CITY OF AUSTIN
500 Fourth Avenue N.E.
Austin, Minnesota 55912-3773

Building Department

507-437-9950 Fax 507-437-7101

RESIDENTIAL DECKS / PORCHES

*A Building permit is required for any alteration or addition to any existing building or structure. *MN State Building Code Section 1300.0120 Subpart 1*. Permit may be applied for at the Austin Building Department.

NOTE: We require contractors and homeowners to allow 15 working days for the city to review your site drawings and plans, as well as compliance to MN State Building Code. When the review process has been completed the City Building Department will contact you after the review is complete and at that time you will pay any applicable permit fees and be allowed to commence work on your project. No work shall be started without prior approval by the Building Official.

PERMITS: A building permit is required for construction of deck or porch that is more than 30" above grade. Decks 30" or less built over any basement or story below also requires a building permit. For all other decks 30" or less a zoning permit is required. **Decks that are attached to a structure with frost footing regardless of height will also require a building permit. MN Building Code 1300.0120** **Decks requiring a zoning permit are not required to adhere to the Minnesota Residential Code, but it is highly recommended**

PERMIT APPLICATION: Permit application must contain the following:

1. Plot drawing that indicates:
   a. Location of house
   b. Future deck/porch
   c. Distance to all lot lines
   d. Drainage/utility easements (if any)

   (Sheet for plot drawing is attached to this form)

2. Plan drawing that indicates:
   a. Size and layout of deck/porch
   b. Size of footings, posts, beams, joists, and decking. (See attached form)

INSPECTIONS: (Contractor or owner are responsible for requesting the necessary inspections)

DECKS:
1. Footing inspection
2. Framing inspection
3. Final inspection

PORCHES:
1. Footing inspection required
2. Framing inspection required
3. Insulation inspection if requested
4. Final inspection required

Setbacks:

a) Decks up to 18" above the surrounding grade as measured to the top of the floor of the deck may extend into the required front yard a distance not to exceed 8', but shall not in any case be nearer than 15' from the front property line

of any lot of record not exceeding 70' of lot frontage, nor extend beyond the sides of the exterior wall directly adjacent to the front yard area.

b) Decks higher than 18" above the surrounding grade as measured to the top of the floor of the deck may extend into the required front yard a distance not to exceed 6', but in no case shall the deck be nearer than 15' to the front property line or any lot of record not exceeding 70' of lot frontage, nor extend beyond the sides of the exterior wall directly adjacent to the front yard area.

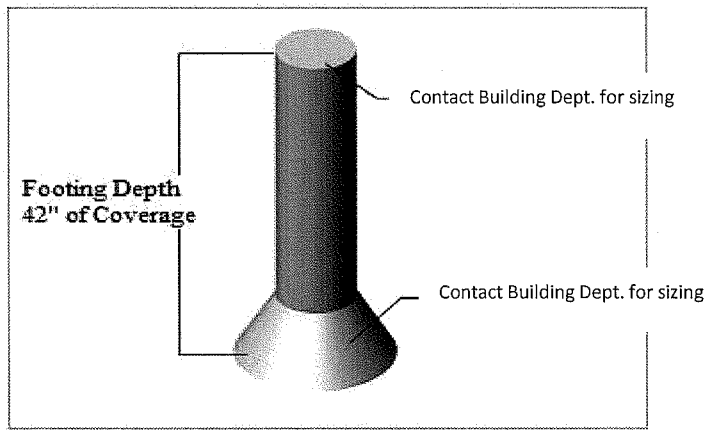
c) Decks to be constructed in front yard setback areas of recorded lots exceeding 70' of lot frontage shall be limited to 50 sq.ft. in area, and shall not extend into required front yard areas more than 5'.

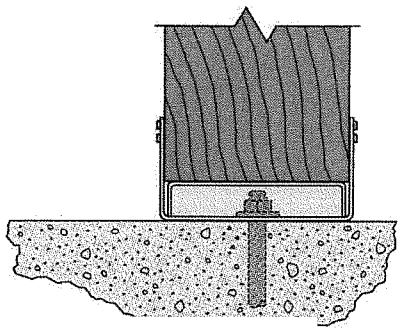
Call Gopher State One at 1-800-252-1166 to identify utility locations prior to digging!

Utility Service Line Relocation:

If a customer creates a condition, such as construction a deck, that in the judgment of the Austin Utilities make it necessary to relocate the natural gas service line, and if that service line is of current standards of quality and construction and the meter is set outside, then the Austin Utilities will relocate the service line as a cost to the customer of time and material. The customer will be required to pipe the fuel line to connect with the new meter set location.

Frost Footings: **Footings** are **required** for any deck **attached to a dwelling** or any other structure that has frost footings. The **minimum depth** to the base of the footings is **42 inches**. The **base** of a column footing **must be flared,** or extended, at least **4 inches** greater in diameter than the remainder of the column. **Cedar posts** must be protected **against direct contact** with the ground, concrete, or moisture. If the materials used for posts are not rated for ground contact, the concrete piers **must protrude** above grade a **minimum** of **6 inches**.



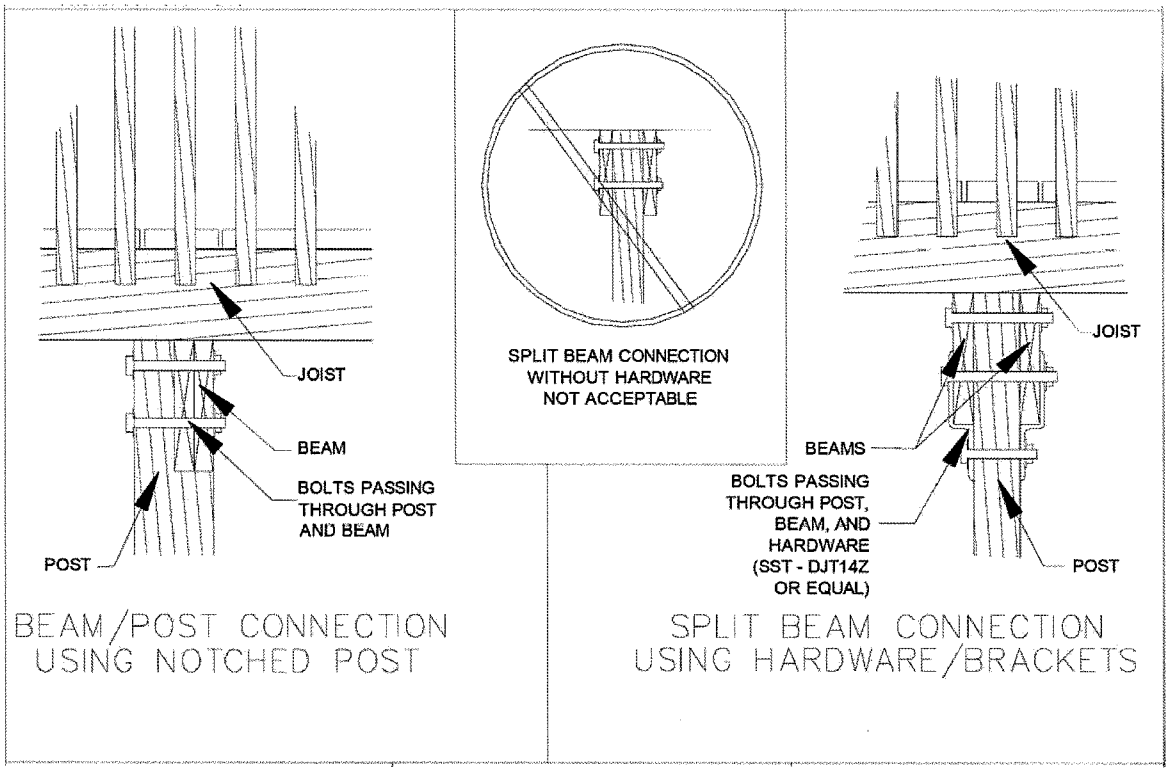


Post to Footing Connection

Loads: All decks shall be designed to support a **live load** (people, furniture, grills, etc.) of **40lbs** per square foot, and a **dead load** (wood, decking, etc.) of **15 lbs** per square foot.R301.4,R301.5

Posts and Beams: Posts **must be centered** on the concrete pier over the footing and **securely fastened** to the concrete so as to resist both **uplift and lateral displacement.** R501.2 & R301.1 **Splices** in beams **must be centered** over posts. Beams made of 2x10 (or larger) materials require **3 - ½ inch diameter bolts** connecting the beam to the posts. 2x8 (or smaller material) beams require **2 - ½ inch diameter bolts. Beams** setting **atop posts** must be **fully anchored** with appropriate fasteners to resist uplift and lateral displacement. **Each joist must be**

connected to the **beam** with the proper fastening criteria using either nails or "hurricane clips". **BEAM MEMBERS SHOULD BE NAILED TOGETHER ACCORDING TO CODE SPECIFICATIONS.** R602.3 SPLIT **BEAM ATTACHMENT TO POSTS IS NOT ACCEPTABLE AND WILL REQUIREADDITIONAL MEANS OF SUPPORT FOR THE BEAM.**



Ledger Attachment: Different loads require different attachment. Please refer to the **Ledger Attachment Table** provided in this hand-out. ***Cantilever Attachment: DECKS CANNOT BE SUPPORTED BY CANTILEVERS*** *extending from the primary structure, or from another deck. Exceptions are granted only if* ***proof is provided*** *of the capability of the cantilevers to give such support.*

TABLE R507.2 FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH-NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST[c, f, g] (Deck live load = 40 psf, deck dead load = 10 psf)

JOIST SPAN	6' and less	6' 1" to 8'	8' 1" to 10'	10' 1" to 12'	12' 1" to 14'	14' 1" to 16'	16' 1" to 18'
Connection details	On-center spacing of fasteners[d, e]						
1/2 inch diameter lag screw with 15/32 inch maximum sheathing[a]	30	23	18	15	13	11	10
1/2 inch diameter bolt with 15/32 inch maximum sheathing	36	36	34	29	24	21	19

1/2 inch diameter bolt with 15/32 inch maximum sheathing and 1/2 inch stacked washers[b, h]	36	36	29	24	21	18	16

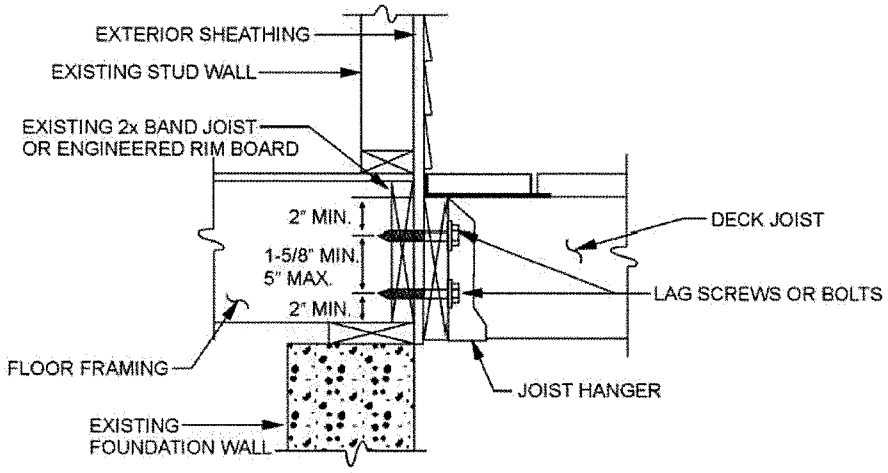
R507.2.1 Placement of lag screws or bolts in deck ledgers and band joists.
The lag screws or bolts in deck ledgers and band joists shall be placed in accordance with Table R507.2.1 and Figures R507.2.1(1) and R507.2.1(2).

TABLE 507.2.1

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS				
	TOP EDGE	**BOTTOM EDGE**	**ENDS**	**ROW SPACING**
Ledger[a]	2 inches[d]	1/4 inch	2 inches[b]	1 5/8 inches[b]
Band Joist[c]	3/4 inch	2 inches	2 inches[b]	1 5/8 inches[b]

For SI: 1 inch = 25.4 mm.

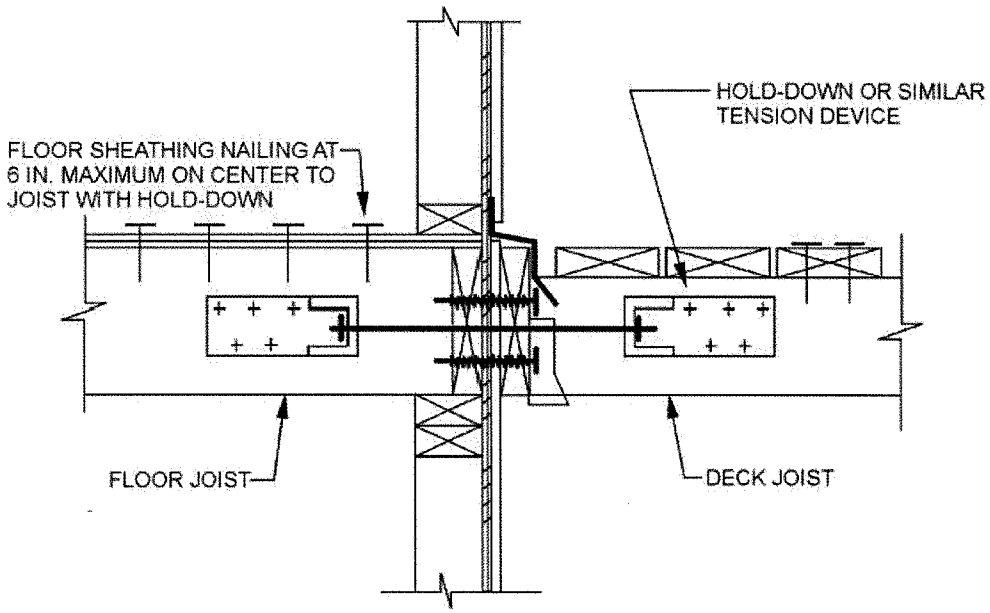
FIGURE R507.2.1(1) PLACEMENT OF LAG SCREWS AND BOLTS IN LEDGERS



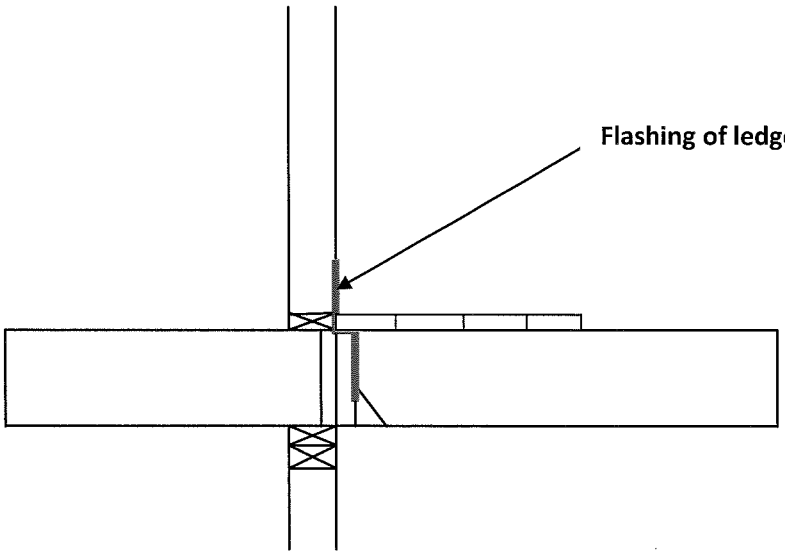
For SI: 1 inch = 25.4 mm.

FIGURE R507.2.1(2) PLACEMENT OF LAG SCREWS AND BOLTS IN BAND JOISTS

Lateral load connection: The lateral load connection required by Section R507.1 shall be permitted to be in accordance with Figure R507.2.3. Where the lateral load connection is provided in accordance with Figure R507.2.3, hold-down tension devices shall be installed in not less than two locations per deck, and each device shall have an allowable stress design capacity of not less than 1500 pounds (6672 N).



Flashing: **All connections** between deck and dwelling **shall be weatherproof**. Any cuts in the exterior finish **shall be flashed**. Flashing of the **ledger** at the point of connection to the **house** is especially **critical.** R703.8

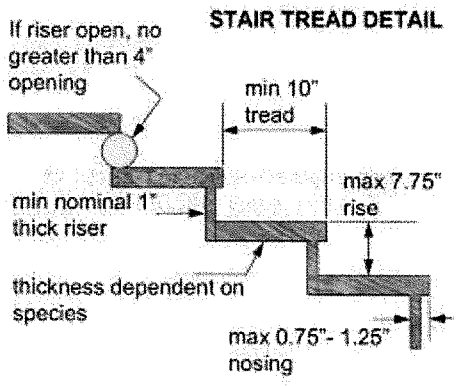


Cantilevers/Overhanging Joists and Beams: **Joists** should **not overhang beams** by more than **2 feet,** and **beams** must **not overhang posts** by more than **1 foot** unless a special design is approved.

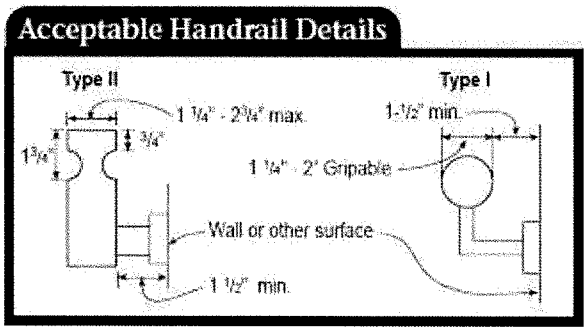
Floor Joist Spans: The following tabe shows the max spans for Southern Pine #2 (AC2) acording to the 2015 Minnesota Residential Code. Table represents 40 psf of live load and 10 psf of dead load with a deflection equal to 360.

Joist Spacing	Species & Grade	2x6	2x8	2x10	2x12
12inch	Southern Pine #2 (AC2)	10-9 (ft.-in.)	14-2 (ft.-in.)	18-0 (ft.-in.)	21-9 (ft.-in.)
16inch	Southern Pine #2 (AC2)	9-9 (ft.-in.)	12-10 (ft.-in.)	16-1 (ft.-in.)	18-10 (ft.-in.)
19.2inch	Southern Pine #2 (AC2)	9-2 (ft.-in.)	12-1 (ft.-in.)	14-8 (ft.-in.)	17-2 (ft.-in.)
24inch	Southern Pine #2 (AC2)	8-6 (ft.-in.)	11-0 (ft.-in.)	13-1 (ft.-in.)	15-5 (ft.-in.)

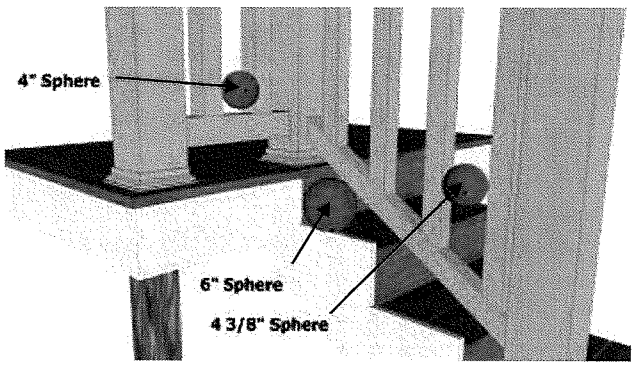
Stairs: **Minimum width is 36 inches. Maximum riser height is 7 ¾ inches. Minimum tread depth is 10 inches.** Treads with a depth less than 11 inches must have compliant nosing. **Largest tread depth or riser height shall not exceed the smallest** by more then **3/8 inch** across the run of the stairs. **Treads shall be level**, (a slope no greater than 2% is permitted). R311.5 **Lighting** capable of illuminating the treads and landings **is required**, shall be located in the immediate vicinity of the top landing, and may be activated from inside the dwelling. R303.7



Handrails: Stairways having **4 or more risers** shall have at **least 1 handrail**. The top of the handrail **shall not be less than 34 inches or more than 38 inches above the nosing of the treads**. Handrails shall be **continuous** for the full length of the stairs shall **protrude** from the adjoining surface by at least **1 ½ inches**, but **no more than 4 ½ inches**, and the ends shall be returned or terminated into posts. **Handrails with a circular cross section** shall have an outside diameter of **not less than 1-1 ¼ inches** or **more than 2 inches**. Other handrails may be acceptable. See the specific code language to be sure your handrail does comply. R311.8.3



Guardrails: A guardrail is **required** on all decks, or any portion of a deck, more than 30 inches above grade or above a lower deck. Deck **guardrails must** be **36 inches high**. Open guardrails on decks must have intermediate rails (balusters) or an ornamental pattern that a **4 inch sphere** cannot pass through. **Guardrails on stairs** cannot have an **opening** between balusters that a **4 3/8 inch sphere** can pass through. R312.1



Landings: There shall be a **landing at the top and bottom of stairs**. Landings must be as **wide as the stairs they serve**, have a **minimum length of 36 inches** in direction of travel. 311.7.6 Floor landings at Ext Doors shall comply with section R311.3

Nails and Screws: Use only stainless steel, hot-dipped zinc-coated galvanized steel, silicon bronze, copper, or polymer-coated fasteners for attachment to pressure-preservative treated wood. Ask your materials supplier for an approved fastener. R319.3 **SCREWS CANNOT BE USED TO ATTACH JOIST HANGERS.**

Wood Required: All **exposed wood** must be **approved, treated** material. Grade **stamps and tags** must be **visible** to the inspector and **must meet the exposure criteria** to which they will be subjected (above ground, ground contact, etc.). R317 Untreated or landscaping-type materials will be rejected. Cedar and redwood are also approved; however **cedar cannot** be in **direct contact** with either **soil or concrete. OTHER DECK MATERIALS (composites, plastic, etc.) MUST BE LISTED BY AN APPROVED EVALUATION SERVICE AND APPROVED BY THE BUILDING OFFICIAL.** Ask your lumber supplier for help selecting the proper material, or the building department for a list of approved materials.

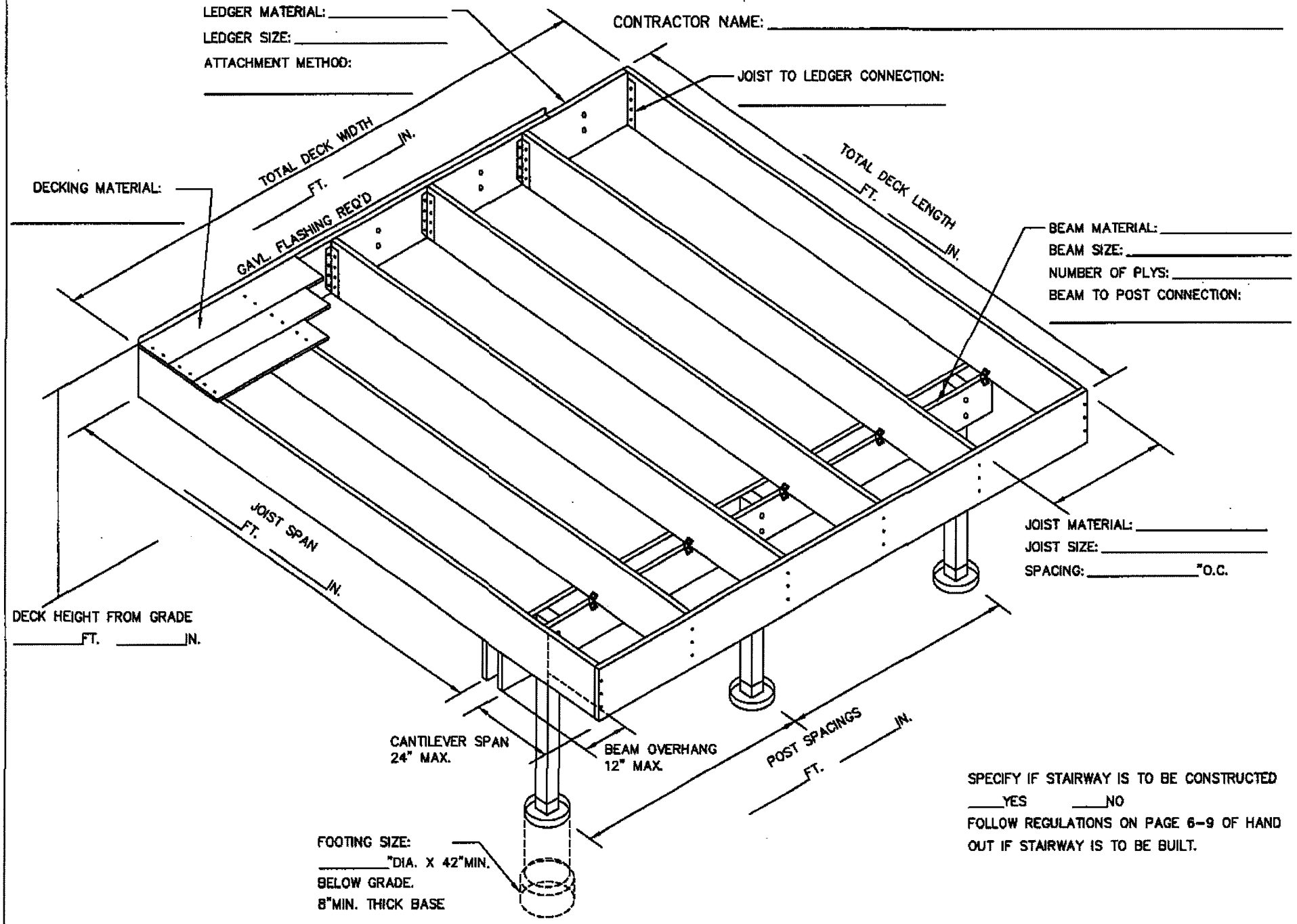
The language & depictions in this hand out is meant as a guide for the construction code & building process and may not contain exact code language. For exact code you may go online at www.revisor.mn.gov or contact the Austin Building Department.

DECK PLAN

SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE: _____

LOCATION OF WORK TO BE DONE: _____

CONTRACTOR NAME: _____



SPECIFY IF STAIRWAY IS TO BE CONSTRUCTED

_____YES _____NO

FOLLOW REGULATIONS ON PAGE 6-9 OF HAND OUT IF STAIRWAY IS TO BE BUILT.

PLOT PLAN

ADDRESS: _____

LEGAL DESCRIPTION: _____

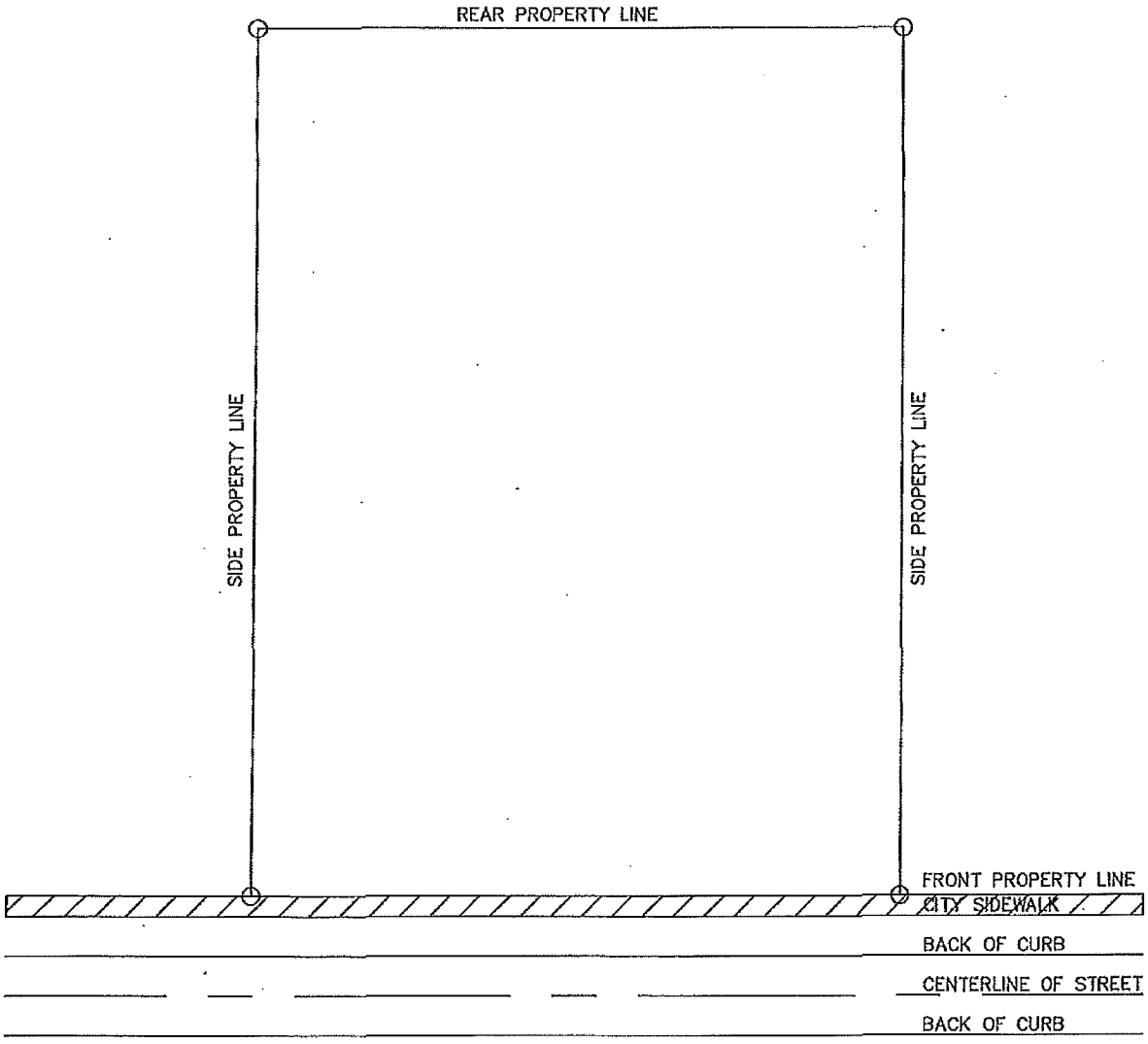
LOT BLOCK ADDITION

SITE AREA: _____ SQ. FT. AREA OF SITE OCCUPIED BY BUILDING: _____ SQ. FT.

INSTRUCTIONS TO APPLICANT: COVERAGE PERCENTAGE: _____ %

FOR NEW BUILDINGS AND BUILDING ADDITIONS THE FOLLOWING INFORMATION MUST BE PROVIDED IN THE SPACE BELOW:

1) Location of proposed construction and existing improvements.
2) Show buildings (square footage) and setback distances of existing buildings and new structures.
    a) How far the new building will be away from the front property line.
    b) How far the new building will be away from the side property line.
    c) How far the new building will be away from the rear property line.
    d) How for the new building will be away from existing structures.
3) Show easements.
4) Indicate whether property is a corner lot.
5) Show street and avenue location.



SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE: _____

RESIDENTIAL MINIMUM REQUIRED YARD SETBACKS

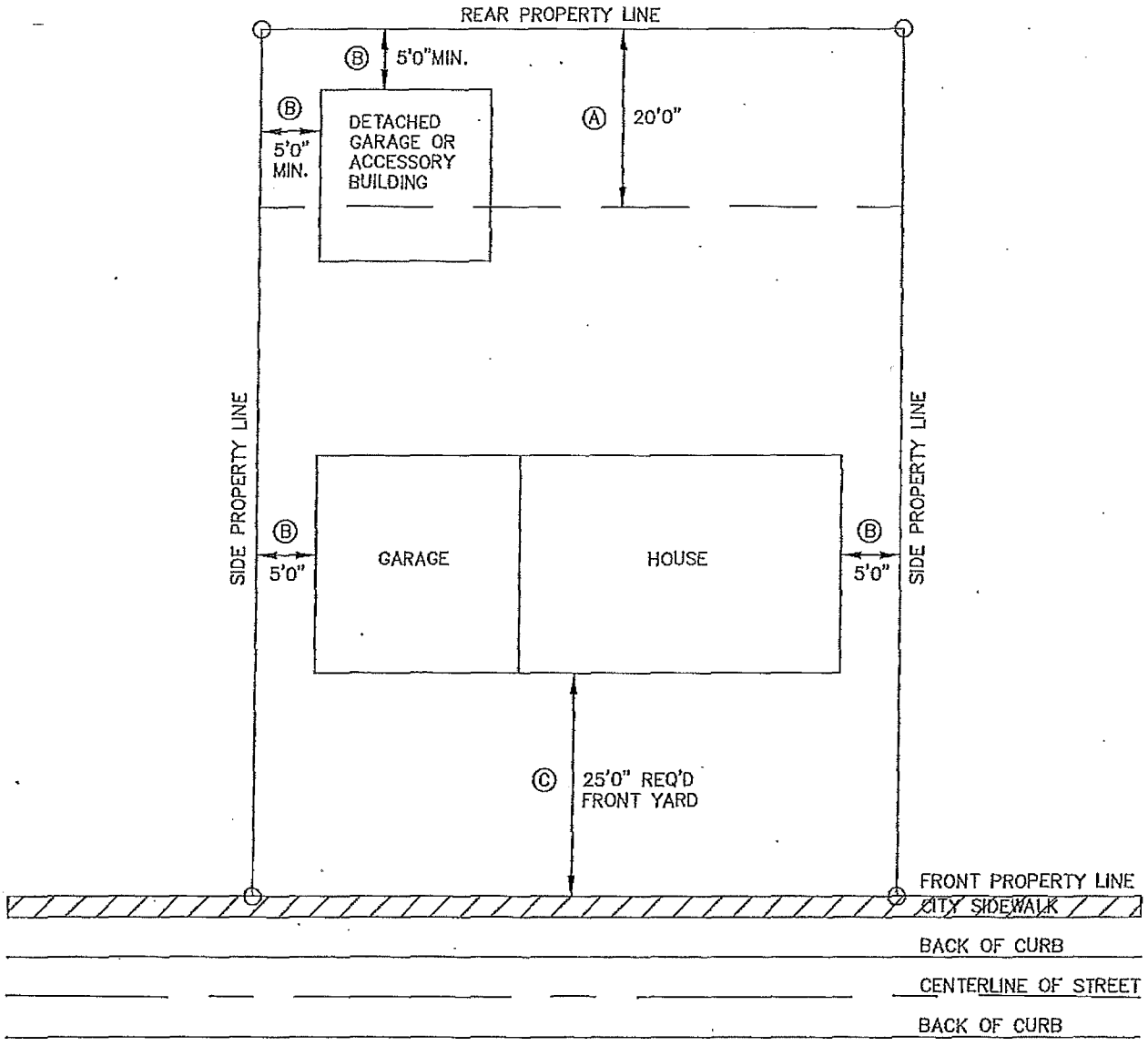
SETBACKS

"A" Rear Yard — R1 = 20' 0" required to rear property line.
"B" Side Yard — 5' minimum on interior side yards. Minimum corner side yard setbacks.
"C" Front Yard — R1 = 25' 0" minimum.

OTHER DEVELOPMENT RESTRICTIONS

Maximum structure lot coverage 40%
Maximum accessory buildings limited to 1,000 sq. ft.

Average Depth of Front Yards. In any District where front yards are required, whenever the average depth of at least two existing front yards on lots within one hundred (100) feet of the lot in question and within the same block is less or greater than the least front yard depth prescribed elsewhere in this Chapter, the required depth of the front yard on such lot may be modified, In such cases, this shall not be less than the average depth of said existing front yards on the two lots immediately adjoining or in the case of a corner lot, the depth of the front yard on the lot immediately adjoining.



SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE: _____