

**MASONRY:**

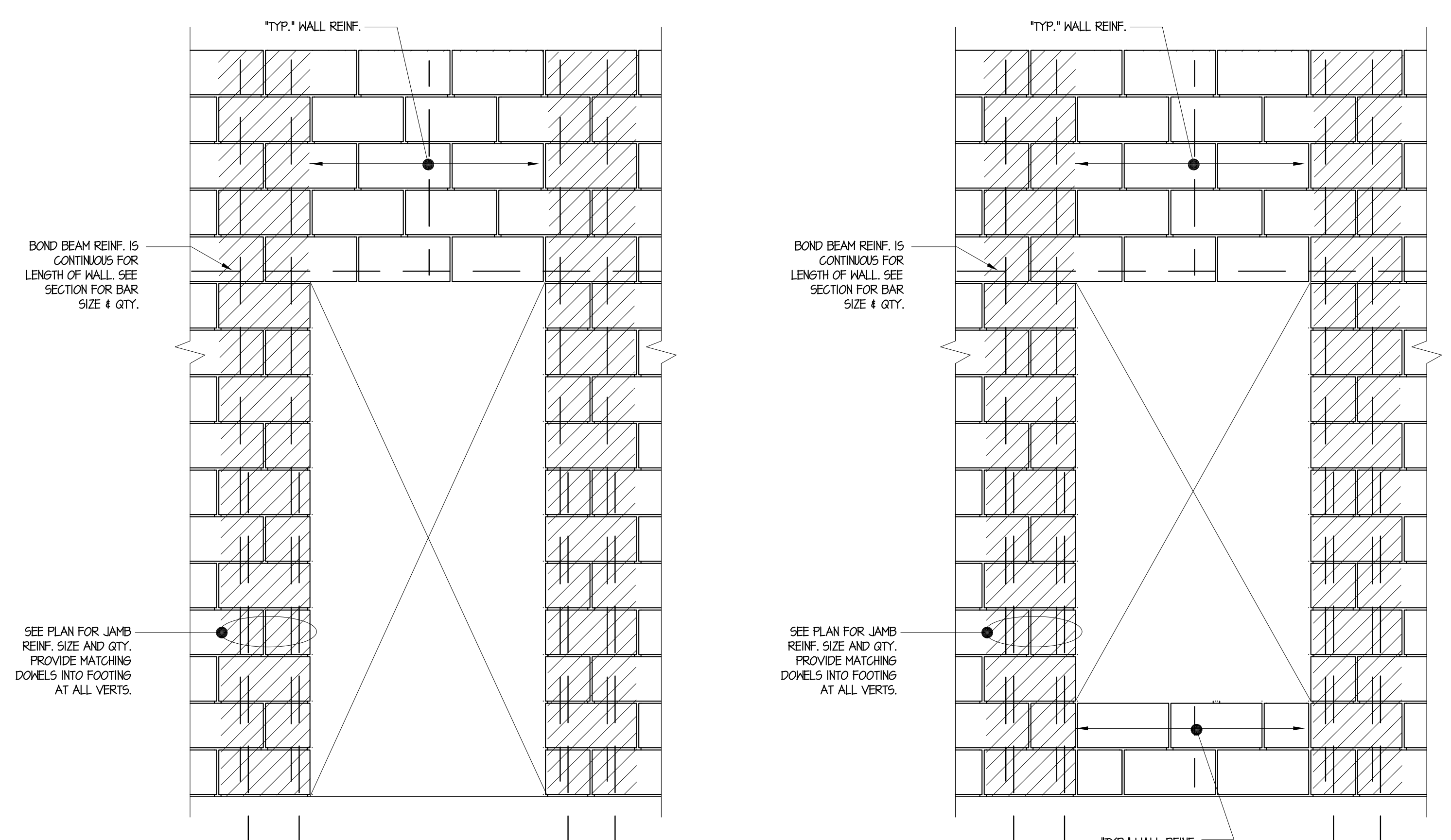
1. STANDARDS:
  - a. ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
  - b. NCA TEK "MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION"
  - c. BIA TECHNICAL NOTES ON BRICK CONSTRUCTION
2. MASONRY UNITS SHALL COMPLY WITH ASTM C40 AND TESTED PER ASTM C140 MORTAR SHALL COMPLY WITH ASTM C270 GROUT SHALL COMPLY WITH ASTM C476 AND TESTED PER ASTM C1019 REINFORCING BARS ARE TO BE ASTM A615 - GRADE 60 STEEL JOINT REINFORCING SHALL CONFORM TO ASTM A82, GALVANIZED
3. PRISM STRENGTH (f<sub>m</sub>) OF CMU'S SHALL BE 2000 PSI MINIMUM (NORMAL HEIGHT BLOCKS)
4. NET COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS SHALL BE 2800 PSI (NORMAL HEIGHT BLOCKS GRADE N-1 OR BETTER)
5. GROUT CELLS SOILD AT REINFORCING ONLY WITH 3000 PSI CONCRETE GROUT UNLESS OTHERWISE NOTED.
6. MORTAR SHALL BE TYPE "S" FOR ALL REINFORCED MASONRY WALL AND TYPE "N" FOR ALL MASONRY VENEERS.
7. USE "LOW- LIFT" METHOD OF CONSTRUCTION WITH VERTICAL BARS LAPPED PER "BAR SPLICE SCHEDULE".
8. MORTAR SHALL BE PLACED AT ALL HEAD JOINTS, FACE SHELLS, AND WEBS ADJACENT TO THE CELLS CONTAINING VERTICAL REINFORCEMENT.
9. VERTICAL REINFORCEMENT MUST BE POSITIONED IN THE CENTER OF THE CELL USING MASONRY POSITIONING TIES AT 8'-0" c/c MAXIMUM UNLESS NOTED ON THE STRUCTURAL DRAWINGS. PLACEMENT OF THE BAR MUST BE KEPT WITHIN 1/2" OF CENTER. IF REINFORCEMENT PLACEMENT NEEDS TO EXCEED 1/2" DUE TO PLACEMENT OF THE EMBEDDED ITEMS OF CONDUIT, THE ENGINEER MUST BE NOTIFIED TO APPROVE RESULTING LOCATION.
10. MASONRY SHALL BE LAID IN A RUNNING BOND UNLESS NOTED OTHERWISE.
11. PROVIDE CONTROL JOINTS IN ALL MASONRY AT A MAXIMUM OF 20'-0" APART UNLESS NOTED OTHERWISE ON DRAWING.
12. UNLESS NOTED OTHERWISE ALL LOAD BEARING AND NONLOAD BEARING CMU WALLS TO BE REINFORCED WITH HEAVY WEIGHT (DUR-O-WALL or EQUAL) HORIZONTAL JOINT REINFORCING AT 8' o.c. AND VERTICAL BARS AS INDICATED BELOW:
  - a. PROVIDE VERTICAL REINFORCING AT CORNERS OF INTERSECTING WALLS, AT EACH JAMB OF OPENINGS, AND ON EACH SIDE OF CONTROL JOINTS AND EXPANSION JOINTS.
  - b. VERTICAL REINFORCING:
    - #4's @ 36" o.c. @ 6" CMU
    - #5's @ 36" o.c. @ 8" CMU
    - #6's @ 36" o.c. @ 10" & 12" CMU
13. VERTICAL REINFORCING IN MASONRY WALLS SHOWN HERE ON THE DRAWINGS ARE NOT A SUBSTITUTE FOR TEMPORARY BRACING REQUIRED FOR MASONRY WALLS DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALLATION OF THE TEMPORARY BRACING AS REQUIRED.
14. PROVIDE FULL HEIGHT SOLID MASONRY UNDER BEARING ENDS OF ALL STRUCTURAL STEEL BEAMS AND LINTELS MINIMUM 8" BEARING ON MASONRY UNO
15. PROVIDE 8" MIN. OF SOLID MASONRY UNDER ENDS OF ALL JOISTS BEARING ON MASONRY OR AS OTHERWISE SHOWN ON DRAWINGS.
16. BLOCK CORES SHALL BE FILLED SOLID AT LOCATIONS OF ANCHOR EXPANSION BOLTS.
17. PROVIDE CONTINUOUS BOND BEAMS w/ (2) - #4 HORIZONTAL BARS EVERY 10'-0" MAX. VERTICALLY.
18. AT MASONRY VENEER WITH METAL OR WOOD STUD BACKUP PROVIDE VENEER ANCHORAGE SPACED AT 16"x16". USE 'X'-SEAL' BY HOMAN & BARNARD OR 'DA210-X' BY DUR-O-WALL WITH TRIANGULAR TIES. PROVIDE 9ga JOINT REINFORCING AT VENEER JOINT AT 16" o.c. CLIP 9ga JOINT REINFORCING TO TRIANGULAR TIES WITH STANDARD SEISMIC CLIP.
19. AT MASONRY VENEER WITH CMU BACKUP PROVIDE VENEER ANCHORAGE SPACED AT 16"x16". USE LADDER JOINT REINFORCING AT CMU BACKUP WITH BUILT-IN EYELETS. PLACE ADJUSTABLE PINTEL AT EACH EYELET. PROVIDE 9ga JOINT REINFORCING AT VENEER JOINT AT 16" o.c. CLIP 9ga JOINT REINFORCING TO PINTEL TIES WITH STANDARD SEISMIC CLIP.

**SPECIAL STRUCTURAL INSPECTIONS:**

1. REFER TO THE ADJACENT STATEMENT OF SPECIAL INSPECTIONS FOR THE LIST OF ELEMENTS OF CONSTRUCTION THAT SHALL REQUIRE SPECIAL INSPECTION PER IBC CODE SECTION 1704. THE OWNER SHALL EMPLOY A QUALIFIED SPECIAL INSPECTION AGENCY. THE SELECTED AGENCY SHALL BE APPROVED BY THE DESIGN TEAM AND BUILDING INSPECTOR PRIOR TO THE START OF WORK. COPIES OF ALL INSPECTION REPORTS SHALL BE SUBMITTED TO THE ARCHITECT OF RECORD, STRUCTURAL ENGINEER OF RECORD, AND BUILDING INSPECTOR IN A TIMELY MANNER.
2. THE SPECIAL INSPECTIONS IDENTIFIED ON THE PLANS ARE IN ADDITION TO, AND NOT SUBSTITUTED FOR THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY THE BUILDING INSPECTOR.
3. CONTINUOUS INSPECTION SHALL BE PROVIDED DURING THE PERFORMANCE OR WORK REQUIRING SPECIAL INSPECTION UNLESS OTHERWISE NOTED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT SHALL BE THE RESPONSIBILITY OF THE AGENT TO EMPLOY A SUFFICIENT NUMBER OF SPECIAL INSPECTIONS TO ASSURE THAT ALL WORK IS CONTINUOUSLY INSPECTED IN ACCORDANCE WITH THOSE PREVISIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND TIMELY NOTIFICATION FOR THE NEED OF SPECIAL INSPECTIONS.

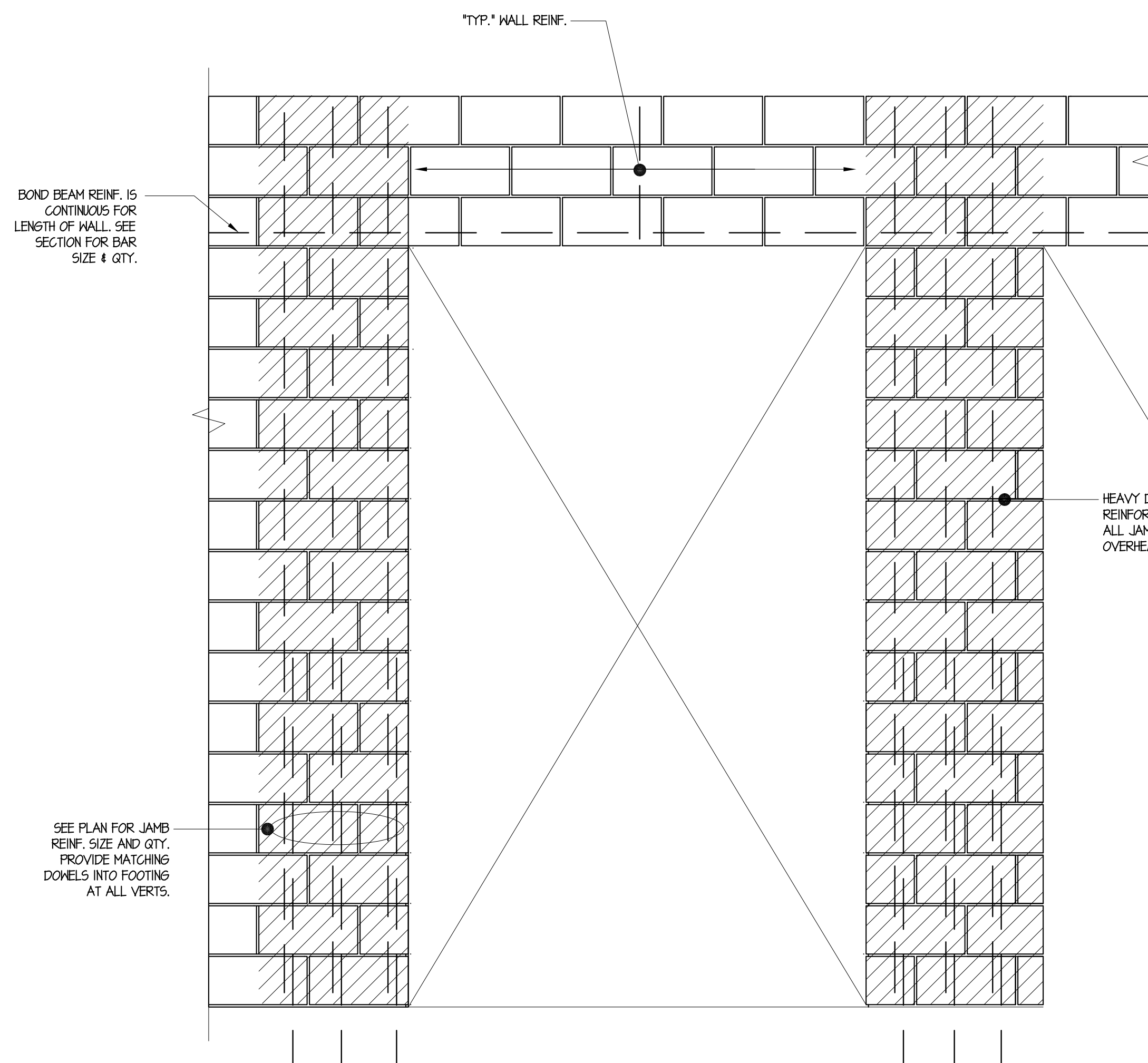
**STATEMENT OF SPECIAL INSPECTIONS**

IBC REF	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, LOCATION, REMARKS, ET CETERA	DESIGN STRENGTH
1704.2	OFF-SITE FABRICATION (INCLUDING GLUE-LAMINATED TIMBERS AND STEEL FABRICATIONS)  SPECIAL INSPECTION FOR OFF-SITE FABRICATION IS NOT REQUIRED FOR FABRICATORS APPROVED BY THE BUILDING OFFICIAL TO PERFORM THE WORK INDICATED.  PERIODIC INSPECTIONS: VERIFY THAT FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS; REVIEW PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.	AS NOTED
1704.3	STEEL CONSTRUCTION  DOCUMENTATION: MATERIAL VERIFICATION OF STRUCTURAL STEEL (IDENTIFICATION MARKINGS TO CONFORM TO ASTM A6 OR ASTM A568, AND MANUFACTURER'S CERTIFIED MILL TEST REPORTS); MATERIAL VERIFICATION OF WELD FILLER MATERIALS (IDENTIFICATION MARKING TO CONFORM TO AWS STANDARDS; MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED).  CONTINUOUS INSPECTIONS: COMPLETE AND PARTIAL PENETRATION GROOVE WELDS; MULTI-PASS FILLET WELDS; SINGLE-PASS FILLET WELDS GREATER THAN 5/16" ROOT.  PERIODIC INSPECTIONS: SINGLE-PASS FILLET WELDS 5/16" ROOT OR LESS; INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS (DETAILS SUCH AS BRACING AND STIFFENING, MEMBER LOCATIONS, AND APPLICATION OF JOINT DETAILS AT EACH CONNECTION).	SEE STRUCTURAL STEEL NOTES THIS SHEET
1704.4	CONCRETE CONSTRUCTION  CONTINUOUS INSPECTIONS: INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE; AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE; INSPECTION OF CONCRETE FOR PROPER APPLICATION TECHNIQUES.  PERIODIC INSPECTIONS: INSPECTION OF REINFORCING STEEL AND PLACEMENT; VERIFICATION OF USE OF REQUIRED DESIGN MIX; INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES; INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	f'c = 3000 PSI
1704.5.2	CONCRETE MASONRY CONSTRUCTION: LEVEL 1 SPECIAL INSPECTION PER TABLE 1704.5.1 OF THE IBC.  CONTINUOUS INSPECTIONS: THE INSPECTION PROGRAM SHALL VERIFY WELDING OF REINFORCING BARS; GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS; AND PREPARATION OF REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND PRISMS SHALL BE OBSERVED.  PERIODIC INSPECTIONS: AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE: PROPORTIONS OF SITE-PREPARED MORTAR; CONSTRUCTION OF MORTAR JOINTS; LOCATION OF REINFORCEMENT, CONNECTORS AND ANCHORAGES. THE INSPECTION PROGRAM SHALL VERIFY: SIZE AND LOCATION OF STRUCTURAL ELEMENTS; TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION; SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT; PROTECTION OF MASONRY DURING COLD WEATHER (BELOW 40°F) OR HOT WEATHER (ABOVE 90°F). PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE: GROUT SPACE IS CLEAN; PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHORAGES; AND CONSTRUCTION OF MORTAR JOINTS. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	f'm = 1500 PSI
1704.7	SOILS  CONTINUOUS INSPECTIONS: VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILLS.  PERIODIC INSPECTIONS: VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY; VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL; PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS; PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	SEE FOUNDATION NOTES THIS SHEET
1704.13	POST-INSTALLED ANCHORS IN MASONRY  CONTINUOUS INSPECTIONS: VERIFY FASTENER TYPE AND DIMENSIONS; MASONRY UNIT TYPE AND COMPLIANCE WITH ASTM C90 AND GROUT AND MORTAR COMPRESSIVE STRENGTHS; DRILL BIT SIZE AND COMPLIANCE WITH ANSI B212.15-1994; AND FASTENER EMBEDMENT, SPACING, AND EDGE AND END DISTANCES. THE INSPECTOR SHALL ALSO VERIFY THAT THE ANCHOR INSTALLATION COMPLIES WITH THE ICC EVALUATION REPORT AND SIMPSON'S PUBLISHED INSTALLATION INSTRUCTIONS.	SIMPSON TITEN HD SCREW ANCHORS (ICC ESR-1056)
1709	STRUCTURAL OBSERVATIONS SEE THE "STRUCTURAL OBSERVATIONS" NOTES PRECEDING THE "SPECIAL INSPECTION AND TESTING" NOTES.	

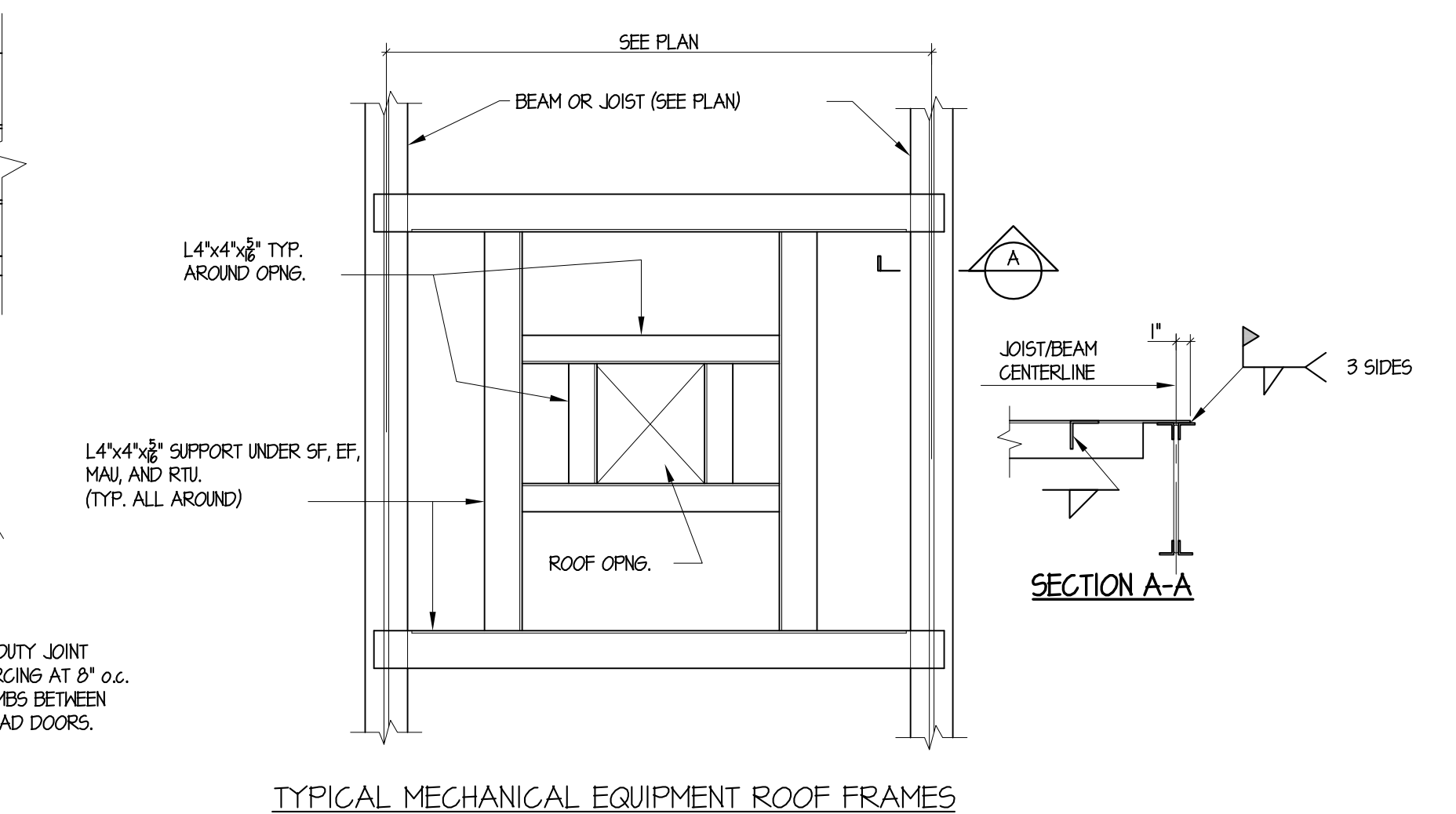


1 NEW MASONRY LINTEL NO SCALE

2 NEW MASONRY LINTEL NO SCALE

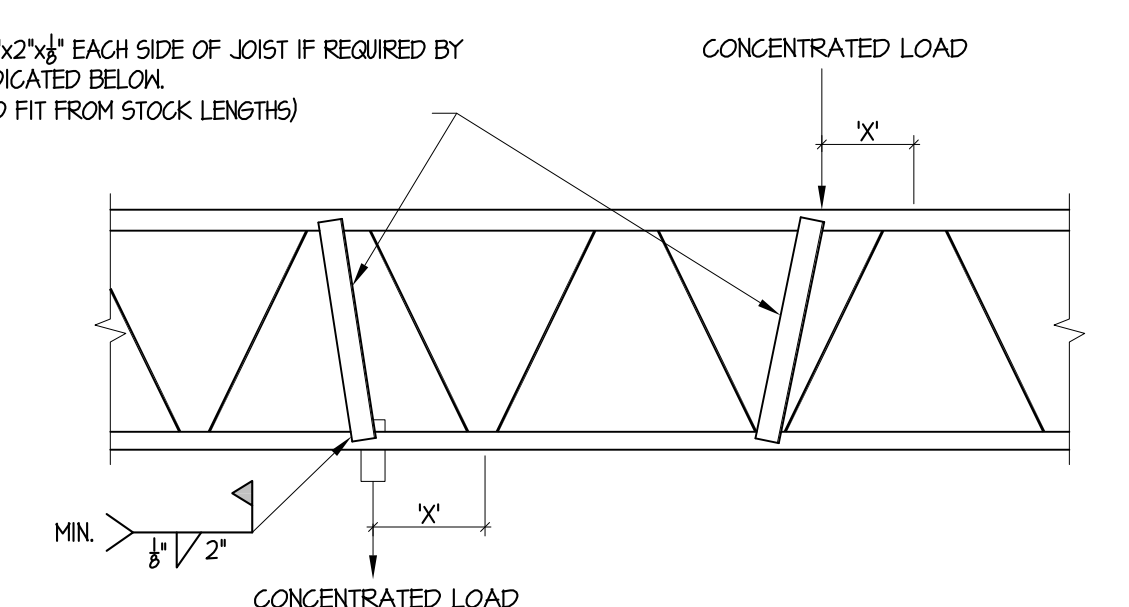


3 NEW MASONRY LINTEL NO SCALE



TYPICAL MECHANICAL EQUIPMENT ROOF FRAMES

4 SECTION SCALE: 3/4" = 1'-0"



FIELD MODIFICATIONS TO JOISTS FOR CONCENTRATED LOADS

5 SECTION SCALE: 3/4" = 1'-0"

