

Garnet70 Garnet70

Strong

LATEST TREND IN THE 70 SERIES



TRIPLE
SEALING
SYSTEM

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FIRAT



FIRATPEN

GARNET 70 & GARNET STRONG WINDOW AND DOOR SYSTEM

NEW ERA IN SERIES OF 70MM WIDTH GARNET 70 & GARNET STRONG
 Today's city culture and structural technologies are shaped at totally new dimensions. Cities are full of differentiating silhouettes caused by this change. New living areas make aesthetics, isolation, comfort, and efficiency principles come forward. Following closely this change, we fulfill the need of the differentiating construction technologies with a new series. Garnet Strong with triple sealing system and Garnet, both of which interpret the 70 mm series with a different aesthetics and isolation perspective, are the new choices of the modern structures.

ABOVE-STANDARD SOLUTIONS WITH 70 MM SERIES
 Garnet and Garnet Selective Series, which were designed to bring a new dimension to the quality and aesthetic understanding of the window standard, increase the comfort in your living areas with the excellent heat and sound insulation. Garnet, whose all profiles have got 70 mm width and 5 chambered design together with Garnet Strong with triple sealing, are new choices of the new generation architecture. Garnet and Garnet Strong fulfil the expectations of the new trends with their 21 different color options and start a new era in 70mm series of windows providing excellent heat and sound insulation in modern structures. Both series develop different alternatives that are compatible with your furniture and wall color and the outer facade of the buildings.



SYSTEM

- Garnet Strong provides maximum insulation values in the 70 series with its triple sealing design in the Garnet System which has all main profiles of 70 mm width and B class wall thickness.
- While the system has 4 different types of oval shaped glazing beads which increase the interior width, it also offers 4 different decorative glazing bead profile alternatives.
- It can solve all the architectural details thanks to its detailed and auxiliary profiles designed compatible with its main profiles.
- Glass application until 40 mm can be done thanks to the system's glazing bead profiles.
- Garnet and Garnet Strong series provide you options to meet decorative expectations and add value to your house with its 22 different laminated color applications.

WIND LOAD RESISTANCE

- Garnet system is designed pursuant to 1.800 Pa safety test on wind load and 600 Pa (110 km/h) water impermeability strength test and it has successfully passed these tests.
- The New Garnet Strong Series, which has triple sealing system for providing resistance in high wind load structures, offers perfect solutions.
- While developing Garnet system, the maximum wind load values to which the buildings can be exposed were taken into the consideration; the structure of the reinforcement steel and their locations inside the profiles were designed in the most effective way.
- System, whose detailed and box profiles provide solutions to meet the architectural needs, easily ensures the closure of the wide openings and necessary resistance values.

WATER AND AIR IMPERMEABILITY

- In order to keep air and water permeability at the lowest level, the Garnet Strong Series is designed with 3 seals.
- Preventing the passage of air from the external environment to the internal environment, which is required for energy conservation, is provided with the middle gasket in addition to the standard inner and outer gaskets.
- The Garnet System provides high resistance to water even at high wind loads, thanks to its water drainage channels and sets designed to discharge the rainwater in a faster and easier way.
- The system did not let any water inside and proved its high quality under the tests carried out with 600 Pa (110 km/h) wind load.

HEAT INSULATION

- The profile designs of New Garnet and New Garnet Strong were made as for the thermal conductivity coefficient values which is the most important part of energy conservation, to be at minimum levels.
- Profile width, chamber numbers and chamber width of the system were created to keep the heat and sound insulation at maximum levels.
- With the triple sealing system, the best insulation values that can be achieved in a 70 PVC window system have been achieved.
- All profiles of Garnet and Garnet Selective system have a structure of 5 chambers and since the chamber width is large, low level coefficient of thermal conductivity values are provided.
- Compatible with TS EN ISO 10077-2 standards, Ug: 0.7 W/m²K, Uw: 1,05 W/m² K, and Uf: 1.2 W/m² K values were accomplished with the windows system which has a size of 1,23m x 1,43m.

SOUND INSULATION

- One of the most important criteria in window systems is the sound insulation. High sound levels about 70 dB in the areas close to airports, railways or crowded highways are decreased to values under 30 dB which a child can sleep easily by with the Garnet and Garnet Strong systems.
- Sound insulation up to 40 dB value can be provided with Garnet and New Garnet Strong series. Therefore, it is possible to create a sound environment at a high quality life level even at the loudest places.



COLOUR AND DESIGN CHART

PROFILE WIDTH: **70 mm**

WALL THICKNESS: **B CLASS**

NUMBER OF SEALS: **GARNET: 2
GARNET STRONG: 3**

CHAMBERS: **5**

SOUND INSULATION: **40 db**

AIR PERMEABILITY CLASS: **4**

WATER IMPERMEABILITY CLASS: **9A**

PROFILE HEAT INSULATION (W/m²K): **1,20**

WINDOW HEAT INSULATION (W/m²K): **1,05**

WIND LOAD RESISTANCE CLASS: **C3**

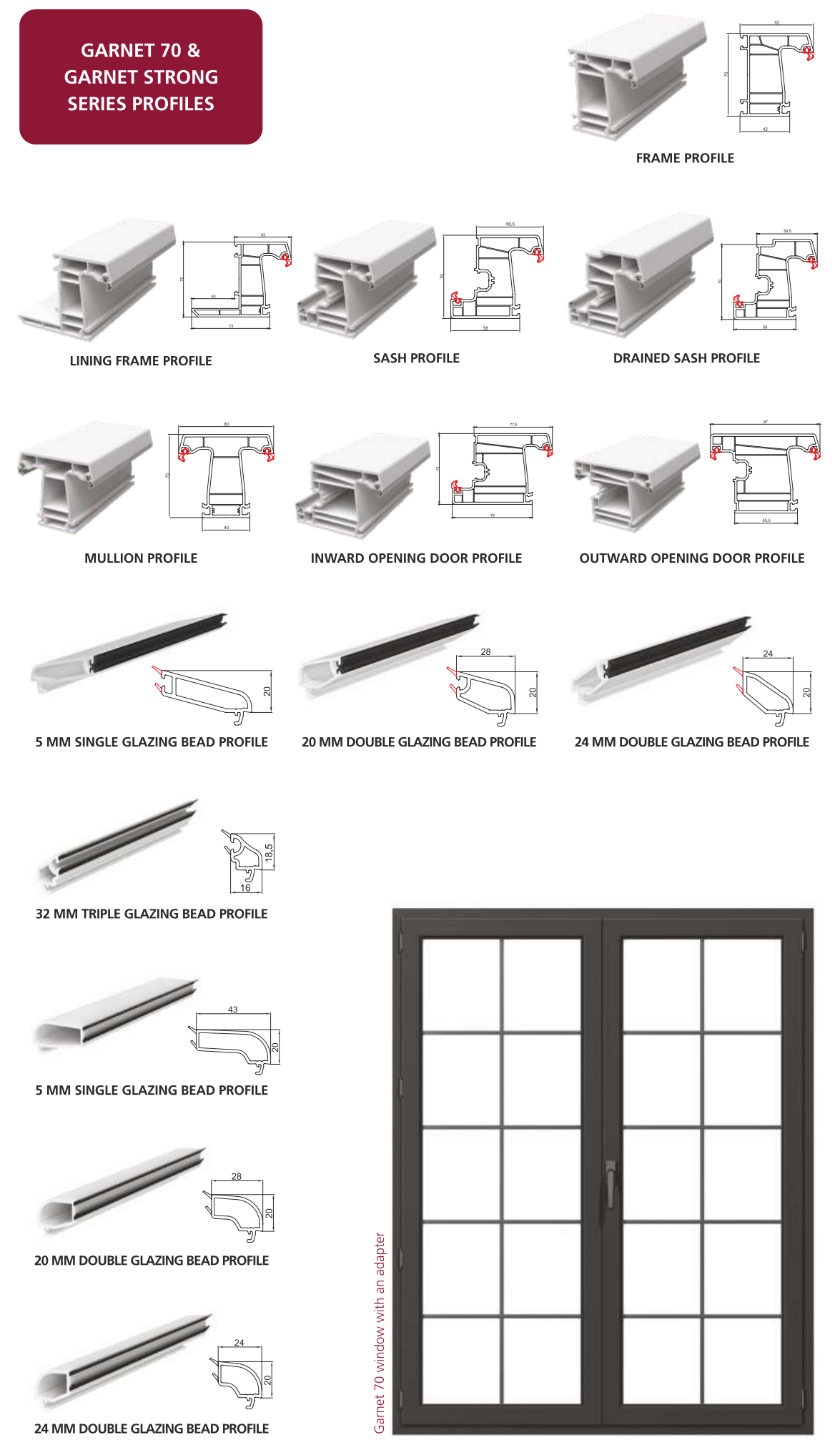
GLASS THICKNESS: **5, 20, 24, 32, 40 mm**

Calculations were made according to **TS EN ISO 10077-2** standard, using a glass unit with a heat transmission coefficient of **0.7 W/m²K** for a window measuring **1.23 x 1.43 m**.



WHITE	CREAM WHITE	MAHOGANY
EICHE RUSTICAL	DARK OAK	DARK GREEN
STEEL BLUE	GOLDEN OAK	OAK
WALNUT	CEDAR	ANTEAK
WINCHESTER	MACORE	ANTHRACITE
SMOOTH ANTHRACITE	BLACK ULTI-MATT	TROMPET
GREY	SILVER BRUSH EFFECT	SILVER D (SILVER GREY)
ALUMINIUM BRUSH EFFECT		

GARNET 70 & GARNET STRONG SERIES PROFILES



Garnet 70 window with an adapter

