

SOLARIXPEDIA

Fire resistance: ČSN EN 60332-3-x* standard

WHAT IS ČSN EN 60332-3-x?

- This standard (as well as IEC 60332-3-x) defines cable testing under fire conditions, especially tests of vertical flame propagation on vertically mounted cable bundles.
- It consists of several parts, such as ČSN EN 60332-3-22, ČSN EN 60332-3-23, and ČSN EN 60332-3-24.
- The individual parts mainly differ in the **duration of the test** (the so-called flame application time) and in the **volume of non-metallic materials** per meter of tested cables.
- Due to the amount of flammable (non-metallic) materials involved, compliance with ČSN EN 60332-3-22 is considered the most demanding from the perspective of fire resistance.

TABLE: COMPARISON OF THE MOST IMPORTANT PARTS OF ČSN EN 60332-3-x

	ČSN EN 60332-3-22	ČSN EN 60332-3-23	ČSN EN 60332-3-24
Category	A	B	C
Also known as	ČSN EN 60332-3A	ČSN EN 60332-3B	ČSN EN 60332-3C
Test duration	40 minutes	40 minutes	20 minutes
Volume of non-metallic materials per 1 meter of cable	7 liters	3.5 liters	1.5 liters
Maximum damage range during fire	2.5 meters	2.5 meters	2.5 meters
Number of burners	1 to 2 (depending on the width of the ladder)	1	1
Minimum sample length	3.5 meters	3.5 meters	3.5 meters

*) x = individual parts ČSN EN 60332-3 (e.g. ČSN EN 60332-3-22)