

TJI BEARING



BASE MATERIAL; DRILL BIT COMPLIANCE WITH ANSI B212-15; HOLE DIAMETER, DEPTH, AND CLEANLINESS; HOLE EDGE DISTANCE AND SPACING; INSTALLATION TEMPERATURE; ADHESIVE PRODUCT DESCRIPTION, INCLUDING PRODUCT NAME; ADHESIVE EXPIRATION DATE; ADHESIVE MIXING PROCEDURE; USE OF PROPER NOZZLES; VERIFICATION OF PROPERLY MIXED ADHESIVE PRIOR TO INJECTION OF ADHESIVE IN ANCHOR HOLE; ANCHORS UNDISTURBED DURING GEL TIME; ROD TYPE, GRADE, DIAMETER, LENGTH, AND CLEANLINESS; AND VERSIFICATION OF ANCHOR INSTALLATION IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS AND ICBO ER REPORT. B. PULL TESTS - ANCHOR DOES NOT EXHIBIT OBSERVABLE MOVEMENT AT THE APPLICATION OF PROOF LOAD, I.E., WASHER UNDER THE NUT DOES NOT BECOME LOOSE. 5. THRD RODS SHALL BE ASTM A307 EXCEPT SHALL BE ASTM A195, GRADE STAINLESS STEEL OR ASTM A153 ZINC-COATED THRD

ADHESIVE ANCHOR/DOWELS

½"中THRD ROD | 多"中 | 3½" | CONCRETE | 2000# TENSION

BIT ϕ | DEPTH | MATERIAL | PROOF LOAD | 56"Φ | 414" | CONCRETE | 2000# TENSION

ADHESIVE FILLED

DRILLED HOLE

EMBED DEPTH

PER SCHED

DRILL EMBED

ANCHOR/

ANCHOR/DOWEL

PER DETAILS

ADHESIVE ANCHORS/DOWELS

1. ADHESIVE TO BE EITHER OF THE FOLLOWING:

WITH ICBO REPORT ESR-2322.

THAT COMPLIES WITH ANSI B212.15.

PUBLISHED INSTRUCTIONS.

A. SET-XP EPOXY ADHESIVE ANCHOR SYSTEM AS

MANUFACTURED BY SIMPSON STRONG- TIE COMPANY, INC.

INSTALLED IN ACCORDANCE WITH ICBO REPORT ESR-2508.

MANUFACTURED BY HILTI, INC. INSTALLED IN ACCORDANCE

B. HILTI HIT-RES 500-SD ADHESIVE ANCHOR SYSTEM AS

2. HOLES MUST BE DRILLED USING A DRILL THAT IS SET IN ROTATION-

MANUFACTURER'S RECOMMENDED WIRE BRUSH AND OIL FREE

COMPRESSED AIR TO REMOVE PARTICULATE DEBRIS AND TO ACHIEVE A RELATIVELY DUST-FREE ADHESIVE CONTACT SURFACE.

MUST BE REMOVED IN ACCORDANCE WITH MANUFACTURER'S

4. SPECIAL INSPECTION OF ANCHORS/DOWELS MAY BE EITHER:

A. FULL TIME OBSERVATIONS (PULL TEST NOT REQUIRED) -

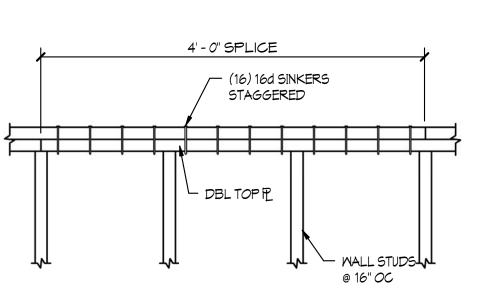
SPECIAL INSPECTOR TO RECORD STRENGTH AND AGE OF

HOLES ARE PERMITTED TO BE DAMP BUT ALL STANDING WATER

3. HOLES MUST BE CLEANED OF DUST AND DEBRIS, USING THE

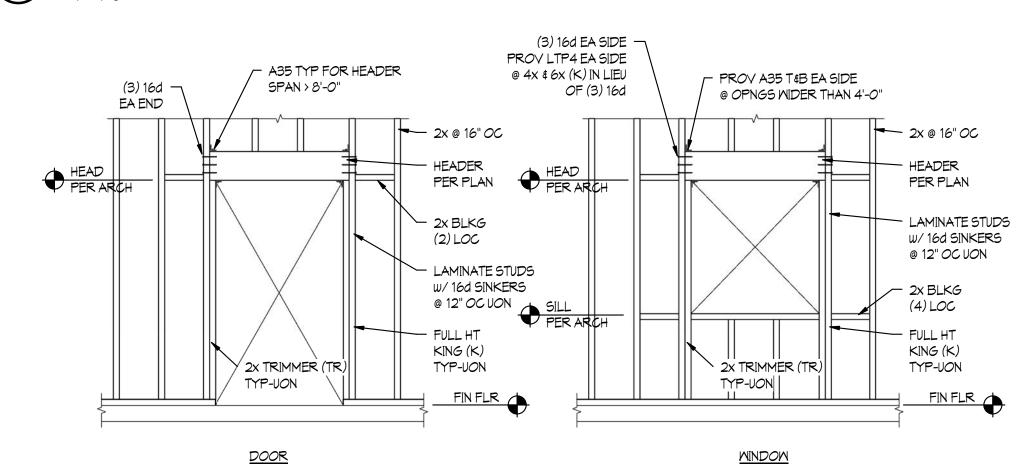
AND-HAMMERING MODE THAT HAS A CARBIDE-TIPPED DRILL BIT

RODS FOR EXTERIOR APPLICATIONS.

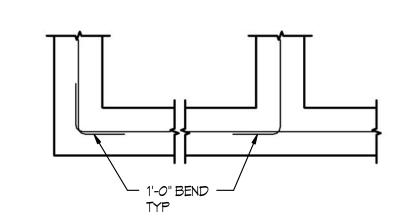


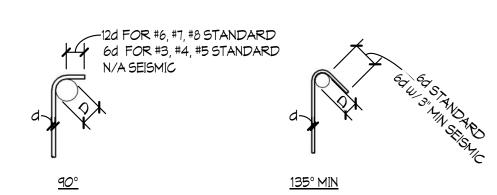
WHERE 4'-O" SPLICE IS NOT AVAILABLE PROVIDE C516x24" W/8d EVERY OTHER HOLE EA SIDE





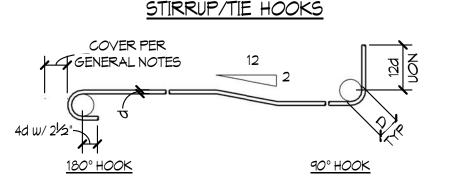
PIPES & TRENCHES



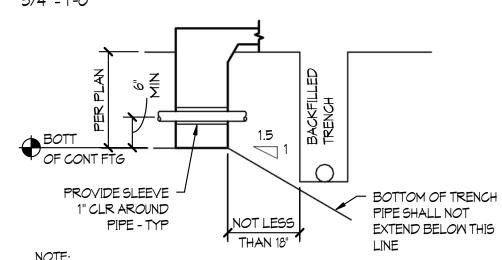


INTERSECTION

BAR BEND DIAMETER: D = 4d FOR #3, #4, \$ #5 D = 12d FOR #6, #7, \$ #8

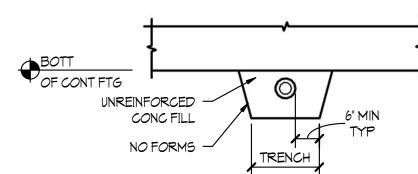


BAR BEND DIAMETER: D = 6d FOR #8 & SMALLER D = 8d FOR #9, #10, & 11 D=10d FOR #14 & #18



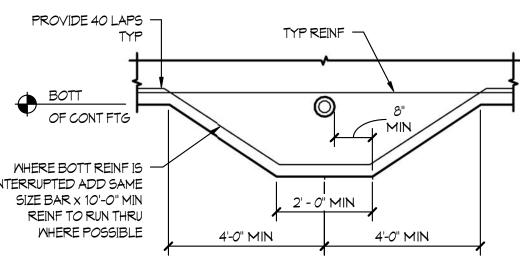
PIPES MAY PENETRATE THRU CONT FOOTING, NOT THRU SPREAD FOOTINGS

WHERE PIPE SLEEVE IS 2 6" ABY BOTT OF CONT FTG



CONCRETE FILL @ PIPE SHALL BE SAME WIDTH AS CONT FTG FULL WIDTH OF TRENCH, & SHALL BE PLACED BEFORE CONT FTG IS POURED

 $\frac{\text{BELOW CONT FTG}}{\text{WHERE PIPE SLEEVE IS } 2 \text{ 4" BELOW BOTT OF CONT FTG}}$



THRU CONT FTG WHERE PIPE SLEEVE IS BETWEEN 6" ABV & 4" BELOW BOTT OF CONT FTG

A. THE STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE 2007 EDITION OF THE CALIFORNIA BUILDING CODE (CBC).

B. THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

1. 2ND LEVEL FLOOR LIVE LOAD - 50 PSF, REDUCIBLE IN ACCORDANCE WITH CBC 1607.11.7. 2. PARTITION LOAD - 15 PSF PARTITION LOADING PER CBC 1607.5. 3. WIND - NOT APPLICABLE; NO EXTERIOR EXPOSURE.

4. SEISMIC - ASCE 7-05 EQUIVALENT LATERAL FORCE ANALYSIS WITH I= 1.0, OCCUPANCY CATEGORY II, SOIL CLASS D, SDS= 0.653, SD1= 0.359, AND SEISMIC DESIGN CATEGORY D WITH PLYMOOD SHEAR/BEARING WALLS (R=6.5, C6=0.104). C. FOUNDATIONS HAVE BEEN DESIGNED FOR MAXIMUM SOIL BEARING PRESSURES IN ACCORDANCE WITH

CBC TABLE 1804.2 WITH SILTY SANDS, CLAYEY SANDS CLASS OF MATERIALS. FOOTINGS HAVE BEEN DESIGNED FOR 1,500 PSF. D. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE BRACING AND SUPPORT OF ALL TEMPORARY CONSTRUCTION AND PARTIALLY COMPLETED PORTIONS OF THE WORK. THE

CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ADJACENT PAVED SURFACES, UTILITIES AND

E. THE WORK SHALL CONFORM TO THESE NOTES AND DRAWINGS. NO CHANGES SHALL BE ALLOWED WITHOUT WRITTEN AUTHORITY FROM THE ARCHITECT.

F. SLAB ON GRADE AND WATER VAPOR TRANSMISSION - NO GUARANTEE IS PROVIDED OR ASSURANCE IS GIVEN THAT SLAB ON GRADE SYSTEM (DRAINAGE BASE, VAPOR BARRIER, SAND CUSHION, AND SLAB THICKNESS AND REINFORCEMENT) AS SHOWN ON THESE DRAWINGS WILL REDUCE MOISTURE OR MOISTURE VAPOR TRANSMISSION TO ANY SPECIFIC LEVELS OR RATES TO INHIBIT MOLD GROWTH OR NOT ADVERSELY EFFECT MOISTURE-SENSITIVE FLOORING. IF SPECIFIC LEVELS OR RATES ARE TO BE ACHIEVED, THEN A QUALIFIED CONSULTANT SHOULD BE RETAINED TO PROVIDE RECOMMENDATIONS.

A. FOOTINGS AND SLABS SHALL BEAR ON UNDISTURBED NATIVE SOILS. AFTER FOOTING EXCAVATIONS AND PRIOR TO PLACING CONCRETE DENSIFY FOOTING BEARING SURFACES USING HAND COMPACTION METHODS. ALL FOOTINGS SHALL BEAR A MINIMUM OF 1'-O" BELOW GRADE AND NOT GREATER THAN THE SPECIFIED ELEVATION.

B. AFTER FOUNDATIONS ARE CONSTRUCTED, BACKFILL WITH ON SITE SILTY SANDY ON SITE MATERIAL PLACED IN 8" MAXIMUM OF LOOSE THICKNESS, UNIFORMLY MOISTURE CONDITION TO NEAR OPTIMUM AS NECESSARY, AND RECOMPACT TO 90% RELATIVE DENSITY.

C. ANY PROPOSED DEVIATIONS FROM THE ABOVE EARTHWORK REQUIREMENTS SHALL HAVE THE ARCHITECT'S PRIOR WRITTEN APPROVAL.

A. CONCRETE MIX DESIGNS - 3,000 PSI 28 DAY COMPRESSIVE STRENGTH MADE WITH 1" ASTM C33 AGGREGATES AND CONTAIN MINIMUM OF 5.75 SACKS OF CEMENT PER CUBIC YARD WITH A 0.50 WATER/CEMENT RATIO AND PLACED AT A 5" MAXIMUM SLUMP.

B. CEMENT SHALL BE ASTM C150, TYPE I OR II. USE OF FLYASH NOT ALLOWED.

C. AGGREGATE SHALL CONFORM TO ASTM C33.

D. CONTRACTOR SHALL RETAIN A TESTING LABORATORY TO DESIGN AND TEST CONCRETE MIX DESIGNS. MIX DESIGNS MAY BE PROPORTIONED BASED ON FIELD EXPERIENCE IN ACCORDANCE WITH CBC 1905.3 AND ACI 318, SECTION 5.3. FIELD STRENGTH DATA SHALL BE SUBMITTED IN ACCORDANCE WITH ACI 318, SECTION 5.3.1 AND SHALL BE CURRENT WITHIN THE LAST 12 MONTHS, AND SHALL BE BATCHED FROM THE SAME PLANT USING MATERIALS FROM THE SAME SOURCES. FOR CONCRETE TO

1. SUBMIT SEPARATE MIX DESIGNS FORMULATED FOR PLACEMENT BY PUMP. 2. SLUMP CONTROL SHALL BE AT THE PUMP HOPPER AND NOT AT THE END OF THE LINE.

3. SUBMIT WRITTEN VERIFICATION FROM THE CONCRETE PLACEMENT SUBCONTRACTOR AS TO THE PUMPABILITY OF THE PROPOSED MIXES. E. ALL CONCRETE SHALL BE READY-MIXED CONCRETE AND SHALL BE BATCHED, MIXED AND DELIVERED

TO SITE PER ASTM C94. WATER SHALL BE ADDED ONLY TO OBTAIN MINIMUM SLUMP EXCEPT THE QUANTITY OF THE BATCHED WATER PLUS THE WATER ADDED AT THE SITE SHALL NOT EXCEED THE QUANTITY OF WATER AS STATED ON THE MIX DESIGN. PLACE CONCRETE WITHIN 90 MINUTES OF THE ADDITION OF MIXING WATER.

F. REINFORCEMENT SHALL BE ASTM A615, GRADE 60.

G. REINFORCEMENT SHALL BE FABRICATED WITH BEND AND HOOKS CONFORMING TO ACI 315 AND AS SHOWN ON DRAWINGS. LAP ALL REINFORCING MINIMUM OF 40 BAR DIAMETERS (BUT NOT LESS THAN 12") UNLESS OTHERWISE NOTED.

H. REINFORCEMENT SHALL BE HELD SECURELY IN PLACE AND SUPPORTED ON GALVANIZED CHAIRS CONFORMING TO CRSI. WIRE TIE ALL INTERSECTIONS. CONCRETE DOBIES MAY BE USED TO SUPPORT REBAR CAST AGAINST EARTH.

I. MINIMUM CONCRETE COVER OVER REINFORCEMENT SHALL BE: 3" FOR CONCRETE CAST AGAINST EARTH, 2" FOR FORMED SURFACES EXPOSED TO EARTH OR WEATHER, AND 1" FOR FORMED SURFACES NOT EXPOSED TO WEATHER UNLESS OTHERWISE SHOWN.

J. ALL CONCRETE SHALL BE VIBRATED.

K. PROVIDE SLAB ON GRADE JOINTS PER DETAILS L. CHAMFER OR TOOL ALL EXPOSED EDGES 3/4".

M. PROVIDE HOT AND COLD MEATHER PROTECTION PER ACI 305 AND 306 RESPECTIVELY

N. ALL CONCRETE SHALL BE CURED FOR 7 DAYS MINIMUM BY MET CURING OR MITH CURING COMPOUND. CURING COMPOUNDS TO BE COMPATIBLE WITH FLOOR FINISHES.

O. AFTER SLAB IS PLACED SEAL MATER TIGHT SLAB BLOCKOUTS AND SLAB EDGES WHERE THE VAPOR BARRIER IS EXPOSED SO THAT WATER/MOISTURE FROM ALL SOURCES (CURE WATER, RAIN WATER, ETC) IS NOT ALLOWED TO PENETRATE BETWEEN THE SLAB AND VAPOR BARRIER.

4. POST INSTALLED ANCHORS/DOWELS

A. ADHESIVE ANCHORS/DOWELS - SIMPSON STRONG-TIE SET-XP IN ACCORDANCE WITH ICC ESR-2508. B. WEDGE ANCHORS - SIMPSON STRONG-TIE STRONG-BOLT WEDGE ANCHORS IN ACCORDANCE WITH ICC

A. ALL STEEL CONSTRUCTION SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC 360-05 "SPECIFICATIONS FOR STRUCTURAL STEEL FOR BUILDINGS", AISC 303-05 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", AND AISC 341-05 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, SUPPLEMENT NO. 1".

B. PLATES - ASTM A36; TUBES - ASTM A500, GRADE B; MACHINE BOLTS - ASTM A307. C. WELDING:

1. SHALL CONFORM TO AWS D1.1. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS 2. ELECTRODES - FILLER METALS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF ANSI/AWS SPECIFICATIONS FOR ELECTRODES. MINIMUM TENSILE STRENGTH OF WELD METAL SHALL BE 70 KSI TYPICAL UNLESS OTHERWISE NOTED.

3. FILLET WELDS - FILLET WELD SIZES SHALL BE THE LARGER OF THE SIZES AS SHOWN ON

STRUCTURAL DRAWINGS AND AS REQUIRED BY ASIC TABLE J2.4. D. SUBMITTAL DRAWINGS: 1. OBTAIN ENGINEER'S REVIEW OF SUBMITTALS IN A TIMELY MANNER SO AS NOT ADVERSELY

AFFECT CONSTRUCTION SCHEDULE. ALLOW 10 WORKING DAYS FOR REVIEW.

2. SUBMITTAL DRAWINGS: A. SHALL INDICATE PROFILES, SIZES, SPACING, LOCATIONS OF STRUCTURAL MEMBERS,

OPENINGS, ATTACHMENTS, AND FASTENERS. B. SUBMIT SHOP STANDARDS FOR EACH TYPE OF CONNECTION REQUIRED, CORRESPONDING TO STRUCTURAL DRAWINGS.

C. SUBMIT ERECTION AND PLACING DRAWINGS SHOWING SIZE AND PIECE MARK OF EACH MEMBER AND ITS LOCATION. D. SHALL INDICATE WELDED CONNECTIONS WITH AMS A2.4 WELDING SYMBOLS. INDICATE NET

WELD LENGTHS. E. SUBMIT 3 COPIES OF SUBMITTAL DRAWINGS. ONE REVIEWED SET WILL BE RETURNED TO

THE CONTRACTOR FOR REPRODUCTION AND DISTRIBUTION. E. PRIME PAINTING OF STEEL NOT REQUIRED EXCEPT WHERE STEEL IS EXPOSED TO VIEW.

A. ALL FRAMING MEMBERS SHALL BE IDENTIFIED BY GRADE STAMP OF WEST COAST LUMBER

2. PLATES LEDGERS, AND BLOCKING - HEM FIR OR D.F. NO. 2 WITH 19% MAXIMUM MOISTURE

WITH ICC ESR-2994 OR APPROVED EQUAL AS FOLLOWS: A. DESIGN CRITERIA - 14 PSF DL, 15 PSF PARTITION, 50 PSF OFFICE LL, MINIMUM

TJ-PRO RATING OF 44. 2. LAMINATED VENEER LUMBER SHALL BE REDLAM LVL'S AS MANUFACTURED BY REDBUILT, LLC IN

2900 Fb EXCEPT RIM BOARDS CAN BE GRADE 1.4E, 1800 Fb.

MANNER SO AS NOT ADVERSELY AFFECT CONSTRUCTION SCHEDULE. ALLOW 10 WORKING DAYS FOR

AND PLACEMENT. B. COMPLETE SET OF DESIGN CALCULATIONS SEALED BY A CALIFORNIA REGISTERED

PROFESSIONAL ENGINEER.

1. PRESERVATIVE TREATED MOOD SHALL BE USED ONLY WHERE SHOWN ON DRAWINGS AND SHALL NOT BE USED IN PLACE OF OTHER FRAMING UNLESS WRITTEN AUTHORIZATION FROM THE STRUCTURAL

2. PRESERVATIVE TREATMENT SHALL BE EITHER ZINC BORATE OR DOT SODIUM BORATE.

HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A653, CLASS 690. NO SUBSTITUTIONS ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER

E. JOIST HANGERS AND FRAMING CONNECTORS - STANDARD ITEMS AS MANUFACTURED BY SIMPSON STRONG-TIE CO. (OR EQUAL), INSTALLED FOR FULL RATED LOAD VALUES.

G. ALL FRAMING MEMBERS ARE TO BE CUT FOR FULL BEARING AND PROPER LENGTH. H. NAILING - PER CBC TABLE 2304.9.1 UNLESS OTHERWISE NOTE ON THE DRAWINGS. NAILING FOR

VALUES OR AS NOTED.

EXPOSURE 1. FLOOR SHALL BE A GLUED-NAILED SYSTEM. NAIL EDGES WITH 10d COMMON RING SHANKED NAILS @ 6" O.C. AND FIELD @ 10" O.C. ADHESIVE SHALL CONFORM TO ASTM D3498 AND HAVE A MINIMUM DRY STRENGTH OF 350 PSI. INSTALL SHEETS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS.

2. SHEAR WALL SHEATHING SHALL BE 3/8" OSB OR PLYWOOD APA RATED SHEATHING, 16/0 PANEL INDEX, EXPOSURE 1, NAILED IN ACCORDANCE WITH SHEAR WALL SCHEDULE.

A. CONCRETE - SLABS ON GRADE AND FOUNDATIONS - SPECIAL INSPECTION NOT REQUIRED. EXCEPTIONS 1, 2.3, AND 3 OF CBC 1704.4 APPLIES. CONCRETE DESIGN IS BASED ON F'C= 2,500 PSI IN ACCORDANCE WITH CBC SECTION 1704.4, EXCEPTION 2.2.3.

B. POST INSTALLED ANCHORS/DOWELS SHALL HAVE SPECIAL INSPECTIONS AS FOLLOWS: 1. ICC REPORT ESR-2508, SECTION 4.4 FOR SIMPSON STRONG-TIE SET-XP ADHESIVE ANCHORS/DOWELS.

2. ICC REPORT ESR-1771, SECTION 4.4 FOR SIMPSON STRONG-BOLT WEDGE ANCHORS. C. MELDING SHALL HAVE SPECIAL INSPECTION IN ACCORDANCE WITH CBC 1703.1. MELDING IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH CBC 1704.2.2 MAY NOT REQUIRE CONTINUOS

B. FRAMING MEMBERS TO BE DF NO. 2 WITH 19% MAXIMUM MOISTURE CONTENT, EXCEPT AS FOLLOWS: 1. 6X MEMBERS - D.F. NO. 1 WITH 19% MAXIMUM MOISTURE CONTENT.

C. SHOP FABRICATED STRUCTURAL WOOD:

1. MOOD I JOISTS SHALL BE RED-I JOISTS AS MANUFACTURED BY REDBUILT, LLG IN ACCORDANCE

ACCORDANCE WITH ICC ESR-2993 OR APPROVED EQUAL WITH ALL MEMBERS BEING GRADE 2.0E,

3. SUBMITTALS - OBTAIN ENGINEER'S REVIEW OF THE FOLLOWING SUBMITTALS IN A TIMELY

A. SUBMITTAL DRAWINGS SHALL SHOW LAYOUT AND DETAIL NECESSARY FOR DETERMINING FIT

D. PRESERVATIVE TREATED WOOD:

3. NAILS USED TO FASTEN FRAMING AND CONNECTORS TO PRESERVATIVE TREATED WOOD SHALL BE

F. MACHINE BOLTS - ASTM A307. PROVIDE WASHERS UNDER BOLT HEADS WHICH BEAR AGAINST WOOD.

JOIST HANGERS AND FRAMING CONNECTORS PER MANUFACTURER'S REQUIREMENTS FOR FULL RATED

1. FLOOR SHEATHING SHALL BE 3/4" APA STURD-I-FLOOR, T&G, 24" O.C. SPAN RATING,

SPECIAL INSPECTION. PERIODIC INSPECTIONS SHALL BE IN ACCORDANCE WITH CBC TABLE 1704.4

RE GRANITE

No. 2310 Exp. 3-31-11

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Description Date

gk/10-021 09/24/10 929-A12

PRINT DATE: 09/24/10

GENERAL NOTES & TYPICAL DETAILS

GENERAL NOTES

FRAMED OPENING

INTERRUPTED ADD SAME

