#### **CHAPTER 4645**

# **DEPARTMENT OF HEALTH**

# HOSPITAL CONSTRUCTION AND EQUIPMENT

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# 4645.0200 CONSTRUCTION DEFINED.

The term "construction" as used in parts 4645.0200 to 4645.5200 means the erection of new buildings and the additions to existing buildings commenced on or after the effective date of these rules.

Prior to the final selection of a hospital site, it is suggested that a request be made to the commissioner of health for a study and recommendations relative to the choice of a site. It is recommended that a site survey and soil investigation be completed prior to starting work on the building design.

Statutory Authority: MS s 144.55; 144.56

**History:** L 1977 c 305 s 39

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#### SPECIALIZED UNITS OF THE GENERAL HOSPITAL

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#### CHRONIC DISEASE HOSPITALS FACILITIES

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# STRUCTURAL WORK FOR ALL HOSPITALS

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### MECHANICAL WORK FOR ALL HOSPITALS

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# ELECTRICAL INSTALLATIONS FOR ALL HOSPITALS

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**4645.4400** [Repealed, L 2023 c 70 art 3 s 83]

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#### ELEVATORS AND DUMBWAITERS FOR ALL HOSPITALS

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#### SERVICE FACILITIES FOR ALL HOSPITALS

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# 4645.5200 LAUNDRY FOR ALL HOSPITALS.

Where laundries are provided, they shall be complete with washers, extractors, tumblers, ironers, and presses which shall be provided with all safety appliances and meet all sanitary requirements.

**Statutory Authority:** MS s 144.55; 144.56 **Published Electronically:** January 21, 2000

# PLANS AND SPECIFICATIONS

# 4645.5300 PRELIMINARY PLANS.

When construction is contemplated for new buildings, additions to existing buildings, or for major remodeling or alterations of existing buildings, the preliminary plans or sketches shall be submitted to the commissioner of health for review and approval before the preparation of working drawings is undertaken. The preliminary plans shall be drawn to scale and shall indicate the type of construction, the assignment of all spaces, sizes of areas and rooms, and the location and kind of fixed equipment. The proposed roads and walks, service and entrance courts, parking, and orientation shall be shown on either a small plot plan or the first floor plan.

**Statutory Authority:** *MS s 144.55; 144.56* 

**History:** L 1977 c 305 s 39

**Published Electronically:** January 21, 2000

# 4645.5400 FINAL WORKING DRAWINGS AND SPECIFICATIONS.

Subpart 1. Plans submitted to the commissioner of health. Before construction is begun, plans and specifications covering the construction of new buildings, additions to existing buildings, or for major remodeling or alterations of existing buildings shall be submitted in duplicate to the

commissioner of health for its approval. These plans shall show the general arrangement of the building, including a room schedule and fixed equipment of each room, together with other pertinent information. Separate drawings shall be prepared for each of the following branches of work: architectural, structural, mechanical, and electrical. They shall include or contain the information in subparts 2 to 5.

# Subp. 2. Architectural drawings. Architectural drawings must include:

- A. approach plan showing all topography; newly established levels and grades; existing structures on the site, if any; new buildings and structures; roadways and walks;
  - B. plan of each floor and roof;
  - C. elevations of each facade;
  - D. sections through building;
  - E. scale and full size details as necessary;
  - F. schedule of finishes; and
  - G. large scale drawings of typical and special rooms indicating all fixed equipment.
- Subp. 3. **Structural drawings.** Structural drawings must meet the following requirements in items A to E.
- A. Plans of foundations, floors, roofs, and all intermediate levels shall show a complete design with sizes, sections, and the relative location of the various members. A schedule of beams, girders, and columns shall be included.
  - B. Floor levels, column centers, and offsets shall be dimensioned.
- C. Special openings and pipe sleeves shall be dimensioned or otherwise noted for easy reference.
  - D. Details of all special connections, assemblies, and expansion joints shall be given.
- E. Notes on design data shall include the name of the governing building code, values of assumed live loads, wind loads, and soil-bearing pressures.
- Subp. 4. **Mechanical drawings.** These drawings with specifications shall show the complete installations and equipment as follows:
  - A. heating, piping, ventilation, and air-conditioning:
    - (1) radiators and steam heated equipment, such as sterilizers, warmers, and steam tables;
    - (2) heating mains and branches with pipe sizes and provisions for expansions;
    - (3) diagram of heating risers with pipe sizes;
    - (4) sizes, types, and heating surfaces of boilers, furnaces, with firing equipment;

- (5) pumps, tanks, boiler breeching, and piping and boiler room accessories;
- (6) exhaust and supply ventilating systems with steam connections and piping. A supply and exhaust fan schedule shall be shown; and
  - (7) air-conditioning systems with refrigerators, water, and refrigerant piping and ducts;
  - B. plumbing, drainage, stand pipe systems, and gas piping:
- (1) size, location, and elevation of: street sewer, house sewer, house drains, street water main, and water service into the building;
- (2) location and size of soil, waste, and vent stacks with connections to house drains, fixtures, and equipment;
  - (3) roof and surface drainage systems;
- (4) size and location of hot, cold, and circulating mains, branches, and risers from the service entrance and tanks;
- (5) riser diagram to show all plumbing stacks with vents, water risers, and fixture connections:
- (6) plumbing fixtures and fixtures which require water and drain connections. A fixture schedule shall be shown unless included in the specifications;
  - (7) standpipe and sprinkler system, if required; and
  - (8) gas, oxygen, and special connections;
- C. elevators and dumbwaiters. Shaft details and dimensions, size of car platform and doors, travel, pit, and machine room; and
- D. kitchens, laundry, laboratories, boiler room, and mechanical equipment rooms shall be detailed at a satisfactory scale to show the location, size, and connections of all fixed and movable equipment.
- Subp. 5. **Electrical drawings.** Drawings shall show all electrical wiring, outlets, and equipment which require electrical connections as follows:
- A. Electrical service entrance with service switches, service feeders to the public service feeders, and characteristics of the light and power current. Transformers and their connections, if located in the building, shall be shown.
- B. Plan and diagram showing main switchboard, power panels, light panels, and equipment. Feeder and conduit sizes shall be shown with schedule of feeder breakers or switches.
  - C. Light outlets, receptacles, switches, power outlets, and circuits.

D. Telephone layout showing service entrance, telephone switchboard, strip boxes, telephone outlets, and branch conduits as approved by the telephone company. Where public telephones are used for intercommunication, equipment shall be provided as required by the telephone company.

- E. Nurses' call systems with outlets for beds, duty stations, door signal lights, annunciators, and wiring diagrams.
  - F. Doctors' call and doctors' in-and-out systems with all equipment wiring, if provided.
  - G. Fire alarm system with stations, gongs, control board, and wiring diagrams.
- H. Emergency lighting system with outlets, transfer switch, source of supply, feeders, and circuits.
- Subp. 6. Additions to existing buildings. The procedures and requirements for working drawings and specifications shall be followed and in addition the following information shall be submitted:
- A. plans and details showing attachment of new construction to the existing structure and mechanical systems as well as a plan of the functional layout of the existing building designating bedrooms and service areas; and
  - B. type of construction of existing building and number of stories.

Statutory Authority: MS s 144.55; 144.56

**History:** L 1977 c 305 s 39

Published Electronically: October 3, 2013

# 4645.5500 SPECIFICATIONS.

Specifications shall supplement the drawings and shall comply with the following:

- A. The specifications shall fully describe, except where fully indicated and described on the drawings, the materials, construction, the kind, sizes, capacities, finishes, and other characteristics of all materials, products, articles, and devices.
  - B. The specification shall include:
    - (1) cover or title sheet;
    - (2) general index and index to each section;
    - (3) general conditions;
    - (4) general and special requirements; and
    - (5) sections describing material and construction in detail for each class of work.

Statutory Authority: MS s 144.55; 144.56

**History:** 17 SR 1279

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# 4645.5600 PLANS FOR WATER SUPPLY AND SEWERAGE SYSTEMS.

No water supply or plumbing system or system for the disposal of sewage, garbage, or refuse shall be installed nor shall any such existing system be materially altered or extended until complete plans and specifications for the installation, alteration, or extension, together with such additional information as the commissioner of health may require, have been submitted to the commissioner of health in duplicate and approved. The plumbing installation in the existing building shall upon completion comply with the Minnesota Plumbing Code, chapter 4714.

**Statutory Authority:** *MS s* 144.55; 144.56

**History:** L 1977 c 305 s 39; 40 SR 71 **Published Electronically:** April 1, 2016

# 4645.5700 PREPARATION OF PLANS AND SPECIFICATIONS BY A REGISTERED ARCHITECT OR ENGINEER.

Plans and revisions shall be prepared and certified by an engineer or architect registered to practice in the state of Minnesota as provided by state laws.

Minnesota Statutes, sections 326.02 and 326.03, require that plans be prepared by a registered architect or registered engineer if the total cost of the improvement exceeds \$2,000 paid in whole or in part from public funds, or if the total cost exceeds \$10,000, paid from funds not public.

**Statutory Authority:** MS s 144.55; 144.56 **Published Electronically:** January 21, 2000

#### 4645.5800 COMPLIANCE WITH APPROVED PLANS.

All hospital construction shall take place in accordance with the approved completed plans. If it is desired to make deviations from the approved plans, the commissioner of health shall be consulted and approval of the proposed changes obtained before construction changes are started.

**Statutory Authority:** MS s 144.55; 144.56

**History:** L 1977 c 305 s 39

**Published Electronically:** January 21, 2000

# 4645.5900 DELAYED CONSTRUCTION.

Unless construction is commenced within one year of approval of final working drawings and specifications, the drawings shall be resubmitted for renewal of review and approval.

**Statutory Authority:** MS s 144.55; 144.56 **Published Electronically:** January 21, 2000

# 4645.6000 FIRE MARSHAL APPROVAL REQUIRED.

Fire protection for the hospital shall be provided in accordance with requirements of the state fire marshal. Approval by the state fire marshal of the fire protection of a hospital shall be a prerequisite for licensure.

**Statutory Authority:** MS s 144.55; 144.56 **Published Electronically:** January 21, 2000