

COLUMN FOR JANUARY 7, 2006.
HEADLINE; POT LIGHT PROBLEMS

Q; We had our kitchen renovated last summer and had issues with the contractor. During the last mild spell we noticed the area around the pot lights above the sink appeared damp and stained. I went in the attic and there is no insulation over the lights and the ceiling is damp. What do I do?

A; I have had a number of pot light questions recently; I will answer a couple of them today. The first thing is do not cover the pot lights until you have confirmed that they are designed for attic use. There is a specific design for this application that allows for the heat build-up to be properly dissipated. This also allows them to be covered with insulation. I called the reader and established that the contractor did in fact use the wrong lights. This is likely why they did not replace the insulation. The proper lights are considerably more money. The correct lights should be installed here and this is a job for a qualified electrician. Some amount of care should be taken to make sure the vapour barrier is correctly fitted around the pot light base once the correct lights are installed. In my former life we sealed this with silicone and then carefully cut out a hole the correct size of the pot light box in a fibreglass insulation batt and fitted it over the light. We then laid another batt over the top of the light box. We also made sure that we had adequate ventilation baffles installed at the eave edge to ensure correct passive airflow in the attic. I advised our reader to do the same. I also suggested that he clear the roof area above the kitchen of snow and ice. He told me he had already done that and found a build-up of slush behind the ice dam. It is safe to say that the heat loss around the lights was causing a localized ice dam problem, hence the damp ceilings. Once the correct lights are installed, insulation and ventilation corrected it is likely this will solve the issue here.

Q: Last summer I took two pot lights down above our sink. My wife wanted a fluorescent light instead. I made a wood base wide enough to cover the holes and then wired everything into a junction box and covered it all over with insulation. A friend said this was all wrong, is it?

A: At minimum, the junction box you installed for the wiring should not be hidden; this is an electrical code standard. The wood base you made up to cover the pot light holes is not likely an airtight fit. I called the reader and he said that the wood base is long enough to go from one ceiling joist to another. The light is 24" long. I advised our reader to go into the attic and reposition a junction box on the web portion of roof truss above the kitchen. Run a new lead from this junction box to a new junction box in the drywall ceiling. There are electrical boxes that you can buy that come with expandable brackets, these are nailed or screwed to the bottom cord of the truss. Cut a hole and level the box with the drywall. Using proper box connectors you can then wire to the light. The home is 15 years old and does have a vapour/air barrier. This is a quick fix for this type of area where no contact is likely. Cut a piece ½ plywood the width of the space between the trusses and about 8 inches wide and lay it on the ceiling above the old pot light holes. Cut the plastic barrier away from around the plywood. Now take two pieces of 2x4 and laminate them along side of the bottom the trusses and then go to the kitchen and screw the piece of plywood to the pieces of 2x4. This will stop any chance of movement. Now cut out two pieces of drywall and fit them into the old pot light holes. Joint fill and tape them over, do the screws that you used to attach the plywood too. At this point you can fully finish the drywall ceiling or as our reader wants, put the wood base back. Now return to the attic with a piece of 6mil plastic that is large enough to fully cover the patch. Now carefully fit the new plastic over the wood patch and using urethane sealant, seal the entire patch to the wood making sure you overlay the original plastic barrier and seal them all together. Now you have a proper electrical installation and no air leakage around the old pot light holes. One small tip I used to do. Take a magic marker and write the use of the junction box on the flat metal cover. While you may never need this, it sure speeds up looking for wiring issues in the future.

One final note, I would like to thank everyone who called or wrote me in 2005. We had a noticeable increase in your inquiries. We sent out over 500 information booklets of various types this past year. I will continue to offer this feature. Starting this year I am going to interview Master trades and contractors on major renovation issues, watch for this new feature.

This week's question is "What is a Parapet Wall?" Is it A) a non-bearing interior wall containing a built in cabinet B) the portion of a wall that extends above the roofline C) an exterior wall that contains two or more bay windows. The answer in next week's column.

Cam Allen L.I.W. RHI can be reached at cam.allen@sympatico.ca.