

# Garnet70 Garnet70

Selective

NEW ERA IN SERIES OF 70MM WIDTH

NEW  
DRAINED  
SASH

WALL  
THICKNESS  
GARNET:  
"A" CLASS  
GARNET:  
"B" CLASS

FRAME &  
SASH WIDTH  
70 MM

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## GARNET 70 & GARNET SELECTIVE WINDOW AND DOOR SYSTEM

### NEW ERA IN SERIES OF 70MM WIDTH GARNET 70 & GARNET SELECTIVE

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 fulfil the need of the differentiating construction technologies with a new series. Garnet Selective with Class A wall thickness 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 Selective which has Class A wall thickness, are the new choices of architecture. Garnet and Garnet Selective 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 and Garnet Selective systems, which provide esthetical integrity thanks to the Oval Drained Sash profile, have two different drained sash profile options. Oval drained sash profile has the same ovality with the frame; and another drained sash profile is with sharper edges, these are also offered with Garnet system, depending on the customer's demand.

→ All main profiles of Garnet and Garnet Selective series have a width of 70 mm.

→ Garnet Selective has Class A wall thickness; Garnet has Class B 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 Selective series provide you options to meet decorative expectations and add value to your house with its 21 different laminated color applications.

### WIND LOAD RESISTANCE

→ Garnet system is designed pursuant to 3.000 Pa (245 km/h) safety test on wind load and 600 Pa (110 km/h) water impermeability strength test and it has successfully passed these tests.

→ The Garnet Selective Series, which has Class A wall thickness 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.

→ Garnet and Garnet Selective series provide you options to meet decorative expectations and add value to your house with its 21 different laminated color applications.

### WATER AND AIR IMPERMEABILITY

→ Garnet and Garnet Selective series provide 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 and 4 liters of rainwater per minute.

### HEAT INSULATION

→ The profile designs of the Garnet Series 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.

→ 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/m<sup>2</sup>K, Uw: 1.05 W/m<sup>2</sup>K, and Uf: 1.2 W/m<sup>2</sup>K values were accomplished with the windows system which has a size of 1,23m x 1,43m.

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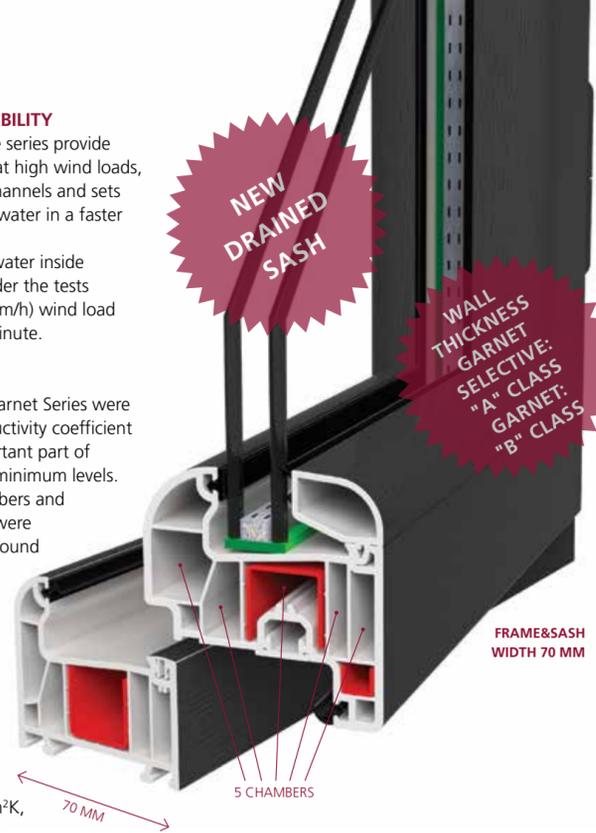
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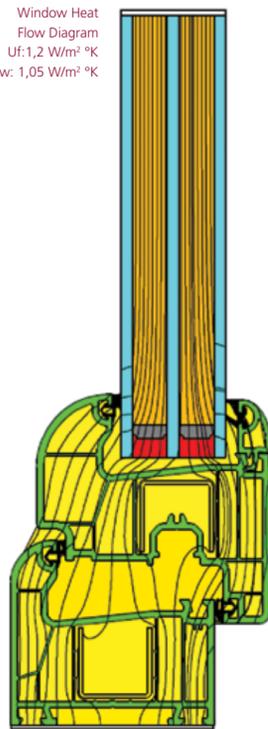
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Window Heat Flow Diagram  
Uf: 1,2 W/m<sup>2</sup> °K  
Uw: 1,05 W/m<sup>2</sup> °K



### COLOUR AND DESIGN CHART



WHITE



CREAM WHITE



MAHOGANY



EICHE RUSTICAL



DARK OAK



DARK GREEN



STEEL BLUE



GOLDEN OAK



OAK



WALNUT



CEDAR



ANTEAK



WINCHESTER



MACORE



ANTHRACITE



ASH



TROMPET



GREY



SILVER BRUSH EFFECT



SILVER D (SILVER GREY)



ALUMINIUM BRUSH EFFECT

PROFILE WIDTH  
**70 mm**

WALL THICKNESS  
GARNET SELECTIVE  
"A" CLASS  
GARNET "B" CLASS

NUMBER OF SEALS  
**2**

NUMBER OF THE CHAMBERS  
**5 pcs**

SOUND INSULATION  
**40 db**

AIR IMPERMEABILITY  
**CLASS 4**

WATER IMPERMEABILITY  
**CLASS 9A**

PROFILE HEAT INSULATION  
**1,2 W/m<sup>2</sup> °K**

WINDOW HEAT INSULATION  
**1,05 W/m<sup>2</sup> °K**

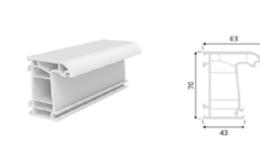
WIND LOAD RESISTANCE  
**CLASS C3**

GLASS THICKNESS  
**5, 20, 24, 32, 40 MM**

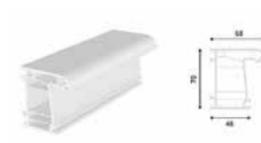
The calculations were made by using a glass unit with a thermal conductivity coefficient of 0,7 W/m<sup>2</sup>°K for a window with dimensions of 1,23x1,43 m in accordance with the standard TS EN ISO 10077-2.



### GARNET SERIES PROFILES



FRAME PROFILE



WIDE FRAME PROFILE



MULLION PROFILE



OVAL DRAINED SASH PROFILE



DRAINED SASH PROFILE



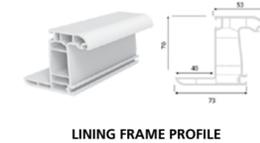
SASH PROFILE



INSIDE OPENING DOOR PROFILE



OUTSIDE OPENING DOOR PROFILE



LINING FRAME PROFILE



SASH ADAPTING PROFILE



SINGLE GLAZING BEAD PROFILE (5 MM)



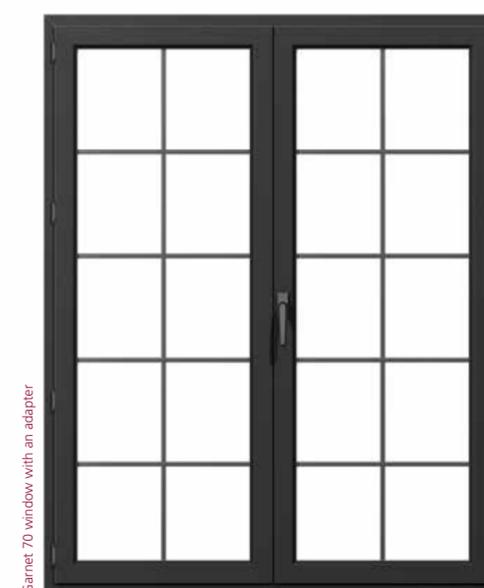
DOUBLE GLAZING BEAD PROFILE (20 MM)



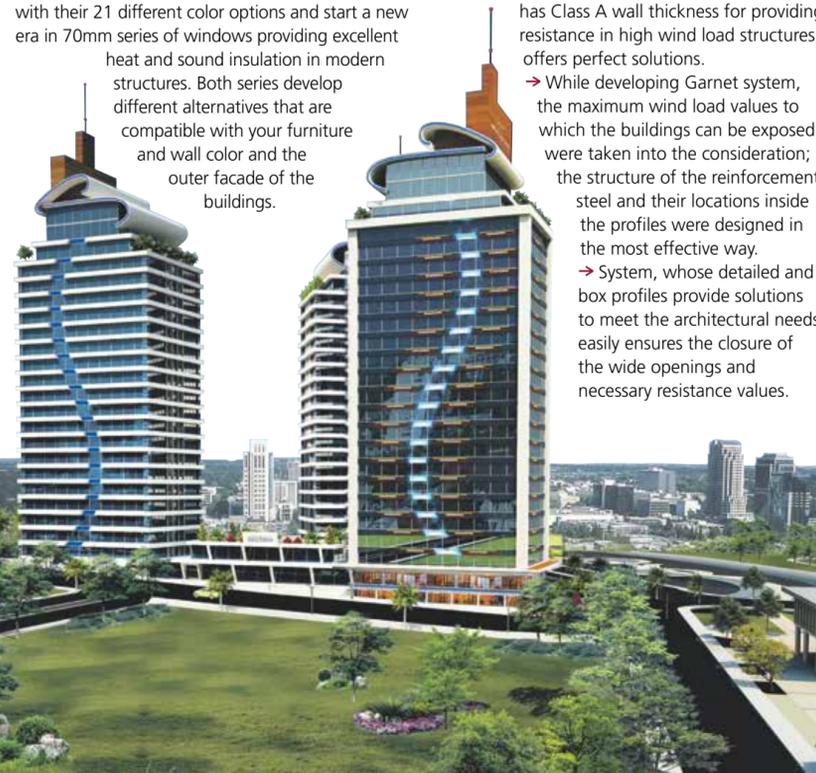
DOUBLE GLAZING BEAD PROFILE (24 MM)



TRIPLE GLAZING BEAD PROFILE (32 MM)



Garnet 70 window with an adapter



Tilt and Turn Windows