

DECK INFORMATION

Required Technical Information for Application

1. Submit 2 copies of the plot plan showing the proposed deck and distances to the side, rear and front property lines and location of and distances to all components of the septic system. Show all existing structures.
2. Submit 2 sets of detailed scaled drawings. All drawings should indicate the owners name, address of job site and PIN. Drawings shall be neat and of sufficient detail to check for building code compliance.

Samples of Construction Details per 2003 International Residential Code

Footings

The footing (footer) shall be a minimum of 10 inches in diameter and at a depth which is below the frost level. In this area the frost level is considered to be 42 inches below existing grade.

The footing can also be 8 inches of concrete placed in the bottom of the 42 inch deep hole. The post would extend from the top of the concrete to the bottom of the girder. The backfill material must be well compacted around the post.

All concrete shall be a minimum of 2500 psi. The holes for the footing shall be dry and free of mud and organic debris at the time of inspection.

Lumber

All lumber used in the construction of the deck shall be pressure treated or be of natural decay resistant wood (heartwood of redwood, black walnut or cedar).

Metal Connectors

The following are the locations and model number of the metal connectors to be used. The examples shown are Simpson connectors. Any approved metal connector may be used. Toenail or nails subject to withdrawal are not acceptable.

- Post to Footing.....Simpson ABE44 or Equal
- Post to Girder.....Simpson LPC4 or Equal
- Joist to Girder.....Simpson H3 or Equal
- Joist to Ledger Board.....Simpson LU210 or Equal.

Girder Sizing

Joints and splices must be directly above the support columns.
All values used are for #2 So. Yellow Pine

Max. Clear Span for:	One Story	Two Stories
2 - 2 x 6	4' 8"	4' 0"
3 - 2 x 6	6' 0"	5' 1"
2 - 2 x 8	5' 11"	5' 0"
3 - 2 x 8	7' 5"	6' 3"
2 - 2 x 10	7' 3"	6' 2"
3 - 2 x 10	9' 1"	7' 8"
2 - 2 x 12	8' 5"	7' 1"
3 - 2 x 12	10' 7"	8' 11"

Floor Joist Sizing

Values given are for 40# live load using #2 So. Yellow Pine

Joist Size	Clear Span for Joist Spacing of:		
	12"	16"	24"
2 x 6	10' 3"	9' 1"	7' 5"
2 x 8	13' 3"	11' 6"	9' 5"
2 x 10	16' 3"	14' 1"	11' 6"
2 x 12	18' 10"	16' 3"	13' 4"

Confir

Stairs cont.

When solid risers are used a nosing of $\frac{3}{4}$ to $1\frac{1}{2}$ inches is required. No nosing is required if treads are 11 inches or greater. Open risers must not allow a 4 inch sphere to pass. Dimensional Uniformity: There shall not be a variation greater than $\frac{3}{8}$ inches between adjacent treads nor in the entire run. The greatest difference in treads may not exceed $\frac{3}{8}$ inches.

Handrails

All stairs with 4 or more risers require a graspable handrail the entire length. All handrails shall have a circular cross section and have an outside diameter of at least $1\frac{1}{4}$ inches and not more than $2\frac{5}{8}$ inches or be of equivalent graspability. Note: 2x 4's on the flat and 2x on edge are not acceptable substitutions. The clear space between the handrail and wall shall be $1\frac{1}{2}$ inches minimum. The height of the handrail shall be 34 inches minimum and 38 inches maximum measured from the nosing.
-TYPE II HANDRAIL IS ALSO ACCEPTABLE

Lateral Bracing

Decks with a floor surface greater than 7 feet above grade or detached from the structure shall be braced diagonally between girder and posts.

Connectors

All connectors, nails, screws bolts and related hardware shall be hot-dipped zinc-coated (galvanized), stainless steel silicon bronze, copper or other corrosion resistant material.

Inspections

- The bottom of footings prior to placement of concrete
- Framing – before covering with decking
- Final – prior to occupancy application

Cantilever

Backspan to cantilever ratio must not exceed 2:1
Solid blocking shall be provided at the cantilever support

Joist Size	Joist Spacing		
	12"	16"	24"
2 x 8	34"	29"	N/A
2 x 10	49"	42"	34"
2 x 12	N/A	57"	47"

Ledger

Board against the house securely attached with 1/2" diameter galvanized lag screws of sufficient length (typ. 4") to bolt firmly into rim joist. Lags shall be 24" on center minimum in a staggered pattern. Provide galvanized washers between heads of bolts/screws and wood. Through bolting with a washer on the outside and washer/nut on the inside with a similar pattern as lag screws is also acceptable.

Flashing

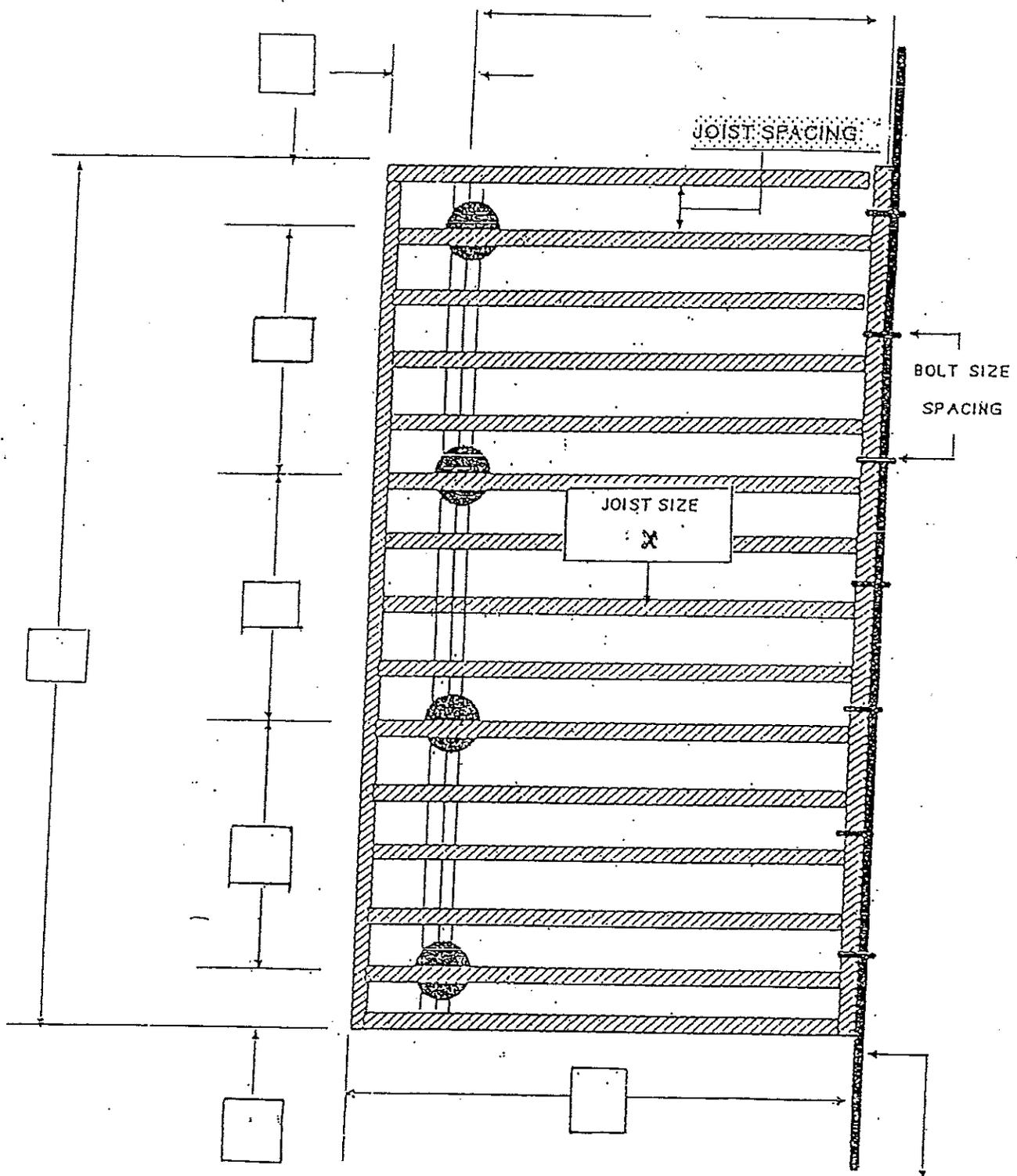
Provide continuous corrosion-resistive flashing along the ledger in such a manner as to prevent the passage of moisture into the wall, untreated wood or siding. Exception: Not required if against vinyl siding, metal siding or masonry. In this case provide shims as not to crush the siding when bolts are tightened.

Guardrails

On decks with surfaces greater than 30 inches guardrails must be installed to a height of 36 inches. The railing system must not be capable of allowing a 4" sphere to pass. Open sides of stairs with a rise greater than 30 inches shall have guards not less than 34 inches and the opening between rails must not exceed 4 inches. The guardrail system must be capable of resisting a 200# thrust at any point. Triangular openings at riser, tread and bottom rail must not allow a 6 inch sphere to pass.

Stairs

Minimum width is 36 inches
Maximum riser height is 8 1/4 inches
Minimum tread is 9 inches

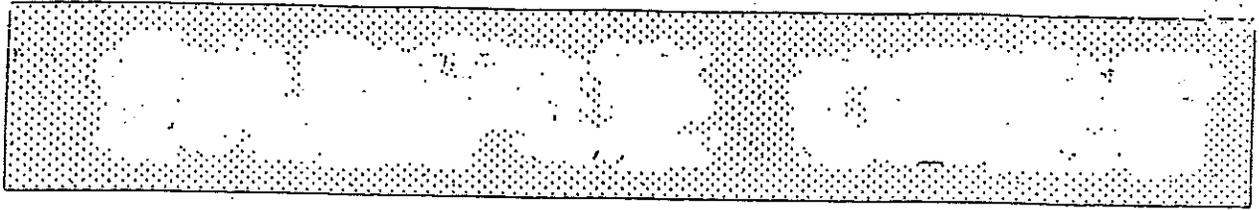


EXISTING STRUCTURE

DECK

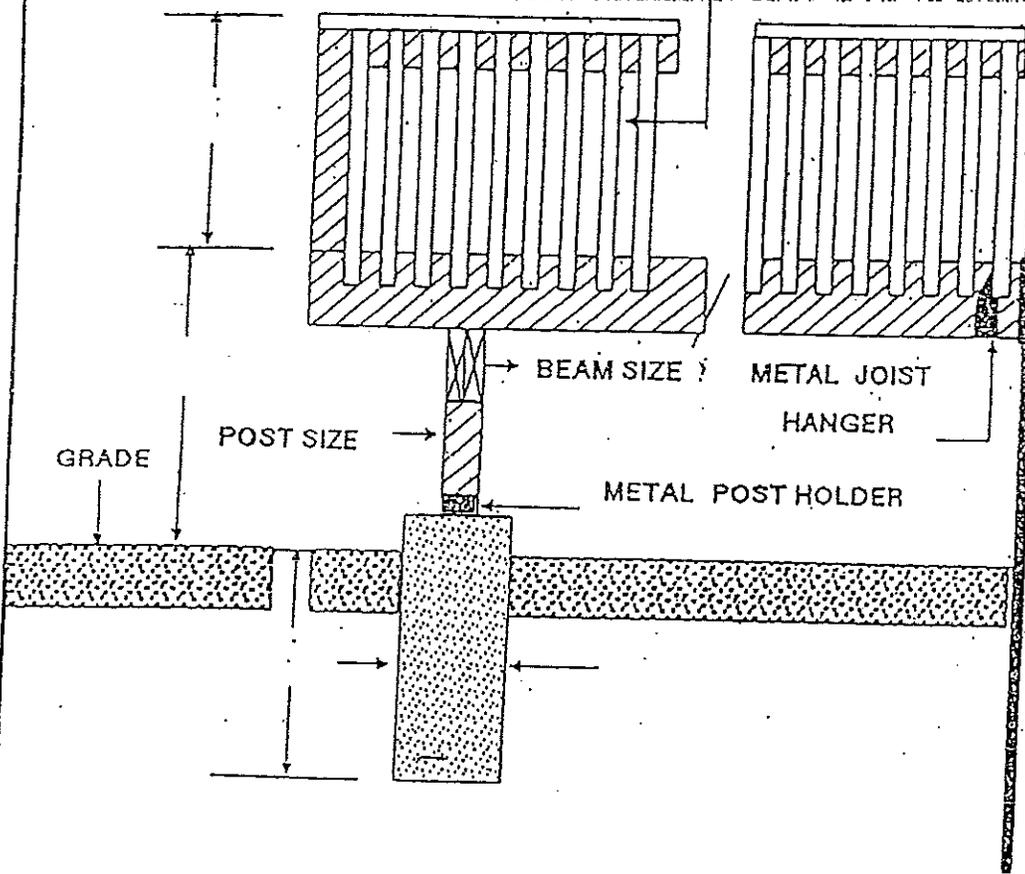
DRAWN:

DATE:



EXISTING STRUCTURE →

spindle spacing



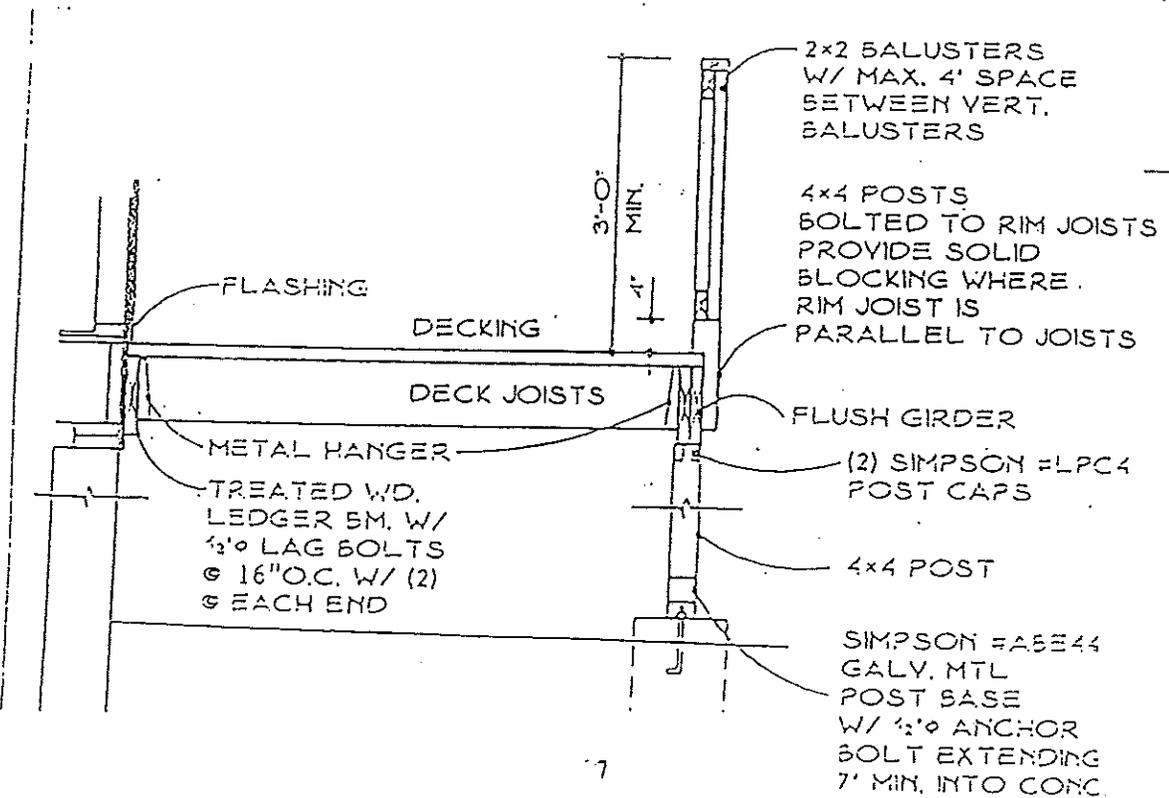
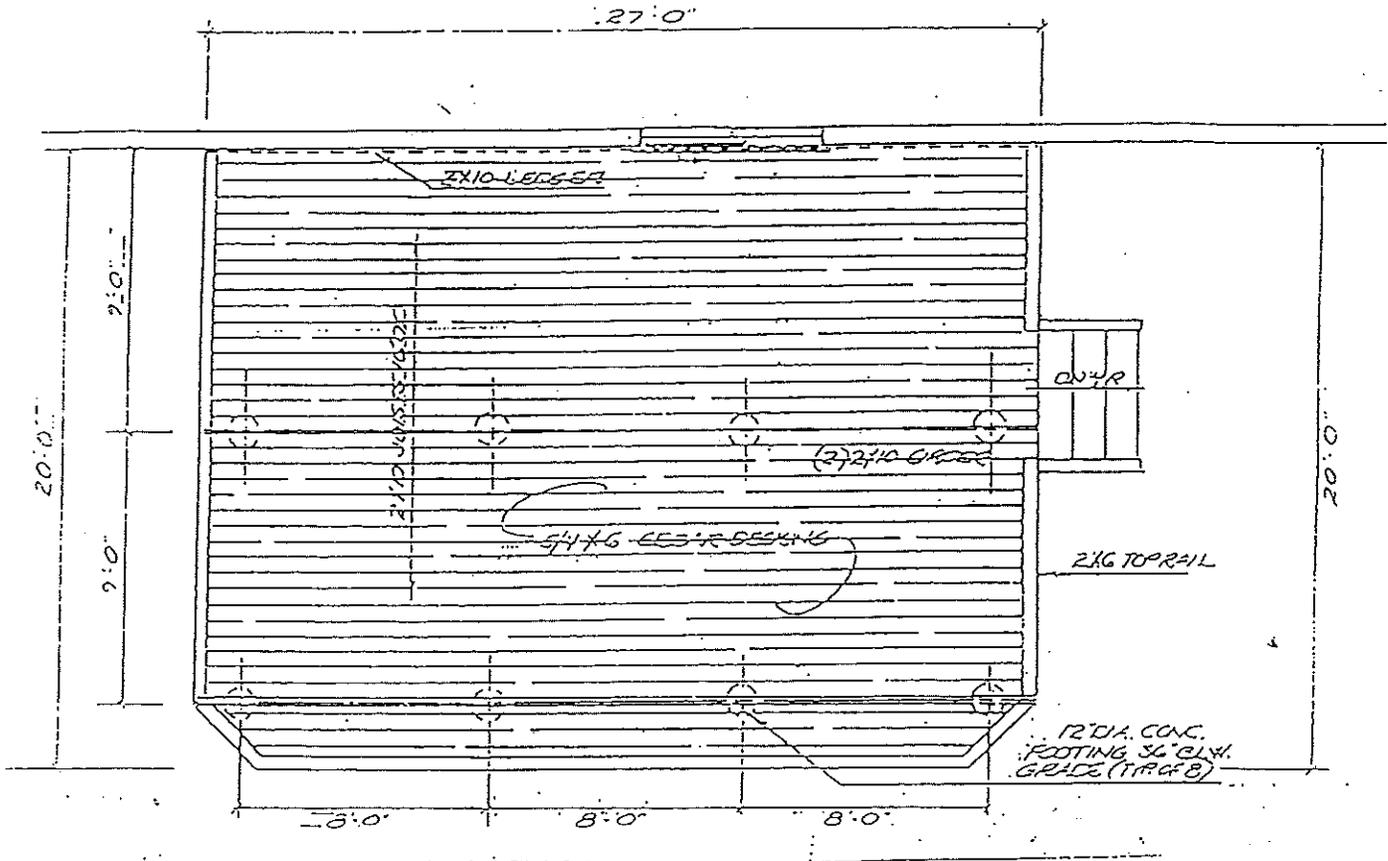
DECK

DRAWN:

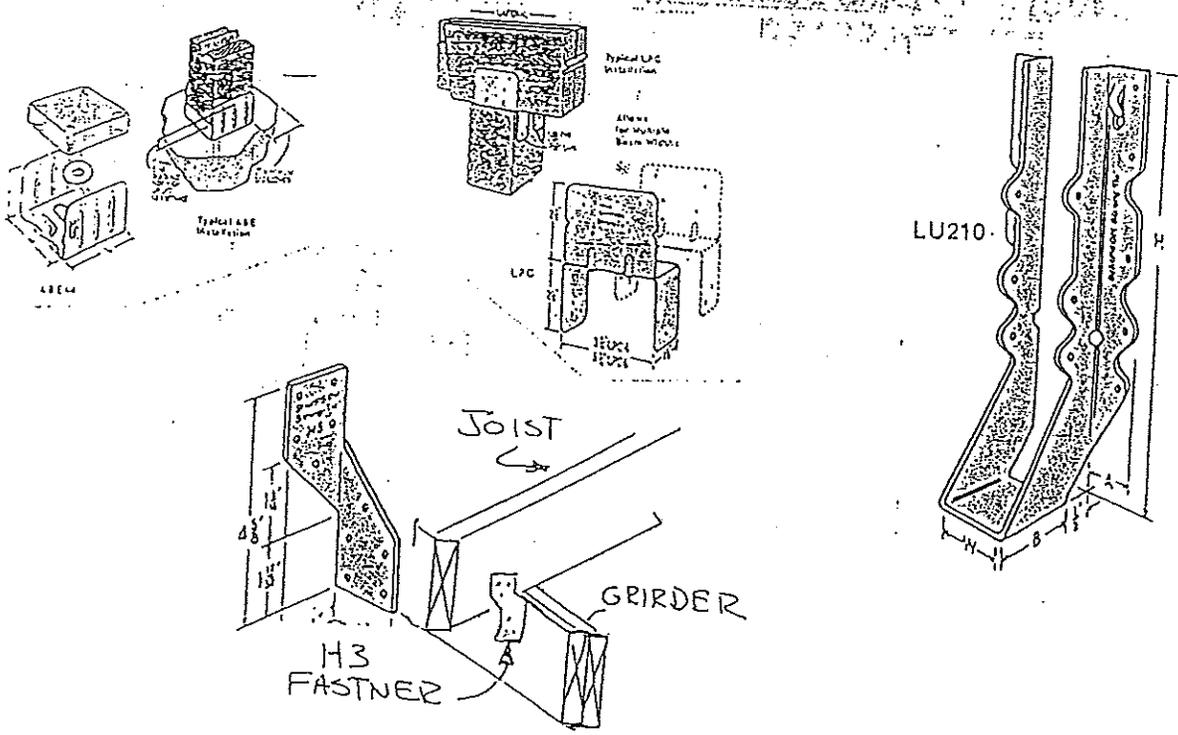
DATE:

ADD

EXAMPLE OF THE INFORMATION TO BE SHOWN ON THE CONSTRUCTION PLANS BEING SUBMITTED WITH THE APPLICATION FOR THE CONSTRUCTION PERMIT OF A DECK



EXAMPLES OF APPROVED METAL CONNECTORS



EXAMPLE OF ATTACHING THE LEDGER TO THE RESIDENCE

EXAMPLE OF ATTACHING THE LEDGER TO THE "TJI" BAND

