

GENERAL STRUCTURAL NOTES
 WALLACE RESIDENCE, 8295 S. KRAMERIA WAY, CENTENNIAL, COLORADO
 PROJECT #008080
 2006 INTERNATIONAL RESIDENTIAL CODE

DESIGN LEVEL LOADS
 SNOW 30 PSF
 WIND (SECOND 60/97) 40 MPH EXPOSED C
 FLOOR 40 PSF
 CEILING 10 PSF
 ROOF 40 PSF

FOUNDATIONS
 THE FOUNDATION WAS DESIGNED WITHOUT A SOILS REPORT.

THE ALLOWABLE SOIL DESIGN CAPACITY WERE ASSIGNED FOR THE PURPOSES OF THE STRUCTURAL DESIGN OF THE FOUNDATION SYSTEM. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE SOILS AND HAS DETERMINED THAT THE SOILS ARE SUITABLE FOR THE FOUNDATION DESIGN. THE DESIGNER HAS VERIFIED BY A QUALIFIED SOIL ENGINEER PRIOR TO CONSTRUCTION, IF THE ORIGINAL DESIGN CRITERIA CANNOT BE CONFIRMED, CONTACT THE ENGINEER FOR FURTHER DESIGN AND CONSTRUCTION RECOMMENDATIONS.

THE FOUNDATION SHALL BE SUPPORTED ON A CAST-IN-PLACE GRADE BEAM AND STRAIGHT SHIRT DRILLED PIER CONCRETE FOUNDATION WITH THE FOLLOWING MINIMUM CHARACTERISTICS:

SIZE:
 TOTAL LENGTH 10'-0"
 25'-0" BELOW EXCAVATION 10'-0"
 VERIFIED BEDROCK EMBEDMENT 10'-0"
 ALL DEPT REINFORCEMENT 10'-0"
 ALL DEPT REINFORCEMENT EXT 10'-0"
 ALLOWABLE SIDE SHEAR 1500 PSF
 DEAD LOAD END BEARING PRESSURE 1500 PSF
 A FULL WALL WITH VOID SPACE AT LEAST 6" DEEP SHALL BE PLACED BELOW ALL GRADE BEAMS BETWEEN PIERS. THE VOID SHALL BE DAMAGED AT THE TIME OF CONCRETE PLACEMENT.
 EXTEND PIER REINFORCING A MINIMUM OF 36" INTO THE GRADE BEAMS AND WALLS.
 SLOPE FURTHER GRADE AWAY FROM FOUNDATION.

CONCRETE AND REINFORCEMENT

CONCRETE SHALL CONFORM TO THE APPLICABLE PROVISIONS OF LATEST REVISION OF ACI-301 MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:
 ALL FOUNDATION & FOOTING CONCRETE 3000 PSI
 ALL GARAGE SLAB & PAVEMENT CONCRETE 4000 PSI W/ 3% SLAK FINE AGGREGATE
 28% FT. ASH 0.25% WATER/CEMENT RATIO

PERFORMED REINFORCEMENT
 REINFORCEMENT FABRICATED AND PLACED IN ACCORDANCE WITH A MANUAL OF STANDARD PRACTICE (ACI-309).

CONCRETE MUST BE PLACED CONTINUOUSLY WITHOUT HORIZONTAL COLD JOINTS. IF COLD JOINT IS DESIRED, APPROPRIATE VERTICAL REINFORCEMENT MUST BE PROVIDED.
 CONCRETE MUST BE PLACED ACCORDING TO ALL ACI COLD WEATHER CONCRETE PLACEMENT REQUIREMENTS AS TEMPERATURE AT THE TIME OF PLACEMENT REQUIRES.
 STRUCTURAL STEEL

WIDE FLANGE & STEEL
 OTHER CHANNELS, ANGLES, PLATES, & BARS) ASTM A99 (Fy = 36 KSI)
 PIPE COLUMNS ASTM A53 GRADE B (Fy=35 KSI)
 BOLTS ASTM A307
 WELD MATERIAL E70XX ELECTRODES

ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED PER AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.

ALL WELDERS SHALL HAVE EVIDENCE OF HAVING PASSED THE AWS STANDARD QUALIFICATION TEST.

WOOD FRAMING
 PARALLEL STRAND LUMBER (PSL) Fy= 2400 PSI, E= 2,000,000 PSI
 LAMINATED VENEER LUMBER (LVL, MVL) Fy= 2400 PSI, E= 1,800,000 PSI
 FRAMING LUMBER (MAXIMUM MOISTURE CONTENT = 19%)

HEM-FIR STUD & BATTEN 120 & 160 PSI, E= 1,200,000 PSI
 JOISTS & RAFTERS Fy= 850 PSI, E= 1,800,000 PSI
 BEAMS (6x9 & 1P) DOUBLES FOR LAMINATED LVL & BATTEN
 DOUBLES FOR 1800 PSI, E= 1,600,000 PSI
 COLLINGS (5x5 & 1P) DOUBLES FOR 1200 PSI, E= 1,600,000 PSI

ALL WALLING SHALL BE PER THE BUILDING CODE EXCEPT WHERE WORK OR LARGER WALLING IS SHOWN ON DRAWINGS.

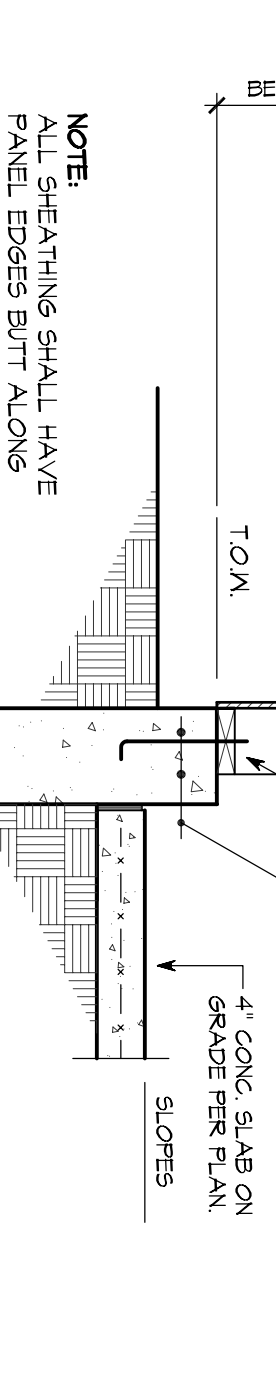
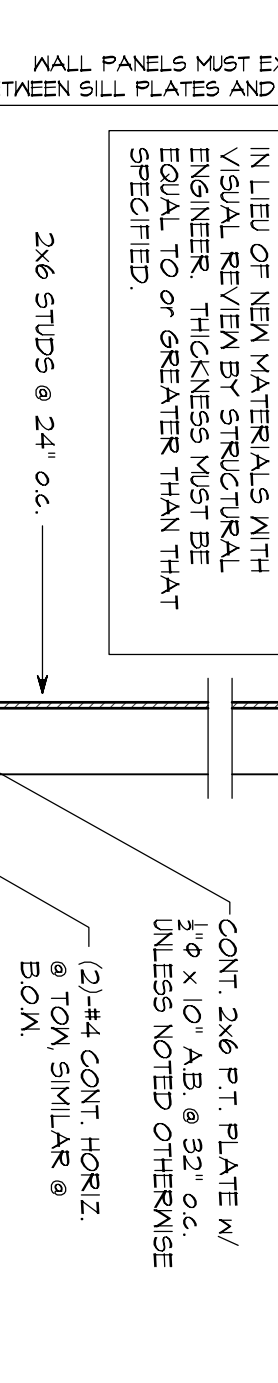
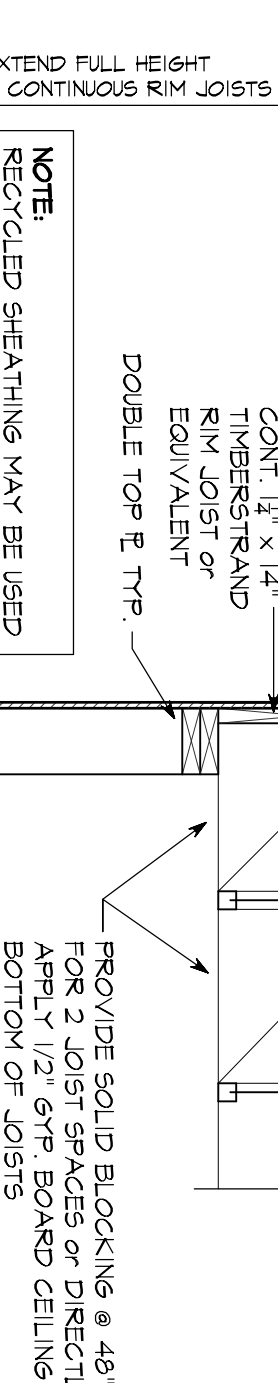
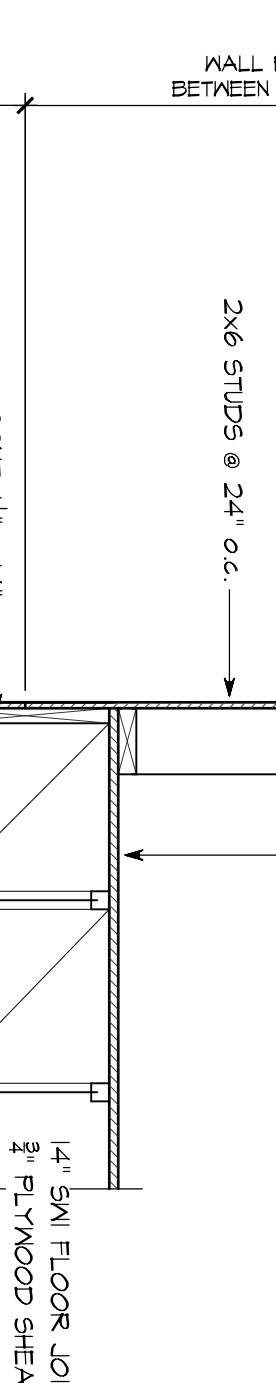
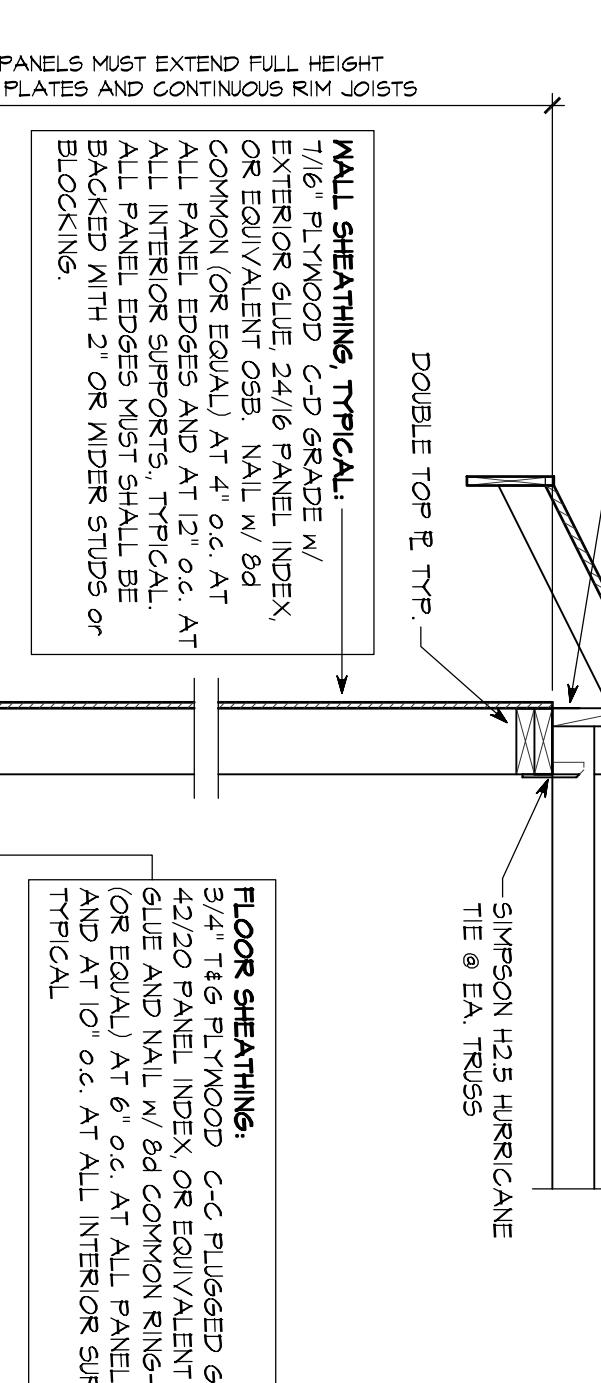
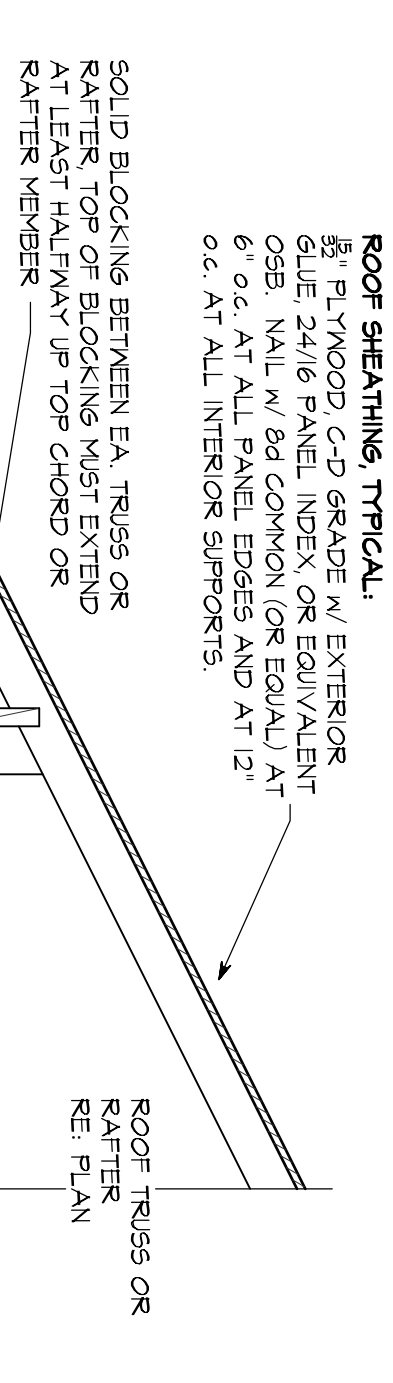
ALL ROOF RAFTERS, TRUSSES, & BEAMS MUST BE ANCHORED WITH 6 GA. METAL FRAMING ANCHORS. ALL WOOD ROOF SHEATHING AND SHEATHING SHALL BE ENGINEERED GRADERS WITH GRADE STAMP INDICATING APPROPRIATE VAPOR SPACING OR SUPPORTS (APA 321/6).

CROSS BRACE ALL ROOF AND FLOOR JOISTS AT MIDSPAN WHERE BOTTOM DOES NOT RECEIVE BRACING ON OTHER SIDE.

PROVIDE SOLID BLOCKING OR RIV JOISTS AT ALL JOIST SUPPORTS AND JOIST ENDS. PROVIDE ALL FLOOR JOIST SYSTEMS AND ROOF TRUSS BEAMS AND BRIDGES AND CONNECTIONS SPECIFIED BY JOIST MANUFACTURER.

METAL CONNECTOR DESIGNATIONS ARE SIMPSON STRONG-TIE COMPANY.

THESE PLANS HAVE BEEN ENGINEERED FOR CONSTRUCTION AT ONE SPECIFIED BUILDING SITE. THE CONTRACTOR IS RESPONSIBLE FOR USE OF THESE PLANS AT ANY OTHER BUILDING SITE. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL PERTINENT EXISTING CONDITIONS AS SPECIFIED ON THE CONSTRUCTION DOCUMENTS AND REPORTING ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONTINUING CONSTRUCTION.



1 TYPICAL EXTERIOR WALL
 3/4" = 1'-0"

2 TYP. GARAGE FDN. WALL
 3/4" = 1'-0"

3 TYP. PORCH FDN. WALL
 3/4" = 1'-0"

4 TYP. CORNER REINF.
 3/4" = 1'-0"

5 TYP. WALL OPENING
 3/4" = 1'-0"

6 TYP. STEEL BEAM ON WOOD POST
 3/4" = 1'-0"

7 TYP. FLUSH STEEL BEAM
 3/4" = 1'-0"

NO.	DATE	DESCRIPTION	DRAWN	REVIEWED
1	8/12/08	C.D. SET	CRD	KAO

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