# City of Meriden

Building Department 142 East Main Street Meriden, CT 06450 (203) 630-4091

## **DECK GUIDELINES**

All information in this handout pertains to 1 and 2 family residential decks. The City of Meriden CT is offering this informational handout as representative of typical issues/questions that may arise on a typical deck construction project. The City of Meriden CT assumes no responsibility for any errors or omissions the installer is required to follow applicable codes. This handout does not cover all situations, nor is it intended to. If a issue arises please feel free to contact this office.

### **<u>1. IMPORTANT NOTES:</u>**

A. If you plan to install a hot tub, spa, pool, screen room, sunroom or future addition on proposed deck, this handout may be used as a guide. Please contact this department for correct foundation and frame details.

B. If proposed deck is in area of electric or gas service, oil fill/vent or other utilities a clear working/service area should be maintained. Any heating, drying or exhaust outlets shall maintain the correct distance to floor/grade below. In some instances a combustible service may not be allowed and exhaust may need to be relocated.

## **2. PERMIT APPLICATION:**

A. Plot Plan or GIS survey with proposed deck location required for Zoning Department approvals.

- B. Deck plan drawn to scale with the following items;
  - 1. deck size
  - 2. Size and spacing of floor joist and beams
  - 3. Size and type of decking materials
  - 4. Size, type, location and spacing of support post

#### C. Deck Elevation

- 1. Height of deck
- 2. Size, amount and depth of footings
- 3. Stairs being installed, if yes details.
- 4. Attachment details for deck ledger.

#### D. Permit Fees;

1. .42 X square foot rounded to nearest dollar plus \$50.00 for C.O. Fee.

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## **<u>3. STRUCTURAL NOTES:</u>**

Proper ledger attachment is crucial to structural safety of deck. If structure you are attaching the deck onto has any of the following conditions then deck may need to be independently supported:

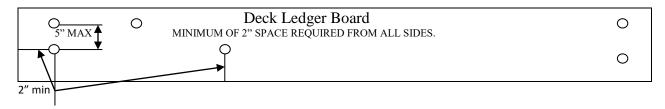
- 1. Cantilevered.
- 2. Brick or other soft masonry.
- 3. Supported on piers/posts.

#### Ledger attachment requirements.

#### FASTENER SPACING FOR SPF OR HEM-FIR DECK LEDGER AND A 2" SOLID SAWN SPRUCE PINE FIR BAND JOIST (DECK LIVE LOAD=40PSF WITH 10LB DEAD LOAD)

Joist Span	6' or less	6'1"-8'	8'1"-10'	10'1''-12'	12'1"-14'	14'1"-16'	16'1"-18'
Connection Details On-center spacing for fasteners							
<sup>1</sup> / <sub>2</sub> '' diameter lag screw with 15/32'' sheathing	30"	23'	' 18	" 15"	13"	11"	10"
<sup>1</sup> / <sub>2</sub> " diameter bolt with 15/32" sheathing	36"	36'	' 34	, 29"	24"	21"	19"
<sup>1</sup> / <sub>2</sub> " diameter bolt with 15/32 inch maximum sheathin and <sup>1</sup> / <sub>2</sub> " stacked washers	36"	36	., 29	, 24,	21"	18"	16"

### 4. PLACEMENT OF LAG SCREWS/BOLTS.



### **5. MATERIALS/DETAILS**

- 1. All wood exposed to the elements must be pressure treated or naturally decay resistant.
- 2. All fasteners must be approved for exterior use.
- 3. All piers must be 42" deep for frost protection.
- 4. Any joints/splices in deck beams must be located on a support post/column.
- 5. Joist must have a minimum of 1.5" of support either by joist hangers or a 2"x 2" ledger strip.
- 6. Depending on size and height of the proposed deck diagonal bracing may be required.

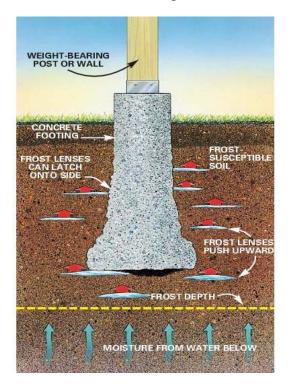
## 6. DECK JOIST SPAN TABLE

Joist Size	<i>12" OC</i>	16" OC	24" OC
2x6	9'4"	10'6"	7'8''
2x8	13'8"	11'10"	9'8''
2x10	16'9"	14'6"	11'10"
2x12	19'5"	16'10"	13'9"

\*\*\* ALL JOIST AND SPANS ARE BASED ON PRESSURE TREATED # 2 GRADE\*\*\*

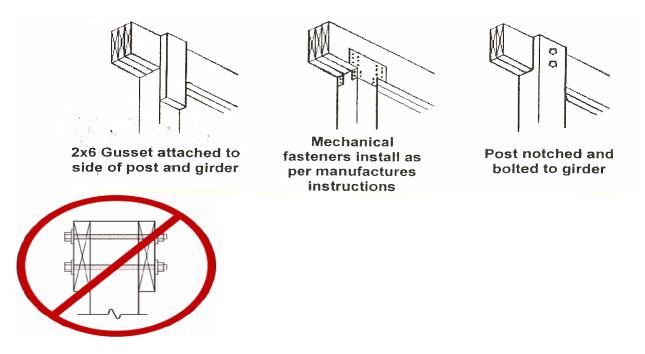
## 7. ATTACHMENT

1. Pier and Pier/attachment to post

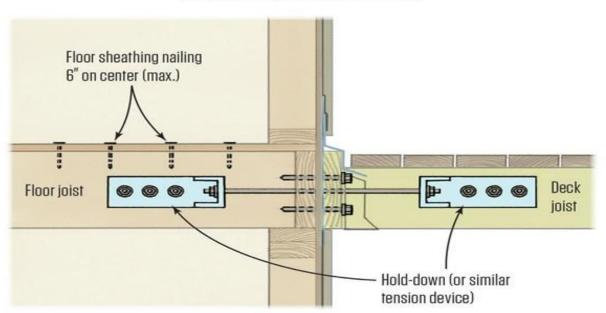




2. Post to Beam Attachment

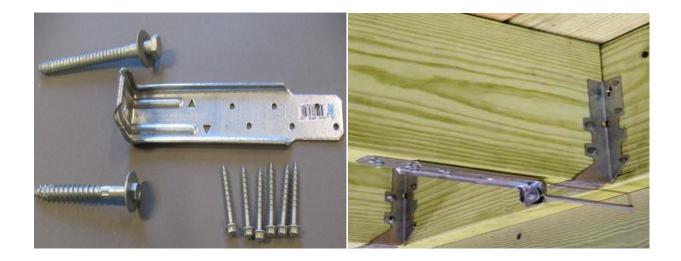


- 3. Deck Lateral Support Requirements
- A. Building code requires a minimum of 2 deck lateral load connections to be installed R507.2.3



## Parallel (Sawn Joists)

B. Option to above (4) are required to meet the loading of the ones above. Must be installed per instructions. Located at equal spacing throughout the width of the deck.



## 8. STAIRS

A. When stairs are installed the maximum step height is  $8\frac{1}{4}$  and the minimum thread depth measured from nosing to nosing is 9".

B. Stairs are required to be supported by a solid base.

C. Landings are required at the bottom of all stairs, no less than the width of the stairs and a minimum of 36" deep.

D. Handrails are required when 4 or more risers are installed.

E. Guards are required when stairs are located 30" or greater to finished grade. Guards shall be no less than 36" in height from the stair nosing or no less than 34" when combining guardrail and handrail.

