

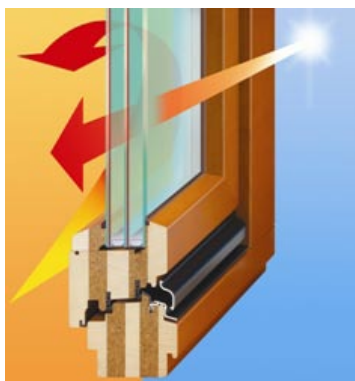
# 0-Energy windows and doors from Vrogum

Developed from nature – for nature

We all want to live healthy and comfortably lives. Unfortunately, the Earth's natural resources may not last forever. Now more than ever, it is crucial that we develop ecological products in order to preserve energy resources.

Vrogum's 0-energy window does exactly that. Not only does it provide you with a comfortable and healthy living environment, it also saves you energy.

Pollution is significantly reduces when we burn less domestic fuels. Thus, 0-energy windows are not just a question of your family's comfort and central heating bill, but also a vital improvement of the Earth's environment in an easy and pleasant way



Energy windows absorb solar radiant heat and re-emit this heat internally, providing a natural and cheap heating source.

At Vrogum, we only use natural resources to produce our 0-energy windows.

We achieve an extremely high insulation value due to the way in which the wood is laminated with layers of cork and combined with a thermal break on the bottom aluminium sill. All glass is triple glazing glass filled with argon gas resulting in a Uw-Value of 0.6

Vrogum can deliver 2 types of energy windows. From 0-energy to energy windows with a U-value of 1.0,



Technical Information	Ewitherm® 0,8	Ewitherm® 1,0
Demanded Uw-Value	Uw <= 0.8 W/(m²K)	Uw <= 1.0 W/(m²K)
Uw-Value IFT-Tested	0.73	0.91
Uw-Value Bauphysik Hermes Tested	0.74	0.97
Wood	Spruce "picea abies"	Spruce "picea abies"
Cork	Cork "quercus suber"	Cork "quercus suber"
Frame width	99 mm	68 mm
Sash width	108 mm	76 mm
Cork layer frame	2 x 20 mm	1 x 20 mm
Cork layer sash	2 x 20 mm	2 x 8 mm
Cork layer glazing bead	1 x 17 mm	1 x 7 mm
Glazing rebate height	30 mm	18 mm
Glass type	Unitop 0.6	Unitop 0.8
Glass thickness	44 mm	36 mm
Light transmittance	69 %	69 %
g-Value	53 %	53 %
Gas	Argon	Argon
Glass divider	Thermix	Thermix
Weather strips	3	2