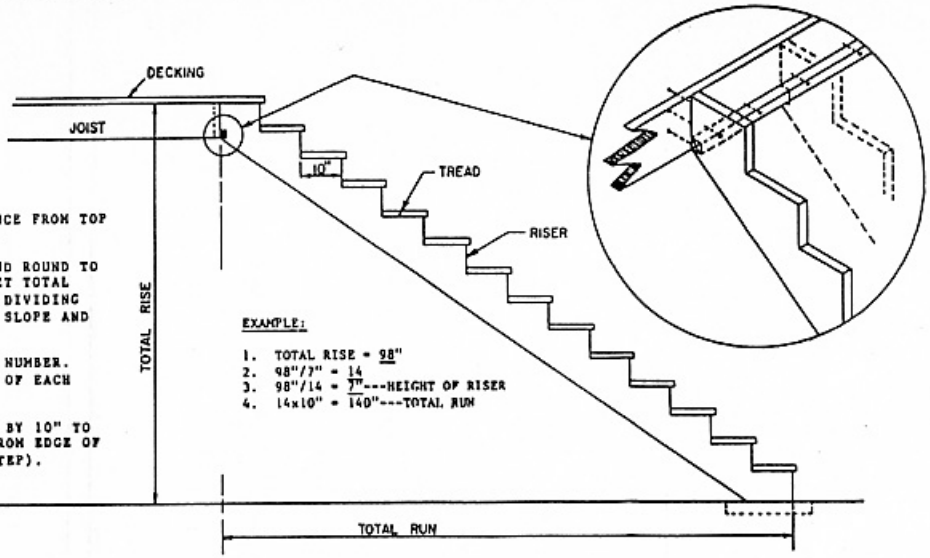


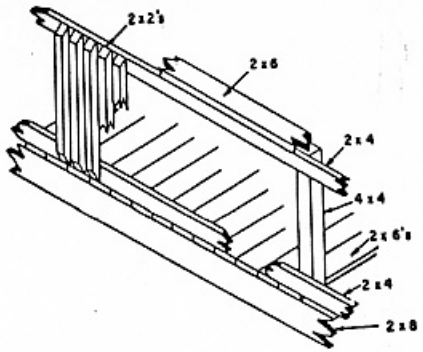
LAYING OUT THE STAIRS

1. MEASURE TOTAL RISE (DISTANCE FROM TOP OF JOIST TO GROUND LEVEL).
2. DIVIDE TOTAL RISE BY 7" AND ROUND TO NEAREST WHOLE NUMBER TO GET TOTAL NUMBER OF RISERS NEEDED. DIVIDING BY 8" WILL GIVE A STEEPER SLOPE AND DECREASE THE TOTAL RUN.
3. DIVIDE TOTAL RISE BY THIS NUMBER. THIS WILL GIVE THE HEIGHT OF EACH RISER.
4. MULTIPLY NUMBER OF RISERS BY 10" TO GET TOTAL RUN (DISTANCE FROM EDGE OF DECK TO FRONT OF BOTTOM STEP).

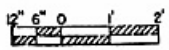
EXAMPLE:

1. TOTAL RISE = 98"
2. 98"/7" = 14
3. 98"/14 = 7"---HEIGHT OF RISER
4. 14x10" = 140"---TOTAL RUN

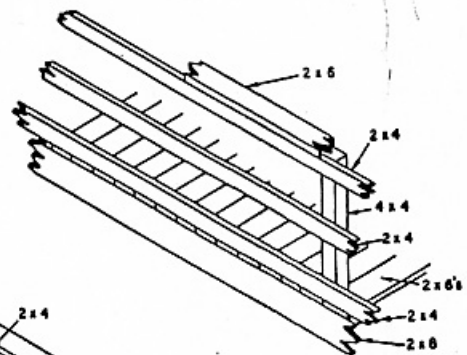
STAIR LAYOUT DETAILS



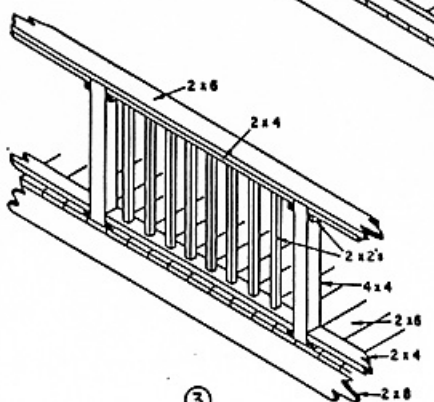
RAILING OPTIONS ①



SCALE

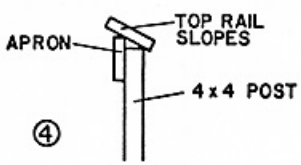


②



③

SLOPING TOP RAIL TO IMPROVE DURABILITY



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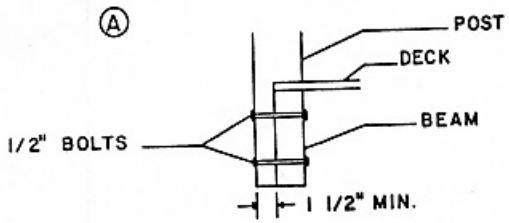
Ⓐ



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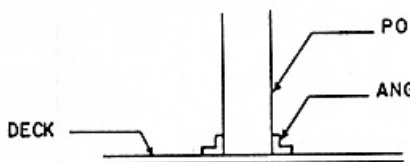

SECURE WITH TWO 3/8" DIA. WOOD SCREWS IN EACH LEG

ALTERNATE POST ANCHORAGE

SCALE

NOTES:

1. WEATHER RESISTANT WOOD (i.e. REDWOOD) OR PRESERVATIVE (CCA) PRESSURE TREATED WOOD SOULD BE USED. USE LUMBER THAT HAS BEEN REDRIED AFTER PRESERVATIVE TREATMENT WILL REDUCE WARPING
2. SECURELY ANCHOR BASE OF POST TOENAILING ON ALL 4 SIDES MAY BE ENOUGH BUT IF FAILURE WOULD CAUSE BAD FALL ALTERNATE ANCHORAGES SHOULD BE CONSIDERED

CAUTION:
RAIL HEIGHT SHOULD BE AT LEAST 30" AND, FOR CHILDREN, RAIL SPACING NEEDS TO BE NARROW ENOUGH TO PREVENT FALLING THROUGH BUT NOT BE OF A WIDTH THAT WOULD CATCH A CHILDS HEAD

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
STATE OF TENNESSEE
UNIVERSITY OF TENNESSEE
AGRICULTURAL ENGINEERING DEPARTMENT
AND
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

STAIR AND DECK RAILING DETAIL

MD 88	6407	SHEET | OF |