

## Canadian Standards Association Mississauga, Ontario **To the Part I Committee**

Subject No. 3078Chair: R. LeducDate: November 25, 2002

Title: One Circuit per Room, Rule 26-722

**Submitted by:** Louis Itiniant of 293 Armadale Ave., Toronto, Ontario, M6S 3X5 on March 22, 2002

**Proposal:** Add a new Subrule to Rule 26-722 to read: 'One 15 amp circuit breaker per room/function. (Exception are appliances requiring more than 15 amps).

**Reasons for Request:** To be able to find a light or outlet in the house is very difficult when looking at the distribution panel and seeing a space  $1\frac{1}{2}$ " by 2" available to identify that light or outlet. Knowing that the light or outlet could be part of 12 circuits weaving through the house makes it necessary to map the circuits and keep a record of the pathways for each circuit breaker.

**Supporting Information:** Please refer to circuits 14, 16, 20, and 22 in exhibit A. Although it follows the Code, there is a problem to place all this information on the  $1\frac{1}{2}$ " by 2" space supplied at the distribution panel for each respective circuit breaker. The Code was introduced to insure safety for the end user, the house owner(s). The electricians installing the wiring are finished in 2 to 3 weeks, the house owner(s) must live with this woven wiring for at least 25 to 75 years.

Please refer to exhibit B. This is the same house wired one 15 amp circuit per room, exceptions noted. This method used the same number of circuit breakers as did exhibit A wiring. It looks very clean, simple and is very easy to identify at the distribution panel.

I believe the 12 circuits per 15 amps code is a carry-over from that time period when a house had/has a 60 amp service as the standard, with knob and tube wiring, coupled to 6 to 8 fuses and a double 30 amp stove snap-in cartridge.

The 6 to 8 fuses included the furnace, refrigerator and any 1000 to 1500 watt appliance(s) in the fuse protected circuits. Times have changed, the 12 circuit limit per 15 amps should be relegated to each room and to distributed light loads like entrance and hall lighting, detectors, annunciators etc.

Please review Exhibits A and B again. There is a difference, simplicity.

The end use would be extremely happy to be able to identify whatever circuit he/she desires.

**Chair's Comments:** I interpret the submitter's proposal as a request for a new rule under 26-722 as follows:

(x) each room of a dwelling unit shall be supplied by at least one 15 A branch circuit solely for the general wiring of that room.

## Subcommittee Deliberations (1<sup>st</sup> Round)

Only 6 Subcommittee members responded. 1 agreed with the proposal and the rest disagreed.

The member agreeing proposed re-wording the proposal to ensure that a separate circuit would not be required for such rooms as closets, washrooms, utility rooms, etc.

Receptacles installed in a room or area identified as requiring receptacles in Rule 26-712(a) shall be supplied by a branch circuit that does not supply any other outlets in the dwelling unit except that luminaires located in the room or area shall be permitted to be supplied by this branch circuit.'

Rationale.

I do not think we should limit the lighting circuits to one room and this will permit all the lighting to be on its own circuit or the lighting in the room or area to be on the circuit dedicated to the room or area.

In general the thinking of the original proposal is good as it permits the use of power in each room or area irrespective of the situation in other rooms or areas.

As an old electrician, I can think of times when I had to work with a flash light (no extension lamp with me) So I like this idea. BUT is it safety related YES. Because rather than work in the dark many electricians would work with the power on.

One of my staff just told me about an incident at the weekend where the electrician changed a lighting switch live and accidentally shorted between the live terminal and the case with a screw driver.

For those disagreeing with the proposal, the main reasons included:

- Lack of evidence suggesting that existing practices pose a safety concern
- This is a design issue that does not belong in the Code. Anyone wishing a one-circuit per room design is free to do so within current Code Rules.
- Will unnecessarily add circuits to a typical installation
- A significant increase in cost will be realized... where current requirements would permit 2 or 3 bedrooms to be on 1 arc-fault breaker, the proposal would require a separate arc-fault for each bedroom
- Proposal is too general... what is a room?

## Chair's comments:

The member agreeing with the proposal sees a potential safety issue and the members disagreeing fail to see safety concerns. For the purposes of the Canadian Electrical Code, I wish to remind everyone that the CE Code addresses electrical safety of <u>installations</u>... that is the electrical installation itself, once under normal operational, should not pose a fire or shock hazard. When someone decides to remove covers and begin work on the installation, it is no longer normal operation and other rules exist to protect individuals such as the series 300 Rules in section 2 and Provincial Occupational Health and Safety Rules. The fact that someone decides to work in the dark or is careless with activities around the installation does not make the installation unsafe. It is rather the behaviour or activity that is unsafe.

Despite the relatively low response, I feel that proportionately, the results reflect a consensus by the Subcommittee.

## Subcommittee Recommendation:

Reject the proposal and close the subject.