

Deck Requirements

Permit/ Inspection Requirements:

- Permits are required for any deck, balcony or any other raised floor surface 30” above grade, measured from the lowest point within five feet of the structure.
- Permits are required for any structure attached to the principle structure
- Inspections shall be conducted on the footings, after holes are dug and before poles are set. Additional inspections shall take place after support structure is framed and before decking is laid and finally at the completion of the project.
- If project has a roof, an addition inspection will be required for the ice guard.
- Please ask the Building Official at the time of permit application when inspections will be required for your specific project.
- It is your responsibility to contact the City of Midland Building Department to schedule each inspection.

Projections into Yard/ Setback Requirements:

- Decks that are not attached to the principle structure can be located in front, side and rear yards with the following restrictions:
 - Such structures shall not exceed three feet above the finished surrounding grade when located within the required yard setback.
 - Such structures shall not be located closer than five feet from the front, side or side street line.
 - Such structures shall not be located closer than ten feet from the rear lot line
 - Such structures shall not be located closer than six feet from any accessory structure.
- Covered porches and decks increase the footprint of the principle structure. Therefore, they are governed by the setback requirements of the principle structure for the zoning district the structure is in.

◆ Zoning District RA-1	Setback	◆ Zoning District RA-3	Setback
Front	30’	Front	25’
Rear	30’	Rear	25’
Side	8’	Side	7’
Both Sides	20’	Both Sides	16’
Side Street Yard	20’	Side Street Yard	15’

◆ Zoning District RA-2	Setback	◆ Zoning District RA-4	Setback
Front	30’	Front	25’
Rear	30’	Rear	25’
Side	8’	Side	7’
Both Sides	20’	Both Sides	16’
Side Street Yard	20’	Side Street Yard	15’

- RB Zoning District for 1-2 family dwellings:

Zoning District RB	Setback
Front	25'
Rear	25'
Side	5'
Both Sides	14'
Side Street Yard	10'

- To determine which zoning district you are in, either call the City of Midland Building Department or visit the City of Midland website at <http://www.midland-mi.org>.

Fastener Requirements:

- Fasteners for pressure preservative treated lumber above grade shall be of hot dipped galvanized steel, stainless steel, silicon bronze or copper.
- Below grade fasteners shall be stainless steel.
- Aluminum nails of any kind shall never be used in contact with treated lumber.

Height Limitations

- Porches, balconies, or raised floor surfaces located more than 30" above the floor or grade below shall have guards not less than 36" in height.
- Porches and decks which are enclosed with insect screening shall be provided with guards when the walking surface is located more than 30" above the floor or grade below.
- All measurements shall be taken from the lowest grade within five feet adjacent to the structure.

Foundation Requirements:

- Decks not supported by dwellings and are less than 30" high need not be supported by footings that extend below the frost line.
- Decks attached to the dwelling in any way must be supported by footings that extend below the frost line of 42".
- A minimum 6" footing of hardened mixed concrete, pre-cast concrete cookie or other approved method must be placed in bottom of hole that has been mushroomed out and is flat in the bottom before post foundation is set.
- Concrete mixes that are used to set the post foundations must be mixed with water and allowed to set before backfill. No dry mix allowed.

Flashing Requirements:

- Flashing shall be made of an approved corrosion- resistant material.

- Aluminum flashing or trim shall not be in contact with pressure preservative treated lumber.
- Flashing is required where exterior porches, decks, or stairs attach to a wall or floor assembly of wood frame construction.
- Flashing shall be installed to prevent water penetration into the supporting wall cavity or into the building structural framing components.

Stairway/ Step Requirements:

- Stairways shall be a minimum of 36" wide.
- Handrails are allowed to project 4.5" on each side for a total allowable width at handrail height of 31.5" for handrails on one side and 27" for both sides.
- Risers on steps must be a maximum of 8.25" high.
- No riser height dimension in a flight of stairs shall vary by more than 3/8".
- Treads must be a minimum of 9" deep.
- No tread depth dimension in a flight of stairs shall vary by more than 3/8".
- Open risers are allowed but shall not allow the passage of a 4" sphere for stairs with total rise of 30" or more.
- Stairs with total rise of less than 30" do not have the opening restriction.

Handrail/ Guard Requirements:

- Handrails shall be provided on at least one side of each continuous run of treads or flight with 4 or more risers.
- Handrails shall be continuous for the full length of the flight.
- Handrails that run adjacent to walls shall be a minimum of 1.5" from the adjacent wall.
- Circular handrails shall have a cross section dimension of at least 1.25" but less than 2".
- Non-circular handrails shall have a total perimeter dimension of 4" to 6.25". If larger than 6.25", they must have a graspable finger recess on both sides.
- Walking surfaces higher than 30" above grade, or steps with a total rise greater than 30", must be provided with a guard.
- Guards must be 36" minimum for walking surfaces.
- Guards must be minimum 34" for stairs measured vertically from the nosing of the tread.
- Intermediate rails or ornamental closures are required and shall be spaces such that you can not pass a 4" sphere through the opening.
- A 6" sphere can not pass through the triangular opening formed by the stair riser, tread and bottom rail of handrail.

Pool Deck Requirements:

- Swimming pool decks have their own set of regulations which are somewhat stricter in nature because of the inherent danger associated with pools. The purpose of more stringent regulations is to protect and prevent a small child from gaining access and entry into an unattended pool. Pools require a barrier of at least 48” to surround the pool structure. If the sides of an above ground pool are at least 48”, measured from the lowest grade within 5 feet adjacent to pool, the sides of the pool would satisfy that requirement. But, if you build a deck abutting or surrounding the pool, you have created a walking surface which is flush or near flush to top of pool, that needs to be protected. Please contact the City of Midland Building Department before installing any in-ground or above-ground pool with water depth of greater than 24” for more safety requirements associated with pools.
- Guards must be a minimum of 48” in height.
- If guards are made up of horizontal and vertical members and the space between horizontal members is less than 45”, the spacing between the vertical members shall not exceed 1.75”.
- If the horizontal members are spaced greater than 45”, the space between vertical members must not exceed 4”.
- Horizontal members must be located on the pool side of the rail.
- Access gates shall open outward away from the pool and shall be self-closing and have a self latching device.
- Where the release mechanism of the self latching device is located within 54” from the bottom of the gate the release mechanism shall be located on the pool side of the gate at least 3” below the top of the gate.
- The gate and barrier shall have no opening greater than ½” within 18” of the release mechanism.

This brochure is intended to be a general overview of exterior deck requirements. Every project is different and yours may have a situation not covered in this brochure. Please contact the City of Midland Building Department in the planning stage so your questions can be answered and your project will be designed for safety and durability.