

Our final conclusion:

We investigated if the roofconstruction of the house is secure and stable enough, so that we are able to place solarpanels on top of them. After that, we concluded that the current construction should be good enough, so we don't have to change that. We mostly paid attention to the state of the wood, because if the wood was in a bad state it would have a lack of support. The pillars that support the entire roofconstruction don't look very well, because it also seems like the pillars are already reinforced and still it doesn't look very stable (picture 1). And if we would place solarpanels on them at this state the pillars will weight down ever more, maybe even to the point that they can't hold it and collapse. That's why we give the advise to replace most of the current pillars with new, stronger and more secure ones. With this idea there will be less security risks and eventually it will hold for a long amount of time. Our second idea is to let the current pillars be and place new pillars along with them, but we imagine the first idea as the one, because even though it is a bit more work, it will look better and more clear.

2 solarpanels will be placed and they will produce a total amount of 1600kW each year. We will also place a 'Nachtspeicherkachel'



Picture 1

Nachtspeicher- Heizung	700 – 1000 € (+250 € Stromzähler)	2.000 W
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We also got some other ideas, but we made some considerations.

First with the solar panels, because we looked at the types of solar panels René send. We looked at how much solar panels you need and it came down at 2 big panels. Just like they represent in Armenia for the school. We also search for the difference between the 2 types of solar panels: monocrystalline and polycrystalline.

Monocrystalline solar panels:

Monocrystalline solar panels are generally thought of as a premium solar product. The main advantages of monocrystalline panels are higher efficiencies and sleeker aesthetics.

To make solar cells for monocrystalline solar panels, silicon is formed into bars and cut into wafers. These types of panels are called “monocrystalline” to indicate that the silicon used is single-crystal silicon. Because the cell is composed of a single crystal, the electrons that generate a flow of electricity have more room to move. As a result, monocrystalline panels are more efficient than their polycrystalline counterparts.

Polycrystalline solar panels:

Polycrystalline solar panels generally have lower efficiencies than monocrystalline options, but their advantage is a lower price point. In addition, polycrystalline solar panels tend to have a blue hue instead of the black hue of monocrystalline panels.

Polycrystalline solar panels are also made from silicon. However, instead of using a single crystal of silicon, manufacturers melt many fragments of silicon together to form the wafers for the panel. Polycrystalline solar panels are also referred to as “multi-crystalline,” or many-crystal silicon. Because there are many crystals in each cell, there is less freedom for the electrons to move. As a result, polycrystalline solar panels have lower efficiency ratings than monocrystalline panels

So our conclusion to the solar panels is that we thought that it is the right choice to get 2 solar panels, just like the man from Armenia said against René.

We also thought about an sun collector, but that idea where fast from the table. Because the main priority is to get energy. And not to get only warmth.

The main thing of this project was to look at the construction of the roof. So we did.

The first thing we walked against were the pillars, because some of the pillars are in a bad shape. Some pillars seems to be rotten, there also some pillars are already reinforced so they can carry the weight of the roof. So we said to be sure that we will replace the rotten pillars. Also we said that we will get some new pillars for the ones which are reinforced. But we think some reinforced pillars can carry a little much more weight so we thought also to let the pillars which are reinforced stand and place some more pillars.

And about the corrugated sheets, there is no problem because they don't carry the solar panels alone. the solar panels will be attached at the construction and not at the corrugated sheets.