



Family Home Jankovic Svilajnac (Serbia)



This Family Home was the first Heating system installed in Europe. The Client lived in France and moved back to Serbia in 2012 as they entered into retirement.

The double story home has 205 m² with not the best Insulation. On the outside wall he has 5 cm Insulation and the Roof is not Insulated. Also he changed the Windows in 2014 as the old Timber window didn't insulate anymore so they have been changed to PVC Windows.

One of the most important's by installing a new heating system is Insulation which here in Serbia majority of People don't have sufficient insulation due to lack of Funds and still very cheap Energy Prices compare to the EU.

With a good insulated Home Energy consumption can be reduced by 50% or more. Some Clients turn their heater up to 27°C where good insulation is even more important because the bigger temperature difference is the more heat can be lost throughout the Building.

Jankovic Svilajnac

Rooms	Area (m2)	Volume (m3)	Temp. C°	heating time per Day
Floor Area	205	492	22 C°	18h
Total	205	492		

Gas Consumption from 2012 till 2022

The Client gave me his Gas consumption over the the last 10 years of heating the Family Home which he's been heating since we installed the System which was 13'055 m3 for 10 Years which make it in average 1'305 m3 per Winter season. Please note that the first 2 Years of using the unit he went during Winter for 2 months in Winter to spend time with he's Kids and Grandchildren so the Average per year is a bit lower then shown. He told me that he has spend this past Winter € 550 for the whole Winter.

Gas consumption 2012 - 2022

Date	Consumption for Heating m3	Cost RSD 44 per m3
15.10.2012 - 15.4.2022	13,055	RSD574,420.00
Total in RSD	13,055	RSD574,420.00

Gas consumption 2012 - 2022 in Euros (€1 = RSD 118)

Date	Consumption for Heating m3	Cost € 0.37 per m3
15.10.2012 - 15.4.2022	13,055	EUR4,830.35
Total in €	13,055	EUR4,830.35

Conclusion

As you can see in the Table below that the heat requirement is 0.15 kW instead of 0.1 kW per m² which we regard as the maximum. With good insulation we could reduce even further the Gas consumption. A very good insulated Home would have 0.07 kW per m² which would reflect on Gas consumption. Even so the Gas consumption compared with other Heating system are exceptionally low and as Gas produces 3.8 times less CO₂ then electricity, Gas is a cleaner alternative form of heating. Also one big advantage is that the Gas furnace is not drying the Air nor do you will have any dangerous Mould in your home. All our Clients which installed our Brivis System tend to turn up the heat more then required as they have the luxury to heat the part of the home they using at the time of occupation and once they leave that Zone they turn down or of the unused Zone, which benefits them with smaller energy bill at the end of the month.

As you can see that for this home we need 57 kW per m² which would comply with EU Standards but out of our experience that we could reduce this to 40 kW per m² with a very good insulated Home.

Furnace Model	SP6 Uni
Area m ²	205
Volume m ³	492.0
kW/h required	30.0
kW/h required per m ²	0.15
Exchange rate	118.0000
Natural Gas consumption m ³ per winter Season	1,305
Gas price per m ³	RSD44.00
Heating cost per winter season with Natural Gas	RSD57,420
Heating cost per m ²	RSD280
Heating cost per winter season with Natural Gas	EUR486.61
Heating cost per m ²	EUR2.37
Heating cost over 5 Years with Natural Gas	EUR2,433.05
kW per m ² used	57.29
CO ₂ emission in kilogram	2,701