

Dualframe

Adding security
and beauty to
your home



Dualframe windows are manufactured by Sapa Building Systems. Our wealth of experience in the manufacture of doors and windows has satisfied the demands of homeowners for over four decades.

We offer architects, specifiers, fabricators, contractors and homeowners a wide range of innovative aluminium systems for doors, windows and conservatory

roofs as well as specialised architectural items.

Sapa Group is an international company specialising in aluminium profiles and building systems. With 7,900 employees in 25 countries it is the world's third largest manufacturer of aluminium profiles. In particular we focus on the development of creative aluminium solutions that offer customers added value.

strong, safe, sustainable and beautiful

Dualframe windows and doors are inherently strong, secure and long lasting and are made from sustainable materials... and they are beautiful.

Making the right choice of windows and doors for your home need not be a worrying time. The benefits of choosing strong, safe aluminium mean that your

windows and doors will provide the best value in terms of durability, maintenance and security.

Among the benefits of choosing our windows and doors is that you will be dealing with a world leader in innovation in aluminium windows and doors. Ours is a proven and trusted product

that has provided the windows and doors for many thousands of homes in the UK.

With so many choices of window format, interior and exterior colours and glass type, Dualframe provides the right combination to suit the appearance of your house so as to make it a more beautiful and safer home.





beauty, security and style

Dualframe windows and doors combine beauty and slim sightlines with low maintenance to provide the secure solution for houses of all ages and styles.

Whatever the style of your home, Dualframe's wide choice of window and door configurations, sizes and colours as well as a choice

of matching and contrasting hardware, offers you a fantastic choice of windows and doors. And you can rest assured that it will last and stay looking good whilst remaining safe and secure.

The overall appearance of your home plays a large part in how much you enjoy it. Choosing the right windows and doors

makes a great difference to the aesthetics of where you live and could improve your quality of life as well as increasing the value of your home. That's why it makes sense to choose Dualframe, not only will your windows and doors be the most secure and the most environmentally sustainable but they will enhance your life and your home.





We want a nice airy feel but are worried that some replacement windows have thick frames, especially in the bays.

Because aluminium is so strong Dualframe windows and doors have slim frames, much slimmer than timber or plastic. This is equally important whether the windows are large or small. As well as looking unsightly, thick frames can block out an appreciable amount of light, particularly in bay windows. Aluminium frames also mean that you can also have larger windows as aluminium is that much stronger than other window materials.



Can I have more than one type of window?

We designed Dualframe as a complete range of windows, some of which are available with the popular 'softline' ovolo frame feature. Our range includes traditional hinged casements, vertical sliders that work like sash windows, tilt-turn and reversible windows as well as a choice of entrance and patio doors.

Our house is unique, can we install Dualframe windows and doors that will match its style?

Dualframe has been designed to be suitable for both traditional and contemporary properties, so much so that it has been successfully installed in listed buildings. You can choose the profiles for the outer frame as well as the window bars, leaded light effects, stained glass units and other features that best enhance your home. You can even mount Dualframe into timber subframes if desired, giving you the benefits of aluminium windows and doors in older traditional buildings.



I was told that you can only have aluminium windows and doors with a plain metal finish?

Not true, Dualframe windows and doors can be supplied in almost any colour, including coloured metallic finishes. Dualframe windows can be polyester powder coated to BS EN 12206-1:2004 which results in a finish like that on a car but tougher. Our range consists of over 400 colours and remember that you can have a different finish on the inside to the outside, that's why we called it Dualframe!

Because of the quality of the finish applied to Dualframe your windows and doors will not attract dirt electrostatically the way plastics such as PVC-U do. This means that whatever colour you choose for your windows they will stay looking good for many years.



Does the size of the window matter?

Dualframe windows are supplied in almost any size. Whether you want to have smaller frames for a traditional farmhouse style property or very large expanses of glass for a modern house, Dualframe can provide the answer.



Do we have to have special glass in Dualframe windows? We would like to have a leaded light look.

There are no special requirements so you can have almost any glass that you wish. Dualframe windows are usually glazed with standard 24mm double glazed

units but you can choose the style and performance you want including triple glazing, leaded lights and stained and figured glass with or without glazing bars.





beautiful, sustainable & low maintenance

Dualframe's combination of beauty and strength create a unique solution for your windows and doors.

Aluminium's physical properties, such as low thermal expansion and contraction and inherent strength, result in window and door frames that are extremely stable. This means that the frames

and casements of Dualframe doors and windows fit precisely together and will continue to be close fitting throughout their lives. This stability and rigidity means that Dualframe provides exceptional watertightness and wind resistance so that heat losses are reduced. Combined with our dual polyamide thermal break technology this

gives compliance with Building Regulations Part L using standard glazing units and can result in reduced fuel costs.

And Dualframe requires much less maintenance than timber or plastic PVC-U windows and doors, the finish is like that on a car but tougher – it is weatherproof, durable and easy to wipe clean.



How much choice of colour do we have?

Hundreds. There are over 400 colours that you can choose from. You can even combine two colours, choosing one for the exterior and another for the interior. For example black or dark brown exterior frames work well with Tudor style properties and a contrasting colour finish is excellent for rendered buildings. And you can have a choice of colour for the interior.

The polymer finishes used for Dualframe are architectural quality. They will not degrade or rub off in normal use for at least 25 years. That means that they won't look tatty after a few years and you do not need a regular repainting programme.



Surely aluminium is a good conductor of heat, does this mean that we will lose heat through our windows?

Dualframe incorporates a special layer, called a thermal break, which prevents heat loss. In fact Dualframe windows have been independently tested and proven to exceed the requirements of the latest Building Regulations using standard glazing units. In very cold climates you can achieve even greater insulation using optional high performance glass.

Are aluminium windows and doors environmentally sustainable?

Aluminium is the most abundant metal and the third most abundant element on the Earth, after carbon and silicon. It can be 100% recycled indefinitely so we can confidently say that aluminium

is one of the most sustainable building materials available.

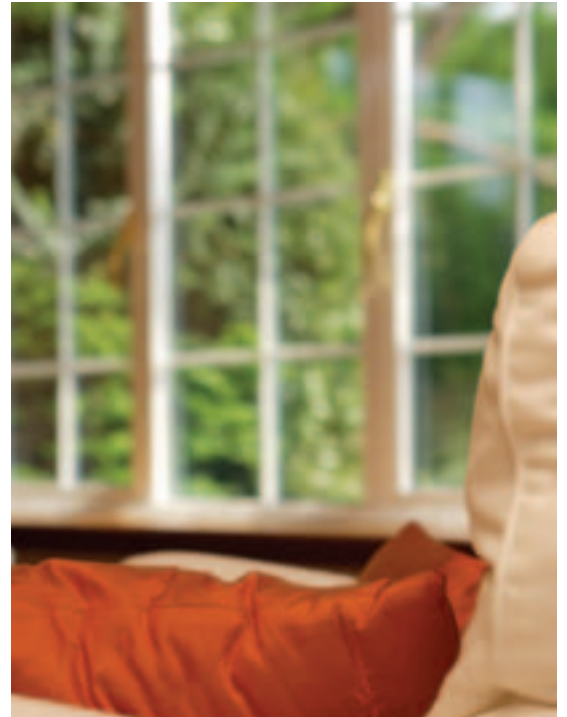
Importantly aluminium windows have a long working life, an important element in determining

how environmentally friendly a material is. You should confidently expect Dualframe windows to have a very long life. And they will need much less maintenance than other windows and doors.



We would like to have the inside of the windows a light and airy colour, but have the outside a darker colour.

Dualframe is called Dualframe because you can have two different colours for the interior and exterior finish. So choosing a cream or white interior and a completely different colour for the exterior is very, very easy. And with over 400 colours available you will be able to choose the shade that best suits your home and lifestyle.



How much maintenance will our Dualframe windows and doors need?

Very little. Aluminium requires very much less looking after than PVC-U or wood. Dualframe windows and doors will not warp or twist or swell up and will not rot or rust. Unlike plastic doors and windows they do not attract dirt and will not discolour.

Maintenance generally means a simple wipe over with a damp cloth.

We expect our new windows to be weatherproof, but will they stay weatherproof?

Every part of the Dualframe range has been tested for watertightness, air permeability and wind resistance in accordance with BS 6375 and have been shown to exceed the 2400 Special Exposure Category. This category is for windows and doors that can withstand the higher wind speeds and pressures that occur at exposed locations.

Aluminium's low thermal expansion and inherent strength mean that the frames and casements of Dualframe doors and windows fit together precisely and will stay weatherproof long after timber and plastic windows have begun to leak.





security, strength and safety

Security is what makes a house into a home. Whether you are at home or out somewhere, you want the reassurance that your home is safe; Dualframe windows and doors offer security features that give you that reassurance.

Not only do they deter opportunist thieves but their inherent strength and new generation locks create secure barriers against more

determined burglars. Dualframe windows have been tested and awarded a BS 7950 Kitemark whilst Dualframe doors have been tested and awarded a PAS 23 and PAS 24 Kitemark.

Because aluminium is so strong and so rigid it is highly resistant to warping and bending, which means that security is inherently built into all Dualframe windows and doors. And, because

aluminium does not expand like plastic or wood, there will be no gaps that can be used to prise a window or door open.

In fact Dualframe doors and windows have been designed from the outset with security as a prerequisite. Our long experience and design expertise mean that security is not just dependent on the locks that are fitted but is actually built in to the whole system.



Are Dualframe windows and doors really secure? How can we be sure?

Aluminium is a naturally strong material, as strong as some steels yet it neither rusts nor weakens with age like PVC-U. We have been manufacturing strong, safe aluminium window systems for over 30 years and have made sure that Dualframe has undergone stringent testing by independent bodies. The system has been awarded the BS 7950 Kitemark for advanced security performance for domestic casement windows.

For your security casement windows have a shootbolt multipoint locking system as standard. Details of security standards appear at the back of this brochure whilst your supplier can explain Dualframe's security options to you.



Often the weak point in a window or door is the glass. How does Dualframe measure up?

We have invested decades of testing to ensure that all aspects of our Dualframe windows and doors are secure. A choice of 24mm, 28mm and 32mm double glazed window units are supplied as standard, with other depths and glass types available if required. Glazing units are installed using high security beading.



There are many different designs of glass panels for Dualframe entrance doors, do these affect security in any way?

No, Dualframe entrance doors can be specified to use the most advanced security glass. Combined with the design of the door itself and the location of security features this not only provides PAS 23 and PAS 24 levels of security but also meets the need to reduce heat loss through the door.

How does Dualframe's door security work?

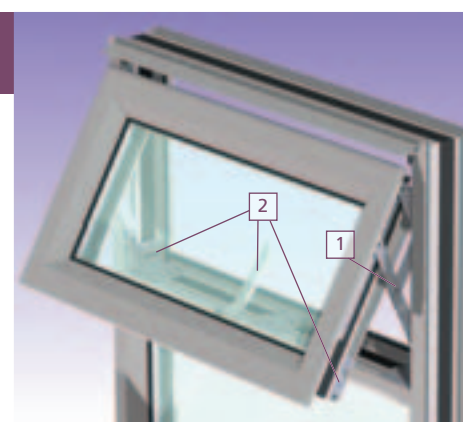
This drawing shows our standard security multipoint locking and the optional extras that you can specify.

- 1 High security shootbolts top and bottom can be specified to secure the door in a total of six places
- 2 The three bolts are hook shaped to prevent the door being levered away from the frame
- 3 Security key cylinder with anti-drill inserts – offered as an optional extra safeguard
- 4 Centre latch



Dualframe's security features

- 1 High security friction hinges can be specified which offer smooth, effortless opening but when closed have a locked arm which locates into the frame.
- 2 A turn of the handle operates the shootbolt locking mechanism and drives high strength brass alloy bolts into the window frame into die-cast keeps in the outer frame. The locking mechanism also offers a lockable 'night-vent' position.



We want to be able to close all windows quickly and to be sure they are secure.

Secure multipoint locking is standard on all Dualframe windows. With top and side opening windows, turning the handle shoots high strength metal bolts in opposite directions to firmly locate into diecast keeps in the metal

window frame. They are then further secured with a central key operated handle which adds an extra level of security. Whatever security options you choose, even standard Dualframe windows meet the needs of BS 7950.

How resistant to attack are Dualframe doors?

All Dualframe entrance doors have three hook locks and a central latch engaging with stainless steel keeps and a central deadbolt with a 5-pin anti-drill cylinder complying with BS EN 1303.

Double doors have at least three hook locks as well as a central dead bolt actuated by a 5-pin anti-drill cylinder lock. Further head and floor shootbolts can also be fitted, however as

standard Monarch Dualframe entrance doors meet PAS 23-1:1999 and PAS 24-1:1999 which specify the requirements for enhanced security performance for door assemblies.



How do Dualframe windows and doors perform if there is a fire?

Dualframe windows and doors are made from aluminium which is a metal and therefore will not burn. Timber and PVC-U windows and doors can catch

fire and give off toxic chemicals as they burn. Dualframe is so much safer as aluminium is flame resistant, does not burn and will not give off any fumes.

Sliding patio doors feature multipoint locking, what does this mean?

Multipoint locking is where there are several points at which the door is firmly locked to the door frame. Our patio doors feature four separate locking bolts with mushroom heads which locate into strong stainless steel keeps. Then the door can be deadlocked by key in a 5-pin cylinder lock. This gives at least five points where the door is firmly fixed to the frame to give you peace of mind security.



What other features help prevent interference with patio doors?

Permanent anti-lift blocks are fitted to prevent panels being prised out, whilst overlocking stiles on the facing edges of the doors prevent them being prised apart. And being made of aluminium the frames themselves are very strong.

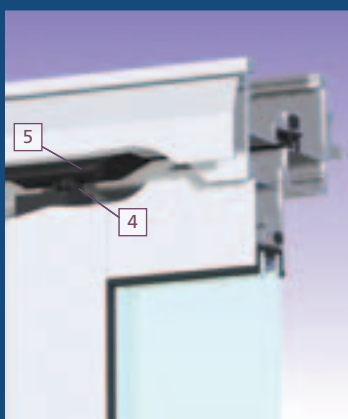
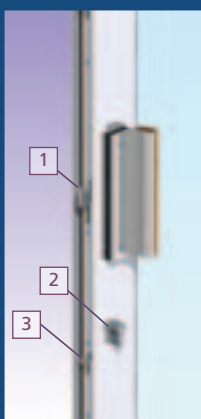
Can we add extra security if we think it necessary?

Our patio doors, just like Dualframe windows and entrance doors, are designed to meet the relevant British and European Standards without further optional security features. However where enhanced security is desired patio doors can be fitted

with optional hook and shoot bolts. These further increase the number of locked points as well as incorporating a lockable vent position which provides full height ventilation to allow fresh air in but preventing children or pets from wandering out.



Where does security fit into the patio door?



- 1 Optional centre hook lock
- 2 Key deadlocking cylinder
- 3 One of the four mushroom-headed locking bolts which locate behind heavy gauge stainless steel keeps, preventing the door being forced from the frame.
- 4 High security shootbolts allow the

door to be held in a semi-open position to allow for fresh air but prevent children or pets escaping. High security bolts, where fitted, incorporate an anti-slam feature that prevents damage to the locking mechanism.

- 5 Anti-lift blocks which prevent the door panels being lifted out of the frame.

Sapa Building Systems is part of the international Sapa Group and has specialised in the design and manufacture of window and door systems for over 40 years.

You know that when you choose windows and doors from Sapa you are investing in a superbly designed, engineered and manufactured product that will not only look good for years to come, but that has

been tested and Kitemarked to British Standards to keep the elements and uninvited guests at bay.

All of the windows and doors shown in this brochure are designed and manufactured to exacting standards for fabrication and installation by one of our network of local fabricators and installers.

We firmly believe that the decision on who installs

your products should be your choice and so our network leaves you free to choose your own local installer – maybe one that you already know or one that has been recommended to you – to do the fitting.

We are confident that you will find our windows and doors and your local installer a fitting combination.

We invest in our standards to give you peace of mind.



License No. FM 1154

Sapa Building Systems Limited has been granted the BSI Registration of Firms of Assessed Capability in accordance with BS EN ISO 9001:2000.



License No. KM90215

PAS 23-1:1999 specifies the general performance requirements for door assemblies. Part 1: Single leaf, external door assemblies to dwellings.



License No. 74159

BS 4873 specifies materials, construction, finishes and hardware as well as the weathertightness performance for aluminium windows.



License No. KM74141

BS 7950 specifies the security standards for windows.

PAS 24-1:1999 specifies Enhanced security performance requirements for door assemblies. Part 1: Single leaf, external door assemblies to dwellings.

sapa:

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We operate a deliberate and continuing process of window design and development and reserve the right to amend the designs and specifications shown in this brochure without notice.

Part no. DFC81 1105