

Evacuation Signage National and ISO Standards

Evacuation signs play an important role in providing guidance to people in risk areas during an emergency as they indicate escape routes and safe areas. They are also permanent reminders and help build and sustain awareness and preparedness in the case of tsunamis. In some areas billboards have been erected to inform the general public about evacuation zones and procedures. Unique reminders for people in Aceh about the impact of a past tsunami are tsunami poles that indicate the inundation heights of the 2004 tsunami posted at various locations throughout the area.

Evacuation signs that indicate evacuation routes need to be quickly recognizable and easy to understand by local residents, as well people who are not familiar with the area. This is the reason why national standards are considered necessary.

NATIONAL STANDARDS FOR EVACUATION SIGNAGE IN INDONESIA

In 2007, the State Ministries for Research and Technology (RISTEK) suggested standards for tsunami evacuation signage for Indonesia. The standards are documented in a national guideline. The objective of the guideline is to provide practical guidance for local decision makers and relevant stakeholders in tsunami prone areas to prepare and install tsunami evacuation signage as an integral part of evacuation planning efforts. The standards are expected to be used nationally.

The first part of the document explains the general requirements for tsunami evacuation signage that are related to understandability (symbols, providing guidance to the public), selection of locations (visibility) and design (shape and color). The second part provides technical information regarding the specific background color, symbol, size, materials, and installation method as summarized below:

The Signage Board is made from aluminum metal (L 90 cm; W: 45 cm; L inside: 75 cm), shaped as an arrow on one side, obtuse angle in the other side. The background is ORANGE without an outline and the symbols are WHITE with spotlight ink so that they can be seen in the dark. The Pole is made from a cylindrical iron pipe; metallic as a background color; height 300 cm straight. The board can be fastened to the pole or posted on a wall.

Tsunami evacuation signboards should include the symbol, the name of the evacuation area (shelter area) and the distance, while evacuation area signboards do not need to indicate distance because they are located at the entrances of evacuation areas.

Tsunami evacuation signs shall be located in accordance with local evacuation plans in visible and strategic places. Special emphasis should be given to the selection of durable materials as experiences show that the “life time” of tsunami evacuation signs can be quite short if inappropriate materials are used.

ISO TSUNAMI SIGNAGE

In the aftermath of the 2004 Indian Ocean tsunami, many countries worked to create and deploy tsunami evacuation signage in the coastal risk areas. Today, many examples exist which carry the same warning and evacuation messages, but have been depicted through a variety of symbols, graphics, texts, sign shapes and colors, and in some cases, customized to reflect the local culture and demographics.



Tsunami Poles in Aceh



RISTEK Guidebook



In 2008 the International Organization for Standardization (ISO) published the standard ISO 20712 on water safety signs and beach safety flags to provide specifications and guidance on internationally agreed signage for a tsunami hazard zone, an evacuation area and an evacuation building:

		
Warning: Tsunami hazard zone To warn of a hazard from tsunami waves	Tsunami Evacuation Area To Indicate the location of a safe place/uphill area for evacuation in the event of a tsunami	Tsunami Evacuation Building To indicate the location of a safe building for evacuation in the event of a tsunami



Signs indicating a tsunami hazard zone of the seashore may contain supplementary text to indicate that you are located in a "Tsunami hazard zone" or provide information about the specific elevation of the area above sea level ("Warning-ground height 2 m above sea level").

Example of signing in a tsunami hazard zone

Directional signs on evacuation route show the way to the closest tsunami evacuation areas or tsunami evacuation building. They include a directional arrow and supplementary text with the name of the tsunami evacuation area (or building), distance in meters, and direction.



Evacuation route to tsunami evacuation area



Evacuation route to tsunami evacuation Building

Signs indicating tsunami evacuation areas or buildings should include the name of the tsunami evacuation area (or building).

FURTHER RESOURCES IN THE TSUNAMI-KIT

You may find a digital copy of the Guideline published by RISTEK containing the suggested Indonesian standard on the Tsunami-Kit DVD or as a download file on the project website. Further information on the ISO Standard can be obtained from the UNESCO-IOC website.



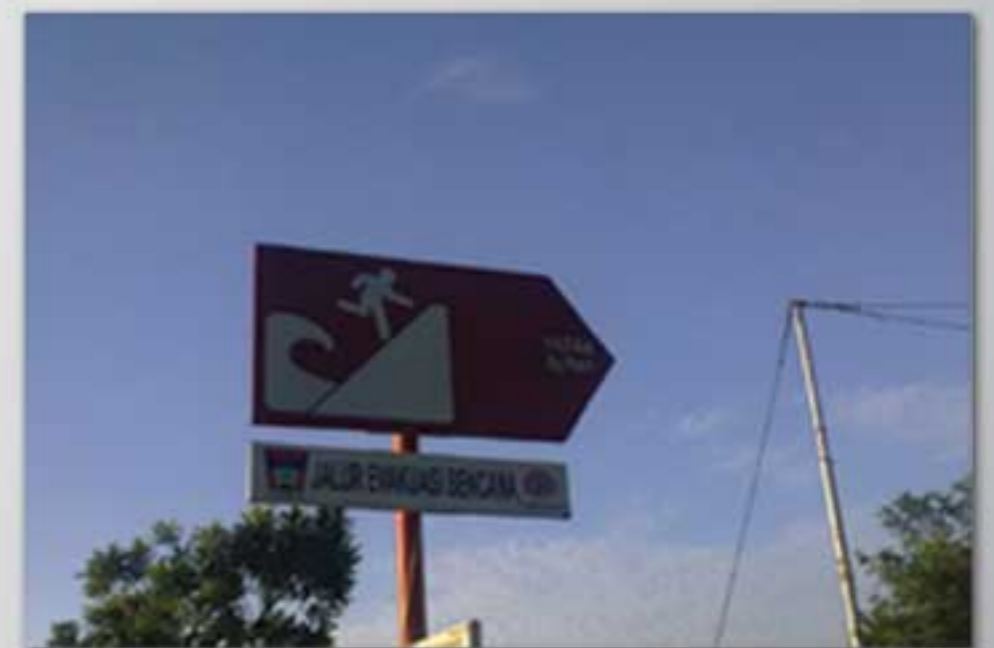
Example of the Tsunami Evacuation Signboard in Aceh



Example of the Tsunami Evacuation Signboard in Jawa



Example of the Tsunami Evacuation Signboard in Bali



Example of the Tsunami Evacuation Signboard in Padang

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