

**Questionnaire to estimate the level (%) of the Safety of Users of Electricity in Dwellings in Countries**

The Electrical Safety Barometer consists of 13 essential criteria. Each of these criteria has a weighting factor to enable the calculation of a general score for each country. Both FISUEL and world experts endorse these criteria and the weighting factors. With the assistance of local experts, we are applying the barometer in an increasing number of countries.

Explanation of the **13 major criteria** go to -->

<https://www.safetybarometer.org/criteria/>

Enter a number of the following criteria (1, 2, 3 or 4) in the yellow cells "column criteria"

**4 = Fulfilled Criteria : existing criteria in your country (score 100%)**  
**3 = Partially fulfilled Criteria : part of the criteria existing in your country (score 50%)**  
**2 = Not met Criteria : criteria known but unapplied (score 10%)**  
**1 = Unknown Criteria : criteria inexistent (score 0%)**

Number of criteria	4 - Fulfilled	3 - Partially	2 - Unapplied	1 - Unknown		Level of Electrical Safety in Dwellings
	6	4	3	0		61%

Criteria	Question	Weight	Criteria	Score
1- Standards & rules	Are standards and rules in place?	10	4	10%
Comments : Brazil has two standards , one for power entrance (Utility) and another for inside building installation (NBR 5410 based on IEC 60364)				
2- Initial verification	Is an initial inspection required?	10	4	10%
Comments : In the Utility side is imperative, inside the building is provided by standard				
3- Periodic inspection	Is a periodic inspection required?	7,5	2	1%
Comments : In the power entrance no, is on the consumer side it is expected, but not always is done				
4- Inspection report	Must there be proof of the inspection by the delivery of an inspection report?	5	3	3%
Comments : Only the part of utility				
5- Inspection for existing installations	Is there a mechanism for inspection of existing installations?	10	2	1%
Comments : No				
6- Inspector	Must the person carrying out the inspection be a qualified inspector?	7,5	2	1%
Comments : yes only qualified professional is enable for this task				

<b>7- Electrical contractor or installer</b>	<b>Must the electrical contractor or installer be a qualified person?</b>	5	<b>4</b>	5%
<b>Comments :</b> yes				
<b>8- Role of utilities</b>	<b>Does the electric utility only connect the installation after having received a positive inspection report?</b>	10	<b>3</b>	5%
<b>Comments :</b> The utility only demands the inspection until the meetreing no inside the building				
<b>9- Consumer education</b>	<b>Are consumers educated on the dangers of electricity?</b>	5	<b>4</b>	5%
<b>Comments :</b> Since 2005 is obligation due a safety course (40h) accordind NR-10 (Safety standard)				
<b>10- Regulation</b>	<b>Is regulation in place that imposes standards for electrical installations and initial verification?</b>	5	<b>4</b>	5%
<b>Comments :</b> yes for both utility and consumer				
<b>11- Labelling and certification</b>	<b>Are products in the market adequately labeled for electrical safety, and is this labeling system understood?</b>	5	<b>4</b>	5%
<b>Comments :</b> yes, but I am not sure the all symbols are completed understood				
<b>12- Role of manufacturers</b>	<b>Do manufacturers actively engage for electrical safety in the marketplace?</b>	5	<b>3</b>	3%
<b>Comments :</b> Existing marketing of the products, but the main enfoque is not safety.				
<b>13- Market surveillance</b>	<b>Is there adequate action on market surveillance from the authorities?</b>	15	<b>3</b>	8%
<b>Comments :</b> Not effective and this action is obligation of another standard NR-10 (Safety in electric workplace)				

South America

Classification	Criteria	9	BRAZIL
1	1- Standards & rules		4
2	2- Initial verification		4
3	3- Periodic inspection		2
4	4- Inspection report		3
5	5- Inspection for existing instal		2
6	6- Inspector		2
7	7- Electrical contractor or insta		4
8	8- Role of utilities		3
9	9- Consumer education		4
10	10- Regulation		4
11	11- Labelling and certification		4
12	12- Role of manufacturers		3
13	13- Market surveillance		3

