type of false ceiling are lightweight, sound insulated, fire resistance, soft and thermally insulated.

@ ₹ 70-130 PER SQFT.



### POP

POP comes as a fine white powder, which hardens when moistened and allowed to dry. They are easy to style into elaborate designs and are popular for ornate false ceilings.

@ ₹ 100-150 PER SQFT.



### WOODEN

A wooden false ceiling is an excellent option for any project that requires a ceiling. It is a great way to add some warmth and style to your space.

@ ₹ 250-750 PER SQFT.



### FABRIC

Fabric false ceiling is one of the newest inventions in the world of home interiors. These ceilings generally use cloth or leather, molded into multiple shapes and designed without any complexity.

@ ₹ 120-200 PER SQFT.



### FIBER

Fiber ceiling tiles are made from natural or synthetic minerals. Mineral tiles made of ceramics are used in a drop ceiling, strengthened with natural stone, wood.

@ ₹ 80-150 PER SQFT.



### WPC

WPC is one of the best types of false ceilings for any home, office, or hotels. WPC false ceiling is easy to clean and conceals the lights, making the rooms appear brighter and more alive.

@ ₹ 125-175 PER SQFT.



### METAL

Metal is a durable home-decor material. Its lustre adds beauty and a sophisticated appeal to the interiors. Metal is a durable home décor option.

@ ₹ 200-400 PER SQFT.



### OSB

OSB or Oriented Strand Board is a type of manufactured plywood. Instead of being one solid piece, it uses small pieces of wood that are aligned to run in different directions.

@ ₹ 90-130 PER SQFT.



### GLASS

Glass is a non-crystalline, brittle, and transparent material. Because of its transparency, it makes a living or working space look bigger and grand.

@ ₹ 400-600 PER SQFT.



### PVC

PVC false ceiling designs offer a great deal of versatility and flexibility in terms of sheets and panels, and cost among several other benefits.

@ ₹ 120-200 PER SQFT.

- WOODEN



Highly durable, Long Lasting, Unique in Appearance.

₹ 80-200 per SQFT.

- VITRIFIED



Bright, Cost Effective, Stain resistant & Glossy and Non-porous.

₹ 75-150 per SQFT.

- MARBLE



Natural Elegance, Allergen-resistant, Joints Are Easy To Match.

₹ 100-300 per SQFT.

- GRANITE



Durable, It's Resistant to Staining, Strong & Non Porous.

₹ 150-450 per SQFT.

- VINYL



Appearance, Water Resistant, Easy To Install & Maintain.

₹ 80-200 per SQFT.

- 3D EPOXY



Long lasting, Robust, Hygienic, Breath taking Effect.

₹ 350-500 per SQFT.

- LINOLEUM



Durable and Versatile, Affordable & Very low cost maintenance.

₹ 60-180 per SQFT.

- TERAZZO



Environment friendly, Longevity & Design capabilities.

₹ 75-250 per SQFT.

- RED OXIDE



Cooling factor, Eco – friendly & Traditional aesthetic.

₹ 75-200 per SQFT.

- BAMBOO



Refinishing potential, Durability, DIY-Friendly & Pest resistant.

₹ 125-500 per SQFT.



# WARDROBE

SPACE & STYLE

## Types of Wardrobe by door mechanism



### Hinge Door Wardrobe:

Also known as the standing wardrobe and swing door wardrobe, hinge door closets are the most common and traditional. Plain in appearance and opens with a hinged door, this type of closet comes in a variety of colors in several textures and finishes.

It is suitable and affordable for both large and small areas, and can be installed in any exposed shell space. It is easy to install and simple to move around without any difficulty.

### Sliding Wardrobe:

A modern take on conventional and classic hinge door closets, sliding door wardrobe has emerged as a non-fussy style with a contemporary appeal. As per the convenience, these closets can be designed with two or more doors that slide smoothly on a metal track.

This kind of closet can save precious space in bedroom and one can also customize an overhanging loft to stash your bedding and suitcases. This wardrobe style will give your home an urban look and a cool factor.



## Types of Wardrobe by Space utilization



### Wall-Mounted Wardrobe:

This is a modern kind of wardrobe design is mounted to the wall and occupies much less space than its counterparts and looks elegant as well. It offers homeowners what they most crave for, which is extra storage for your clothing and shoes without comprising on space.

They not only maximize your storage, but make your room seem more light and airy. There is a wide variety of colors, finishes, and materials that can complement your current décor while helping with organizational skills.

### L-Shape/Corner Wardrobe:

L-shaped wardrobe, also known as corner wardrobe, is the perfect solution to maximize utilization of a bedroom corner. This design type uses the corners of the room that are usually unemployed and saves precious space.

The sliding doors are most preferred for the fitted L-shaped wardrobe as they provide great style as well as storage solutions, making it a prevalent choice.



## Types of Wardrobe by ease of approach



### Reach-in Wardrobe:

Reach-in closet, one can reach into but not walk into, is the most common kind of closet. It's typically equipped with a hanging rod or two and a shelf above them. A reach-in closet can be transformed into being super functional with the addition of built-ins, and it can still effectively store your entire wardrobe. A new reach-in closet can also be built on any open wall. Reach-in wardrobe designs can accommodate a variety of customisable fixtures, including an overhanging loft to stow away luggage or lesser used items.

### Walk-in Wardrobe:

Walk-in-wardrobe is the epitome of luxury with huge storage space for clothes and a wide variety of accessories. A typical walk-in-closet has hanging and extra storage space on three sides.

These closets offer an incredibly well-organized storage option for everything from your shoes to jewelry to clothes and everything else in between. It is an ideal choice for people with a fashion flair who enjoy collecting extravagant and luxurious items.



## Types of Wardrobe by customisation



### Modular Wardrobe:

Modular closets are designed to cater to your needs and optimize the available space smartly. Every aspect of modular wardrobe, including the layout of shelving, drawers, and hanging rails, can often be customized to suit the individual.

It has become a trendy, long-lasting, and space-savvy storage option for modern homes. It brilliantly suits small apartments where every inch of space is essential.

### Concealed Wardrobe:

This concealed wardrobe is a super space saver as it is built into the wall and remains hidden as a part of the TV showcase when its doors are closed. The colour of the wardrobe also blends well with the light grey walls of the room, resulting in a soft look and feel for the bedroom. The wardrobe doors are hinged and swing open at a 90-degree angle, making it easy for you to gain a full view of the wardrobe's interiors and spot personal items conveniently.



## Types of Wardrobe by portability



### Freestanding or Stand-alone Wardrobe:

The freestanding wardrobe is one of the most basic types and have been around for a long time. They are available in wood, metal and plastic models. If you are looking for something retro-inspired, a wood or metal freestanding wardrobe is the right pick.

Also known as standalone wardrobe, they are traditional, inexpensive and classic. It is a perfect choice for those who often change their home layout or shift frequently due to work or travel life.

### Built-in or fitted Wardrobe:

They cannot be moved once installed but are the best option if you want something with lots of storage and adjustability. Offering optimal storage for your clothes, shoes, and accessories, they take up less room than their standalone counterparts, allowing you to make the most of every available square inch.

Because they are custom built, you can also select any combination of drawers, shelves, hanging rails, and specialized accessory compartments to suit your needs.



## Wardrobe Carcass Materials

### Solidwood

It does require timely polishing, expensive than other options, but worthy because of warm touch to the room and extreme durability.



### Plywood

It is manufactured by pasting several layers of veneered wood pressed together with resins



### Fiberwood

A synthetic building material made by breaking down softwood and hardwood into wood fibers. Both HDF and MDF get engineered wood fibers combined with glue. But HDF has a higher density than MDF. Chipboard or Particle Board or LDF constitutes pressing together of small wood particles with epoxy resin.



HDF



MDF



LDF

### HDHMR

Made by mixing and pressing fibre chips and forest wood waste. HDHMR boards are fairly waterproof.



## Wardrobe Finish Materials

### Laminates

Most Popular  
More Colour  
Cost-effective



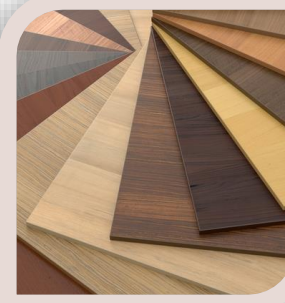
### Acrylic

Glossy & Opulent  
More Expensive  
High maintenance



### Membrane (PVC)

Luxury Finish  
More Durable  
Wide Variety



### Thermofoil

Attractive Appearance  
Fade & Warp Resistant  
Heat & Moisture Issue



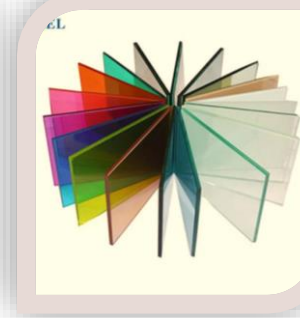
### Veneer

Natural Look  
Easy to Maintain  
Less Durable



### Glass

Luxurious Look  
Elegant And Shiny  
Ecologic & Hygienic



### Metal & Leather

uncommon finish  
Expensive Material  
Difficult to maintain





## WARDROBE PRICING

| Carcass    | Finish/Polish    | Accessories         | Rate per sqft. |
|------------|------------------|---------------------|----------------|
| Plywood    | Laminates        | Hafele/Hettich/Ebco | ₹ 1500         |
| Fiberwood  | Laminates        | Hafele/Hettich/Ebco | ₹ 1600         |
| Plywood    | Acrylic          | Hafele/Hettich/Ebco | ₹ 1750         |
| Fiberwood  | Acrylic          | Hafele/Hettich/Ebco | ₹ 1850         |
| Plywood    | Veneer           | Hafele/Hettich/Ebco | ₹ 1900         |
| Fiberwood  | Veneer           | Hafele/Hettich/Ebco | ₹ 1950         |
| Plywood    | Lacquer Glass    | Hafele/Hettich/Ebco | ₹ 2300         |
| Fiberwood  | Lacquer Glass    | Hafele/Hettich/Ebco | ₹ 2350         |
| Solid wood | PU-Polish        | Hafele/Hettich/Ebco | ₹ 2100         |
| Solid wood | Polyester-Polish | Hafele/Hettich/Ebco | ₹ 2300         |





# DOORS & WINDOWS

Indoor and Outdoor

# Doors



## Wooden Door

An affordable wood door design might use pine, douglas fir, cypress, mango wood, babool, knotty alder and poplar, while higher-end doors might feature premium woods such as oak, ash, cherry, walnut, redwood, rosewood, Sal wood, cedar wood, teak wood, satin wood, jack wood, mahogany, deodar and hickory.



## Steel Door

Steel door is a cost-effective and long-lasting alternative of wooden doors for both exterior and interior doors. **Galvanized steel** is typically used for entry doors. While **stainless steel** is more robust. Other types of steel doors are Mild Steel sheet doors, Rolling Steel shutter doors, Corrugated Steel sheet doors and Collapsible steel doors.



## Fiberglass/GRP Door

Fiberglass doors are made using three components namely the frame, core, and skin. The frame consists of any high-strength material such as wood or steel. The core comprises polyurethane with glass fibers for insulation against weather and sound. The skin/surface of the door is visible and it is covered with artificially induced grains to mimic the wood.

# Doors



## Glass Door

Glass doors are typically made with opaque or semi-opaque glass, which allows for privacy but also allows light to pass through. The glass doors are rated on a privacy scale: Level 1 doors are clear glass, offers no privacy; level 10 doors are highly private, with opaque glass. Cut glass panels set into wooden edges are an incessant and wonderful alternative for front doors.



## Aluminium Door

Aluminum doors are becoming a staple in modern-looking homes, creating an aesthetic impact in any room, from the front door to the bedroom and beyond. They can be placed in different settings to be either hinged or sliding doors. It's more ductile than steel, comparably lighter and more affordable. Since aluminum resists corrosion better than steel, it requires less maintenance.



## Iron Door

Several different types of iron are used to make various products and materials, such as wrought iron entry doors, iron gates, iron railings, and so on. Depending on how blacksmiths work the raw iron, it can change its properties to make various types of iron, such as- cast iron (white iron, gray iron and ductile iron), wrought iron, malleable iron.

# Doors



## MDF Door

These hollow-core doors are one of the most common types of interior doors for homes. They are used to create privacy for bedrooms and bathrooms, and as entryways to closets. They are lightweight, paintable, and available in a variety of styles to suit different looks. MDF Doors can be either painted or laminated.



## PVC Door

PVC is a typical term for Poly Vinyl Chloride. It is essentially a plastic material generally utilized for making different items including water tanks, funnels, and fittings for houses. The merits of utilizing PVC doors are that they are termite confirmation, solid, hostile to destructive, lightweight, dampness safe and so forth.



## FRP Door

Fiber Reinforced Plastics famously known as FRP is a general term relating with the fortification of plastic with fibrous glass. Because of its high quality it can be put to numerous utilizations including manufacturing of doors. Normally, the elasticity is around ten times that of PVC.

# Doors



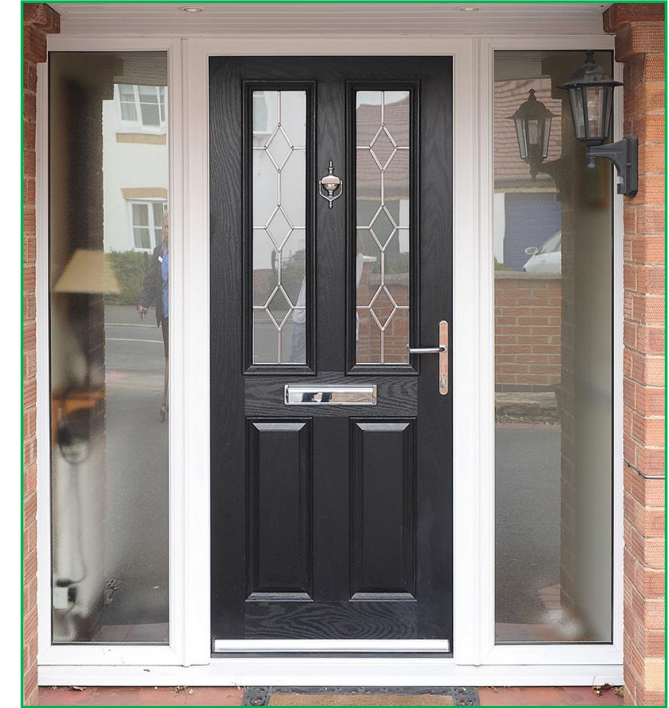
## Particleboard Door

Particleboard wood door cores are made of ground up raw wood that is glued together to form the core. Particleboard is very durable and will meet most, if not all, of the requirements for door performance on many commercial projects. Low cost and availability are major benefits of using particleboard cores.



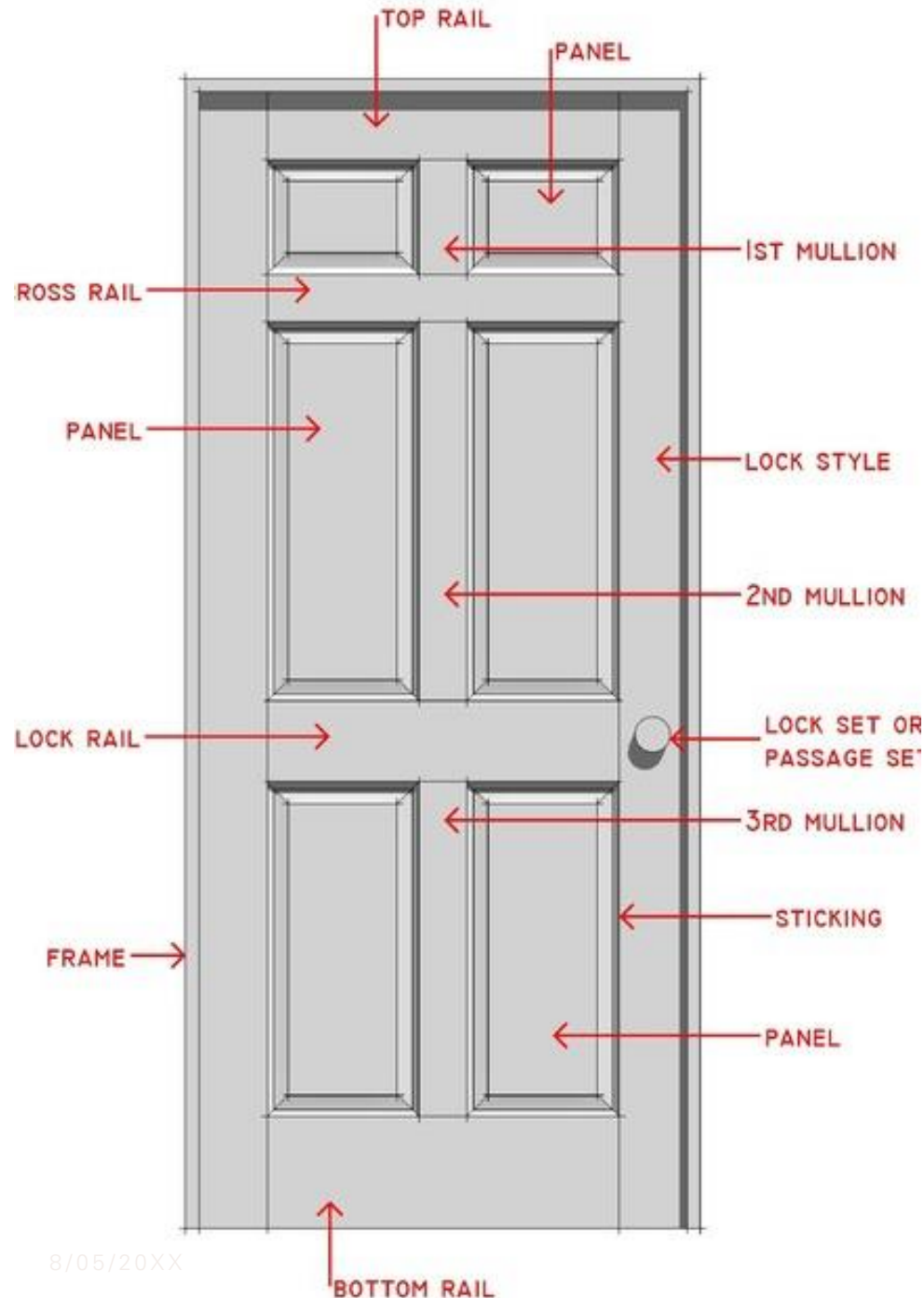
## uPVC Door

UPVC doors are made of synthetic unplasticized Poly Vinyl Chloride. It is very rigid and durable against weather and temperature when compared to other materials. UPVC is an excellent material for exteriors of all kinds since it offers strong insulation and can withstand extremely high temperatures without cracking.



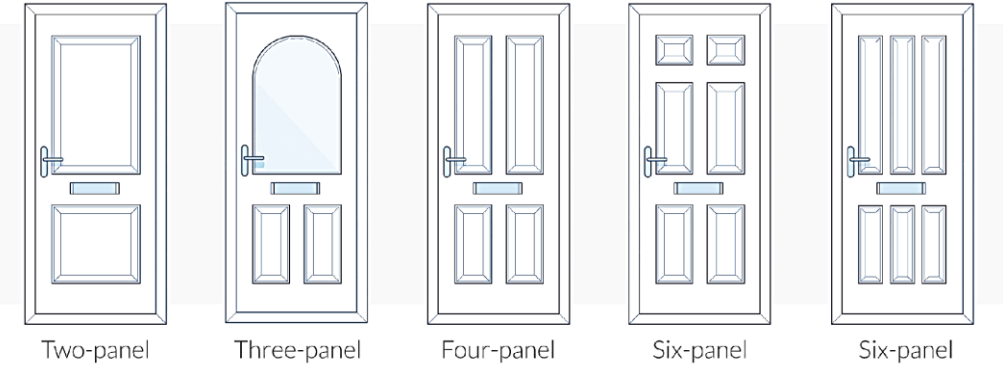
## Composite Door

This type of door can be made of several different materials, including wood, foam, PVC, and glass. Composite doors look like wood but require very little maintenance, won't warp, are very well insulated, and offer some of the best security of any door material. These qualities also make them very expensive.



8/05/20XX

## Panel door configuration examples



## Panel Door

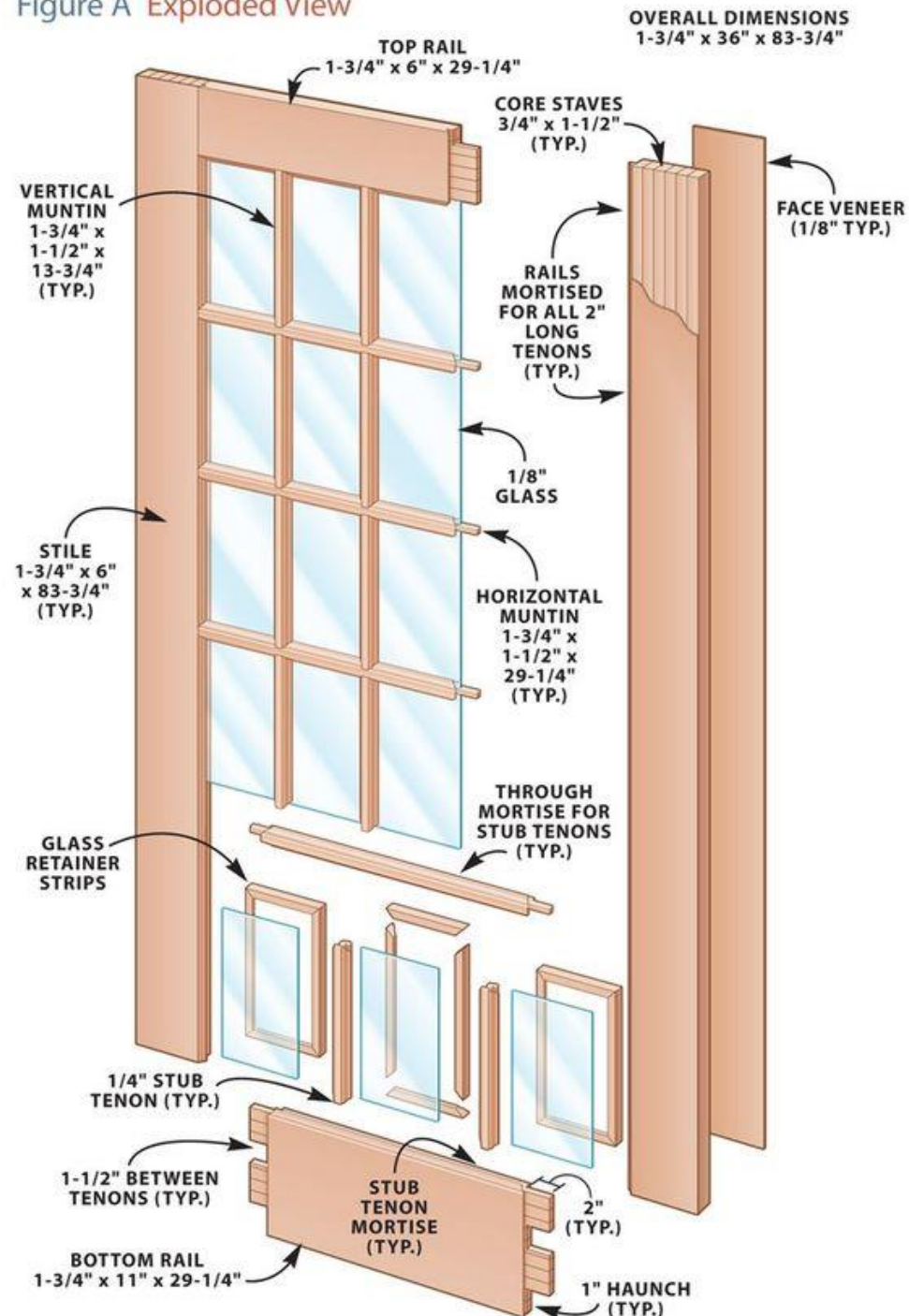
Panel doors are like the casement windows of doors. Versatile and the most popular and common type of door style in the UK for exterior and interior doors.

Panel doors offer a traditional styling, but can be contemporary in the right finish and colour and will suit all house types. It features moulded panels in different variations & configurations:

A panel door is constructed of three basic pieces: **Stiles**, **rails** and **panels**. The left and right vertical elements are called stiles. The stile with the hinges is called the hinge stile, while the stile with the doorknob is called the lock stile. The horizontal elements are called rails. These rails butt into and connect to the stiles. At the top and bottom are, naturally enough, the top rail and bottom rail.

Panel doors are mostly made of timber and surface finished with varnish to add beauty to the natural wood.

Figure A Exploded View



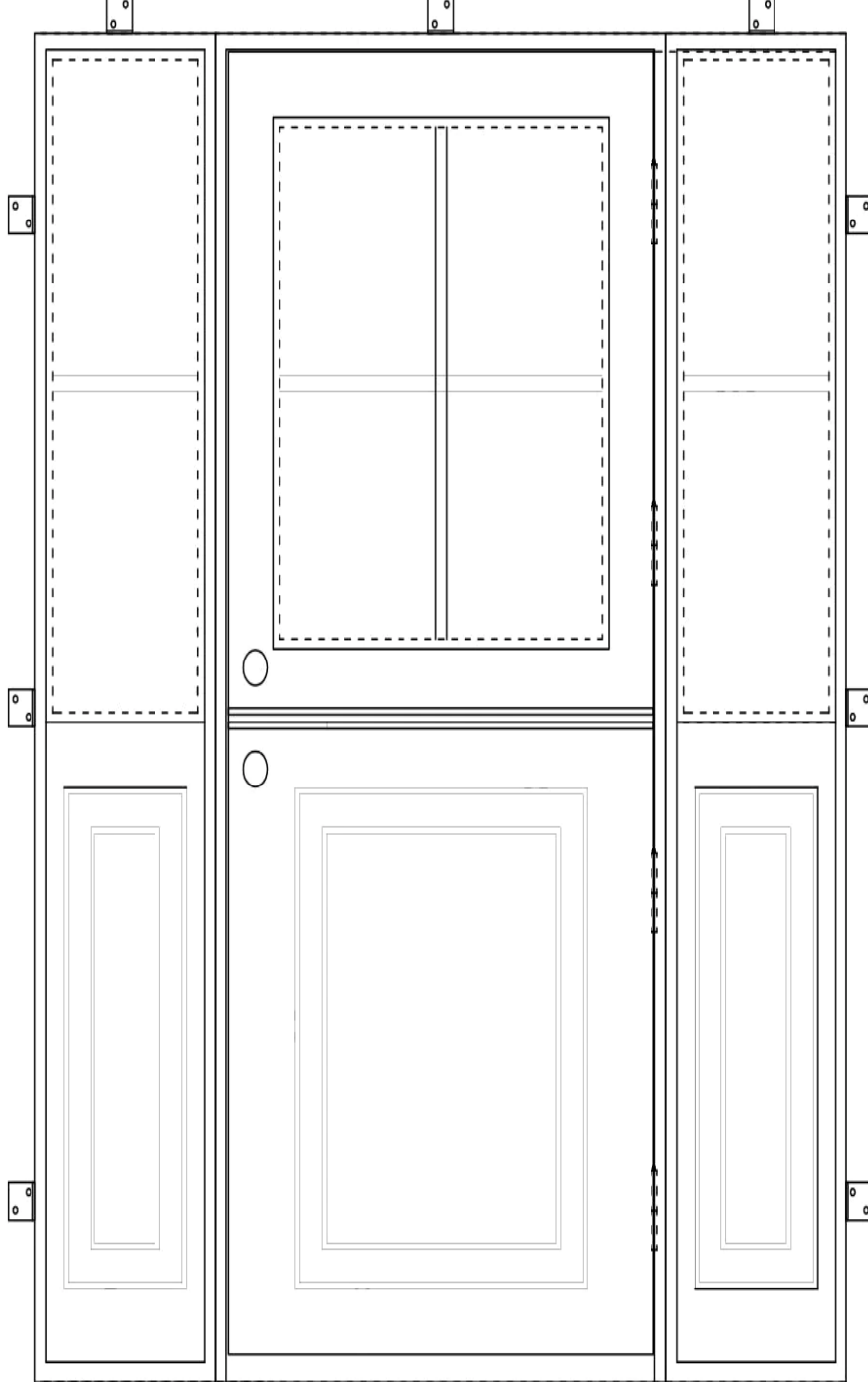
## French Door

Highly decorative, French, or casement, interior doors with glass panels usually come in pairs, with each door featuring a frame around one or more window panels. They're double doors that are mainly composed of glass panes. The two doors open inward and can open together or independently. French doors typically are installed to introduce formal living areas, close off an office area, or provide access to outdoor living areas.

Followings are the types of French Doors according to their Function.

1. Sliding French Door (single sliding, telescopic sliding)
2. Bifold French Door
3. In & out swing Doors (single & double)

A French door can be made of wood, glass, metal, aluminium, composite, UPVC and RPVC. French doors made of fiberglass exteriors and wood interiors are a great option if one wants to benefit from both the protective advantages of fiberglass and the luxurious feel of real wood.



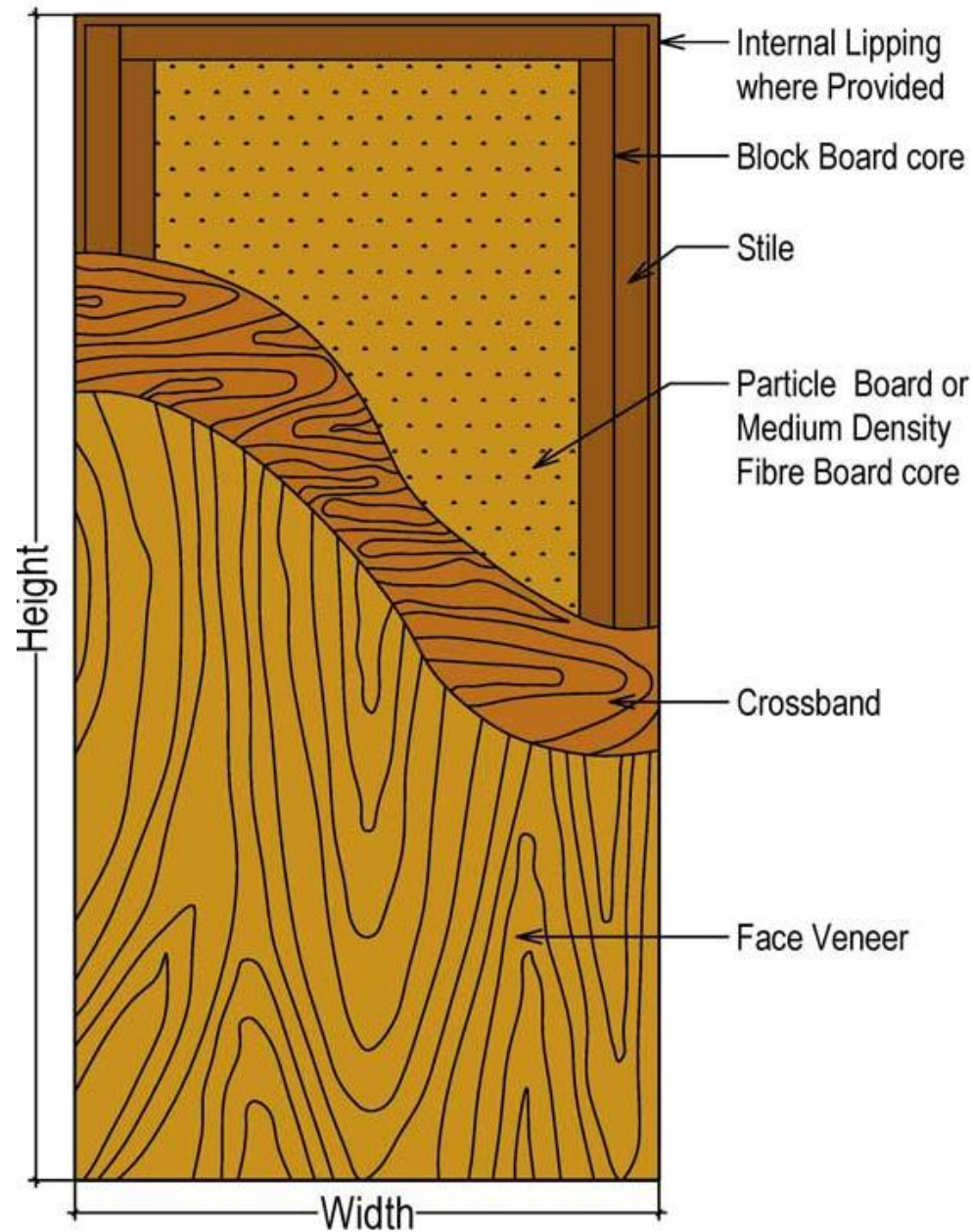
## Dutch Door

A stable door, also known as a Dutch door in the US, or a half door is a door split into two parts. The full door can be opened, or the top or bottom half can be opened independently. Dutch doors are ideal for a kitchen to let air in, or as the door to the patio for letting pets or kids out.

The stable door is a centuries-old style that is found in rural properties and especially cottages. The door could be opened at the top to allow ventilation of the house whilst keeping animals out or children in. It would also stop dirt from blowing into the kitchen from a farmyard.

Dutch doors are available in single and double styles.

1. A single Dutch door is split in half horizontally so the top and bottom can be used independently. A latch secures both halves of the Dutch door together, allowing the door to be opened and closed as one unit when needed
2. A double Dutch door is a side-by-side Dutch door, you have the option of opening both or just one of the top sections of the doors while keeping the lower parts closed.



**Solid Core Flush Door Shutter**



## Flush Door

Flush doors are beautiful, light-weight, and a durable alternative to wooden ones. Types of flush doors are:

- **Solid Core Flush Doors**

These doors are made up of a solid block of material such as particleboard, MDF or lumber. The core is then covered with a veneer or laminate surface.

- **Glass Flush Doors**

These doors feature glass panels in place of a solid core, used in offices, conference rooms and other commercial spaces.

- **Metal Flush Doors**

These durable and strong doors are made from metal sheets and are often used in industrial or commercial settings.

- **PVC Flush Doors**

These doors are water-resistant, termite-resistant and easy to maintain, mostly used in bathrooms and kitchens.

- **FRP Flush Doors**

These doors are highly resistant to water, fire, and impact. They are a popular choice for hospitals, schools, and other high-traffic public areas.



## Other Door

- **Pivot Door**

A pivot door is a movable door with a vertical axis, or spindle, that rotates. Pivot doors have a unique pivot hinge with pins at the top and bottom which attach to the door.

- **Sliding Door**

Sliding doors consist of two panels where one is fixed and the other slides over the fixed one. This saves space and comes in handy when there is a restriction to swinging movement.

- **Louvered doors**

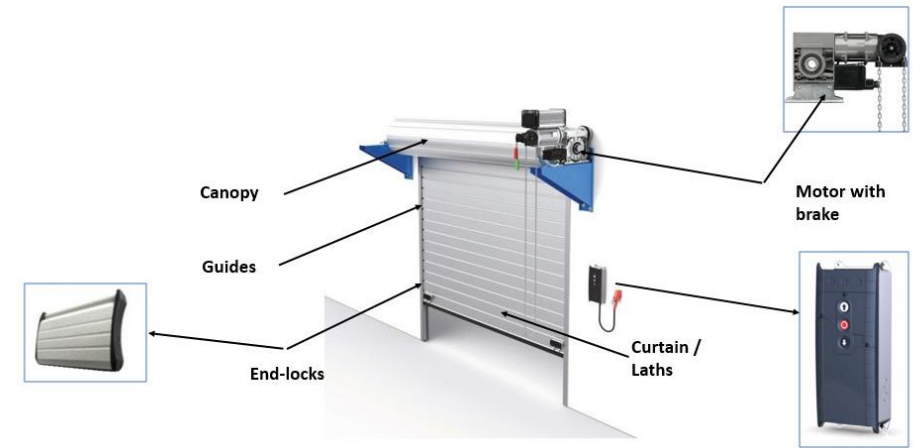
Louvered doors are made using several horizontal strips of wood arranged in an inclined fashion and parallel to each other. This arrangement regulates airflow and allows natural light inside the building.

- **Collapsible doors**

Collapsible doors are the types of doors used where the width of the passage is large. This facilitates the horizontal collapsing of the door when it is pushed. It, made up of mild steel or PVC.

- **Bi-fold door**

A Bi-fold door is a type of collapsible door used for passages with large openings. In bi-fold doors, the door is made up of various panel sections which collapse when pushed.



## Other Door

### ▪ Wire Gauged Doors

In wire gauge doors, the panels of the door are replaced by a wire mesh or gauge. This allows plenty of natural light and ventilation inside but keeps away insects and intruders. It is very common to install a wire gauge door in addition to the main door to get safety and ventilation at the same time.

### • Glazed Doors

They are made using glass panes that are cut and shaped to a particular pattern. They enhance the sight of the building. Fully glazed sliding door is called **patio door**.

### • Rolling Shutter Doors

Rolling shutter doors are also types of exterior door that provides access by collapsing vertically. It is installed with an end cap also called "hood" inside which the door would roll up when opened. They can be operated manually or completely automated, made using aluminum and sometimes using PVC.

### • Up and Over Doors

Up and over doors also called as a canopy up and over doors are electrically operated doors mostly seen in garages. These types of doors have a custom-made steel frame over which the doors with rollers are placed..

# WINDOWS

*A window is a vented barrier provided in a wall opening to admit light and air into the structure and also to give outside view. Windows also increases the beauty appearance of the building. There are so many types of windows are available based on their positions, materials, and functioning.*



## Casement Window



This kind of window was popular in the UK before the invention of the sash window, and it is still popular in many European countries. In this design, the operable panel (installed singly or in a series) hangs on a hinge that enables the window to be opened like a door.

## Bay/Bow Window



Both functional and an interesting design feature, the term “bay windows” describes windows grouped together to extend from the house. The individual windows in a bay window group meet at angles. Bow windows are similar, but the design is curved without angles between windows.

## Sash Window



A sash window is a **hung (Single or Double)** window that is made of several movable panels, known as sashes. These form a frame that holds panes of glass together, separated by astragal bars. They are operated by sliding a sash open either vertically or horizontally.

## Sliding Window



Sliding windows are wide rectangles with two sashes that open horizontally. One or both sashes can open, depending on the type. They are low-maintenance, but you need to pay attention to their track so it doesn't get clogged with dirt. The biggest con is they're easy to break into.

## Transom Window



Transom windows are small and go atop door frames. They debuted in the 14th century and have been a popular accent window since. Many homeowners place transom windows over entryway and interior doors as a design element and a way to let more natural light in the house.

## Pivot Window



In this type of windows, pivots are provided to window frames. Pivot is a shaft which helps to oscillate the shutter. The swinging may either horizontal or vertical based on the position of pivots. It is usually soundproof and great for areas with high rain or snowfall.

## Awning Window



Awning windows are ideal for climates with a lot of rain, thanks to the way the window creates a water-resistant awning when opened. They swing open on the outside by being pushed outward with the latch or handle. This makes them quite weatherproof and also easy to clean.

## Hopper Window



A hopper window is the reverse of an awning window. It has a hinge at the bottom and opens inward and down. It's another popular choice for tight areas like basements and bathrooms. Hopper windows are mostly used for ventilation purposes only as they come in smaller sizes.

## Jalousie Window



Jalousie window ( Louvre window in British English ) is a unique window style, invented by Joseph W. Walker of Massachusetts in 1900, that splits into many different slats of metal, wood or glass. The windows open like a set of blinds. Simply crank the lever and the slats tilt to the side, which creates a series of gaps for air to flow through.

## Oriel Window



An oriel window is a form of **bay** window which protrudes from the main wall of a building but does not reach to the ground. Supported by corbels, brackets, or similar cantilevers, an oriel window is most commonly found projecting from an upper floor. With the Oriel window, more light is generated in the room.

## Garden Window



Sometimes called a **greenhouse window**, garden windows extend past the wall of home, adding a shelf that's perfect for growing a small indoor garden. They can be installed in living rooms and kitchen with side panels that be opened to provide ventilation for the plants.

## Other types of Windows



Based on their position and use, followings are the type of windows:

- ☐ Dormer Window
- ☐ Egress Window
- ☐ Lantern Window
- ☐ Clerestory Window
- ☐ Gable Window
- ☐ Arched Window
- ☐ Palladian Window
- ☐ Fixed Window
- ☐ Corner Window
- ☐ Storm Window
- ☐ Skylight Window....etc.

## Top doors and windows manufactures/brands in India

| Wooden     | UPVC/PVC    | Steel          | FRP/Fiberglass | MDF/Particleboard |
|------------|-------------|----------------|----------------|-------------------|
| Mangalam   | Finesta     | Tata Pravesh   | Shreeji        | Century           |
| Shreeji    | Prominance  | JSW Door       | Godrej         | Greenply          |
| Purewood   | Koemmerling | Primegold      | Sintex         | Archidply         |
| Maxon      | weatherseal | Shakti Hormann | Century        | Kitply            |
| Mikasa     | Aluplast    | Petradoor      | National       | Mini max          |
| RSV Wood   | Durofenster | Duroguard      | Duroplast      | Duroply           |
| Durian     | Ncl Veka    | Starkdoor      | Oswin          | Shreebalaji       |
| Saina Door | Supreme     | Instor India   | Astral         | Dormark           |
| HK Doors   | Saint-Gobin | Kenza Steel    | Durian         | Konnark           |
| Guntier    | Deceuninck  | Rextan         | Fiber Tech     | nikidoors         |
| D.S. Door  | Schueco     | Shell Door     | Konnark        | Unitedply         |
| GSM Door   | Asahi (AIS) | Tentuff        | Highness       | Jacdoor           |



## Door and Window Pricing

| Material              | Accessories           | Price per sqft |
|-----------------------|-----------------------|----------------|
| Teak Wood (sagwan)    | Hafele/Hettich/Godrej | ₹ 500-750      |
| Rose Wood (Sheesham)  | Hafele/Hettich/Godrej | ₹ 750-950      |
| Sandal Wood (Chandan) | Hafele/Hettich/Godrej | ₹ 800-1050     |
| Sal Wood              | Hafele/Hettich/Godrej | ₹ 400-600      |
| Mahogany              | Hafele/Hettich/Godrej | ₹ 450-650      |
| Cedar (Devdar)        | Hafele/Hettich/Godrej | ₹ 700-900      |
| Jack Wood (Katahal)   | Hafele/Hettich/Godrej | ₹ 300-500      |
| Oak Wood              | Hafele/Hettich/Godrej | ₹ 250-450      |
| LDF/MDF               | Hafele/Hettich/Godrej | ₹ 150-350      |
| FRP/GRP               | Hafele/Hettich/Godrej | ₹ 250-500      |
| PVC/uPVC              | Hafele/Hettich/Godrej | ₹ 300-600      |
| Steel Door            | Hafele/Hettich/Godrej | ₹ 750-1250     |



## Teak Wood (Sagwan) Door

|                   |            |
|-------------------|------------|
| Door Size         | 7-8ft.     |
| Door Thickness    | 35 mm      |
| Type of Wood      | Teak Wood  |
| Door Position     | Exterior   |
| Usage             | Home       |
| Surface Finishing | Finished   |
| Design            | Customized |
| Open Style        | Swing      |
| Life Span         | 20-25 yrs  |

Approx. Price: **Rs 500-750** / Square Feet



## Rose Wood (Sheesham) Door

|                   |            |
|-------------------|------------|
| Door Size         | 7-8ft.     |
| Door Thickness    | 35 mm      |
| Type of Wood      | Rose Wood  |
| Door Position     | Exterior   |
| Usage             | Home       |
| Surface Finishing | polished   |
| Design            | Customized |
| Open Style        | Swing      |
| Life Span         | 20-25 yrs  |

Approx. Price: **Rs 750-950** / Square Feet



## Sandal Wood (Chandan) Door

|                   |             |
|-------------------|-------------|
| Door Size         | 7-8ft.      |
| Door Thickness    | 35 mm       |
| Type of Wood      | Sandal Wood |
| Door Position     | Exterior    |
| Usage             | Home        |
| Surface Finishing | Finished    |
| Design            | Customized  |
| Open Style        | Swing       |
| Life Span         | 20-25 yrs   |

Approx. Price: **Rs 800-999** / Square Feet



## Sal Wood Door

|                   |            |
|-------------------|------------|
| Door Size         | 7-8ft.     |
| Door Thickness    | 35 mm      |
| Type of Wood      | Sal Wood   |
| Door Position     | Interior   |
| Usage             | Home       |
| Surface Finishing | Finished   |
| Design            | Customized |
| Open Style        | Swing      |
| Life Span         | 20-25 yrs  |

Approx. Price: **Rs 400-600** / Square Feet



## Mahogany Wood Door

|                   |                     |
|-------------------|---------------------|
| Door Size         | 7-8ft.              |
| Door Thickness    | 35 mm               |
| Type of Wood      | Mahogany Wood       |
| Door Position     | Exterior & Interior |
| Usage             | Home                |
| Surface Finishing | Finished            |
| Design            | Customized          |
| Open Style        | Swing               |
| Life Span         | 15-20 yrs           |

Approx. Price: **Rs 400-600** / Square Feet



## Cedar (Devdar) Wood Door

|                   |                     |
|-------------------|---------------------|
| Door Size         | 7-8ft.              |
| Door Thickness    | 35 mm               |
| Type of Wood      | Deodar Wood         |
| Door Position     | Exterior & Interior |
| Usage             | Home                |
| Surface Finishing | Finished            |
| Design            | Customized          |
| Open Style        | Swing               |
| Life Span         | 15-20 yrs           |

Approx. Price: **Rs 700-900** / Square Feet



## Jackwood (Katahal) Door

|                   |                     |
|-------------------|---------------------|
| Door Size         | 7-8ft.              |
| Door Thickness    | 35 mm               |
| Type of Wood      | Jackwood            |
| Door Position     | Exterior & Interior |
| Usage             | Home                |
| Surface Finishing | Finished            |
| Design            | Customized          |
| Open Style        | Swing               |
| Life Span         | 15-20 yrs           |

Approx. Price: **Rs 300-600** / Square Feet



## Oak Wood Door

|                   |            |
|-------------------|------------|
| Door Size         | 7-8ft.     |
| Door Thickness    | 35 mm      |
| Type of Wood      | Oakwood    |
| Door Position     | Interior   |
| Usage             | Home       |
| Surface Finishing | Finished   |
| Design            | Customized |
| Open Style        | Swing      |
| Life Span         | 15-20 yrs  |

Approx. Price: **Rs 250-500** / Square Feet



## Steel Door

|                   |                     |
|-------------------|---------------------|
| Door Size         | 7-8ft.              |
| Door Thickness    | 46 mm               |
| Type of material  | Steel               |
| Door Position     | Interior & exterior |
| Usage             | Home                |
| Surface Finishing | Finished            |
| Design            | Customized          |
| Open Style        | Swing               |
| Life Span         | 50-90 yrs           |

Approx. Price: **Rs 850-1100** / Square Feet



## FRP/GRP Door

|                   |                     |
|-------------------|---------------------|
| Door Size         | 7-8ft.              |
| Door Thickness    | 40 mm               |
| Type of material  | Fiber               |
| Door Position     | Interior & exterior |
| Usage             | Home                |
| Surface Finishing | Finished            |
| Design            | Customized          |
| Open Style        | Swing               |
| Life Span         | 35-40 yrs           |

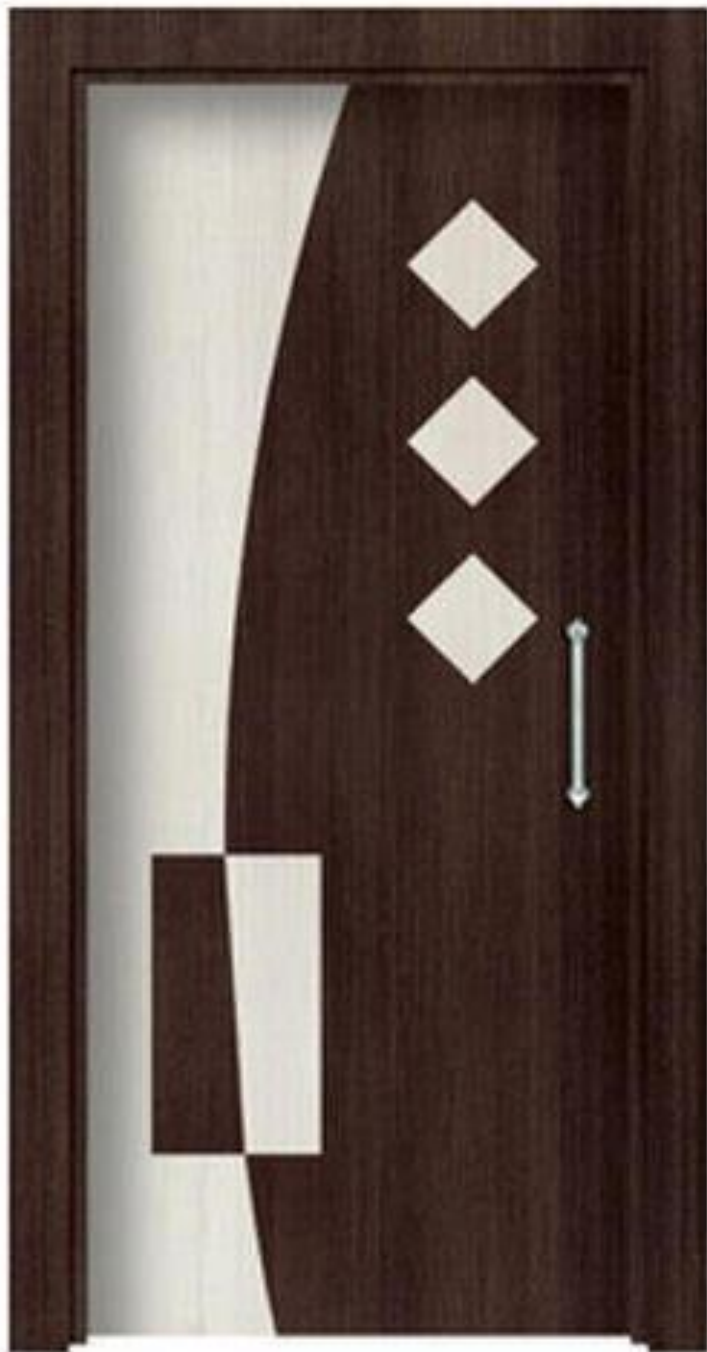
Approx. Price: **Rs 250-400** / Square Feet



## MDF/LDF Door

|                   |            |
|-------------------|------------|
| Door Size         | 7-8ft.     |
| Door Thickness    | 25 mm      |
| Type of material  | Fiberwood  |
| Door Position     | Interior   |
| Usage             | Home       |
| Surface Finishing | Finished   |
| Design            | Customized |
| Open Style        | Swing      |
| Life Span         | 25-40 yrs  |

Approx. Price: **Rs 150-300** / Square Feet



## Laminated Ply Door

|                   |            |
|-------------------|------------|
| Door Size         | 7-8ft.     |
| Door Thickness    | 30 mm      |
| Type of material  | Plywood    |
| Door Position     | Interior   |
| Usage             | Home       |
| Surface Finishing | Finished   |
| Design            | Customized |
| Open Style        | Swing      |
| Life Span         | 15-30 yrs  |

Approx. Price: **Rs 100-250** / Square Feet



## PVC/UPVC Door

|                   |                     |
|-------------------|---------------------|
| Door Size         | 7-8ft.              |
| Door Thickness    | 30 mm               |
| Type of material  | Poly Vinyl Chloride |
| Door Position     | Interior            |
| Usage             | Home                |
| Surface Finishing | Finished            |
| Design            | Customized          |
| Open Style        | Swing               |
| Life Span         | 35-50 yrs           |

Approx. Price: **Rs 250-700** / Square Feet