# GENERAL

PLANS COMPLY TO THE 2009 INTERNATIONAL RESIDENTIAL CODE. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS HAVE BEEN MADE. IT IS THE CONTRACTORS RESPONSIBILITY TO IDENTIFY ALL DISCREPANCIES TO CORNERSTONE DESIGNS, LLC. AT THE TIME THEY ARE NOTED. DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS.

## CODES:

- ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION SHALL BE FOLLOWED
- 2009 INTERNATIONAL RESIDENTIAL CODE (IRC).
- 2009 INTERNATIONAL BUILDING CODE (IBC).
   2009 INTERNATIONAL MECHANICAL CODE (IMC).
- 2009 UNIFORM PLUMBING CODE (UPC).
   2009 INTERNATIONAL FIRE CODE.

# BUILDING

CONSTRUCTION TYPE:	V-B	SEISMIC ZONE:	PER LOCATIO
OCCUPANCY GROUP: FIRE ZONE	R-3 PER LOCATION	WIND SPEED: EXPOSURE CATEGORY:	PER LOCATION PER LOCATION
FIRE ZONE	PER LOCATION	EXPOSURE CATEGORT:	PER LOCATIO

# SITE WORK

## GENERAL

UNLESS A SOILS INVESTIGATION REPORT BY A LISCENSED SOILS ENGINEER IS PROVIDED, THE FOUNDATION DESIGN IS BASED UPON AN ASSUMED AVERAGE SOIL BEARING CAPACITY OF 2,000 PSF. EXTERIOR FOOTINGS SHALL BEAR TO A MINIMUM DEPTH BELOW FINISHED GRADE AS SET FORTH BY THE LOCAL JURISDICTION. ALL FOOTINGS TO BEAR ON FIRM, UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. ALL BACK FILL MATERIAL SHALL BE THOROUGHLY COMPACTED.

# CONCRETE

GEN	ERAL			
CLAS	S AND USE	F'C	SLUMP	MINIMUM SACKS / C.Y.
A.	FOOTINGS	2500	3 - 4	5-1/2
B.	SLABS ON GRADE	2500	3 - 4	5-1/2

- I. AIR ENTRAINING AGENT (3% TO 6%) TO BE USED IN ALL CONCRETE FLAT WORK
- EXPOSED TO WEATHER.

  2. POSSOLITH 300 SERIES (4 oz. PER 100# OF CEMENT) TO BE USED IN ALL CONCRETE.

  3. MIX MAY BE DESIGNED IN ACCORDANCE WITH PROVISIONS OF THE 2006 IBC/IRC.

#### 4. WATER TO CEMENT RATIO PER THE 2006 IBC/IRC.

## REINFORCING STEEL

ASM A615 GRADE 40, REINFORCING STEEL DETAILS SHALL BE PREPARED BY AN EXPERIENCED APPROVED DETAILER AND CONFORM TO STANDARD PRACTICE OUTLINED IN ACI REPORT 315.

- CONCRETE COVER OF REINFORCING STEEL
- 3" CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.
- I-I/2" CONCRETE EXPOSED TO EARTH OR WEATHER.
  I-I/2" BEAMS AND COLUMNS NOT EXPOSED TO EARTH OR WEATHER.
- 3/4" SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER.

## CARPENTRY

#### <u>GENERAL</u>

- ALL FRAMING SHALL COMPLY WITH THE APPROPRIATE SECTION(S) OF THE 2009 IBC/IRC. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
  - 6" MINIMUM CLEARANCE BETWEEN WOOD AND EARTH.
    12" MINIMUM CLEARANCE BETWEEN FLOOR BEAMS AND EARTH
  - 12 MINIMUM CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.
    18" MINIMUM CLEARANCE BETWEEN FLOOR JOISTS AND EARTH.

# LUMBER STRENGTH (UNITS IN PSI)

STUDS
HEM-FIR #3
STUD GRADE

JOISTS & RAFTER	S					
HEM-FIR #2		(2×10)	75	1,075	1,300,000	
HEM FIR #2		(2×12)	75	980	1,300,000	
BEAMS, HEADERS, LINTELS & GIRDERS						
4" NOMINAL DOUG-FIR #2			<b>95</b>	960	1,600,000	
6" NOMINAL DOUG-FIR #2			85	<i>850</i>	1,600,000	
GLUE LAMINATED						
DOUG-FIR LARCH (24F-V4)		1)	165	2,400	1,800,000	
STRUCTURAL COMPOSITE TIMBERS						
LAMINATED	VENEER LUMB	ER	285	2,600	1,900,000	
PARALLEL	STRAND LUMBI	ER	290	2,900	2,000,000	

675

# LOADING

ROOF	15 PSF DEAD LOAD	+	25 PSF LIVE LOAD	=	40 PSF
FLOOR	IO PSF DEAD LOAD	+	40 PSF LIVE LOAD	=	50 PSF
CEILING	5 PSF DEAD LOAD	+	IO PSF LIVE LOAD	=	15 PSF
DECK	5 PSF DEAD LOAD	+	40 PSF LIVE LOAD	=	45 PSF
EXTERIOR CANTILEVERED					
BALCONY	IO PSF DEAD LOAD	+	60 PSF LIVE LOAD	=	70 PSF
INTERIOR PARTITION				=	7 PSF
EXTERIOR PARTITION				=	10 PSF

MOOD BEARING ON OR INSTALLED WITHIN ½" OF MASONRY OR CONCRETE TO BE TREATED WITH AN APPROVED PRESERVATIVE. SOLID BLOCKING OF NOT LESS THAN 2x THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS. TYPICAL SILL ANCHOR BOLTS TO BE ¾" DIAMETER WITH 3"x3"x¼" PLATE WASHERS @ 4'-O" ON CENTER UNLESS NOTED OTHERWISE. 7" MINIMUM EMBEDMENT. ALL METAL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE STRONG TIE CONNECTORS AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL.

PROVIDE FIREBLOCKING IN CONCEALED SPACES OF STUDS WALLS & PARTITIONS INCLUDING FURRED SPACES & PARALLEL ROWS OF STUDS OR STAGGERED STUDS AS FOLLOWS:

- I. VERTICALLY AT THE CEILING @ FLOOR JOIST LEVELS.
- 2. HORIZONALLY AT INTERVALS NOT EXCEEDING 10 FEET.

# PROVIDE FIREBLOCKING AT OTHER LOCATIONS PER 2009 IRC R302.II.

# PLYWOOD

ALL PLYWOOD WALL AND ROOF SHEATHING SHALL BE ½" CDX, UNLESS NOTED OTHERWISE. MINIMUM NAILING SHALL BE &d @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD. SPAN INDEX SHALL BE 24/O. ALL PLYWOOD FLOOR SHEATHING SHALL BE ¾" CDX TONGUE & GROOVE UNLESS NOTED OTHERWISE. MINIMUM NAILING SHALL BE IOD @ 6" O.C. @ PANEL EDGES AND 12" O.C. IN FIELD. SPAN INDEX SHALL BE 40/20. STAGGER ALL PANEL EDGES AT ROOF AND FLOOR SHEATHING. ORIENTED STRAND BOARD (O.S.B.) SHEATHING PRODUCTS OF EQUIVALENT SPAN RATINGS SHALL BE ALLOWED.

# GLUE LAMINATED TIMBERS

ALL GLUE LAMINATED TIMBERS SHALL BE DOUG-FIR LARCH, FABRICATED TO THE REQUIREMENTS OF THE US PRODUCT STANDARD PS 56. LUMBER SHALL BE OF SUCH GRADE TO PROVIDE NORMAL WORKING STERSS VALUES OF: 2400 PSI IN BENDING, 1100 PSI IN TENSION, 1600 PSI IN COMPRESSION PARALLEL TO GRAIN, 560 PSI IN COMPRESSION PERPENDICULAR TO GRAIN AND 165 PSI HORIZONTAL SHEAR (COMBINATION 24F-V4). GLUE LAMINATED TIMBERS TO BE AITC CERTIFIED. USE WATERPROOF GLUE.

# CARPENTRY (CONTINUED)

## MANUFACTURED TRUSSES

ALL TRUSSES SHALL BE DESIGNED BY A REGISTERED STATE ENGINEER AND FABRICATED FROM ONLY THESE DESIGNS. TRUSSES SHALL BE STAMPED BY THE ENGINEER OR BY A QUALITY CONROL AGENCY SUCH AS THE STATE TRUSS FABRICATIORS COUNCIL. ALL TRUSS DESIGNS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.

ALL NON BEARING WALLS OR PARTITIONS SHALL BE HELD AWAY FROM THE TRUSS BOTTOM CHORD WITH AN APPROVED FASTENER TO ENSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL OR PARTITION.

APPROVED AHNGERS SHALL BE USED AT ALL CONNECTIONS OF RAFTERS, JACH OR HIP TRUSSES TO MAIN GIRDER TRUSSES.

ALL ROOF TRUSSES SHALL BE FRAMED AND TIED INTO THE FRAME WORK AND SUPPORTING WALLS SO AS TO FORM AN INTEGRAL PART OF THE WHOLE STRUCTURE. ROOF TRUSSES SHALL HAVE JOINTS WELL FITTED AND SHALL HAVE ALL TENSION MEMBERS WELL TIGHTENED BEFORE ANY LOAD IS PLACED UPON THE TRUSS. DIAGONAL AND SWAY BRACING SHALL BE USED TO BRACE ALL TRUSSES.

ALL TRUSSES SHALL BE DESIGNED FOR UNIFORM LOADING AS FOLLOWS: TOP CHORD: 35 PSF OF TRIBUTARY WIDTH

BOTTOM CHORD: 55 PSF OF TRIBUTARY WIDTH

TILE ROOF: 45 PSF TOP CHORD \$ 5 PSF BOTTOM CHORD

# INSULATION AND MOISTURE PROTECTION

#### GENERAL

INSULATION BAFFLES TO MAINTAIN I CLEAR SPACE ABOVE INSULATION.
BAFFLES TO EXTEND 6" ABOVE BATT INSULATION & 12" ABOVE LOOSE FILL INSULATION.
INSULATE BEHIND BATHTUBS, SHOWERS, PARTITIONS AND CORNERS. PROVIDE FACE STAPLED BATTS OR FRICTION FIT FACED BATTS. PROVIDE 4 MIL (0.004") POLYETHYLENE VAPOR BARRIER AT WALLS OR USE PVA PAINT WITH A DRY CUP PERM RATING OF ONE (MAX...)
PROVIDE R-10 INSULATION UNDER ELECTRIC WATER HEATERS.

#### INFILTRATION CONTROL

- EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF AND BETWEEN WALL PANELS, OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOORS, AND ROOF, AND ALL OTHERS SUCH OPENINGS IN THE BUILDING ENVELOPE, INCLUDING ACCESS PANELS INTO UNHEATED SPACES, SHALL BE SEALED, CAULKED, GASKETED OR WEATHER-STRIPPED TO LIMIT AIR INFILTRATION.
- 2. ALL EXTERIOR DOORS, OTHER THAN FIRE-RATED DOORS, SHALL BE DESIGNED TO LIMIT AIR INFILTRATION AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION. DOORS BETWEEN RESIDENCE AND GARAGE ARE NOT CONSIDERED "FIRE-RATED" AND MUST MEET THE ABOVE REQUIREMENT.
- 3. ALL EXTERIOR WINDOWS SHALL BE DESIGNED TO ADMIT AIR INFILTRATION INTO OR FROM THE BUILDING ENVELOPE WHICH SHALL BE SUBSTANTIATED BY TESTING TO STANDARD ASTM E 263.73. SITE BUILT AND MILLWORK SHOP MADE WOODEN SASH ARE EXEMPT FROM TESTING BUT SHALL BE WEATHER-STRIPPED, CAULKED AND MORE TIGHTLY FITTING.

## VAPOR BARRIERS / GROUND COVERS

AN APPROVED VAPOR BARRIER SHALL BE PROPERLY INSTALLED IN ROOF DECKS, IN ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND AT EXTERIOR WALLS. INSET STAPLED BATTS WITH A PERM RATING LESS THAN ONE MAY BE INSTALLED IF THE VAPOR BARRIER IS TO THE WARM SIDE, STAPLES SHALL BE PLACED NOT MORE THAN 8" O.C. AND GAPS BETWEEN THE FACING AND THE FRAMING SHALL NOT EXCEED 1/16"

A GROUND COVER OF 6 MIL (0.006") BLACK POLYETHYLENE OR EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

THE NET FREE VENTILATING AREA FOR ATTIC VENTILATION MAY BE 1/300 OF THE AREA OF THE VENTILATED SPACE PROVIDED THAT A VAPOR BARRIER HAVE A PERM RATING NOT EXCEEDING ONE IS INSTALLED ON THE WARM SIDE OF THE INSULATION.

# DOORS, WINDOWS AND SKYLIGHTS

# <u>GENERAL</u>

1,200,000

THE REQUIRED EGRESS DOOR MAY HAVE A MAXIMUM 7 3/4" STEP FROM THE TOP OF THE THRESHOLD TO A MINIMUM 36" DEEP LANDING. OTHER EXTERIOR DOORS MAY HAVE A MAXIMUM (2) 7 3/4" STEPS TO A MIN.. 36" DEEP LANDING. ALL SKYLIGHTS AND SKYWALLS SHALL HAVE LAMINATED GLASS UNLESS NOTED OTHERWISE. ALL BEDROOM EMERGENCY EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. MINIMUM NET CLEAR OPERABLE WIDTH OF 20" AND A MINIMUM NET CLEAR OPENING HEIGHT OF 24", MAXIMUM FINISHED SILL HEIGHT OF 44" ABOVE FLOOR. WINDOWS WITH A SILL OF MORE THAN 72" ABOVE FINISHED GRADE TO BE A MINIMUM OF 24" ABOVE ADJACENT FINISHED FLOOR.

SITE BUILT AND MILLWORK SHOP BUILT WOODEN SASH SHALL BE MADE WEATHER-STRIPPED, CAULKED AND BE MADE TIGHTLY FITTING. SLIDING GLASS DOORS TO PERMIT MAXIMUM INFILTRATION OF 0.5 CFM PER SQUARE FOOT OF DOOR AREA. SEE PLANS FOR, GLAZING MANUFACTURER AND MODEL NUMBERS. SEE PLANS FOR WEIGHTED UQ CALCULATIONS FOR SUBSTANDARD GLAZING.

# SAFETY GLAZING LOCATIONS PER 2009 IRC SECTION R308.4 I. GLAZING IN ALL FIXED AND OPERALBE PANELS OF SWINGING, SLIDING AND BIFOLD

- 2. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24 INCH ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE.
- 3. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:

  3.1. THE EXPOSED AREA OF AN INDIVIDUAL PANEL IS LARGER THAN 9 SQUARE FEET.
  - 3.2. THE EXPOSED BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR AND.

    3.3. THE TOP EDGE MORE THAN 36" ABOVE THE FLOOR.
- 3.4. THE ONE OR MORE WALKING SURFACES WITHIN 36" HORIZONTALLY OF THE PLANE OF THE GLAZING. 4. ALL GLAZING IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING
- SURFACE. INCLUDED ARE STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL INFILL PANELS.

  5. GLAZING IN ENCLOSURES FOR OR WALLS FACING HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, AND SHOWERS. WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR
- WALKING SURFACE.

  6. PANELS.

  7. GLAZING IN WALLS AND FENCES ADJACENT TO INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS, AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE A WALKING SURFACE AND WITHIN 60" MEASURED HORIZONTALLY AND IN A STRAIGHT LINE OF THE WATER'S EDGE. THIS SHALL APPLY TO SINGLE GLAZING AND
- ALL PANES IN MULTIPLE GLAZING.

  8. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36" HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
- . GLAZING ADJACENT TO THE STAIRWAYS WITHIN 60" HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60" ABOVE THE NOSE OF THE TREAD.

FOR EXPEPTIONS SEE IRC SECTION R308.4

# FIREPLACES

ALL MASONRY FIREPLACES AND CHIMNEYS SHALL BE CONSTRUCTED TO CONFORM TO ALL APPLICABLE PORTIONS OF THE 2006 IBC/IRC CODE. FLUE LINER MINIMUM %" FIRE CLAY (OR EQUIVALENT) PER IRC. FLUE AREA PER IRC. CHIMNEYS SHALL SUPPORT ONLY THEIR OWN WEIGHT UNLESS SPECIFICALLY DESIGNED TO SUPPORT ADDITIONAL LOADS. ALL FIREPLACES SHALL BE PROVIDED WITH TIGHTLY FITTING FLUE DAMPERS, OPERATED WITH A READILY ACCESSIBLE MANUAL OR APPROVED AUTOMATIC CONTROL, AND AN OUTSIDE SOURCE OF COMBUSTION AIR. MINIMUM DUCT SIZE OF 6 SQUARE INCHES IN AREA PROVIDED WITH READILY ACCESSIBLE DAMPER LOCATED IN THE FRONT PART OF THE FIREBOX. PREFABRICATED FIREPLACES, CHIMNEYS, AND RELATED COMPONENTS TO BEAR U.L. OR I.C.B.O. SEAL OF APPROVAL AND TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. HEARTHS SHALL EXTEND 20" (MINIMUM) IN FRONT OF AND 12" (MINIMUM) BEYOND EACH SIDE OF FIREPLACE OPENINGS. FIREPLACES SHALL BE PROVIDED WITH TIGHTLY FITTING GLASS OR METAL DOORS.

# MECHANICAL

#### SENERAL

SOLID FUEL BURNING APPLIANCES INCLUDE AIRTIGHT STOVES, FIREPLACE STOVES, ROOM BEATERS, FACTORY BUILT FIREPLACES AND FIREPLACE INSERTS. ALL SOLID FUEL BURNING APPLIANCES SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 24 OF THE 2009 INTERNATIONAL RESIDENTIAL CODE.

#### FATING

EACH DWELLING UNIT SHALL BE PROVIDED WITH HEATING FACILITIES CAPABLE OF MAINTAINING A TEMPERATURE OF 68 DEGREES FAHRENHEIT AT A HEIGHT OF 3'-O" ABOVE THE FLOOR AND TWO FEET FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS WHEN THE OUTSIDE TEMPERATURE IS AS SET FORTH BY LOCAL ENERGY CODES.

- I. FUEL BURNING APPLIANCES LOCATED WITHIN THE BUILDING ENVELOPE SHALL OBTAIN AIR
- FROM OUTDOORS, MEETING THE PROVISIONS OF CHAPTER 24 OF THE 2009 IRC.

  PUEL BURNING APPLIANCES LOCATED OUTSIDE THE BUILDING ENVELOPE SHALL MEET THE PROVISIONS OF CHAPTER 24 OF THE 2009 IRC.
- DUCTWORK LOCATION AND SOURCE OF COMBUSTION AIR SHALL MEET THE PROVISIONS OF CHAPTER 16 OF THE 2009 IRC.

ALL WARM AIR FURNACES SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY AND INSTALLED PER CHAPTER MI402 OF THE 2009 IRC.

NO WARM AIR FURNACE SHALL BE INSTALLED IN A ROOM USED OR DESIGNED TO BE USED AS A BEDROOM, BATHROOM, CLOSET OR IN ANY ENCLOSED SPACE WITH ACCESS ONLY THROUGH SUCH ROOM OR SPACE, EXCEPT DIRECT VENT FURNACE, ENCLOSED FURNACES AND ELECTRIC HEATING FURNACES PER THE 2006 IBC/IRC.

NO WARM AIR FURNACE SHALL BE INSTALLED IN A CLOSET OR ALCOVE WITH A SPACE LESS THAN 12" WIDER THAN THE FURNACE OR A CLEARANCE OF 3" ALONG THE SIDES, BACK AND TOP ACCORDING TO THE 2009 IBC/IRC.

LIQUEFIED PETROLEUM GAS BURNING APPLIANCES SHALL NOT BE INSTALLED IN A PIT, BASEMENT OR SIMILAR LOCATION WHERE HEAVIER THAN AIR GASES MIGHT COLLECT. APPLIANCES SO FUELED SHALL NOT BE INSTALLED IN AN ABOVE GRADE UNDER FLOOR SPACE OR BASEMENT UNLESS SUCH LOCATION IS PROVIDED WITH AN APPROVED MEANS FOR REMOVAL OF UNBURNED GAS PER THE 2009 IBC/IRC.

# MECHANICAL (CONTINUED)

HEATING AND COOLING APPLIANCES LOCATED IN A GARAGE AND WHICH GENERATE A GLOW, SPARK OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS SHALL BE INSTALLED WITH THE PILOTS AND BURNERS OR HEATING ELEMENTS AND SWITCHES AT LEASE 18" ABOVE THE FLOOR SURFACE.

FIRE DAMPERS NEED NOT BE INSTALLED IN AIR DUCTS PASSING THROUGH THE WALL, FLOOR OR CEILING SEPARATING A RESIDENCE (GROUP B, DIVISION 3 OCCUPANCY) FROM A GARAGE (GROUP M, DIVISION I OCCUPANCY), PROVIDED SUCH DUCTS WITHIN THE GARAGE ARE CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN O.019" (NO. 26 GALVANIZED SHEET GAUGE AND HAVE NO OPENINGS INTO THE GARAGE.

WARM AIR FURNACE INSTALLATIONS IN ATTICS OR CRAWL SPACES SHALL COMPLY WITH MI402 OF THE 2009 IRC.

EVERY APPLIANCE DESIGNED TO BE VENTED SHALL BE CONNECTED TO A VENTING SYSTEM COMPLYING WITH CHAPTER 18 OF THE 2009 IRC.

EVERY FACTORY BUILT CHIMNEY, TYPE L VENT, TYPE B GAS VENT OR TYPE BW GAS VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING, MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE REQUIREMENTS PER CHAPTER 10 OF THE 2009 IRC.

A TYPE B OR BW GAS VENT SHALL TERMINATE PER CHAPTER 24 OF THE 2009 IRC.

VENT CONNECTORS SHALL BE INSTALLED WITHIN THE SPACE OR AREA IN WHICH THE APPLIANCE IS LOCATED AND SHALL BE CONNECTED TO A CHIMNEY OR VENT IN SUCH A MANNER AS TO MAINTAIN THE CLEARANCE TO COMBUSTIBLES PER SECTION MISOS OF THE 2009 IRC.

#### HEATING EQUIPTMENT

ALL HEATING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE 1987 NATIONAL APPLIANCE ENERGY CONSERVATION ACT (NAECA) AND BE SO LABELED.

HVAC EQUIPMENT FOR LOW-RISE RESIDENTIAL SHALL BE SIZED NO GREATER THAN 200% OF DESIGN LOAD

#### DUCTMOR

- I. DUCT SYSTEMS OR FACTORY BUILT AIR DUCTS SHALL BE OF METAL AS SET FORTH BY TABLE 1601.1.1 (1) \$ 1601.1.1 (2) OF THE 2009 IRC.
- 2. RECTANGULAR, FLAT, OVAL AND ROUND DUCT JOINTS AND SEAMS SHALL BE AIRTIGHT PER SECTION MI601.3.1 OF THE 2009 IRC.
- INSTALLATION OF DUCTS SHALL COMPLY WITH SECTION MIGOI.3 OF THE 2009 IRC.
   DUCT INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH SECTION MIGOI.2.1 OF THE 2009 IRC.

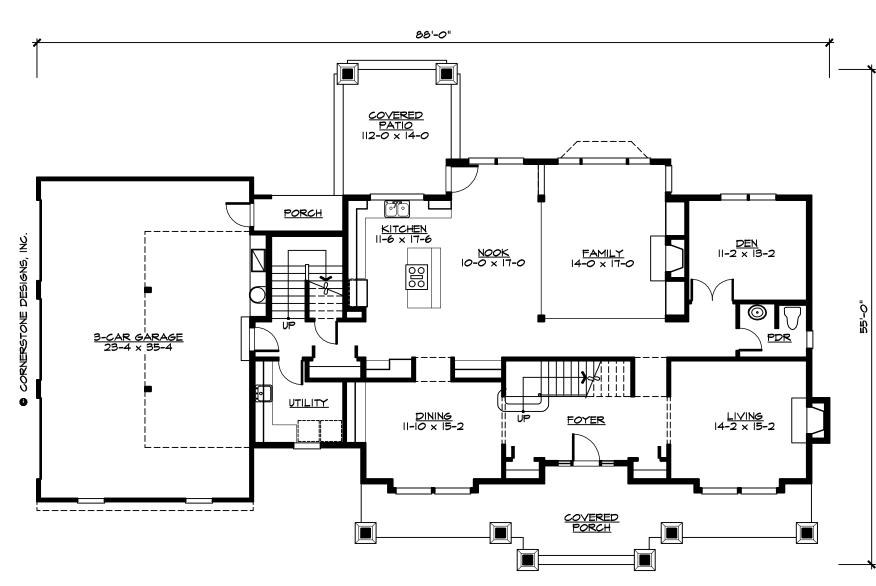
# PLUMBING

# GENER/

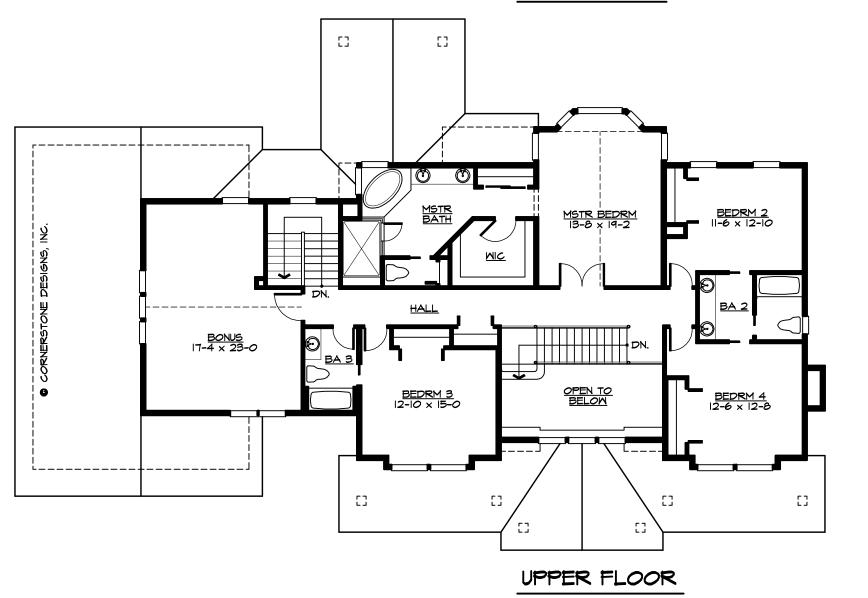
WATER HEATERS ARE REQUIRED TO MEET THE REQUIREMENTS OF THE N.A.E.C.A. STANDARD AND BE LABELED AS SUCH. IN ADDITION, ELECTRIC WATER HEATERS INSTALLED IN UNHEATED SPACES SHALL BE PLACED ON AN INCOMPRESSIBLE SURFACE OR FLOOR INSULATED TO A MINIMUM OF R-10.

WATER TANKS TO BE LABELED PER N.A.E.C.A.





# MAIN FLOOR



# NOT FOR CONSTRUCTION

DRAWN BY: DATE
SMD 4/20/0

PROJECT MANAGER:
TROY CLYMER
REVISED BY: DATE
JRA 8/18/1

AIO

CORNERSTONE DESIGNS
JOB NUMBER:

CORNERS

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DER BOB

REVISED BY: DATE:

CORNERSTONE DESIGNS JOB NUMBER: