



Redesigning plastics. For good.

Building closure systems PVC compounds

ProViny



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.

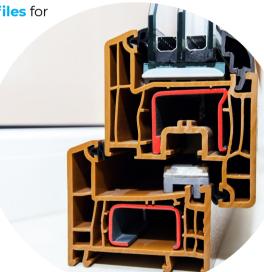
Window systems have significantly improved during the past decades. They allow more light inside homes and are more durable and better insulated. Lower energy consumption, larger apertures and cost improvement are also key parameters to meet the

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 ensuing efficient sealing to water and air between fixed and movable parts at each opening cycle over le lifespan

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

Thermal rupture allowing

aluminum frame windows to avoid thermal conductibility 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

> > ProVinvl

the

performance

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. contribution to

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.

Key benefits

- W resistance color resistance against ageing
 - Color on demand and wide existing color range
 - $\lim_{n \to \infty}$ Dimensional stability against thermal stresses
 - Brightness different finishes from matt to gloss
- Shock resistance improved formulation
- Hardness modulation for seals
- **Compression** recovery time modulation
- L 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	∟淡戀₽	QB34() BCCA	FR	Pellets Dryblend
EH842	Extrusion Co-extr.	Pastel color - weld able	∟≫⊚ ₽	କ୍ରି QB34()	FR	Pellets Dryblend
EH875	Extrusion Co-extr.	Decorative film deposition compatible		CSTB	FR	Pellets Dryblend
ER845	Extrusion	White colors—weld able	∟ 🕸 🔛	<u>@</u>B QB34()	FR	Pellets Dryblend
EH855	Extrusion Co-extr	Core profile for co-extrusion		ଜ୍ରି QB34()	FR	Pellet Dryblend
EH443	Extrusion	Roof window	止 🖗 🖗 🖻		IT	Pellet
EH641	Extrusion	General purpose	∟@₽		IT	Pellet
EH645	Extrusion Co-ext	Coating for fiber glass profiles	¢		IT	Pellet
ER760	Extrusion	Tropical environment	止 🖗 🖗 🔛		SP	Pellet
CPE18/152	Extrusion	General purpose Gloss 60%	∟≫⊚₽	BS EN 12608	UK	Pellet



	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
ER019	Extrusion	Multi-cavity profile design	\$	NF 132	FR	Pellets Dryblend
ET284	Extrusion	High dimensional stability	TWE TO A		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	© ₽ Ŷ		SP	Pellets
ER718	Extrusion	High impact resistance	@ ₽ î> Xi		SP	Pellets



Window additional profiles & parts

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
ER449	Extrusion	Mechanical performance Durability	22 @ @ @		FR	Pellets Dryblend
ER459	Extrusion	Value grade	Ŵ		FR	Pellets
IH014	Injection	Profile junction part High fluidity	23 @ D		FR	Pellets
ER014	Extrusion	General purpose Satin / matt finish	1		FR	Pellets Dryblend
ST/28CZ-0	Injection	High filled Satin finish			PL	Pellets
CRT07/128	Extrusion	Conservatory parts architectural fittings	∟ ※ ◎		UK	Pellets



	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
EP803	Extrusion	Dynamic seal Matt finish	@ ₽ Ш	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	@ ₽ Ш		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		ହ୍ରି QB36(1)	SP	Pellets
EP755	Extrusion	Static seal Aluminum frame compliant	T		SP	Pellets
CS6135P	Extrusion	Dynamic seals	<u>نة الله</u>		UK	Pellets
CS6135 CFE14/143-CFR14/145	Extrusion	Static seal	ات الله الله الله الله الله الله الله الله		UK	Pellets
	Extrusion	Static seal	◎ Ⅲ ■		UK	Pellets

	Process	Main features or applications	Benefits	Certifications	Country of origin	Presentation
ER198	Extrusion	Shutter blade- NF certified	¢۲ 🔊	NF132	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() BCCA	FR	Pellets Dryblend
EH842	Extrusion	Shutter casing, blade guides Pastel color	∟淡蘂 ₽	QB34() BCCA	FR	Pellets Dryblend
ER845	Extrusion	Shutter casing Certification for France	∟ @ ₽	ନ୍ଧି QB34୍ୱ	FR	Pellets
ER625	Extrusion	High speed extrusion Plateout free - burr free	\$ \$		IT	Pellets
ER634	Extrusion	Value level	\$		IT	Pellets
ER700	Extrusion	High speed extrusion Closs finish	Ś		SP	Pellets
ER733	Extrusion	Tropical environment Entry level	\$		SP	Pellets
CRE18/003	Extrusion	Skinning grade Matt finish	止 🕸 🖻		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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