

# **Construction Guidelines Information Sheet**

Your building plans have been reviewed by the Building and Inspection Division to determine compliance with the *Minnesota State Building Code* and *the Bloomington City Code*.

The submitted plans have been marked to inform you of noncomplying items. It is your responsibility to see that any corrections required by the codes are implemented during the construction of your building.

Should you desire to change or revise any item indicated on the approved plans, you must receive prior approval from the Building and Inspection Division.

The approved plans you have received are required to be on the job site from the beginning of construction until the building has been completed and all final inspections have been made.

#### Inspection requirements

These requirements must be met before obtaining an inspection from the Building and Inspection Division.

#### **Footing inspections**

- Job site address posted during entire construction process.
- Inspection record card available.
- · Approved plans and survey available.
- Property lines located.
- Engineer's soil report available, if applicable.
- Excavation/form work completed. If reinforced, secured per code.
- Erosion control in place when required.

## **Inspection Requirements new houses**

Numerous new homes are being built at elevations differing from the City approved survey. As part of the inspection process, you are required to submit top of foundation elevation verification, by surveyor, to the City Engineer prior to the start of framing.

#### Foundation walls

Poured concrete walls exceeding four (4) feet in height require an inspection. All formwork must be in place and all reinforcing secured to resist displacement by time of scheduled inspection.

## Foundation wall inspection prior to backfill

Full height foundation walls must be inspected. Bracing and/or floor frame, drain tile, waterproofing and any proposed exterior insulation material shall be in place at time of inspection.

#### Framing inspections

- Prior to calling for a framing inspection, electrical, plumbing and heating work must be inspected and approved.
- Building inspection record card posted.
- City approved plans are on site.
- Engineer approved and signed shop drawings for all roof/floor trusses, girders and hanger specs must be on site.
- All framing, fire blocking materials and bracing are in place.

### Water Resistive Barrier/Housewrap

Prior to installing any soffits or siding you must have an inspection of the Water Resistive Barrier/Housewrap.

## **Insulation inspections**

- Framing work inspected and approved.
- Insulation and vapor retarder in place and completed.
  Seal around all penetrations of the vapor retarder.
- Insulation is protected from the weather, e.g. roofing materials, doors and windows are installed.

### **Final inspections**

- · Inspection record card posted.
- City approved plans are on site.
- Final electrical, plumbing and heating work inspected and approved.
- All referenced inspections on the card are inspected and approved.
- Address numerals installed on building and visible from street. Four (4) inches minimum height.
- For new homes as-built survey has been submitted to and approved by City Engineer.
- Finish grading, sod, retaining walls, and hard-surface driveway are in place and home and/or addition is ready for occupancy.

952-563-8740

#### Smoke alarms for new construction

Single- and multiple-station smoke alarms shall be installed in the following locations:

- 1. In each sleeping room.
- 2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- 3. On each additional story of the dwelling, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

#### Carbon monoxide alarms

For **new construction** of single family homes, two family dwelling units or each townhouse unit an approved carbon monoxide alarm must be installed when one of the following conditions occur:

- 1. Fuel-fired appliance or appliances are installed; or
- 2. There is a garage attached to the dwelling unit.

The carbon monoxide alarms must be installed outside of and not more than 10 feet from each separate sleeping area or bedrooms. The alarms must be listed as complying with UL 2034. They are to be installed in accordance with these code directives and the manufacturer's installation instructions.

**Existing dwellings.** When there is work being done that requires a permit, dwellings that do not currently have carbon monoxide detectors installed and where there is either an attached garage or fuel fired appliances must be upgraded with alarms in locations noted in the above section for new construction.

## In-floor heat systems

In-floor heat systems will require either an electric or mechanical permit. Only the applicant is authorized to perform the installation. Prior to covering the City must inspect the system. Failure to request the necessary inspection will result in the floor covering(s) having to be removed. You must provide the Manufacturer's installation instructions on site for the inspection.

#### Surface drainage

The grade for a new home or addition must fall a minimum of 6 inches within the first 10 feet of the structure. Any impervious surface(s) e.g. patio slabs, driveways, decks with no spacing in walking surface material must be sloped a minimum of 2% away from the building. Swales located within 10 feet of the structure must be sloped a minimum of 2%.

### **Retaining Walls**

Retaining walls that are not laterally supported at the top and that retain in excess of 24 inches of unbalanced fill must be designed to insure stability.

Any retaining wall exceeding 4 feet from the bottom of the base/footing material to the top of the wall requires a design from a Minnesota licensed Engineer and a permit. No retaining walls of any height may be placed in a drainage or utility easement without express permission from the City Engineering Department.

## **Automatic garage door systems**

MN Statute 325F.82 and.83

All residential automatic garage door systems that are manufactured, sold, purchased, installed or repaired must include an attached edge sensor, safety beam or similar device. When activated, the device causes a closing door to open and prevents an open door from closing. The device must also be designed to prevent the door from closing if the device fails.

If an automatic system does not have this safety device as part of the system, or if the safety device does not function, the repair person must tag the system with a warning tag outlining the problem. The firm or person placing the tag must also notify the occupant of the residence within 10 days that the system does not comply.

**Note:** The carton, as well as the mechanism, must be labeled or listed as being in compliance with *Standard for Safety UL 325*.

If you have any questions, please contact the Building and Inspection Division, 952-563-8930.

## Doors/landings

In each single family home there must be a minimum of one, 3 foot x 6 foot 8 inch, side-hinged door leading directly to the exterior. This exit door must have a landing/floor on each side. The floor/landing on the interior may be no more than 1-1/2 inches below the threshold. The **exterior** landing must be, at a minimum, the width of the door and a minimum 36 inches in depth from the door/wall plane. This landing may be up to 7-3/4 inches lower than the top of the door threshold **if** the primary door does not swing out.

#### Exterior door landings other than exit door

If no door, other than a storm/screen door swings over the exterior landing, that landing may be up to 7-3/4 inches below the top of the threshold.

The code allows an exterior stair, when less than 30 inches high, to butt up to the opening **without** a landing **if no** door swings over it. This would include sliding patio doors. The 30 inches measurement is taken from the **interior** floor height to the exterior finished grade or surface the bottom of the stair rests on.

#### **Energy code requirements**

Any changes in the field to energy code items proposed on approved City plans must be verified/discussed with the Plans Examiner prior to proceeding. All energy stickers must remain on the doors and windows until the Building Inspector has reviewed them for u-value compliance.

Recessed fixtures used in remodeling or new construction must have both I.C. and air tight ratings when the fixture comes in contact with insulation.

## **Unvented crawl spaces**

The ground must be covered with a vapor retarder. The joints must be overlapped a minimum of 6 inches and be sealed/taped. The edges must extend up the foundation wall a minimum 6 inches and be attached and sealed to the wall.

One of the following mechanical systems must be installed:

- 1. A **continuously** operated mechanical exhaust at a rate equal to 1 cfm for each 50 sq. ft. and an air pathway to the common area e.g. a duct or transfer grille.
- Conditioned air supply sized to deliver at a rate equal to 1 cfm for each 50 sq. ft. It must include a return air pathway to the common area such as a duct or transfer grill.

## Green gypsum board

"Gypsum green board" is no longer allowed to be used as backer material behind tiled tub and shower walls. You must now install cement, fiber-cement board or glass mat gypsum board.

### **Completion of work**

Section 15.201.(a) directs that:

(a) Any person altering, repairing, remodeling, or adding to the exterior portion of a single-family dwelling or twofamily dwelling, including an attached or detached garage or accessory structure, shall complete all exterior work within one (1) year from the date of issuance of the building permit. Completion of work includes completing the structure and exterior finishes (including but not limited to siding, windows, roofing, driveways, retaining walls, decks and patios). In the case of demonstrated hardship due to sources beyond the control of the property owner (including but not limited to extreme weather conditions; reasonably unforeseen material, equipment or labor shortages; vandalism; or theft), the time allowed for exterior construction and finishes may be extended at the sole discretion of the Manager of Building and Inspection upon written appeal filed as soon as the need for an extension becomes known.

(Added by Ord. No. 84-56, 10-15-84; Ord. No. 84-60, 11-19-84; Ord. No. 2007-21, 6-25-2007)

## **Bloomington noise code**

#### Section 10.29.07. Operational Limits.

(c) Construction Activities. No person shall engage in, permit, or allow construction activities involving the use of power equipment, including but not limited to any kind of electric-diesel, or gas-powered machine, on Sundays or at any time other than between the hours of 7:00 a.m. and 10:00 p.m. on weekdays and 9:00 a.m. and 9:00 p.m. on Saturdays.

Construction activities which meet Section 10.29.02 (Noise Source Requirements) may be exempt from the above operating limits. In this section, residentially zoned areas require a L10 noise limit of 60 dBA in the day (7 a.m. to 10 p.m.) and a L10 noise limit of 50 dBA at night (10 p.m. to 7 a.m.).

Few construction activities in close proximity to residential areas can meet the nighttime requirements. Therefore, avoid complaints by starting construction after 7 a.m. This provision also prohibits maintenance of the vehicle before 7 a.m.

Violation of this ordinance is a misdemeanor and provides for a fine of up to \$500 or 90 days in jail conviction.

Any questions pertaining to operational limits on construction activities can be directed to Environmental Health at 952-563-8930.

#### Water meter

Water meter remote device will be remounted by the Utilities Division after re-siding. There is no charge for this service. Call 952-563-4910.

#### **Driveway installations**

A permit is required for new and alterations to existing residential driveways.

- The permit must be obtained prior to commencement of work.
- All new or altered residential driveways must terminate a minimum 5 feet from the sideyard property line and 5 feet from rear property line. Driveway setbacks shall not apply where an access easement or common driveway agreement is approved by the Issuing Authority.

Many customers request that driveway contractors extend their driveways to abut the property line. In many instances, this practice causes neighbor disputes. First, the driveway can block the drainage easement, causing water damage during heavy rains. Second, spilled gas, oil and anti-freeze run onto the neighbors' grass or trees and cause property damage. Third, sometimes the driveway is extended adjacent to the garage. This places parked vehicles in close proximity to the neighbors' bedroom window or patio, creating noise and odor problems.

For these reasons, we seek cooperation in obtaining a valid permit and verifying locations of all residential driveway work. Our inspection staff will inspect the finished job.

For more information and a handout, visit our Web site at BloomingtonMN.gov, search: driveway.

## All construction sites must be kept clean of litter and debris

All streets must be cleaned immediately by the party responsible if mud or dirt is carried onto the street by construction vehicles or erosion. These provisions of the *Bloomington Zoning Code* will be rigorously enforced.

These requirements prevent construction sites from becoming neighborhood nuisances and prevent blockage of the storm sewer system which would make it ineffective during a heavy rain.

## Truck loads causing litter

#### Sec. 10.21. directs that:

No person shall drive or move any truck or other vehicle within the City unless such vehicle is equipped with covers or is so constructed or loaded as to prevent any load, contents, or litter from being blown or deposited upon any street, alley, or other public place. Nor shall any person drive or move any vehicle or truck within the City the wheels or tires of which carry onto or deposit in any street, alley or other public place, mud, dirt, sticky substances, litter or foreign matter of any kind. (Code, 1958 S 118.07)

#### Litter on private property.

#### Sec. 10.25. directs that:

The owner or person in control of private property shall maintain thereon private receptacles for collection in such a manner that litter will be prevented from being carried or deposited by the elements upon any street, sidewalk or other public place, or to prevent litter from becoming a nuisance, source of filth, or cause of sickness on said private property. (Code, 1958 S 118.11)

#### **Penalty**

#### Sec. 10.27. directs that:

Violation of any provision of this Article shall be a misdemeanor. (Code, 1958 S 118.14: Ord. No. 77-68, 10-3-77)

#### **Enclosure/container required**

Enclosure/container provided on site for all constructionrelated rubbish. Contents periodically disposed to prevent littering of property or adjacent areas until final inspection approval.

#### **Streets**

No dumpsters, building materials, landscaping materials or similar items may be placed in a city street and /or alley way without express permission from the City Traffic Engineer.

## Final inspection/new homes

Provide a certified as-built survey to the Engineering Division indicating that grading conforms to the City-approved Certificate of Survey. Finish grade elevations shall be shown. This information must be submitted prior to final approval. Engineering will notify the Building and Inspection Division as to results.

If you have any questions, please contact the Engineering Division at 952-563-4870.