

# GENERAL NOTES:

THE FOLLOWING NOTES APPLY TO STRUCTURAL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED.

## A. GENERAL:

1. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES. IF ANY SUCH STRUCTURES ARE FOUND, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
3. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS.
4. SPECIFIC NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
5. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE UNIFORM BUILDING CODE AND ANY OTHER REGULATING AGENCIES.
6. DESIGN LOADS:  
ROOF: LIVE LOAD: 20 PSF

## B. FOUNDATION

1. EXTERIOR FOOTINGS SHALL BEAR NOT LESS THAN 24" BELOW FINISH GRADE ON COMPACTED FILL OR UNDISTURBED SOIL.
2. FOOTINGS MAY BE POURED IN NEAT EXCAVATION WHERE POSSIBLE.
3. ALL FOOTING EXCAVATIONS SHALL BE HAND CLEANED PRIOR TO PLACING CONCRETE.
4. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS.
5. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY RETAIN EARTH BANKS AND EXISTING STRUCTURES.
6. A SOIL BEARING CAPACITY OF 2500 PSF HAS BEEN USED FOR ALL FOOTING DESIGNS. IMMEDIATELY NOTIFY STRUCTURAL ENGINEER IF FIELD CONDITIONS DEPART FROM ASSUMED CONDITIONS.

## C. CONCRETE

1. REINFORCED CONCRETE WORK SHALL CONFORM TO APPLICABLE REQUIREMENTS OF ACI STANDARD 318- LATEST EDITION, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. CONCRETE PLACED IN COLD WEATHER SHALL BE PERFORMED IN ACCORDANCE WITH ACI STANDARD 306- LATEST EDITION, "RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING".
3. CONCRETE PLACED IN HOT WEATHER SHALL BE PERFORMED IN ACCORDANCE WITH ACI STANDARD 305- LATEST EDITION, "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING".
4. COMPRESSIVE STRENGTH OF REINFORCED STRUCTURAL CONCRETE SHALL BE NOT LESS THAN 3000 PSI IN 28 DAYS.
5. CONCRETE SLUMP SHALL NOT EXCEED 3" FOR FOOTINGS AND SLABS ON GRADE.
6. MINIMUM COVERAGE FOR REINFORCING SHALL BE THE CLEAR DISTANCE TO THE FACE OF BARS AS FOLLOWS:  
3" WHERE CONCRETE IS POURED AGAINST EARTH.  
2" FOR BARS LARGER THAN #5 FROM FORMED SURFACES TO BE EXPOSED TO GROUND OR WEATHER.  
1-1/2" FOR #5 AND SMALLER BARS FROM FORMED SURFACES TO BE EXPOSED TO GROUND OR WEATHER.
7. ALL EXPOSED CONCRETE EDGES, CORNERS AND INTERSECTIONS SHALL BE TOOLED OR CHAMFERED NOT LESS THAN 3/4" WHETHER OR NOT SHOWN ON THE DRAWINGS.

## D. REINFORCING STEEL:

1. ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 LATEST APPROVED EDITION), AND THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION (1973 ED.) BY THE C.R.S.I. AS MODIFIED BY THE PROJECT DRAWINGS AND SPECIFICATIONS.
2. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 GRADE 40.
3. ALL REINFORCING BAR BENDS SHALL BE MADE COLD AND NOT REBENT.

4. ALL REINFORCING STEEL, INCLUDING WALL STEEL, SHALL BE ACCURATELY POSITIONED AND ADEQUATELY TIED, USING PROPER CHAIRS OR BOLSTERS. NAILS IN WALL FORMS WILL NOT BE ACCEPTABLE. SUPPORTS AND ACCESSORIES SHALL BE FURNISHED AS SHOWN OR REQUIRED.
5. REINFORCING STEEL SHALL BE LAPPED AT SPLICES A MINIMUM OF 32 DIAMETERS.
6. WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-185. MESH SHALL BE PULLED UP INTO PROPER POSITION IMMEDIATELY AFTER CONCRETE PLACEMENT.
7. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH, WHICHEVER IS GREATER.

## STRUCTURAL STEEL (HOT-ROLLED):

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (LATEST EDITION AND SUPPLEMENTS).
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION A-36 UNLESS OTHERWISE NOTED.
3. ALL BOLTS SHALL CONFORM TO ASTM A-307.
4. BOLT HOLES IN STEEL SHALL BE 1/16" LARGER DIAMETER THAN NOMINAL SIZE OR BOLT USED, EXCEPT 3/16" LARGER AT BASE PLATES.
5. ALL STRUCTURAL STEEL SURFACES SHALL BE PAINTED.
6. ALL WELDS SHALL BE IN CONFORMITY WITH THE CODE FOR WELDING IN BUILDING CONSTRUCTION OF THE AMERICAN WELDING SOCIETY (AWS D1.1-71).

## STRUCTURAL STEEL (COLD ROLLED):

1. ALL STUD AND BEAM FRAMING MEMBERS SHALL BE AS PER MILCOR DIVISION OF INRYCO INC., OR EQUAL.  
ALL PAINTED 12, 14, AND 16. GAGE STUDS SHALL BE ASTM A-570 STEEL WITH A MINIMUM YIELD POINT OF 50,000 PSI.
2. ALL JOISTS SHALL BE AS PER STRAN STEEL (METAL BUILDING) SPECIFICATIONS OR EQUAL, AND CONFORMING TO THE REQUIREMENTS OF ASTM A-570 WITH A MINIMUM YIELD OF 55,000 PSI.
3. COLD FORMED SECTIONS SHALL BE MANUFACTURED BY PRECISION ROLL OR BRAKE FORMING. ALL DIMENSIONS SHALL BE TRUE, AND THE FORMED MEMBER SHALL BE FREE FROM FLUTING OR BUCKLING.
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4. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THOSE SECTIONS OF THE AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, AWS D1.3, LATEST EDITION, SHEET STEEL WELDERS AND WELDING PROCEDURES SHALL BE QUALIFIED AS PER AWS D1.3.

5. ALL STUDS, JOISTS AND ACCESSORIES SHALL BE PRIME WITH RUST-INHIBITIVE PAINT MEETING THE PERFORMANCE REQUIREMENTS OF TT-P-536C.
6. PRIOR TO PREFABRICATION OF FRAMING, THE CONTRACTOR SHALL SUBMIT FABRICATION AND ERECTION DRAWINGS TO THE ARCHITECT OR ENGINEER TO OBTAIN APPROVAL.

7. FRAMING COMPONENTS MAY BE PREASSEMBLED INTO PANELS PRIOR TO ERECTING. PREFABRICATED PANELS SHALL BE SQUARE WITH COMPONENTS ATTACHED IN A MANNER AS TO PREVENT RACKING.

8. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR AS REQUIRED FOR AN ANGULAR FIT AGAINST ABUTTING MEMBERS. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.

9. AXIALLY LOADED STUDS SHALL BE INSTALLED IN A MANNER WHICH WILL ASSURE THAT ENDS OF THE STUDS ARE POSITIONED AGAINST THE INSIDE TRACK WEB, PRIOR TO STUD AND TRACK ATTACHMENT.

10. HANDLING AND LIFTING OF PREFABRICATED FRAME PANELS SHALL BE DONE IN A MANNER AS TO NOT CAUSE DISTORTION IN ANY MEMBER.
11. TRACKS SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE AS SHOWN ON THE PLANS.

12. COMPLETE, UNIFORM, AND LEVEL BEARING SUPPORT SHALL BE PROVIDED FOR THE BOTTOM TRACK.

13. AT TRACK BUTT JOINTS, ABUTTING PIECES OF TRACK SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT, OR THEY SHALL BE BUTT WELDED OR SPLICED TOGETHER.

14. STUDS SHALL BE PLUMBED, ALIGNED AND SECURELY ATTACHED TO THE FLANGES OR WEBS OF BOTH UPPER AND LOWER TRACKS.

15. FRAMED WALL OPENINGS SHALL INCLUDE HEADERS AND SUPPORTING STUDS AS SHOWN ON THE PLANS.

16. JACK STUDS SHALL BE INSTALLED BELOW WINDOW SILLS, ABOVE WINDOW AND DOOR HEADS, AT FREE STANDING STAIR RAILS, AND ELSEWHERE TO FURNISH SUPPORT, AND SHALL BE SECURELY ATTACHED TO SUPPORTING MEMBERS.

17. TEMPORARY BRACING SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.

18. WALL STUD BRIDGING SHALL BE INSTALLED IN A MANNER TO PROVIDE RESISTANCE TO BOTH MINOR AXIS BENDING AND ROTATION. BRIDGING ROWS SHALL BE EQUALLY SPACED NOT TO EXCEED 3'-4" ON CENTER.

19. PROVIDE STUD WALLS AT LOCATIONS INDICATED ON PLANS AS "SHEAR WALLS" FOR FRAME STABILITY AND LATERAL LOAD RESISTANCE. SUCH STUD WALLS SHALL BE BRACED AS INDICATED ON PLANS AND SPECIFICATIONS. ADDITIONAL STUDS SHALL BE POSITIONED TO RESIST THE VERTICAL COMPONENTS AS INDICATED ON PLANS.

20. SPLICES IN AXIALLY LOADED STUDS SHALL NOT BE PERMITTED.

21. PROVIDE INSULATION EQUAL TO THAT SPECIFIED ELSEWHERE IN ALL DOUBLED JAMB STUDS AND DOUBLED HEADER MEMBERS WHICH WILL NOT BE ACCESSIBLE TO THE INSULATION CONTRACTOR.

22. JOISTS SHALL BE LOCATED DIRECTLY OVER BEARING STUDS OR A LOAD DISTRIBUTION MEMBERS SHALL BE PROVIDED AT THE TOP TRACK.

23. PROVIDE WEB STIFFENERS AT REACTION POINTS WHERE INDICATED BY PLANS.

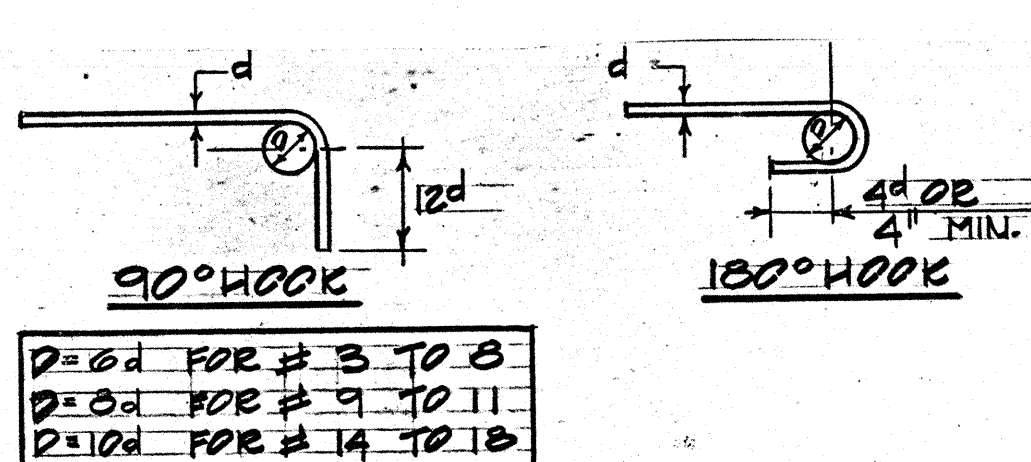
24. JOIST BRIDGING SHALL BE PROVIDED AS SHOWN ON THE PLANS.

25. PROVIDE AN ADDITIONAL JOIST UNDER PARALLEL PARTITIONS WHERE THE PARTITION LENGTH EXCEEDS ONE-HALF THE JOIST SPAN AND FLOOR AND ROOF OPENINGS WHICH INTERRUPT ONE OR MORE SPANNING MEMBERS UNLESS OTHERWISE NOTED.

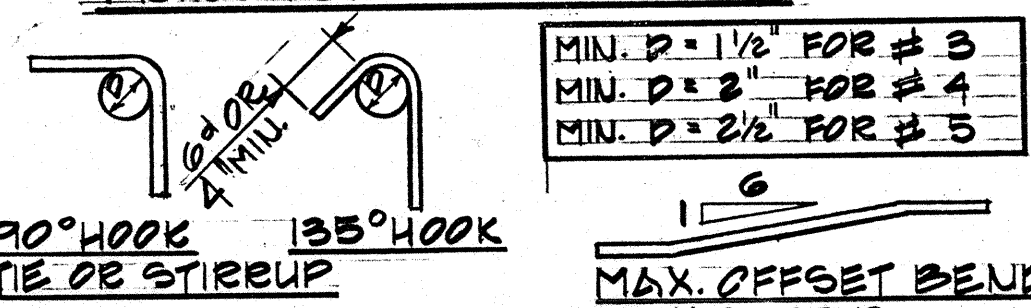
26. END BLOCKING SHALL BE PROVIDED WHERE JOIST ENDS ARE NOT OTHERWISE RESTRAINED FROM ROTATION.

6. HOLES IN STRUCTURAL MEMBERS:

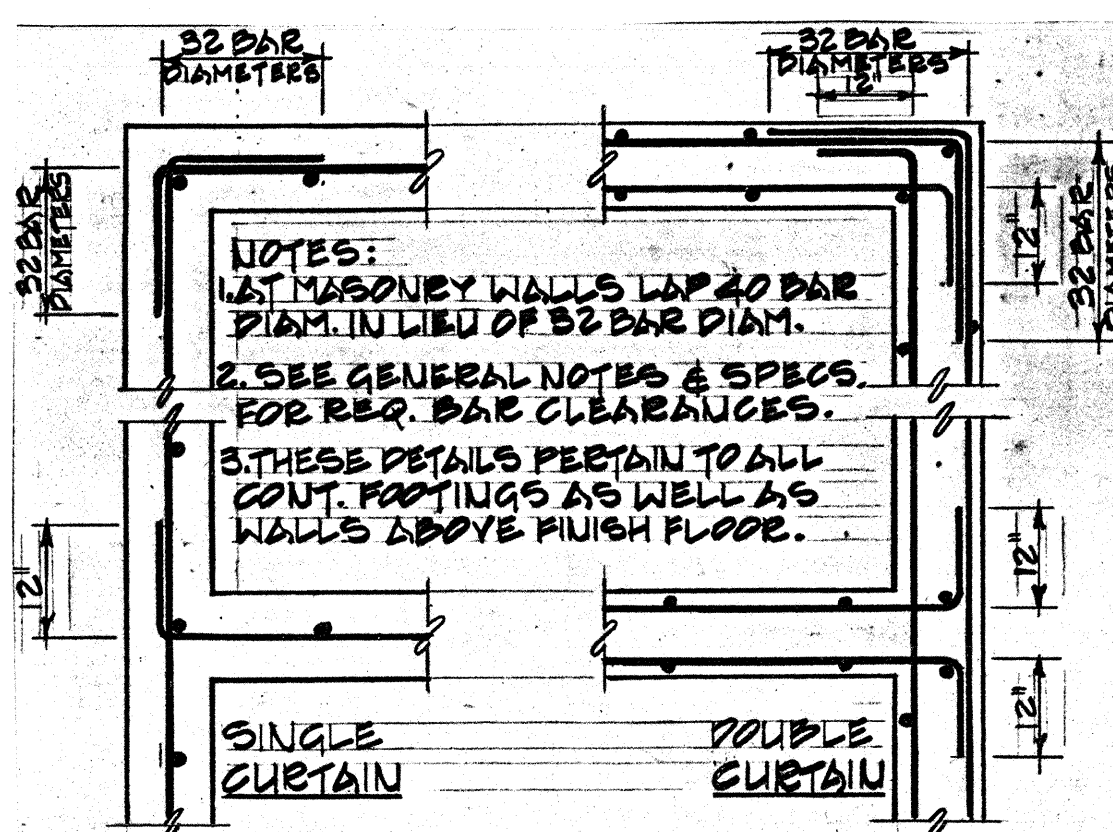
1. NO HOLES OR CANS SHALL BE PUT IN ANY STRUCTURAL MEMBER UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR WRITTEN PERMISSION IS OBTAINED FROM THE ENGINEER.



### PRINCIPAL REINFORCING



### BAR BENDS



### TYPICAL BAR PLACEMENT IN CONCRETE & MASONRY WALLS

### TYPICAL CONG. CHAMFER

