



**FIRATPEN** 

**L**i winhouse

Gedizpen



**REDONIT 85** WINDOW AND DOOR SYSTEM

# A NEW ERA IN WINDOW TECHNOLOGY **REDONIT 85**

Our understanding of life and living spaces is changing rapidly. We strive to use time more efficiently and make careful choices for the places we live in to keep us from experiencing problems for years. Construction technology continues to shape itself on higher comfort and functionality. REDONIT 85 is a new series which takes PVC window and profile standards to a new level and meets all the requirements in durability, aesthetics, and heat-sound insulation criteria by exceeding all standards for prestigious projects. It was designed for more comfort via its superior heat and sound insulation features and is now presented to those who are searching for a new dimension in aesthetics. Through its Class A wall thickness, 7 chambered design and triple sealing system, the series is capable of providing maximum performance in thermal and acoustic insulation parameters under the harshest climate conditions. With a lamination range of 21 colors and patterns, the Redonit Series is a system which goes beyond the standards for elite projects. The series also allows usage of different colors for the exterior and interior of buildings in order to meet decorative expectations. The Redonit system provides excellent sound insulation

against the outdoor noise on which we become gradually more sensitive and ensures extra impermeability via its triple sealing system. Redonit, a perfect window system for those who wish to enhance their quality of life, is now at your service.

#### **AESTHETICS**

REDONIT 85 is a window system which suits the decorative needs of all modern projects through its range of 21 lamination colors. The system makes it possible for the lamination colors of the exterior and interior of structures to differ from each other and for the architectural styles of both the building façade and the indoor spaces to be supported aesthetically. While the wood patterned colors capture the beauty of nature, the varying gray tones, particularly eloxal gray and anthracite, can provide you with an appearance of aluminum which may suit the exterior of the structure.

#### **SYSTEM PROPERTIES**

- → Redonit system has a profile width of 85 mm
- → All profiles in the system have Class A wall thickness.
- → It is designed to have 7 chambers.
- → All profiles of the system have three seals.
- → It is possible to use glass units of up to 44
- → The Redonit system can be used under the harshest conditions and in the widest openings by means of its profile width, number of chambers and impermeability system.
- → It is compatible with 13 mm axis espagnolettes. → It was designed to conveniently provide

solutions for all architectural

technicalities through its detailed and auxiliary profiles. of superior features profiles, 7 chambers, capacity for glass units up to 44 mm, suitable chamber

### WIND LOAD RESISTANCE

- → The Redonit system was designed to have resistance against a wind load of 3.000 Pa (245 km/h) and water impermeability
- → During the design process of the Redonit system, the maximum wind load values modern structures are exposed to were taken into consideration and the reinforcement steels' structure and position within the profile were developed to attain maximum efficiency.
- → The system easily meets the resistance value requirements for covering the wide openings in multi-floored modern structures via its detailed and grillage profiles.
- → By its Class A Wall thickness and reinforcement steels, the system can meet the inertia values required against high wind loads.

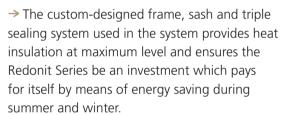
# AIR PERMEABILITY AND WATERTIGHTNESS

- → The water discharge angle and barriers which were developed for faster and easier water disposal provide high resistance against rain, even with
- → There were no water leakages indoors during tests which were carried out under a wind load of 600 Pa (110 km/h) and a rain flow rate of 4 liters/second.
- → The triple sealing system of the series prevents indoor water leakage completely.

## **HEAT INSULATION**

high wind loads.

→ Redonit system was designed to achieve the lowest heat conductivity coefficient possible in window systems by means such as its 85 mm wide widths and convenient profile heights.



→ In accordance with the TS EN ISO 10077-2 standard, the window system with the dimensions of 1,23 m x 1,43 m has achieved the values of Ug: 0,6 W/m<sup>2</sup>K, Uw: 0,93 W/m<sup>2</sup>K and Uf: 1,07 W/m<sup>2</sup>K.

#### **SOUND INSULATION**

- → Redonit 85 Series provides sound insulation with values up to 44 dB. Thus, the system makes it possible to attain an indoor sound level that accommodates a quality life, even in the noisiest environments.
- → The custom-design seal system of the Redonit 85 Series enables the series to achieve maximum values in sound insulation.
- → The sound insulation level to be acquired via acoustic glasses that can be used with

the system isolates the noise of outdoors from indoors in the most Uf:1.07 W/m<sup>2</sup> °K efficient way. Uw: 0,93 W/m<sup>2</sup> °F





DARK OAK

CEDAR

BLACK







DARK GREEN









**85 FRAME PROFILE** 







WALL THICKNESS A CLASS



NUMBER OF CHAMBERS

PROFILE HEAT INSULATION 1,07 W/m<sup>2</sup> °K

WINDOW HEAT INSULATION 0,93 W/m<sup>2</sup> °K

SOUND INSULATION 44 db

AIR PERMEABILITY CLASS

WATER **IMPERMEABILITY** CLASS 9A

WIND LOAD **RESISTANCE CLASS** 

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

The calculations were made by using a glass unit with a thermal conductivity coefficient of **0,6 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.













WINCHESTER STEEL BLUE



CREAM WHITE



SILVER BRUSH EFFECT TROMPET

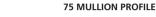


SILVER D (SILVER GREY) ALUMINIUM BRUSH EFFECT



MACORE





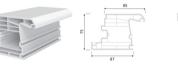


**85 MULLION PROFILE** 



75 SASH PROFILE

**75 SASH ADAPTING PROFILE** 



75 INSIDE OPENING DOOR PROFILE



75 OUTSIDE OPENING DOOR PROFILE



DOUBLE GLAZING

BEAD PROFILE (20 MM)











**BEAD PROFILE (24 MM)** 







