1 & 2 Family Garage/Shed Permits

City of Oshkosh Inspection Services Division

This handout will help guide you through the permit application process. Following the steps below will help to expedite the issuance of your building permit. Please plan ahead and pick one of the following methods to apply for your permit. We suggest that you apply for the permit a minimum of 2 weeks prior to your start date. Permits can be applied for by using the following methods below:

In Person:

This is the best method to discuss the specifics of your project with a planner and inspector. Typically if all the required information is submitted, and the information is found acceptable, the permit can be issued at that time.

How to Apply

Step 1: Obtain site plan approval from Planning Services. They are located in RM 204 on the 2nd floor of City Hall. A scaled site plan will need to be submitted for their review. If you have questions about your project contact their office at (920) 236-5059. The planning office is open 8:00am-4:30pm Monday through Friday.

Step 2: After you've obtained site plan approval apply for your permit at the Inspection Services Division.

Submit the following for review:

- A detailed description of all proposed work
- An elevation and floor plan detailing the following; the overall height of the garage, height of the side walls, door and window locations, dimensions of the overhangs, headers/beam material and size, truss plans/rafter sizes, grade beam size, slab thickness & reinforcement size/location, heat source and wall bracing lengths and locations.

Owners may obtain permits for construction projects if the house is owner occupied. All contractors shall include their Dwelling Contractor Certification and Dwelling Contractor Qualifier Certification numbers from the State of Wisconsin Safety and Buildings Division. Our office is required by the State of Wisconsin to verify these certifications prior to issuing permits to contractors performing work on one and two family dwellings. Typically if all the required information is submitted, and the information is found acceptable, the permit can be issued at that time. Inspectors are available for consultation and permit issuance 7:30am-4:30pm Monday through Friday.

Payment

The City of Oshkosh accepts cash, check or credit/debit cards for payment (a service fee applies when using cards). If you have questions on permit fees please see page 2.

Inspection Requests

After the permit is obtained inspections can be requested by calling the Inspection Request Line at (920) 236-5128. You will need the permit number or address to request inspections.

Online:

When applying for a permit online please follow this link: http://www.ci.oshkosh.wi.us/EvolvePublic/

Underground Utilities: Call Diggers Hotline 3 Work Days Before You Dig! 1-800-242-8511

How to Apply

Step 1: Click on "*New Account*" or "*Login*" located on the upper black bar and enter your contact information. If you have an existing account with our department you may need to contact our office at (920) 236-5050 to set up a password.

Step 2: Click on "*Permit Application*" on the left side of the screen. Select "*Residential Building*" for the category and "*Garage or Shed*" for the type, click Next.

Step 3: Enter the address of the project, click next. If the address does not show up enter it in the lower box, click next.

Step 4: Enter the description of your project and the cost. It also needs to include the fair market value (labor and material costs). Only the highlighted fields need to be filled in, click next.

Step 5: If you're applying as the owner you can also add the building contractor for your project. Only building contractors that have pulled permits in the past are capable of being added.

Step 6: Upload the following for review: site plan, framing plans (foundation plan, elevations, cross sections, wall bracing details, truss plans, beam/header calculations).

Step 7: Read the Esignature statement and check the "I agree to conditions" box, hit finish.

Step 8: You will see a message that your application has been submitted for review. Someone from the City will contact you if additional information is required and/or when the permit is ready to be issued.

* Please note that no construction can commence until after the permit is approved and obtained.
* When the permit is ready to be issued you'll be able to make payments.
* Inspections will be able to be scheduled after the permit has been obtained.

Permit Fees:

See the following fee schedules to determine the permit fees:

- Inspection Services fee schedule for **building fees**. Questions please contact (920) 236-5050.
- Assessors fee schedule for **property record maintenance fees**. Questions please contact (920) 236-5070.
- Planning Services fee schedule for **zoning fees**. Questions please contact (920) 236-5059.

Permit fees will need to be payable to the "City of Oshkosh".

Building Code Requirements:

Fire Separation:

- Any garage/shed located less than 10' from the principal structure or closer than 3' to the property line must be provided with a 3/4 hour fire separation. This requirement would be a minimum of 1 layer of 5/8" Type X Fire Code Gypsum applied to the inside walls of the garage that would extend from the foundation to the underside of the roof sheathing.
- Twenty-minute fire rated doors and windows may also be required.

Foundation:

- Attached garages must have a minimum of 48 inches of frost protection.
- Detached garages are allowed to have a minimum of a 4-inch concrete slab with an 8 inch by 8 inch perimeter grade beam.
- The slab must be reinforced with a minimum of 6x6 #10 welded wire mesh, 1/2 inch re-rod @ 24 inches on center (maximum), or Fiber mesh.
- 1/2" anchor bolts embedded at least 7 inches into the concrete with a maximum spacing of 18" from the

corners of the garage and 6' o/c.
- Sheds that are 100 square ft. or larger in size must be on a 4 inch minimum concrete slab.

NOTE: A minimum clearance of 8 inches is required from untreated wood sheathing to finished grade.

Top Plates:

- Studs at bearing walls shall be capped with double top plates.
- End joints in double top plates shall be offset at least 2 stud spaces.
- Double top plates shall be overlapped at the corners and at intersections with partitions.
- Any breaks in the top plates shall be broken over a stud.

Roof Rafters:

- Where rafters meet to form a ridge, they shall be placed directly opposite each other and nailed to a ridge board of not less than 1 inch in thickness and not less in depth than the plumb cut of the rafters.
- Hip rafters may be single members.
- Valley and hip rafters shall be 2 inches deeper than jack rafters and continuous from ridge to plate.
- Collar ties of 1 inch by 6 inch (1x6) boards or better shall be installed in the upper third of the roof height to every third pair of rafters.
- Ceiling joists shall be nailed to exterior walls and to the ends of the rafters.
- Engineered straps/clips, "Hurricane Ties" are required to secure the trusses and/or rafters to the top plate.

Roof Sheathing:

Panels 24 inches or wider should be used. For panel widths greater than 16 inches but less than 24 inches, use panel edge clips or lumber blocking at unsupported edges. The edge support is to be placed at the joint between the narrow-width panel and an adjacent full-width panel. Unless otherwise required by the building code, the support may be omitted at the edge adjacent to a ridge or valley when the opposite edge or the narrow-width panel is thus supported. When used, **two panel edge clips,** equally spaced, shall be placed between each pair of supports. Two-by-four blocking may be used flatwise or edgewise and shall be adequately attached to roof framing. For panels greater than 12 inches but less than or equal to 16 inches, lumber blocking is required. For panel widths of 12 inches or less, lumber blocking applied to both narrow-width panel edges is required, regardless of adjacent ridge or valley.

Wall Openings:

- Headers shall be sized to carry loads imposed where doors or windows occur.
- Where the opening is less than 6 ft. in width, the header shall be supported on each end by a single common stud and shoulder stud.
- Where the opening is more than 6 ft. the header shall be supported on each end by a single common stud and two shoulder studs or as required by beam bearing calculations.

Exterior Wall Bracing (Does not apply to sheds):

- When a garage has structural sheathing (osb) applied to the entire surface of the exterior walls the minimum required Braced Wall Panel width is determined by the height of the garage walls. Each corner must have a minimum of a 2' braced wall panel return at each corner.
- For 8' high walls a minimum Braced Wall Panel Width of 24" is required.
- For 9' high walls a minimum Braced Wall Panel Width of 27" is required.
- For 10' high walls a minimum Braced Wall Panel Width of 30" is required.

Nailing Requirements:

Building code requirements specify that common nails are to be installed for wall bracing. It is rare for a contractor to install common nails. Please refer to the charts below for the required spacing for gun nails and staples.

The following can be substituted for 6d common nails:

6d Common Nail	Spaced 3" o/c	Spaced 6" o/c	Spaced 12" o/c
2-3/8" x .113 Gun Nail	3"	6"	12"
16 Gage Staple (7/16" crown)	2"	4"	8"

The following can be substituted for 8d common nails:

8d Common Nail	Spaced 3" o/c	Spaced 6" o/c	Spaced 12" o/c
2-3/8" x .113 Gun Nail	2"	4"	8"
16 Gage Staple (7/16" crown)	1.5"	3"	6"

NOTE: When installing fasteners into treated plates make sure you are using fasteners that have been approved for corrosion resistance.

Permanent Weather Resistant Finish:

The exterior walls of the garage are required to be covered with a permanent weather resistant finish. There is a misconception in the construction industry that vinyl siding is a permanent weather resistant finish. However the vinyl siding does not protect the osb sheathing from getting wet and is actually constructed with holes in it to let the water shed out due to the fact that it is not weather resistant. Most vinyl siding manufacturers require a weather barrier under the siding such as tar paper or house wrap. Please also note that osb is not an exterior finish material and it shall not be exposed to the elements for longer than required during construction even if it is painted. When installing house wrap and/or tar paper please remember to properly lap it so that the water sheds from the top of the structure to the bottom.

Electrical Code Requirements:

Wiring Requirements:

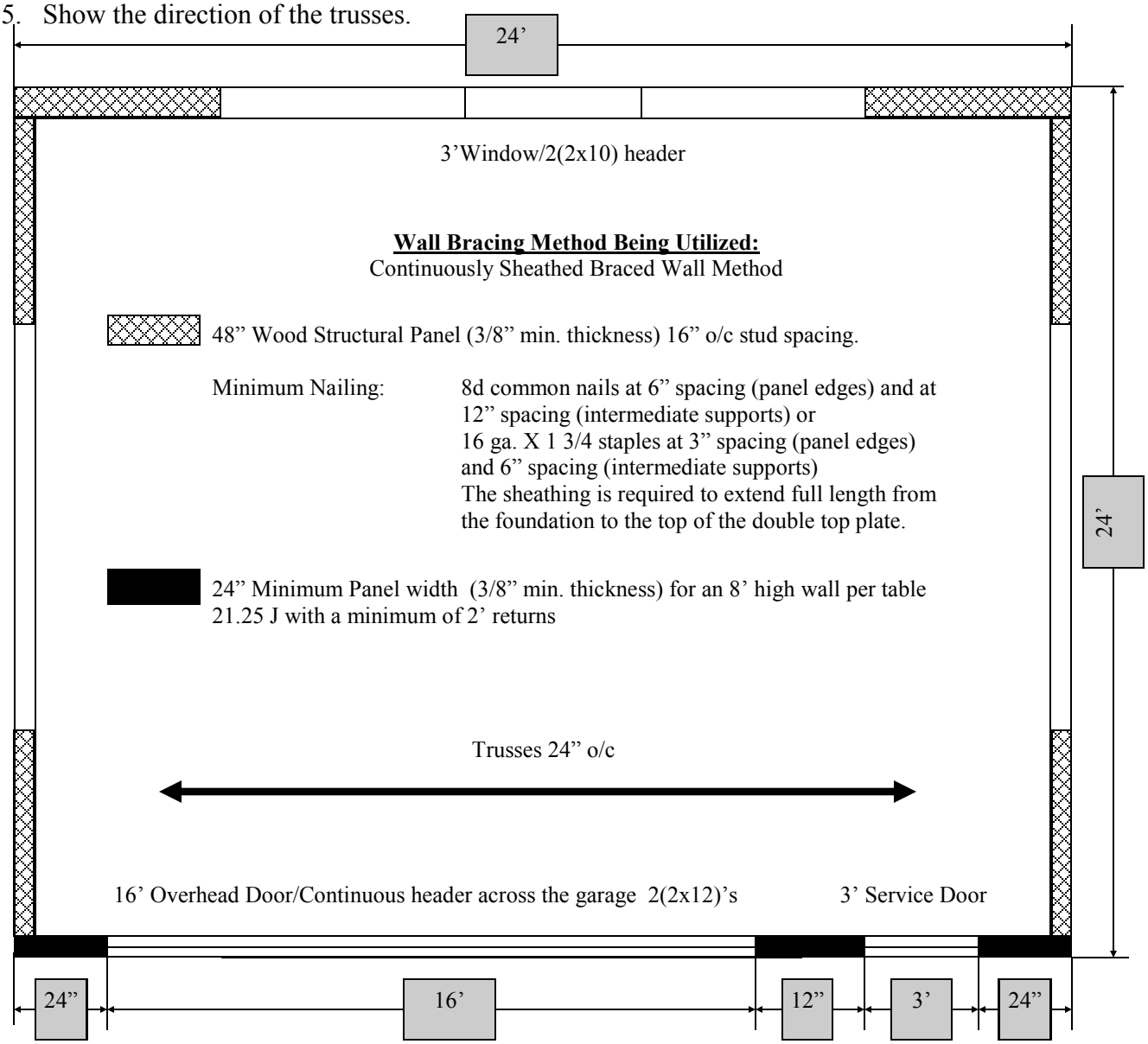
- All service doors and their required landings are required to be illuminated by a wall switch-controlled light.
- At least one wall switched light and one receptacle is required for garages with electric power.
- All garage receptacles are required to be GFCI protected.
- Romex (type NM cable) shall be supported within 8 inches of a plastic box and 12 inches of a metal box and every $4^{1}/2$ ft. thereafter.
- Metallic boxes are to be grounded.
- Mechanically secure all ground wire splices (green wire nuts, crimps, pigtails with wire nuts, etc.)
- All devices are to be grounded including switches, receptacles, light fixtures, etc.
- All receptacles shall be of the Tamper Resistant type.
- Underground wiring shall be approved for direct burial and shall be placed:
    * 18" (to the top of the pipe) below finished grade and 24" under any driveway.
    * 24" below finished grade for direct burial cable in all locations.
    * 12" below finished grade for a 120 volt, 20 amp or less GFCI protected single circuit.

Sample Wall Bracing Plan

City of Oshkosh Inspection Services Division

Effective 4/1/09 the State of WI Uniform Dwelling Code changed to include new standards for the construction of wall bracing and foundation requirements for all structures. The diagram below is a sample of what is required to be submitted to show compliance with the State of Wisconsin Wall Bracing Requirements for a garage. The following information is required when submitting your plans:

1. Note the bracing method being utilized.
2. Garage dimensions. Label the size and location of all windows, service doors and overhead doors.
3. Show all header sizes.
4. Show bracing panel locations, dimensions and the total braced wall percentage for each wall.
5. Show the direction of the trusses.



Braced Wall Percentage (front wall): 24’ wall x 12”/1 ft x 16% = 46.08” of wall is required to be braced.
24” panel + 24” panel = 48” (Passed! ….needed 46.08”)

The other walls pass due to the other wall sections having 96” of braced wall length