



# NORME INTERNATIONALE

## INTERNATIONAL STANDARD

CEI  
IEC

62305-2  
Edition-1  
2005-01

Project: OŠIPAREŇ FORBASY

### Structure's Dimensions:

Length of structure (m): 77  
Width of structure (m): 17  
Height of roof plane (m)\*: 5  
Collection area (m2): 4 836 m2

### Structure's Attributes:

Risk of physical damage (incl. fire): Ordinary  
Structure screening effectiveness: Average  
Internal wiring type: Unscreened

### Environmental Influences:

Location factor: Similar in height  
Environmental factor: Rural  
Number thunderdays: 40 days/year  
Annual ground flash density: 4,0 flashes/km2

### Protection Measures:

Class of LPS: Class IV  
Fire protection provisions: Manual systems  
Surge protection: Coord. SPD IEC 62305-4

### Conductive Electric Service Lines:

#### Power Line:

Type of service to the structure: Buried cable  
Type of external cable: Unscreened  
Presence of MV / LV transformer: No Transformer

#### Other Overhead Services:

Number of conductive services: 0  
Type of external cable: Unscreened

#### Other Underground Services:

Number of conductive services: 2  
Type of external cable: Unscreened

### Types of Loss:

#### Type 1 - Loss of Human Life:

Special hazards to life: No special hazards  
Life loss due to fire: Other structures  
Life loss due to overvoltages: Not relevant

#### Type 2 - Loss of Essential Public Services:

Services lost due to fire: No service exist  
Services lost due to overvoltages: No service exist

#### Type 3 - Loss of Cultural Heritage:

Cultural heritage lost due to fire: No heritage value

#### Type 4 - Economic Loss:

Special hazards to economics: No special hazards  
Economic loss due to fire: Museum, Agricultural  
Economic loss due to overvoltage: Museum, school  
Step/touch potential loss factor: Livestock inside  
Tolerable risk of economic loss: 1 in 1,000

### Calculated Risks:

|                            | <i>Tolerable<br/>Risk Rt</i> | <i>Direct Strike<br/>Risk Rd</i> | <i>Indirect Strike<br/>Risk Ri</i> | <i>Calculated<br/>Risk R</i> |
|----------------------------|------------------------------|----------------------------------|------------------------------------|------------------------------|
| Loss of Human Life:        | 1,00E-05                     | 1,06E-07                         | 2,02E-07                           | 3,09E-07                     |
| Loss of Public Services:   | 1,00E-03                     | 0,00E+00                         | 0,00E+00                           | 0,00E+00                     |
| Loss of Cultural Heritage: | 1,00E-03                     | 0,00E+00                         | 0,00E+00                           | 0,00E+00                     |
| Economic Loss:             | 1,00E-03                     | 6,09E-06                         | 2,41E-04                           | 2,47E-04                     |

IEC Risk Assessment Calculator: Version 1.0.3

Database: Version 1.0.3

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The IEC lightning risk assessment calculator is intended to assist in the analysis of various criteria to determine the risk of loss due to lightning. It is not possible to cover each special design element that may render a structure more or less susceptible to lightning damage. In special cases, personal and economic factors may be very important and should be considered in addition to the assessment obtained by use of this tool. It is intended that this tool be used in conjunction with the written standard IEC62305-2.