

V-MAKE PAKISTAN

UPVC DOORS AND WINDOWS



V-MAKE
Commitment to Quality

Learning Notes

By: IT Department VMAKE

INTRODUCTION

“Combining quality with aesthetics, V-MAKE fabricates customized uPVC windows & doors to the ultimate satisfaction of architects, private and commercial building developers”

V-MAKE has the largest production line in Pakistan, equipped with two latest automated setups run by a dedicated team of experienced craftsmen.

European standard ISO certified uPVC profile is being imported from Germany, Turkey and China mainly.

15 years care-free warranty to uPVC profile is provided, along two year hardware & accessories warranty and life-time after sale service.

V-MAKE made windows & doors are already making homes energy efficient, more secure and elegant, right across Pakistan.

uPVC

- Upvc is the base material of profile of doors and windows which stands for unplasticized Polyvinyl chloride. This material is a kind of advanced thermoplastic and is made from main derivatives of crude oil and table salt.
- Upvc consists of 57% chlorine (produced from ordinary salt and used to purify water) and 43% ethylene. Ethylene is the most widely produced organic compound in the world. Most ethylene is produced (like petrol) by refining oil.
- Pvc is Poly vinyl chloride with a “U” for being Unplasticised so that it is rigid for strong window frames. It is reinforced with galvanized metal for hardware attachments and extra strength.

BENEFITS OF V-MAKE’S UPVC WINDOW

- **THERMAL INSULATION**, that plays a major role as energy cost of heating and cooling is increasing day by day. V-MAKE uPVC windows & doors provide lower conducting material, helping to retain heating and cooling as a thermal barrier. Adding double or triple glazing to uPVC frame can achieve U-Values as low as 0.8W/m²K.
- **DUST, MOISTURE AND NOISE INSULATION** is achieved using co-extruded EPDM Gasket, Double fin weather strip, which provide excellent resistance to air, water and dust etc. V-MAKE uPVC frames are joined through fusion welding process that can never shrink back overtime causing gaps in the joints, which occurs in both wooden and aluminum window frames.

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- **DURABILITY AND SECURITY** in windows and doors is much required. V-MAKE uPVC is resistant to sunlight, oxidation and variety of chemicals. With ultra-violet rays (UV rays) protective layer, its color isn't effected by sunlight and harsh weather. Secure your home with MAKE windows multi-point locking system. Galvanized steel reinforcement inside Frames and Sash makes it capable of withstanding breakage & theft.
 - **FIRE, CORROSION & IMPACT RESISTANT** uPVC material is used by V-MAKE. Profiles are made with highly resistant polymers that confirm to self-extinguishing and non-spontaneous ignition characteristics. It withstands high impact with the use of special additives to make the material extremely tough & durable. V-Make windows are corrosion resistant when used in marine and tropical climates and in places exposed to high pollution.
 - **VALUE FOR MONEY** solutions for windows & doors as long-term cost are lower than the price for compatible good quality wooden and aluminum windows.

BENEFITS OF V-MAKE'S DOUBLE GLAZED WINDOW

Double glazed windows consist of two layers of glass with a layer of inert gas sealed between them. This creates nearly twice the insulation as single glazed units. Once sealed, the unit becomes airtight.

- **Energy cost savings.**

The airtight construction of double glazed windows creates thermal insulation. This reduces the flow of incoming and outgoing heat. Less energy is used to heat up or cool down the space, resulting in lower energy bills.

- **Limited condensation.**

Moisture on a warm surface forms droplets of water, which freeze into frost. This can make the room feel colder, which forces the people inside to adjust the heat. The air

between the two panes of glass, plus the airtight seal, prevents condensation from building up by blocking moisture in cold weather.

- **Sound insulation.**

Double glazed windows improve sound insulation by creating a barrier between the home and the environment outside.

- **Safety.**

Double glazed windows are tougher to break than single pane windows, so they increase the security of the home. Because they're sealed tighter than other windows, it is also tougher to force them open from the outside.

- **Reduce damage to furnishings.**

Double glazed windows can reduce the amount of sun and heat entering the room. This can help reduce sun damage to your paintings, furniture, carpet, and other objects around the home.

QUALITY CUSTOMER SERVICE is paramount at V-MAKE, given the individual nature of the products manufactured. There's a dedicated customer service and technical support team that are there to support customers whatever the query may be. Our after sales service team is always ready to support clients.

QUALITY PRODUCT

Our product quality is a benchmark in the sector and the integration computer modelling software has improved this considerably with manufacturing tolerance now within a few millimeters. We can now process over 92% of orders using this system which virtually eliminates the need for the manual drawing out of templates. We import top quality profile and hardware that achieved ISO 9001, ISO 14001 accreditation, CE certification and GOST certification having TiO2 high Anti-UV performance. We have hundreds of projects all over Pakistan.

V-MAKE 5 STEPS ORDER IMPLEMENTATION

Step 1: Site visit.

A team of technicians and experts visits to assess your needs and customize solutions that fits you the best.

Step 2: Consultation.

V-Make follows a consultative approach as we believe in listening thoroughly to the customers.

Step 3: Suggest Solutions. (Glass, Frames, Hardware etc.)

The team makes sure that it has the best suggestions to suit your space.

Step 4: Estimated Pricing

V-MAKE epitomizes the highest standard of transparency, integrity and most importantly, trust - amongst its customers.

Step 5: Logistics

- ._ On-time delivery ._ Dedicated vehicle for each delivery
- ._ Proper vehicle tracking till destination
- ._ Preferred time frame delivery
- ._ Materials are insured, hence better service recovery
- ._ A highly trained delivery team provides professional service

Step 6: Hassel-free installation.

This is the last and critical mile of achieving absolute customer delight. It is vital for the team to ensure a quick and efficient installation process.

COMPARISON OF UPVC, ALUMINUM AND WOOD

With the technological advancement in building materials, UPVC is now considered one of the most preferred windows framing material as compared to Aluminum and Wood across the world and is now gaining popularity in Pakistani market too. If you are making a decision about selecting material for windows, door and building partitions, these facts tabulated below will help you make value for money selection, in just one glance.

FEATURES	UPVC WINDOWS	ALUMINUM WINDOWS	WOODEN WINDOWS
EXPANSION & CONTRACTION OF WINDOW PROFILES CAN LEAD TO PRODUCT DEFORMATION	 UPVC is rigid plastic that does not expands or contracts with temperature variation which makes it durable with minimal expansion and contraction in window frames.	 Aluminum has very high thermal expansion coefficient as compared to UPVC, leading to product distortion if not manufactured and installed appropriately.	 Wood has inherent property to breathe / absorb moisture / expand & contract, eventually leading to distortion and gapes
INSULATION FROM HEAT & COLD	 UPVC window provides superior insulation to your home from outside heat as UPVC is a bad conductor of heat.	 Aluminum (being a metal) is a good conductor of heat and therefore cannot provide insulation from heat and cold.	 Wood is a poor conductor of heat; however improper sealing & bending can allow heat to pass.
LOW MAINTENANCE	 UPVC windows and doors require no painting, only routine cleaning.	 Aluminum windows and doors may require periodic maintenance over long periods of usage.	 Wooden windows need regular painting and polishing.
LOW EMBEDDED ENERGY	 UPVC Window frames are environment friendly as they require very less energy to convert from raw material to finished good.	 Aluminum window and door frames use large amount of energy in conversion	 Wooden windows and doors use tropical hardwoods.

FEATURES	UPVC WINDOWS	ALUMINUM WINDOWS	WOODEN WINDOWS
TERMITE RESISTANCE	✓✓✓ UPVC Windows and doors are not prone to termites.	✓✓✓ Aluminum windows and doors do not attract termites.	✗ Wooden windows and doors are prone to termites.
RESISTANCE TO CORROSION	✓✓✓ UPVC Windows do not rust or corrode due to inherent material characteristics.	✗ Aluminum windows are prone to corrosion.	✓✓✓ Wooden windows do not rust / corrode
FADE RESISTANT/ UV RESISTANT	✓✓✓ UPVC Windows and doors are made of special UV resistant blend and therefore do not fade even after prolonged exposure to sun	✓✓ Aluminum windows are typically powder coated or anodized. The powder coating, if not of high UV resistance, shall discolor quickly.	✗ Wooden windows and doors start fading very soon; require constant re-polishing/finishing.
FIRE	✓✓✓ UPVC windows are Fire retardant and Self Extinguishing so do not propagate fire	✓✓✓ Aluminum windows have very high melting temperature	✗ Wooden windows can catch fire easily
SECURITY	✓✓✓ UPVC windows are reinforced with galvanized steel reinforcement; therefore provide protection against breakage or cutting of window frame.	• ✓ Aluminum frame profiles are screwed together which results in easy break-in.	✗ Wooden window frame can be cut and break easily.
SOUNDPROOFING	✓✓✓ UPVC material is bad conductor therefore blocks exterior noise.	✗ Aluminum is metal and good conductor transfers noise.	✓✓ Wood is a poor conductor; however improper sealing & bending can allow noise to pass.
FIRE ESCAPE	✓✓✓ UPVC windows can allow easy escape in case of fire; due to its lower softening	✗ Aluminum & glass both have high MP and therefore does	✗ Wood itself can catch fire very easily

	temperature glass can be pushed out of the frame easily	not assist in easy break away.	
CONCLUSION	33 ✓ 0 ✗	12 ✓ 6 ✗	10 ✓ 7 ✗

Particular	V-MAKE uPVC	Aluminum	Wood
Surface Quality	The surface quality is maintained through out its useful life.	Anodizing wears out and corrosion sets it.	Requires regular up keeping
Thermal Insulation	Very good, Heat losses are reduced due to wider profile depth & multi chamber section & Low K value.	Poor being a metal it has a poor thermal insulation, and high thermal conductivity.	Fair
Fire Properties	Excellent	Excellent	Poor
Acoustic Insulation	Excellent, the multi chamber sealed cavities and welded corners offers excellent acoustic insulating properties.	Poor, the mechanically Joint corners renders very poor result from Acoustic insulation angle.	Fair
Dimensional Accuracies	Excellent, they are factory produced on sophisticated machine hence offer uniform quality control.	Poor, they are fabricated locally, hence poor quality and non uniformity.	Fair
Conservation of energy	Excellent	Require 7.5 times the energy than that required to manufacture pvc.	-
Preservation of natural forest wealth	Excellent	Excellent	Poor
Maintenance	NIL	NIL	Require regular Painting & Polishing
Durability & Security	Much stronger due to steel reinforcement profile & multi point locking system.	Good	Good
Warping	Will not warp, last for a life time.	Can Warp	Can Warp

TYPES OF WINDOWS

1. Sliding Window

A Frame of UPVC Sliding Windows Material that contains Horizontal sashes and a glass window panel fitted with Rollers at the bottom is built on a wall or on the floor to admit air and light.



2. Casement Window

Casement windows are a style of window that open and close inward or outward and are permanently attached in the window frame, unlike sliding windows. Casement windows have several parts. These include the window frame, in which the window is mounted.



Styles of Windows

Bay Window

Bay window, window formed as the exterior expression of a **bay** within a structure, a **bay** in this context being an interior recess made by the outward projection of a wall. The **purpose** of a **bay** window is to admit more light than would a window flush with the wall line.



L Shaped Window

The L-shaped windows are designed to be installed where the roof meets a vertical wall. These windows serve to extend the roof window into the wall



Arch Window

In an 'arch' or 'radius' window, the bottom half of the window is rectangular while the top is an arch or half-circle. Arch shaped windows bring a softness to a room and juxtaposes the straight corners of rectangular windows and walls for a contrasting effect.



Tilt and Turn Window

Tilt and turn windows can be opened fully like a casement **window** (inwards) or they can be **tilted** from the bottom so that the top of the **window** is angled into the room, giving a smaller opening for ventilation.



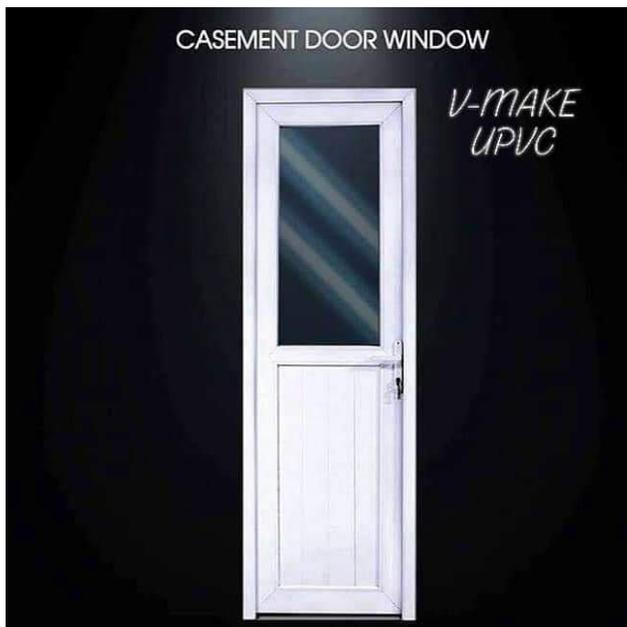
TYPES OF DOORS

STYLES OF DOORS

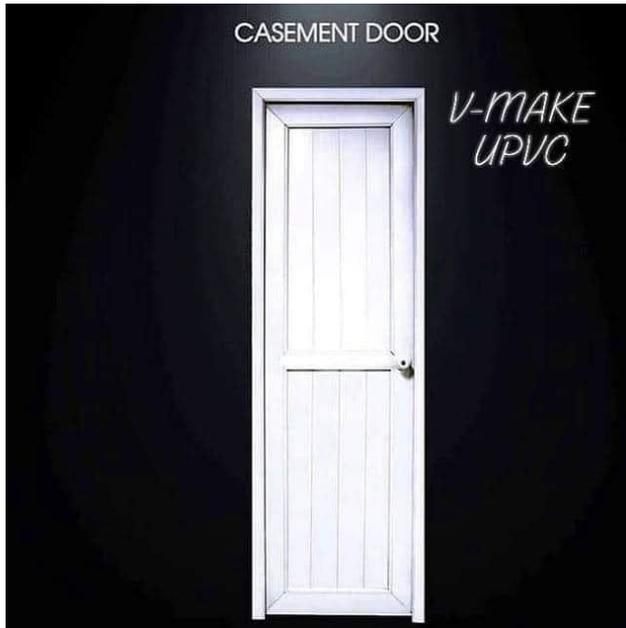
- Full Glass



- Half Glass Half Panel



- Full Panel



Average Price List

V-MAKE UPVC AVERAGE PRICE LIST			
TYPE/SIZE	SMALL	MEDIUM	LARGE
SLIDING WINDOW	Rs: 600/SQFT Rs: 14,500/-	Rs: 500/SQFT Rs: 20,000/-	Rs: 450/SQFT Rs: 32,900/-
CASEMENT WINDOW	Rs: 900/SQFT Rs: 21,600/-	Rs: 800/SQFT Rs: 29,700/-	Rs: 650/SQFT Rs: 35,700/-
ARCH WINDOW	Rs: 800/SQFT Rs: 19,200/-	Rs: 700/SQFT Rs: 25,000/-	Rs: 500/SQFT Rs: 37,900/-
VENTILATOR	Rs: 2000/SQFT Rs: 6,000/-	Rs: 1500/SQFT Rs: 7,500/-	Rs: 850/SQFT Rs: 8,500/-
FULL PANEL DOOR	Rs: 1050/SQFT Rs: 13,000/-	Rs: 900/SQFT Rs: 22,000/-	Rs: 850/SQFT Rs: 32,000/-
<p>NOTE: Above mentioned rates are based on average sizes and rates. Actual rates may vary in accordance with actual measurement per square feet. These rates are without Glass and Installation charges which may vary depending on client's preferences.</p>			

پاکستان کے بیشتر علاقوں میں موسم کی شدت میں اضافہ ہوتا جا رہا ہے۔ سردی کے موسم میں سردی کی شدت اور گرمیوں میں گرمی میں اضافے کے ساتھ ماحولیاتی آلودگی، دھند اور فوگ جیسے نئے موسمی حالات بھی بڑھتے جا رہے ہیں۔ ان حالات میں گھر کے اندر موسمی اثرات سے تحفظ کے لیے بجلی اور گیس کے استعمال بڑھنے اور ان کے ساتھ ریٹ میں بھی روز بروز اضافہ ہوتا جا رہا ہے۔

گھر کا اندرونی درجہ حرارت کھڑکیوں اور دروازوں سے آنے والے موسمی اثرات سے ہی تبدیل ہوتا ہے۔ اگر گھر کے کھڑکی دروازے UPVC میٹریل سے بنے ہوں تو ان مضمر موسمی حالات کو (70%) ستر فیصد تک باآسانی روکا جاسکتا ہے۔ UPVC میٹریل کی چند خصوصیات کا مختصر تعارف درج ذیل ہے:

■ UPVC کے فوائد:

یو پی وی سی میٹریل ایلومینیم کی نسبت نہ گرمی سے گرم اور نہ سردی سے سرد ہوتا ہے۔ ایلومینیم چونکہ ایک دھات ہے اس پر درجہ حرارت کا اثر بہت زیادہ ہوتا ہے۔ ایلومینیم اور سٹیل کی بنی کھڑکیوں سے گرمی اور سردی گھر میں باآسانی منتقل ہو جاتی ہے۔

■ یو پی وی سی (UPVC) سے بنی کھڑکیوں اور دروازوں کے بارے میں معلومات:

UPVC مخفف ہے Unplastized Polyvinyl Chloride کا یہ پلاسٹک سے بنا میٹریل ہے جس کو جرمن سائنسدانوں نے کیمیائی تبدیلی کر کے انتہائی سخت بنایا اور بلڈنگ میٹریل کے طور پر 1935 میں دنیا کو پائپ اور کھڑکی دروازوں کی صنعت میں متعارف کروایا۔

اس میٹریل میں سے پلاسٹک کی پلک اور نرمی کو ختم کیا گیا۔ اس کو زیادہ تر کیمیکل اور موسمیاتی اثرات سے محفوظ بنادیا گیا۔ یو پی وی سی میٹریل سے بنی کھڑکیوں اور دروازوں کو نہ کسی قسم کا رنگ کرنے کی ضرورت نہیں ہوتی اور نہ ہی استعمال کے ساتھ ان کی دوبارہ مرمت کی ضرورت پڑتی ہے دو درجہ پیک بلڈنگ انڈسٹری میں یہ میٹریل بہت تیزی سے صارفین کا اعتماد حاصل کر رہا ہے۔

■ "وی میک یو پی وی سی"

V-MAKE یو پی وی سی کی کھڑکیوں اور دروازے بنانے والی اسلام آباد میں قائم سب سے بڑی فیکٹری ہے بیرون ملک سے درآمد کی گئی مشینری اور پلانٹ کے تین سیٹ، چھ کنال پر محیط ٹھہر ٹیکشن اور کم و بیش 75 ٹن سٹاک اور ماہر ترین کاریگروں کی نگرانی میں کام کیا جاتا ہے۔ ہمارے ہاں چائے، ترکی، بلیچیم اور جرمنی سے درآمد کیے اعلیٰ معیار کے 15 سے 20 سال وارئی کے پروفاکس میٹرل اور دو (2) سالہ برانڈ ڈیکمپل طور پر ایمپورٹڈ میٹرل استعمال کیا جاتا ہے۔ وارئی ہارڈ ویئر سے کھڑکی دروازے تیار ہوتے ہیں۔

یو پی وی سی کی کھڑکیوں میں مرمت (Maintenance) نہ ہونے کی برابر ہوتی ہے۔ اس کی سطح بہت ہموار اور اسکی صفائی انتہائی آسان ہے اسکی سطح پر کسی کیمیکل یا تیزات وغیرہ کا اثر نہیں ہوتا۔ UV لیٹر کی وجہ سے اس کی دھوپ کا اثر نہیں ہوتا۔ Life Time V-Make وارئی اور آئرنزیل سروس اپنے صارفین کو دیتے ہیں۔

V-Make کے اسلام آباد اور اوپنٹڈی ڈپلے تشریف لائیں۔

اپنی پسند کے مطابق ڈیزائن پسند فرمائیں آپ کے گھرا بلڈنگ کا بلا معاوضہ سروے کیا جائے گا اور آپ کو ٹوشن دی جائے گی اسلام آباد اور اوپنٹڈی میں سب سے معیاری اور مناسب قیمت پر کھڑکی دروازے V-MAKE یو پی وی سی سے بنوانے کے لیے دیے گئے نمبروں پر رابطہ کریں:

WINDOW & DOOR TERMS

uPVC – the abbreviation for Unplasticised Poly Vinyl Chloride.

PVCu (uPVC): Unplasticised Polyvinyl Chloride - The basic raw material from which most modern plastic windows are made. Modern convention has changed the original uPVC abbreviation to PVCu.

PVC-U. Polyvinyl Chloride – Un-plasticized. The rigid plastic used to manufacture

V-Make windows and doors. PVC-U provides low maintenance coupled with long life. The term PVC-U is often misunderstood. Mis-spellings include PVC, PVC-U, U-PVC, UPVC, PVCu and uPVC. PVC-U is sometimes also referred to as just plastic, e.g. plastic windows.

Bay Window: A shaped window that projects beyond the face of the existing wall. The windows are normally placed at 45 degree angles to suit proprietary corner posts, but other angles can be achieved. Appropriate support underneath a bay window is critical, as many fail or become detached from the property without it.

Bow Window: An angled combination of a number of windows (usually between 5 & 7) that project beyond the face of the existing wall. The angle at which the frames are joined is much shallower than a bay window, giving a more curved appearance to the whole assembly. As with bay windows appropriate support underneath the bow is critical, as many fail or become detached from the property without it.

Casement: A window which has one or more outward opening sashes. The term used to describe a conventional window, with a sash that is side or top hinged. Casement windows open outwards.

French Door: A door set comprising of two openable door leaves, offering a wide unobstructed space when opened. Double outward-opening doors that meet in the middle without a mullion, giving a clear unobstructed opening.

Tilt & Slide: A type of patio door, which has two main modes of operation. For limited ventilation the leaf can tilt in at the head, and when required fully open, the leaf will slide back over the

fixed pane. These doors require careful operation and have largely been replaced by the Inline Patio

Tilt & Turn: A type of window, which has two main modes of operation. For ventilation the sash can tilt in at the head, and when required fully open, the sash will open inwards like a door. They are particularly suitable as fire escape windows, or in locations where it would be impossible to clean the outside of the glass. A window system that opens inwardly in two ways. Tilt and turn windows swing completely inwards allowing for easy cleaning. They also tilt at the top to provide good ventilation without leaving the window fully open.

Patio Door: A sliding door which normally comprises one fixed and one sliding pane of equal size; however they can be manufactured in more complex configurations. Also referred to as Inline Patio.

French window: Double outward opening windows that meet in the middle without a mullion, giving a clear unobstructed opening.

Galvanised Steel Reinforcement: A very strong extruded metal section which is used to internally reinforce some uPVC sections. The steel is cold dipped galvanized to prevent rusting.

Gasket: The black rubber strip that runs around the pane of glass in a window to create a weatherproof join.

Georgian Bar: A lightweight aluminum bar that can be made into a decorative grid and placed in the cavity of the insulating unit, giving the appearance of multiple panes. The main advantage is reducing cleaning time, while retaining a certain period look.

Georgian (Astrical) Bars – the bars that divide a large window into smaller panes.

Sun Room: A room which is constructed mainly of glazed side walls, and a traditional tiled roof.

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Sliding Sash: A type of window in which one or more sashes operate in a vertical direction.

Vent: The sections of the window or door which can be opened vertically, horizontally or slid side to side.

Glass: An inorganic transparent material composed of sand (silica), soda (sodium bicarbonate), and lime (calcium carbonate) with small quantities of alumina, boric or magnesia oxides.

Glazing: This term is used to describe the installation of glass (single sheet or units) into a frame, and as a generic term referring generally to an area of installed glass.

Triple Glazed: Windows that are made of three panes of glass with a separating spacer. The air cavities may be air filled or have an inert gas such as argon or krypton injected at the time of manufacture.

Tempering: The process of hardening a piece of glass by heating and cooling it.

Glazing Aperture: The part of the frame into the glass unit is fitted.

Glazing Bead: A strip of profiled uPVC which is used to retain the insulating unit. Is also referred to as glazing bead or glazing slip.

Krypton Gas: An inert gas that can be injected into the cavity of an insulating unit, increasing its thermal efficiency. Krypton gas is more efficient than Argon, and is used in higher specification units.

Laminated Glass: A glass product which comprises two layers of glass with a PVB (Polyvinyl Butyral) plastic interlayer bonding the two sides together. The plastic material stops the glass from shattering, and holds it together if it became broken. It is widely used for safety and security and is also used in thicker forms to make bullet proof glass.

Laminated Glass – a “sandwich” of glass/plastic/glass which makes it harder to break & safer when it does break.

Low-e or Low emissivity – energy efficient glass that is coated (with a metal oxide)

Low E Glass: The term used to describe a specially coated glass, which when incorporated into an insulating unit significantly reduces the heat loss through the glazing. An invisible coating of a metallic oxide allows short-wave energy (solar rays) to pass through but reflects long-wave infrared energy (radiator heat) which reduces heat loss.

Low ‘e’ glass: Low ‘e’ stands for low emissivity glass. This glass varies from normal clear glass in that one side has a special metal coating, technically known as a low emissivity coating. Low ‘e’ glass is a type of insulating glass which works by letting in energy from the sun while blocking heat loss from the home.

Float Glass: Glass formed by a process of floating the material on a bed of molten metal. It produces a high-optical-quality glass with parallel surfaces, without polishing and grinding.

Fogging: A term used to describe the visible signs of an insulating unit failure, which may include misting, fogging, formation of droplets, water marking, ponding etc.

Patterned Glass: A glass product having a pattern impressed on one or both sides and which is used extensively for privacy and decorative glazing.

WINDOW & DOOR PARTS:

Beads (window or door) – strips that fit around a window or door panel to hold the panel (or glass pane) into place. Interior beading is preferred to prevent removal by burglars.

Cill: Refers to the bottom section of the window frame, but is used by many as a general term describing the area around the bottom of the window. Also refer to Cill Board and Exterior Cill. The bottom section or “shelf” of a window (inside or outside). The protruding lip that directs water away from brickwork at the bottom of a window opening.

Co-extruded gasket: A flexible gasket or seal which is bonded at the time of extrusion onto a uPVC section.

Drain slots: Slots or holes in the cill member of the sash or outer frame that provides a path for rainwater to escape.

Drainage Caps: A small cover which is used to conceal drain slots which would otherwise be visible.

Friction Stay: A window hinge, which remains open at any position by means of friction in the hinge.

Espagnolette: A locking mechanism used on windows & doors which comprises a metal plate and multiple moving bolts which engage in a keeper when the handle is operated. It would normally be fitted to the euro groove, and can only be seen when the window or door is open.

Mullion: A vertical rail which divides a window or door frames into two or more separate glazing apertures.

Outer frame: The perimeter frame of any window or door.

Outer frame: An alternative term for the main frame of a window system.

Profile – refers to the cross section design of a frame.

Sash – the vertical moving window section. The opening portion of a window. The sections of the window or door which can be opened vertically, horizontally or slid side to side.

Weather-strip: A strip of resilient material for covering the joint between the window sash and frame in order to reduce air leaks and prevent water from entering the structure. Many types - woodpile, bulb, fin, leaf, etc. Older types include metal, foil and felt strips (used primarily on doors).

Window Lights (lites) – can often mean a glazed section of the window that opens (top lite / side lite)

Window Cill (sill) – the bottom section or “shelf” of a window (inside or outside). The protruding lip that directs water away from brickwork at the bottom of a window opening.

Tolerance: The amount by which a required nominal dimension can vary from the actual dimension. uPVC frames in general have an operational tolerance of +/- 2mm on straights, and +/- 3mm on diagonals.

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Wedge Gasket: A rubber gasket which when viewed end on will typically be triangular in shape. This type of gasket is normally fitted after a frame has been glazed, and it's purpose is to compress the glass against the glazing bead, reducing water ingress and noise transmittance.

3d Hinge: A type of door hinge which allows adjustment in 3 planes. Typically a door leaf can be lifted up or down, left or right, or in and out by upto +/- 5mm

What are the benefits of installing UPVC double glazed windows?

Keeps the home warm in winter

Double glazing adds a very efficient form of insulation. During winter, double glazed windows prevent the house from losing a lot of heat.

Keep the home cool in summer:

The same way by which double glazed windows protect the home from losing heat during winter, in summer they prevent outside heat from entering the home.

Energy saving

Since double glazed windows act to prevent heat loss during winter and heat gain during summer, a considerable amount of energy is saved as the home will no longer need as much use of heaters in winter or cooling systems in summer. This significantly lessens home energy bills.

Acoustic properties

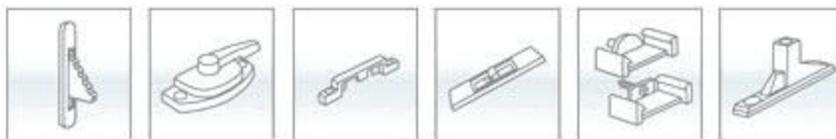
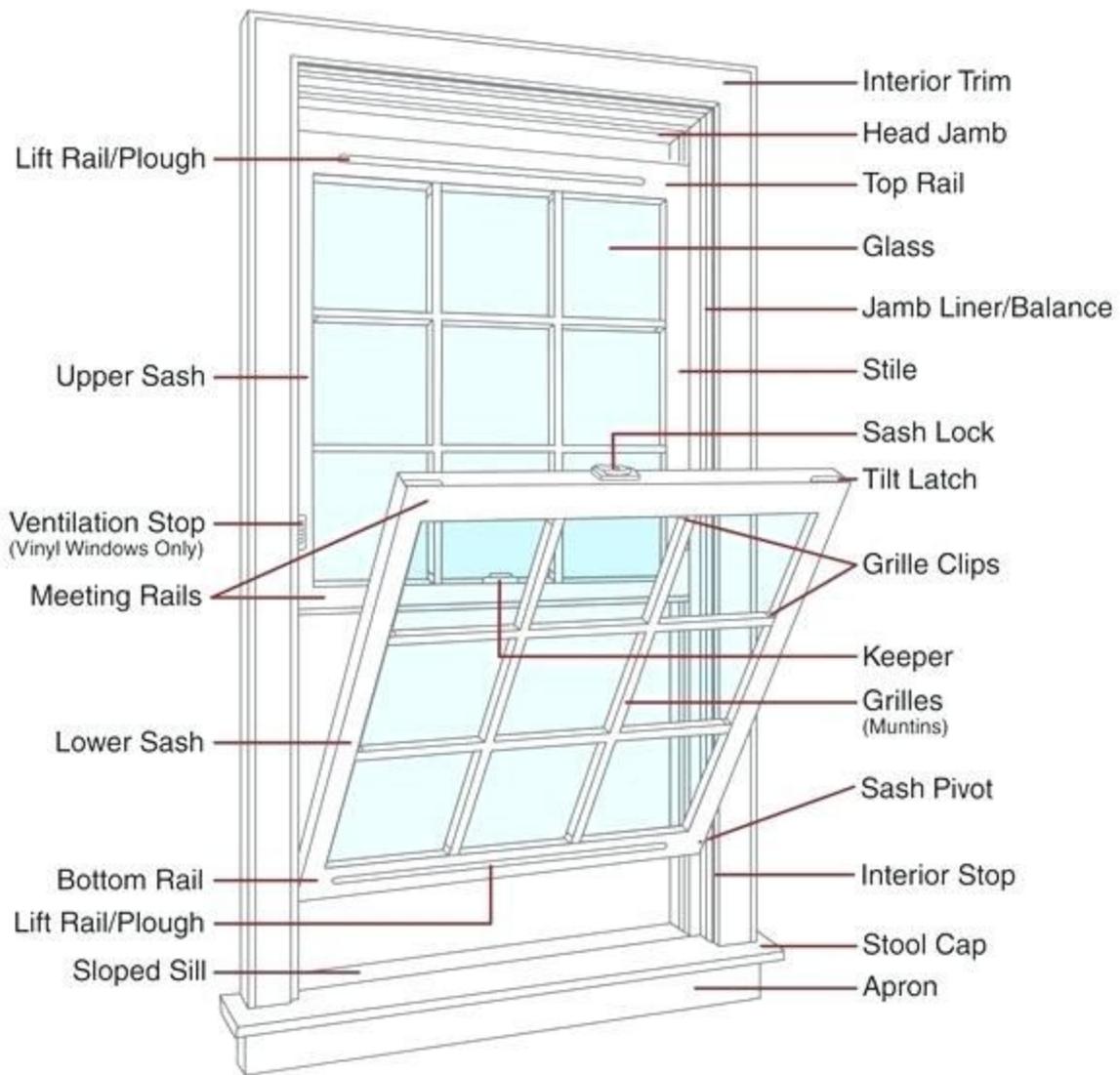
Double glazed windows have incredible acoustic properties that improve sound quality in the house. They minimize the amount of outside noise that enters the home and prevents inside sounds from being transmitted outside of the house.

Security

Double glazed windows provide much better security as compared to the standard single pane windows. Two panes of glass are logically more difficult to break than a single pane.

Reduced condensation

Double glazed windows reduce the amount of moisture on the window panes, thereby reducing the rate of mold and mildew formation.



Ventilation Stop Sash Lock Keeper Tilt Latch Grille Clips Sash Pivot

