

## Solutions for Electrical Wiring in a New House

A young married couple building their first house have asked for meetings with the builder, plumber and electrician before construction work starts. The drawings are finished, but there are still many decisions to be made. Since the husband is not Norwegian all communication has to be in English.

We are at *Stavanger Elektro's* main office. The consultant from the electrical company is going to advise the house builders, Eric and Veronica, on the electrical installation. The house drawing with the wiring diagram is placed on the table in front of them.

**Consultant:** I really like your house. So spacious! ... Now.... let's have a look at the electrical layout. That's why we are here, right? As you can see, we have allotted electrical outlets according to standard, which means that each room has the number of outlets required by regulations. I assume you have studied the plan?

**Eric:** Yes, yes...We have studied the plan, and think it's fine. We just want to make some minor changes. Right Veronica?

**Veronica:** Yes.

**Consultant:** Good! Well, a new standard has been developed to comply with the increase in the number of electronic devices in homes, such as smart phones, computers, tablets and so on. So I think you will find the number of electrical outlets sufficient.... and we have of course planned your house with concealed wiring.

**Eric:** Excellent! And, yes, the number of outlets is satisfactory except in the living room. I think we will need more outlets there. We have quite a few electrical appliances.

**Consultant:** I see. No problem. Just tell me where you want them and consider it done.

**Eric:** Yes, I have already marked additional outlets on my copy. Here, you can have it. Oh, and one more thing. We want to move the antenna outlet to the wall facing the kitchen. We want to watch television while cooking.

**Consultant:** Mm, I see. Good, good. I see your point. I will have to talk to the carpenter about this. Seems like it might cause a problem. But, I am sure he can do the necessary changes. ... Might cost you a little extra, though.

**Veronica:** Fine, we want these changes anyway. I absolutely want to watch television from the kitchen. ... And in the kitchen.... we need to move the fridge outlet too.

**Consultant:** No problem. Moving outlets is free of charge. Hm... looks like the fridge is connected to the plumbing system? You have one of those American fridges with ice cube maker and cold water dispenser?

**Veronica:** Of course!

**Consultant:** Well, we will have to check with the plumber then. He will have to move some of the pipes to connect the fridge to the water supply. This, I believe, will be an additional cost.

**Eric:** No worries. Oh, ... and talking about the plumber. We already met with him and decided on washlet toilets. It seems that you have not included additional outlets in the bathrooms to accommodate this? They run on electricity to flush and heat the water, you know.

**Consultant:** Yes, yes of course. Strange though, I didn't hear about that. I will of course install the necessary outlets to operate the toilets.

**Eric:** Good. I just love those toilets. Ever since my visit to Japan....I said to Veronica. When we build our home, we will have washlets.

**Consultant:** Well, I do not have any personal experience with such toilets, but they sure seem to be in demand these days. Good choice, good choice! Well, now we have gone through the living room, kitchen and bathrooms. What about the lighting and outlets in the bedrooms?

**Eric:** Oh, I noticed there was no outlet in the ceiling. I assume we can have spotlights then?

**Veronica:** Spotlights? Do we have anything but spotlights?

**Consultant:** Your inquiry did not ask for spotlights. (*Phone rings.*) Excuse me, I have to take this. (*Picks up the phone*) Yes, yes, this meeting will only take another minute. Yes, I understand. Tell him I will be there in a couple of minutes. (*Hangs up*) Sorry about that. Busy these days.... Yes, spotlights. ...You can have spotlights with or without a dimmer switch. Actually most of our customers prefer a dimmer switch.

**Veronica:** That's what we want. I think we should have spotlights with dimmer switches in all of the rooms.

**Consultant:** Of course you can, but then we will have to go through this plan once again. Spotlights call for a different wiring. We will need one outlet for each spotlight and we need to decide where to place them. Do you want recessed or surface mounted spotlights?

**Veronica:** Recessed, that's what we want.

**Consultant:** Well, I will make an appointment with the carpenter to inform him of these changes. I assume that you want LED lights as well. They use less energy than halogen.

**Eric:** Of course, LED lights with dimmer switches.

**Consultant:** No problem. Do you want your spotlights to have a chrome or a white finish?

**Veronica:** I like the chrome, looks modern.

**Eric:** Sure, sure

**Consultant:** Good. Well, that's it then. I think we have gone through all the necessary details. I will revise the plan and email you the details with a new estimate of the costs over the weekend. I believe you will be satisfied with the choices you have made. Get in touch if you think of something else

**Veronica:** Thanks, we'll do that.

**Eric:** Yes, thanks.