



# Basement Finish Construction Guide

April 2020

*City of Milan*  
*Building Department Guide to*  
*Finishing a Basement*



City of Milan Building Department  
147 Wabash Street  
734-439-7089

# **INTRODUCTION**

## **Basement Finish**

The City of Milan has prepared this Guidebook to assist you in the process of finishing your basement. This Guidebook contains important information that will help you understand the Building Permit and construction process from application to completion. We have included sample drawings for areas that have generated confusion or delays in the past. The information is presented in a start-to-finish sequence to guide you as you progress through your project.

**Codes Currently in Effect**.....Page 2

**From Application to Completion**.....Pages 3-5  
This is intended to be your general guide through the complete process. It provides information on the application requirements, permit and inspections.

**Inspection Request**.....Page 6  
Contains details required for requesting an inspection, making sure your job is ready for inspection, the time inspections are done and what the inspection reports mean.

**Construction Requirements**..... Page 7  
A general guide to help you understand and apply Building Code requirements to your project. This information should be used as you prepare your construction drawings and construct your Basement Finish project.

**Sample Drawings**..... Pages 8-9  
A guide to help you understand the information that must be contained on the construction drawings and to assist you with the construction of your Basement Finish project.

This Guidebook contains procedures and requirements. We urge you to read through it completely. It may save you valuable time in completing your project. We hope this Guidebook is helpful and we encourage you to provide us with any suggestions you may have as we continue to work toward improving our permitting process

**Note: This Guidebook is only intended to be a guide and is not all inclusive of the Building Code. For complete details of all requirements, please consult the 2015 Michigan Residential Code. The information in this Guidebook is subject to change without notice.**

# **CODES CURRENTLY IN EFFECT**

## **Basement Finish**

**City of Milan**

April 2020

**Building:** 2015 Michigan Residential Code

**Plumbing:** 2015 Michigan Residential Code

**Mechanical:** 2015 Michigan Residential Code

**Electrical:** 2015 Michigan Residential Code

**Energy Code:** 2015 Michigan Residential Code

Codes can be purchased by going to the Michigan Department of Labor & Economic Growth, Bureau of Construction Codes & Fire Safety, Lansing, MI 48909, or their website at: <http://michigan.gov/bcc>.

# **FROM APPLICATION TO COMPLETION**

## **Basement Finish**

A Building Permit from the City of Milan is required prior to construction starting. Included in this Guidebook is a checklist of items needed for application submittal. The Building Permit Application can be found online at <http://milanmich.org> or can be obtained at the Building Department counter. Once the Building Permit is issued, Electrical, Mechanical and Plumbing permits can then be obtained.

### **1. Information Required For Permit Application**

#### **A. Building Permit Application**

- Forms are available online at <http://milanmich.org> or at the Building Department counter. Applications shall be filled out completely.

#### **B. Construction Drawings – Two Sets**

- See “Sample Drawings”, pages 9-10.
- Documents that contain all necessary information and details will help expedite the plan review process.

#### **C. Owners** may submit a Building Permit application for work on property that is or will be, upon completion, their place of residence. Owners of rental property may submit a Building Permit application to do maintenance and alterations to the rental property.

**Please Note:** Any Contractor, hired by an Owner for a contract price of \$600.00 or more, shall be licensed in accordance with the State of Michigan Builders Laws.

### **2. Registration of Builder’s License**

- A Builder shall be currently registered with the City of Milan to be able to submit a Building Permit application.
- Builders not currently registered can register at the time of application by providing the following:
  - The original or a copy of the Builder’s license
  - Contractor Registration Form
    - The form shall have an original signature by the License Holder
    - The form shall be notarized (if not presented by License Holder)
- A Contractor Registration Form is available at our counter or online at <http://milanmich.org>
- Note: All information noted above shall be submitted with the applicable Building Permit Application.

### **3. Plans Reviewed and Approved**

- All Building Permit Applications for Accessory Structures will be processed within a reasonable amount of time.

#### **Permit Requirements**

- Construction drawings and Plot Plans will be reviewed for compliance with City Ordinances and the 2015 Michigan Residential Code.
- Plans are reviewed in the order they are received, based on the application date. Plan review time varies depending on the Building Department’s workload.
- Plans that contain all the necessary information and details will help expedite the Plan Review process.

- The Permit Applicant will be notified if the plans do not meet Zoning Ordinance, grade, or Building Code requirements, or if any additional information is required.

## **5. Permit Ready**

- When the permit has been processed, the Permit Applicant will be contacted to let them know the Building Permit is ready to be picked up.

### **Note:**

- All Permit fees are due at the time of Permit issuance.
- Permit fees may be paid by cash, credit card, or check.
- Permits that have no activity for more than 6 months may be cancelled.
- Once the Building Permit is issued, Electrical, Mechanical and Plumbing permits can then be obtained.

**When all required permits are obtained, construction may begin. Revisions to the structure or grade after issuance of the Building Permit may require re-submittal and Building Department approval.**

The following items shall be maintained throughout the construction process:

- The street address shall be posted on the house and visible from the street.
- The street shall be kept clean.
- All construction materials and debris shall be contained on the property.
- Temporary soil erosion control shall be erected and maintained.

## **6. Inspections** (See “Inspection Requests” – page 6)

- Once your Building Permit has been issued, you may begin construction. Your Basement Finish project will be reviewed and inspected in accordance with the requirements of the 2015 Michigan Residential Code. As your project progresses, the Building Department will need to perform the following inspections:

### **A. Rough Plumbing (as applicable)**

- After bathtubs, showers and all concealed piping are installed and fire-blocked.

### **B. Rough Mechanical**

- After all concealed gas piping, duct work, return air, chimneys and electrical wiring are installed and fire-blocked.
- After the fireplace is installed (as applicable).

### **C. Rough Electrical**

- After all recessed fixtures, wires and boxes are installed with grounds and neutrals tied together.

### **D. Rough Building**

- After rough Plumbing, Mechanical, Electrical and fireplace (as applicable) inspections are approved.
- Open Ceiling Inspection for the suspended ceiling grid is typically done at this time.
- Approved plans shall be on site for all inspections.

### **E. Insulation**

- After insulation is installed in the wall cavities.

### **F. Final Plumbing (as applicable)**

- After all fixtures are installed and operational.

### **G. Final Mechanical**

- After gas piping, furnace, duct work and return air is installed and operational.
- A gas pressure test will be required for existing gas piping if concealed by drywall.
- Furnace manufacturer's installation instructions shall be on site (if recently replaced).

### **H. Final Electrical**

- After all Electrical equipment, switches, plugs, covers and fixtures are installed and operational.
- After fireplace is installed (if prefabricated, manufacturer's instructions must be on site.)

### **I. Final Building**

- After final Plumbing, Mechanical and Electrical inspections have been performed.
- Common items Inspectors look for:
  - Means of Egress R311.1
  - Stairway Handrails R311.7.8
  - Under Stairway Protection R302.7
  - Smoke Alarms R314.1
  - Carbon Monoxide Detectors R315.2.2
  - Wood Protection (Treated Wood Bottom Plate) R317.1
  - Fire Stopping R302.11
  - Draft Stopping R302.12
  - Basement Insulation N1102.2.8
  - Basement Bathroom Ventilation R303.3
  - Bathroom Tub and Shower Walls are Non-Absorbent Materials R307.2
  - Bathroom Electrical Ground Fault Circuit Protection (GFCI) E4209.1
  - Bathroom Shower Compartments are not less than 30 inches P2708.1

**Note: This Guidebook is only intended to be a guide and is not all inclusive of the Michigan Residential Code. For complete details of all requirements, please refer to the 2015 Michigan Residential Code. The information in this Guidebook is subject to change without notice.**

# **INSPECTION REQUESTS**

## **Basement Finish**

### **Contact the Building Department to schedule the inspection.**

- At this time, you will be required to provide the following information:
  - **The Street Address of the job site.**
  - **The Permit Number.**
  - **The type of Inspection you are requesting.**

Inspections will be done Monday through Friday. Inspections may be available outside the normal business hours by special arrangement.

**A request to cancel an Inspection needs to be called in to the Building Department at 734-439-7089 before 9:00 a.m. on the day of the requested Inspection.**

**Please make sure your project is ready for your inspection. If your project is not ready for an inspection, the inspection will not be done and a \$55.00 re-inspection fee may be charged. The following items shall be completed or in place at the time of the inspection:**

- Safe access to the job site and throughout the area to be inspected.
- The job ready for inspection.
- The street address and lot number posted and visible from the street.
- Temporary soil erosion control properly installed (if applicable).
- The street kept clean.
- All construction materials and debris contained on the project property.

### **Inspection results will be left on site after each inspection has been completed.**

**Green Tag –** Your Inspection has been approved.

**Inspector's Report –** Your Inspection has not been approved. The Report will contain a list of items that need to be addressed before calling for a re-inspection. A \$55.00 re-inspection fee will be charged for any items not corrected at the time of the second inspection. Inspections shall be approved before proceeding with the next phase of your construction project.

It is your responsibility as the permit holder to check the job site for the inspection results. Please read the information on all Inspection Reports. If you have any questions regarding this information, call the City of Milan Building Department at 734-439-7089.

# **CONSTRUCTION REQUIREMENTS**

## **Basement Finish**

This information is provided in a “User-friendly” format as a general guide to help you apply the common Building Code requirements to your project. It covers the most common types of projects. The actual Building Code language may contain additional requirements or exceptions that may apply if your project is beyond the scope of this Guidebook.

Please indicate the following on your plans:

### **1. Floor Plan** (See pages 9 & 10 for Sample Drawings)

- Rooms and spaces, and use of all rooms, all fully dimensioned.
- Outline for Electrical Wiring
- Outline for the Mechanical System including new or moved duct work or gas lines and fireplaces.
- Outline for Plumbing System including a new bathroom, wet bar, or kitchen.

### **2. Wall (Cross) Section** (See pages 9 & 10 for Sample Drawings)

- Detail the type of Framing and Wall Finishes (wood framing requires a treated bottom plate).
- Detail the Ceiling Type (drywall, suspended, or painted) and Height (7'-0" minimum.) A gas pressure test will be required for existing gas piping if concealed by drywall.
- Insulation being installed (batt or spray foam) and its rating (Note: use un-faced batt insulation).

### **3. Fire Blocking** (See pages 9 & 10 for Sample Drawings)

- Required at all Basement perimeter wall top wall plates back to Basement foundation wall and any penetrations in the top plate. Reference R302.11 for more information on fire blocking.

### **4. Emergency Egress Window** (See pages 9 & 10 for Sample Drawings)

- An emergency Egress Window is required in each sleeping area that is being added as part of the Basement Finish.
- The sill height cannot exceed 44" above the finished floor and the minimum Clear Opening Size is 5.7 square feet.
- Egress Windows under decks and porches shall have a path no less than 36" clear to a yard or court.
- Egress Window wells shall be a minimum 9 square feet in area. The minimum horizontal projection and width shall be 36". Window wells deeper than 44" shall have permanent ladders.

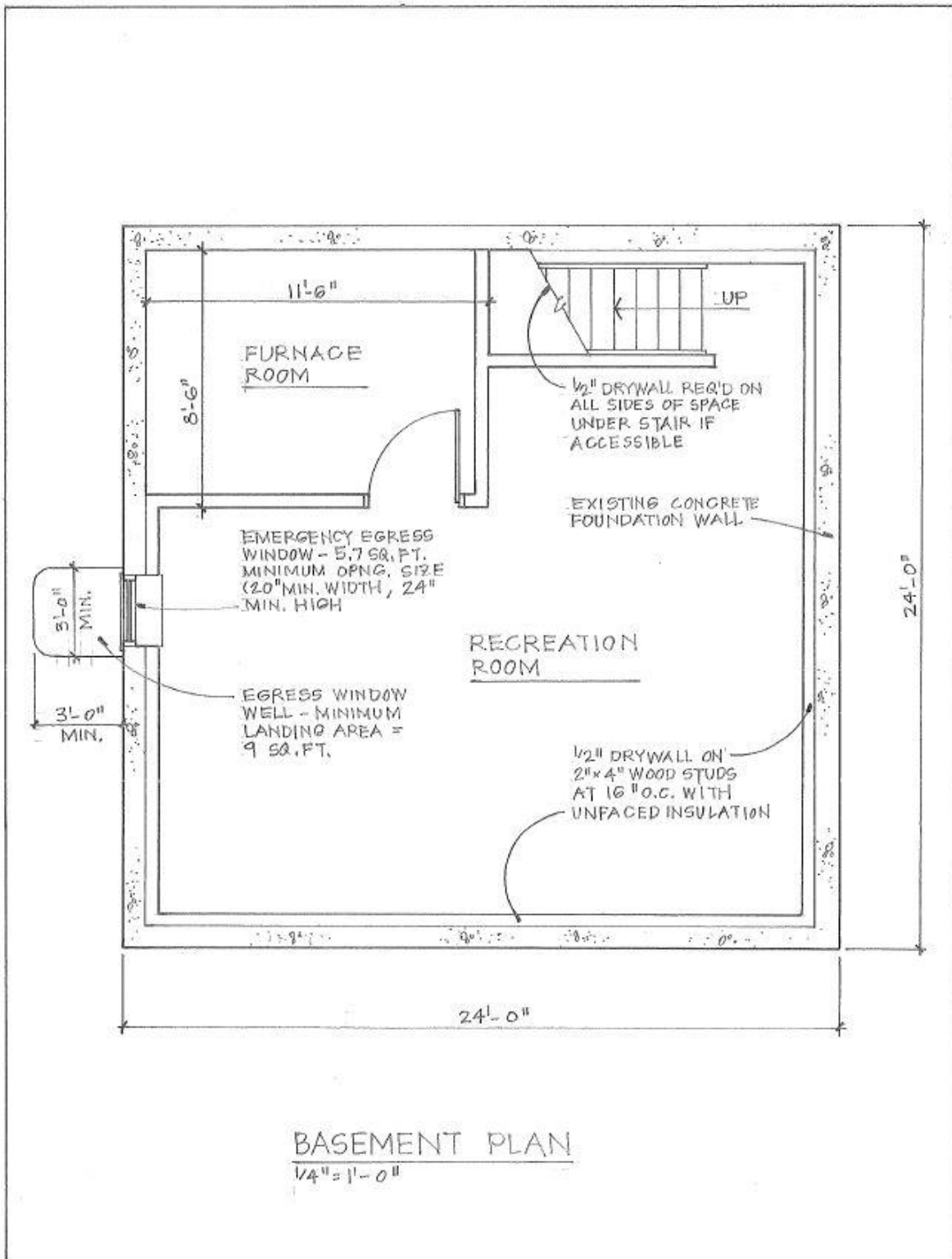
### **5. Smoke Alarms**

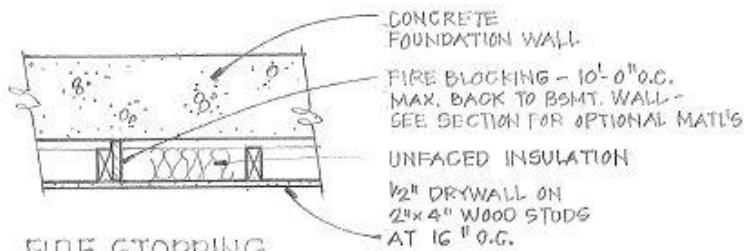
- Smoke alarms shall be installed in each sleeping room and outside of each separate sleeping area in the vicinity of the bedroom(s). All smoke detectors shall be interconnected throughout the home and have a battery backup. **Please be advised, a Basement Finish project will require updating of smoke alarms and carbon monoxide detectors that comply with regulations in the 2015 Michigan Residential Code throughout your residence.**

### **6. Carbon Monoxide Detectors**

- Carbon monoxide alarms shall be installed outside of each separate sleeping area in the vicinity of bedroom(s).

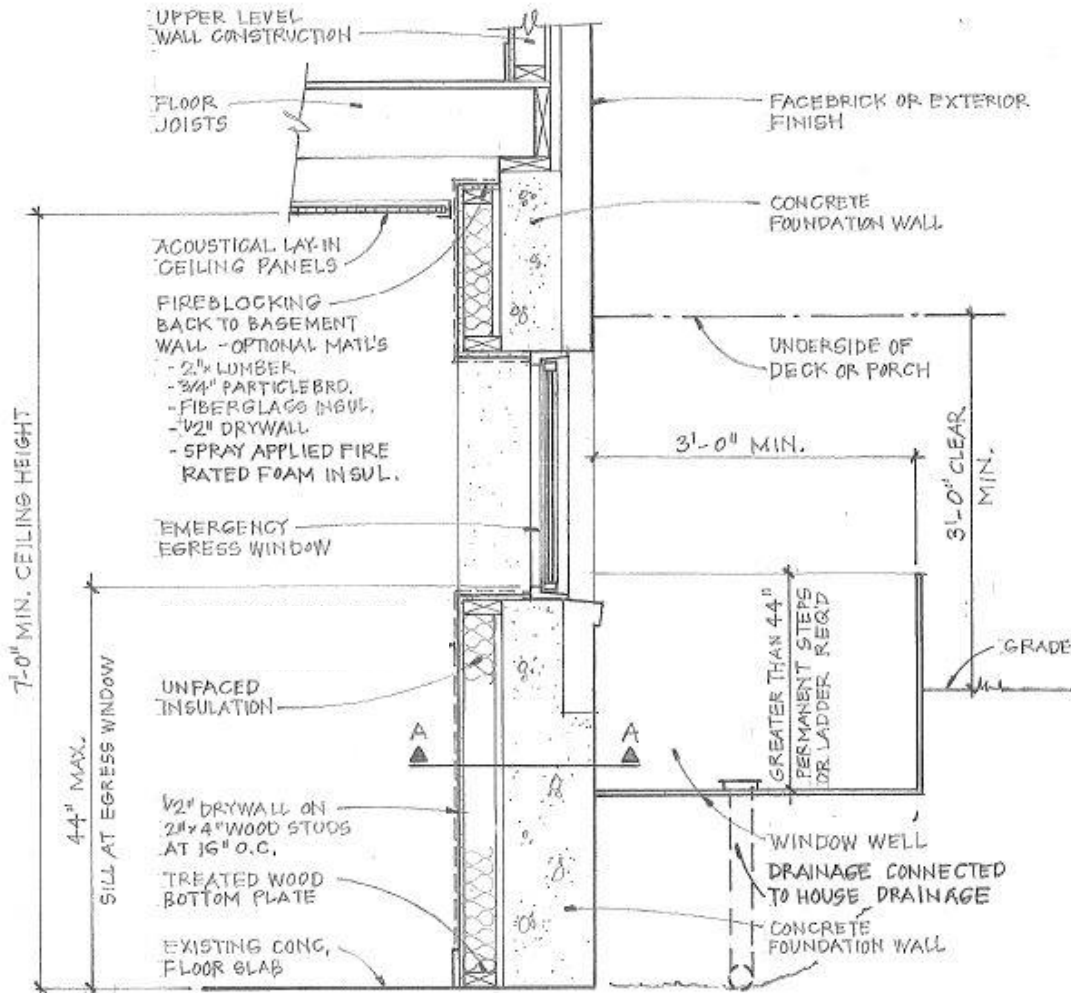






**FIRE STOPPING  
DETAIL A-A**

3/4" = 1'-0"



**WALL SECTION**

3/4" = 1'-0"