



RESIDENTIAL DECK INFORMATION PACKET

THIS PACKET CONTAINS INFORMATION REGARDING ITEMS THAT NEED TO BE SUBMITTED AT THE TIME OF APPLICATION FOR A DECK

REQUIRED SUBMITTALS AT TIME OF APPLICATION:

- Building Permit Application
- Complete set of building plans
- Copy of Plat of Survey with deck shown and distances from lot line marked

RESIDENTIAL SITE PLAN REQUIREMENTS:

COPY OF A CURRENT PLAT OF SURVEY MUST INCLUDE THE FOLLOWING:

- A legible copy that includes the legal description, the surveyor's name and date of survey.
- Proposed new construction must be drawn to scale, include exterior dimensions and indicate the distance from deck to the property lines
- Location of existing well and septic system must be shown.
- The Plat of Survey must be separate from any building plans.
- Plat of Survey must include all existing buildings, driveways, improvements and easements

** For parcels located in a flood plain, contact the Water Resources Department for additional requirements.**

BUILDING & ZONING SETBACK RULES & REGULATIONS:

DECKS:

Decks and Patios not over three (3) feet above grade and not roofed over may encroach into a setback area, but must stay three (3) feet from any easement.

PERMIT FEES FOR DECKS:

Fees are \$75.00 per 100 square feet (\$300.00 minimum fee) plus 25% plan review (\$100.00 minimum fee)

WOOD DECK PLAN REQUIREMENTS:

1. One (1) set of the building plans, drawn at 1/4" to 1'-0 scale.
2. The building plans must show the following:
 - The overall size of the deck features a plain view.
 - The locations with dimensions of all piers, beams, stairs and the direction of joists.
 - The minimum pier footing is 8" thick and 12" diameter. Required deck pier footing depths are 42" for structures with frost footings and 24" deep for free standing decks (decks not attached to houses).
 - The loading on the deck is 40# live and 10# dead load for each square foot of deck surface including the stairs. Specify the soil pounds per square foot bearing capacity at the building site or a 3000-pound per square foot minimum soil pressure will be assumed. Design the pier sizes and locations to support the imposed loads.
 - Show the grade, species and size of the lumber used. The lumber must be rot resistant or a treated material.
 - Raised floor areas a total of 30 inches above the ground shall have guardrails. The minimum height of platform guardrails shall be 36 inches and railings on the open side of stairs shall be 34" to 38". Open side of stairs with a total rise of less than 30" require a handrail only.
 - Guardrail opening limitations will not allow passage of a 4" diameter sphere.
 - The ledger board must be attached directly to the wood framing of the structure or concrete foundation by a bolted connection. Use *W* diameter bolts with washers - staggered 16" oc. for ledger attachment to structure. Concrete anchors must be a minimum of six (6) inches in length. Ledger boards are prohibited from attachment thru siding.
 - Ledger board attachment thru any stone veneer must be designed by an Illinois registered structural engineer or architect.
 - Provide continuous flashing, with drip edge, over the ledger board.
 - Lateral Load Tensioning Devices (Min. 2) are required on all decks per R 507
 - Free Standing and attached decks require lateral bracing in both directions on the comers.
 - If you are building a multi level deck configuration, then show the decks in "plan view" marked; upper deck, lower deck, etc. and a section thru each level step-up to show the construction.
 - Post-base anchors are required for all posts or beams "setting-on" any type of foundation system. Exception: Post "setting-on" footings 42" or more below grade.
 - Show the distance of the deck floor above the ground.
 - "Ready-mix" concrete is required, no "dry-mix" dumped into the footings.
 - Handrail grip-size R311 IRC code section "Means of Egress" shall apply to exterior decks. Grip sizes: Type I: 1-1/4" to 2" Dia. Or Type II: 1-1/4" to 2-3 /4" grip width above the grip recess. Grip recess: see code for the size and location.
 - Open and closed riser stairs, show what type to be used follow R311• Profile" Open rise are permitted, provided that the opening between treads does not permit the passage of a 4" sphere



RESIDENTIAL DESIGN CRITERIA

(Include this information on building plans)

FLOOR	40# LL 10# DL ALL AREAS EXCEPT SLEEPING
FLOOR	30# LL 10# DL SLEEPING AREAS
WALLS	60# PLF OR ACTUAL
CEILINGS	20# LL 10# DL
	10# LL 5# DL ROOF SLOPES NOT OVER 3 IN 12
ROOF	30# LL 10# DL
CATHEDRAL	30# LL 15# DL
EXT. DECKS	40# LL 10# DL
EXT. BALCONY	60# LL 10# DL

FRAMING LUMBER

2012 National Design Specification

(Floor, Joists, Ceilings Joists, Rafters, Headers and Beams)

Grade _____ Species _____

Domestic or Canadian Base FB (Circle One)

SOUTHERN PINE OR MIXED SOUTHERN PINE LUMBER

Grade _____ Species _____

Pressure Treated: YES or NO (Circle One)



RESIDENTIAL DESIGN CRITERIA

(Include this information on building plans)

ENGINEERED WOOD PRODUCT

(Beams and Girders)

Manufacturer _____ Product Type _____
(LVL, PSL, LSL, GLU-LAM)

Size _____ FB= _____ E= _____

Pressure Treated: YES or NO

ENGINEERED WOOD PRODUCT

(I- Joist)

Manufacturer _____ Series # _____ Size _____

ENGINEERED WOOD PRODUCT

(Studs & Columns)

Manufacturer _____ Product Type _____

Pressure Treated: YES or NO

R507 Deck Ledger Board Connection Requirements

FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH-NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST^{1,2} (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'
On-center spacing of fasteners ^{4,*}							
1/2 inch diameter lag screw with 1 1/2 inch maximum sheathing ^a	30	23	18	15	13	11	10
1/2 inch diameter bolt with 1 1/2 inch maximum sheathing	36	36	34	29	24	21	19
1/2 inch diameter bolt with 1 1/2 inch maximum sheathing and 1/2 inch stacked washers ^{b,h}	36	36	29	24	21	18	16

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

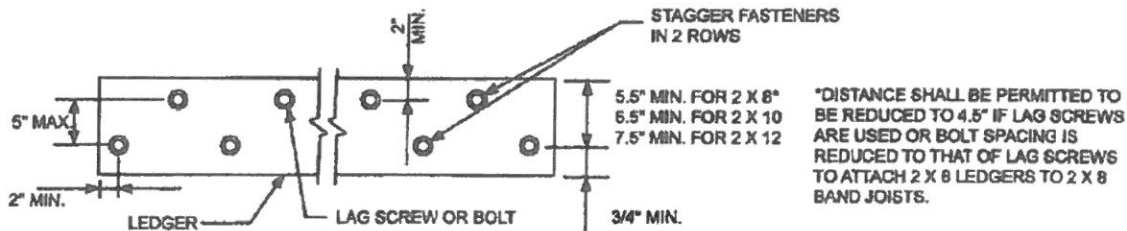
- The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- The maximum gap between the face of the ledger board and face of the wall sheathing shall be 1/2 inch.
- Ledgers shall be flashed to prevent water from contacting the house band joist.
- Lag screws and bolts shall be staggered in accordance with Section R507.2.1.
- Deck ledger shall be minimum 2 x 8 pressure-preservative-treated No. 2 grade lumber, or other approved materials as established by standard engineering practice.
- When solid-sawn pressure-preservative-treated deck ledgers are attached to a minimum 1-inch-thick engineered wood product (structural composite lumber, laminated veneer lumber or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.
- A minimum 1 x 9 1/2 Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.
- Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.

PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

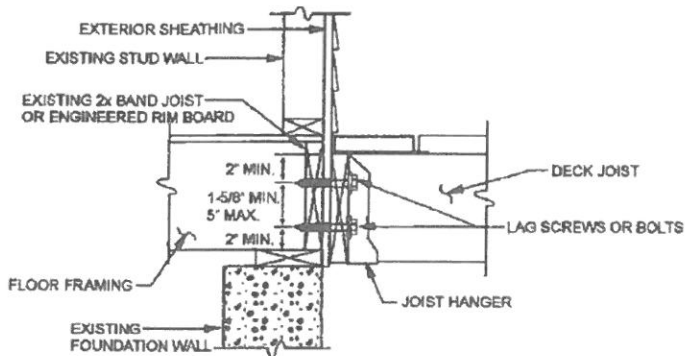
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
Ledger ^a	2 inches ^d	1/4 inch	2 inches ^b	1 3/4 inches ^b
Band Joist ^c	3/4 inch	2 inches	2 inches ^b	1 3/4 inches ^b

For SI: 1 inch = 25.4 mm.

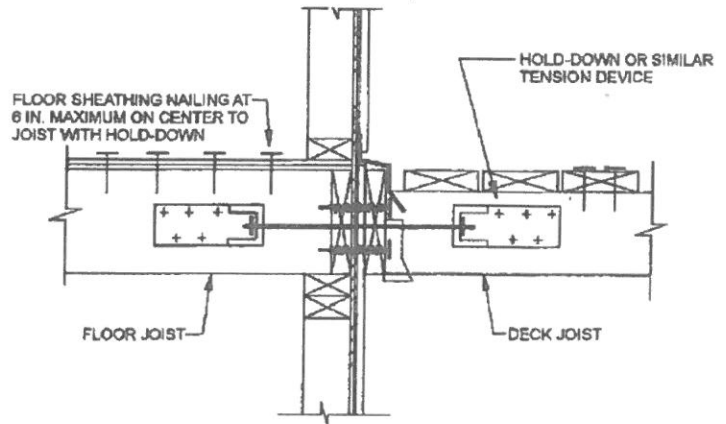
- Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure R507.2.1(1).
- Maximum 5 inches.
- For engineered rim joists, the manufacturer's recommendations shall govern.
- The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.2.1(1).



Typical Ledger Board Connection

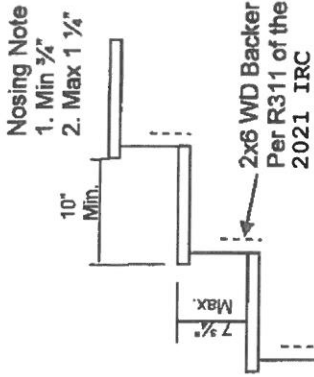


Lateral Load Connection Minimum 2 Required

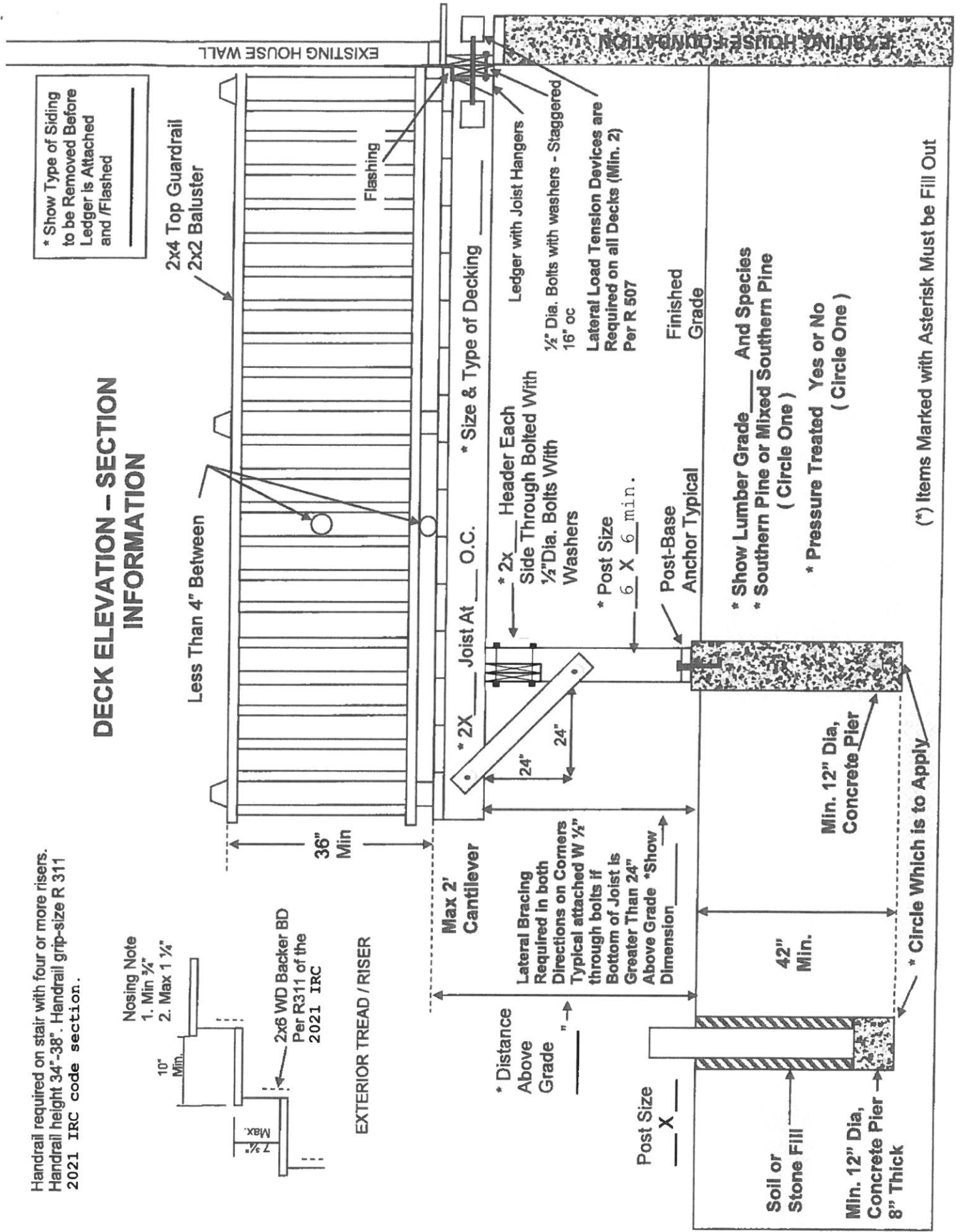


Handrail required on stair with four or more risers.
 Handrail height 34"-38". Handrail grip-size R 311
 2021 IRC code section.

DECK ELEVATION -- SECTION INFORMATION



EXTERIOR TREAD / RISER

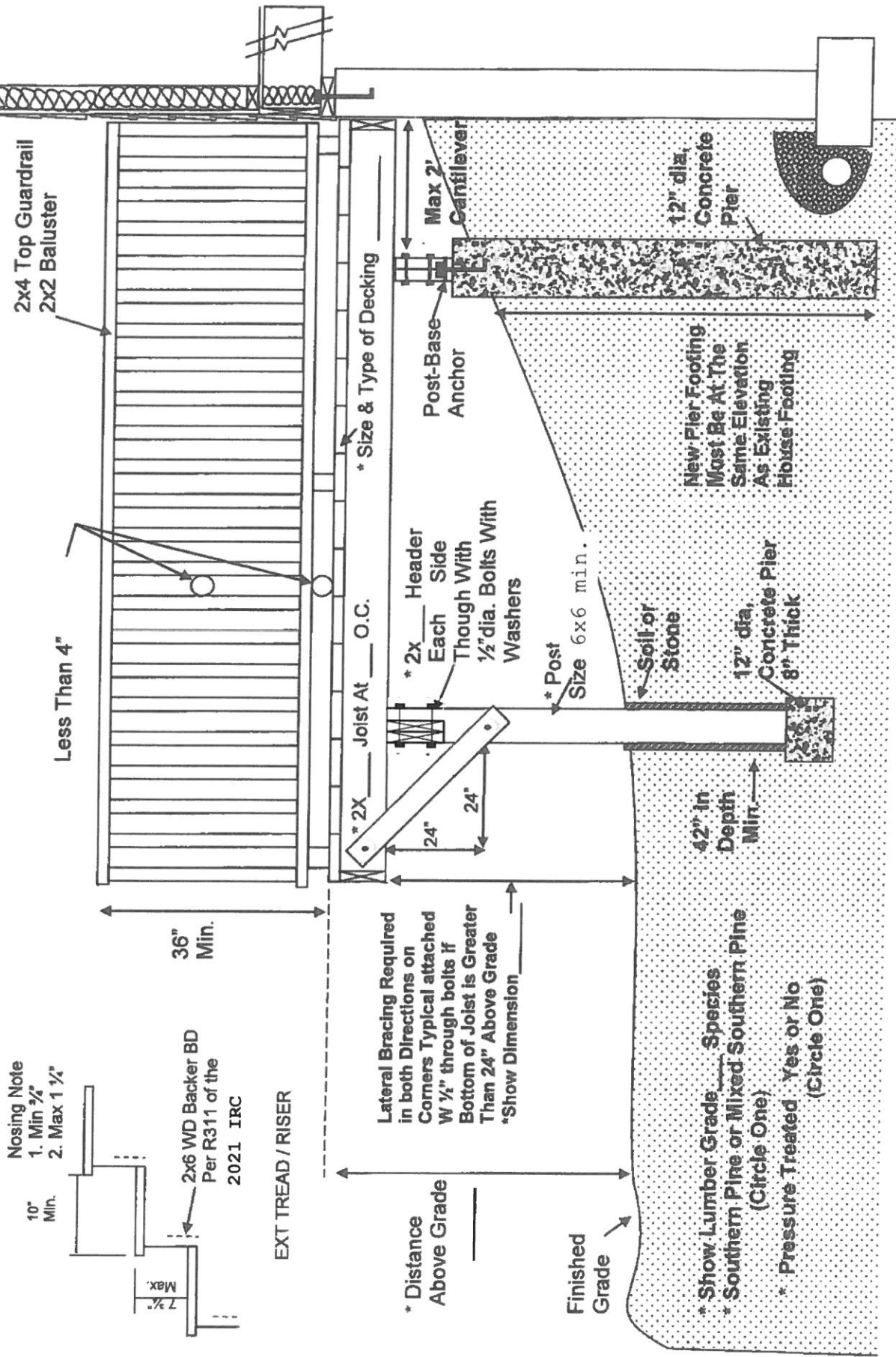


* Show Type of Siding to be Removed Before Ledger is Attached and /Flashed

Handrail required on stair with four or more risers.
 Handrail height 34"-38". Handrail grip-size R 311
 2021 IRC code section.

FREE-STANDING DECK (INFORMATION)

(*) Items Marked with Asterisk Must be Fill Out



* Show Lumber Grade _____ Species _____
 * Southern Pine or Mixed Southern Pine (Circle One)
 * Pressure Treated Yes or No (Circle One)

Handrail required on stair with four or more risers.
 Handrail height 34"-38". Handrail grip-size R 311
 2021 IRC code section.

FREE-STANDING DECK (INFORMATION)

(* Items Marked with Asterisk Must be Fill Out

Nosing Note
 1. Min 3/4"
 2. Max 1 1/4"

10" Min.

Max.

2x6 WD Backer BD
 Per R311 of the
 2021 IRC

36" Min.

EXT TREAD / RISER

2x4 Top Guardrail
 2x2 Baluster

Less Than 4" Between

* Size & Type of Decking

* 2X Joist At ___ O.C.

* 2x Header Each
 Side Though With 1/2" dia.
 Bolts With Washers

Max 2'
 Cantilever
 Deck Joist
 and Beam

* Post Size
 6 X 6 min.

Post-Base
 Anchor Typical

Finished
 Grade

New Pier
 Deck Footing
 Must Be At The
 Same Elevation
 As Existing
 House Footing

12" dia,
 Concrete
 Pier

42" in
 Depth Min.

* Circle
 Which is to
 Apply

Soil or
 Stone Fill

12" dia,
 Concrete Pier
 8" Thick

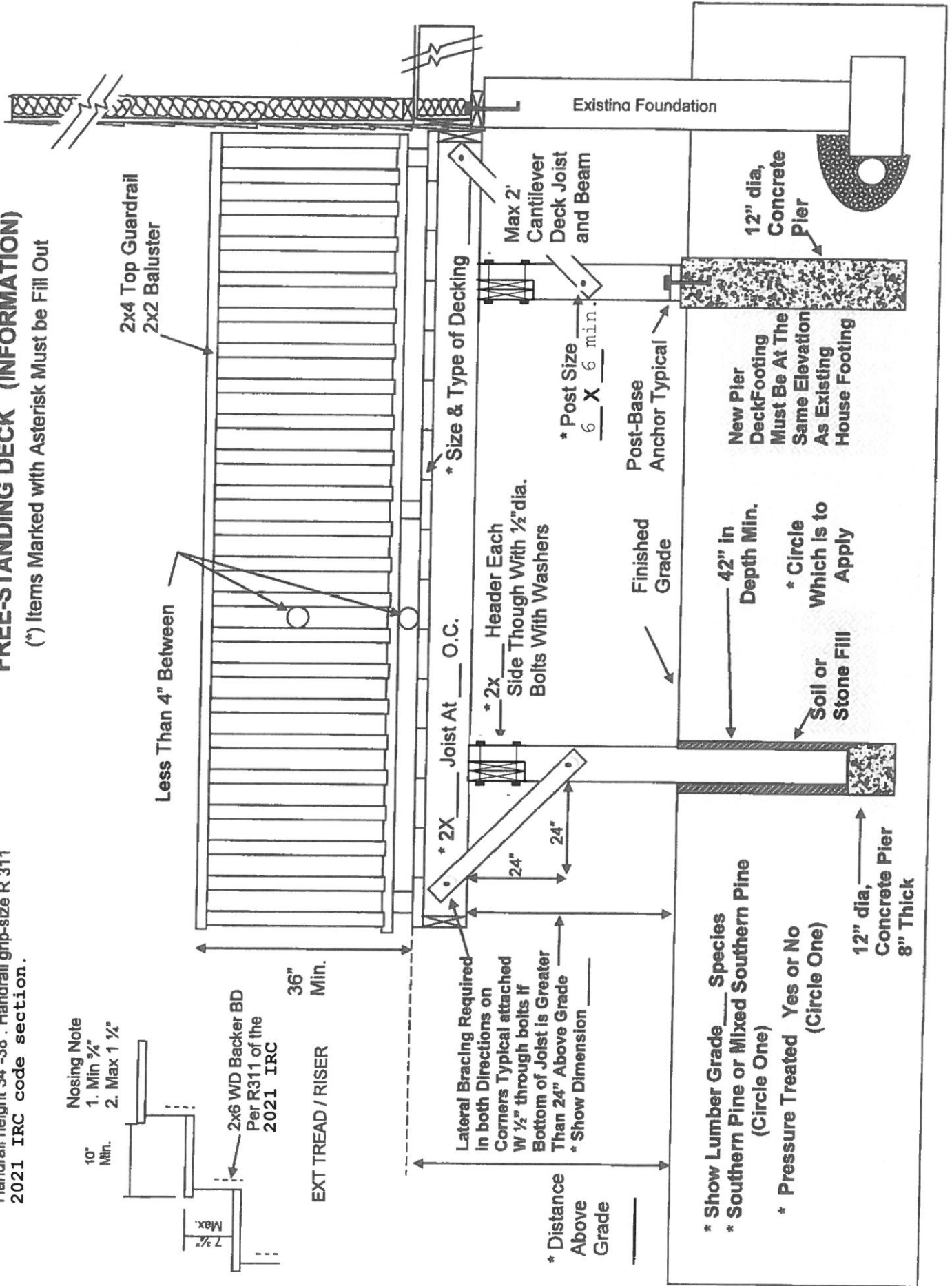
Lateral Bracing Required
 In both Directions on
 Corners Typical attached
 W 1/2" through bolts if
 Bottom of Joist is Greater
 Than 24" Above Grade
 * Show Dimension

* Distance
 Above
 Grade

* Show Lumber Grade ___ Species
 * Southern Pine or Mixed Southern Pine
 (Circle One)

* Pressure Treated Yes or No
 (Circle One)

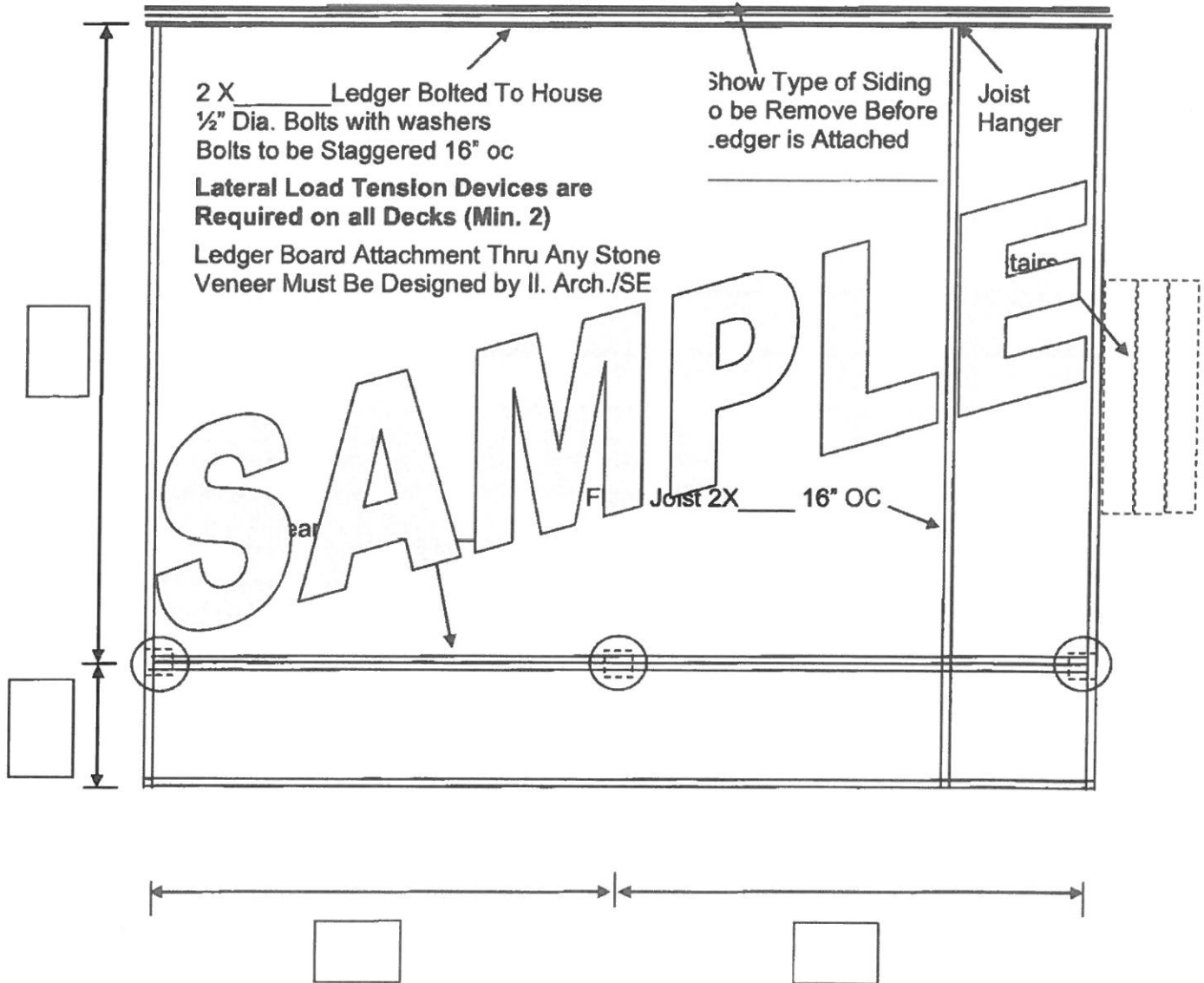
Existing Foundation



Single Beam Deck Foundation Plan: Example Only

HOUSE

Remove siding before installing Ledger Boards. Provide Continuous Flashing With Drip Edge Over The Ledger Board



Show Additional Piers with Dimensions
Between Piers
Show Additional Beam Lines if Used with
Dimension Between Beams

Show Dimension Between
All Piers
Pier Size Minimum 12" Dia.
42" In Depth

Deck Framing Materials

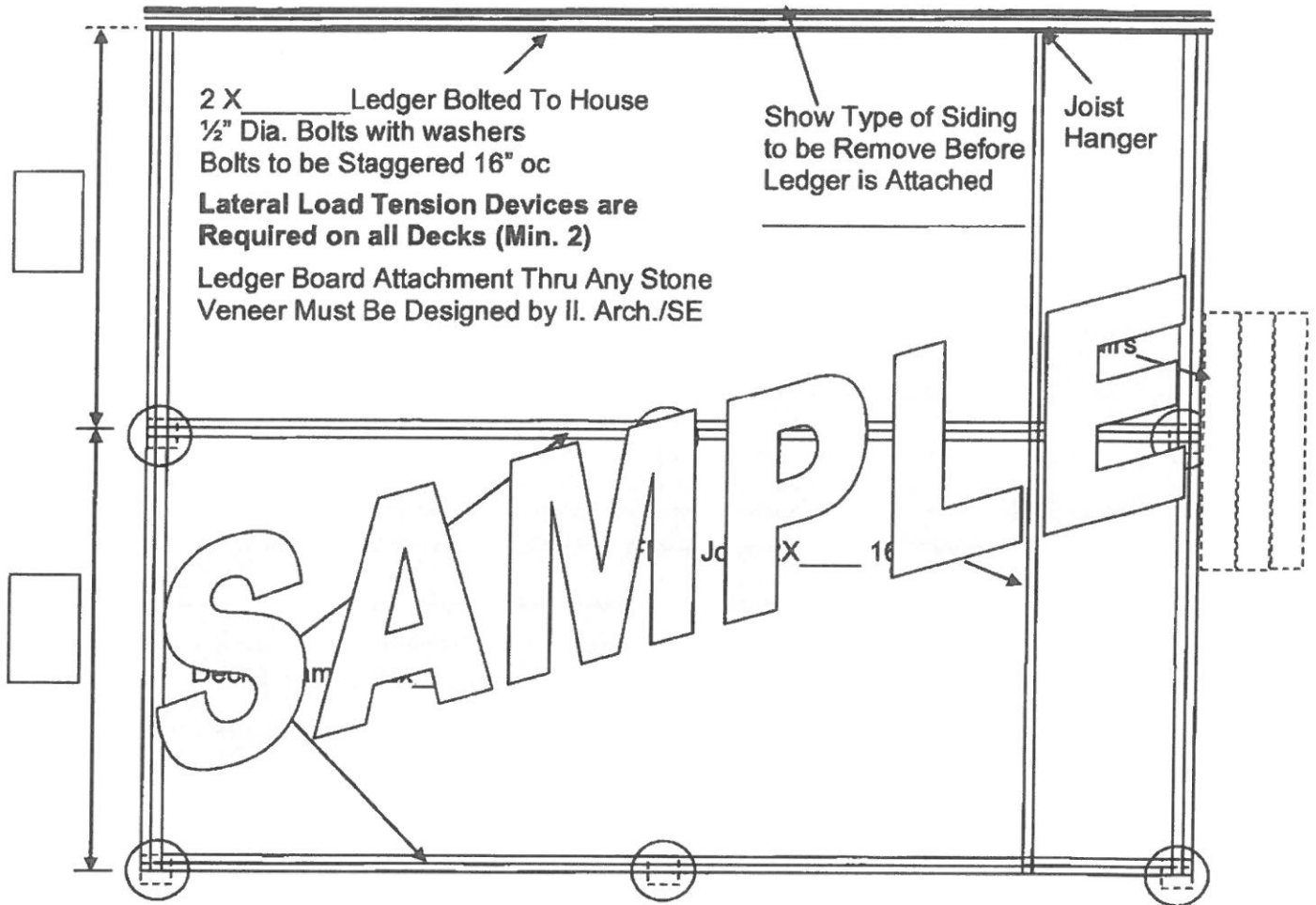
Show Lumber Grade _____
Lumber Species – Southern Pine
or Mixed Southern Pine
(Circle One)

Lumber to be Pressure Treated –
Yes or No (Circle One)

Double Beam Deck Foundation Plan: Example Only

HOUSE

Remove siding before installing Ledger Boards. Provide Continuous Flashing With Drip Edge Over The Ledger Board



Show Additional Piers with Dimensions Between Piers
Show Additional Beam Lines if Used with Dimension Between Beams

Show Dimension Between All Piers
Pier Size Minimum 12" Dia.
42" In Depth

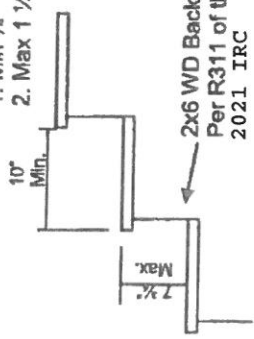
Deck Framing Materials

Show Lumber Grade _____
Lumber Species – Southern Pine
or Mixed Southern Pine
(Circle One)

Lumber to be Pressure Treated –
Yes or No (Circle One)

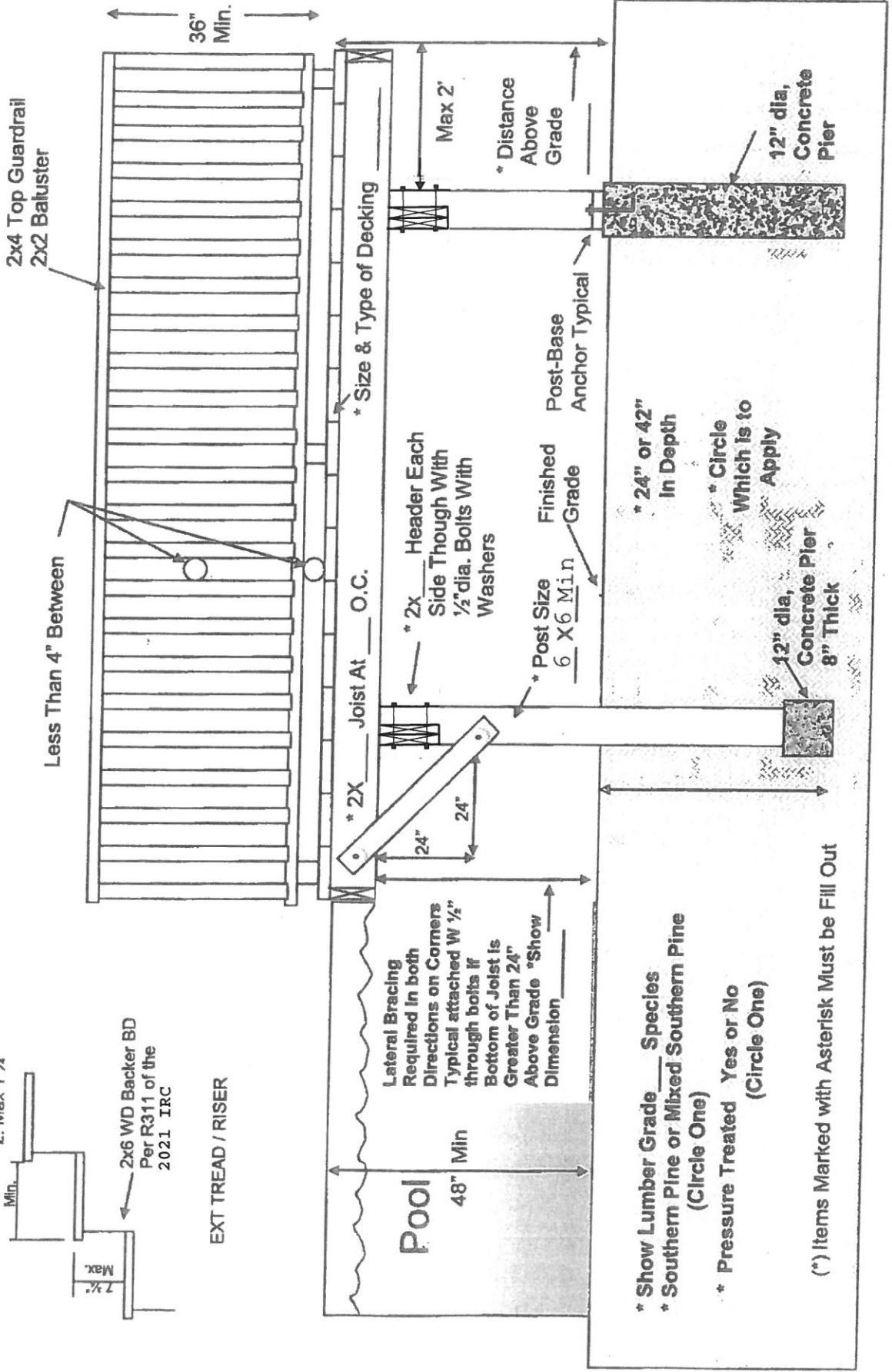
Handrail required on stair with four or more risers.
 Handrail height 34"-38".
 Handrail grip-size R 311 IRC code section.

Nosing Note
 1. Min 3/4"
 2. Max 1 1/4"



EXT TREAD / RISER

**POOL WITH FREESTANDING DECK
 REFER TO 2021 ISPSC SECTION 305
 FOR BARRIER REQUIREMENTS AND
 GATE/LATCHING REQUIREMENTS**



- * Show Lumber Grade _____ Species (Circle One)
- * Southern Pine or Mixed Southern Pine (Circle One)
- * Pressure Treated Yes or No (Circle One)

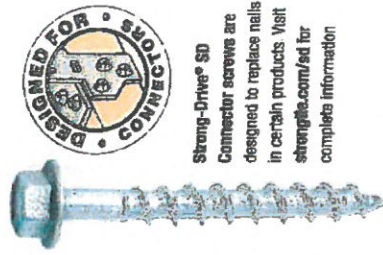
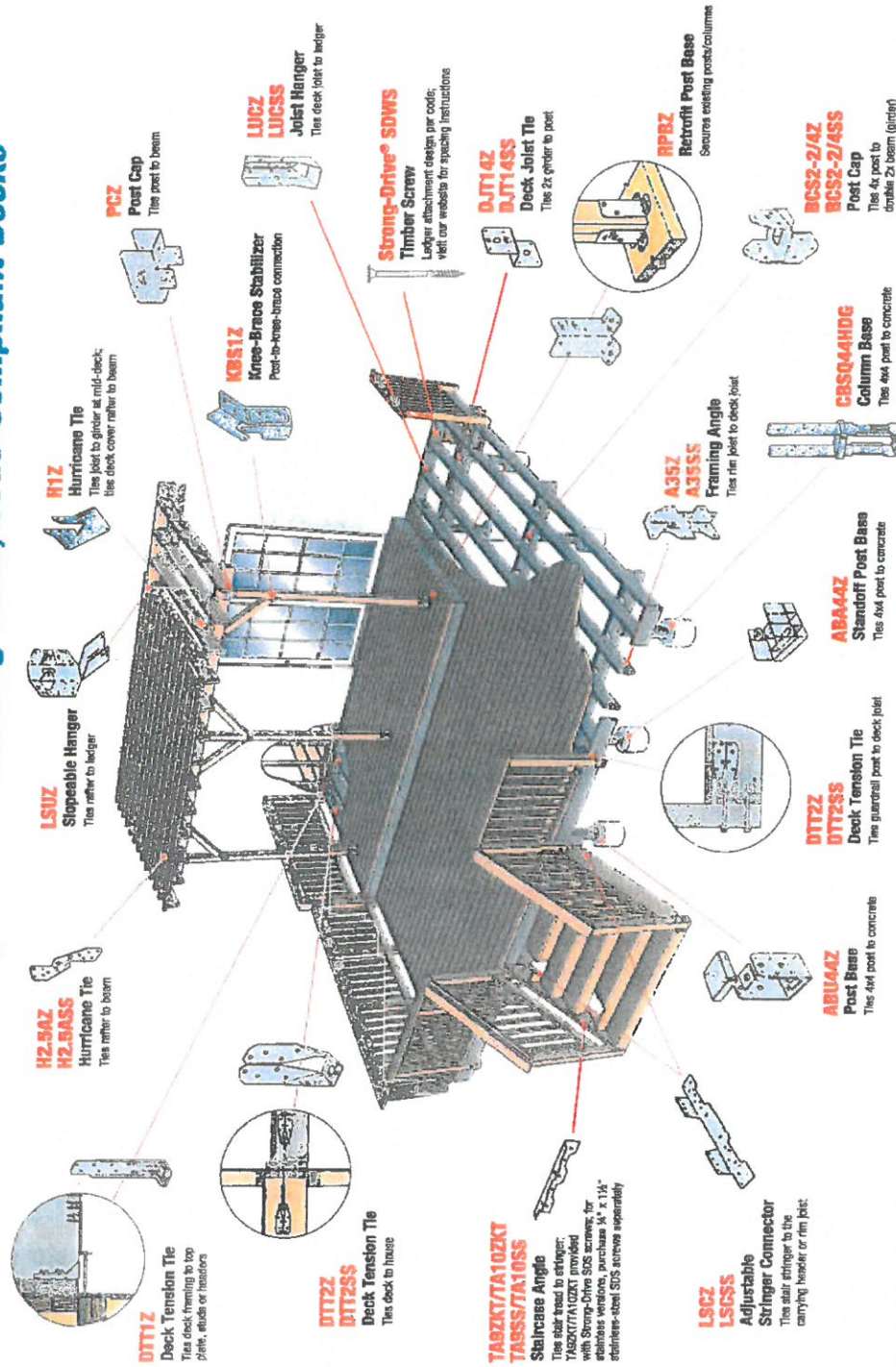
(*) Items Marked with Asterisk Must be Fill Out

FOR EASIER, STRONGER, SAFER CONSTRUCTION

DO YOUR DECKS MEET CODE?



A Complete Connector System for Building Safer, Code-Compliant Decks



Strong-Drive® SD Connector screws are designed to replace nails in certain products. Visit strongtie.com/ed for complete information.



See the Simpson Strong-Tie® Deck Connection and Fastening Guide for specific recommendations.

(800) 999-5099
www.strongtie.com

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DIY-DECKPAT1016 4/16 imp. 6/16

NOTE: Illustration shows all available deck products. Actual products selected will depend upon application or construction method used for a particular deck. Check local building codes before you begin a project.

Use ZMAX® coated or stainless-steel connectors in outdoor environments and to protect against corrosion from preservative-treated wood. Use ONLY fasteners with a hot-dip galvanized (HDG) or double-barrier coating with ZMAX and post-HDG connectors. Use ONLY stainless-steel fasteners with stainless-steel connectors. Visit strongtie.com/info for critical information.

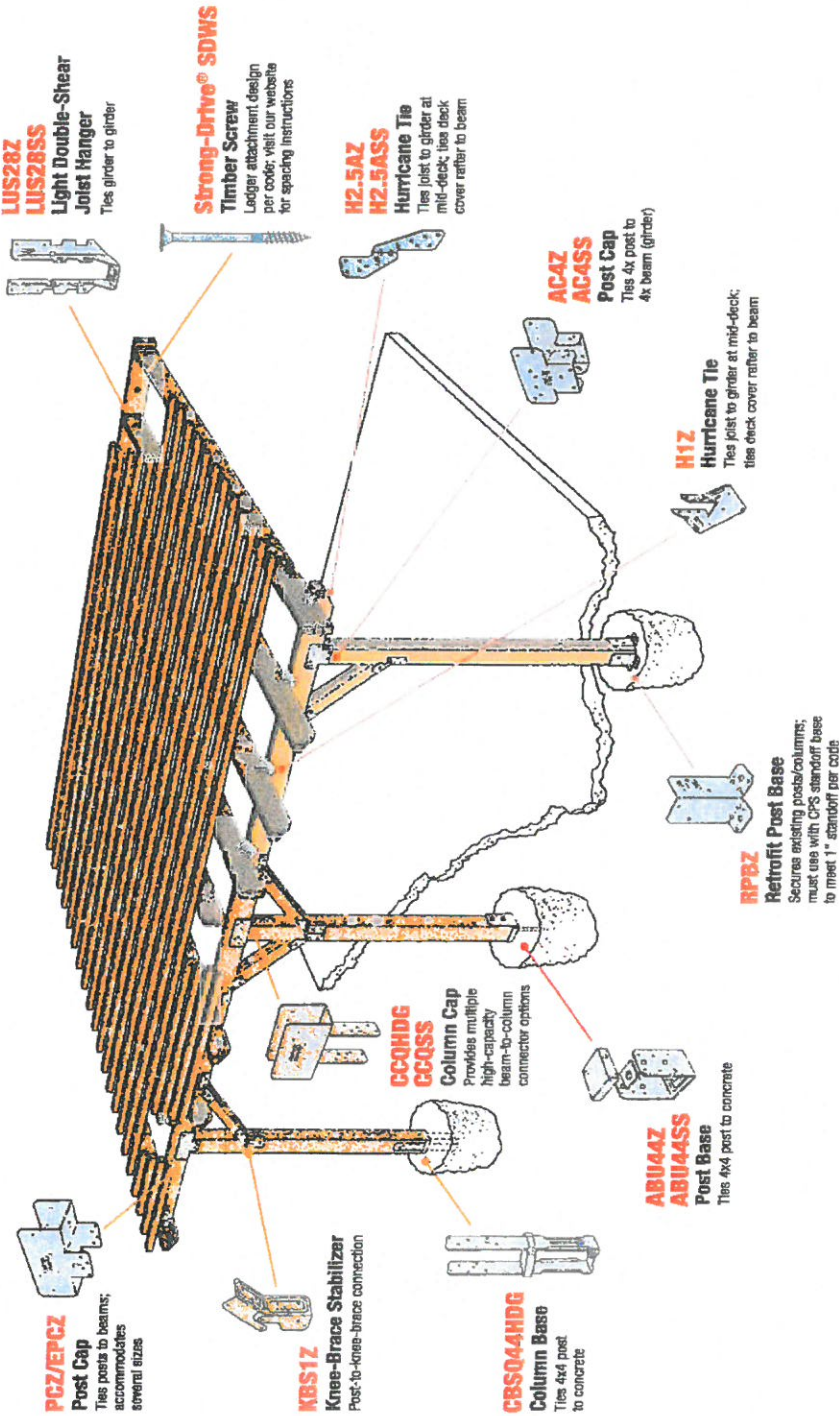


G185

FOR EASIER, STRONGER, SAFER CONSTRUCTION

PATIO COVER SYSTEM

A Complete Connector System for Patio Cover Construction



Strong-Drive® SD Connector screws are designed to replace nails in certain products. Visit strongtie.com/sd for complete information.



See the Simpson Strong-Tie® Deck Connection and Fastening Guide for specific recommendations.

(800) 999-5099
www.strongtie.com

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DIY-DECKPAT1016 4/16 exp. 6/16

NOTE: Illustration shows all available patio-cover products. Actual products selected will depend upon application or construction method used for a particular patio cover. Check local building codes before you begin a project.

Use ZMAX® coated or stainless-steel connectors in outdoor environments and to protect against corrosion from preservative-treated wood. Use ONLY fasteners with a hot-dip galvanized (HOG) or double-barrier coating with ZMAX and post-HOG connectors. Use ONLY stainless-steel fasteners with stainless-steel connectors. Visit strongtie.com/info for critical information.

Choose the Right Level of Corrosion Protection
Visit www.strongtie.com/info for critical information.



COUNTY OF KANE

DEVELOPMENT DEPARTMENT
Building & Community Services Division
Mark D. VanKerkhoff, AIA, Director



County Government Center
719 Batavia Avenue
Geneva, Illinois 60134
Phone: (630) 232-3485
Fax: (630) 232-3411
Website: www.co.kane.il.us

BUILDING PLAN REVISIONS

TO AVOID POSSIBLE DELAYS IN APPROVAL OF YOUR PLANS PLEASE FOLLOW THESE PROCEDURES
ALL CORRECTIONS AND REVISIONS MUST BE MADE IN RED.

- 1) The Kane County Development Department, Building and Community Service Division must approve ALL revisions to approved building plans.
- 2) FOR ALL REVISIONS: (during application review process and after permit is issued)

Revisions may be made on the original submitted plan sets. If "new drawings" are submitted the originally submitted plan marked "permit copy" must be returned with two new plan sets.

- a) Each revision set must be identified by a "revision #, item #" and date. The revision numbers must be sequential e.g. "first revision" 1.1, 1.2, 1.3, etc., 2-02-01, "Second revision" 2.1, 2.2, 2.3, etc., 3-05-01. Each revision must have a "cloud" drawn around it and "item number triangle" to call attention to its location on the plan.

Examples: 

- b) Revisions in response to a Plan Review or Field Inspection Report must be added to the proper locations on the plans and correlated to the plan review or field inspection report. AN EXAMPLE OF THIS IS ON THE REVERSE SIDE OF THIS SHEET.
 - c) Revisions to plans sealed by an Illinois licensed architect or Illinois structural engineer must be approved and added to the plans by that same professional.
 - d) Revisions prepared by an Illinois licensed architect or Illinois structural engineer must have their initials at each revision and be accompanied by two sealed copies of an approval letter confirming the added revisions.
 - e) New building plans may be required for plans that have extensive changes and/or are in a unreadable condition or damaged beyond reasonable repair, as determined by the Building Division.
 - f) No faxed or mailed revisions will be accepted.
- 3) FOR REVISIONS TO APPROVED PERMIT PLANS:
 - a) A \$50.00 minimum re-examination fee will be charged plus other fees e.g. "additional square footage."
 - b) The approved Permit Copy plan set must accompany all proposed revisions.
 - c) Submit all revisions for approval one week prior to any scheduled inspections. The Building Division cannot assure "on the spot" review of revisions. Major revisions may require review by other county departments.

SAMPLE OF CORRELATED PLAN REVIEW SHEET



Building Plan Review Notice
County of Kane
Plan Review Notice

SAMPLE OF CORRELATED PLAN REVIEW SHEET

February 11, 2001
ACME CONSTRUCTION
22N135 RIVERVIEW AVE.
AURORA, IL 60001

Permit #: DB-2001-6842
Parcel: 01-40-211-8420
Owner of App: SMITH, JOHN
Date of Plans: 01/22/01

PROJECT NAME: JOHN SMITH RESIDENCE

Make All Corrections in Red on Original Prints Submitted

Review # 1 Review Date 01/22/01 Reviewer Jack Longfellow

Code Section

Comment

FOUNDATION PLAN

CHAP. 29 AMENDED

2-02-01
JLM
SHEET 4



Basement floor drain - to sanitary sewer
* MARK ALL - ALSO NEED DRAIN AT LOWER LEVEL(SPORTS AREA) TO SANITARY (GRAY WATER)

R403

2-02-01
JLM
SHEET 4



Column footings - size and thickness
* YOUR NOTE SAYS TYPICAL FOR 8 - THERE ARE 10 (ONE BY THE STAIRWAY TO 1ST FLOOR (NEAR ARCADE AREA)

R1003

2-02-01
JLM
SHEET 4

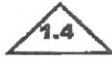


Fireplace footing - 12" thick - project 6" all sides
* FIREPLACE FOR STUDY/LIBRARY

WALL CROSS SECTION

R406

2-02-01
JLM
SHEET 6



Damp proofing foundation walls
* CLARIFY - PART OF THE NOTES SAY DAMP PROOFING OTHERS SAY WATER PROOFING

TABLE N1102.1 (AMENDED)

2-02-01
JLM
SHEET 6 & 8



Insulation R value (flat ceiling R38-cath ceiling R30 w/1" airspace above-walls R20-floors R30-crawl & unfin basement walls R10/13 finished-min R10 perimeter insul at walkout found walls or at application energy perform progrm. Cert at final inspection
* FLOOR INSULATION FOR AREAS OVER THE GARAGES AND THE PRECAST (CEILING OVER THE SPORTS AREA - R38) - ALSO WALKOUT DETAIL AND FLOOR PLAN NOTES FOR PERIMETER INSULATION DO NOT AGREE B/A-9 AND SHEET A-3 ALSO NEED TO FILL OUT ALL INSULATION FORMS (ATTACHED) - PLANS AND CHART INFO MUST ALL AGREE

R803

2-02-01
JLN
SHEET 6



Roof sheathing - thickness of APA rated sheathing - osb or plywood
* CLARIFY ROOF SHEATHING - 2 LAYERS OF 1/4" PLYWOOD ON THE WHOLE ROOF OR JUST AT THE BOTTOM EDGE OF THE ROOF ?

FLOOR PLAN

R313 AMENDED

2-02-01
JLM
SHEET 6 & 8



Smoke alarms req'd in all sleeping rooms and at all floor levels - mark locations: 110v interconnected - within 15' of each sleeping area door on hall side of door
* EXERCISE ROOM HAS A CLOSET ANY WILL BE CONSIDERED A BEDROOM - WILL REQUIRE A SMOKE ALARM IN THE AREA AND IN THE HALL W/ 15' OF THE DOOR TO THE AREA. ALSO A ALARM IS REQUIRED W/ 15' OF THE GUEST BEDROOM DOOR ON THE HALL SIDE OF THE DOOR

R308

2-02-01
JLM
SHEET 6



Glazing requirements - add note to plans : All glazing to follow R308 of the 2003 IRC as required
* ADD A GENERAL NOTE AS CALLED FOR ABOVE

* This is an additional comment for item directly above.