



## CITY OF NAPERVILLE

### Transportation, Engineering, & Development (T.E.D.) Business Group

#### **APPLICATION INFORMATION** **RESIDENTIAL ALTERATIONS/REMODELING**

A Residential Alteration permit is required for any modifications to the house that impact the structure, the electrical or plumbing systems. Typical projects include kitchen and bath remodeling, finished basements, or substantial repairs to the home as a result of damage or deterioration. Cosmetic improvements such as painting, carpeting or flooring do not require a permit.

For roofing, siding and storm damage: A building permit is not required to replace the most common damaged or deteriorating roofing and siding materials on single family homes. A permit is not required to install vinyl, aluminum or cement board siding Nor is it required to replace an asphalt composite shingle roof as long as the existing roof sheathing remains in place. Installation of any other exterior finish products such as brick, thin-set masonry, stone veneer, or roofing materials such as metal, wood, slate or sealed membranes will require a permit. Even if a permit is not required, the property owner is still responsible to ensure that the installation meets the required building codes and that any roofer hired to do the work is licensed by the State of Illinois.

#### **APPLICATION REQUIREMENTS**

The following items must be submitted when applying for a permit:

- A. A completed and signed building permit application form. The homeowner's signature is required.
- B. Detailed architectural drawings indicating the complete scope of work to be performed. Computer-generated or to-scale, hand-drawn plans may be submitted. However, sketches are not acceptable. The architectural plans shall include the following, if applicable, and shall conform to the latest effective building codes as adopted and amended by the City of Naperville:

##### **Floor Plan**

- Indicate all existing and proposed walls
- Doors, windows, and means of emergency egress throughout
- Furnace and hot water heater locations
- Electrical panel location, size of service
- Electrical plan including receptacles, lighting, switches, smoke detectors, and any other electrical appliances
- Existing and proposed plumbing fixtures (include sump and sanitary ejector pits)
- Supply and return vent locations
- Any other pertinent information (fireplaces, etc.)

##### **Wall Section**

- Complete cross section of the proposed perimeter wall

- The size and spacing of the wall studs
- Fire blocking materials and technique
- The R-value and the location of the required insulation
- The proposed ceiling height

For in-kind replacement of damage resulting from a fire, flood or storm, a detailed scope of work may be submitted in lieu of architectural drawings. The reviewer will assess the proposed scope of work and determine if any additional information will be required.

- C. A completed Plumbing Checklist for Existing Water Services.
- D. A completed Homeowners Notification Form acknowledging the need for smoke detectors and carbon monoxide alarms.
- E. A completed Electric Calculation Sheet (online at [naperville.il.us/loadcalculator.aspx](http://naperville.il.us/loadcalculator.aspx)) and single line electrical diagram if the project includes an electric service upgrade, panel replacement or new sub-panel.
- F. Contractor information. Add the contact information for all your contractors on the application and include following information as applicable.
- Electrician: Electrical sub-contractors must be licensed and registered in the City of Naperville when electrical work is being performed. Any questions regarding registration should be directed to the City Clerk at 630-305-5300.
  - Plumber: All Plumbing Contractors must complete and submit a Letter of Intent and provide a copy of the State of Illinois Contractor's Plumbing License (055#) with each application when plumbing work is being performed.
  - Roofing: All roofing contractors must provide a copy of their State of Illinois roofing license with each application when roofing work is being performed.
  - Concrete: Concrete sub-contractors must also be City-licensed, bonded, and registered if they are working in the Right-of-Way.

If you are unsure of the subcontractors you will be employing at the time you apply for permit, you may still submit your application. The City will not issue a building permit however, until everyone working on your project has been identified. If, for any reason, you must change a subcontractor, you are responsible for notifying the City **in writing**, being sure to include the project name, address and permit number as well as the names of the former and current subcontractors.

### **APPLICATION REVIEW AND APPROVAL**

All construction drawings must be legible and complete. **The items listed in “Application Requirements” must be included as part of your application. Omission of any of these items will delay the approval of your application for permit.** The applicant will be notified when the permit has been approved.

Every building permit shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance. The permit is to be displayed in the window nearest

to the front door for the duration of the construction and inspection process. After the construction is complete, please remove the building permit from the window and retain it for your personal homeowner's records.

### **INSPECTIONS**

It is the applicant's responsibility to request all required inspections. A list of inspections that must be completed based on the proposed scope of work will be listed on the last page of the permit. Common inspections, and when they need to be scheduled, include:

<u>Type of Inspection</u>	<u>When to call</u>
Underground electrical and/or plumbing	After the pipe is laid, but the pipe must be inspected prior to concealment.
Rough Mechanical; Rough Electrical; Rough Plumbing (if applicable) and Rough Framing	Rough plumbing prior to concealment; inspections must be conducted once all rough-ins are complete, rough framing after all other roughs.
Insulation	Prior to drywall installation.
Final	Conducted when the project is complete.

Inspections are scheduled by calling 630/420-6100 option 1 between the hours of 8:00 a.m. and 4:00 p.m. Monday through Friday. **(Closed 1-2 pm daily)** Please have the **permit number** and **site address** ready. In addition, please allow a minimum of 72 hours when scheduling an inspection.

### **FEES**

See Building Permit Fee Schedule.

### **CONTACT INFORMATION**

#### Inspection Dispatch

Monday-Friday, 8 am to 4 pm **(Closed daily 1 pm-2 pm)**  
630/420-6100 Option 1

#### Development Services Counter

Monday-Friday, 8 am to 5 pm **(Closed daily 1 pm-2 pm)**  
630/420-6100 Option 2

**\*\*\*\*\*APPROVED PLANS MUST BE KEPT ON SITE\*\*\*\*\***



**CITY OF NAPERVILLE  
TRANSPORTATION, ENGINEERING & DEVELOPMENT (T.E.D.) BUSINESS  
GROUP**

**BUILDING PERMIT APPLICATION**

**OWNER** \_\_\_\_\_  
PROJECT ADDRESS \_\_\_\_\_  
SUBDIVISION \_\_\_\_\_  
UNIT # \_\_\_\_\_ LOT # \_\_\_\_\_  
PHONE \_\_\_\_\_ ZIP \_\_\_\_\_  
E-MAIL ADDRESS \_\_\_\_\_

**ARCHITECT** \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_  
PHONE \_\_\_\_\_ FAX \_\_\_\_\_  
E-MAIL ADDRESS \_\_\_\_\_

**DESCRIBE THE PROPOSED CONSTRUCTION:**

**GENERAL CONTR.** \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_  
PHONE \_\_\_\_\_ FAX \_\_\_\_\_  
E-MAIL ADDRESS \_\_\_\_\_

**ESTIMATED COST OF WORK \$** \_\_\_\_\_

**ROOFING CONTR.** \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_  
PHONE \_\_\_\_\_  
ST REG # \_\_\_\_\_

**ELECTRIC SERVICE UPGRADE:**

**ELECTRIC SERVICE RELOCATION:**

**WATER SERVICE UPGRADE :**

**DIMENSIONS OF BUILDING:**

HEIGHT \_\_\_\_\_ WIDTH \_\_\_\_\_ LENGTH \_\_\_\_\_

NUMBER OF STORIES \_\_\_\_\_

NUMBER OF UNITS \_\_\_\_\_

SQ. FT. OF STURCTURE \_\_\_\_\_

**ZONING** \_\_\_\_\_

**TYPE OF HEAT: GAS** \_\_\_\_\_ **ELECTRIC** \_\_\_\_\_

**AIR CONDITIONER** \_\_\_\_\_ **TONS** \_\_\_\_\_

**APPLICANT** \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

**PROJECT CONTACT** \_\_\_\_\_

PHONE \_\_\_\_\_

FAX \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

**ELECTRICAL CONTR.** \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_  
PHONE \_\_\_\_\_  
NAP REG # \_\_\_\_\_

**PLUMBING CONTR.** \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_  
PHONE \_\_\_\_\_  
NAP REG # \_\_\_\_\_  
ST LIC # \_\_\_\_\_

**SEWER/WATER CONTR.** \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_  
PHONE \_\_\_\_\_  
ST LIC # \_\_\_\_\_

**OWNER CONFIRMATION:**

I HAVE READ AND UNDERSTAND THE CONSTRUCTION SITE SAFETY REQUIREMENTS OF THE CITY OF NAPERVILLE.  
Initial here: \_\_\_\_\_

I understand that this project may be subject to road impact fees for DuPage County or Will County in Illinois. I further understand that the DuPage county fee (if applicable) must be paid and the receipt for same submitted prior to the issuance of a full building permit. All other impact fees must be paid prior to the issuance of any type of occupancy permit. Initial here: \_\_\_\_\_

I understand that interior inspections may be needed to verify the work being done. As the OWNER, I agree to arrange for all necessary interior inspections, or to authorize my contractor to arrange for all necessary inspections.  
Initial here: \_\_\_\_\_

As the OWNER of the property, I understand that this permit belongs to me, and may be updated by me or my authorized agent as needed. Initial here: \_\_\_\_\_

UNDER THE PENALTIES OF PERJURY AS PROVIDED BY LAW, THE UNDERSIGNED CERTIFIES THAT THE STATEMENTS SET FORTH IN THIS APPLICATION, PLANS, SPECIFICATIONS AND PLAT ARE TRUE AND CORRECT AND ARE IN ACCORDANCE WITH THE PROVISIONS AND REGULATIONS OF THE BUILDING CODE AND ALL OTHER CODES AND ORDINANCES OF NAPERVILLE APPLICABLE THERETO AND IN FORCE WHEN CONSTRUCTION IS COMMENCED. IF THE APPLICANT KNOWINGLY FALSIFIES ANY INFORMATION IN THIS APPLICATION, APPLICANT SHALL BE CONSIDERED IN VIOLATION OF SECTION 1-12-4 OF THE NAPERVILLE MUNICIPAL CODE AND SHALL BE FINED NOT LESS THAN FIFTY DOLLARS (\$50) NOR MORE THAN FIVE HUNDRED DOLLARS (\$500).

**SIGNATURE OF OWNER** \_\_\_\_\_

**DATE** \_\_\_\_\_

**\*\*No permit can be issued until the owner of the property has signed the application and initialed the information above.**

**SIGNATURE OF APPLICANT** \_\_\_\_\_

**DATE** \_\_\_\_\_

***The parties agree that this document may be electronically signed. The parties agree that the electronic signatures appearing on this document are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.***



# CITY OF NAPERVILLE

## OWNER'S DISCLOSURE OF BENEFICIARIES FOR BUILDING PERMIT

In compliance with Title 1, Chapter 12 of the Naperville Municipal Code, the following disclosures are required for all building permit applications for improvements valued at \$50,000 or more. This disclosure shall be completed by the property owner, business owner/tenant or other entity that derives the primary benefit of the permitted improvements. If the owner fails to provide full and complete disclosure, the City may revoke the permit at any time.

1. Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

2. Proposed Improvement: \_\_\_\_\_

3. Nature of Ownership (select one):

Individual

Partnership

Corporation

Joint Venture

Land Trust/Trustee

Limited Liability Corporation (LLC)

Trust/Trustee

Sole Proprietorship

4. If the owner is an entity other than described above, briefly state the nature and characteristics of ownership: \_\_\_\_\_

5. If the answer to Section 3 was anything other than "Individual", please provide the following information in the space provided below (or on a separate sheet):

- **Limited Liability Corporation (LLC):** The name and address of all members and managing members, as applicable. If the LLC was formed in a State other than Illinois, confirm that it is registered with the Illinois Secretary of State's Office to transact business in the State of Illinois.
- **Corporation:** The name and address of all corporate officers; the name and address of every person who owns five percent (5%) or more of any class of stock in the corporation; the State of incorporation; the address of the corporation's principal place of business. If the State of incorporation is other than Illinois, confirm that the corporation is registered with the Illinois Secretary of State's Office to transact business in the State of Illinois.
- **Trust or Land Trust:** The name, address and interest of all persons, firms, corporations or other entities who are the beneficiaries of such trust.

- **Partnerships:** The type of partnership; the name and address of all general and limited partners, identifying those persons who are limited partners and those who are general partners; the address of the partnership's principal office; and, in the case of a limited partnership, the county where the certificate of limited partnership is filed and the filing number.
- **Joint Ventures:** The name and address of every member of the joint venture and the nature of the legal vehicle used to create the joint venture.
- **Sole Proprietorship:** The name and address of the sole proprietor and any assumed name.
- **Other Entities:** The name and address of every person having a proprietary interest, an interest in profits and losses or the right to control any entity or venture not listed above.

6. Name, address and capacity of person making this disclosure on behalf of the owner:

VERIFICATION

I, \_\_\_\_\_ (print name), being first duly sworn under oath, depose and state that I am the person making this disclosure on behalf of the owner, that I am duly authorized to make this disclosure, that I have read the above and foregoing Disclosure of Beneficiaries, and that the statements contained therein are true in both substance and fact.

Signature: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public and seal



**CITY OF NAPERVILLE**  
**Transportation, Engineering & Development (T.E.D.) Business Group**

**CONSTRUCTION SITE SAFETY DIRECTIVE**  
**Effective Date: January 3, 2000**  
**Attention: Builders, Contractors, Architects, & Developers**

The City of Naperville is concerned about the safety of construction workers, city inspectors, and the general public. The Police and Fire Department frequently respond to calls at construction sites to aid persons injured as the result of an accident. It is everyone's responsibility to insure that construction sites are safe for everyone involved in the construction phase of a project or development. Therefore, in an effort to promote safety at construction sites, effective January 3, 2000, the following requirements must be met in order for the City to conduct an inspection:

1. The building address (not lot number) must be displayed, including suite numbers, if applicable. This includes a sign in front of the structure while foundation work is in progress and numbers on the front of the structure. Numbers must be at least 5 1-2 inches in height and visible from the street.
2. A gravel access path, at least 3 feet wide and clear of debris, water and snow, is required from the street to the structure.
3. Manufactured ladders (minimum type 1) rated for 250 pounds and secured in place must be present on the site. Site-built ladders, constructed in accordance with OSHA/ANSI standards,\* are acceptable.
4. Cleated ramps shall be constructed to OSHA/ANSI standards,\* elevated to a **maximum** of 3 feet, and secured in place.
5. Railings (36 inches in height) constructed at OSHA/ANSI standards\* are required on elevated platforms, stair openings, and lofts.
6. Temporary stairs, constructed in accordance with OSHA/ANSI standards\*, must be secured at the top and bottom and have intermediate support rails every 6 feet.
7. The inside of structures must be free of debris, standing water, ice, mud and human waste.
8. Construction debris must be in a dumpster or other four-sided container with a floor.
9. Access to excavations must comply with OSHA/ANSI standards.

**\*Copies of OSHA and ANSI standards are available for review in T.E.D (Transportation, Engineering & Development Business Group). OSHA can be contacted at 630-896-8700, and ANSI can be contacted at 212-642-4900.**

**The above list details the minimum on-site safety requirements that went into effect on January 3, 2000. Upon arrival at a job site, building inspectors will confirm that the minimum requirements have been met before they will conduct an inspection. If all requirements have not been met, the inspector will issue a STOP WORK ORDER that will remain in effect until the construction site is brought into full compliance with the City's safety requirements.**





**CITY OF NAPERVILLE**  
Transportation, Engineering & Development (T.E.D.) Business Group

**PLUMBERS LETTER OF INTENT**

Naperville requires the following Letter of Intent for plumbing contractors. This form is to be completed and submitted to the City along with any building permit applications where plumbing work is being performed.

**Letter of Intent**

The undersigned certifies that \_\_\_\_\_,  
**Name of Contractor/ Subcontractor**

\_\_\_\_\_  
**Street Address**

\_\_\_\_\_ **City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip**

has been retained by \_\_\_\_\_  
**Owner or Contractor Name**

As the plumbing contractor for \_\_\_\_\_  
**Job Location Street Address**

\_\_\_\_\_  
**Plumbing Contractor**  
**(Signature)**

\_\_\_\_\_  
**Date**

# City of Naperville

**Transportation, Engineering & Development (T.E.D.) Business Group**

## PLUMBING CHECKLIST for EXISTING WATER SERVICES

SITE ADDRESS \_\_\_\_\_ DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_

### WATER SUPPLY FIXTURE UNITS (WSFU) CHECKLIST TABLE "A"

\_\_\_\_\_ New Plumbing/to be installed under concrete slab. \_\_\_\_\_ All plumbing installed under concrete slab to remain as is.

What is the existing service? \_\_\_\_\_ Lead \_\_\_\_\_ Copper

EXISTING WATER SERVICE SIZE \_\_\_\_\_" EXISTING METER SIZE \_\_\_\_\_"

Fixture Type	Existing or Replaced	New	Values	Total WSFU
Water Closet (flush tank toilet)			X 3	=
Lavatory (sink)			X 1	=
Bathtub			X 2	=
Shower Stall			X 2	=
Kitchen Sink			X 2	=
Laundry Tray (tub) (1 to 3)			X 3	=
Dishwashing Machine			X 1	=
Laundry Machine (8 lb)			X 2	=
Lawn Irrigation System			X 10	=
			<b>TOTAL WSFUs</b>	

List the number of **new and/or existing** plumbing fixtures in the correct row. Multiply each row by the values and add all Water Supply Fixture Units sums to get the total WSFU plumbing load.

The information provided is accurate:

Applicant signature \_\_\_\_\_ Date \_\_\_\_\_

Based on the information provided in **Table A Total WSFUs** above it has been determined that the existing water service and/or water meter as noted is inadequately sized to accommodate the proposed total water supply fixture units (WSFU). **Upgrade Required?** \_\_\_\_\_ **Yes** \_\_\_\_\_ **No** \_\_\_\_\_

#### PLEASE CIRCLE WHAT WATER SIZE YOU WILL BE UPGRADING TO

WSFU	Water Service Size <i>(inside diameter)</i>	Water Meter Size
1 to 34*	1" *	1" **
35 to 50*	1-1/4" *	1"
51 to 90	1-1/2"	1-1/2"
91 to 100	1-1/2"	2"
101 to 200	2"	2"

\*Department of Public Utilities – Water/Wastewater requires 1-1/2" minimum water service for all new water service connections

\*\*Department of Public Utilities – Water/Wastewater requires 1" minimum water meters for all new construction

Water meter and service size are per Table N of the Illinois Plumbing Code. The table does not provide adjustments for pressure losses such as height of building or length of water service line.

Infrastructure Availability Charges (Tap-on fees) for new water service are determined by the size of the water service connection at the City's water main. Costs for residential water, meter & sewer fees (IAC Fees) for increasing water service or meter size (effective 02/01/22, fees subject to change):

3/4" to 1"	water and sewer hook-up	\$0	1" meter, horn & reader	\$753.66
3/4" to 1-1/4"	water and sewer hook-up	\$927.00	1 1/2" meter, reader	\$819.89
3/4" or 1" to 1-1/2"	water and sewer hook-up	\$2,078.00	2" meter, reader	\$1,097.89
3/4" or 1" to 2"	water and sewer hook-up	\$4,572.00		

**\*\*CONTACT THE CITY OF NAPERVILLE WATER DEPARTMENT @ (630) 420-6137 FOR INFORMATION ON LEAD PIPE REBATES \*\***

## **CITY OF NAPERVILLE WATER SERVICE UPGRADE REQUIREMENTS:**

- Transportation Right- Of-Way Permit (see Building Permit Fee Schedule)**
- Maintenance Bond \$5,000 for minor arterial or \$50,000 for major arterial that is site specific listing City of Naperville as beneficiary**
- A detailed engineering survey**

### ***DETAILED ENGINEERING SURVEY REQUIREMENTS***

The detailed engineering survey must be signed and sealed by an Illinois registered Professional Engineer and must include:

- North arrow
- Scale
- Benchmarks
- Show building footprint
- Dimensions from each side of house to lot lines (front, rear, sides)
- Existing conditions for a minimum of 50' adjacent to all sides of property (ex. – Driveways, trees, and all other features that fall within work area).
- Easements
- All existing utilities including:
  - Manholes
  - Storm Sewer inlets (rim and invert elevations)
  - B-Boxes
  - Fire Hydrants
  - Valve Vaults
  - Street Lights, Utility Poles
  - Utility Services
- Proposed relocations/new service
- Offsite disturbed areas
  - Street – full-depth patch
  - Parkway – driveways, sidewalk, sod restoration
  - Existing driveway and sidewalk locations with material type identified.
  - Driveway and sidewalk to be replaced (specify material type)
- Trees (identify trunk size with diameter measured in inches)

**PLEASE ALLOW UP TO 21 DAYS FOR APPROVAL**



## CITY OF NAPERVILLE HOMEOWNER NOTIFICATION FORM *SMOKE DETECTORS & CARBON MONOXIDE ALARMS*

*This form serves as notification to all homeowners and contractors of the City's building code requirements for smoke detectors & carbon monoxide alarms. The City of Naperville has adopted the 2018 IRC with local amendments, Section R314 & R315 that, at a minimum, require the following:*

- When a room addition or interior remodeling requires a building permit, smoke detectors shall be provided for the entire building as is required for new dwellings.
- All smoke detectors shall be interconnected such that the actuation of one alarm will actuate all the alarms in the individual unit.
- All detectors shall be approved and listed and shall be installed in accordance with the manufacturer's specifications.
- Smoke detectors shall be installed in each sleeping room, outside of each separate sleeping area within 15' of each bedroom and on each additional story of the dwelling, including basements and cellars but not including crawl spaces and uninhabitable attics.
- In portions of the residence that are impacted by the renovation or addition, smoke detectors shall be 110V, interconnected with a battery backup (wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection). Smoke detectors required in the portion of the residence that is not impacted by the renovation or addition shall be permitted to be battery powered and interconnected.
- When a room addition or interior remodeling requires a building permit, a carbon monoxide alarm(s) must be installed outside and within 15' of each sleeping room or area. In portions of the residence that are impacted by the renovation or addition, carbon monoxide alarms shall be 110V, interconnected with a battery backup. Carbon monoxide alarms required in the portion of the residence that is not impacted by the renovation or addition shall be permitted to be battery powered and interconnected.

*I have read the above building code requirements and fully understand that all smoke detector & carbon monoxide alarm requirements must be met in order to pass **both the rough electric and final inspections** for my room addition or alteration permit:*

Homeowner's Address: \_\_\_\_\_

Homeowner's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**CITY OF NAPERVILLE**  
**Transportation, Engineering, & Development (T.E.D.) Business Group**

**WHOLE HOUSE VENTILATION**

**Why?** Ventilation is very important in an energy-efficient home. Required air sealing techniques can reduce air leakage to the point that contaminants are sealed into the house; ventilation assists in moving contaminants out of the home. Ventilation also helps control moisture, which can lead to mold growth and structural damage.

**What?** Whole-house ventilation exchanges outdoor air for indoor air at a minimum air-flow rate prescribed in Section M1505 based on the area of the dwelling and the number of bedrooms. There are four basic mechanical whole-house ventilation systems – ENERGY RECOVERY, SUPPLY, EXHAUST, AND BALANCED.

TABLE M1505.4.3(1)  
 CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (square feet)	NUMBER OF BEDROOMS				
	0 – 1	2 – 3	4 – 5	6 – 7	> 7
	Airflow in CFM				
< 1,500	30	45	60	75	90
1,501 – 3,000	45	60	75	90	105
3,001 – 4,500	60	75	90	105	120
4,501 – 6,000	75	90	105	120	135
6,001 – 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

For St: 1 square foot = 0.0929 m<sup>2</sup>, 1 cubic foot per minute = 0.0004719 m<sup>3</sup>/s.

**Energy Recovery/  
Heat Recovery  
Ventilators**

*Examples:*  
 -Honeywell True Fresh  
 -Panasonic Intelli-Balance  
 or Whisper Comfort



-improves efficiency and pressure by exchanging energy (from temperature and humidity differences) between the outgoing and incoming airstreams

**Supply:**

*Examples:*  
 -Honeywell Inline Supply Ventilator  
 -Broan Fresh In Premium Supply Fan



- draws in clean outside air (can cause moisture problems in cold climates)

**Exhaust:**

*Examples:*  
 -Honeywell Digital Bath Fan Control HVC



- depressurizes the building causing infiltration of outside air through any cracks or openings (can cause moisture problems in hot humid climates)

**Balanced:**

*Example:*  
 -Panasonic SelectCycler Whole House Ventilation System



- a combination of the strategies above

*Sources: 2018 International Residential Code, Energy.gov, Honeywell International Inc., Broan, Panasonic*  
 - Above examples are only a small sample of manufacturers and models that are available and compliant with the adopted code.