

MINNESOTA RULES, CHAPTER 1370

STORM SHELTERS

1370.0100 PURPOSE.

The purpose of parts 1370.0100 to 1370.0230 is to provide minimum standards of design and construction of buildings to provide protection for manufactured home park occupants from tornadoes and extreme winds.

1370.0110 SCOPE.

Parts 1370.0100 to 1370.0230 apply to buildings or portions of buildings that are designed for use as manufactured home park storm shelters.

1370.0120 DEFINITIONS.

Subpart 1. **Scope.** The definitions in this part apply to parts 1370.0100 to 1370.0230.

Subp. 2. **Storm shelter.** “Storm shelter” means a structure or portion of a structure designed in compliance with parts 1370.0100 to 1370.0230.

Subp. 3. **Dual purpose storm shelter.** “Dual purpose storm shelter” means a structure or portion of a structure designed for use as a storm shelter and also designed for some other secondary permitted use.

Subp. 4. **Single purpose storm shelter.** “Single purpose storm shelter” means a structure designed for use only as a storm shelter.

1370.0130 APPLICABLE REQUIREMENTS.

Subpart 1. **Incorporation by reference.** “Interim Guidelines for Building Occupant Protection from Tornadoes and Extreme Winds,” TR-83A January 1980, sections 1 and 2, published by the Federal Emergency Management Agency, Washington, D.C., is incorporated by reference and must be used to determine design loads and as a guide for use

in designing storm shelters. The document is not subject to frequent change and is available: (1) in the Minnesota State Law Library; (2) from the Printing and Publications Division, Federal Emergency Management Agency, P.O. Box 8181, Washington, D.C. 20024; and from the Minnesota Department of Public Safety, Division of Emergency Management, 85 State Capitol, Saint Paul, Minnesota 55155.

Subp. 2. **Dual purpose storm shelters.** A dual purpose storm shelter must comply with other applicable requirements of the state building code for its other intended uses.

1370.0140 PLANS, SPECIFICATIONS, PERMITS.

Storm shelter plans, engineering calculations, diagrams, and other required data must be prepared by a registered architect or engineer licensed to practice in Minnesota. For permit procedures, see section 106 of the Uniform Building Code, incorporated by reference in part 1305.0010.

1370.0150 SPACE REQUIREMENTS.

A minimum of four square feet per person must be provided within a storm shelter. A ceiling height of not less than seven feet must be provided over 60 percent of the floor area.

1370.0160 REQUIRED EXITS.

Subpart 1. **Exits; openings.** At least two exits must be provided in compliance with chapter 10 of the Uniform Building Code. The second exit from a single purpose storm shelter may have an opening of at least nine square feet with a minimum of 20 inches in width and the bottom of the opening not more than 44 inches from the floor.

Openings in the exterior walls of the shelter must be protected to prevent flying

missiles from entering the interior of the shelter.

Subp. 2. **Handicapped access.** At least one of the exits must comply with chapter 1340, facilities for the handicapped.

Subp. 3. **Exit to exterior.** When a portion of a structure is designed as a storm shelter, one exit must be directly to the exterior of the building or to an exit system complying with the state building code.

1370.0170 DRY INTERIOR.

Provisions must be made to construct storm shelters outside of flood-prone areas and other nonwater ponding areas and so that the interiors remain reasonably dry.

1370.0180 UTILITY LINE HAZARDS.

Hazardous utility lines must not be located in or near a storm shelter. The underground electrical service required by part 1370.0200 is exempt from this requirement.

1370.0190 MINIMIZING FIRE DANGER.

Storm shelters must be constructed to minimize the danger of fire from both external and internal sources.

1370.0200 ELECTRICAL POWER.

Underground electrical service must be provided to a storm shelter.

1370.0210 ILLUMINATION.

Subpart 1. **Minimum illumination.** At least five foot candles of illumination must be provided at floor level.

Subp. 2. **Source.** An emergency lighting system must be supplied from storage batteries or an on-site generator installed in accordance with the requirements of the National Electrical Code, incorporated by reference in chapter 1315.

1370.0220 VENTILATION.

Ventilation must comply with the criterion

on page nine of the interim guidelines incorporated in part 1370.0130.

1370.0230 SANITATION FACILITIES.

Sanitation facilities and water for drinking are not required for storm shelters.