

**5107.3 Review by the Commissioner of Public Safety.** The Commissioner of the Commonwealth of Massachusetts, Department of Public Safety shall establish districts which shall be supervised by a state inspector of the Division of Inspections. The Commissioner may review, on his own initiative, or on the application of any state inspector, any action or refusal or failure of action by any building official, the result of which does not comply with the uniform implementation of 780 CMR 51.00 through 99.00; and may reverse, modify or annul, in whole or in part, such action except with respect to the specialized codes, provided that an order or action of the Commissioner shall not reverse, modify, annul or contravene any order, action, determination, interpretation or any decision by the BBRS or the State Building Code Appeals Board.

**5107.4 Reports.** The state inspector shall file with the BBRS reports of his periodic reviews and recommendations for improvements of building inspection practices. The format and due dates for these reports shall be determined by the BBRS.

#### 780 CMR 5108 RULES AND REGULATIONS

**5108.1 Rule-making Authority.** Under authority granted by St. 1984, c. 348, as amended, the BBRS is empowered in the interest of public safety, health and general welfare, to adopt and promulgate rules and regulations, and to interpret and implement the provisions of 780 CMR 51.00 through 99.00 to secure the intent thereof.

**5108.2 Amendments and Promulgation of Rules.** In accordance with the provisions of M.G.L. c. 143, § 97, any person may propose amendments to 780 CMR 51.00 through 99.00. Public hearings shall be held as specified in said law, and at such other times and places as the BBRS may determine, to consider petitions for such amendments. Amendments adopted by the BBRS shall be binding and have the full force and effect in all cities and towns.

**5108.3 Activities Requiring Licenses, Registration or Certification.** See Special Regulations 780 CMR 110.R1 through R7, as applicable, for the special regulation relating to such license, registration and/or certification.

**5108.3.1 Testing Laboratories.** When a testing laboratory, branch laboratory and/or project laboratory is engaged to test concrete and/or concrete materials for use in detached one- and two-family dwellings, said laboratory shall be licensed by the BBRS in accordance with 780 CMR 51.00 through 99.00 and Special Regulation 780 CMR 110.R1: *Concrete Testing Laboratories Licensing*.

**5108.3.2 Field Technicians.** When a person is engaged in the activities of field testing of

concrete for use in detached one- or two-family dwellings and/or controlled materials, such person shall be licensed by the BBRS in accordance with Special Regulation 780 CMR 110.R2: *Concrete Testing Personnel Licensing*.

**5108.3.3 Manufactured Buildings.** No individual, organization or firm shall be engaged in the construction of manufactured buildings for use in the Commonwealth of Massachusetts or shall act as a third-party inspection agency (TPIA) or a dealer of said manufactured buildings unless approved to construct same or act in such capacity by the BBRS in accordance with Special Regulation 780 CMR 110.R3: *Manufactured Buildings, Building Components and Mobile Homes*.

**5108.3.4 Native Lumber.** No individual, organization or firm shall engage in the production of native lumber for use in detached one- or two-family dwellings within the Commonwealth of Massachusetts unless registered by the BBRS in accordance with 780 CMR 51.00 through 99.00 and Special Regulation 780 CMR 110.R4, The Rules and Regulations Controlling the Use of Native Lumber.

#### 5108.3.5 Licensing of Construction Supervisors.

**5108.3.5.1** Except for those structures governed by Construction Control as identified in the Commonwealth of Massachusetts Base Building Code (780 CMR 1.00, 780 CMR 116.00), no individual shall be engaged in directly supervising persons engaged in construction, reconstruction, alteration, repair, removal or demolition involving any activity regulated by any provision of 780 CMR 51.00 through 99.00, unless said individual is licensed in accordance with 780 CMR 110.R5: *Construction Supervisors*.

No person shall be engaged in the supervision of the field erection of a manufactured building unless such person is licensed in accordance with Special Regulation 780 CMR 110.R5: *Construction Supervisors*.

**Exception:** Any homeowner performing work for which a building permit is required shall be exempt from the licensing provisions of 780 CMR 5108.3.5, provided that if a homeowner engages a person(s) for hire to do such work, that such homeowner shall act as supervisor. This exception shall not apply to the field erection of manufactured buildings constructed pursuant to 780 CMR 51.00 through 99.00 and Special Regulation 780 CMR 110.R3. For the purposes of 780 CMR 5108.3.5, a "homeowner" is defined as follows: Person(s) who owns a parcel of land on

which he or she resides or intends to reside, on which there is, or is intended to be, a one- or two-family dwelling, attached or detached structures accessory to such use and/or farm structures. A person who constructs more than one home in a two-year period shall not be considered a homeowner.

**Note:** Any licensed construction supervisor who contracts to do work for a homeowner shall be responsible for performing said work in accordance with 780 CMR 51.00 through 99.00, Special Regulation 780 CMR 110.R5 and all referenced standards and/or manufacturer's recommendations, whether or not the licensed contractor secured the permit for said work.

**5108.3.5.2 Exemptions from Construction Supervisor License Requirement.** A construction supervisor's license is not required for:

1. Erection of rooftop solar collectors, the erection of signs, the erection of tents, construction of swimming pools, insulating of the building thermal envelope and the insulating of other systems or portions thereof, required by 780 CMR;
2. Projects which are subject to "construction control" (see 780 CMR 2.00 for definition of "Construction control");
3. Agricultural buildings which are not open to the public or otherwise made available for public use;
4. Massachusetts-registered engineers and Massachusetts-registered architects (collectively referred to in 780 CMR 51.00 as "registered design professionals"), provided such engineers and/or architects comply with the Construction Supervisor oversight requirements set forth in Special Regulation 780 CMR 110.R5 generally and 780 CMR 5116.0, as applicable; and
5. The practice of any trade licensed by agencies of the Commonwealth, provided that any such work is within the scope of said license, including, but not limited to, wiring, plumbing, gas fitting, fire protection systems, pipefitting, HVAC and refrigeration equipment.

**5108.3.5.3 Municipal Construction Licensing.** No municipality shall be prohibited from requiring a license for those individuals engaged in directly supervising persons engaged in construction, reconstruction, alteration, repair, removal or demolition in those categories of buildings and structures for which the BBRS does not require a license, provided that those municipalities which have established licensing requirements for construction supervisors prior to January 1, 1975, may maintain their existing licensing requirements.

**5108.3.6 Registration of Home Improvement Contractors.** In accordance with the provisions of M.G.L. c. 142A, no home improvement contractor, or organization or firm shall be involved in the improvement of any existing owner-occupied one- to four-family residential building unless said home improvement contractor has registered with the BBRS in accordance with Special Regulation 780 CMR 110.R6: *Registration and Enforcement of Home Improvement Contractor Program.*

**5108.3.7 Certification of Inspectors of Buildings, Building Commissioners and Local Inspectors.** Except as allowed for conditional appointees, no individual shall perform the duties of municipal inspectors of buildings, building commissioners or local inspectors unless certified by the BBRS as set forth in Special Regulation 780 CMR 110.R7.

**5108.4 Enforcement.** Whoever violates the provisions of 780 CMR 5108 or any rules and regulations promulgated hereunder, or who falsifies or counterfeits a license, registration or certification issued by the BBRS, or who fraudulently issues or accepts such a license, registration or certification shall be punished as provided in 780 CMR 5118 or shall be subject to any other penalty provided for by law.

#### 780 CMR 5109 APPROVAL

**5109.1 Approved Materials and Equipment.** All materials, equipment and devices subject to approval by the building official shall be constructed and installed in accordance with such approval.

**5109.2 Used Materials and Equipment.** Used materials, equipment and devices which meet the minimum requirements of 780 CMR 51.00 through 99.00 for new materials, equipment and devices shall be permitted; however, the building official may require satisfactory proof that such materials, equipment and devices have been reconditioned, tested, and/or placed in good and proper working condition prior to approval.

**5109.3 Modifications.** Wherever there are practical difficulties involved in carrying out the provisions of 780 CMR 51.00 through 99.00, the building official shall have the authority to grant modifications for individual cases, provided the building official shall first find that special individual reason makes the strict letter of 780 CMR 51.00 through 99.00 impractical and the modification is in compliance with the intent and purpose of 780 CMR 51.00 through 99.00 and that such modification does not lessen health, life, fire safety or structural requirements. The details of actions granting modifications shall be recorded and entered in the files of the building department. A building official may seek assistance from the District State Building Inspector for action under 780 CMR 5109. The

## ADMINISTRATION FOR SINGLE- AND TWO-FAMILY DWELLINGS

Failure to comply with 780 CMR 5110.7 Items through .7 shall result in denial of the building permit.

**5110.7.1 Preparation of Construction Documents.** In accordance with M.G.L. c. 112, § 60L and M.G.L. c. 112, §§ 81D through 81T, the design of any structural member, building system or parts thereof not prescriptively provided for in 780 CMR 51.00 through 99.00 may require the services of a registered design professional. A building official may require plans, specifications, calculations and/or details of sufficient clarity to ensure compliance with the relevant requirements of 780 CMR 51.00 through 99.00 and/or relevant laws, ordinances, rules and regulations.

**5110.7.2 Information for Construction in Areas Prone to Flooding.** Construction documents for detached one- and two-family dwellings to be constructed in flood hazard areas are required to be prepared by a registered architect or registered professional engineer (collectively referred to herein as registered design professionals) and shall include:

1. Delineation of flood hazard areas, floodway boundaries, and flood zones, and the design flood elevation, as appropriate; and
2. The elevation of the proposed lowest floor, including basement; in areas of shallow flooding (AO zones), the height of the proposed lowest floor, including basement, above the highest adjacent grade.

**5110.7.3 Design.** Plans, computations and specifications involving new construction, alterations, repairs, expansions or additions or change in use or occupancy of any detached one- or two-family dwelling which are prepared by or under the supervision of a Massachusetts-registered architect or Massachusetts-registered professional engineer, as applicable, shall bear his or her original signature and seal. Said signature and seal shall signify that the plans, computations and specifications meet the applicable provisions of 780 CMR 51.00 through 99.00 and all accepted engineering practices. A legally recognized professional performing work as defined by M.G.L. c. 112, § 81R may be exempted from 780 CMR 5110.

**5110.7.4 Plot Plan.** The construction documents submitted with the application for permit shall be accompanied by a plot plan showing the size and location of new construction and existing structures on the site and distances from lot lines. In the case of demolition, the plot plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site.

**5110.8 Amendments to Application.** Subject to the limitations of 780 CMR 5110.9, amendments to a plan, application or other records accompanying the

same shall be filed prior to the commencement of the work for which the amendment to the permit is sought or issued. Such amendments shall be deemed part of the original application and shall be submitted in accordance with 780 CMR 5110.1.

**5110.9 Time Limitation of Application.** An application for a permit for any proposed work shall be deemed to have been abandoned six months after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the building official shall grant one or more extensions of time for additional periods not exceeding 90 days each if there is reasonable cause and upon written request by the owner.

### 780 CMR 5111 PERMITS

**5111.1 Action on Application.** The building official shall examine or cause to be examined all applications for permits and amendments thereto within 30 days after filing thereof. If the application or the construction documents do not conform to the requirements of 780 CMR 51.00 through 99.00 and all pertinent laws under the building official's jurisdiction, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of 780 CMR 51.00 through 99.00 and all laws and ordinances applicable thereto, the building official shall issue a permit therefore.

**5111.2 Zoning.** In accordance with the provisions of M.G.L. c. 40A or St. 1956, c. 665 as amended, no permit for the construction, alteration, change of use or moving of any detached one- or two-family dwelling shall be issued if such detached one- or two-family dwelling or use would be in violation of any zoning ordinance or bylaw.

**5111.3 Railroad Right-of-way.** No permit to build a structure of any kind on land formerly used as a railroad right-of-way or any property appurtenant thereto formerly used by any railroad company in the state shall be issued without first obtaining, after public hearing, the consent in writing to the issuance of such permit from the Secretary of the Executive Office of Transportation and Construction, all in accordance with M.G.L. c. 40, § 54A.

**5111.4 Water Supply.** No permit shall be issued for the construction of a detached one- or two-family dwelling which would necessitate the use of water therein, unless a supply of water is available therefore, either from a water system operated by a city, town or district, or from a well located on the land where the detached one- or two-family dwelling is to be constructed, or from a water corporation or company, as required by M.G.L. c. 40, § 54.

**5111.5 Debris.** As a condition of issuing a permit

## THE MASSACHUSETTS STATE BUILDING CODE

or the construction, demolition, renovation, rehabilitation or other alteration of a detached one- or two-family dwelling, M.G.L. c. 40, § 54 requires that the debris resulting therefrom shall be disposed of in a properly licensed solid waste disposal facility as defined by M.G.L. c. 111, § 150A. Signature of the permit applicant, date and number of the building permit to be issued shall be indicated on a form provided by the building department, and attached to the office copy of the building permit retained by the building department. If the debris will not be disposed of as indicated, the holder of the permit shall notify the building official, in writing, as to the location where the debris will be disposed.

**5111.6 Excavation and Trench Safety.** Excavation on private or public land shall be permitted and executed in accordance with 520 CMR 14.00: Excavation and Trench Safety.

**5111.7 Workers' Compensation.** No permit shall be issued to construct, reconstruct, alter or demolish a detached one- or two-family dwelling until acceptable proof of insurance pursuant to M.G.L. c. 152, § 25C(6) has been provided to the building official.

**5111.8 Hazards to Air Navigation.** Application for building new structures or adding to existing structures within airport approaches as defined in M.G.L. c. 90, § 35B and any amendments thereto or language substituted therefore, must include a certification by the applicant that:

1. Either a permit from the Massachusetts Aeronautics Commission is not required because the structure is, or will be:
  - (a) In an area subject to airport approach regulations adopted pursuant to M.G.L. c. 90, §§ 40A through 40I; or
  - (b) in an approach to Logan International Airport; or
  - (c) less than 30 feet (9144 mm) above ground level; or
2. A permit from the Massachusetts Aeronautics Commission is required pursuant to M.G.L. c. 90, § 35B and a copy of said permit is enclosed with the application.

Applications for permits to build a new structure or add to an existing structure requiring the filing of a Notice of Proposed Construction or Alteration (FAA Form 7460-1) with the Federal Aviation Administration shall mail a copy of the completed FAA Form 7460-1 to the Massachusetts Aeronautics Commission within three business days after submitting said form to the FAA.

**5111.9 Expiration of Permit.** Any permit issued shall be deemed abandoned and invalid unless the work authorized by it shall have been commenced within six months after its issuance; however, for cause, and upon written request of the owner, one or more extensions of time, for periods not exceeding

six months each, may be granted in writing by the building commissioner or inspector of buildings. Work under such a permit in the opinion of the building commissioner or inspector of buildings must proceed in good faith continuously to completion so far as is reasonably practicable under the circumstances. It is the sole responsibility of the owner to inform, in writing, the building commissioner or inspector of buildings of any facts which support an extension of time. The building commissioner or inspector of buildings has no obligation under 780 CMR 5111.8 to seek out information which may support an extension of time. The owner may not satisfy this requirement by informing any other municipal and/or state official or department.

For purposes of 780 CMR 5111.8 any permit issued shall not be considered invalid if such abandonment or suspension of work is due to a court order prohibiting such work as authorized by such permit; provided, however, in the opinion of the building commissioner or inspector of buildings, the person so prohibited by such court order, adequately defends such action before the court. Although said permit shall remain valid pending final disposition by the court, no work shall be performed in violation of a valid court order.

**5111.10 Previous Approvals.** 780 CMR 51.00 through 99.00 shall not require changes in the construction documents, construction or designated use group of a building for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been actively prosecuted by September 27, 2007 and is completed with dispatch.

**5111.11 Signature to Permit.** The building official's signature shall be attached to every permit; or the building official shall authorize a subordinate to affix such signature thereto.

**5111.12 Approved Construction Documents.** When the building official has determined that the proposed construction conforms to the provisions of 780 CMR 51.00 through 99.00 and other applicable laws, bylaws, rules and regulations under his or her jurisdiction, the building official shall stamp or endorse in writing the three sets of construction documents "Approved." One set of the approved construction documents shall be retained by the building official, one set shall be forwarded to the head of the local fire department (when applicable/see 780 CMR 5110.7 and 780 CMR 5111.8) for purposes of notification and the other set shall be kept at the construction site, open to inspection of the building official or an authorized representative at all reasonable times.

**5111.13 Revocation of Permits.** The building official shall revoke a permit or approval issued under the provisions of 780 CMR 51.00 through 99.00 in case of any false statement or

misrepresentation of fact in the application or on the plans on which the permit or approval was based.

**5111.14 Approval in Part.** The building official may issue a permit for the construction of foundations or any other part of a detached one- or two-family dwelling before the construction documents for the whole detached one- or two-family dwelling have been submitted, provided that adequate information and detailed statements have been filed complying with all of the pertinent requirements of 780 CMR 51.00 through 99.00. Work shall be limited to that work approved by the partial approval and further work shall proceed only when the building permit is amended in accordance with 780 CMR 5110.8. The holder of such permit for the foundation or other parts of a detached one- or two-family dwelling shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire detached one- or two-family dwelling will be granted.

**5111.15 Posting of Permit.** A true copy of the building permit shall be kept on the site of operations, open to public inspection during the entire time of prosecution of the work and until the completion of the same.

**5111.16 Notice of Start.** At least 24-hour notice of start of work under a building permit shall be given to the building official.

#### 780 CMR 5112 DEMOLITION OR REMOVAL OF STRUCTURES

**5112.1 Service Connections.** Before a detached one- or two-family dwelling is demolished or removed, the owner or agent shall notify all utilities having service connections within the structure such as water, electric, gas, sewer and other connections. A permit to demolish or remove a detached one- or two-family dwelling shall not be issued until a release is obtained from the utilities, stating that their respective service connections and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

All debris shall be disposed of in accordance with 780 CMR 5111.5.

**5112.2 Notice to Adjoining Owners.** Only when written notice has been given by the applicant to the owners of adjoining lots and to the owners of wired or other facilities, of which the temporary removal is necessitated by the proposed work, shall a permit be granted for the removal of a detached one- or two-family dwelling.

**5112.3 Lot Regulation.** Whenever a detached one- or two-family dwelling is demolished or removed, the premises shall be maintained free from all unsafe or hazardous conditions by the proper regulation of the lot, restoration of established grades and the erection of the necessary retaining walls and fences in accordance with the provisions of 780 CMR 51.00

through 99.00.

#### 780 CMR 5113 CONDITIONS OF PERMIT

**5113.1 Payment of Fees.** A permit shall not be issued until the fees prescribed in 780 CMR 5114.0 have been paid.

**5113.2 Compliance with Code.** The permit shall be a license to proceed with the work and shall not be construed as authority to violate, cancel or set aside any of the provisions of 780 CMR 51.00 through 99.00 or any other law or regulation, except as specifically stipulated by modification or legally granted variation as described in the application. Permits presuming to give authority to violate or cancel the provisions of 780 CMR 51.00 through 99.00 or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of 780 CMR 51.00 through 99.00 or of any other ordinances of this jurisdiction.

**5113.3 Compliance with Permit.** All work shall conform to the approved application and the approved construction documents for which the permit has been issued and to any approved amendments to the approved application or the approved construction documents.

**5113.4 Compliance with Site Plan.** All new work shall be located strictly in accordance with the approved site plan.

#### 780 CMR 5114 FEES

**5114.1 General.** A permit to begin work for new construction, alteration, removal, demolition or other building operation shall not be issued until the fees prescribed in 780 CMR 5114 shall have been paid to the department of building inspection or other authorized agency of the jurisdiction, nor shall an amendment to a permit necessitating an additional fee be approved until the additional fee has been paid.

**5114.2 Special Fees.** The payment of the fee for the construction, alteration, removal or demolition for all work done in connection with or concurrently with the work contemplated by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law or ordinance for water taps, sewer connections, electrical permits, erection of signs and display structures, or other appurtenant structures, or fees of inspections, certificates of occupancy or other privileges or requirements, both within and without the jurisdiction of the department of building inspection.

**5114.3 New Construction and Alterations.** The fees for plan examination, building permit and

## THE MASSACHUSETTS STATE BUILDING CODE

inspections shall be as prescribed in 780 CMR 5114.3.1.

**5114.3.1 Fee Schedule.** A fee for each plan examination, building permit and inspection shall be paid in accordance with the fee schedule as established by the municipality.

**5114.4 Related Fees.** The payment of the fee for the construction, alteration, removal or demolition for work done in connection with or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

**5114.5 Accounting.** The building official shall keep an accurate account of all fees collected; and such collected fees shall be deposited in the jurisdiction treasury in accordance with procedures established by the municipality, or otherwise disposed of as required by law.

### 780 CMR 5115 INSPECTION

**5115.1 Preliminary Inspection.** Before issuing a permit, the building official shall, if deemed necessary, examine or cause to be examined all detached one- or two-family dwellings and sites for which an application has been filed for a permit to construct, enlarge, alter, repair, remove, demolish or change the use or occupancy thereof.

**5115.2 Required Inspections.** After issuing a building permit, the building official shall conduct inspections during construction at intervals sufficient to ensure compliance with the provisions of 780 CMR 51.00 through 99.00. The building official shall inform the applicant of the required points of inspection at the time of application. Upon completion of the work for which a permit has been issued, the building official shall conduct a final inspection pursuant to 780 CMR 5115.4. A record of all such examinations and inspections and of all violations of 780 CMR 51.00 through 99.00 shall be maintained by the building official.

In conjunction with specific construction projects, the building official may designate specific inspection points in the course of construction that require the contractor or builder to give the building official 24 hours notice prior to the time when those inspections need to be performed. The building official shall make the inspections within 48 hours after notification. The building official may require the owner, owner's representative or licensed construction supervisor to be present during such inspections.

**5115.3 Approved Inspection Agencies.** The building official may accept independent third-party reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability and subject to any and all applicable requirements of M.G.L. c. 268A

(Conduct of Public Officials and Employees).

**5115.4 Final Inspection.** Upon completion of the permitted work of the detached one- or two-family dwelling, or before issuance of the certificate of occupancy required by 780 CMR 5120.0, a final inspection shall be made. All variations of the approved construction documents and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

**5115.5 Right of Entry.** In the discharge of his duties, the building official shall have the authority to enter at any reasonable hour any detached one- or two-family dwelling in the municipality to enforce the provisions of 780 CMR 51.00 through 99.00.

If any owner, occupant or other person refuses, impedes, inhibits, interferes with, restricts or obstructs entry and free access to every part of the detached one- or two-family dwelling where inspection authorized by 780 CMR 51.00 through 99.00 is sought, the building official, or state inspector, may seek, in a court of competent jurisdiction, a search warrant so as to apprise the owner, occupant or other person concerning the nature of the inspection and justification for it and may seek the assistance of police authorities in presenting said warrant.

**5115.6 Approval Required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with 780 CMR 51.00 through 99.00. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

**5115.7 Identification.** The building official shall carry proper identification when inspecting detached one- or two-family dwellings in the performance of duties under 780 CMR 51.00 through 99.00.

**5115.8 Jurisdictional Cooperation.** The assistance and cooperation of police, fire and health departments and all other officials shall be available to the building official as required in the performance of his duties.

**5115.9 Coordination of Inspections.** Whenever in the enforcement of 780 CMR 51.00 through 99.00 or another code or ordinance, the responsibility of more than one building official of the jurisdiction is involved, it shall be the duty of the building officials involved to coordinate their inspections and administrative orders as fully as practicable so that the owners and occupants of the detached one- or