## FOOTING PLACEMENT FOR FOUNDATION WALLS

- 1. BOTTOMS OF ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOILS CAPABLE OF SUPPORTING THE ASSUMED DESIGN LOAD OF 3,000 PSF. THE CONTRACTOR SHALL EXAMINE AND VERIFY THE SOIL CONDITIONS BEFORE ALLOWING CONCRETE FOOTINGS AND FOUNDATIONS TO BE INSTALLED. IF SOILS EXHIBIT A LESSER VALUE, NOTIFY THE ARCHITECT IMMEDIATELY, AS THE FOUNDATION DESIGN MUST BE RE-EVALUATED AND POSSIBLY REDESIGNED
- 2. THE SOIL IN THE TRENCHES FOR ALL FOOTINGS SHALL BE INSPECTED BY A MUNICIPAL OFFICIAL BEFORE ANY FOOTINGS ARE PLACED. PROVIDE INSPECTION CERTIFICATE.
- 3. THE BOTTOM ELEVATION SHOWN FOR ALL FOOTINGS IS THE MINIMUM, AND SHALL BE NO LESS THAN 36 INCHES BELOW FINAL EXTERIOR GRADE. SOIL CONDITIONS MAY REQUIRE ADDITIONAL DEPTH.
- 4. FOOTINGS AND SLABS SHALL NOT BE PLACED ON FROZEN SOILS.
- 5. FOOTING CONCRETE SHALL BE MINIMUM 3,000 PSI DESIGN MIX @ 28 DAYS. IN LIEU OF TESTING, PROVIDE MIX CERTIFICATE TO CONTRACTOR FOR DELIVERY TO OWNER.
- 6. WHERE PIPES PASS THROUGH A FOOTING, THE FOOTING SHALL BE MINIMUM OF 12 INCHES THICK SOLID BELOW, STEP DOWN AS REQUIRED, INSTALL SLEEVE SAME SIZE AS PIPE DIAMETER PLUS 2 INCHES.
- 7. FOOTING TO FOUNDATION WALL ANCHORAGE: INSTALL HOOKS FORMED FROM #4 DEFORMED REINFORCING BARS. VERTICAL LEG SHALL BE 20 INCHES LONG, AND HOOK SHALL BE 3-INCHES. BOTTOM OR HOOK SHALL BE 3 INCHES FROM BOTTOM OF FOOTING. INSTALL NOT MORE THAN 12 INCHES FROM ANY CORNER (BOTH SIDES) AND THEN NOT MORE THAN 48 INCHES ON CENTER FOR ENTIRE LENGTH OF WALLS. ALIGN HOOKS TO BE CENTERED IN FOUNDATION THICKNESS AND IN BLOCK CORES IF CMU WALLS.

#### UNIT MASONRY FOUNDATION WALLS

- 1. CONCRETE MASONRY UNIT (CMU) CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6-88)" PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE.
- 2. HOLLOW LOAD BEARING CMU SHALL CONFORM TO ASTM C90, TYPE I, "NORMAL WEIGHT". MINIMUM NET TENSILE STRENGTH OF 1250 PSI; 0.06% MAXIMUM. LINEAR SHRINKAGE FROM SATURATED TO OVEN DRY; CURE 28 DAYS. PROVIDE MANUFACTURER'S CERTIFICATE OF COMPLIANCE FOR UNITS PROVIDED TO SITE.
- 3. MORTAR TO BE TYPE S, CONFORMING TO ASTM C270. MORTAR SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.
- 4. INSTALL 9 GA. DUROWALL TRUSS TYPE JOINT REINFORCEMENT @ 16" O.C. VERTICALLY (EVERY OTHER COURSE), ALL CMU WALLS.
- 5. CMU WALLS SHALL BE FILLED SOLID TOP TO BOTTOM, FOR ENTIRE LENGTHS, WITH
- CONCRETE, PUMP MIX. MAX. 48-INCH LIFTS.
- 6. WHERE PIPES OR WIRE PASS THROUGH A FOUNDATION WALL, INSTALL SLEEVE MINIMUM OF PIPE OR WIRE DIAMETER PLUS 2 INCHES.
- 7. REINFORCING BARS SHALL BE "DEFORMED" CONFORMING TO ASTM A615; GRADE-40 FOR #3 BARS, GRADE-60 FOR #4 AND LARGER BARS. "LAP JOIN" ALL REINFORCING BARS 30 BAR DIAMETERS MINIMUM. CORNER BARS FOR CONTINUOUS REINFORCING SHALL BE LAPPED MINIMUM 30 BAR DIA. EACH WAY.
- 8. COMPACT BACKFILL BEHIND FOUNDATION WALLS TO MINIMUM OF 90% DENSITY, IN APPROPRIATE LIFTS. ALL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC OR OTHER DETRIMENTAL MATERIAL
- 9. CEMENT PARGING: COVER EXTERIOR OF CMU WALLS, FROM TOP TO 2" BELOW GRADE. APPLY A & THICK CEMENT PARGING
- 10. DO NOT APPLY CONCENTRATED LOADS FOR AT LEAST 3 DAYS AFTER BUILDING MASONRY WALLS. DO NOT APPLY UNIFORM FLOOR OR ROOF LOADS FOR AT LEAST 12 HOURS AFTER BUILDING MASONRY WALLS.

### CONCRETE WORK

- 1. CODES AND STANDARDS: ACI-301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR
- 2. COMPRESSIVE STRENGTH OF CONCRETE 3,000 PSI AT 28 DAYS. MAX. SLUMP OF ALL CONC. SHALL BE 4". IN LIEU OF TESTING, CONTRACTOR SHALL PROVIDE CERTIFIED MIX RECEIPTS, DELIVERED TO OWNER.
- 3. WHEN PLACING INTERIOR CONCRETE SLABS, DO NOT PUNCTURE THE VAPOR BARRIER. BE CAREFUL & PATIENT WITH CURING TIME BECAUSE VIRTUALLY NO WATER WILL BE LOST
- 4. USE AIR-ENTRAINING ADMIXTURE IN ALL CONCRETE THAT IS EXPOSED TO FREEZING AND THAWING, PROVIDING NOT LESS THAN 4% NOR MORE THAN 6% ENTRAINED AIR.
- 5. ALL CONCRETE FOR SLABS SHALL BE "FIBRATED."
- 6. NO CONCRETE SLABS OR FOOTINGS SHALL BE PLACED UNTIL SUBGRADE PREPARATION IS INSPECTED AND APPROVED BY THE MUNICIPALITY
- 7. WOVEN WIRE FABRIC FOR RADIANT HEATED SLABS INSTALL 6x6, 16 GA., EDGE TO EDGE.
- RADIANT TUBING SHALL BE "TIED" TO THIS FABRIC. 8. FINISHES: EXPOSED TO VIEW VERTICAL SURFACES SHALL HAVE A RUBBED FINISH IN ACCORDANCE WITH ACI-301. FLOOR SLABS SHALL HAVE A STEEL TROWEL FINISH.
- EXTERIOR WALKWAYS TO HAVE BROOM FINISH. 9. NEW ADDITION SLAB: FINAL FINISH SHALL BE ETCHED AND POLISHED BY OWNER, USE

### NO CHEMICAL SEALERS, LEAVE RAW. BELOW SLAB VAPOR BARRIERS

- 1. BELOW ADDITION GROUND SUPPORTED CONCRETE SLAB SHALL BE INSTALLED A VAPOR BARRIER, RADON / METHANE BARRIER. THE LOWER THE WATER VAPOR PERMEANCE RATING OF THE BARRIER, THE MORE RESISTIVE IT IS TO RADON AND METHANE. 2. ALL VAPOR BARRIERS SHALL BE PLACED ON THE PREPARED SUBGRADE, BELOW ANY
- INSULATION BOARDS. THE V.B. SHALL BE EXTENDED UP EDGES TO BE VISIBLE ABOVE THE SLAB, REMOVE EXCESS AFTER SLAB HAS CURED. FOR THE V.B. TO PERFORM AS A GOOD RADON GAS BARRIER ALL PENETRATIONS SHALL BE SEALED AND ALL JOINTS LAP SPLICED A MINIMUM OF 6-INCHES, AND TAPED PER MFG. RECOMMENDATIONS.
- 3. PRODUCT SHALL BE A HIGH QUALITY POLYETHYLENE PLASTIC, AT LEAST 8-MILS THICK THE MINIMUM PERM RATING SHALL BE "CLASS 1" VAPOR RETARDER, PERM RATING OF 0.10 OR LESS, CONFORMING TO ASTM E96. MEMBRANE SHALL MEET ASTM E-1745.

# BELOW SLAB RIGID INSULATION BOARD

 INSULATION BOARD PLACED BELOW INTERIOR CONCRETE SLABS SHALL BE A MINIMUM OF 2-INCHES THICK, R-10, TIGHTLY FITTED. BLUE STYROFOAM.

# CONCRETE SEALER (IF SHOWN)

- 1. CONCRETE SEALER FOR ALL HORIZONTAL INTERIOR AND EXTERIOR SLABS WHERE INDICATED SHALL BE "SEALTIGHT INTEX" BY W.R. MEADOWS, INC., P.O. BOX 543, ELGIN,
- 2. INTEX IS A NON-YELLOWING WATER BASE ACRYLIC CURING AND SEALING COMPOUND. APPLICATION SHALL BE TWO COATS, PER MANUFACTURES RECOMMENDATIONS WITH MINIMUM OF 24 HOURS BETWEEN COATS. APPLICATOR SHALL PROVIDE THE OWNER WITH RECEIPT SHOWING THE QUANTITY OF MATERIAL SUPPLIED TO THE SITE.

# STAIRS AND RAILS

- 1. STAIRWAYS SHALL NOT BE LESS THAN 36" CLEAR. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5" INTO STAIR. THE MIN. CLEAR WIDTH OF STAIRS BETWEEN HANDRAILS SHALL NOT BE LESS THAN 31.5" WITH ONE HANDRAIL, AND 27" WITH HANDRAILS BOTH
- 2. FOR THIS PROJECT: TREAD DEPTH IS 10-1/2" NOSING TO NOSING, RISER IS 7-1/2" OR MATCHES THE EXISTING STAIR RISER, WHICHEVER IS GREATER.
- 3. LANDINGS: AT THE TOP AND BOTTOM OF STAIRS SHALL BE A LANDING OF EQUAL WIDTH TO THE STAIR SERVED, AND MIN. DEPTH OF 36" MEASURED IN THE DIRECTION OF TRAVEL. A LANDING IS NOT REQUIRED AT THE TOP OF INTERIOR STAIRS, PROVIDED NO DOOR SWINGS OVER THE STAIR.
- 4. HANDRAIL HEIGHT SHALL BE 36", MEASURED VERTICALLY FROM THE NOSING OF THE TREADS, ALL STAIRS SHALL HAVE HAND RAILS ON BOTH SIDES. PROVIDE GOOD SUPPORT
- 5. HANDRAILS BE STANDARD "OVAL" STAIN GRADE MAHOGANY, WITH A DIAMETER OF 1.25 TO 2 INCHES, EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH. SEE CODE REQUIREMENTS.
- 6. GUARDRAILS AT EXTERIOR STEPS HAVE INTERMEDIATE RAILS (BALUSTRADE) OR ORNAMENTAL CLOSURES WHICH DO NOT ALLOW THROUGH PASSAGE OF AN OBJECT OF
- 7. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS FROM A POINT DIRECTLY ABOVE THE TOP AND BOTTOM RISER, AND SHALL EXTEND MIN 12" BEYOND THE TOP AND BOTTOM, BECOMING LEVEL. ENDS SHALL BE MITERED AND RETURNED TO THE WALL. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1.5" BETWEEN THE WALL AND THE HANDRAIL.

## WOOD FRAMING "BASIC"

- 1. STANDARDS: ALL ROUGH CARPENTRY TO COMPLY WITH "MANUAL OF HOUSE FRAMING" BY NATIONAL FOREST PRODUCTS ASSOC., ICC RESIDENTIAL CODE, AND WITH RECOMMENDATIONS OF AMERICAN PLYWOOD ASSOC
- 2. STRUCTURAL LUMBER (WALL STUDS, FLOOR CEILING JOISTS) OF NOMINAL 2" THICKNESS
- SHALL BE KILN DRIED (MAX. 19% MOISTURE CONTENT) #2 HEM-FIR WITH MIN. Fb 1,200. 3. ALL WOOD, IN PARTICULAR SILL PLATES, IN CONTACT WITH MASONRY SHALL BE PRESSURE TREATED. ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD TO BE STAINLESS STEEL OR HEAVY HOT DIPPED GALVANIZED. USE STAINLESS NAILS FOR SHEATHING TO PRESSURE TREATED WOOD.
- 4. THE JOINT BETWEEN MASONRY FOUNDATION WALL AND WALL SILL PLATES SHALL RECEIVE POLYPROPYLENE FOAM SILL PLATE INSULATION.
- 5. PROVIDE TWO (2) FLOOR JOISTS DIRECTLY BELOW PARALLEL WALLS AND PARTITIONS ABOVE. IF WALLS ABOVE ARE CHASES FOR PIPES OR DUCTS, PUT JOISTS EITHER SIDE AND INSTALL SOLID BLOCKING AT 16" O.C. MIN. ALSO, PROVIDE ONE (1) ADDITIONAL JOIST 8" INSIDE OF ROOMS ABOVE TO TAKE FURNITURE AND BOOKCASE LOADS AT ROOM PERIMETERS PARALLEL TO FLOOR FRAMING.
- 6. ALL FLOORS AND ALL ATTIC ACCESSIBLE CEILING JOISTS SHALL BE "BRIDGED" WITH SOLID BLOCKING, FULL DEPTH, STAGGERED, AS FOLLOWS: SPANS > TO 14', PROVIDE 2 ROWS; SPANS > TO 06', PROVIDE 1 ROW. IF EXISTING DIAGONAL "BRIDGING" IS FOUND, THEN REPLACE WITH SOLID BLOCKING AS DESCRIBED ABOVE.
- 7. ALL RAFTERS TO BE SOLIDLY BLOCKED ALONG THE TOP PLATE OF EXTERIOR WALLS, LESS 1" GAP FOR AIR FLOW UNDER THE ROOF SHEATHING
- 8. WIND BRACING HORIZONTAL: ALL WALLS SHALL BE COMPLETELY SHEATHED WITH APA RATED, 4-PLY, 1/2 INCH THICK PLYWOOD. STARTING FROM THE BOTTOM, THE FIRST ROW SHALL BE LAID HORIZONTALLY; THE SECOND ROW SHALL BE INSTALLED VERTICALLY TO COMPLETELY COVER THE FLOOR BAND JOIST. ROWS ABOVE SHALL ALTERNATE USING THE SAME SYSTEM. VERTICAL JOINTS SHALL BE FULLY SUPPORTED ON STUDS. NAILING USING 8D COMMON NAILS, ALL AROUND SHEET PERIMETERS SHALL BE 4" O.C., INTERIOR FIELD NAILING SHALL BE 6" O.C. NOTE: NAILS IN THE PRESSURE TREATED SILL PLATE MUST BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.
- 9. SUB-FLOOR DECKS: SHALL BE ADVANTECK, 3/4", TONGUE & GROOVED, COMPOSITE DECKING, GLUE IN PLACE AND SCREW @ 6" O.C. ALONG ALL SHEET PERIMETERS AND 16" O.C. AT INTERIOR FIELD. ALL JOINTS SHALL BE FULLY SUPPORTED.
- 10. ROOF SHEATHING: SHALL BE EXTERIOR GRADE PLYWOOD, MIN. 1/2" THICK WITH RAFTER SPACING OF 16" O.C. NAIL SAME AS WALL SHEATHING. PROVIDE TWO (2) SIMPSON STRONG-TIE "PSCL" SHEATHING CONTINUITY CLIPS IN EACH RAFTER BAY AT JOINTS BETWEEN SHEATHING.
- 11. SEE NOTES, OTHER LOCATIONS, ABOUT RADIANT BARRIERS.
- 12. LUAN FLOOR UNDERLAYMENTS SHALL ALL BE CERTIFIED AS FABRICATED WITH EXTERIOR

### WOOD FRAMING & "CONTINUOUS LOAD PATH" ANCHORAGE

- 1. THE CONSTRUCTION OF BUILDING AND STRUCTURES SHALL RESULT IN A SYSTEM THAT PROVIDES A COMPLETE LOAD PATH CAPABLE OF TRANSFERRING ALL LOADS FROM THEIR POINT OF ORIGIN THROUGH THE LOAD-RESISTING ELEMENTS TO THE FOUNDATION. (CODE SECTION R301)
- 2. THE CONTINUOUS LOAD PATH ANCHORAGE REQUIREMENTS ARE A METHOD OF ACHIEVING A MINIMUM, FIELD OBSERVABLE, BUILDING FRAME "STIFFENING" AND "ANCHORAGE" SYSTEM. THE GOAL IS SAFER STRUCTURES, BETTER ABLE TO RESIST WIND AND SEISMIC ACTIVITY. THE BASIC CONCEPT USES A CONTINUOUS "LINE" OF BUILDING ELEMENTS, SUCH AS WALL STUDS, AND MECHANICAL ANCHORS LINKING THE ROOF RIDGES TO FOUNDATION WALL FOOTING. IMAGINE IT LIKE A BIG TENT, WITH "GUY WIRES" FROM THE ROOF RIDGE TO THE GROUND.
- 3. IT IS UNDERSTOOD FOR MOST BUILDINGS, A CONSISTENT RHYTHM OF COMPLETELY LINEAR LINES OF CONNECTIVITY CANNOT BE ACHIEVED BECAUSE THINGS GET IN THE WAY, SUCH AS DOORS AND WINDOWS. HOWEVER, THE CODE DESCRIBES AN "INTENT." IT IS THE CONTRACTOR'S RESPONSIBILITY TO INTERPRET AND MAKE EVERY REASONABLE EFFORT TO ACHIEVE THE GOAL BY USING THE COMPONENTS DESCRIBED, IN THE QUANTITIES PRESCRIBED, AND IN THE LOCATIONS BEST SUITED
- 4. WALL AND ROOF SHEATHINGS CREATE CONTINUOUS "DIAPHRAGMS," THESE HELP PREVENT BUILDING RACKING AND TWISTING. USE "APA" RATED MATERIALS. SHEATHING MATERIAL MUST HAVE GOOD QUALITIES TO ABSORB THE REQUIRED NAILING WITHOUT BREAKING, RESIST TEARING, AND HAVE GOOD NAIL RETENTION. INSTALL THE LARGEST POSSIBLE SIZE SHEETS. STAGGER JOINTS, SUPPORT ALL JOINTS PROPERLY, AND NAIL
- CORNERS ARE IMPORTANT: MAKE STRONG BUILDING BY MAKING STRONG CORNERS. INSTALL ANCHORS AS CLOSE AS POSSIBLE TO BOTH SIDES OF EACH CORNER.
- 6. THE SYSTEMS MECHANICAL PLATES AND CONNECTORS CAN BE INSTALLED ON EITHER THE INSIDE OR OUTSIDE FACE OF THE STUDS, HOWEVER IT MUST BE CONSISTENT THROUGHOUT. (THIS ARCHITECT BELIEVES IT IS BEST ON THE INSIDE FACE OF WOOD STUD WALLS. RAFTER TO TOP PLATE CONNECTIONS ARE MUCH EASIER. USE SAW-ALL TO SLOT PLYWOOD DECKING FOR THE FLOOR TO FLOOR STRAPS, COVER WITH THE INTERIOR GYPSUM BOARD)
- 7. IT ALL LINKS AS FOLLOWS: THE FOUNDATION FOOTING IS ANCHORED TO THE FOUNDATION WALL: THE WALL IS MADE "MONOLITHIC:" THE BOTTOM WALL PLATES ARE ANCHORED TO THE FOUNDATION WALL; THE BOTTOM PLATES ARE THEN ANCHORED TO THE WALL STUD FRAMING ABOVE: UPPER FLOOR WALLS ARE STRAPPED TO LOWER WALLS; THE TOP WALL PLATES ARE ANCHORED TO THE WALL STUD FRAMING BELOW; THE RAFTERS ARE ANCHORED TO THE TOP WALL PLATE; AND FINALLY THE RATERS ARE STRAPPED TOGETHER AT THE TOP OF THE ROOF.
- 8. READ ALL NOTES ABOUT ANCHORAGE IN THE MASONRY SECTIONS, THERE IS A CONSISTENCY OF LAYOUT FOR BOTH MASONRY AND WOOD FRAMING, THE IMPLICATION IS, IT SHOULD ALL LINE UP.
- 9. FOR BUILDINGS WITH ROOF AND FLOOR SPANS OF LESS THAN 20 FEET, THIS STARTS WITHIN AS CLOSE AS POSSIBLE TO EXTERIOR CORNERS (BOTH SIDES), AND THEN RE-OCCURS ALONG WALLS AT NOT GREATER THAN 48 INCH INTERVALS.
- 10. ALL PRODUCTS REFERENCED HEREIN AND TO BE USED ON THIS JOBSITE ARE BY SIMPSON STRONG-TIE BECAUSE THEY SUPPORT THE INDUSTRY WITH EXTENSIVE TESTING, EDUCATION, AND FIELD SUPPORT. ALL ANCHORS SHALL BE INSTALLED PER MF6'S. RECOMMENDATIONS, BE ATTENTIVE TO NAIL SIZES AND LENGTHS. THE SIMPSON CATALOG SHALL BE ON THE JOBSITE, NO ALTERNATE MANUFACTURERS ARE ALLOWED.
- 11. SILL PLATE ANCHORING: SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WALL AS FOLLOWS: ANCHOR BOLTS SHALL BE MIN. ONE-HALF INCH DIAMETER DEFORMED OR THREADED ROD WITH MIN. EMBEDMENT OF 7 INCHES INTO CONCRETE OR SOLID FILLED MULTI COURSE MASONRY, THE WASHER IN CONTACT WITH THE SILL PLATE SHALL BE MIN. 2 INCHES SQUARE AND 1/8" THICK. AT BLDG. CORNERS, OR THE END OF SILL PLATE SECTIONS, THE ANCHOR BOLT SHALL NOT BE MORE THAN "7 DIAMETERS" (3-1/2") FROM ENDS. IN ADDITION, ANCHORS SHALL BE PLACED ALONG WALLS AT INTERVALS NOT EXCEEDING 48 INCHES. IF ANCHOR BOLTS ARE "CAST" INTO THE FOUNDATION WALL AND
- "MISS" THESE OBJECTIVES, THEN SUPPLEMENT AS REQUIRED BY DRILLING AND SETTING EPOXY BOLTS OR SIMPSON "TITEN HD" MASONRY SCREWS.
- 12. NOTE, IT IS PRACTICAL TO BUILD THE WALL AS REQUIRED FOR OPENINGS, THEN DETERMINE THE BEST ANCHOR LOCATIONS. USE OF THE SIMPSON "TITEN HD" WOOD SCREWS, ALLOWS ANCHORS CLOSER TO CORNERS AND BETTER COORDINATION WITH "UPLIFT" SILL PLATE TO WALL ANCHORS.
- 13. WIND BRACING "UPLIFT": A) SILL PLATE TO WALL STUD ANCHORAGE: USE SIMPSON #SSP WITH Z-MAX HOT DIPPED GALVANIZED COATING (BECAUSE OF PRESSURE TREATED PLATE, ALSO USE STAINLESS STEEL NAILS). USE A PAIR (INSIDE AND OUT) LOCATED AT BLDG. CORNERS, THEN SINGLE UNITS AT SPACING NOT EXCEEDING 48" O.C. (SAME AS FOUNDATION ANCHOR BOLTS). B) WALL STUD TO TOP DOUBLE PLATE. USE SAME PRODUCT AT THE SILL PLATE TO WALL STUD ANCHOR, LOCATED ON THE SAME STUD. THESE TOP AND BOTTOM ANCHORS SHOULD BE IN "ALIGNMENT."
- 14. WALL-TO-WALL ANCHORAGE: WHERE WALLS CONTINUE ABOVE A FLOOR DECK, THE CONTINUITY OF UPLIFT ANCHORAGE SHALL BE MAINTAINED. UPPER WALL STUDS MUST BE LOCATED INLINE WITH LOWER WALL STUDS. USING THE SAME STUDS WHICH HAVE THE SILL PLATE TO STUD ANCHORS, INSTALL SIMPSON #CS STRAPS.
- 15. WALL TO RAFTER ANCHORAGE: EVERY RAFTER SHALL BE ANCHORED TO THE WALL TOP PLATE USING ONE "HURRICANE CLIP", SIMPSON #H2.5A. ALL CEILING JOISTS (OR FLOOR
- JOISTS) SHALL BE SECURELY NAILED TO THE RAFTER. 16. RAFTER TO RIDGE BEAM (OR OTHER EXISTING STRUCTURE): USE SIMPSON #LSTA

STRAPS.

# FIRESTOPPING

- 1. INSTALL BEFORE ROUGHING IN OF ANY PLUMBING, ELECTRICAL OR HVAC WORK.
- 2. FIRESTOPPING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIRESTOPPING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:
- 3. FIRESTOPPING SHALL CONSIST OF 2-INCH NOMINAL LUMBER WITH TIGHT JOINTS, OR TWO THICKNESS OF 1-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS, OR ONE THICKNESS OF 23/32-INCH PLYWOOD WITH JOINTS BACKED BY 23/32-INCH PLYWOOD, OR OTHER APPROVED MATERIALS SECURELY FASTENED IN PLACE.
- 4. THE INTEGRITY OF ALL FIRESTOPS SHALL BE MAINTAINED AND SHALL NOT BE CONCEALED UNTIL INSPECTED AND APPROVED.
- SEE CODE BOOK FOR A COMPLETE DESCRIPTION OF LOCATIONS, IN GENERAL FURRED SPACES AND STUDDED OFF SPACES OF MASONRY OR CONCRETE WALLS, AT THE CEILING
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, SOFFITS OVER CABINETS, DROP CEILINGS, COVE CEILINGS
- IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF RUN; IN EXTERIOR CORNICES AND OTHER EXTERIOR ARCHITECTURAL ELEMENTS WHERE PERMITTED OF COMBUSTIBLE CONSTRUCTION OR WHEN ERECTED WITH COMBUSTIBLE FRAMES, AT MAX. INTERVALS OF 20 FT. IF NONCONTINUOUS, THEY SHALL HAVE CLOSED ENDS, WITH AT LEAST 4" OF SEPARATION BETWEEN SECTIONS.
- AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS, WITH NONCOMBUSTIBLE U.L. RATED SYSTEMS AND MATERIALS.

WELL PUMP TANK

-CULLIGAN WATER TREATMEN

— WELL PUMP

FUEL OIL TANK

TRENCH TO NEW PROPANE TANK

OWNER TO REMOVE AND RECONSTRUCT EXISTING DECK -

EXIST. REMAINS, NO CHANGES

EXIST REMAINS

RUBBLE STONE AND BLOCK FOUNDATION

CARBON FILTERS FOR

KIT. SINK ABOVE

WALL WITH OPEN STUD FRAMING

BASEMENT

EXISTING

ELECT. PANEL

WASHER

ELECT.

\_\_\_\_\_\_

\_\_\_\_\_\_

EXIST ELECT. METER ABOVE,\_\_\_

MUST RELOCATE

-OLD BOILER

BY OWNER: NEW LOCATION FOR ELECT METER,

COORDINATE TO FEED NEW ELECT. PANEL LOCATION

ELECT. H.W.H.

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## CAULKING

- 1. PERMITTED MATERIALS: ALL EXTERIOR CAULKING SHALL BE TWO-PART POLYURETHANE COMPONENT BASED. NO SILICONE CAULKS ARE PERMITTED UNLESS THE APPLICATION IS FOR A "GLASS TO GLASS" ADHESIVE. ALL CAULKS USED IN PREPARATION FOR INTERIOR PAINTING SHALL BE POLYURETHANE OR LATEX, WITH NO SILICONES.
- 2. CAULKING SHALL BE PROVIDED: BETWEEN ALL EXTERIOR DISSIMILAR MATERIALS WHERE A MECHANICAL CONNECTION DOES NOT MAKE A WATERTIGHT SEAL.
- 3. REVIEW VINYL SIDING SYSTEM RECOMMENDATIONS REGARDING WINDOW AND DOOR

#### DESIGN LOADS

- INTERNATIONAL RESIDENTIAL CODE CLASSIFIES THE DELAWARE VALLEY AS SEISMIC DESIGN CATEGORY "C." NOTE: DETACHED ONE AND TWO FAMILY DWELLINGS ARE EXEMPT FROM THE SEISMIC REQUIREMENTS OF THIS CODE.
- 2. INTERNATIONAL RESIDENTIAL CODE CLASSIFIES MONTGOMERY COUNTY WITH WIND SPEEDS OF 90 MPH.
- 3. THE PROJECT HAS BEEN DESIGNED WITH THESE LOADS

	ROOFS	FLOORS	FLOORS	ATTIC FLOOR	BALCONIES /DECKS
DESIGN LOADS	WOOD OR ASPHALT SHINGLES	WOOD, CARPET OR VCT	CERAMIC, SLATE OR STONE	UNFINISHED SHEATHING	SPACED DECK
DEAD LOAD (PSF)	15	15	25	15	15
LIVE LOAD (PSF)	30	40	40	20	60
TOTAL (PSF)	45	55	65	35	75

### ELECTRICAL SERVICE

- 1. OWNER'S ELECTRICIAN SHALL COORDINATE WITH THE PUBLIC UTILITY TO INSTALL A TEMPORARY SERVICE AWAY FROM THIS WORK
- 2. OWNER'S ELECTRICIAN SHALL PROVIDE THIS GC MIN 3, 20 AMP CIRCUITS FOR CONSTRUCTION POWER
- 3. OWNER'S ELECTRICIAN SHALL COORDINATE WITH THIS GC FOR ANY REQUIRED CONDUITS ETC. TO FACILITATE THE WORK.
- 4. AS SOON AS SHELL CONSTRUCTION PERMITS, ESTABLISH PERMANENT UTILITY ENTRANCE INSTALLATIONS.

FILL ABANDONED BASEMENT ENTRANCE: REMOVE DOOR AND FILL OPENING WITH 8" CMU APPLY 1/2" CEMENT PARGING, THEN TWO COATS ASPHALTIC DAMPPROOFING - RREAK UP SLAB AT BOTTOM FOR DRAINAGE REMOVE TOP COURSES OF EXISTING WALLS TO MIN 8" BELOW GRADE INSTALL GOOD COMPACTABLE FILL IN MAX 12" "LIFTS", COMPACT BLEND BACK TO NATURAL GRADE

HOT WATER RADIANT HEATED SLAB:

ON 8 MIL POLY VAPOR BARRIER

ON 4" FINE GAVEL LEVELING BED

THERMAL BREAK

BOILER FLUE

4" CONC. SLAB W/ WOVEN WIRE FABRIC

ON R-10 INSULATION BOARD, w/ PERIMETER

ON COMPACTED FILL AND PREPARED SUB-GRADE

DO NOT POUR SLAB UNTIL SHELL FRAMING

IS COMPLETE, PREP TO LEVELED "PREPARED

SUB-GRADE" @ 7" BELOW TOP OF BLOCK.

COORDINATE WITH OWNER'S

SLAB ON GRADE

POINT LOADS FROM ABOVE-

THICKEN SLAB TO TOTAL 12" @

"SHELL" PHASE

BEARING WALL ABOVE

PLUMBER BEFORE POURING SLAB

## PLUMBING

1. ALL PLUMBING BY OWNER

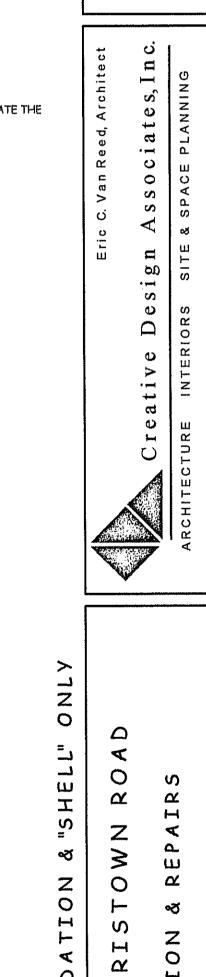
8" CONC. BLOCK FOUNDATION WALL,

CEMENT PARGING

2. OWNER'S PLUMBER SHALL COORDINATE WITH THIS GC FOR ANY REQUIRED BELOW SLAB PIPING OR EXCAVATIONS ETC. TO FACILITATE THE

FOOTING: 20" WIDE x 10" DEEP,

3,000 PSI CONCRETE

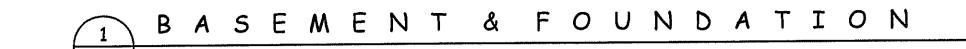


ONLY VALID FOR PERMITS W/

'RED" SIGNATURE

EMBOSSED SEAL & ORIGINAL

Sheet No. 2012-2957 **of** 



REMOVE WINDOW AND ALL WOOD, FILL SOLID WITH 8" CMU, PARGE

WITH 1/2" CEMENT, ALL RECESSED FROM EXTERIOR FACE 1"

BASEMENT