DEPARTMENT OF HUMAN SERVICES
SENIORS AND PEOPLE WITH DISABILITIES DIVISION
OREGON ADMINISTRATIVE RULES

CHAPTER 411
DIVISION 87

NURSING FACILITIES/LICENSING - PHYSICAL ENVIRONMENT

411-087-0005 Definitions
(Effective 1/1/1992)

As used in OAR 411, division 87, the definitions in OAR 411, division 85 and following definitions apply:

(1) "ASHRAE" means the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

(2) "Calling Station" means an individual light, or other electrically operated visual signalling device, with or without audio signaling device, which is located at a nursing station and which effectively alerts nursing staff to a specific room or location from which a resident or other staff is requesting assistance.

(3) "Clearly Marked Emergency Power Duplex Receptacle" means an outlet for standard household current (110 volts) connected to an emergency power supply in accordance with the National Electrical Code and NFPA 99 and clearly marked to easily distinguish the outlet from an outlet not on the emergency power supply.

(4) "Continuously Licensed" means licensed as a nursing facility without interruption.

(5) "Easily Cleanable" means surfaces are readily accessible and made of materials and finish and fabricated so residue may be effectively removed by normal cleaning methods.

(6) "Locked Unit" means a nursing facility or a part of a nursing facility, including resident rooms, from which egress is restricted by secured doors.

(7) "NFPA" means National Fire Protection Association, Inc.

(8) "Nursing Station" means a location at which nursing staff perform charting and related activities throughout the day and at which a calling station exists.

(9) "Resident Room" means a room in the facility licensed for one or more beds.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0010 New and Old Construction, Remodeling, Certificate of Need
(Effective 10/1/1993)

(1) New Construction. New construction shall not be eligible for "exceptions" as provided in these rules (OAR 411-087) unless specifically authorized by the Division. All such alterations, additions, conversions in use, and renovations shall be subject to plan review in accordance with section (3) of this rule.

(2) Old Construction:

> (a) Where specifically provided within OAR 411-087-0010 - 411-087-0490, facilities which have been continuously licensed and operational since January 1, 1992 may be exempt from certain specified physical environment requirements. Such exemptions do not apply if there is a change in the purpose for which the room is licensed; e.g., a room which has not been continuously licensed as a resident room must comply with the requirements for new construction in order to be licensed as a resident room. The Division, however, may terminate an exemption if the Division determines that continuation of the exemption adversely impacts the facility's ability to otherwise meet nursing facility law. The exemption may be

discontinued if the area subject to the exemption incurs major alterations as defined in OAR 411-085-0005;

(b) Notwithstanding the "exceptions" provided for in these rules, facilities constructed prior to January 1, 1992 shall, when replacing equipment or remodeling areas subject to such exceptions, comply with the rules to the greatest extent reasonable. Subsection (2)(b) of this rule does not apply to new construction;

(c) Under no circumstances are the "exceptions" provided for in these rules intended to allow a facility that already meets or previously met these rules without the exception provision to be exempt from meeting the rules without the "exception provision."

(3) Plan Review:

(a) Schematic Plans. Schematic plans may be submitted for review;

(b) Construction Plans. Two sets of project construction drawings and specifications must be submitted for review prior to initiation of related construction pursuant to subsection (3)(e) of this rule. Construction documents must be sufficient to allow the Division to determine if the project complies with OAR 411;

(c) Floor Plan. Projects involving addition, deletion or relocation of beds shall include a floor plan showing the proposed number and location of each bed for which licensure will be requested. The plan shall include dimensions, area and room number of each resident room;

(d) Program Narrative. All plans submitted shall be accompanied with a narrative description including:

(A) Identification of services which will not be provided directly, but will instead be provided via contract;

(B) All specialty services to be offered; and

(C) Modifications to be made to heating, ventilating, plumbing and electrical systems.

(e) Submission of Plans. All schematic and construction plans submitted shall be delivered to the Office of Health Policy (OHP), Public Health Division, Department of Human Services, State Office Building, Suite 640, 800 Oregon Street N.E., Portland, OR 97232;

(f) When construction or remodeling includes an increase in bed capacity, exceptions allowed for size of dining, activities and living areas (OAR 411-087-0300) shall no longer be applicable unless specifically authorized by the Division.

(4) Certificate of Need. Before a facility may increase capacity, the licensee shall submit to the Division a Certificate of Need (CN) or a letter from the Office of Health Policy stating that a CN is not required.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0020 Referenced Regulations
(Effective 1/1/1992)

In addition to meeting OAR 411, division 087, the following additional requirements must be met except where determined by the Division to not be applicable to nursing facilities. Licensure is contingent on approval of the agency having enforcement authority:

(1) Building and Fire Safety Codes:

(a) State Building Codes as adopted by the Oregon Building Codes Division;

(b) Local building codes and requirements as adopted by local government agencies;

(c) State and local fire codes, NFPA 101 and applicable referenced NFPA publications; and

(d) All facilities and construction completed after January 1, 1992, shall comply with the American National Standards Institute's

"Providing Accessibility and Usability for Physically Handicapped People" effective February 5, 1986, and Title III of the American with Disabilities Act of 1990.

(2) Food Sanitation Rules. Food Sanitation Rules as adopted by the Public Health Division.

(3) Drinking Water. Oregon Drinking Water Quality Act and the rules adopted thereunder by the Oregon State Health Division. Documentation of conformance to this law is required except when the facility is served by an approved community water system.

(4) Sewage. On-site sewage disposal rules as enforced by the Oregon Department of Environmental Quality (DEQ). Documentation of conformance to this law is required except when the facility is served by an approved community sewer system.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0030 Waivers for Physical Environment Requirements
(Effective 1/1/1992)

(1) Request. Any request for a waiver of these building requirements (OAR 411, division 087) shall comply with OAR 411-085-0040.

(2) Duration. The Division may grant waivers for building requirements for a period not to exceed ten years; however, such waiver may be rescinded if the Division determines continuance of the waiver has a potential adverse impact on resident well-being, privacy or dignity.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0100 Physical Environment Generally
(Effective 1/1/1992)

(1) Good Repair and Cleanliness:

(a) All interior and exterior surfaces (e.g., floors, walls, roofs, ceilings, windows, and furniture) and equipment necessary for the health, safety, and comfort of the resident shall be kept clean and in good repair;

(b) All interior surfaces shall be easily cleanable;

(c) Measures shall be taken which prevent the entry of rodents, flies, mosquitoes, and other insects;

(d) The facility grounds shall be kept orderly and free of litter and refuse.

(2) Outside Walkways, Parking:

(a) Walkways and curbs from the street, public transit or parking spaces to the building entrance shall be designed to facilitate travel by people using wheelchairs or crutches;

(b) Disabled Parking Facilities. Parking spaces for disabled visitors and staff shall be provided.

(3) Entrance, Waiting Area. At least one primary grade level entrance to the building shall be sheltered from weather and be fully accessible to disabled persons. The facility shall have a waiting area or lounge located inside the main entrance.

(4) Drinking Fountains, Telephones. At least one drinking fountain and telephone shall be available on each floor for residents, staff, and visitors, including those physically disabled. Telephones and fountains shall be provided in accordance with the American National Standards Institute's "Providing Accessibility and Usability for Physically Handicapped People" effective February 5, 1986. The number of the fire department and police department shall be affixed to every telephone. The facility shall have telephones designated for use by residents which allow for privacy during conversation and are wheelchair accessible.

(5) Exceptions. Facilities continuously licensed since January 1, 1992 shall not be required to have drinking fountains on every floor, waiting area/lounge or a sheltered entrance as required by this rule unless otherwise provided by OAR 411-087-0010.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0110 Administrative Area
(Effective 1/1/1992)

(1) Office Space. General or individual office(s) shall be provided for business transactions, medical and financial records, and administrative and professional staff.

(2) Interview Space. Interview space(s) shall be provided for private interviews relating to social service, credit, and admissions.

(3) Storage. Storage for office equipment, supplies and clinical records shall be provided.

(4) Lighting. Lighting intensity shall comply with Table 4.

[ED. NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0120 Signs
(Effective 1/1/1992)

(1) Resident Rooms. All resident rooms shall be clearly identified by room number. Room numbers shall be no less than one inch high and shall contrast with their background (light characters on dark background or dark characters on light background). Such signs shall be located in order to be easily readable to all residents, including those in wheelchairs.

(2) Other Rooms. All other rooms used by residents shall be clearly identified by name (e.g., "Dining Room," "Activity Room") with letters as described in section (1) of this rule.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0130 Resident Care Unit
(Effective 1/1/1992)

Each resident care unit shall provide the following:

(1) Resident Rooms. Each resident room shall meet the following requirements:

(a) Capacity. Maximum room capacity shall be four residents;

(b) Size:

(A) Minimum room areas exclusive of toilet rooms, closets, lockers or wardrobes, alcoves or vestibules shall be 120 square feet in single-bed rooms and 100 square feet per bed in multi-bed rooms:

(i) Room dimensions shall allow at least three feet between the side of each bed and any wall;

(ii) Room dimensions shall allow at least four feet between adjacent beds and three feet six inches at the foot of each bed;

(iii) Beds may be rearranged to satisfy the needs and desires of individual residents; and

(iv) At least 50 percent of the resident rooms shall be designed to allow a five foot diameter circle of clear floor area for turning of wheelchairs immediately inside the

resident room entrance and immediately outside each resident toilet room.

(B) In facilities caring for pediatric residents where bed size does not exceed that of a six-year crib, the minimum floor space allowance shall be 60 square feet for each crib;

(C) Space shall be provided in each room for an armchair, geriatric chair or wheelchair for each resident.

(c) Closet. Each resident shall have a wardrobe locker or closet within the resident's room. Each locker or closet shall have minimum clear dimensions of 30 inches by 24 inches by 60 inches. The space shall include a rod, at least 15 inches long, with 54 inches (vertical) of hanging space;

(d) Lockable Storage. Each resident shall be provided with a lockable closet or drawer with a minimum of 0.5 cubic feet. The lockable storage space may be included within the closet space defined in subsection (1)(c) of this rule;

(e) Privacy. The facility shall provide full visual privacy by means of cubicle curtains for each resident in multi-bed rooms. Design for privacy shall not restrict the exit/access of other residents from/to the resident room, handwash sink, or toilet. "Full visual privacy" in a multi-bed room means curtains which prevent staff, visitors and other residents from seeing a resident in bed, but which allow staff, visitors and other residents access to the toilet room, handwash sink and entrance;

(f) Door. Each resident room shall have a door which directly accesses an exit corridor. The door opening shall have a horizontal clearance of 44 inches and shall not swing into the exit corridor;

(g) Other Requirements. See rules relating to lighting (OAR 411-087-0430), toilets and handwash sinks (OAR 411-087-0310), nurse call systems (OAR 411-087-0440) and windows (OAR 411-087-0400).

(2) Isolation Room. Each facility shall have at least one resident room capable of being designated as an isolation room which is equipped with a private toilet and handwash sink (see Table 2).

(3) Exceptions:

(a) Number of Residents Per Room. The number of residents in a room may exceed four if the room has been continuously licensed since January 1, 1992 for a number equal to or greater than the number of residents for which the license is requested unless otherwise provided by OAR 411-087-0010;

(b) Room Size. The dimensions of a resident room which has been continuously licensed since January 1, 1992 shall be considered to be in compliance with subsection (1)(b) of this rule unless otherwise provided by OAR 411-087-0010. In facilities which do not comply with subparagraph (1)(b) (A)(iv) of this rule, all new construction which increases licensed bed capacity shall be required to meet the clearance requirements in said subparagraph until the 50 percent requirement is met;

(c) Closet. The size and design of the resident closet in a room which has been continuously licensed since January 1, 1992 shall be considered to be in compliance with subsection (1)(c) of this rule unless otherwise provided by OAR 411-087-0010;

(d) Locked. Facilities continuously licensed since January 1, 1992, shall only be required to have locked storage in accordance with this rule if the resident or significant other requests locked storage.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0140 Locked Units
(Effective 1/1/1992)

(1) Dining, Activities, Living Space. Each locked unit shall have dining, activities and living space within the locked unit. The total area of such

space shall be the same as if the locked unit was a separately licensed nursing facility.

(2) Nurses' Station. There shall be at least one nurses' station within each locked unit.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0150 Nurses' Station
(Effective 1/1/1992)

Each floor with resident rooms shall have a nurses' station with space for charting and storage for administrative supplies:

(1) Handwash Sink. There shall be a handwash sink, exclusive of resident and soiled utility room handwash sinks, within 20 feet of the nurses' station.

(2) Exceptions. The handwash sink required in section (1) of this rule is not required in a facility which has been continuously licensed since January 1, 1992 unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0200 Dietary Services
(Effective 1/1/1992)

(1) Food Sanitation Rules. Construction, equipment, and installation shall comply with OAR 333, divisions 150.

(2) Food Preparation Areas. The dietary services area shall include:

(a) Space and equipment for preparing, cooking, and baking;

(b) Ice making equipment which is easily cleanable. All ice dispensing equipment which is not in the dietary services area but is accessible to residents shall be self-dispensing;

(c) Space for tray assembly and distribution;

(d) Handwash sink; and

(e) Design shall provide for flow of clean items/food and soiled items/food in a manner which avoids potential for contamination.

(3) Food Receiving, Storage and Other Work Areas. The dietary services area shall include the following which shall not be in the food preparation area:

(a) Storage space for seven days' supply including cold storage for two days' food needs;

(b) An area designated for receiving food supplies;

(c) Dishwashing equipment and work area;

(d) Office or suitable work space for the dietitian or the dietary service manager;

(e) Janitor's closet for exclusive use of the dietary department. It shall contain a floor receptor or service sink and storage space for housekeeping equipment and supplies;

(f) Cart storage and cart sanitizing area. This area may be shared with other departments if located outside the dietary services area. If located outside, the area shall be covered and paved;

(g) Waste storage facilities in a separate area easily accessible to the outside for direct pickup or disposal; and

(h) Toilet room. There shall be a staff toilet room accessible within 25 feet of the dietary services area. The toilet room shall not open directly to the food preparation area.

(4) Exceptions:

(a) Toilet Room. The distance to the toilet room may exceed 25 feet if the facility has been continuously licensed since January 1, 1992 unless otherwise provided by OAR 411-087-0010;

(b) Office. The office space required in subsection (3)(d) of this rule may be outside the dietary services area if the facility has been continuously licensed since January 1, 1992 unless otherwise provided by OAR 411-087-0010;

(c) Closet. The janitor's closet required in subsection (3)(e) of this rule may be outside the dietary services area if the facility has been continuously licensed since January 1, 1992 unless otherwise provided by OAR 411-087-0010. In such circumstances, the facility shall have a documented system to ensure mops and other cleaning supplies used in nursing or laundry areas are not used in the dietary services area;

(d) Cart Storage/Sanitizing. If located outside, the cart sanitizing and storage area is not required to be paved and covered if the facility has been continuously licensed since January 1, 1992 unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0210 Therapy Services
(Effective 1/1/1992)

The facility shall have a therapy services room(s) to support services such as physical, occupational and speech therapy, and special programs:

(1) Treatment Areas. The therapy services area shall include:

(a) A minimum floor area of 250 square feet, sufficient to meet therapy service needs as outlined in facility policies;

(b) Space and equipment for facility programs which may include thermotherapy, diathermy, ultrasonics, and hydrotherapy. A cubicle curtain shall be provided around each individual treatment area.

Provisions shall include handwash sink (one sink may serve more than one cubicle);

(c) Space and equipment for exercise;

(d) Storage for clean and soiled linens, supplies and equipment (including wheelchairs and stretchers); and

(e) Deep sink, a minimum of 22 inches by 21 inches by ten inches deep. The deep sink may also serve as the handwash sink.

(2) Exceptions. Facilities which have been continuously licensed since January 1, 1992 shall be considered to be in compliance with section (1) of this rule unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0220 Pharmacy Services
(Effective 1/1/1992)

Provision shall be made for the procurement, storage, dispensing, and accounting of drugs and other pharmacy products:

(1) Off-Site Provider Allowance. Pharmaceutical services may be by arrangement with a convenient off-site facility but must include provisions for 24-hour emergency service.

(2) Pharmacy/Drug Room. When provided, the phar-macy/drug room shall be well-lighted (see Table 4), properly ventilated (see Table 2) and include a medication refrigerator and a sink with hot and cold running water. The pharmacy/drug room may be combined with the clean utility room (see OAR 411-087-0320).

(3) Drug Distribution Stations. Provision shall be made for convenient 24-hour distribution of medicine to residents. This may be a medicine preparation room or unit, a self-contained medicine dispensing unit or by another approved system. If used, a medicine preparation room shall be under the nursing staff's visual control and contain a work counter,

handwash sink, refrigerator, and locked storage for biologicals and drugs. A medicine dispensing unit may be located at or near the nurses' station, in the clean utility room or in another space under direct control of the nursing staff.

(4) Exceptions. Facilities which have been continuously licensed since January 1, 1992 are not required to have a handwash sink within the drug distribution station unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0230 Laundry Services
(Effective 1/1/1992)

(1) On-Site Processing. If linen is to be processed on-site, the following shall be provided:

(a) A processing area which cannot be entered directly from the resident corridor;

(b) A laundry processing room with equipment which can process even days' needs within a regularly scheduled work week. The laundry services area shall include a handwash sink and soiled linen receiving, holding and sorting areas;

(c) Ventilation in accordance with Table 2;

(d) Storage for laundry supplies;

(e) Clean linen inspection, mending and folding room or area;

(f) Janitor's closet or alcove containing a floor receptor or service sink and storage space for housekeeping equipment and supplies; and

(g) The design shall provide for flow of clean and soiled laundry and supplies in a manner which avoids potential for contamination.

(2) Off-Site Processing. If linen is processed off-site, the facility shall have a soiled linen holding room ventilated in compliance with Table 2. The soiled linen holding room may also serve as the soiled utility room if sufficient space is provided (see OAR 441-087-0320).

(3) Clean Linen Storage. The facility shall have a separate or designated area within the clean utility room for linen storage. If a closed cart system is used, storage may be in an alcove.

(4) Cart Sanitizing and Storage. The facility shall have a cart sanitizing and storage area with running water. If located outside, the area shall be covered and paved. The area may be shared with dietary services only if located outside and directly accessible from both departments.

(5) Exceptions. In facilities continuously licensed since January 1, 1992, section (1) of this rule shall not apply unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0240 Personal Care Services
(Effective 1/1/1992)

Separate room or designated space and appropriate equipment shall be provided for hair care and grooming needs of residents.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0250 Day Care Services
(Effective 1/1/1992)

(1) Facilities admitting day care residents shall have 40 square feet of dining, recreation, living and sleeping areas in addition to space required for other residents.

(2) Facilities admitting day care residents shall have either an unassigned bed or a folding cot in an area where rest and privacy can be provided for each resident.

(3) There shall be one toilet and one lavatory available for every 15 day care residents. Such facilities shall be in close proximity to the area used by day care residents.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0300 Residents' Dining, Activities and Living Areas
(Effective 1/1/1992)

(1) Area Requirement. The total area available for dining, activities, visitor waiting and living shall be not less than 30 square feet per bed with a minimum size of 225 square feet. Additional space shall be provided for outpatients if they participate in a day care program.

(2) Storage. Storage space shall be provided for activity equipment and supplies.

(3) Living Areas. Each facility shall have a solarium, living room, or sun porch for the use of residents on each floor. Such rooms must be provided with mechanical ventilation or with windows that open.

(4) Lighting. Lighting intensity of all dining, activities and living areas shall comply with Table 4.

(5) Exceptions. Facilities continuously licensed since January 1, 1992, shall not be required to meet the area requirements for dining, activities, visitor area/lounge and living space (30 square feet per bed) unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0310 Toilet, Handwashing, and Bathing Areas

(Effective 1/1/1992)

(1) General Requirements:

(a) Temperature. Hot water at shower, bathing and handwash sink areas shall not exceed 120 degrees Fahrenheit (49 degrees Celsius) or be lower than 105 degrees Fahrenheit (41.5 degrees Celsius);

(b) Grab Bars. Grab bars shall be provided at all residents' toilets, showers, tubs and sitz baths. The bars shall have 1-1/2 inch (3.8 cm) clearance to walls and shall have sufficient strength and anchorage to sustain a concentrated load of 250 pounds (113.4 kilograms). Grab bars shall be returned to the wall or otherwise be constructed to prevent snagging clothes;

(c) Emergency Access. All rooms containing bathtubs, sitz baths, showers, and toilets shall be equipped with doors and hardware which will permit access from the outside in any emergency. When such rooms have only one opening or are smaller than 25 square feet, the doors shall be capable of opening outward or are smaller than 25 square feet, the doors shall be capable of opening outward or be otherwise designed to be opened without need to push against a resident who may have collapsed within the room;

(d) Accessibility. Toilets, handwash sinks, and baths shall be provided in accordance with the American National Standards Institute's "Providing Accessibility and Usability for Physically Handicapped People," effective February 5, 1986, and Title III of the Americans with Disabilities Act of 1990;

(e) Nurse Call System. See OAR 411-087-0440.

(2) Toilet Facilities:

(a) Resident toilets:

(A) Access. Each resident room shall have direct access to a toilet room without entering the general corridor area;

(B) Number. One toilet room shall serve no more than four beds and no more than two resident rooms;

(C) Handwash sink. Each toilet room shall contain a toilet and a handwash sink. The handwash sink may be omitted from a toilet room serving only one resident room if the room is a single-bed room and contains a handwash sink;

(D) Dimensions. The dimensions of a resident toilet room shall be sufficient to allow access and self transfer by a resident in a wheelchair or with the assistance of an attendant. The distance from the toilet plumbing wall to the opposite wall shall be no less than six feet;

(E) Privacy. Partitions between toilet shall be provided. These partitions shall be at least six feet in height and provide for privacy. Privacy curtains may be used in bathing areas in lieu of fixed partitions.

(b) Employee/Visitor Toilets. In addition to the toilet rooms for residents, there shall be at least one toilet room on each floor with handwash sink available for facility employees and visitors. Such toilets shall be clearly identified for public use and shall be directly accessible from the corridor, public lounge or waiting area.

(3) Handwashing Facilities:

(a) Sinks, Water Supply Spouts, Faucet Handles:

(A) Each resident room shall have a handwash sink. The handwash sink may be omitted from a single-bed room if the adjacent toilet room serves only one resident room;

(B) Handwash sinks shall be securely anchored to withstand an applied vertical load of not less than 250 pounds (113.4 kilograms) on the front of the fixture;

(C) Handwash sinks shall be wheelchair accessible;

(D) Sink faucets shall have a single spout (outlet) which discharges both hot and cold water;

(E) All handwash sinks shall be trimmed with single-lever or write-blade faucet handles which are operable without the use of hands.

(b) Mirrors:

(A) Mirrors shall be arranged for convenient use by residents in wheelchairs and in a standing position. Mirrors are not required in rooms exclusively serving residents whose care plans indicate mirrors are contraindicated;

(B) Mirrors shall not be installed at handwash sinks in food preparation areas.

(c) Hand Drying. Provisions for hand drying shall be included at all handwash sinks except scrub sinks. These shall be single use separate individual paper or cloth units enclosed in such a way as to provide protection against dust or soil and insure single unit dispensing.

(4) Bathtubs and Showers:

(a) Number. Bathtubs or showers shall be provided at the rate of one for every 25 beds which are not otherwise served by bathing facilities within the residents' rooms;

(b) Whirlpool Tubs. In addition to the requirements listed in subsection (4)(a) of this rule, at least one therapeutic whirlpool tub designed for disabled assist shall be provided on each floor. The facility shall have at least one therapeutic whirlpool-type tub for every 60 beds;

(c) Privacy. Each tub or shower shall be in an individual room or enclosure which provides space for the private use of the bathing fixture, for drying and dressing, and for a wheelchair and an attendant;

(d) Shower Dimensions:

(A) Each facility shall have at least one shower that is a minimum of four feet square, without curbs, and designed to permit use by a wheelchair resident with an assisting attendant;

(B) Showers for ambulatory residents shall be not less than four feet by three feet.

(e) Non-Slip Surface. Shower bases and tubs shall provide non-slip surfaces;

(f) Toilet/Sink Access. A toilet and handwash sink shall be accessible to each bathtub/shower without going through the central corridor.

(5) Exceptions:

(a) Whirlpool Tubs. The number of whirlpool tubs in facilities which have been continuously licensed since January 1, 1992 without modification of number or type of bathtubs/showers shall be considered to be in compliance with subsection (4)(b) of this rule unless otherwise provided by OAR 411-087-0010. Facilities which lack the required number of therapeutic tubs shall have a hospital-type tub on each floor which does not have a therapeutic whirlpool tub. As of January 1, 2000, all facilities shall have at least one therapeutic whirlpool tub (waivers may be provided on a case-by-case basis);

(b) Showers. Facilities which have been continuously licensed since January 1, 1992 shall not be required to meet the dimensions or design criteria defined in subsection (4)(d) of this rule or requirements for dressing and drying areas adjacent showers and tubs;

(c) Toilets. Facilities continuously licensed since January 1, 1992 shall be exempt from section (2) of this rule unless otherwise provided by OAR 411-087-0010;

(d) Handwash Sinks. In facilities with rooms continuously licensed since January 1,1992, without meeting subsection (3)(a) of this rule,

such rooms shall be exempt from this requirement unless otherwise provided by OAR 411-087-0010;

(e) Spouts, Faucet Handles. Facilities continuously licensed since January 1, 1992 without meeting paragraph (3)(a)(E) of this rule shall be exempt from such paragraph unless the spouts/faucets are replaced or otherwise provided by OAR 411-087-0010;

(f) Accessibility. Facilities continuously licensed since January 1, 1992 without meeting subsection (3)(a) of this rule shall be exempted from such subsection unless the spouts/faucets are replaced or otherwise provided by OAR 411-087-0010.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0320 Soiled and Clean Utility Rooms
(Effective 10/1/1993)

(1) Soiled Utility Room. The facility shall have one or more soiled utility rooms equipped to pre-rinse soiled linens and equipment. Each floor with resident rooms shall have a soiled utility room on the same floor within 120 feet of each resident room. The soiled utility room shall be equipped with:

(a) Handwash sink.

NOTE: If a two compartment sink is used to meet subsection (1)(b) of this rule, a separate handwash sink is not required.

(b) A mechanical sanitizer or two compartment deep sink (minimum dimensions for each compartment of 19 inches by 22 inches by ten inches deep) with hot and cold running water large enough to provide for disinfection of resident care equipment;

(c) A flush rim clinical sink with washing device;

(d) A work counter;

(e) Area for storage of linen and trash receptacles;

(f) Mechanical ventilation (see Table 2); and

(g) Storage space. Clean urinals and bedpans may be stored in a closable cabinet in the soiled utility room. Other clean supplies and equipment may not be stored in the soiled utility room.

(2) Clean Utility Room. Each floor with resident rooms shall have a clean utility room with a work counter, handwash sink and space for storage and distribution of clean and sterile supply materials. The clean utility room may be used for storage of clean linens.

(3) Exceptions:

(a) Locations. The maximum distance from resident room to soiled utility room in facilities which have been continuously licensed since January 1, 1992 may exceed 120 feet unless otherwise provided by OAR 411-087-0010;

(b) Ventilation. Facilities continuously licensed since January 1, 1992 without meeting subsection (1)(f) of this rule shall be exempt from such subsection unless otherwise provided by OAR 411-087-0010;

(c) Sink. Facilities continuously licensed since January 1, 1992 with a single compartment deep sink shall not be required to have a double deep sink or mechanical sanitizer in the soiled utility room unless the sink is replaced or otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0330 Employee Rooms
(Effective 1/1/1992)

(1) Rooms Required. The facility shall have an employee lounge and room(s) for conferences, meetings and inservice training. This requirement

may be met with a multi-purpose room, but must be in addition to space required for residents.

(2) Exceptions. Facilities continuously licensed since January 1, 1992 shall be exempt from section (1) of this rule unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0340 Storage Rooms
(Effective 1/1/1992)

(1) General Storage. General storage room(s) shall have a total area of not less than five square feet per bed. This space shall include an equipment storage room on each floor (which has resident rooms) for equipment such as I.V. stands, inhalators, air mattresses, and walkers. Separate storage space shall be provided for storage of commodes (this may be in the soiled utility room). There shall also be space located out of the path of normal traffic on each floor for stretchers and wheelchairs.

(2) Linen, Food. There shall be separate areas for storage of clean linens and food.

(3) Maintenance Equipment and Supplies. Space shall be provided for storage of building and yard maintenance equipment and supplies which are kept at the facility.

(4) Exceptions. Facilities continuously licensed since January 1, 1992 shall be exempt from the square footage requirements in section (1) of this rule unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0350 Maintenance and Housekeeping
(Effective 1/1/1992)

(1) Maintenance Areas. The facility shall have a maintenance shop or area and tools required for equipment maintenance.

(2) Janitor's Closet:

(a) Location. In addition to the janitor's closet required in dietary, there shall be a minimum of one janitor's closet on each floor. There shall be a janitor's closet within 120 feet of every resident room;

(b) Design. Each janitor's closet shall contain a floor receptor or service sink with hot and cold running water and storage space for housekeeping equipment and supplies. All such closets shall have mechanical ventilation pursuant to Table 2 and a light fixture and wall switch.

(3) Exceptions. Facilities continuously licensed since January 1, 1992 shall be exempt from section (1) and subsection (2)(a) of this rule unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0360 Hallways, Corridors and Stairways
(Effective 1/1/1992)

(1) Dimensions. All resident corridors/hallways serving resident living areas shall be a minimum of eight feet in width.

(2) Obstructions. Items such as drinking fountains, telephone booths, vending machines, and portable equipment shall be located so as not to restrict corridor traffic or reduce the corridor width below the required minimum.

(3) Handrails:

(a) Handrails shall be provided on both sides of corridors used by residents and on all stairways. A minimum clear distance of 1-1/2 inches (3.8 cm) shall be provided between the handrail and the wall;

(b) Ends of handrails shall be returned to the wall or otherwise be constructed to prevent snagging the clothes of residents.

(4) Exceptions. Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992 shall be exempt from sections (1) and (2) of this rule.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0400 Doors and Windows
(Effective 1/1/1992)

(1) Doors:

(a) Interior doors:

(A) The minimum width of all doors to rooms with beds shall be three feet, eight inches (1.12) meters clear opening and six feet, eight inches (2.03 meters) high. Doors to rooms needing access for stretchers, residents' toilet rooms and rooms needing access for wheelchairs shall have a minimum width of two feet, eight inches (85.82 cm) clear opening;

(B) Doors on all openings to corridors shall be swing type;

(C) Space shall be provided in front and adjacent to doors to allow space for persons in wheelchairs;

(D) Doors, except those to spaces such as small closets (less than ten cubic feet) which are not subject to occupancy, shall not swing into corridors in a manner that might obstruct traffic flow or reduce the required corridor width. Closet that are ten or more cubic feet are considered as occupiable spaces;

(E) Interior doors which go between areas frequented by residents and which may be locked shall have electromagnetic locks which automatically release in the event of fire alarm or power failure.

(b) Exterior doors:

(A) Exit/entrance doors with electromagnetic locks shall automatically release in the event of fire alarm or power failure;

(B) Exit/entrance doors shall be keyed or otherwise designed to allow all staff to promptly and easily exit;

(C) Exit/entrance door locks shall be approved by the Office of the State Fire Marshal;

(D) Space shall be provided in front of and adjacent to doors to allow space for persons in wheelchairs.

(2) Windows:

(a) All outer windows that open shall have insect screens;

(b) Windows above the first floor shall be designed to minimize potential for accidental falls when open;

(c) All resident rooms shall have outside windows with sills not more than three feet above the floor with a minimum area of ten percent of the floor area. The window will must be above ground level;

(d) Window shades, draperies, or blinds must be provided to control the amount of outside light and to assure the privacy of residents;

(e) Windows in resident rooms shall open without the use of tools. Windows in buildings designed with an engineered smoke control system in accordance with NFPA 90A are not required to be operable.

(3) Exceptions:

(a) Doors. In facilities with rooms continuously licensed since January 1, 1992 without meeting requirements in section (1) of this rule, such rooms shall be exempt from such requirement unless required to

conform pursuant to OAR 411-087-0010 or required to conform pursuant to state building codes;

(b) Windows. Facilities continuously licensed since January 1, 1992 shall be exempt from subsection (2)(a) of this rule unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0410 Floors, Ceilings and Walls
(Effective 1/1/1992)

(1) General Requirements:

(a) Finish, trim, wall and floor construction shall be free from spaces that can harbor rodents and insects;

(b) Finish on walls, floors and ceilings in resident areas shall provide for a low sheen surface to minimize reflected glare;

(c) Rooms containing heat producing equipment (such as boiler or heater rooms and laundries) shall be insulated and ventilated to prevent any floor surface above from exceeding a temperature ten degrees Fahrenheit (six degrees Celsius) above the ambient room temperature;

(d) The noise reduction criteria shown on Table 1 shall apply to partition, floor, and ceiling construction in resident areas.

(2) Floors and Wall Base:

(a) Floor materials shall be easily cleanable and have wear resistance appropriate for the location involved. Floors in shower and bath areas shall have a non-slip surface;

(b) Threshholds shall be constructed to facilitate use of wheelchairs and carts;

(c) Rugs or carpeting shall be Class I or II in accordance with NFPA 101, Chapter 6;

(d) Wall bases in kitchens, soiled utility rooms, central bathing areas, resident toilet rooms and janitor closets shall be self-coved (six inch minimum height), tightly sealed with the wall;

(e) Top-set rubber or vinyl base, where used, shall be sealed to the floor and walls.

(3) Ceilings:

(a) The minimum ceiling height shall be a nominal eight feet (2.44 m) with the following exceptions:

(A) Boiler rooms shall have ceiling clearances not less than two feet, six inches (76 cm) above the main boiler header and connecting piping;

(B) Rooms containing ceiling-mounted equipment shall have height required to accommodate the equipment;

(C) Ceilings in corridors, storage rooms, toilet rooms, and closets shall be not less than seven feet, six inches (2.29 m);

(D) Suspended tracks, rails, and pipes located in path of normal traffic shall be not less than six feet, eight inches (2.03 m) above the floor;

(E) Activity, recreation and exercise rooms, and similar spaces where impact noises may be generated shall not be located directly over resident bed areas unless special provisions are made to minimize such noise.

(b) Ceilings in the dietary and food preparation areas shall have a smooth surface, be light in color, and cover all overhead piping and duct work;

(c) Acoustical ceilings (i.e., acoustical tile) shall be provided for corridors in resident areas, nurses' stations, dayrooms, recreation

rooms, dining areas, and waiting areas. Other methods of sound control (e.g., carpeting) will be accepted by the Division if they meet STC classification requirements in Table 1 of these rules).

(4) Walls:

(a) Wall finishes shall be easily cleanable and, in the immediate area of plumbing fixtures, shall be smooth and moisture resistant;

(b) All walls of rooms in which food or drink is prepared or stored and in dishwashing areas shall be smooth, moisture resistant and light in color.

(5) Exceptions:

(a) Self-Covered Wall Base. Facilities which have been continuously licensed since January 1, 1992 shall not be required to have self-covered base as required in subsection (2)(d) of this rule unless otherwise provided by OAR 411-087-0010;

(b) Noise Reduction. Facilities which have been continuously licensed since January 1, 1992 shall not be required to meet noise reduction criteria as required in subsection (1)(d) of this rule unless otherwise provided by OAR 411-087-0010;

(c) Acoustical Ceilings. Facilities which have been continuously licensed since January 1, 1992 shall not be required to have acoustical ceilings as required in subsection (3)(c) of this rule unless otherwise provided by OAR 411-087-0010.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0420 Electrical Systems: General
(Effective 1/1/1992)

(1) Panelboards. Panelboards serving lighting and appliance circuits shall be located on the same floor as the circuits they serve. This requirement does not apply to emergency system circuits.

(2) Receptacles (Convenience Outlets):

(a) Resident Room. Each resident room shall have duplex grounding type receptacles as follows: Two located near the head of each bed, and one for television if used, and one on another wall;

(b) Corridors. Duplex grounding receptacles for general use shall be installed approximately 50 feet (15.24 m) apart in all corridors and within 25 feet (7.62 m) of ends of corridors;

(c) GFI Outlets. All outlets within five feet of a sink shall be a GFI type outlet. The resident sink located either in the resident room or the adjacent resident toilet room shall have a GFI type outlet located within five feet of the sink.

(3) Emergency Electrical Service:

(a) General. To provide electricity during an interruption of the normal electric supply, an emergency source of electricity shall be provided and connected to certain circuits for lighting and power as follows:

(A) Illumination for means of egress as required in NFPA Life Safety Code 101;

(B) Illumination for exit signs and exit directional signs as required in NFPA Life Safety Code 101;

(C) At least one clearly marked emergency power duplex receptacle in each dining area, food preparation area, and restorative care room;

(D) At least one clearly marked emergency power duplex receptacle in each resident room and at each nursing station;

(E) Nurses' calling systems;

(F) Equipment necessary for maintaining telephone service;

(G) Elevator service that will reach every resident floor when resident rooms are located on other than ground floor;

(H) Equipment for heating resident rooms to maintain a minimum temperature of 65 degrees in each resident room;

(I) General illumination at the nurses' stations, in the kitchen, and at selected receptacles in the vicinity of the generator set;

(J) Paging or speaker systems if intended for communication during emergency;

(K) Alarm systems including fire alarms activated at manual stations, water flow alarm devices of sprinkler system if electrically operated, fire and smoke detecting systems, and alarms required for nonflammable medical gas systems if installed; and

(L) Coolers for storage of food.

(b) Details. Emergency lighting and emergency outlets in resident rooms shall be in operation within ten seconds after the interruption of normal electric power supply. Emergency service to other receptacles and equipment may be delayed automatic or manually connected. Receptacles connected to emergency power shall be distinctively marked. Stored fuel capacity shall be sufficient for not less than 24-hour operation of the generator;

(c) Referenced Regulations. Note: OAR 411-087-0020;

(d) Flashlights. Functioning flashlights shall be readily available in the kitchen, administrator's office, and at each nursing station.

(4) Exceptions. Resident rooms in facilities which have been continuously licensed since January 1, 1992 and which are not used for residents using life-support equipment (e.g., ventilators, continuous suction devices) shall not be required to meet paragraphs (3)(a)(C)-(L) of this rule unless otherwise provided by OAR 411-087-0010.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0430 Electrical Systems: Lighting
(Effective 10/1/1993)

(1) Purpose. The purpose of this rule is to help ensure nursing facility lighting which provides the best visual acuity possible for nursing facility residents. Facility design should consider that, due to the normal aging process, the older person requires higher levels of illumination, is much more sensitive to glare, and requires greater time to adapt to changes in light levels. The older adult generally has reduced contrast sensitivity. Proper lighting is important in promoting personal independence, psychosocial well-being, minimizing need for staff intervention and preventing accidents.

(2) Lighting Required:

(a) All spaces occupied by people, machinery, equipment within buildings, approaches to buildings, and parking lots shall have lighting;

(b) Light Fixtures. Light fixtures shall be designed to minimize direct glare; e.g., indirect or diffused lighting, and to minimize energy consumption. Bare light bulbs or tubes are not allowed in resident areas or food preparation areas;

(c) Lighting Intensity. Lighting fixtures and circuitry shall have the capability of providing the lighting intensities shown in Table 4.

(3) Natural Light. Windows and skylights shall be utilized to minimize the need for artificial light and to allow residents to experience the natural daylight cycle. The use of windows and skylights is especially important near entrances/exits, in order to avoid difficulty in adjusting to light levels when entering or leaving the facility.

(4) Walls, Floors, Ceilings, Doors, Windows. Wall, floor and ceiling surfaces shall be designed/finished to minimize reflected glare. High contrast surfaces shall be used to assist residents with limited visual acuity to recognize the juncture between floor and wall, between wall and door, and between floor and other objects (e.g., toilet):

(a) On or after January 1, 1994, new paint and other new finishes used on ceiling shall have a reflectance value of 80 percent or higher. Such paint/finishes shall have a low sheen or matte finish;

(b) On or after January 1, 1994, new paint and other new finishes used on walls above 36 inches from the floor shall have a reflectance value of 60 percent or higher. Such paint/finishes shall have a low sheen or matte finish;

(c) Floors shall have a low sheen or matte finish;

(d) By January 1, 1997, all windows shall have coverings which minimize glare without blocking out all light.

(5) Resident Rooms. Residents' rooms shall have general lighting switchable at the doorway. Resident rooms shall also have lighting for each bed suitable for reading and indirect low level night illumination switchable at the bed. At least one light fixture for night lighting shall be switchable at the entrance to each resident room. All switches for control of lighting in resident areas shall be of the quiet operating type.

(6) Exceptions:

(a) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be exempt from section (3) of this rule;

(b) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be required to have 20 percent of the resident rooms (including wardrobe, toilet room entry, toilet room and make-up/shaving area) in compliance with Table 4 by January 1, 1995. One year after January 1, 1995, and every year thereafter, such facility shall be required to have an additional 20

percent of the resident rooms in compliance with Table 4 until January 1, 1999, at which time all resident rooms shall comply;

(c) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be required to meet task lighting requirements for medicine preparation area(s) and nurses station(s) as described in Table 4 by January 1, 1995;

(d) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be required to meet task lighting requirements for food preparation areas, occupational therapy area and activity area(s) as described in Table 4 by January 1, 1996;

(e) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be required to meet task lighting requirements for laundry, examination room(s), and physical therapy area as described in Table 4 by January 1, 1997;

(f) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be required to meet task lighting requirements for staff toilet(s) and administrative offices as described in Table 4 by January 1, 1998;

(g) Except as provided in OAR 411-087-0010, facilities continuously licensed since January 1, 1992, shall be required to have a minimum interior entry area ambient lighting of 50 foot candles instead of 100 foot candles as described in Table 4.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0440 Electrical Systems: Alarm and Nurse Call Systems
(Effective 10/1/1993)

(1) Exit Door Alarm. The facility shall have an exit door alarm system which alerts the staff when an exit door is opened or when a resident departs, or any other system determined to be acceptable to the Division (such determination shall be in writing).

(2) Nurse Call System:

(a) Resident Rooms. Each resident room shall be served by an electric nurse call system. Each resident shall have a nurse call button which may be easily located to allow the resident to summon nursing staff. Two call buttons serving adjacent beds may be served by one calling station;

(b) Bath, Toilet and Shower Rooms. Each bath, toilet and shower room must have an electric call system;

(c) Nurses' Station. The nurse call system shall register all calls at the nurses' station by both a visible and audible signal. The nurse call system shall also register a visible signal in the corridor adjacent to the door of the room from which the signal originated:

(A) The visible signal shall remain on until turned off at the location where the signal originated;

(B) In multi-corridor nursing units, additional visible signals shall be installed at corridor intersections.

(3) Fire/Smoke Alarm System. Fire and smoke detection/alarm systems shall comply with OAR 411-087-0020 ("Referenced Regulations").

(4) Exceptions:

(a) Pediatric Units. Rooms in pediatric units may have two-way voice communications in lieu of call buttons required under subsection (2)(a) of this rule. Such systems shall be equipped with an indicating light at each calling station which lights and remains lighted as long as the voice circuit is operating;

(b) Locked Units. Rooms in locked units serving residents with Alzheimers or other dementias may have wall-mounted call buttons in lieu of call buttons on cords when necessary for resident safety;

(c) Audible Signal. Call systems in facilities continuously licensed since January 1, 1992 shall not be required to have an audible call

feature at the nurses' station unless required to conform pursuant to OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0450 Heating and Ventilating Systems
(Effective 1/1/1992)

(1) Energy Conservation. Special design considerations should be given to energy conservation in accordance with Section 53 of the Oregon Structural Specialty Code.

(2) Temperature:

(a) Design. For all areas occupied by residents, the indoor winter design temperature shall be 75 degrees Fahrenheit (24 degrees Celsius). For all other occupied areas, the indoor winter design temperature shall be 72 degrees Fahrenheit (22 degrees Celsius).

NOTE: This does not preclude operation at lower temperatures where appropriate and resident safety is not affected.

(b) Function. For all areas occupied by residents, the indoor temperature shall be maintained at not less than 70 degrees Fahrenheit (21 degrees Celsius).

(3) Ventilation Design. In the interest of energy conservation, the facility is encouraged to utilize recognized procedures such as variable air volume and load shedding systems in areas not listed in Table 2 and where direct care is not affected such as administrative and public areas, general storage, etc. Consideration may be given to special design innovations of Table 2 provided that pressure relationships as an indication of direction of air flow and total number of air changes as listed is maintained. All such proposed design innovations are subject to review and approval by the Division.

(4) Ventilation System Details. All air-supply and air-exhaust systems shall be mechanically operated. All fans serving exhaust systems shall be

located at the discharge end of the system and have motor life ratings suitable for continuous use (20,000 hours minimum). The ventilation rates shown in Table 2 shall be considered as minimum acceptable rates and shall not be construed as precluding the use of higher ventilation rates when needed for temperature control or control of odors:

(a) Outdoor air intakes shall be located as far as practical but not less than 25 feet (7.62 m) from exhaust outlets of ventilating systems, combustion equipment stacks, vacuum systems, plumbing vent stacks, or from areas which may collect vehicular exhaust and other noxious fumes (plumbing and vacuum vents that terminate above the level of the top of the air intakes may be located as close as ten feet (3.05 m)). The bottom of outdoor air intakes serving central systems shall be located as high as practical but not less than six feet (1.83 m) above ground level, or if installed above the roof, three feet (91 cm) above roof level;

(b) The ventilation systems shall be designed and balanced to provide the air exchange rate and pressure relationship shown in Table 2;

(c) The bottoms of ventilation openings shall be not less than three inches (7.6 cm) above the floor of any room;

(d) Corridors shall not be used to supply air or exhaust air from any occupiable room. Pressurization of corridors for odor control will be allowed within limits established by the agency having jurisdiction for enforcement of the Oregon Mechanical Specialty Code;

(e) All central ventilation or air conditioning systems shall be equipped with filters having efficiencies no less than those specified in Table 3. The filter bed shall be located upstream of the air conditioning equipment unless a pre-filter is employed. In this case, the pre-filter shall be upstream of the equipment and the main filter bed shall be located further downstream. Electronic filter systems meeting required efficiency ratings may be proposed as an acceptable alternative when installed and maintained in accord with recommendations of the manufacturer. Manufacturer's specifications and recommendations for installation shall be submitted for approval by the Division. If electronic filters are used, the facility shall comply

with the manufacturer's specifications and recommendations for maintenance and cleaning. This information, including a copy of the manufacturer's specifications and recommendations, shall be documented and available in the facility;

(f) All filter(s) efficiencies shall be average atmospheric dust spot efficiencies tested in accordance with ASHRAE Standard 52-76. Filter frames shall be durable and carefully dimensioned and shall provide an airtight fit with the enclosing duct work. All joints between filter segments and the enclosed duct work shall have gaskets or seals to prevent air leakage. A manometer shall be installed across each filter bed serving central air systems;

(g) Air handling duct systems shall meet the requirements of NFPA Standard 90A;

(h) Fire and smoke dampers shall be constructed, located, and installed in accordance with the requirements of NFPA Standard 90A except that all systems, regardless of size, serving more than one smoke or fire zone shall be equipped with smoke detectors to shut down fans automatically as delineated in Paragraph 4-3.2 of the Standard. Access for maintenance shall be provided at all dampers. Switching for restart of fans may be conveniently located for fire department use to assist in evacuation of smoke after the fire is controlled, provided provisions are made to avoid possible damage to the system because of closed dampers.

(5) Testing Required. Prior to facility licensure, all mechanical systems shall be tested, balanced, and operated to demonstrate to the design engineer or his/her representative that installation and performance of these systems conform to the design intent. Test results shall be made available on request to representatives of the Division.

(6) Exceptions. Facilities continuously licensed since January 1, 1992 shall not be required to meet sections (1), (3), (4) and (5) of this rule unless required to conform pursuant to OAR 411-087-0010.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0460 Water Supply, Sewage Disposal, and Other Piping Systems
(Effective 1/1/1992)

(1) Plumbing System. All interior plumbing systems shall be installed and maintained in conformance with the State Plumbing Code which was current at the time of construction, municipal or county ordinances and to m rules of the Building Codes Division governing the installation of interior supplies in buildings:

(a) The material used for plumbing fixtures shall be of nonabsorbent acid-resistant material;

(b) Hot water heaters and tanks:

(A) The hot water heating equipment shall have sufficient capacity to supply water at sinks, showers, and tubs at 105 to 120 degrees Fahrenheit. Hot water supply in these areas shall not exceed 120 degrees Fahrenheit and not be less than 100 degrees Fahrenheit;

(B) The hot water heating equipment shall have sufficient capacity to provide water in the laundry and dietary areas at a minimum temperature of 160 degrees Fahrenheit;

(C) Storage tank(s) shall be fabricated of corrosion-resistant metal or lined with noncorrosive material.

(c) Drainage systems. Insofar as possible, draining piping shall not be installed within the ceiling nor installed in an exposed location in food preparation centers, food serving facilities, food storage areas, and other critical areas. Special precautions shall be taken to protect these areas from possible leakage or condensation from necessary overhead piping systems;

(d) Nonflammable medical gas systems. If used, nonflammable medical gas system installations shall conform to the requirements of NFPA 99, Chapter 4, 1990 Edition;

(e) Clinical vacuum (suction) systems. If used, clinical vacuum system installations shall be in accordance with the requirements of NFPA 99, Chapter 4, 1990 Edition;

(f) Identification. All piping in the heating, ventilation, air conditioning (HVAC) and service water systems shall be color coded or otherwise marked for easy identification.

(2) Water Supply. Hot and cold water, safe, sanitary and suitable for domestic use, shall be distributed at 20 pounds per square inch pressure or greater to conveniently located taps throughout the building. When the water supply is not obtained from the community water supply system and an independent supply is used, such water supply shall be in compliance with the Health Division Administrative Rules.

(3) Sewage and Wastewater:

(a) All sewage and liquid wastes shall be disposed of in a municipal sewer system if such facilities are available. When a municipal sewer system is not available, sewage and liquid wastes shall be collected, treated, and disposed of in an independent sewer system which conforms to the applicable minimum standards of the Department of Environmental Quality;

(b) All drainage and other arrangements for the disposal of excreta, infectious discharges, institutional and kitchen wastes shall conform to the State Plumbing Code, municipal or county ordinances, and to the rules of the State Health Division and the Department of Environmental Quality.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0470 Building Sprinkler Systems
(Effective 1/1/1992)

(1) Applicable Codes. Facilities with sprinkler systems for fire suppression shall be installed to comply with the Oregon Structural and Life Safety Code as adopted by the Oregon Building Codes Division or local jurisdictions having authority.

(2) Unheated Areas. Sprinkler systems located in unheated areas or above the insulated ceiling system shall be of a dry type, have automatic heaters that maintain a minimum temperature of 40 degrees Fahrenheit, or have an antifreeze system.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0480 Waste Processing Systems
(Effective 1/1/1992)

Storage and disposal. Space and facilities shall be provided for the sanitary storage and disposal of waste. Incinerator units must be a system approved by the Department of Environmental Quality. Compliance with OAR 333, division 18 is required.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

411-087-0490 Elevator Systems
(Effective 1/1/1992)

All buildings having residents' facilities (such as bedrooms, dining rooms, or recreation areas) or resident services (such as diagnostic or therapy) located on a floor other than the main entrance floor shall have electric or electro-hydraulic elevators. Installation and testing of elevators shall comply with requirements of the Oregon Building Codes Division Elevator Safety Section:

(1) Number:

(a) Buildings required to have elevators under this rule shall have at least one hospital-type elevator;

(b) Buildings with 60 to 200 beds located on floors other than the main entrance floor or where the major inpatient services are located on a floor other than those containing resident beds shall have at least two elevators;

(c) Buildings with more than 200 beds located on floors other than the main entrance floor shall have at least three elevators.

(2) Cars and Platforms:

(a) Dimensions. Cars of hospital-type elevators shall have inside dimensions that will accommodate a resident bed and attendants and shall be at least five feet (1.52 m) wide by seven feet six inches (2.29 m) deep. The car door shall have a clear opening of not less than three feet eight inches (1.12 m);

(b) Leveling. Elevators shall be equipped with an automatic leveling device on the two-way automatic maintaining type with an accuracy of 1/2 inch (1.3 cm);

(c) Operation. Elevators, except freight elevators, shall be equipped with a two-way special service switch to permit cars to bypass all landing button calls and be dispatched directly to any floor. Elevator call buttons, controls, and door safety stops shall be of a type that will not be activated by heat or smoke;

(d) Disabled Access. Elevator controls, alarm buttons, signals and telephones shall be accessible to wheelchair occupants and usable by the blind.

(3) Exceptions. Facilities continuously licensed since January 1, 1992 shall be exempt from this rule unless otherwise provided by OAR 411-087-0010.

Stat. Auth.: ORS 410.070 & 441.055
Stats. Implemented: ORS 441.055 & 441.615

Table 87-1

SOUND TRANSMISSION LIMITATIONS IN NURSING FACILITIES	Airborne Sound Transmission Class (STC)[1]	
	Partitions	Floors
New Construction		
Resident room to resident room	45	45
Public space[2] to resident room	50	50
Service area[3] to resident room	55	55

[1]Sound transmission class (STC) shall be determined by tests in accordance with methods set forth in ASTM E90 and ASTM E413. Where partitions do not extend to the structures above, sound transmission through ceilings and composite STC performance must be considered.

[2]Public space includes hallways, lobbies, dining and activity rooms, etc.

[3]Service areas include kitchens, laundry rooms, elevators, boiler and mechanical rooms.

Table 87-2

PRESSURE RELATIONSHIPS AND VENTILATION IN NURSING FACILITIES[1] OAR 411-087-0450	AIR MOVEMENT RELATIONSHIP TO ADJACENT AREAS[2]	MINIMUM AIR CHANGES OF OUTDOOR AIR PER HOUR[3] (Supplied to Room)	MINIMUM TOTAL AIR CHANGES PER HOUR[4] (Supplied to Room)	ALL AIR EXHAUSTED DIRECTLY TO OUTDOORS[5]	RECIRCULATED AIR WITHIN ROOM
Resident Room	Equal or In	2	2	Optional	Optional
Resident Area Corridor	Equal or Out	1	2	Optional	Optional
Dining/Activities Room	Equal	2	4	No	Optional
Examination and Treatment Room	Equal or In	2	6	Optional	Optional
Pharmacy or Drug Room	Out	1	2	Optional	Optional
Physical Therapy Area	In	2	6	Optional	Optional
Occupational Therapy Area	In	2	6	Optional	Optional
Soiled Utility Room	(In)	2	10	Yes	No
Clean Utility Room	(Out)	2	4	Optional	Optional
Equipment and Utensil Washing Rom	In	Optional	10	Yes	No
Toilet Room	In	Optional	10	Yes	No
Bath or Shower Room	In	Optional	10	Yes	No
Janitor's Closet	In	Optional	10	Yes	No
Sterilizer Equipment Room	In	Optional	10	Yes	No
Linen and Trash Chute Room	(In)	2	10	Yes	No
Food Preparation Area[6]	(Out)	Optional	6	Optional	No
Dietary Dry Storage	In	Optional	2	Optional	No
Laundry, General	Equal or Out	2	10	Yes	No
Soiled Linen Sorting and Storage	(In)	2	6	Yes	No
Clean Linen Storage	Out	Optional	2	Optional	Optional
Isolation Room	In	2	2	Yes	No
Smoking Room	In	6	6	Yes	No
Personal Care Room	In	6	6	Yes	No

[1]This table covers ventilation standards for comfort, as well as for sepsis and odor control, in areas of the nursing facility that directly affect resident care. Areas where specific standards are not given shall be ventilated in accordance with ASHRAE Standard 62-1981, "Ventilation for Acceptable Indoor Air Quality Including Requirements for Outside Air."

[2]Design of the ventilation system shall, insofar as possible, provide that air movement is from "clean to less clean" areas. However, continuous compliance may be impractical with full utilization of some forms of variable air volume and load-shedding systems which may be used for energy conservation. Those areas which do require positive and continuous control are noted with "out" or "in" stated in parentheses and require continuous direction of air movement in relation to the space named. Rate of air movement may be varied as needed within the limits required for positive control.

[3]To satisfy exhaust needs, replacement air from outside is necessary, except where shown as option.

[4]Number of air changes may be reduced when the room is unoccupied if provisions are made to ensure the required number of air changes is re-established any time the space is being utilized. Adjustments include provisions so the direction of air movement shall remain the same when the number of air changes is reduced in accord with note 2. Areas not indicated as having continuous directional control may have ventilations systems shut down when space is unoccupied and ventilations is not otherwise needed.

[5]Air from areas with contamination or odor problems shall be exhausted to the outside and not recirculated to other areas.

[6]Food preparation rooms shall have ventilation systems that provide an excess of air supply for "out" air movement when hoods are not in operation. The number of air changes may be reduced or varied to any extent required for odor control when space is not in use.

Table 87-3

FILTER EFFICIENCIES FOR CENTRAL VENTILATION[1] AND AIR CONDITIONING SYSTEMS IN NURSING FACILITIES OAR 411-087-0450	**MINIMUM NUMBER OF FILTER BEDS**	**FILTER EFFICIENCIES** (Percent) FOR MAIN FILTER BED
Resident Care, Treatment, Diagnostic and Related Areas	1	80
Food Preparation Areas and Laundries	1	80
Administrative, Bulk Storage and Soiled Holding Areas	1	25

[1]Central ventilation systems are those supplying air to more than one room or area when return air from a single room is recirculated to other rooms. Resident toilet rooms may be exhausted using make-up air from adjoining resident rooms by undercutting doors or through provision of transfer grills without mandating installation of filters when otherwise not required.

Table 87-4

Nursing Facility Lighting Intensity

AREA	Minimum Footcandles[1]	
	Ambient Light[2]	Task Light[3]
Administrative Offices (day only)	30	50
Activity Area(s)	30	50
Visitor Waiting (day)	30	N/A
Visitor Waiting (night)	10	N/A
Barber/Beautician (day)	50	N/A
Chapel or Quiet Area	30	N/A
Hallways (day)	30	N/A
Hallways (night)	10	N/A
Dining Room(s)	50	N/A
Exterior Entrance (night)	10	N/A
Interior Entry Area[4] (day)	100[5]	N/A
Interior Entry Area[4] (night)	10	N/A
Exit Stairway & Landings	30	N/A
Elevator Interior(s)	30	N/A
Medicine Preparation Area	30	75
Nurses Station(s) (day)	30	50
Nurses Stations(s) (night)	10	50
Physical Therapy Area (day)	30	50
Occupational Therapy Area (day)	30	50
Examination Room(s)	30	100
Janitor's Closet	30	N/A
Laundry	30	50
Clean/Soiled Utility Rooms	30	N/A
Food Preparation Areas	50	75
Food Storage Areas (non-refrigerated)	30	N/A
Resident Room	30	75[6]
Wardrobe	30	N/A
Toilet Room Entry	30	N/A
Toilet Room	30	N/A
Make-Up/Shaving Area	30	50
Staff Toilet Room	20	30
Shower/Bathing Rooms	30	N/A

[1]Design must take into consideration that lighting systems normally decrease in output with age.
[2]Ambient light measurements taken 2 ½ feet from floor (± 6 inches). Minimum footcandles based upon average measurement. A minimum of three measurements should be taken, including a measurement at the center of each area, near the outer perimeter, and at a point equidistant from the center and the perimeter measurement.
[3]Task light measurements taken at work surface. Minimum footcandles for task light based upon average measurement. A minimum of three measurements should be taken, including a measurement at the center of each work surface, near the outer perimeter of the work surface, and at a point equidistant from the center and the perimeter measurement.
[4]Measured ten feet from door.
[5]Higher light levels desirable. Windows and skylights recommended.
[6]Reading light. Position adjustment and variable intensity preferred.
[7]Measured at center of door opening.