



BASEMENT FINISH CONSTRUCTION

April 2019

**A City of Rochester Hills
Building Department Guide to
Finishing a Basement**



**Rochester Hills Building Department
1000 Rochester Hills Dr.
248-656-4615**



The City of Rochester Hills 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.

The following information is provided:

Codes Currently in Effect.....Page 3

From Application to Completion.....Pages 4-6

- This is intended to be your general guide through the complete process. It provides information on the application requirements, permit and inspections.

Building Permit Fee.....Page 7

- A list of fees related to Finishing a Basement.

Inspection Request.....Page 8

- 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 9

- 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 10-11

- 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.

Customer Satisfaction Survey.....Page 12

- Please take the time to complete this survey. It is an opportunity for you to provide comments and suggestions that will help us as we continue working to improve our service.

Forms

- Building Permit Applications
- Contractor Registration
- Customer Survey Form



*All forms are available at
our counter or online at:
www.rochesterhills.org*

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. Please review and complete the Customer Satisfaction Survey form that is attached at the end of this Guidebook and available online at www.rochesterhills.org.

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 Michigan Residential Code (MRC). The information in this Guidebook is subject to change without notice.

CODES CURRENTLY IN EFFECT
Basement Finish

City of Rochester Hills
February 8, 2016

Building: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Plumbing: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Mechanical: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Electrical: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Energy Code: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

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: www.michigan.gov/bcc

The codes noted above are adopted by the City of Rochester Hills Codified Ordinance Section 18-41 and 18-136.

FROM APPLICATION TO COMPLETION

Basement Finish

A General Guide through the Complete Process

A Building Permit from the City of Rochester Hills 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 www.rochesterhills.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 www.rochesterhills.org or at the Building Department counter. Applications shall be filled out completely.

B. Application Fee

- See “Building Permit Fees” – page 7.

C. Construction Drawings – Two Sets (Regular Permit Applications ONLY)

- See “Plan Review”, page 8 & “Sample Drawings”, pages 10-11.
- Documents that contain all necessary information and details will help expedite the plan review process.

D. 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 Residential Builders Laws.

2. Registration of Builder’s License

- A Builder shall be currently registered with the City of Rochester Hills to submit a permit application.
- All registrations expire May 31st.
- 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 and Driver’s license.
 - Registration fee is \$30.00 until the end of the license.
 - Contractor Registration form:
 - The form shall have an original signature by the License Holder
 - The form shall be notarized (if not presented by the License Holder)
- A Contractor Registration form is available at our counter or online at www.rochesterhills.org

Note: All information noted above shall be submitted with the Building Permit Application

3. Plans Reviewed and Approved

All Building Permit Applications for basement finish construction will be processed within 48 hours from the time of application as an Expedited Building Permit.

Please Note:

If the Plan Reviewer determines that the project needs a full review due to its complexity, the Permit Applicant will be notified that their project does not qualify for the Expedited Permit process. The Building Permit Application will be processed as a regular permit. Please see the explanation for Expedited and Regular Permits below.

A. Expedited Permits

- Construction documents and Plan Review are not required, but the Basement Finish improvement is required to comply with City Ordinances, this Guidebook, and the State of Michigan Residential Code (MRC).
- The Permit Applicant will be notified if the plans do not meet Zoning or Building Code requirements, or if additional information is required.

B. Regular Permits

- Construction drawings will be reviewed for compliance with City Ordinances, this Guidebook, and the State of Michigan Residential Codes (MRC).
- Plans are reviewed in order they are received, based on the application date. Plan Review times vary depending on the Building Department’s workload.
- Plans that contain all the necessary information and details will help speed up the plan review process.
- The Permit Applicant will be notified if the plans do not meet the City of Rochester Hills Building Code requirements or if any additional information is required.

5. Permit Ready

- Whether a regular Building Permit or an Expedited Building Permit has been processed, the Permit Applicant will be called when 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, debit card or check.
- The permit shall be issued within 6 months of the application date or the application will be cancelled.
- 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 (if applicable).

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

6. Inspections (See “Inspection Requests” – page 8)

Once your Building Permit has been issued, you may begin construction. **If you have received an Expedited Permit, the Construction Guidebook provided to you shall be present on site at the time of inspections.** Your Basement Finish project will be reviewed and inspected in accordance with the requirements of the Michigan Residential Code (MRC). As your project progresses, the Building Department will need to perform the following inspections:

A. Rough Plumbing (if applicable)

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

B. Rough Mechanical (if applicable)

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

C. Rough Electrical (if applicable)

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

D. Rough Building

- After rough Plumbing, Mechanical, Electrical and pre-fab (fireplace) inspections are approved as applicable.
- Approved plans shall be on site for all inspections.

E. Insulation

- After insulation is installed in the wall cavities.

F. Final Plumbing (if applicable)

- After all fixtures are installed and operational.

G. Final Mechanical (if applicable)

- 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.

H. Final Electrical (if applicable)

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

I. Open Ceiling (Building)

- Prior to installation of lay-in acoustic ceiling tiles.

J. Final Building

- After final Plumbing, Mechanical and Electrical inspections have been performed.

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 Michigan Residential Code. The information in this Guidebook is subject to change without notice.

BUILDING PERMIT FEES

Basement Finish

1. **Application Fee**.....\$100.00
 -Non-refundable and due when the Permit Application is submitted.

2. **Building Permit Fee**
 -Based on the Construction Value of the project excluding site work. Refer to Fee Charts below.

Construction Value

(A)\$1000.00 and under..... \$85.00

\$1001.00 to \$10,000-

\$85.00 plus \$22.00 for each additional \$1000.00 or part thereof over \$1000.00

(B)\$10,000.00 and over-

\$283.00 plus \$7.00 for each additional \$1000.00 or part thereof over \$10,000.00

3. **Building Plan Review Fee**
 \$1.62 per \$1000.00 of the Construction Value, **minimum** fee..... \$85.00

4. **Reinspection Fee**.....\$85.00

5. **Schedule of Fees for Basement Finish:**

BUILDING PERMIT FEE SCHEDULE

| CONSTRUCTION VALUATION | APPLIC'N FEE | PLAN REVIEW FEE | BUILDING PERMIT FEE | TOTAL PERMIT FEE |
|---|--------------|-----------------|---------------------|------------------|
| \$0-\$1,000 | \$100 | \$85 | \$85 | \$270 |
| \$1,001-\$2,000 | \$100 | \$85 | \$107 | \$292 |
| \$2,001-\$3,000 | \$100 | \$85 | \$129 | \$314 |
| \$3,001-\$4,000 | \$100 | \$85 | \$151 | \$336 |
| \$4,001-\$5,000 | \$100 | \$85 | \$173 | \$358 |
| \$5,001-\$6,000 | \$100 | \$85 | \$195 | \$380 |
| \$6,001-\$7,000 | \$100 | \$85 | \$217 | \$402 |
| \$7,001-\$8,000 | \$100 | \$85 | \$239 | \$424 |
| \$8,001-\$9,000 | \$100 | \$85 | \$261 | \$446 |
| \$9,001-\$10,000 | \$100 | \$85 | \$283 | \$468 |
| \$10,001-\$11,000 | \$100 | \$85 | \$290 | \$475 |
| \$11,001-\$12,000 | \$100 | \$85 | \$297 | \$482 |
| \$12,001-\$13,000 | \$100 | \$85 | \$304 | \$489 |
| \$13,001-\$14,000 | \$100 | \$85 | \$311 | \$496 |
| \$14,001-\$15,000 | \$100 | \$85 | \$318 | \$503 |
| \$15,001 & over see items 1 through 3 above | | | | |

INSPECTION REQUESTS

Basement Finish



The Building Department offers three convenient methods to allow you request inspections:

- **24-hour Inspection Request Line** – An Inspection may be requested by calling our Inspection Request Line at (248) 656-4619 and providing the following information:
 - **The Street Address of the job site.**
 - **The Permit Number.**
 - **The type of Inspection you are requesting.**
- **Please Note:** This 24-hour Inspection Request Line is for Building Department Inspection Requests only.
- **Online Inspection Requests** – Inspections may also be requested by visiting the Building Department’s website at www.rochesterhills.org. At the bottom of the page, click on “Permits & Property Data Look up”. Register with BSAonline and call us at 248-656-4615 to link your username. Once linked, you will be able to schedule your inspections online.
- **QR Code Inspection Scheduling**– Scanning the QR Code at the top of this page will gain you direct access to the same Online Inspection Request Form as mentioned above. You will find the QR Code for scheduling inspections on many of our Building Department documents for your convenience.

Inspections scheduled before 3:00 p.m. that have been verified by the Building Department Staff will be scheduled for the next business day between 9:00 a.m. and 4:00 p.m. Inspections may be done earlier or later depending on the Inspector’s workload. Inspections will be done Monday through Friday. Inspections may be available outside the normal business hours by special arrangement. Additional fees for “After Hours” inspections shall be paid in advance of the inspection.

A request to cancel an Inspection needs to be called in to the Building Department at (248) 656-4615 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 an \$85.00 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.
- Approved plans and truss drawings on site.
- The job ready for inspection.
- The Street address and lot number posted and visible from the street.
- Temporary soil erosion control properly installed.
- The street kept clean.
- All construction materials and debris contained on the project property.
- Any required tree protection properly installed and maintained.

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. An \$85.00 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 (248) 656-4615 between 8:00 a.m. and 9:00 a.m. and ask to speak with the Inspector that wrote the Inspector’s Report.

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 page 10 for Sample Drawing)

- Rooms and spaces, and use of all rooms, all fully dimensioned.
- Draftstopping (to be installed in the floor/ceiling assembly so that the area does not exceed 1000 sq ft & should be divided into approximate equal areas.)

2. Wall (Cross) Section (See page 11 for Sample Drawing)

- Type of Framing and Wall Finish (if wood, a treated wood bottom plate is required.)
- Ceiling: Type and Height (7'-0" minimum.) A gas pressure test will be required for existing gas piping if concealed by drywall.

3. Fire Blocking (See page 11 for Sample Drawing)

- Required at all Basement perimeter wall top wall plates back to Basement foundation wall **and** 10' O.C. maximum horizontally back to Basement perimeter wall. See page 10 for sample details.

4. Vapor Retarder (See page 11 for Sample Drawing)

- Latex or enamel paint vapor retarder (Class III) can be installed on the interior side of gypsum board at framed walls. Use un-faced insulation in wall cavities.

5. Emergency Egress Window (See pages 10-11 for Sample Drawings)

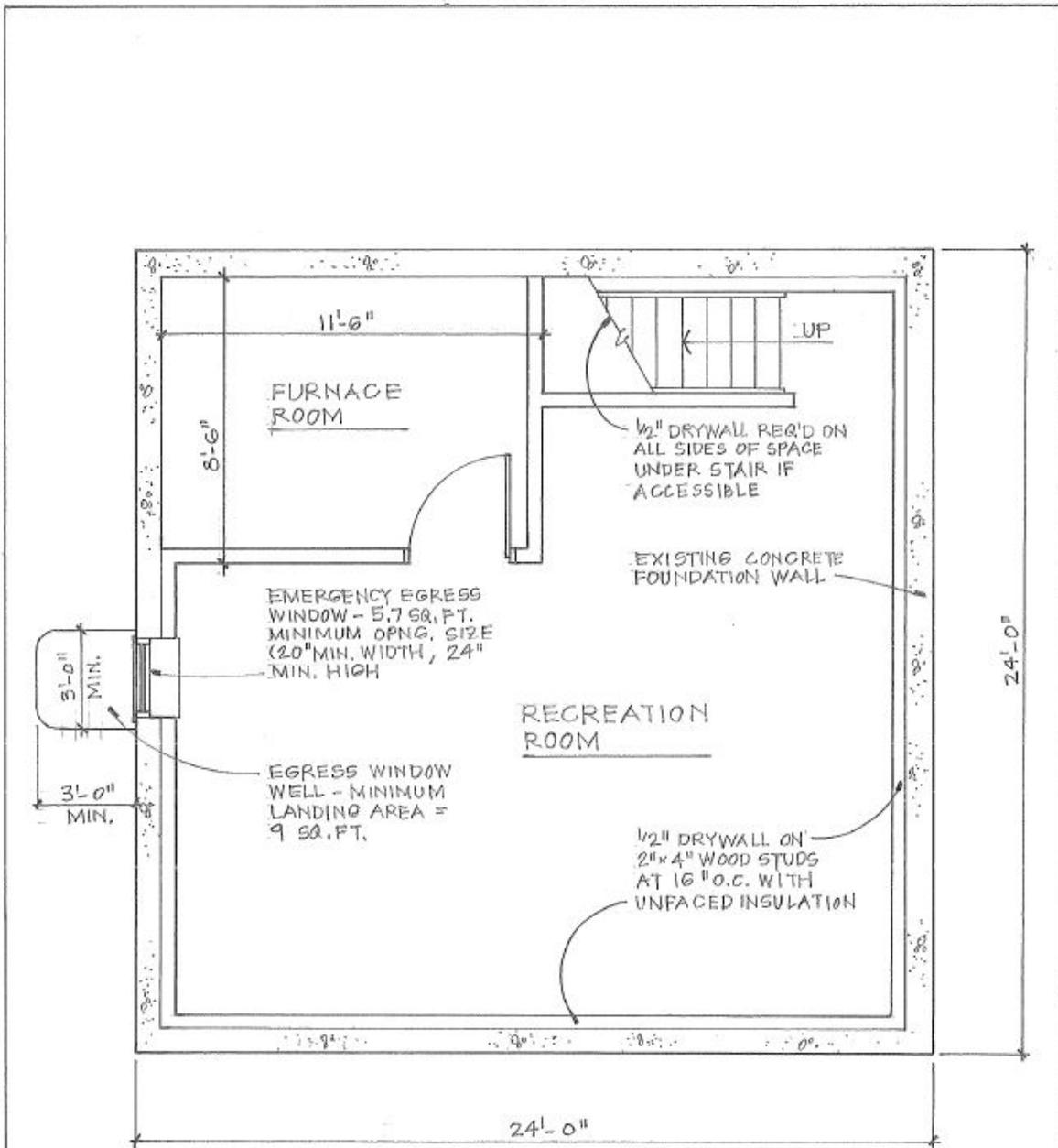
- An emergency Egress Window is required in each sleeping area that is being added as part of the Basement Finish.
- The sill height cannot exceed 44" above the finished floor.
- The minimum Clear Opening Size: 5.7 sq ft clear.
- The minimum Clear Window Openings: Height: 24", Width: 20"
- Egress Windows under decks and porches shall have a path no less than 36" clear to a yard or court.
- Egress Windows wells (if required) shall be a minimum 9 sq ft in area. The minimum horizontal projection and width shall be 36". The emergency egress leading to the window well must be able to fully open. Window wells deeper than 44" shall have permanent ladders or steps.

6. Smoke Alarms

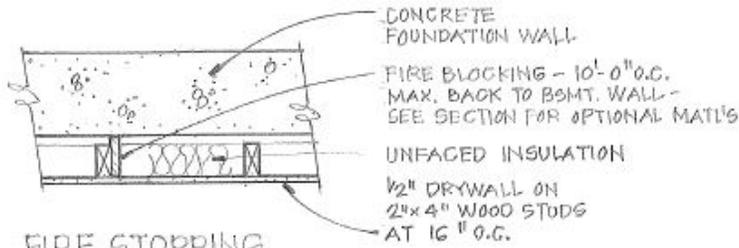
- Smoke alarms shall be installed in each sleeping room and outside of each separate sleeping area in the vicinity of the bedroom(s) (if applicable). If no sleeping areas exist, smoke alarms are required within the dwelling area of the basement. **Please be advised, a Basement Finish project will require the updating of smoke alarms that comply with regulations in the Michigan Residential Code throughout your residence.**

7. Carbon Monoxide Alarms

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

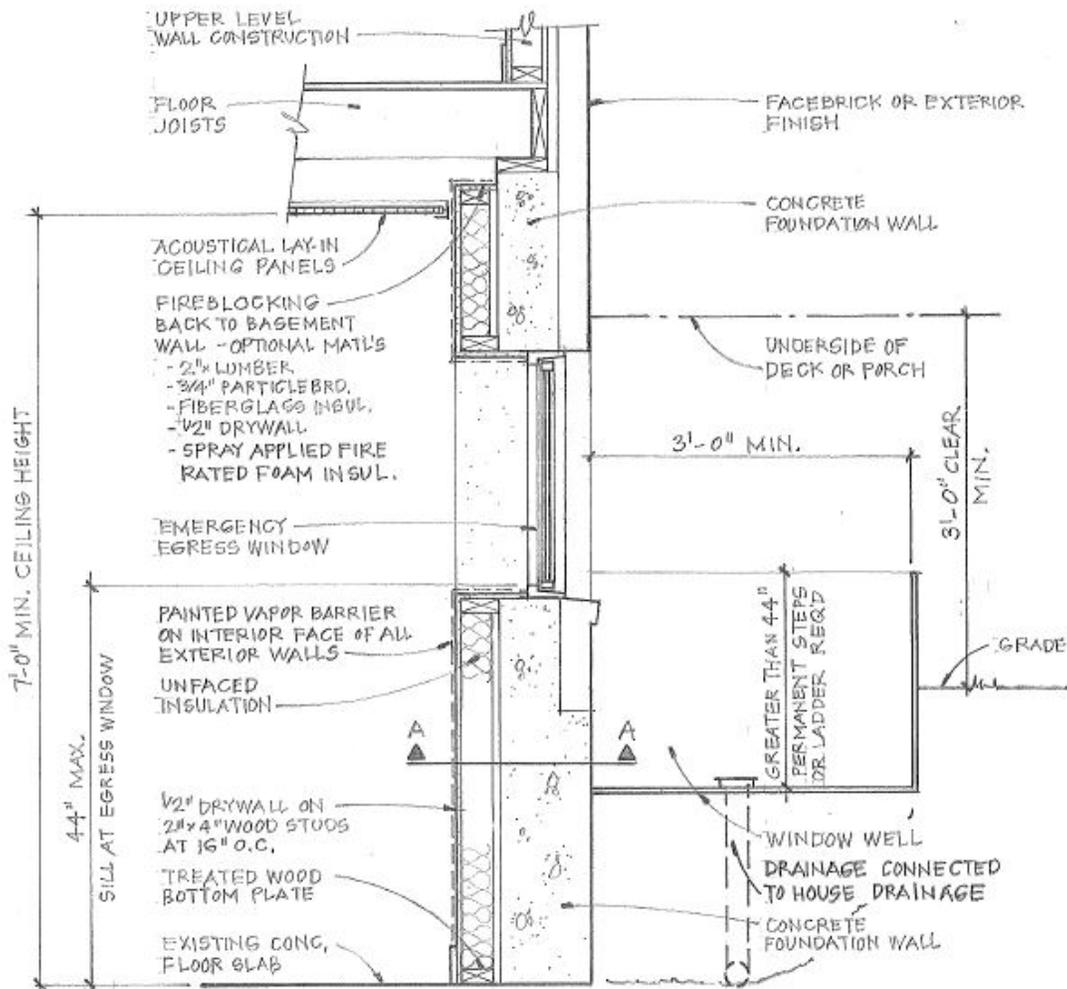


BASEMENT PLAN
 1/4" = 1'-0"



**FIRE STOPPING
DETAIL A-A**

3/4" = 1'-0"



WALL SECTION

3/4" = 1'-0"

