DECKS

Building Permit – is required from the Building Services Department of the City of Dubuque, 589-4150, for any deck that is attached to a structure or any detached deck thirty (30) inches or more above the adjacent grade.

Inspections – are required on permitted projects when the pier holes are open, before any framing is concealed and when projects is completed. The following requirements must be met even if a building permit is not required.

Setbacks from Property Lines – Please contact the Planning Services Department of the City of Dubuque at 589-4210 for information regarding the required setback distances from property lines.

Frost Protection – to a minimum depth of forty-two (42) inches is required for any deck that is attached to a dwelling or structure that has frost protection.

Guardrails – are required to be installed on all decks or open stairways that are thirty (30) inches or more above grade or the floor below. The guardrail shall be not less than thirty-six (36) inches in height. Intermediate rails shall be spaced so that an object four (4) inches in diameter cannot pass through. The top of guardrails for stairways, exclusive of their landings may have a minimum height of thirty-four (34) inches. Guardrails shall be constructed to support a twenty (20) pounds per square foot lateral load.

Stairways – shall be a minimum of thirty-six (36) inches wide with a maximum rise of seven and three-quarters (7 ¾) inches and a run of ten (10) inches.

A Handrail – shall be provided on at least one side of stairways of four or more risers. The handrail shall be continuous with a height of between thirty-four (34) and thirty-eight (38) inches measured vertically form the nosing of the treads. The handrail shall be between one and one fourth (1 ¼) and two (2) inches wide and provide a gripping surface.

Overhanging Decks – Joists should not overhang the beam by more than two (2) feet, nor should beams overhang support posts by more than one (1) foot unless a special design is approved by the Building Services Department.

Live Load – All decks shall be designed to support a live load of forty (40) pounds per square foot.

Weather Protection – All connections between decks and dwelling shall be weatherproof. Any cuts in the exterior finish of the dwelling shall be flashed or caulked. All exposed wood used in the construction of decks is required to be wood of natural resistance to decay (redwood, cedar, etc.) or approved treated wood. This includes posts, beams, joists, and decking.

Joist Hangers and Fasteners – Headers joists more than six (6) feet long and tails joists more than twelve (12) feet long shall be supported by approved joist hangers and fasteners (no roofing nails) sized and installed per the manufacturer’s listing. All fasteners shall be corrosion resistant and approved for the specific use.

Special Design Notes – Some deck designs may not be appropriate should the construction of a roof or enclosure be a future consideration.
Provide two sets of construction plans consisting of SITE PLAN – SECTION – FRAMING PLAN.

SITE PLAN shows location of house and proposed deck with distance to property lines and other nearby structures. Setbacks for decks are subject to zoning requirements.

ALLEY

Either a Survey or exposed property corners identifying relevant property line is required. See "Property Line Location" bulletin for more assistance.

Provide dimensions

Identify relevant Property Corners and Line. In this example, locate the monuments for this Line (if no Survey)

New deck X by X

Existing
House address
and
Street Name
Prepare drawings to scale (1/2" or 1/4" = 1'-0" works well). Size all basic materials (footings, posts, joists, beams, decking) indicating spans and all post locations.

Note: All materials used for posts, joists, beams and decking shall be approved treated wood or approved wood of natural resistance to decay such as cedar, or approved composite materials (see attached list for approved composite decking).

Stairs with four or more risers require graspable handrails (see detail next page). Guards and handrails with less than 4" openings are required where deck height is 30" or more above adjacent ground. If deck is closer to ground, guard and its design are optional.

Lumber in contact with the ground shall be treated and bear the label of an accredited agency showing 0.5 retention.

The base of stairs shall not rest on bare ground. Placement of patio blocks or a concrete pad is acceptable if deck is near ground level.

**SECTION - Scale 1/2" = 1'-0"**

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Diagram showing:
- Joists
- Guards - Less than 4" openings
- Fasten securely with metal connector
- Flashing or caulk required to keep moisture out of holes
- Indicate footing dimensions. Note: footing width may vary according to load
- Sold blocking to foundation (provide structural calculations if not used)
- Alternate Post footing connections
- Indicate connection of joists to house. Most common method is to use joist hangars to connect joists to ledger board bolted to house in rim joist area. Recommended minimum of 1/8" or 5/8" bolts or lag screws, 8" on center. See detail for bolting pattern.
Indicate scale used.

Minimum decking: 1x4 if 16" O.C. joists, 2x4's if 24" O.C. joists.

**FRAMING PLAN – Scale 1/4 "= 1'-0"**

- Overall Dimension
- Post/Footing Dimension
- Diameter of footing shall be determined by using 2000 lb./sq. ft. of bearing on soil.
- Indicate beam size and span (Location of posts)
- Indicate joist size, spacing and span (see table)
- Existing house
- Handrail able to be grasped 1 1/4" - 2"

Service-entrance conductors

Service-drop conductors

If service conductors are within three (3) feet measured horizontally from a balcony, stair landing or other platform, clearance to the platform of at least 10 feet must be maintained as shown. See NEC Sec 230.24(B) for vertical clearances from ground.