



Building closures systems solutions

PVC compounds for windows and shutters

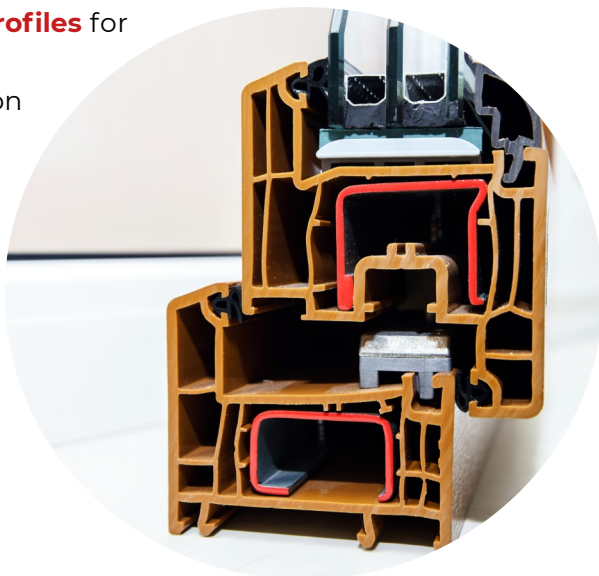
Your expert for closure components materials

PVC has been widely used for producing construction elements for decades, and it is acknowledged for its value in building closures such as doors, windows and shutters.

Window systems have significantly improved during the past decades. They allow more light inside homes and are more durable and better insulated. Lower energy consumption, larger apertures and cost improvement are also key parameters to meet the energy transition demands. PVC is a major component of window systems, and as such it is a major contributor to the performance enhancement. Whether rigid or plasticized, made for PVC or aluminum frames, ProVinyl by BENVIC is an asset for every window system application.

Shutter systems require similar performances. BENVIC provides fully adapted PVC for blades and mechanism housings, with increased resistance against mechanical shocks.

Additional profiles for
window
customization

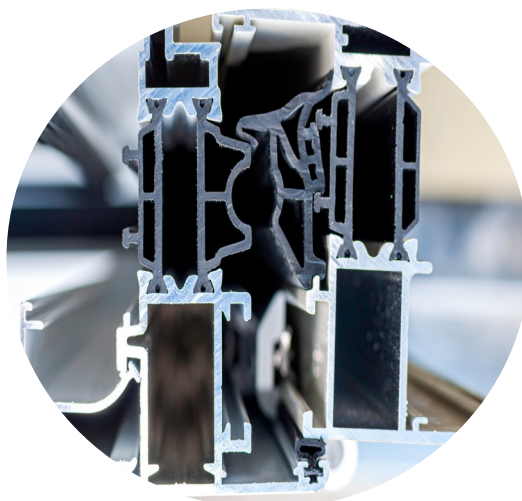


Static gasket manage interface
between profile and glass

Dynamic gasket ensuring efficient
sealing to water and air between
fixed and movable parts at each
opening cycle over the lifespan

Main profile skin and core,
window PVC profiles managing
mechanical resistance,
appearance and durability

Thermal rupture allowing
aluminum frame windows to
avoid thermal conductivity
between outdoor and indoor
faces and maintaining
optimized insulation



Shutter casing profile holding
the rolling system



Shutter blades to be assembled to
create the whole shutter

Acoustic insulation to improve
comfort

Durability Windows systems are exposed to various stress factors linked to outdoor conditions: variation of temperature, solar exposure, effect of water having significant potential impact on window materials in terms of function or appearance, and so on. For this reason, windows profiles need to be resistant and durable.

With ProVinyl, BENVIC offers a set of solutions meeting the highest standards of durability. Depending on countries, materials are certified to demonstrate such performance.

BENVIC capitalizes on years of experience regarding long-term material aging and how to compensate for it. This enables rugged materials to endure for decades of service and is a major advantage for any manufacturer.

Aspects and colors Whatever the basic material, appearance is the major contributor to window value. PVC frame windows must display a variety of colors and appearance. BENVIC provides a wide array of solutions with valuable properties, from color on demand to surface brightness, from optimized materials to decorative film deposition. Color resistance against UV aggression is also a key asset of our materials.






Dimensional stability Since window frames are exposed to high temperatures or direct sun, they need good thermal stability to avoid deformations through time. BENVIC grades are specifically designed to meet such requirements whether for PVC frames or for thermal rupture profiles.

Compression resistance Gaskets, especially dynamic ones, need to demonstrate their ability to handle pressure throughout the opening and closing cycles. A combination of flexibility and wear resistance is key. BENVIC has developed high resistance compounds precisely to reach this performance level.

Value for money Using PVC helps ensure that the latest and most efficient windows systems remain affordable for budget homes. Aside from high performance products, BENVIC also provides more basic compounds for cost-effective use.







































**ProVinyl
contribution to
the
performance**

Key benefits

-  **UV resistance** color resistance against ageing
-  **Color on demand** and wide existing color range
-  **Dimensional stability** against thermal stresses
-  **Brightness** different finishes from matt to gloss
-  **Shock resistance** improved formulation
-  **Hardness modulation** for seals
-  **Compression** recovery time modulation
-  **Weldability** for easy junction assembly
-  **Fire resistance**



















Window frame solutions

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
EH840/EH841 EH843/EH844	Extrusion Co-extr.	White colors—weld able	   	 QB34 ⁽¹⁾  BCCA	FR	Pellets Dryblend
EH842	Extrusion Co-extr.	Pastel color - weld able	   	 QB34 ⁽¹⁾	FR	Pellets Dryblend
EH875	Extrusion Co-extr.	Decorative film deposition compatible	  	CSTB	FR	Pellets Dryblend
ER845	Extrusion	White colors—weld able	  	 QB34 ⁽¹⁾	FR	Pellets Dryblend
EH855	Extrusion Co-extr	Core profile for co-extrusion	 	 QB34 ⁽¹⁾	FR	Pellet Dryblend
EH443	Extrusion	Roof window	   		IT	Pellet
EH641	Extrusion	General purpose	  		IT	Pellet
EH645	Extrusion Co-ext	Coating for fiber glass profiles	 		IT	Pellet
ER760	Extrusion	Tropical environment	   		SP	Pellet
CPE18/I52	Extrusion	General purpose Gloss 60%	   	BS EN 12608	UK	Pellet

















Thermal rupture solutions

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
	ER019	Extrusion	Multi-cavity profile design	 	 NF132	FR Pellets Dryblend
	ET284	Extrusion	High dimensional stability	 		FR Pellets
Thermavic®	ET292	Extrusion	High dimensional stability Thermal shield	 	 CSTB ⁽¹⁾	FR Pellets
	ER194	Extrusion	Aluminum profile linkage			FR Pellets Dryblend
	ER702	Extrusion	Value grade	  		SP Pellets
	ER718	Extrusion	High impact resistance	   		SP Pellets







































Window additional profiles & parts

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
	ER449	Extrusion	Mechanical performance Durability	   		FR Pellets Dryblend
	ER459	Extrusion	Value grade			FR Pellets
	IH014	Injection	Profile junction part High fluidity	  		FR Pellets
	ER014	Extrusion	General purpose Satin / matt finish	 		FR Pellets Dryblend
	ST/28CZ-0	Injection	High filled Satin finish			PL Pellets
	CRT07/128	Extrusion	Conservatory parts architectural fittings	  		UK Pellets











































Window gasket solutions

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
EP803	Extrusion	Dynamic seal Matt finish	  	 QB36 ⁽¹⁾  BCCA	FR	Pellets
EP418	Extrusion	Dynamic seal Satin finish	   		FR	Pellets
ER412	Extrusion	Static seal	 		FR	Pellets
EP527	Extrusion	General purpose	 		IT	Pellets
EN614	Extrusion	Dynamic seal	  		IT	Pellets
EP614	Extrusion	Static seal Value grade	 		IT	Pellets
TCH/82CZ-39HP	Extrusion	Dynamic seals Wide hardness range	 	CSTB - RAL GZ - K80	PL	Pellets
TCH/2CZ-38TP	Extrusion	Dynamic seals	  		PL	Pellets
THS/4CZ-35TP	Extrusion	Static seal	 		PL	Pellets
THS/7BCZ-31HP	Extrusion	Static seal Antibacterial			PL	Pellets
EP807	Extrusion	Dynamic seals	  	 QB36 ⁽¹⁾	SP	Pellets
EP755	Extrusion	Static seal Aluminum frame compliant			SP	Pellets
CS6135P	Extrusion	Dynamic seals	  		UK	Pellets
CS6135 CFE14/143-CFR14/145	Extrusion	Static seal	  		UK	Pellets



Roller shutter solutions

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
ER198	Extrusion	Shutter blade – NF certified	 	 NFI32	FR	Pellets Dryblend
ER210	Extrusion	Value grade	 	 NFI32	FR	Pellets
ER211	Extrusion	Shutter blade General purpose	 		FR	Pellets
ER375	Extrusion	Shutter blade High gloss finish	  		FR	Pellets
ER464	Extrusion	Shutter casing Value level	 		FR	Pellets
EH840/EH841	Extrusion	Shutter casing, blade guides White colors	  	 QB34 ⁽¹⁾  BCCA	FR	Pellets Dryblend
EH842	Extrusion	Shutter casing, blade guides Pastel color	  	 QB34 ⁽¹⁾  BCCA	FR	Pellets Dryblend
ER845	Extrusion	Shutter casing Certification for France	  	 QB34 ⁽¹⁾	FR	Pellets
ER625	Extrusion	High speed extrusion Plateout free - burr free	 		IT	Pellets
ER634	Extrusion	Value level	 		IT	Pellets
ER700	Extrusion	High speed extrusion Gloss finish			SP	Pellets
ER733	Extrusion	Tropical environment Entry level	 		SP	Pellets
CRE18/003	Extrusion	Skinning grade Matt finish	  		UK	Pellets
CRT07/93 CRE15/111	Extrusion	General purpose Versatile	  		UK	Pellets

Notes: (1) QB qualification is linked to material color—please check with your representative if color chosen is already qualified.

Support

As leading specialist of PVC compounding, BENVIC supports its customers during the whole production process, from design to manufacturing to after-sales services. For any support, please contact your closest BENVIC sales representative or consult our website at benvic.com.

Technical data sheets, processing recommendations and other supporting data are available upon demand. The information given here above is general commercial information, cannot be considered as a specification and can change without prior notice. Benvic also supports customers through continuous adaptation of its products: please contact your nearest sales representative for technical support.



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