

Electrical Panel in the wrong place

When designing the layout for a basement development in your home, there are many things that you have to take into consideration. You must always do the installation as per the Canadian electrical code, as well as following the local by laws. One thing that is occasionally a concern is the location of the electrical panel (panelboards). When the house was constructed, the original electrical contractor installed the electrical panel in a location that was suitable to him but it may not be necessarily in a location that will be legal by today's electrical codes.

What the electrical inspector is going to look at is this: Canadian Electrical Code rule 26-400 (1) says "*Panelboards shall not be located in a coal bin, clothes closet, bathrooms, stairways, high ambient rooms, dangerous or hazardous locations, nor in any similar undesirable place*".

The most common locations that we deal with in residential applications are only the first four. I don't think we have to worry about coal bins any more so next is clothes closets. In the past years I have come across a lot of basement projects where the original electrical panel ended up in the son or daughter's bedroom closet in the basement. The reason the Canadian Electrical Code frowns on this type of installation is because it has the potential to be a fire hazard. There are a lot of flammable articles in that relatively small enclosed space. Note: In the past, the electrical inspectors have allowed the installation of an electrical panel in a closet with the following changes. The thick round wooden bar that runs from side to side in a closet used to hang coat hooks on, can not pass in front of the panel. Second there has to be vertical barriers installed on either side of the panel preventing flammable clothing from being in front of the panel. These were special arrangements made with the electrical inspectors. Best thing to do is not put the panel in the closet.

Bathrooms: This one takes some explaining. In the 23rd edition of the recent code book, a bathroom is described as, "a room containing bathing or showering facilities and that may also contain a wash basin(s) and/or water closet(s). The reason for this is because of the high humidity caused by showers and tubs. It will have a negative effect, over time, on the components of the panel. Here now is the thing that people don't realize. If you have a 1/2 bath in the basement with a water closet and sink without a tub or shower, this is a "washroom" and not considered a "bathroom". A lot of journeyman electricians don't even know this one. There must also be 1 meter clearance in front and below the panel and it is advisable to have it enclosed in a wall cabinet with a door.

Finally the stairways. If your home was built prior to 1960, there is a good chance the electrical contractor that built your home, put the electrical panel in the back entrance of your home. What the code rule is referring to is the placement of an electrical panel over the stairs. In the older homes there were usually 3 stairs going from the back landing to the kitchen. The original panels were located over these stairs on the exterior wall. This original location is allowed today because it is called "grandfathered", it passed code when it was installed. Rule 26 400 (1) only applies to newly installed panels. Next week, legal suites.