**Charter Township of Genesee**

Building Department

7244 N Genesee Road, PO Box 215

Genesee, MI 48437

(810) 640-2000 ext 232

Single Family Residential Only

APPLICATION FOR PLAN EXAMINATION AND DECK PERMIT

Construction Location:

Number Street

Type of Improvement: New Home Addition Repair/Replacement Garage Deck Dimension of building/improvement: Square footage of improvement:

Type of frame: Wood Steel Other Estimated Cost:

### This permit does not include Electrical, Mechanical, Plumbing

Include 3 sets of drawings.

Contractor/owner: Address:

Telephone: License #:

New homes include right-of-way permit with contractor’s insurance, water and sewer permits.

Drawings must include foundation, floor plan, elevations, guardrail, stair detail and if applicable, a wall section.

Please print legibly on this form.

For new homes only, survey must include proposed final floor elevations.

I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his agent. I agree the statements made on the attached application are true, and if found not to be true, any permit that may be issued may be void. Further, I agree to comply with the conditions and regulations provided with any permit that may be issued. Further, I agree the permit that may be issued is with the understanding all applicable sections of the Charter Township of Genesee Zoning Ordinance and the State of Michigan Residential Building Code will be complied with. Further, I agree to notify the Charter Township of Genesee inspection department prior to the required inspections listed on my issued permit. Further, I agree to give permission to officials of the Charter Township of Genesee to enter the property subject to this permit application for the purposes of inspections. Finally, I understand this is a permit application (not a permit) and that a permit, if issued, conveys only work to be completed as shown, and does not include any representation or conveyance of rights in any other statute, building code, deed restriction or other property right.

Signature Date

**Office use only**

Permit Number: Issue Date: Permit Fee:

Site Bond: Zoning Review Fee: Plan Review Fee:

Zoning District: Use: Flood Plain Approval Req’d: Yes

Front yard Rear yard Side yard Side yard

Total:

Approved by Charter Township of Genesee Official

# Site or Plot Plan

Include all existing and proposed buildings on the site. Include all dimensions to front, side and rear property lines from buildings. Include dimensions of the property. Any accessory structure must maintain 10-foot separation from the main dwelling and must be behind the front line of the house.

Rear property line

S S

I I

1. D
2. E

L L

I I

N N

E E

Front property line

Road centerline

**RESIDENTIAL DECK**

**Deck Guards**

Guards are required if the floor is 30 inches of more off the ground. Openings shall be sized so a 4-inch sphere will not pass through.

Floor joist Clear Span - Floor Joist Size -

Floor Joist Species of Treated Lumber - Ponderosa Pine:

Southern Yellow Pine: Other:

Floor Joist Spacing - Deck Floor Material - Carrier/Beam Size -

Carrier/Beam Species of Treated Lumber - Ponderosa Pine:

Southern Yellow Pine: Other:

Is the Deck Attached to the House – Yes No Post Size -

Post Spacing - Feet Inches Footing Depth Below Grade - Inches

Footing – Width Height

**Deck Stairways**

Stairways shall not be less than 36 inches in clear width. The Maximum riser height shall be 8 1/4 inches and the minimum trend depth shall be 9 inches. The greatest riser height shall not exceed the smallest by more than 3/8 inch.

**Deck Stairway Handrails**

All required handrails shall be continuous the full length of stairways with 4 or more risers on at least 1 side of stairways. Handrails shall be placed not less than 34 inches or more than 38 inches above the nosing of the trends. The handgrip portion of handrails shall have a circular cross section of 1 1/4 inches minimum to 2 5/8 maximum. Other handrail shapes that provide an equivalent grasping surface are permissible. Edges shall have a minimum radius of 1/8 inch. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height measured vertically from nosing of the treads.

4 ½ Inch. Maximum Not Acceptable

**Residential Stairways & Handrails**

1 ½ Inch. Minimum

1 ¼ Inch. Maximum to 2 5/8 Maximum

Handrail Ends Shall Be Returned to Walls or Newel Posts

Handrails Shall Be Continuous The Full Length Of the Stairs With 3 Or More Risers On At Least One Side Of The Stairway

Handrails Shall Be Placed Not Less Than 34 Inches Or More Than 38 Inches Above The Nosing of the Treads

9 Inch Minimum Tread

4 ½ Inch Minimum to

8 ¼ Inch Maximum Riser 3/16 From Step to Step

3/8 Overall

Headroom in All Parts of the Stairway Shall Not Be Less Than 6 Feet, 8 Inches Measured Vertically From the Sloped Plane Adjoining The Tread Nosing Or From The Floor Surface of The Landing or Platform.

Nosing Of ¾ Inch Minimum To 1 ¼ Inch Maximum Required On Stairways With Solid Risers And Treads Less Than 11 Inches

Stairways With A Total Rise Of More Than 30 Inches May Have Open Risers Provided The Opening Is Less Than 4 Inches

Enclosed Accessible Space Under Stairs Shall Have Walls, Under Stair Surface And Any Soffits Protected On The Enclosed Side With ½ Gypsum Board

# General Requirements for Residential Decks

36 Inch Minimum

 Provide

 Flashing

 Between

 House

 And Deck

Floor Must Be Designed To Support 40 Pounds Per Square Foot Live Load

Clear Span Of Floor Joist

Beam Size Is Dependent On Post Spacing And Floor Load. Fasten Beam To Post With Approved Fasteners

Use Properly Sized Weather-Resistant Joist Hangers. Fill All Holes In Hangers With Properly Sized Nails.

A Ledger Can Be Placed Under The Joist And Against The Foundation Instead Of Using Hangers. The Ledger Must Be Attached To The Foundation In An Approved Manner. Ledger must fasten to floor joist.

Post Size and Spacing Is Dependent On The Height Off The Grade And The Floor Load.

All Nails, Bolts, Joist Hangers, And Connectors Must Be Approved For Weather Resistance. Lumber Must Be Pressure Treated, Or Be Lumber Naturally Resistant To Decay.

Use Well Drained Soils For Back Fill Around Post.

Footings For The Post Shall Be Based On The Loads Applied And The Allowable Soil Pressure. Minimum Footing Size Shall Be Not Less Than 12 Inches Wide By 6 Inches In Height.

42 Inches Below Finished Grade

Poured Concrete Footing Mixed With Clean Water Outside of Hole Or Approved Pre-Manufactured Pad

Wood Deck Construction

## Building Permits

Building Permits are required for decks. When making application, provide the following:

1. 2 sets of construction plans
2. 2 site plans indicating size, shape, placement and distance from property lines and easements.
3. Building permit application filled out.

**Required inspections** (some decks may require additional inspections)

1. Post hole inspection
2. Final inspection

## Foundation

Posts to be set a minimum of 42” below grade and shall bear undisturbed soil.

## Framing

All material in contact with the ground shall be approved suitable for ground contact use. All other material shall be pressure treated of decay resistant decay or redwood.

## Framing Fasteners

All nails, bolts, brackets and fasteners to the house with lag screws or carriage bolts into the rim joist of the main structure. A flashing must be provided over the ledger board.

## Handrails and guardrails

### Handrails

Handrails having minimum and maximum heights of 34 inches and 38 inches respectively, measured vertically from the nosing of the treads, shall be provided on at least one side of stairways of 4 or more risers. Spiral stairways and winders shall have the required handrail located on the outside radius. All required handrails shall be continuous the full length of the stairs.

The handgrip portion of the handrails shall not be more than 2 5/8 inches in cross-sectional dimension, or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners.

Handrails projecting from a wall shall have a space of not less than 1 1/2 inches between the wall and the handrail.

## Guardrails

Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guardrails not less than 36 inches in height.

Required guardrails on raised floor areas (decks), balconies and porches shall have intermediate rails (balusters/spindles) or ornamental closures which will not allow passage of an object 4 inches or more in diameter. Horizontal spacing between the vertical members in required guardrails shall be a maximum of 4 inches at the nearest point between the members.

Exception: The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway may be such a size that a sphere 6 inches in diameter cannot pass through.

## Decking (deck floor)

Decking is generally 5/4 nominal size material and can span 16 to 24 inches.

## Joists

Joists are used to support the deck floor. Maximum span between supports:

|  |  |  |
| --- | --- | --- |
| Joist size | 16" on center | 24" on center |
| 2 x 6 | 7' 9" | 6' 6" |
| 2 x 8 | 10' 6" | 8' 6" |
| 2 x 10 | 13' 3" | 10' 9" |
| 2 x 12 | 16' 3" | 13' 3" |

## Girders or Beams

Girders are used to support the joists. Maximum span between posts:

|  |  |
| --- | --- |
|  | **Beam Spacing in Feet** |
| **Beam Sizes** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| 2 - 2 x 6 |  | 5' 6" | 5' | 4' 6" | 4' 3" | 4' | --- | --- |
| 2 - 2 x 8 |  | 7' 6" | 7' | 6' 6" | 6' | 5' 6" | 5' | --- |
| 3 - 2 x 8 | 2 - 2 x 10 | 9' 6" | 9' | 8' 6" | 8' | 7' 6" | 7' | 6' 6" |
| 3 - 2 x 10 | 2 - 2 x 12 | 11' | 10' 6" | 10' | 9' 6" | 9' | 8' 6" | 8' |

## Posts

Minimum size is 4 x 4 nominal. Where decks are elevated, such as a 2 story deck, cross bracing is required to eliminate sway.