

## Fire Safety of UUCB Building

The former church burned because of an electrical fault. Had that building been completely rewired according to current National Electrical Code anytime since about 1940, it would probably still be standing. A primary goal of the NEC, which has been promulgated and successively revised since 1897 by the National Fire Protection Association, is fire prevention.

Our new church building was designed, constructed, and inspected many times for conformity to electrical and other codes in effect in the present century. Even if multiple parts become defective, the chance of a fire is very small. When a part of the solar electric system got hot enough to melt metal, the only damage was to itself, as the NEC intended.

Besides minimizing potential causes of fire, the creators of the building paid attention to fire resistance of the structure itself. Although the exterior walls are wood-framed, plywood sheathed, and shingle-covered, they are protected by fireproof insulation and gypsum board. Structural supports, interior partition framing, and roof deck are non-flammable steel. Walls and ceilings are fire-rated gypsum board. Most of the wood in the building is where you can see it, and it would not be easily ignited. Instead of a wet basement to collect disused flammables, we have a concrete floor throughout.

It is true that supposedly fireproof buildings burn, but that is usually due to negligence or malevolence. A lint-clogged clothes dryer vent could make a mess if ignited. Most likely such a fire would promptly trigger both the fire alarm system and the sprinkler nearest the combustion, and first-responders would get the alarm.

The kitchen ranges and the HVAC units on the roof use natural gas, which is lighter than air. A gas leak could be disastrous, but a gas sensor alarm in the range hood should provide timely warning.

No design is fool-proof, but careful design followed by conscientious management of a building can usually keep it safe and intact.