

Residential Deck Construction Guide

City of Wadsworth

120 Maple Street, Wadsworth Ohio 44281

This guide provides information on obtaining deck permits in the City of Wadsworth.

Zoning Permits Are Required for:

- All new deck construction or enlargements.

Building Permits Are Required for:

- All decks attached to the dwelling.
- All decks not attached to the dwelling and 200 or more Square feet.,

Building Permits Not Required for:

- Decks not attached to a dwelling, *and* not more than 20" above grade *and* less than 200 square feet *and* don't serve the main exit door (usually the front door).
- Prepare a Zoning Permit Plan

Step 1) Prepare a Site Plan for the property where the deck is to be built. Provide the distances (setbacks) from the proposed deck to adjacent property lines. Aerial views can be found at <http://www.medinacountyauditor.org/property-search.htm> Some site plans for the property may be on file with the Building Department.

*Required Setbacks

Deck at House Sides:

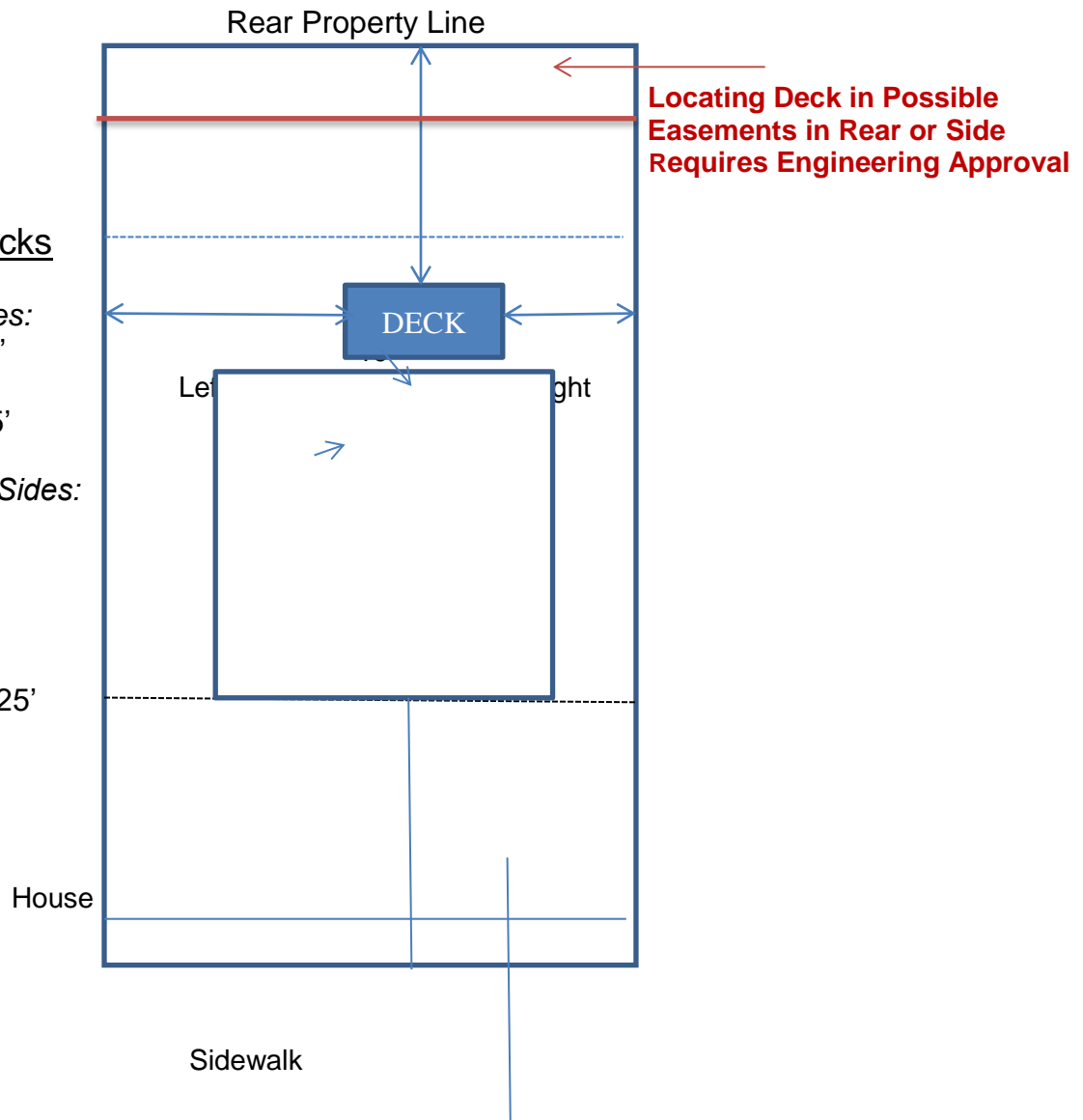
R-1,2,3 = 10'
R-4 = 8'
New PUD's = 7.5'

> 5' Behind House Sides:

All Districts = 5'

Rear:

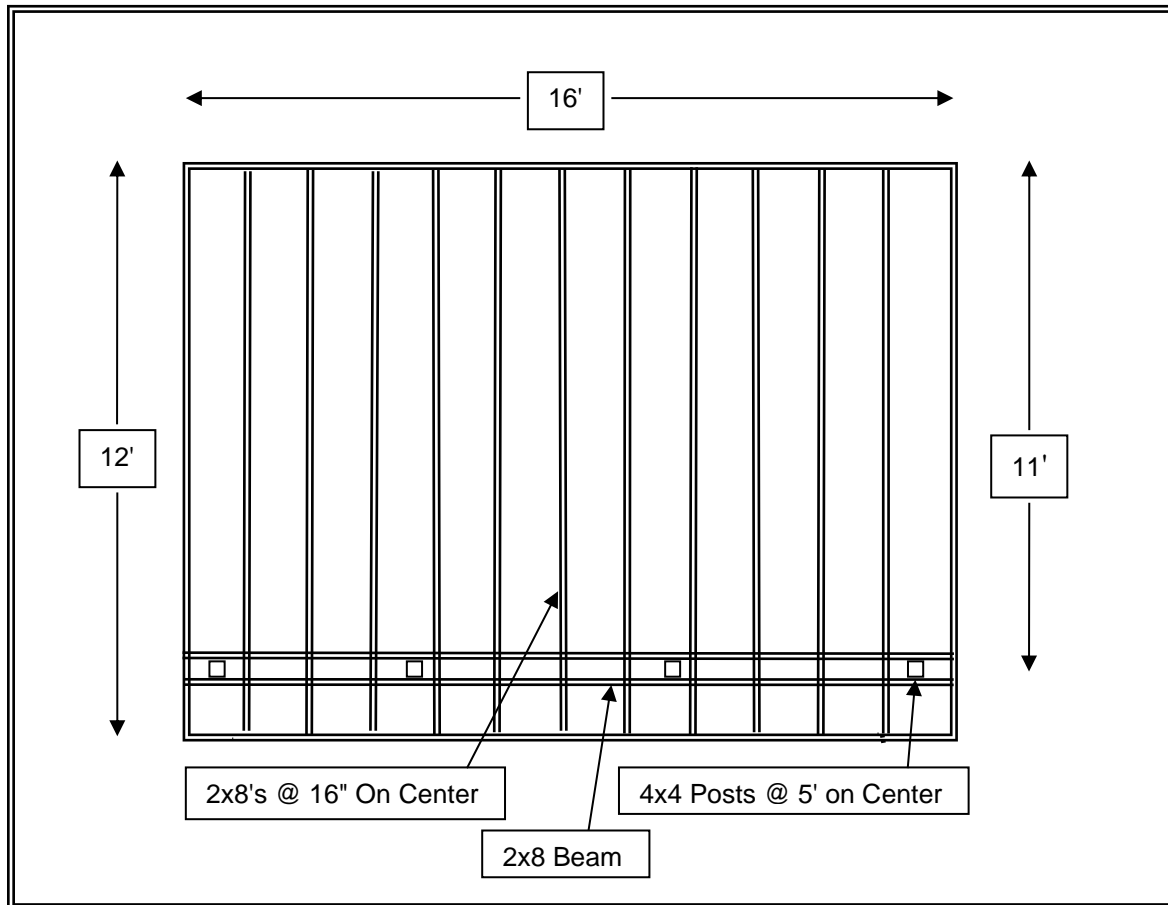
R-1.2.3 = 25'
R-4 = 20'
New PUD's = 20'-25'



*Proposed Deck Locations Involving the Following Require Special Consideration:

- › Decks not meeting the required setbacks for the zoning district require approval from the Board of Zoning Appeals.
- › Deck additions to condominiums require a letter of approval from the condominium association.
- › Decks encroaching into a City utility easement require prior approval from the Wadsworth Engineering Department before zoning approval is granted. Check plot plan for easements.

Step 2) Prepare a Building Plan showing an aerial view of the proposed deck construction.



Building Plans Should Include:

- Completed "Your Deck Design Information" form. (See Below)**
- All deck dimensions, post & beam layout, and house wall cantilevers. (Down-View)
- Height of deck above grade.
- Beam size and spacing.
- Post size and spacing.
- Joist size and spacing.
- Beam connection to posts.
- Joist connections to ledger and beam.
- Ledger attachment to house & flashing.
- Footing size, depth and method.
- Size and type of decking material (e.g., pressure treated wood, vinyl).
- Height, size, type and spacing of guardrail posts and balusters.
- Stair tread and riser details.

YOUR DECK DESIGN INFORMATION

NAME _____ DATE _____

JOB ADDRESS _____

Footer Size (Diameter) 14"(New Min.) 16"18" Other _____

Depth 38" Other _____

Post Size _____" x _____" (4x6 Min. if Beam is Spliced)

Height of Deck Above Grade _____' _____"

Beam Size 2- Pieces 2" x _____" / 1-Piece 2" x _____"

Joist Size 2" x _____" at _____" on center.

Joist Span Between Beams _____ft. - _____inches

Joist Distance Past Beam (Cantilever) _____ft. - _____inches

Distance Between Posts _____ft. - _____inches

Beam/Post Attachment Sits on Top with Bracket Notched into Post Simpson DJT14

Are Any Posts Within 4ft. of Foundation? Yes No

Are Beams in Contact With Ground? Yes No

Do House Walls Extend Past Foundation (Cantilever)? Yes No

Does a Chimney or Bay Window Extend Past Foundation? Yes No

Is Deck Attached to House? Yes No

Is Deck Attached to House Framing Concrete Block

Is Siding to be Removed? Yes No

Are Balusters Planned for Deck and Stairs? Yes No

Are All Fasteners Compatible with Lumber? Yes No

Will Power Lines Be Above Deck? Yes No

Will Deck Cover Furnace/HW Vents? Yes No

Is Hot Tub Planned for Deck? Yes No

**SHOW DECK DIMENSIONS & LOCATION OF POSTS & BEAMS BELOW –
OR ATTACH DRAWING** (Scale Dimensions: 1 SQUARE = 1 FOOT)

-----HOUSE-----

Grid area for drawing deck dimensions and post locations.

Step 3) Permit Application Submission & Payment

- Please submit the Zoning & Building applications & plans at this time by email or mail with an email address included.
- Payments (checks) may accompany the applications if mailed, or be made after permit approval with a credit card by phone.

Deck Permit Fees = Zoning \$ 25 + Building Permit \$50.00 = \$75.00 Total

- Receipts and permits will then be returned by email if possible or mailed.
- Please email or call the office for instructions on handling large sets of plans, or with other questions.

Application Submission: jstefl@wadsworthcity.org **330-335-2753**

Building Code Questions: mnussbaum@wadsworthcity.org **330-335-2780**

Checks Payable to: City of Wadsworth

Mailing Address: Building Department
 City of Wadsworth
 120 Maple Street
 Wadsworth, OH 44281

PERMIT APPLICATION ↓

RESIDENTIAL BUILDING/ZONING PERMIT APPLICATION

CITY OF WADSWORTH 330-335-2753

PERMIT ISSUANCE ____/____/____

PERMIT # _____

Applicant Information – (Applicant is the Owner or Contractor)

APPLICANT/(Owner/Contractor) _____ EMAIL _____
JOB ADDRESS _____
PROJECT DESCRIPTION _____
OWNER _____ PHONE _____
OWNER ADDRESS _____
CONTRACTOR _____ PHONE _____
CONTRACTOR ADDRESS _____ PHONE _____
ESTIMATED COST OF CONSTRUCTION \$ _____ (Cost of Materials and Labor. Excludes Lot.)

DISTANCE FROM FRONT PROPERTY LINE .. _____ BASEMENT AREA _____
DISTANCE FROM LEFT PROPERTY LINE..... _____ FIRST FLOOR LIVING AREA..... _____
DISTANCE FROM RIGHT PROPERTY LINE... _____ SECOND FLOOR LIVING AREA _____
DISTANCE FROM REAR PROPERTY LINE ... _____ GARAGE AREA _____
HEIGHT ABOVE GRADE _____ TOTAL BUILDING AREA (SQ. FT.) .. _____

** (“RIGHT” & “LEFT” ARE LOOKING FROM THE STREET. DISTANCE FROM PROPERTY LINE INCLUDES OVERHANGS, ETC.)*

I HEREBY CERTIFY THAT I AM THE OWNER OF RECORD OF THE NAMED PROPERTY OR THAT I HAVE BEEN AUTHORIZED BY THE OWNER OF RECORD TO MAKE THIS APPLICATION AS HIS AGENT; AND I CERTIFY THAT ALL INFORMATION FURNISHED ON THIS FORM IS ACCURATE; AND I AGREE TO CONFORM TO ALL APPLICABLE CODES OF THE JURISDICTION; AND OBTAIN FINAL INSPECTION APPROVAL BEFORE OCCUPANCY OF THE STRUCTURE. I CERTIFY THAT THE CODE OFFICIAL, OR HIS REPRESENTATIVE, SHALL HAVE AUTHORITY TO ENTER AREAS COVERED BY THIS PERMIT AT ANY REASONABLE HOUR TO ENFORCE PROVISIONS OF THE APPLICABLE CODES. I UNDERSTAND WHAT INSPECTIONS ARE REQUIRED, AND WHEN, AND HOW TO REQUEST AN INSPECTION.

- CALL THE CITY OF WADSWORTH AT 335-2753 FOR BLDG., ELECTRIC, HVAC, INSPECTIONS.
- CALL MEDINA CO. HEALTH DEPT. AT 723-9668 FOR ALL PLUMBING PERMITS.

SIGNATURE OF Owner/Agent _____ DATE _____ ⇒ PRINT NAME _____

Official Use Only – Do Not Write Below This Point

Use _____ Conditional

Plan. Com. Approval Date _____ Zoning District _____
B.Z.A. Approval Date _____ Parcel # _____
In Flood Hazard Area?..... Yes _____ No _____ City Lot # _____

Fee Computation

CONSTRUCTION BASE FEE	\$	50 . 00	BP
TOTAL BUILDING AREA (SQ. FT.)	(x \$.15)	\$	BP
FIREPLACE OR ADDITIONAL HVAC.....	(\$25.00 ea.)	\$	BP
ZONING PERMIT FEE		\$	25 . 00 ZP
RECREATION ACQUISITION FEE		\$	DA
RECREATION DEVELOPMENT FEE		\$	DR
DEMOLITION FEE		\$	PM
OTHER.		\$	
OTHER.		\$	
OTHER.		\$	
TOTAL PERMIT FEES.....		\$	75 . 00

ZONING OFFICIAL / DEPUTY APPROVAL _____ DATE _____

BUILDING OFFICIAL / DEPUTY APPROVAL _____ DATE _____

DECK BUILDING INSPECTION GUIDELINES

City of Wadsworth

Where To Call For Building And Utility Inspections:

Building and Electrical Inspections, 330-335-2753
Wadsworth Communications/Cable Service Installation... 330-335-2888
Wadsworth Electric Service Connections, Toby Blake 330-335-2838

Questions Relating To Zoning And Building Procedures Should Be Directed To:

Jeff Kaiser, Zoning Setbacks330-335-2752
Jennifer Stefl, Permits/Inspections.....330-335-2753
Mark Nussbaum, Building Official.....330-335-2780

Other Utility Information *

OUPS – Call Before You Dig 1-800-362-2764
Dominion Gas 1-800-362-7557
Frontier Communications (Telephone) 1-877-844-7196

**Utility locations available at City Engineering Dept..*

The City of Wadsworth Building Department is located on the second floor of City Hall, located at 120 Maple Street, Wadsworth Ohio. Business hours are Monday through Friday from 7:30 a.m. to 4:30 p.m. (Credit cards are only accepted after 8:30 a.m.).

Building inspections should be requested by 9:00 a.m. the day the inspection is needed by scheduling an inspection at (330) 335-2753 or leaving a message on voice mail, which is available 24 hours a day.

Following is a Schedule of Building Inspections for Deck Construction:

- **Footer** - Deck construction holes are inspected for width, depth, and location before concrete is poured. The perimeter of the proposed construction should be clearly marked by stakes, string or paint, and the property lines should be indicated. You may also call for a pre-footer "Stake" inspection before the holes are dug if there is any question whether the proposed deck will encroach into the required setbacks or easement.
REQUIRED FOR ALL DECKS WHEN HOLES ARE DUG.
- **Rough Frame** - Deck framing is inspected before flooring and railings are installed. A frame inspection *may* not be required for "Weekend Decks" that are over 3' above grade, and in compliance with approved plans and plan review. Please contact inspector. **REQUIRED WHEN DECKS ARE FRAMED, BUT BEFORE DECKING IS INSTALLED.**
- **Final Building Inspection** - **REQUIRED FOR ALL DECKS WHEN COMPLETED.**

ADDITIONAL BUILDING REQUIREMENTS:

1) Accessible permit and visible address numbers must be posted at jobsite to receive inspections.

<p>2) Footer Depth is 38" to bottom of hole. Footer size example: Deck area = how many sq.ft. supported by each post → <u>14' deep x 16' wide (224 sq.ft.) deck attached to house:</u> ½ the deck (7' x16') is bearing on the posts. Total 112 sq.ft. If deck has 3 posts, each post supports 37.3 sq. ft. Footer = 14" diameter.</p> <p>3) All posts within 48" of the foundation (approximate foundation overdig), must extend to the house footer depth (basement), in houses less than ten years old, to reduce settling. Decks may instead attached to the foundation. Beams may only be attached to ledger if 4' or less from a post. (Decks not attached to houses are taxed the same as attached decks).</p>	Deck Footing Size		
	Deck Area Sq'	Diameter	Thickness
	20	14	6
	30	14	6
	40	14	6
	50	16	6
	60	17	6
	70	18	7
	80	19	7
100	21	8	

4) Beams must bear on post tops with mounting brackets; bear on notched posts with thru bolts; or be bolted to post sides with 2 Simpson DJT14 Deck Ties (or equivalent) with 5/8" bolts –(maximum supported deck area per post of 48 ft² - 2320 lbs.)

Beams / joists in contact with soil must be rated "**Ground Contact.**" Min. 4A rating. Splices must be over 6" post.

- Max Post Height = 4x4 - 6'9" for 3 ply Beams; 8' for 1-2 Ply Beams, 4x6 - 8', 6x6 - 14'.
- Post-Frame designs supporting room above require 6x6 posts and full bearing on post.

5) 2x8 Minimum SYP Ledgers attached to house min.2x8 rim. Siding must be removed and a flashing material, non-reactive with treated lumber, installed under upper siding & over the ledger or to a point below the sill plate. **NO BARE ALUMINUM FLASHING.** Ledger boards cannot be supported by face-brick. Beams (supporting more than 550 lbs. total load) cannot be supported by ledger. See on center ledger fastener pacing requirements below:

- 6) All anchors must be corrosion resistant with washers. Fill cells of concrete block with concrete/mortar prior to installing ½" dia. approved epoxy anchors, or use other approved anchors per manufacture's instructions.
- 7) Decks must be adequately braced to resist horizontal forces. Additional devices may be required for decks higher than 4' above grade. Examples include 5-1/2" lag screws into house joist ends, diagonal bracing, or fasteners similar to Simpson DTT2Z tension devices installed on deck ends. Decks > 6' above grade need diagonal bracing from post to beam, or brackets designed to resist lateral forces.
- 8) Decks supported by 24" 2x10 cantilevers from bay windows and fireplaces, must have a support beam no farther than 29" from cantilever. Otherwise use double header with double joists; or install support beam.
- 9) Joist spans 16" o.c.: Treated #2 Southern Pine (2x6 - 9'-0"). (2x8 -11'-10). (2x10 - 14'-0"). (2x12 -16'- 6").
- 10) Joists shall be attached on top of beams with 3-8-d nails, or other approved mechanical fastener. Joists attached flush with ledgers or beams shall have full height (60%) u-shaped, galvanized hangers, fully nailed.
- 11) Stairs stringers must be fully bearing on deck at top and attached to deck rim with sloped hangers or other positive attachment. **Stairs must be supported at ground by posts or concrete/masonry pad.** Notched stringers can span a maximum 7', without additional support..
- 12) Stair width minimum is 36". Stair run minimum is 9"from nosing to nosing + ¾" - 1 ¼" nosing = 9-3/4" tread depth. Riser max 8 ¼". Run/Rise not to vary more than 3/8". **A handrail with a perimeter of not more than 6-1/4" or diameter between 1-1/4 and 2" (i.e. a 2x2), is required on 1 side where 4 or more risers exist.** 36" guardrails, with balusters spaced 4-1/2" between, and solid risers are required on stairs and landings that are 30" above grade. Maximum rise of a flight of stairs is 12'.
- 13) All nails, bolts, screws, & hangers must be hot dipped galvanized, stainless steel, or have a zinc 185 coating. Aluminum flashing must be separated from copper based treated wood.
- 14) Furnace or hot water heater vents must be 12" above deck surface or grade, and 12" below deck framing if under deck and deck is open on two sides, and if permitted by appliance manufacturer. Maintain 12" to windows/doors.
- 15) Deck floor surface, stairways or ramps must be 10 feet below overhead service. Meters must be accessible and have 3" clearance to railings and deck framing. AC units must maintain clearance by manufacturer.
- 16) A 3'x3' landing is required at all exterior doors 30" above grade.
- 17) Prefabricated floor panels must be designed by an approved design professional.
 - Decks not exceeding 200 square feet that are not more than 30 inches above grade at any point, are not attached to a dwelling, and do not serve the main exit door (front) do not require building permits
 - Free-standing decks consisting of joists directly supported on grade do not require footers.
 - Pier block may be used for free standing decks not exceeding 200 square feet, that are no more than 20 inches above grade, where the joists bear directly on pier blocks at grade (no beams).
 - Freestanding decks must have footers that are a minimum of 12 inches below the undisturbed ground surface.

2019 Structural Deck Component Tables

Ledger to House Rim Fastening						
Joist Span/ Fastener Spacing	6' & Less	6'1" to 8'	8'1" to 10'	10'1" to 12'	12'1" to 14'	14'1" to 16'
½" x 3 ½" Lags	30" (o.c.)	23	18	15	13	11
5/16" x 3 ½" Ledgerloks	24	18	14	12	10	9
½" Carriage Bolts	36	36	34	29	24	21
1" EWP w/Ledgerloks	25	19	15	12	10	6
Solid Concrete Fasteners	24	18	14	12	10	9
¼" Tapcon Hollow Block	15	12	8	8	6	6

*DECK BEAM SPAN LENGTHS								
	Size	Deck Joist Spans (feet - inches)						
		6' 18"	8'	10'	12'	14'	16'	
Beam Spans for Southern Pine #2 Wet Service Factor	1-2x6	4-11	4-0	3-7	3-3	3-0	2-10	2-8
	1-2x8	5-11	5-1	4-7	4-2	3-10	3-7	3-5
	1-2x10	7-0	6-0	5-5	4-11	4-7	4-3	4-0
	1-2x12	8-3	7-1	6-4	5-10	5-5	5-0	4-9
	2-2x6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2-2x8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2-2x10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	2-2x12	12-2	10-7	9-5	8-7	8-0	7-6	7-0

* Loads determined from one side of beam only. Cantilevered joists may reduce these spans.

	Size	Allowable Joist Span			Maximum Cantilever		
		Deck Joist Spacing			Deck Joist Spacing with Cantilevers		
		12"	16"	24"	12"	16"	24"
Southern Pine #2 Wet Service Factor	2x6	9-11	9-0	7-7	1-3	1-4	1-6
	2x8	13-11	11-10	9-8	2-1	2-3	2-5
	2x10	16-2	14-0	11-5	3-4	3-6	2-0
	2x12	10-0	16-6	13-6	4-6	4-2	3-4

See Framing Details in the 2019 Ohio Residential Deck Code at www.wadsworthcity.com.