

ALLIED HOME INSPECTION SERVICES

APPENDIX A

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: E 3502 PAGE 437 ELECTRICAL SERVICE AND RATING

**TABLE E3502.2
MINIMUM SERVICE LOAD CALCULATION
LOADS AND PROCEDURE**

3-VOLT-AMPERES PER SQUARE FOOT OF FLOOR AREA FOR GENERAL LIGHTING
AND CONVENIENCE RECEPTACLE OUTLETS.

PLUS

1,500 VOLT-AMPERES X TOTAL NUMBER OF 20 AMPERE-RATED SMALL
APPLIANCE AND LAUNDRY CIRCUITS

PLUS

THE NAMEPLATE VOLT-AMPERE RATING OF ALL FASTENED IN-PLACE
PERMANENTLY CONNECTED OR DEDICATED CIRCUIT-SUPPLIED APPLIANCES
SUCH A RANGES, OVENS, COOKING UNITS, CLOTHES DRYERS AND WATER
HEATERS.

APPLY THE FOLLOWING DEMAND FACTORS TO THE ABOVE SUBTOTAL:

THE MINIMUM SUB-TOTAL FOR THE LOADS ABOVE SHALL BE 100 PERCENT OF
THE FIRST 10,000 VOLT-AMPERES OF THE SUM OF THE ABOVE LOADS PLUS 40
PERCENT OF ANY PORTION OF THE SUM THAT IS IN EXCESS OF 10,000
VOLT-AMPERES.

PLUS THE LARGEST OF THE FOLLOWING:

NAMEPLATE RATING (S) OF AIR-CONDITIONING AND COOLING EQUIPMENT
INCLUDING HEAT PUMP COMPRESSORS.

NAMEPLATE RATING OF THE ELECTRIC THERMAL STORAGE AND OTHER HEATING
SYSTEMS WHERE THE USUAL LOAD IS EXPECTED TO BE CONTINUOUS AT THE
FULL NAMEPLATE VALUE. SYSTEMS QUALIFYING UNDER THIS SELECTION SHALL
NOT BE FIGURED UNDER ANY OTHER CATEGORY IN THIS TABLE.

SIXTY-FIVE PERCENT OF NAMEPLATE RATING OF CENTRAL ELECTRIC
SPACE-HEATING EQUIPMENT, INCLUDING INTEGRAL SUPPLEMENTAL HEATING
FOR HEAT PUMP SYSTEMS.

SIXTY-FIVE PERCENT OF NAMEPLATE RATING (S) OF ELECTRIC SPACE-
HEATING UNITS IF LESS THAN FOUR SEPARATELY CONTROLLED UNITS.

FORTY PERCENT OF NAMEPLATE RATING (S) OF ELECTRIC SPACE-HEATING
UNITS OF FOUR OR MORE SEPARATELY CONTROLLED UNITS.

THE MINIMUM TOTAL LOAD IN AMPERES SHALL BE THE VOLT-AMPERE SUM
CALCULATED ABOVE DIVIDED BY 240 VOLTS.

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SOURCE: **NATIONAL ELECTRICAL CODE (NEC 2002 EDITION)**

SECTION: **SECTION 250.24 (A) (5) PAGE 70-100**
SECTION 250.30 (A) PAGE 70-101

SYSTEM GROUNDING CONNECTIONS

250.24 (A) (5) LOAD-SIDE GROUNDING CONNECTIONS

A GROUNDING CONNECTION SHALL NOT BE MADE TO ANY GROUNDED CIRCUIT CONDUCTOR ON THE LOAD SIDE OF THE SERVICE DISCONNECTING MEANS EXCEPT AS OTHERWISE PERMITTED IN THIS ARTICLE.

FPN:

SEE 250.30 (A) FOR SEPARATELY DERIVED SYSTEMS. 250.32 FOR CONNECTIONS AT SEPARATE BUILDINGS OR STRUCTURES, AND 250.142 FOR USE OF THE GROUNDED CIRCUIT CONDUCTOR FOR GROUNDING EQUIPMENT.

250.30 (A) GROUNDING SEPARATELY DERIVED ALTERNATING - CURRENT SYSTEMS
A. GROUNDED SYSTEMS

A SEPARATELY DERIVED AC SYSTEM THAT IS GROUNDED SHALL COMPLY WITH 250.30 (A) (1) THROUGH (6)

EXCEPTION: HIGH-IMPEDANCE GROUNDED NEUTRAL SYSTEM GROUNDING CONNECTION REQUIREMENTS SHALL BE REQUIRED TO COMPLY WITH 250.30 (A) (1) AND (2) AND SHALL BE MADE AS SPECIFIED IN 250.36 AND 250.186.

(1) BONDING JUMPER

A BONDING JUMPER IN COMPLIANCE WITH 250.28 (A) THROUGH (D) THAT IS SIZED FOR THE DERIVED PHASE CONDUCTORS SHALL BE USED TO CONNECT THE EQUIPMENT GROUNDING CONDUCTORS OF THE SEPARATELY DERIVED SYSTEM TO THE GROUNDED CONDUCTOR. EXCEPT, AS PERMITTED BY 250.24 (A) (3), THIS CONNECTION SHALL BE MADE AT ANY POINT ON THE SEPARATELY DERIVED SYSTEM FROM THE SOURCE TO THE FIRST SYSTEM DISCONNECTING MEANS OR OVERCURRENT DEVICE, OR IT SHALL BE MADE AT THE SOURCE OF A SEPARATELY DERIVED SYSTEM THAT HAS NO DISCONNECTING MEANS OR OVERCURRENT DEVICES. THE POINT OF CONNECTION SHALL BE THE SAME AS THE GROUNDING ELECTRODE AS REQUIRED IN 250.30 (A) (2).

EXCEPTION NO. 1: A BONDING JUMPER AT BOTH THE SOURCE AND THE FIRST DISCONNECTING MEANS SHALL BE PERMITTED WHERE DOING SO DOES NOT ESTABLISH A PARALLEL PATH FOR THE GROUNDED CIRCUIT CONDUCTOR. WHERE A GROUNDED CONDUCTOR IS USED IN THIS MANNER, IT SHALL NOT BE SMALLER THAN THE SIZE SPECIFIED FOR THE BONDING JUMPER BUT SHALL BE REQUIRED TO BE LARGER THAN THE UNGROUNDED CONDUCTOR (S). FOR THE PURPOSES OF THIS EXCEPTION, CONNECTION THROUGH THE EARTH SHALL NOT BE CONSIDERED AS PROVIDING A PARALLEL PATH.

EXCEPTION NO 2: THE SIZE OF THE BONDING JUMPER FOR A SYSTEM THAT SUPPLIES A CLASS 1, CLASS 2, OR CLASS 3 CIRCUIT, AND IS DERIVED FROM A TRANSFORMER RATED NOT MORE THAN 1000 VOLT-AMPERES, SHALL NOT BE SMALLER THAN 14 AWG COPPER OR 12 AWG ALUMINUM.

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SOURCE: NATIONAL ELECTRICAL CODE (NEC 2002 EDITION)

SECTION: SECTION 250.30 (A) PAGE 70-101

SYSTEM GROUNDING CONNECTIONS

(2) GROUNDED ELECTRODE CONDUCTOR

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE INSTALLED IN ACCORDANCE WITH (A OR (B). WHERE TAPS ARE CONNECTED TO A COMMON GROUNDING ELECTRODE , THE INSTALLATION SHALL COMPLY WITH 250.30 (A) (3).

(A) SINGLE SEPARATELY DERIVED SYSTEMS

A GROUNDING ELECTRODE CONDUCTOR FOR A SINGLE SEPARATELY DERIVED SYSTEM SHALL BE SIZED IN ACCORDANCE WITH 250.66 FOR THE DERIVED PHASE CONDUCTORS AND SHALL BE USED TO CONNECT THE GROUNDED CONDUCTOR OF THE DERIVED SYSTEM TO THE GROUNDING ELECTRODE AS SPECIFIED IN 250.30 (A) (4). EXCEPT AS PERMITTED BY 250.24 (A) (3) OR (A) (4), THIS CONNECTION SHALL BE MADE AT THE SAME POINT ON THE SEPARATELY DERIVED SYSTEM WHERE THE BONDING JUMPER IS INSTALLED.

EXCEPTION: A GROUNDING ELECTRODE CONDUCTOR SHALL NOT BE REQUIRED FOR A SYSTEM THAT SUPPLIES A CLASS 1, CLASS 2, OR CLASS 3 CIRCUIT AND IS DERIVED FROM A TRANSFORMER RATED NOT LESS THAN 1000 VOLT-AMPERES, PROVIDED THE SYSTEM GROUNDING CONDUCTOR IS BONDED TO THE TRANSFORMER FRAME OR ENCLOSURE BY A JUMPER SIZED IN ACCORDANCE WITH 250.30 (A) (1), EXCEPTION NO. 2, AND THE TRANSFORMER FRAME OR ENCLOSURE IS GROUNDED BY ONE OF THE MEANS SPECIFIED IN 250.134.

(B) MULTIPLE SEPARATELY DERIVED SYSTEMS.

WHERE MORE THAN ONE SEPARATELY DERIVED SYSTEM IS CONNECTED TO A COMMON GROUNDING ELECTRODE CONDUCTOR AS PROVIDED IN 250.30 9A) (3), THE COMMON GROUNDING ELECTRODE SHALL BE SIZED IN ACCORDANCE WITH 250.66, BASED ON THE TOTAL AREA OF THE LARGEST DERIVED PHASE CONDUCTOR FROM EACH SEPARATELY DERIVED SYSTEM.

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APPENDIX A-4

SOURCE: NATIONAL ELECTRICAL CODE (NEC 2002 EDITION)
SECTION: SECTION 250.30 (A) PAGE 70-101 & 70-102

SYSTEM GROUNDING CONNECTIONS

3. GROUNDING ELECTRODE CONDUCTOR TAPS.

IT SHALL BE PERMISSIBLE TO CONNECT TAPS FROM A SEPARATELY DERIVED SYSTEM TO A COMMON GROUNDING ELECTRODE CONDUCTOR. EACH TAP CONDUCTOR SHALL CONNECT THE GROUNDED CONDUCTOR OF THE SEPARATELY DERIVED SYSTEM TO THE COMMON GROUNDING ELECTRODE CONDUCTOR.

(a) TAP CONDUCTOR SIZE. EACH TAP CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH 250.66 FOR THE DERIVED PHASE CONDUCTORS OF THE SEPARATELY DERIVED SYSTEM IT SERVES.

(b) CONNECTIONS. ALL CONNECTIONS SHALL BE MADE AT AN ACCESSIBLE LOCATION BY AN IRREVERSIBLE COMPRESSION CONNECTION LISTED FOR THE PURPOSE, LISTED CONNECTIONS TO COPPER BUSBARS NOT LESS THAN 6 mm X 50 mm (1/4 in. X 2 in.), OR BY THE EXOTHERMIC WELDING PROCESS. THE TAP CONDUCTORS SHALL BE CONNECTED TO THE COMMON GROUNDING ELECTRODE CONDUCTOR AS SPECIFIED IN 250.30 (A)(2)(b) IN SUCH A MANNER THAT THE COMMON GROUNDING ELECTRODE CONDUCTOR REMAINS WITHOUT A SPLICE OR JOINT.

(c) INSTALLATION. THE COMMON GROUNDING ELECTRODE CONDUCTOR AND THE TAPS TO EACH SEPARATELY DERIVED SYSTEM SHALL COMPLY WITH 250.64 (A), (B), (C) AND (E).

(d) BONDING. WHERE EXPOSED STRUCTURAL STEEL THAT IS INTERCONNECTED TO FORM THE BUILDING FRAME OR INTERIOR METAL PIPING EXISTS IN THE AREA SERVED BY THE SEPARATELY DERIVED SYSTEM, IT SHALL BE BONDED TO THE GROUNDING ELECTRODE IN ACCORDANCE WITH 250.104.

4. GROUNDING ELECTRODE

PREFERABLY IN THE SAME AREA AS THE GROUNDING ELECTRODE CONDUCTOR CONNECTION TO THE SYSTEM. THE GROUNDING ELECTRODE SHALL BE THE NEAREST ONE OF THE FOLLOWING:

- (1) AN EFFECTIVELY GROUNDED STRUCTURAL METAL MEMBER OF THE STRUCTURE
- (2) AN EFFECTIVELY GROUNDED METAL WATER PIPE WITHIN 1.5 m (5 ft) FROM THE POINT OF ENTRANCE INTO THE BUILDING

EXCEPTION: IN INDUSTRIAL AND COMMERCIAL BUILDINGS, WHERE CONDITIONS OF MAINTENANCE AND SUPERVISION ENSURE THAT ONLY QUALIFIED PERSONS SERVICE THE INSTALLATION AND THE ENTIRE LENGTH OF THE INTERIOR METAL WATER PIPE THAT IS BEING USED FOR THE GROUNDING ELECTRODE IS EXPOSED, THE CONNECTION SHALL BE PERMITTED AT ANY POINT ON THE WATER PIPE SYSTEM.

(3) OTHER ELECTRODES AS SPECIFIED IN 250.52 WHERE THE ELECTRODES SPECIFIED BY 250.30 (A)(4)(1) OR (A)(4)(2) ARE NOT AVAILABLE.

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APPENDIX A-5

SOURCE: NATIONAL ELECTRICAL CODE 2002

ARTICLE 220 BRANCH-CIRCUIT, FEEDER, AND SERVICE CALCULATIONS PAGES 70-61 TO PAGES 70.69

ARTICLE 225 OUTSIDE BRANCH CIRCUITS AND FEEDERS PAGES 70-69 TO 70-75

SINGLE FAMILY DWELLING LOAD CALCULATION FORM

NO.		NO. OF WATTS
_____	SQ., FT, LIVING AREA X 3 WATTS EACH	_____
_____	SMALL APPLIANCE CIRCUITS X 1500 WATTS EACH	_____
_____	220 V. DRYER CIRCUITS X 5000 WATTS EACH	_____
_____	220 V RANGE / OVEN CIRCUITS X 8000 WATTS EACH	_____
_____	220 V OVEN CIRCUIT X 4,000 WATTS EACH	_____
_____	220 V COOKTOP CIRCUIT X 4500 WATTS EACH	_____
_____	220 V. WATER HEATER CIRCUIT X 3,000 WATTS EA.	_____
_____	110 V. LAUNDRY CIRCUITS X 1500 WATTS EACH.	_____
_____	110 V. DISHWASHER CIRCUITS X 1500 WATTS EA.	_____
_____	110 V. GARBAGE DISPOSAL CIRCUITS X 750 WATTS EA.,	_____
_____	110 V. TRASH COMPACTOR CIRCUITS X 1,500 WATTS EA.	_____
_____	OTHER USE CIRCUITS X 690 WATTS EA.	_____

FIRST 10,000 WATTS @ 100 % _____

REMAINING _____ WATTS @ 40 % EQUALS _____

_____ TONS OF AIR @ 100 % TIMES 1720 WATTS EQUALS _____

(USE 1720 WATTS PER TON FOR A/C LOAD)

TOTAL WATTS DIVIDED BY 240 VOLTS EQUALS _____
TOTAL AMP AMOUNT NEEDED.

NOTE:
TOTAL ELECTRICAL SERVICE SHOULD MEET OR EXCEED THE TOTAL AMP AMOUNT.

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APPENDIX B-1

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: 401.3 PAGE 57

DRAINAGE

R 401.3 DRAINAGE

SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION SO AS TO NOT CREATE A HAZARD. LOTS SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM THE FOUNDATION WALLS. THE GRADE AWAY FROM THE FOUNDATION SHALL FALL A MINIMUM OF 6 INCHES (152mm) WITHIN THE FIRST 10 FEET (3,048mm).

EXCEPTION:

WHERE LOT LINES, WALLS, SLOPES, OR OTHER PHYSICAL BARRIERS PROHIBIT 6 INCHES (152mm) OF FALL WITHIN 6 FEET (3048mm), DRAINS OR SWALES SHALL BE PROVIDED TO ENSURE DRAINAGE AWAY FROM THE STRUCTURE.

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APPENDIX C

**SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: M 1305.1.2 PAGE 289**

GENERAL MECHANICAL SYSTEM REQUIREMENTS

APPLIANCE ACCESS

APPLIANCES IN ATTICS.

ATTICS CONTAINING APPLIANCES REQUIRING ACCESS SHALL BE PROVIDED WITH AN OPENING AND A CLEAR AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE, BUT NOT LESS THAN 30 INCHES (762 mm) HIGH AND 22 INCHES (559 mm) WIDE AND NOT MORE THAN 20 FEET (6096 mm) IN LENGTH WHEN MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY FROM THE OPENING TO THE APPLIANCE. THE PASSAGEWAY SHALL HAVE CONTINUOUS SOLID FLOORING IN ACCORDANCE WITH CHAPTER 5 NOT LESS THAN 24 INCHES (610 mm) WIDE. A LEVEL SERVICE SPACE AT LEAST 30 INCHES (762 mm) DEEP AND 30 INCHES (762 MM) WIDE SHALL BE PRESENT ALONG ALL SIDES OF THE APPLIANCE WHERE ACCESS IS REQUIRED. THE CLEAR ACCESS OPENING DIMENSIONS SHALL BE A MINIMUM OF 20 INCHES BY 30 INCHES (508 mm X 762 mm) WHERE SUCH DIMENSIONS ARE LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE.

EXCEPTION:

THE PASSAGEWAY AND LEVEL SERVICE SPACE ARE NOT REQUIRED WHERE THE APPLIANCE IS CAPABLE OF BEING SERVICED AND REMOVED THROUGH THE REQUIRED OPENING.

ELECTRICAL REQUIREMENTS

**SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: M 1305.1.3.1 PAGE 290**

A LIGHTING FIXTURE CONTROLLED BY A SWITCH LOCATED AT THE REQUIRED PASSAGEWAY OPENING AND A RECEPTACLE OUTLET SHALL BE PROVIDED AT OR NEAR THE APPLIANCE LOCATION IN ACCORDANCE WITH CHAPTER 38

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APPENDIX CC-1

SOURCE: **IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000**
SECTION: **M 1411.3 PAGE 297**

M 1411.3 CONDENSATE DISPOSAL

CONDENSATE FROM ALL COOLING COILS OR EVAPORATORS SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO AN APPROVED PLACE OF DISPOSAL. CONDENSATE SHALL NOT DISCHARGE INTO A STREET, ALLEY, OR OTHER AREA SO AS TO CAUSE A NUISANCE.

M 1411.3.1 AUXILIARY AND SECONDARY DRAIN SYSTEMS

IN ADDITION TO THE REQUIREMENTS OF SECTION M 1411.3, A SECONDARY DRAIN OR AUXILIARY DRAIN PAN SHALL BE REQUIRED FOR EACH COOLING OR EVAPORATOR COIL WHERE DAMAGE TO ANY BUILDING COMPONENTS WILL OCCUR AS A RESULT OF OVERFLOW FROM THE EQUIPMENT DRAIN PAN OR STOPPAGE IN THE CONDENSATE DRAIN PIPING. DRAIN PIPING SHALL BE A MINIMUM OF 3/4 INCH (19.1 mm) NOMINAL PIPE SIZE. ONE OF THE FOLLOWING METHODS SHALL BE USED:

1. AN AUXILIARY DRAIN PAN WITH A SEPARATE DRAIN SHALL BE PROVIDED UNDER THE COILS ON WHICH CONDENSATION WILL OCCUR. THE AUXILIARY PAN DRAIN SHALL DISCHARGE TO A CONSPICUOUS POINT OF DISPOSAL TO ALERT OCCUPANTS IN THE EVENT OF A STOPPAGE OF THE PRIMARY DRAIN. THE PAN SHALL BE A MINIMUM DEPTH OF 1.5 INCHES (38 mm), SHALL NOT BE LESS THAN 3 INCHES (76 mm) LARGER THAN THE UNIT OR THE COIL DIMENSIONS IN WIDTH AND LENGTH AND SHALL BE CONSTRUCTED OF CORROSION RESISTANT MATERIAL. METALLIC PANS SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN 0.0276 INCH (0.7 mm) GALVANIZED SHEET METAL. NONMETALLIC PANS SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN 0.0625 INCH (1.6mm).

2. A SEPARATE OVERFLOW DRAIN LINE SHALL BE CONNECTED TO THE DRAIN PAN PROVIDED WITH THE EQUIPMENT. SUCH OVERFLOW DRAIN SHALL DISCHARGE TO A CONSPICUOUS POINT OF DISPOSAL TO ALERT OCCUPANTS IN THE EVENT OF A STOPPAGE OF THE PRIMARY DRAIN. THE OVERFLOW DRAIN LINE SHALL CONNECT TO THE DRAIN PAN AT A HIGHER LEVEL THAN THE PRIMARY DRAIN CONNECTION.

3. AN AUXILIARY DRAIN PAN WITHOUT A SEPARATE DRAIN LINE SHALL BE PROVIDED UNDER THE COILS ON WHICH CONDENSATE WILL OCCUR. SUCH PAN SHALL BE EQUIPPED WITH A WATER LEVEL DETECTION DEVICE THAT WILL SHUT OFF THE EQUIPMENT SERVED PRIOR TO OVERFLOW OF THE PAN. THE AUXILIARY DRAIN PAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 1 OF THIS SECTION.

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APPENDIX CC-2 (FLOAT SWITCH)

**SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2009
SECTION: M 1411.3.1..1 PAGE 486**

M 1411.3.1.1 WATER-LEVEL MONITORING DEVICES

ON DOWN-FLOW UNITS AND ALL OTHER COILS THAT HAVE SECONDARY DRAIN OR PROVISIONS TO INSTALL A SECONDARY OR AUXILIARY DRAIN PAN, A WATER-LEVELING MONITORING DEVICE SHALL BE INSTALLED INSIDE THE PRIMARY DRAIN PAN. THIS DEVICE SHALL SHUT OFF EQUIPMENT SERVED IN THE EVENT THAT THE PRIMARY DRAIN BECOMES RESTRICTED. DEVICES SHALL NOT BE INSTALLED IN THE DRAIN LINE.

M 1411. 3. 2 DRAIN PIPE MATERIALS AND SIZES

COMPONENTS OF THE CONDENSATE DISPOSAL SYSTEM SHALL BE CAST IRON, GALVANIZED STEEL, COPPER, POLYBUTYLENE, POLYETHYLENE, ABS, CPVC, OR PVC PIPE OR TUBING. ALL COMPONENTS SHALL BE SELECTED FOR THE PRESSURE AND TEMPERATURE RATING OF THE INSTALLATION. JOINTS AND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE MATERIALS SPECIFIED IN CHAPTER 30. CONDENSATE WASTE AND DRAIN LINE SIZE SHALL NOT BE LESS THAN 3/4 INCH (19 mm) INTERNAL DIAMETER AND SHALL NOT DECREASE IN SIZE FROM THE DRAIN PAN CONNECTION TO THE PLACE OF CONDENSATE DISPOSAL. WHERE THE DRAIN PIPES FROM MORE THAN ONE UNIT ARE MANIFOLDED TOGETHER FOR CONDENSATE DRAINAGE, THE PIPE OR TUBING SHALL BE SIZED IN ACCORDANCE WITH AN APPROVED METHOD.

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APPENDIX D

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000

SECTION: P 2902.3.1 & P 2902.4.3

PAGE 396

P 2902

PAGE 395

WATER SUPPLY AND DISTRIBUTION

PROTECTION OF POTABLE WATER OUTLETS

ALL POTABLE WATER OPENINGS AND OUTLETS SHALL BE PROTECTED BY AN AIR GAP, ATMOSPHERIC-TYPE VACUUM BREAKER, PRESSURE-TYPE VACUUM BREAKER OR HOSE CONNECTION BACKFLOW PREVENTOR.

FLUSH TANKS

FLUSH TANKS SHALL BE EQUIPPED WITH AN ANTISIPHON BALL COCK CONFORMING TO ASSE/ANSI 1002. THE BALL COCK SHALL BE INSTALLED A MINIMUM OF 1 INCH (25.4 mm) ABOVE THE FULL OPENING OF THE OVERFLOW PIPE.

P 2902 PROTECTION OF POTABLE WATER SUPPLY

P2901.1 GENERAL

A POTABLE WATER SUPPLY SYSTEM SHALL BE DESIGNED AND INSTALLED IN SUCH A MANNER AS TO PREVENT CONTAMINATION FROM NONPOTABLE LIQUIDS, SOLIDS, OR GASES BEING INTRODUCED INTO THE POTABLE WATER SUPPLY. CONNECTIONS SHALL NOT BE MADE TO A POTABLE WATER SUPPLY IN A MANNER THAT COULD CONTAMINATE THE WATER SUPPLY OR PROVIDE A CROSS-CONNECTION BETWEEN THE SUPPLY AND SOURCE OF CONTAMINATION UNLESS AN APPROVED BACKFLOW PREVENTION DEVICE IS PROVIDED. CROSS-CONNECTIONS BETWEEN AN INDIVIDUAL WATER SUPPLY AND POTABLE PUBLIC WATER SUPPLY SHALL BE PROHIBITED.

P 2902.2.4 HOSE CONNECTION BACKFLOW PREVENTORS

HOSE CONNECTION BACKFLOW PREVENTORS SHALL CONFORM TO ASSE / ANSI 1052. THE BACKFLOW PREVENTOR SHALL BE INSTALLED ON THE DISCHARGE SIDE OF A HOSE-THREADED OUTLET.

P 2902.4.3 LAWN IRRIGATION SYSTEMS

THE POTABLE WATER SUPPLY TO LAWN IRRIGATION SYSTEMS SHALL BE PROTECTED AGAINST BACKFLOW BY AN ATMOSPHERIC-TYPE VACUUM BREAKER, A PRESSURE-TYPE BREAKER OR A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR. A VALVE SHALL NOT BE INSTALLED DOWNSTREAM FROM AN ATMOSPHERIC VACUUM BREAKER. ALL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

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APPENDIX E

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: G 2437 (613) PAGE 375

CLOTHES DRYER EXHAUST

G 2437.1 (613.1) INSTALLATION:

CLOTHES DRYER SHALL BE EXHAUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. DRYER EXHAUST SYSTEMS SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS AND SHALL CONVEY THE MOISTURE AND ANY PRODUCTS OF COMBUSTION TO THE OUTSIDE OF THE BUILDING.

G 2437.2 (613.2) DUCT PENETRATIONS:

DUCTS THAT EXHAUST CLOTHES DRYERS SHALL NOT PENETRATE OR BE LOCATED ANY FIRE-BLOCKING, DRAFT STOPPING OR ANY WALL, FLOOR / CEILING OR OTHER ASSEMBLY REQUIRED BY THIS CODE TO BE FIRE-RESISTANCE-RATED, UNLESS SUCH DUCT IS CONSTRUCTED OF GALVANIZED STEEL OR ALUMINUM OF THE THICKNESS SPECIFIED IN THE MECHANICAL PROVISIONS OF THIS CODE AND THE FIRE-RESISTANCE RATING IS MAINTAINED IN ACCORDANCE WITH THIS CODE.

G 2437.5 (613.6) CLOTHES DRYER DUCTS:

EXHAUST DUCTS FOR DOMESTIC CLOTHES DRYERS SHALL HAVE A SMOOTH INTERIOR FINISH. THE EXHAUST DUCT SHALL BE A MINIMUM NOMINAL SIZE OF 4 INCHES (102 mm) IN DIAMETER. THE ENTIRE EXHAUST SYSTEM SHALL BE SUPPORTED AND SECURED IN PLACE. THE MALE END OF THE DUCT AT OVER-LAPPED DUCT JOINTS SHALL EXTEND IN THE DIRECTION OF AIRFLOW. CLOTHES DRYER TRANSITION DUCTS USED TO CONNECT THE APPLIANCE TO THE EXHAUST DUCT SYSTEM SHALL BE METAL AND LIMITED TO A SINGLE LENGTH NOT TO EXCEED 8 FEET (2438 mm) IN LENGTH AND SHALL BE LISTED AND LABELED FOR THE APPLICATION. TRANSITION DUCTS SHALL NOT BE CONCEALED WITHIN CONSTRUCTION.

G 2437.5 (613.6.1) MAXIMUM LENGTH

THE MAXIMUM LENGTH OF A CLOTHES DRYER EXHAUST VENT SHALL NOT EXCEED 25 FEET (7620 mm) FROM THE DRYER LOCATION TO THE OUTLET TERMINAL. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED BY 2 1/2 FEET (762 mm) FOR EACH 45 DEGREE (0.79 rad) BEND AND 5 FEET (1524 mm) FOR EACH 90 DEGREE (1.6 rad) BEND.

EXCEPTION:

WHERE THE MAKE AND MODEL OF THE CLOTHES DRYER TO BE INSTALLED IS KNOWN AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SUCH DRYER ARE PROVIDED TO THE CODE OFFICIAL, THE MAXIMUM LENGTH OF THE EXHAUST DUCT, INCLUDING ANY TRANSITION DUCT, SHALL BE PERMITTED TO BE IN ACCORDANCE WITH THE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

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APPENDIX E-2

**SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: R 317.1 PAGE 49 & R317.2 POWER SOURCE**

SMOKE ALARMS

R 317.1 SINGLE AND MULTIPLE-STATION SMOKE ALARMS

SINGLE AND MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

- 1 IN EACH SLEEPING ROOM
- 2 OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS
- 3 ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND CELLARS BUT NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS.. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.

ALL SMOKE ALARMS SHALL BE LISTED AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72.

R 317.2 POWER SOURCE

IN NEW CONSTRUCTION, THE REQUIRED SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE, AND WHEN PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL BE PERMITTED TO BE BATTERY OPERATED WHEN INSTALLED IN BUILDINGS WITHOUT COMMERCIAL POWER OR IN BUILDINGS THAT UNDERGO ALTERATIONS, REPAIRS, OR ADDITIONS REGULATED BY SECTION 31.1.1.

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APPENDIX E-3

SOURCE: INTERNATIONAL MECHANICAL CODE - 2000
SECTION: CHAPTER 5, EXHAUST SYSTEMS, SECTION 501 PAGE 31
SECTION 403.2 TRANSFER AIR PAGE 28

EXHAUST SYSTEMS

501.1 SCOPE

THIS CHAPTER SHALL GOVERN THE DESIGN, CONSTRUCTION, AND INSTALLATION OF MECHANICAL EXHAUST SYSTEMS, INCLUDING DUST, STOCK, AND REFUSE CONVEYOR SYSTEMS AND EXHAUST SYSTEMS SERVING COMMERCIAL FOOD HEAT- PROCESSING APPLIANCES.

501.2 INDEPENDENT SYSTEM REQUIRED

SINGLE OR COMBINED MECHANICAL EXHAUST SYSTEMS FROM BATH, TOILET, URINAL, LOCKER, SERVICE SINK CLOSETS AND SIMILAR ROOMS SHALL BE INDEPENDENT OF ALL OTHER EXHAUST SYSTEMS. TYPE I EXHAUST SYSTEMS SHALL INDEPENDENT OF OTHER EXHAUST SYSTEMS EXCEPT AS PROVIDED IN SECTION 506.3.6. SINGLE OR COMBINED TYPE II EXHAUST SYSTEMS FOR FOOD-PROCESSING OPERATIONS SHALL BE INDEPENDENT OF ALL OTHER EXHAUST SYSTEMS. KITCHEN EXHAUST SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 505 FOR DOMESTIC EQUIPMENT AND SECTIONS 506 THROUGH 509 FOR COMMERCIAL EQUIPMENT.

501.3 OUTDOOR DISCHARGE

THE AIR REMOVED BY EVERY MECHANICAL EXHAUST SYSTEM SHALL BE DISCHARGED OUTDOORS AT A POINT WHERE IT WILL NOT CAUSE A NUISANCE AND FROM WHICH IT CANNOT BE READILY DRAWN IN BY A VENTILATING SYSTEM. AIR SHALL NOT BE EXHAUSTED INTO AN ATTIC OR CRAWL SPACE.

EXCEPTION:

WHOLE HOUSE VENTILATION-TYPE ATTIC FANS THAT DISCHARGE INTO THE ATTIC SPACE OF DWELLING UNITS HAVE HAVING PRIVATE ATTIC SHALL NOT BE PROHIBITED.

403.2.2 TRANSFER AIR

EXCEPT WHERE RECIRCULATION FRO SUCH SPACES IS PROHIBITED BY TABLE 403.2.3, AIR TRANSFERRED FROM OCCUPIED SPACES IS NOT PROHIBITED FROM SERVING AS MAKEUP AIR FOR REQUIRED EXHAUST SYSTEMS IN SUCH SPACES AS KITCHENS, BATHS, TOILET ROOMS, ELEVATORS, AND SMOKING LOUNGES. THE AMOUNT OF TRANSFER AIR AND EXHAUST AIR SHALL BE SUFFICIENT TO PROVIDE THE FLOW RATES AS SPECIFIED IN SECTIONS 403.3 AND 403.3.1. THE REQUIRED OUTDOOR AIR RATES SPECIFIED IN TABLE 403.3 SHALL BE INTRODUCED DIRECTLY INTO SUCH SPACES OR INTO THE OCCUPIED SPACES FROM WHICH AIR IS TRANSFERRED OR A COMBINATION OF BOTH.

ALLIED HOME INSPECTION SERVICES

APPENDIX EE-1-A

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS (2000))
SECTION: SECTION 1501 PAGE 299

EXHAUST SYSTEMS

M 1501 CLOTHES DRYER EXHAUSTS

M 1501.1 GENERAL

DRYER EXHAUST SYSTEMS SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS, SHALL CONVEY THE MOISTURE TO THE OUTDOORS AND SHALL TERMINATE ON THE OUTSIDE OF THE BUILDING. EXHAUST DUCT TERMINATION SHALL BE IN ACCORDANCE WITH DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS. SCREENS SHALL NOT BE INSTALLED AT THE DUCT TERMINATION. EXHAUST DUCTS SHALL NOT BE CONNECTED WITH SHEET-METAL SCREWS OR FASTENING MEANS WHICH EXTEND INTO THE DUCT. EXHAUST DUCTS SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER. EXHAUST DUCTS SHALL BE CONSTRUCTED OF MINIMUM 0.016 INCH THICK (0.406 mm) RIGID METAL DUCTS, HAVING SMOOTH INTERIOR SURFACES WITH JOINTS RUNNING IN THE DIRECTION OF THE AIR FLOW. FLEXIBLE TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE LIMITED TO SINGLE LENGTHS, NOT TO EXCEED 8 FEET (2438 mm) IN LENGTH AND SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. TRANSITION DUCTS SHALL NOT BE CONCEALED WITHIN CONSTRUCTION.

M 1501.2 EXHAUST DUCT SIZE

THE MINIMUM DIAMETER OF THE EXHAUST DUCT SHALL BE AS RECOMMENDED BY THE MANUFACTURER AND SHALL BE AT LEAST THE DIAMETER OF THE APPLIANCE OUTLET.

ALLIED HOME INSPECTION SERVICES

APPENDIX F

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: R 315 PAGE 49 R 314.1 WIDTH PAGE 48

STAIR HANDRAILS & STAIR WIDTH

R. 315.1 HANDRAILS

HANDRAILS HAVING MINIMUM AND MAXIMUM HEIGHTS OF 34 INCHES AND 38 INCHES (864 mm AND 965 mm), RESPECTIVELY, MEASURED VERTICALLY FROM THE NOSING OF THE TREADS, SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS WITH TWO OR MORE RISERS FROM A POINT DIRECTLY ABOVE THE TOP RISER OF A FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1.5 INCHES (38 mm) BETWEEN THE WALL AND THE HANDRAIL.

EXCEPTIONS:

1. HANDRAILS SHALL BE PERMITTED TO BE INTERRUPTED BY A NEWEL POST AT A TURN.
2. THE USE OF A VOLUTE, TURNOUT, OR STARTING EASING SHALL BE ALLOWED OVER THE LOWEST TREAD.

R 315.2 HANDRAIL GRIP SIZE

THE HANDGRIP PORTION OF HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1 1/4 INCHES (32 mm) MINIMUM TO 2 5/8 INCHES (67 mm) MAXIMUM. OTHER HANDRAIL SHAPES THAT PROVIDE AN EQUIVALENT GRASPING SURFACE ARE PERMISSIBLE. EDGES SHALL A MINIMUM RADIUS OF 1/8 INCH (3.2 mm).

R 314.2 WIDTH

STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES (914 mm) IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES (114 mm) ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL NOT BE LESS THAN 31.5 INCHES (787 mm) WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES (698 mm) WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES.

EXCEPTION:

THE WIDTH OF THE SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R314.5.

ALLIED HOME INSPECTION SERVICES

APPENDIX F-2

**SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: R 314 PAGE 40 AND R 314.2 PAGE 49 AND R 314.3 PAGE 40**

STAIRWAYS

R. 314.1 WIDTH

STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES (914 mm) IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES (114 mm) ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL NOT BE LESS THAN 31.5 INCHES (787 mm) WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES (698 mm) WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES.

EXCEPTION:

THE WIDTH OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R 314.5.

R 314. 2 TREADS AND RISERS

THE MAXIMUM RISER HEIGHT SHALL BE 7 3/4 INCHES (196 mm) AND THE MINIMUM TREAD DEPTH SHALL BE 10 INCHES (254 mm). THE RISER HEIGHT SHALL BE MEASURED VERTICALLY BETWEEN THE LEADING EDGES OF THE ADJACENT TREADS. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE WALKING SURFACE OF TREADS AND LANDINGS OF A STAIRWAY SHALL BE SLOPED NO STEEPER THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2 PERCENT SLOPE). THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 mm). THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH (9.5 mm).

R 314.3 HEADROOM

THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY, SHALL NOT BE LESS THAN 6 FEET, 8 INCHES (2032 mm) MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM.

ALLIED HOME INSPECTION SERVICES

APPENDIX FF-1-A

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION R 602.8 PAGE 112 SECTION R 314.8 UNDER STAIR PROTECTION
SECTION R 1001.6 PAGE 264

R 602.8 FIREBLOCKING REQUIRED.

FIREBLOCKING 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. FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

- 1 IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVEL AND AT 10 FOOT (3048mm) INTERVALS BOTH VERTICAL AND HORIZONTAL. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE ALLOWED AS FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS.
- 2 AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS.
- 3 IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R 314.8.
- 4 AT OPENINGS AROUND VENTS, PIPES, AND DUCTS AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
- 5 FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R 1001.16.
- 6 FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION.

R 304.8 UNDER STAIR PROTECTION

ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH (12.7mm) GYPSUM BOARD.

R 1001.15 CHIMNEY FIREBLOCKING

ALL SPACES BETWEEN THE CHIMNEYS AND FLOORS AND CEILINGS THROUGH WHICH CHIMNEYS PASS SHALL BE FIREBLOCKED WITH NONCOMBUSTIBLE MATERIAL SECURELY FASTENED IN PLACE. THE FIREBLOCKING OF SPACES BETWEEN CHIMNEYS AND WOOD JOISTS, BEAMS, OR HEADERS SHALL BE TO A DEPTH OF 1 INCH (25mm) AND SHALL ONLY BE PLACED ON STRIPS OF METAL OR METAL LATH LAID ACROSS THE SPACES BETWEEN COMBUSTIBLE MATERIAL AND THE CHIMNEY.

ALLIED HOME INSPECTION SERVICES

APPENDIX FF-1-A

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION R 602.8 PAGE 112 SECTION R 314.8 UNDER STAIR PROTECTION
SECTION R 1001.6 PAGE 264

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- 1 IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVEL AND AT 10 FOOT (3048mm) INTERVALS BOTH VERTICAL AND HORIZONTAL. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE ALLOWED AS FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS.
- 2 AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS.
- 3 IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R 314.8.
- 4 AT OPENINGS AROUND VENTS, PIPES, AND DUCTS AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
- 5 FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R 1001.16.
- 6 FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION.

R 304.8 UNDER STAIR PROTECTION

ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH (12.7mm) GYPSUM BOARD.

R 1001.15 CHIMNEY FIREBLOCKING

ALL SPACES BETWEEN THE CHIMNEYS AND FLOORS AND CEILINGS THROUGH WHICH CHIMNEYS PASS SHALL BE FIREBLOCKED WITH NONCOMBUSTIBLE MATERIAL SECURELY FASTENED IN PLACE. THE FIREBLOCKING OF SPACES BETWEEN CHIMNEYS AND WOOD JOISTS, BEAMS, OR HEADERS SHALL BE TO A DEPTH OF 1 INCH (25mm) AND SHALL ONLY BE PLACED ON STRIPS OF METAL OR METAL LATH LAID ACROSS THE SPACES BETWEEN COMBUSTIBLE MATERIAL AND THE CHIMNEY.

ALLIED HOME INSPECTION SERVICES

APPENDIX G

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: R 316 PAGE 49

GUARDS

R. 316.1 GUARDS

PORCHES, BALCONIES, OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES (762 mm) ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 36 INCHES (914 mm) IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES (762 mm) ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 34 INCHES (864 mm) IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREADS.

R 316.2 GUARD OPENING LIMITATIONS

REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREAS, BALCONIES AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW THE PASSAGE OF A SPHERE 4 INCHES (102 mm) IN DIAMETER. REQUIRED GUARDS SHALL NOT BE CONSTRUCTED WITH HORIZONTAL RAILS OR OTHER ORNAMENTAL PATTERNS THAT RESULTS IN A LADDER EFFECT.

EXCEPTION:

THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD, AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH A SIZE THAT A SPHERE 6 INCHES (152 mm) CANNOT PASS THROUGH.

ALLIED HOME INSPECTION SERVICES

APPENDIX H

SOURCE: INTERNATIONAL FUEL GAS CODE - 2000
SECTION: 409 (IFGC) SHUTOFF VALVES PAGE 67

409.1 GENERAL

PIPING SYSTEMS SHALL BE PROVIDED WITH SHUTOFF VALVES IN ACCORDANCE WITH THIS SECTION.

409.1.1 VALVE APPROVAL

SHUTOFF VALVES SHALL BE OF AN APPROVED TYPE. SHUTOFF VALVES SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE PIPING. SHUTOFF VALVES INSTALLED IN A PORTION OF A PIPING SYSTEM OPERATING ABOVE 0.5 psig SHALL COMPLY WITH ASME B16.33. SHUTOFF VALVES INSTALLED IN A PORTION OF A PIPING SYSTEM OPERATING AT 0.5 psig OR LESS SHALL COMPLY WITH ANSI Z21.15 OR ASME B16.33.

409.1.2 PROHIBITED LOCATIONS

SHUTOFF VALVES SHALL BE PROHIBITED IN CONCEALED LOCATIONS AND SPACES USED AS PLENUMS.

409.1.3 ACCESS TO SHUTOFF VALVES

SHUTOFF VALVES SHALL BE LOCATED IN PLACES SO AS TO PROVIDE ACCESS FOR OPERATION AND SHALL BE INSTALLED SO AS TO BE PROTECTED FROM DAMAGE.

409.2 METER VALVE

EVERY METER SHALL BE EQUIPPED WITH A SHUTOFF VALVE LOCATED ON THE SUPPLY SIDE OF THE METER.

409.3 SHUTOFF VALVES FOR MULTIPLE-HOUSE LINE SYSTEMS

WHERE A SINGLE METER IS USED TO SUPPLY GAS TO MORE THAN ONE BUILDING OR TENANT, A SEPARATE SHUTOFF VALVE SHALL BE PROVIDED FOR EACH BUILDING OR TENANT.

409.5 EQUIPMENT SHUTOFF VALVE

EACH APPLIANCE SHALL BE PROVIDED WITH A SEPARATE SHUTOFF VALVE SEPARATE FROM THE APPLIANCE. THE SHUTOFF VALVE SHALL BE LOCATED IN THE SAME ROOM AS THE APPLIANCE, NOT FURTHER THAN 6 FEET (1829 mm) FROM THE APPLIANCE AND SHALL BE INSTALLED UPSTREAM FROM THE UNION, CONNECTOR, OR QUICK DISCONNECT DEVICE IT SERVES. SUCH SHUTOFF VALVES SHALL BE PROVIDED WITH READY ACCESS.

ALLIED HOME INSPECTION SERVICES

APPENDIX I-2

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: R 303 LIGHT, VENTILATION, AND HEATING PAGES 42 & 43

LIGHT, VENTILATION, AND HEATING

R 303.1 HABITABLE ROOMS

ALL HABITABLE ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR. SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS. THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.

EXCEPTIONS:

- 1 THE GLAZED AREAS NEED NOT BE OPENABLE WHERE THE OPENING IS NOT REQUIRED BY SECTION R 310 AND AN APPROVED MECHANICAL VENTILATION SYSTEM IS PROVIDED CAPABLE OF PRODUCING 0.35 AIR CHANGE PER HOUR IN THE ROOM OR A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS INSTALLED CAPABLE OF SUPPLYING OUTDOOR VENTILATION AIR OF 15 CUBIC FEET PER MINUTE (CFM) (7.08 L/s) PER OCCUPANT COMPUTED ON THE BASIS OF TWO OCCUPANTS FOR THE FIRST BEDROOM AND ONE OCCUPANT FOR EACH ADDITIONAL BEDROOM.
- 2 THE GLAZED AREAS NEED NOT BE PROVIDED IN ROOMS WHERE EXCEPTION 1 ABOVE IS SATISFIED AND ARTIFICIAL LIGHT IS PROVIDED CAPABLE OF PRODUCING AN AVERAGE ILLUMINATION OF 6 FOOT-CANDLES (6.46 lux) OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES (762mm) ABOVE THE FLOOR LEVEL.

R 303.2.1 ADJOINING ROOMS

FOR THE PURPOSE OF DETERMINING LIGHT AND VENTILATION REQUIREMENTS, ANY ROOM SHALL BE CONSIDERED AS A PORTION OF AN ADJOINING ROOM WHEN AT LEAST ONE HALF OF THE AREA OF THE COMMON WALL IS OPEN AND UNOBSTRUCTED AND PROVIDES AN OPENING OF NOT LESS THAN ONE-TENTH OF THE FLOOR AREA OF THE INTERIOR ROOM BUT NOT LESS THAN 25 SQUARE FEET (2.32M²).

R 306.6 REQUIRED HEATING

WHEN THE WINTER DESIGN TEMPERATURE IN TABLE R 301.2 (1) IS BELOW 60 DEGREES F (16 DEGREE C), EVERY DWELLING UNIT SHALL BE PROVIDED WITH HEATING FACILITIES CAPABLE OF MAINTAINING A MINIMUM ROOM TEMPERATURE OF 68 DEGREES F (20 DEGREE C) AT A POINT 3 FEET (914 mm) ABOVE THE FLOOR AND 2 FEET (610 mm) FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS AT THE DESIGN TEMPERATURE.

ALLIED HOME INSPECTION SERVICES

APPENDIX I-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: DEFINITIONS PAGES 9 - 20

DWELLING DEFINITION

DWELLING

ANY BUILDING THAT CONTAINS ONE OR TWO DWELLING UNITS, USED, INTENDED, OR DESIGNED TO BE BUILT, USED, RENTED, LEASED, LET OR HIRED OUT TO BE OCCUPIED, OR THAT ARE OCCUPIED FOR LIVING PURPOSES.

DWELLING UNIT

A SINGLE UNIT PROVIDING COMPLETE INDEPENDENT LIVING FACILITIES FOR ONE OR MORE PERSONS, INCLUDING PERMANENT PROVISIONS FOR LIVING, SLEEPING, EATING, COOKING, AND SANITATION.

VENTILATION

THE NATURAL OR MECHANICAL PROCESS OF SUPPLYING CONDITIONED OR UNCONDITIONED AIR TO, OR REMOVING SUCH AIR FROM, ANY SPACE.

VENTING SYSTEM

A CONTINUOUS OPEN PASSAGEWAY FROM THE FLUE COLLAR OF AN APPLIANCE TO THE OUTSIDE ATMOSPHERE FOR THE PURPOSE OF REMOVING FLUE OR VENT GASES. A VENTING SYSTEM IS USUALLY COMPOSED OF A VENT OR CHIMNEY AND VENT CONNECTOR, IF USED, ASSEMBLED TO FORM THE OPEN PASSAGE WAY.

VENT SYSTEM

PIPING INSTALLED TO EQUALIZE PNEUMATIC PRESSURE IN A DRAINAGE SYSTEM TO PREVENT TRAP SEAL LOSS OR BLOW-BACK DUE TO SIPHONAGE OR BACK PRESSURE.

VENT GASES

PRODUCTS OF COMBUSTION FROM FUEL-BURNING APPLIANCES, PLUS EXCESS AIR AND DILUTION AIR, IN THE VENTING SYSTEM ABOVE THE DRAFT HOOD OR DRAFT REGULATOR.

SUPPLY AIR

AIR DELIVERED TO A CONDITIONED SPACE THROUGH DUCTS OR PLENUMS FROM THE HEAT EXCHANGER OF A HEATING, COOLING, OR VENTILATING SYSTEM.

DRAFT HOOD

A DEVICE BUILT INTO AN APPLIANCE, OR A PART OF THE VENT CONNECTOR FROM AN APPLIANCE, WHICH IS DESIGNED TO PROVIDE FOR READY ESCAPE OF THE FLUE GASES FROM THE APPLIANCE IN THE EVENT OF NO DRAFT, BACKDRAFT, OR STOPPAGE BEYOND THE DRAFT HOOD; PREVENT A BACKDRAFT FROM ENTERING THE APPLIANCE; AND NEUTRALIZE THE EFFECT OF STACK ACTION OF THE CHIMNEY OR GAS VENT ON THE OPERATION OF THE APPLIANCE.

ALLIED HOME INSPECTION SERVICES

APPENDIX J

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION R 311 PAGES 47 & 48

EXITS

R 311.1 EXIT DOOR REQUIRED

NOT LESS THAN ONE EXIT DOOR CONFORMING TO THIS CHAPTER SHALL BE PROVIDED FROM EACH DWELLING UNIT. THE REQUIRED EXIT DOOR SHALL PROVIDE FOR DIRECT ACCESS FROM THE HABITABLE PORTIONS OF THE DWELLING TO THE EXTERIOR WITHOUT REQUIRING TRAVEL THROUGH A GARAGE.

R 311.2 TYPE OF LOCK OR LATCH

ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

R 311.3 TYPE AND SIZE

THE REQUIRED EXIT DOOR SHALL BE A SIDE-HINGED DOOR NOT LESS THAN 3 FEET (914 mm) IN WIDTH AND 6 FEET 8 INCHES (2032 mm) IN HEIGHT. OTHER EXTERIOR HINGED OR SLIDING DOORS SHALL NOT BE REQUIRED TO COMPLY WITH THESE MINIMUM DIMENSIONS.

R 311.4 HALLWAYS

THE MINIMUM WIDTH OF A HALLWAY SHALL BE NOT LESS THAN 3 FEET (914 mm).

R 311.5 EXIT FACILITIES

EXTERIOR EXIT BALCONIES, STAIRS AND SIMILAR EXIT FACILITIES SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE TO RESIST BOTH VERTICAL AND LATERAL FORCES. SUCH ATTACHMENT SHALL NOT BE ACCOMPLISHED BY USE OF TOENAILS OR NAILS SUBJECT TO WITHDRAWAL.

ALLIED HOME INSPECTION SERVICES

APPENDIX JJ-2

SOURCE: INTERNATIONAL PLUMBING CODE 2000

SECTION: 425 FLUSHING DEVICES FOR WATER CLOSETS AND URINALS PAGES 30 & 31

FLUSHING DEVICES FOR WATER CLOSETS AND URINALS

425.1 FLUSHING DEVICES REQUIRED

EACH WATER CLOSET, URINAL, CLINICAL SINK, AND ANY PLUMBING FIXTURE THAT DEPENDS ON TRAP SIPHONAGE TO DISCHARGE THE FIXTURE CONTENTS TO THE DRAINAGE SYSTEM SHALL BE PROVIDED WITH A FLUSHOMETER VALVE, FLUSHOMETER TANK, OR A FLUSH TANK DESIGNED AND INSTALLED TO SUPPLY WATER IN QUANTITY AND RATE OF FLOW TO FLUSH THE CONTENTS OF THE FIXTURE, CLEANSE THE FIXTURE, AND REFILL THE FIXTURE TRAP.

425.1.1 SEPARATE FOR EACH FIXTURE

A FLUSHING DEVICE SHALL NOT SERVE MORE THAN ONE FIXTURE.

425.2 FLUSHOMETER VALVES AND TANKS

FLUSHOMETER VALVES AND TANKS SHALL COMPLY WITH ASSE 1037. VACUUM BREAKERS ON FLUSHOMETER VALVES SHALL CONFORM TO THE PERFORMANCE REQUIREMENTS OF ASSE 1001 OR CSA CAN/CSA-B64.1.1. ACCESS SHALL BE PROVIDED TO VACUUM BREAKERS. FLUSHOMETER VALVES SHALL BE OF THE WATER-CONSERVATION TYPE AND SHALL NOT BE UTILIZED WHERE THE WATER PRESSURE IS LOWER THAN THE MINIMUM REQUIRED FOR NORMAL OPERATION. WHEN OPERATED, THE VALVE SHALL AUTOMATICALLY COMPLETE THE CYCLE OF OPERATION, OPENING FULLY AND CLOSING POSITIVELY UNDER THE WATER SUPPLY PRESSURE. EACH FLUSHOMETER VALVE SHALL BE PROVIDED WITH A MEANS FOR REGULATING THE FLOW THROUGH THE VALVE. THE TRAP SEAL TO THE FIXTURE SHALL BE AUTOMATICALLY REFILLED AFTER EACH VALVE FLUSHING CYCLE.

425.3 FLUSH TANKS

FLUSH TANKS EQUIPPED FOR MANUAL FLUSHING SHALL BE CONTROLLED BY A DEVICE DESIGNED TO REFILL THE TANK AFTER EACH DISCHARGE AND TO SHUT OFF COMPLETELY THE WATER FLOW TO THE TANK WHEN THE TANK IS FILLED TO OPERATIONAL CAPACITY. THE TRAP SEAL TO THE FIXTURE SHALL BE AUTOMATICALLY REFILLED AFTER EACH FLUSHING. THE WATER SUPPLY TO FLUSH TANKS EQUIPPED FOR AUTOMATIC FLUSHING SHALL BE CONTROLLED WITH A TIMING DEVICE OR SENSOR CONTROL DEVICES.

425.3.1 BALL COCKS

ALL FLUSH TANKS SHALL BE EQUIPPED WITH AN ANTISIPHON BALL COCK CONFORMING TO ASSSE 1002 OR CSA B 125. THE BALL COCK BACKFLOW PREVENTOR SHALL BE LOCATED AT LEAST 1 INCH (25 mm) ABOVE THE FULL OPENING OF THE OVERFLOW PIPE.

425.3.2 OVERFLOWS IN FLUSH TANKS

FLUSH TANKS SHALL BE PROVIDED WITH OVERFLOWS DISCHARGING TO THE WATER CLOSET OR URINAL CONNECTED THERETO AND SHALL BE SIZED TO PREVENT FLOODING IN THE TANK AT THE MAXIMUM RATE AT WHICH THE TANKS ARE SUPPLIED WITH WATER. THE OPENING OF THE OVERFLOW PIPE SHALL BE LOCATED ABOVE THE FLOOR LEVEL RIM OF THE WATER CLOSET OR URINAL OR ABOVE A SECONDARY OVERFLOW IN THE SAME TANK

ALLIED HOME INSPECTION SERVICES

APPENDIX JJ-3

SOURCE: NATIONAL ELECTRICAL CODE 2002

SECTION: 424.44.G OVERCURRENT PROTECTION

PAGE 70-274

GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR HEATED FLOORS OF BATHROOMS, AND IN HYDROMASSAGE BATHTUB, SPA, HOT TUB LOCATIONS

SECTION 424.44.G

GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ELECTRICALLY HEATED FLOORS IN BATHROOMS, AND IN HYDROMASSAGE BATHTUB, SPA, AND HOT TUB LOCATIONS.

SOURCE NATIONAL ELECTRICAL CODE 2002

SECTION 410.4 (D) BATHTUB AND SHOWER AREAS

SECTION 410.4 (D) BATHTUB AND SHOWER AREAS

NO PARTS OF CORD-CONNECTED LUMINARIES (FIXTURES) HANGING LUMINARIES (FIXTURES), LIGHTING TRACK, PENDANTS, OR CEILING-SUSPENDED (PADDLE) FANS SHALL BE LOCATED WITHIN A ZONE MEASURED 3 FEET (900 mm) HORIZONTALLY AND 8 FEET (2.5 m) VERTICALLY FROM THE TOP OF THE BATHTUB RIM OR SHOWER STALL THRESHOLD. THIS ZONE IS ALL ENCOMPASSING AND INCLUDES THE ZONE DIRECTLY OVER THE TUB OR SHOWER STALL.

SOURCE NATIONAL ELECTRICAL CODE 2002

SECTION 410.5 LUMINARIES (FIXTURES) NEAR COMBUSTIBLE MATERIAL

PAGES 70-254 & 70-255

SECTION 410.5 LUMINARIES (FIXTURES) NEAR COMBUSTIBLE MATERIAL

LUMINARIES (FIXTURES) SHALL BE CONSTRUCTED, INSTALLED, OR EQUIPPED WITH SHADES OR GUARDS SO THAT COMBUSTIBLE MATERIAL IS NOT SUBJECTED TO TEMPERATURES IN EXCESS OF 190 DEGREES F OR 90 DEGREES C.

SOURCE NATIONAL ELECTRICAL CODE 2002

SECTION 408.21 GROUNDED CONDUCTOR TERMINATIONS

PAGE 70-253

408.21 GROUNDED CONDUCTOR TERMINATIONS

EACH GROUNDED CONDUCTOR SHALL TERMINATE WITHIN THE PANELBOARD IN AN INDIVIDUAL TERMINAL THAT IS NOT ALSO NOT USED FOR ANOTHER CONDUCTOR.

EXCEPTION:

GROUNDED CONDUCTORS OF CIRCUITS WITH PARALLEL CONDUCTORS SHALL BE PERMITTED TO TERMINATE IN A SINGLE TERMINAL IF THE TERMINAL HAS BEEN IDENTIFIED FOR CONNECTION OF MORE THAN ONE CONDUCTOR.

ALLIED HOME INSPECTION SERVICES

APPENDIX JJ-4

SOURCE: NATIONAL ELECTRICAL CODE 2002
SECTION: 410.66 CLEARANCE AND INSTALLATION OF LIGHT
FIXTURES IN ATTICS PAGES 70-260 & 70-261

410.66 CLEARANCE AND INSTALLATION OF LIGHT FIXTURES IN ATTIC

(A) CLEARANCE

NON-TYPE IC

A RECESSED LUMINAIRE (FIXTURE) THAT IS NOT IDENTIFIED FOR CONTACT WITH INSULATION SHALL HAVE ALL RECESSED PARTS SPACED NOT LESS THAN 1/2 INCH (13 mm) FROM COMBUSTIBLE MATERIALS. THE POINTS OF SUPPORT AND THE TRIM FINISHING OFF THE OPENING IN THE CEILING OR WALL SURFACE SHALL BE PERMITTED TO BE IN CONTACT WITH COMBUSTIBLE MATERIALS.

TYPE IC

A RECESSED LUMINAIRE (FIXTURE) THAT IS IDENTIFIED FOR CONTACT WITH INSULATION, TYPE IC, SHALL BE PERMITTED TO BE IN CONTACT WITH COMBUSTIBLE MATERIALS AT RECESSED PARTS, POINTS OF SUPPORT, AND PORTIONS PASSING THROUGH OR FINISHING OFF THE OPENING IN THE BUILDING STRUCTURE.

(B) INSTALLATION

THERMAL INSULATION SHALL NOT BE INSTALLED ABOVE A RECESSED LUMINAIRE (FIXTURE) OR WITHIN 3 INCHES (75 mm) OF THE RECESSED LUMINAIRE'S (FIXTURE'S) ENCLOSURE, WIRING COMPARTMENT, OR BALLAST UNLESS IT IS IDENTIFIED FOR CONTACT WITH INSULATION , TYPE IC

ALLIED HOME INSPECTION SERVICES
APPENDIX JJ-5

SOURCE: 2000 INTERNATIONAL MECHANICAL CODE
SECTION: 306 ACCESS AND SERVICE SPACE

PAGE 22

306.1 CLEARANCES FOR MAINTENANCE AND REPLACEMENT

CLEARANCES AROUND APPLIANCES TO ELEMENTS TO ELEMENTS OF PERMANENT CONSTRUCTION, INCLUDING OTHER INSTALLED EQUIPMENT AND APPLIANCES, SHALL BE SUFFICIENT TO ALLOW INSPECTION, SERVICE, REPAIR OR REPLACEMENT WITHOUT REMOVING SUCH ELEMENTS OF PERMANENT CONSTRUCTION OR DISABLING THE FUNCTION OF A REQUIRED FIRE-RESISTANCE-RATED ASSEMBLY.

306.3 APPLIANCES IN ATTICS

ATTICS CONTAINING APPLIANCES REQUIRING ACCESS SHALL BE PROVIDED WITH AN OPENING AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE. THE PASSAGEWAY SHALL NOT BE LESS THAN 30 INCHES (762 mm) HIGH AND 22 INCHES (559 mm) WIDE AND NOT MORE THAN 20 FEET (6096 mm) IN LENGTH MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY FROM THE OPENING TO THE APPLIANCE. THE PASSAGEWAY SHALL HAVE CONTINUOUS SOLID FLOORING NOT LESS THE 24 INCHES (610 mm) WIDE. A LEVEL SERVICE SPACE NOT LESS THAN 30 INCHES (762 mm) DEEP AND 30 INCHES (762 mm) WIDE SHALL BE PRESENT AT THE FRONT OR SERVICE SIDE OF THE APPLIANCE. THE CLEAR ACCESS OPENING DIMENSIONS SHALL BE A MINIMUM OF 20 INCHES BY 30 INCHES (508 mm X 762 mm), WHERE SUCH DIMENSIONS ARE LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE.

EXCEPTION:

THE PASSAGEWAY AND LEVEL SERVICE SPACE ARE NOT REQUIRED WHERE THE APPLIANCE IS CAPABLE OF BEING SERVICED AND REMOVED THROUGH THE REQUIRED OPENING.

306.3.1 ELECTRICAL REQUIREMENTS

A LIGHTING FIXTURE CONTROLLED BY A SWITCH LOCATED AT THE REQUIRED PASSAGEWAY OPENING AND A RECEPTACLE OUTLET SHALL BE PROVIDED AT OR NEAR THE APPLIANCE LOCATION IN ACCORDANCE WITH THE NEC ELECTRICAL CODE.

306.5 EQUIPMENT AND APPLIANCES ON ROOFS OR ELEVATED STRUCTURES

WHERE EQUIPMENT AND APPLIANCES REQUIRING ACCESS ARE INSTALLED ON ROOFS OR ELEVATED STRUCTURES AT A HEIGHT EXCEEDING 16 FEET (4877 mm), SUCH ACCESS SHALL BE PROVIDED BY A PERMANENT APPROVED MEANS OF ACCESS, THE EXTENT OF WHICH SHALL BE FROM GRADE OR FLOOR LEVEL TO THE EQUIPMENT AND APPLIANCES' LEVEL SERVICE SPACE. SUCH ACCESS SHALL NOT REQUIRE CLIMBING OVER OBSTRUCTIONS GREATER THAN 30 INCHES (762 mm) HIGH OR WALKING ON ROOFS HAVING A SLOPE GREATER THAN 4 UNITS VERTICAL IN 12 UNITS HORIZONTAL (33 - PERCENT SLOPE.)

EXCEPTION: THIS SECTION SHALL NOT APPLY TO GROUP R-3 OCCUPANCIES

ALLIED HOME INSPECTION SERVICES

APPENDIX JJ-7

SOURCE: 2000 INTERNATIONAL PLUMBING CODE
SECTION: CHAPTER 5 WATER HEATERS PAGE 34

504.6 RELIEF OUTLET WASTE

THE OUTLET OF A PRESSURE, TEMPERATURE, OR OTHER RELIEF VALVE SHALL NOT BE DIRECTLY CONNECTED TO THE DRAINAGE SYSTEM.

504.6.1 DISCHARGE

THE RELIEF VALVE SHALL DISCHARGE FULL SIZE TO A SAFE PLACE OF DISPOSAL SUCH AS THE FLOOR, OUTSIDE THE BUILDING, OR AN INDIRECT WASTE RECEPTOR. THE DISCHARGE PIPE SHALL NOT HAVE ANY TRAPPED SECTIONS AND SHALL HAVE A VISIBLE AIR GAP OR AIR GAP FITTING LOCATED IN THE SAME ROOM AS THE WATER HEATER. THE DISCHARGE SHALL BE INSTALLED IN A MANNER THAT DOES NOT CAUSE PERSONAL INJURY TO OCCUPANTS IN THE IMMEDIATE AREAS OR STRUCTURAL DAMAGE TO THE BUILDING.

504.6.2 MATERIALS

RELIEF VALVE DISCHARGE PIPING SHALL BE OF THOSE MATERIALS LISTED IN SECTION 605.5 OR SHALL BE TESTED, RATED AND APPROVED FOR SUCH USE IN ACCORDANCE WITH ASME A112.4.1. PIPING FROM SAFETY PAN DRAINS SHALL BE OF THOSE MATERIALS LISTED IN TABLE 605.5.

504.7 REQUIRED PAN

WHERE WATER HEATERS OR HOT WATER STORAGE TANKS ARE INSTALLED IN LOCATIONS WHERE LEAKAGE OF THE TANKS OR CONNECTIONS WILL CAUSE DAMAGE, THE TANK OR WATER HEATER SHALL BE INSTALLED IN A GALVANIZED STEEL PAN HAVING A MINIMUM THICKNESS OF 24 GAGE, OR OTHER PANS APPROVED FOR SUCH USE.

504.7.1 PAN SIZE AND DRAIN

THE PAN SHALL NOT BE LESS THAN 1.5 INCHES (38 mm) DEEP AND SHALL BE OF SUFFICIENT SIZE AND SHAPE TO RECEIVE ALL DRIPPING OR CONDENSATE FROM THE TANK OR WATER HEATER. THE PAN SHALL BE DRAINED BY AN INDIRECT WASTE PIPE HAVING A MINIMUM DIAMETER OF 3/4 INCH (19 mm).

504.7.2 PAN DRAIN TERMINATION

THE PAN DRAIN SHALL EXTEND FULL-SIZE AND TERMINATE OVER A SUITABLE LOCATED INDIRECT WASTE RECEPTOR OR FLOOR DRAIN OR EXTEND TO THE EXTERIOR OF THE BUILDING AND TERMINATE NOT LESS THAN 6 INCHES (152 mm) AND NOT MORE THAN 24 INCHES (610 mm) ABOVE THE ADJACENT GROUND SURFACE.

ALLIED HOME INSPECTION SERVICES

APPENDIX K

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION 1307 PAGE 290

WATER HEATERS IN GARAGES

M 1307.1 GENERAL

INSTALLATION OF APPLIANCES SHALL CONFORM TO THE CONDITIONS OF THEIR LISTING AND LABEL AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE MANUFACTURER'S OPERATING AND INSTALLATION INSTRUCTIONS SHALL REMAIN ATTACHED TO THE APPLIANCE.

M 1307.3 ELEVATION OF IGNITION SYSTEM

APPLIANCES HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18 INCHES (457 mm) ABOVE THE FLOOR IN GARAGES. FOR THE PURPOSE OF THIS SECTION, ROOMS OR SPACES THAT ARE NOT PART OF THE LIVING SPACE OF A DWELLING UNIT AND THAT COMMUNICATE WITH A PRIVATE GARAGE THROUGH OPENINGS SHALL BE CONSIDERED TO BE PART OF THE GARAGE.

M 1307.3.1 PROTECTION FROM IMPACT

APPLIANCES LOCATED IN A GARAGE OR CARPORT SHALL BE PROTECTED FROM IMPACT BY AUTOMOBILES.

ALLIED HOME INSPECTION SERVICES.

APPENDIX K-2

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000

SECTION: SECTION P 2704 ACCESS TO PIPING CONNECTIONS PAGE 387

SECTION P 2705 INSTALLATION PAGE 387

SECTION P 2708 SHOWER CONTROL VALVES PAGE 389

SECTION 607.4 HOT WATER SUPPLY SYSTEM PAGE 43

P 2704.1 GENERAL

SLIP JOINTS SHALL BE MADE WITH AN APPROVED ELASTOMERIC GASKET AND SHALL ONLY BE INSTALLED ON THE TRAP OUTLET, TRAP INLET, AND WITHIN THE TRAP SEAL. FIXTURES WITH CONCEALED SLIP-JOINT CONNECTIONS SHALL BE PROVIDED WITH AN ACCESS PANEL OR UTILITY SPACE AT LEAST 12 INCHES (305 mm) IN ITS SMALLEST DIMENSION OR OTHER APPROVED ARRANGEMENT SO AS TO PROVIDE ACCESS TO TO THE SLIP CONNECTIONS FOR INSPECTION AND REPAIR.

P 2705.1

THE INSTALLATION OF FIXTURES SHALL CONFORM TO THE FOLLOWING:

- 1 FLOOR-OUTLET OR FLOOR-MOUNTED FIXTURES SHALL BE SECURED TO THE DRAINAGE CONNECTION AND TO THE FLOOR, WHEN SO DESIGNED, BY SCREWS, BOLTS, WASHERS, NUTS, AND SIMILAR FASTENERS OF COPPER, BRASS, OR OTHER CORROSION-RESISTANT MATERIAL
- 2 WALL-HUNG FIXTURES SHALL BE RIGIDLY SUPPORTED SO THAT STRAIN IS NOT TRANSMITTED TO THE PLUMBING SYSTEM.
- 3 WHERE FIXTURES COME IN CONTACT WITH WALLS, THE CONTACT AREA SHALL BE WATER TIGHT.
- 4 PLUMBING FIXTURES SHALL BE FUNCTIONALLY ACCESSIBLE
- 5 THE CENTER LINE OF WATER CLOSETS OR BIDETS SHALL NOT BE LESS THAN 15 INCHES (381 mm) FROM ADJACENT WALLS OR PARTITIONS OR NOT LESS THAN 30 INCHES (762 mm) CENTER TO CENTER FROM AN ADJACENT WATER CLOSET OR BIDET. THERE SHALL BE AT LEAST 21 INCHES (533 mm) CLEARANCE IN FRONT OF THE WATER CLOSET, BIDET, OR LAVATORY TO ANY WALL, FIXTURE, OR DOOR.
- 6 THE LOCATION OF PIPING, FIXTURES, OR EQUIPMENT SHALL NOT INTERFERE WITH THE OPERATION OF WINDOWS OR DOORS.

P 2708.3 SHOWER CONTROL VALVES

SHOWERS AND TUB / SHOWER COMBINATIONS SHALL BE EQUIPPED WITH CONTROL VALVES OF THE PRESSURE BALANCE, THE THERMOSTATIC MIXING, OR THE COMBINATION PRESSURE BALANCE / THERMOSTATIC MIXING VALVE TYPES WITH HIGH LIMIT STOPS IN ACCORDANCE WITH ASSE / ANSI 1016. THE HIGH LIMIT STOPS SHALL BE SET TO LIMIT WATER TEMPERATURE TO A MAXIMUM 120 F (49 DEGREES C).

607.4 HOT WATER SUPPLY TO FIXTURES

THE HOT WATER SUPPLY TO ANY FIXTURE SHALL BE INSTALLED ON THE LEFT SIDE OF THE FIXTURE.

ALLIED HOME INSPECTION SERVICES

APPENDIX K-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION P 2705.1 **Page 387**

PLUMBING FIXTURES

P 2705.1 GENERAL

THE INSTALLATION OF FIXTURES SHALL CONFORM TO THE FOLLOWING:

FLOOR-OUTLET OR FLOOR-MOUNTED FIXTURES SHALL BE SECURED TO THE DRAINAGE CONNECTION AND TO THE FLOOR, WHEN SO DESIGNED, BY SCREWS BOLTS, WASHERS, NUTS AND SIMILAR FASTENERS OF COPPER, BRASS, OR OTHER CORROSION-RESISTANT MATERIAL.

WALL-HUNG FIXTURES SHALL BE RIGIDLY SUPPORTED SO THAT STRAIN IS NOT TRANSMITTED TO THE PLUMBING SYSTEM.

WHERE FIXTURES COME IN CONTACT WITH WALLS, THE CONTACT AREA SHALL BE WATER TIGHT.

PLUMBING FIXTURES SHALL BE FUNCTIONALLY ACCESSIBLE.

THE CENTER LINE, OF WATER CLOSETS OR BIDETS SHALL NOT BE LESS THAN 15 INCHES (381 mm) FROM ADJACENT WALLS OR PARTITIONS OR NOT LESS THAN 30 INCHES (762 mm) CENTER TO CENTER FROM AN ADJACENT WATER CLOSET OR BIDET. THERE SHALL BE AT LEAST 21 INCHES (533 mm) CLEARANCE IN FRONT OF THE WATER CLOSET, BIDET, OR LAVATORY TO ANY WALL, FIXTURE, OR DOOR.

THE LOCATION OF PIPING, FIXTURES, OR EQUIPMENT SHALL NOT INTERFERE WITH THE OPERATION OF WINDOWS OR DOORS.

ALLIED HOME INSPECTION SERVICES

APPENDIX L-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000

SECTION: SECTION R 502.7.1

PAGE 84

SECTION R 502.7

PAGE 84

BRIDGING - JOISTS

R 502.7.1

JOISTS EXCEEDING A NOMINAL 2 X 12 SHALL BE SUPPORTED Laterally BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL) OR A CONTINUOUS 1-INCH-BY-3-INCH (25mm BY 76mm) STRIP NAILED ACROSS THE BOTTOM OF JOISTS PERPENDICULAR TO JOISTS AT INTERVALS NOT EXCEEDING 8 FEET (2438mm)

LATERAL RESTRAINT AT SUPPORTS

R 502.7

JOISTS SHALL BE SUPPORTED Laterally AT THE ENDS BY FULL-DEPTH SOLID BLOCKING NOT LESS THAN 2-INCHES (51mm) NOMINAL IN THICKNESS; OR BY ATTACHMENT TO A HEADER, OR RIM JOIST, OR TO AN ADJOINING STUD; OR SHALL BE OTHERWISE PROVIDED WITH LATERAL SUPPORT TO PREVENT ROTATION.

ALLIED HOME INSPECTION SERVICES

APPENDIX M

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION 3802 PAGE 461

GROUND FAULT CIRCUIT INTERRUPTERS

E 3802.1 BATHROOM RECEPTACLES

ALL 125 VOLT, SINGLE-PHASE, 15 AND 20 AMPERE RECEPTACLES INSTALLED IN BATHROOMS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E 3802.2 GARAGE RECEPTACLES

ALL 125 VOLT, SINGLE PHASE, 15 OR 20 AMPERE RECEPTACLES INSTALLED IN GARAGES AND GRADE-LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORK AREAS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

EXCEPTIONS:

- 1 RECEPTACLES THAT ARE NOT READILY ACCESSIBLE.
- 2 A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES LOCATED WITHIN DEDICATED SPACE FOR EACH APPLIANCE THAT IN NORMAL USE IS NOT EASILY MOVED FROM ONE PLACE TO ANOTHER, AND THAT IS CORD AND PLUG CONNECTED.

E 3802.3 OUTDOOR RECEPTACLES

ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES INSTALLED OUTDOORS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

EXCEPTION: RECEPTACLES AS COVERED IN SECTION E 4001.7

E 3802.6 KITCHEN RECEPTACLES

ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES THAT SERVE COUNTERTOP SURFACES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E 3802.7 BAR SINK RECEPTACLES

ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES THAT SERVE A COUNTERTOP SURFACE, AND ARE LOCATED WITHIN 6 FEET (1829 mm) OF THE OUTSIDE EDGE OF A WET BAR SINK SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN A FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS.

ALLIED HOME INSPECTION SERVICES

APPENDIX M-2

SOURCE: NATIONAL ELECTRICAL CODE 2002

SECTIONS: 230.1 & 230.81&110.41 PAGES 70-75 & 70-41 & 70-42

210.12 PAGE 70-54

ELECTRICAL SERVICES

230.1 SCOPE

THIS ARTICLE COVERS SERVICE CONDUCTORS AND EQUIPMENT FOR CONTROL AND PROTECTION OF SERVICES AND THEIR INSTALLATION REQUIREMENTS.

230.81 CONNECTIONS TO TERMINALS

THE SERVICE CONDUCTORS SHALL BE CONNECTED TO THE SERVICE DISCONNECTING MEANS BY PRESSURE CONNECTORS, CLAMPS, OR OTHER APPROVED MEANS. CONNECTIONS THAT DEPEND ON SOLDER SHALL NOT BE USED.

110.14 ELECTRICAL CONNECTIONS

BECAUSE OF DIFFERENT CHARACTERISTICS OF DISSIMILAR METALS, DEVICES SUCH AS PRESSURE TERMINAL OR PRESSURE SPLICING CONNECTORS AND SOLDERING LUGS SHALL BE IDENTIFIED FOR THE MATERIAL OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED AND USED. CONDUCTORS OF DISSIMILAR METALS SHALL NOT BE INTERMIXED IN A TERMINAL OR SPLICING CONNECTOR WHERE PHYSICAL CONTACT OCCURS BETWEEN DISSIMILAR CONDUCTORS (SUCH AS COPPER AND ALUMINUM, COPPER AND COPPER-CLAD ALUMINUM, OR ALUMINUM AND COPPER-CLAD ALUMINUM), UNLESS THE DEVICE IS IDENTIFIED FOR THE PURPOSE AND CONDITIONS OF USE. MATERIALS SUCH AS SOLDER, FLUXES, INHIBITORS, AND COMPOUNDS, WHERE EMPLOYED, SHALL BE SUITABLE FOR THE USE AND SHALL BE OF A TYPE THAT WILL NOT ADVERSELY AFFECT THE CONDUCTORS, INSTALLATION, OR EQUIPMENT.

FPN: MANY TERMINATIONS AND EQUIPMENT ARE MARKED WITH A TIGHTENING TORQUE.

SECTION 210.12 ARC-FAULT CIRCUIT INTERRUPTER PROTECTION

(A) DEFINITION

AN ARC-FAULT CIRCUIT INTERRUPTER IS A DEVICE INTENDED TO PROVIDE PROTECTION FROM THE EFFECTS OF ARC-FAULTS BY RECOGNIZING CHARACTERISTICS UNIQUE TO ARCING AND BY FUNCTIONING TO DE-ENERGIZE THE CIRCUIT WHEN AN ARC-FAULT IS DETECTED.

(B) DWELLING UNIT BEDROOMS

ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.

ALLIED HOME INSPECTION SERVICES

APPENDIX N-1

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION E 3903 PAGE 481

LIGHT FIXTURES IN CLOSETS

E 3903.11

FOR THE PURPOSE OF THIS SECTION, STORAGE SPACE SHALL BE DEFINED AS A VOLUME BOUNDED BY THE SIDES AND BACK CLOSET WALLS AND PLANES EXTENDING FROM THE CLOSET FLOOR VERTICALLY TO A HEIGHT OF 6 FEET (1829 mm) OR THE HIGHEST CLOTHES-HANGING ROD AND PARALLEL TO THE WALLS AT A HORIZONTAL DISTANCE OF 24 INCHES (610 mm) FROM THE SIDES AND BACK OF THE CLOSET WALLS, RESPECTIVELY, AND CONTINUING VERTICALLY TO THE CLOSET CEILING PARALLEL TO THE WALLS AT A HORIZONTAL DISTANCE OF 12 INCHES (305 mm) OR THE WIDTH OF THE SHELF, WHICHEVER IS GREATER. FOR A CLOSET THAT PERMITS ACCESS TO BOTH SIDES OF A HANGING ROD, THE STORAGE SPACE SHALL INCLUDE THE VOLUME BELOW THE HIGHEST ROD EXTENDING 12 INCHES (305 mm) ON EITHER SIDE OF THE ROD ON A PLANE HORIZONTAL TO THE FLOOR EXTENDING THE ENTIRE LENGTH OF THE ROD.

THE TYPES OF FIXTURES INSTALLED IN CLOTHES CLOSETS SHALL BE LIMITED TO SURFACE-MOUNTED OR RECESSED INCANDESCENT FIXTURES WITH COMPLETELY ENCLOSED LAMPS, AND SURFACE-MOUNTED OR RECESSED FLUORESCENT FIXTURES, INCANDESCENT FIXTURES WITH OPEN OR PARTIALLY CLOSED LAMPS AND PENDANT FIXTURES OR LAMP-HOLDERS SHALL BE PROHIBITED. FIXTURE INSTALLATIONS SHALL BE IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING:

- 1 SURFACE-MOUNTED INCANDESCENT FIXTURES SHALL BE INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 12 INCHES (305 mm) BETWEEN THE FIXTURE AND NEAREST POINT OF STORAGE.
- 2 SURFACE-MOUNTED FLUORESCENT FIXTURES SHALL BE INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 6 INCHES (152 mm) BETWEEN THE FIXTURE AND THE NEAREST POINT OF STORAGE.
- 3 RECESSED INCANDESCENT FIXTURES WITH A COMPLETELY ENCLOSED LAMP SHALL BE INSTALLED IN THE WALL OR THE CEILING. PROVIDED THERE IS A MINIMUM CLEARANCE OF 6 INCHES (152 mm) BETWEEN THE FIXTURE AND THE NEAREST POINT OF A STORAGE SPACE.
- 4 RECESSED FLUORESCENT FIXTURES SHALL BE INSTALLED IN THE WALL OR THE CEILING PROVIDED THERE IS A MINIMUM CLEARANCE OF 6 INCHES (152 mm) BETWEEN THE FIXTURE AND NEAREST POINT OF STORAGE SPACE.

ALLIED HOME INSPECTION SERVICES

APPENDIX N-2

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION P 2717 PAGE 390

DISHWASHING MACHINES

P 2717.1 PROTECTION OF WATER SUPPLY

THE WATER SUPPLY FOR DISHWASHERS SHALL BE PROTECTED BY AN AIR GAP OR INTEGRAL BACKFLOW PREVENTOR.

P 2717.2 SINK AND DISHWASHER

A SINK AND DISHWASHER ARE PERMITTED TO DISCHARGE THROUGH A SINGLE 1.5 INCH (38 mm) TRAP. THE DISCHARGE PIPE FROM THE DISHWASHER SHALL BE INCREASED TO A MINIMUM OF 0.75 INCH (19.1 mm) IN DIAMETER AND SHALL BE CONNECTED WITH A WYE FITTING TO THE SINK TAIL PIECE. THE DISHWASHER WASTE LINE SHALL RISE AND BE SECURELY FASTENED TO THE UNDER SIDE OF THE COUNTER BEFORE CONNECTING TO THE SINK TAIL PIECE.

P 2717.3 SINK, DISHWASHER, AND FOOD GRINDER

THE COMBINED DISCHARGE FROM A SINK, DISHWASHER, AND WASTE GRINDER IS PERMITTED TO DISCHARGE THROUGH A SINGLE 1.5 INCH (38 mm) TRAP. THE DISCHARGE PIPE FROM THE DISHWASHER SHALL BE INCREASED TO A MINIMUM OF 0.75 INCH (19.1 mm) IN DIAMETER AND SHALL CONNECT WITH A WYE FITTING BETWEEN THE DISCHARGE OF THE FOOD GRINDER AND THE TRAP INLET OR TO THE HEAD OF THE FOOD GRINDER. THE DISHWASHER WASTE LINE SHALL RISE AND BE SECURELY FASTENED TO THE UNDER SIDE OF THE COUNTER BEFORE CONNECTING TO SINK TAIL PIECE OR FOOD GRINDER.

ALLIED HOME INSPECTION SERVICES

APPENDIX N-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION P 2720 PAGE 390

WHIRLPOOL BATHTUBS (JACUZZI)

P 2720.1 ACCESS PANEL

A DOOR OR PANEL OF SUFFICIENT SIZE SHALL BE INSTALLED TO PROVIDE ACCESS TO THE PUMP FOR REPAIR AND / OR REPLACEMENT

P 2702.2 PIPING DRAINAGE

THE CIRCULATION PUMP SHALL BE ACCESSIBLY LOCATED ABOVE THE CROWN WIER OF THE TRAP. THE PUMP DRAIN LINE SHALL BE PROPERLY GRADED TO ENSURE MINIMUM WATER RETENTION IN THE VOLUTE AFTER FIXTURE USE. THE CIRCULATION PIPING SHALL BE INSTALLED TO BE SELF-DRAINING.

P 2720.3 LEAK TESTING

LEAK TESTING AND PUMP OPERATION SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

P 2720.4 MANUFACTURER'S INSTRUCTIONS

THE PRODUCT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ALLIED HOME INSPECTION SERVICES

APPENDIX P-1

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION E 3801 PAGE 460

ELECTRICAL RECEPTACLE LOCATIONS

E 3801.4.1 WALL COUNTER SPACE

A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE 12 INCHES (305 mm) OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES (610 mm) MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.

E 3801.4.2 ISLAND COUNTER SPACES

AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES (610 mm) OR GREATER AND A SHORT DIMENSION OF 12 INCHES (305 mm) OR GREATER.

E 3801.4.3 PENINSULAR COUNTER SPACE

AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES (610 mm) OR GREATER AND A SHORT DIMENSION OF 12 INCHES (305 mm) OR GREATER. A PENINSULAR COUNTERTOP IS MEASURED FROM THE CONNECTING EDGE.

E 3801.4.4 SEPARATE SPACES

COUNTERTOP SPACES SEPARATED BY RANGE TOPS, REFRIGERATORS, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACES IN APPLYING THE REQUIREMENTS OF SECTIONS E 3801.4.1, E 3801.4.2 AND E 3801.4.3.

E 3801.5 APPLIANCE OUTLETS

APPLIANCE RECEPTACLE OUTLETS INSTALLED FOR SPECIFIC APPLIANCES SUCH AS LAUNDRY EQUIPMENT SHALL BE INSTALLED WITH 6 FEET (1829 mm) OF THE INTENDED LOCATION OF THE APPLIANCE.

E 3801.6 BATHROOM

AT LEAST ONE WALL RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS AND SUCH OUTLET SHALL BE LOCATED WITHIN 36 INCHES (914 mm) OF THE OUTSIDE EDGE OF EACH LAVATORY BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL THAT IS ADJACENT TO THE LAVATORY BASIN LOCATION.

RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN A FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS IN A BATHROOM BASIN LOCATION.

ALLIED HOME INSPECTION SERVICES

APPENDIX P-2

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION E 3801 PAGE 460

ELECTRICAL RECEPTACLE LOCATIONS

E 3801.7 OUTDOOR OUTLETS

AT LEAST ONE RECEPTACLE OUTLET ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6 FEET, 6 INCHES (1981 mm) ABOVE GRADE, SHALL BE INSTALLED OUTDOORS AT THE FRONT AND BACK OF EACH DWELLING UNIT HAVING DIRECT ACCESS TO GRADE.

E 3801.8 LAUNDRY AREAS

AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED TO SERVE LAUNDRY APPLIANCES.

E 3801.9 BASEMENTS AND GARAGES

AT LEAST ONE RECEPTACLE OUTLET, IN ADDITION TO ANY PROVIDED FOR LAUNDRY EQUIPMENT, SHALL BE INSTALLED IN EACH BASEMENT AND IN EACH ATTACHED GARAGE, AND IN EACH DETACHED GARAGE THAT IS PROVIDED WITH ELECTRICAL POWER. WHERE A PORTION OF THE BASEMENT IS FINISHED INTO A HABITABLE ROOM (S), THE RECEPTACLE OUTLET REQUIRED BY THIS SECTION SHALL BE INSTALLED IN THE UNFINISHED PORTION.

E 3801.10 HALLWAYS

HALLWAYS OF 10 FEET (3048 mm) OR MORE IN LENGTH SHALL HAVE AT LEAST ONE RECEPTACLE OUTLET. THE HALL LENGTH SHALL BE CONSIDERED THE LENGTH MEASURED ALONG THE CENTERLINE OF THE HALL WITHOUT PASSING THROUGH A DOORWAY.

E 3801.11 HVAC OUTLET

A CONVENIENCE RECEPTACLE OUTLET SHALL BE INSTALLED FOR THE SERVICING OF HEATING, AIR-CONDITIONING, AND REFRIGERATION EQUIPMENT LOCATED IN ATTICS AND CRAWL SPACES. THE RECEPTACLE SHALL BE ACCESSIBLE AND SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET (7620 mm) OF THE HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT. THE RECEPTACLE OUTLET SHALL NOT BE CONNECTED TO THE LOAD SIDE OF THE HVAC EQUIPMENT DISCONNECTING MEANS.

ALLIED HOME INSPECTION SERVICES

APPENDIX Q-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION R 1005 EXTERIOR AIR SUPPLY PAGE 269

FIREPLACE EXTERIOR AIR SUPPLY

R 1005.1 EXTERIOR AIR

FACTORY-BUILT OR MASONRY FIREPLACES COVERED IN THIS CHAPTER SHALL BE EQUIPPED WITH AN EXTERIOR AIR SUPPLY TO ASSURE PROPER FUEL COMBUSTION UNLESS THE ROOM IS MECHANICALLY VENTILATED AND CONTROLLED SO THAT THE INDOOR PRESSURE IS NEUTRAL OR POSITIVE.

R 1005.1.1 FACTORY-BUILT FIREPLACES

EXTERIOR COMBUSTION AIR DUCTS FOR FACTORY-BUILT FIREPLACES SHALL BE A LISTED COMPONENT OF THE FIREPLACE AND SHALL BE INSTALLED ACCORDING TO THE FIREPLACE MANUFACTURER'S INSTRUCTIONS.

R 1005.1.2 MASONRY FIREPLACES

LISTED COMBUSTION AIR DUCTS FOR MASONRY FIREPLACES SHALL BE INSTALLED ACCORDING TO THE TERMS OF THEIR LISTING AND MANUFACTURER'S INSTRUCTIONS.

R 1005.2 EXTERIOR AIR INTAKE

THE EXTERIOR AIR INTAKE SHALL BE CAPABLE OF PROVIDING ALL COMBUSTION AIR FROM THE EXTERIOR OF THE DWELLING OR FROM SPACES WITHIN THE DWELLING VENTILATED WITH OUTSIDE AIR SUCH AS CRAWL OR ATTIC SPACES. THE EXTERIOR AIR INTAKE SHALL NOT BE LOCATED WITHIN A GARAGE OR BASEMENT OF THE DWELLING NOR SHALL THE INTAKE BE LOCATED AT AN ELEVATION HIGHER THAN THE FIREBOX. THE EXTERIOR AIR INTAKE SHALL BE COVERED WITH A CORROSION-RESISTANT SCREEN OF 1/4 INCH (6.4 mm) MESH.

R 1005.3 CLEARANCE

UNLISTED COMBUSTION AIR DUCTS SHALL BE INSTALLED WITH A MINIMUM 1-INCH (25.4 mm) CLEARANCE TO COMBUSTIBLES FOR ALL PARTS OF THE DUCT WITHIN 5 FEET (1524 mm) OF THE DUCT OUTLET.

R 1005.4 PASSAGEWAY

THE COMBUSTION AIR PASSAGE SHALL BE A MINIMUM OF 6 SQUARE INCHES (3870 mm²) AND NOT MORE THAN 55 SQUARE INCHES (0.035 m²) EXCEPT THAT COMBUSTION AIR SYSTEMS FOR LISTED FIREPLACES SHALL BE CONSTRUCTED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

R 1005.5 OUTLET

THE EXTERIOR AIR OUTLET IS PERMITTED TO BE LOCATED IN THE BACK OR SIDES OF THE FIREBOX CHAMBER OR WITHIN 24 INCHES (610 mm) OF THE FIREBOX OPENING ON OR NEAR THE FLOOR. THE OUTLET SHALL BE CLOSABLE AND DESIGNED TO PREVENT BURNING MATERIAL FROM DROPPING INTO CONCEALED COMBUSTIBLE SPACES.

ALLIED HOME INSPECTION SERVICES

APPENDIX R-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION G 2426 PAGES 358 & 359

FUEL GAS VENTING OF EQUIPMENT GAS VENTS

G 2426.6.5 (503.6.6) GAS VENT TERMINATION

A GAS VENT SHALL TERMINATE ABOVE THE ROOF SURFACE WITH A LISTED CAP OR LISTED ROOF ASSEMBLY. GAS VENTS 12 INCHES (305 mm) IN SIZE OR SMALLER WITH LISTED CAPS SHALL BE PERMITTED TO BE TERMINATED IN ACCORDANCE WITH FIGURE G 2426.6.5, PROVIDED THAT SUCH VENTS ARE AT LEAST 8 FEET (2438 mm) FROM A VERTICAL WALL OR SIMILAR OBSTRUCTION. ALL OTHER GAS VENTS SHALL TERMINATE NOT LESS THAN 2 FEET (610 mm) ABOVE THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOF AND AT LEAST 2 FEET (610 mm) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 mm).

EXCEPTIONS:

- 1 DIRECT VENT SYSTEMS AS PROVIDED IN SECTION G 2426.2.3.
- 2 EQUIPMENT WITH INTEGRAL VENTS AS PROVIDED IN SECTION G 2426.2.4.
- 3 MECHANICAL DRAFT SYSTEMS AS PROVIDED IN SECTION G 2426.3.3.

G 2426.6.6 (503.6.7) MINIMUM HEIGHT

A TYPE B OR TYPE L GAS VENT SHALL TERMINATE AT LEAST 5 FEET IN VERTICAL HEIGHT ABOVE THE HIGHEST CONNECTED EQUIPMENT DRAFT HOOD OR FLUE COLLAR. A TYPE B-W GAS VENT SHALL TERMINATE AT LEAST 12 FEET (3658 mm) IN VERTICAL HEIGHT ABOVE THE BOTTOM OF THE WALL FURNACE.

G 2426.6.7 (503.6.8) EXTERIOR WALL PENETRATIONS

A GAS VENT EXTENDING THROUGH AN EXTERIOR WALL SHALL NOT TERMINATE ADJACENT TO THE WALL OR BELOW EAVES OR PARAPETS, EXCEPT AS PROVIDED IN SECTIONS G 2426.2.4 AND G 2426.3.4.

G 2426.6.8 (503.6.9) SIZE OF GAS VENTS

VENTING SYSTEMS SHALL BE SIZED AND CONSTRUCTED IN ACCORDANCE WITH SECTION G 2427 OR OTHER APPROVED ENGINEERING METHODS AND THE GAS VENT AND GAS EQUIPMENT MANUFACTURER'S INSTRUCTIONS.

ALLIED HOME INSPECTION SERVICES

APPENDIX R-4

SOURCE:	INTERNATIONAL FUEL GAS CODE 2000	
SECTION:	SECTION 409 .1.1 VALVE APPROVAL	PAGE 57
	SECTION 409.1.2 PROHIBITED LOCATIONS	PAGE 57
	SECTION 409.1.3 ACCESS TO SHUTOFF VALVES	PAGE 57
	SECTION 409.5 EQUIPMENT SHUTOFF VALVE	PAGE 57

GAS LINE SHUTOFF VALVES

409.1.1 VALVE APPROVAL

SHUTOFF VALVES SHALL BE OF AN APPROVED TYPE. SHUTOFF VALVES SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE PIPING. SHUTOFF VALVES INSTALLED IN A PORTION OF A PIPING SYSTEM OPERATING OVER 0.5 psig SHALL COMPLY WITH ASME B16.33. SHUTOFF VALVES INSTALLED IN A PORTION OF A PIPING SYSTEM OPERATING AT 0.5 psig OR LESS SHALL COMPLY WITH ANSI Z21.15 OR ASME B16.33.

409.1.2 PROHIBITED LOCATIONS

SHUTOFF VALVES SHALL BE PROHIBITED IN CONCEALED LOCATIONS AND SPACES USED AS PLENUMS.

409.1.3 ACCESS TO SHUTOFF VALVES

SHUTOFF VALVES SHALL BE LOCATED IN PLACES SO AS TO PROVIDE ACCESS FOR OPERATION AND SHALL BE INSTALLED SO AS TO BE PROTECTED FROM DAMAGE.

409.5 EQUIPMENT SHUTOFF VALVE

EACH APPLIANCE SHALL BE PROVIDED WITH A SHUTOFF VALVE SEPARATE FROM THE APPLIANCE.. THE SHUTOFF VALVE SHALL BE LOCATED IN THE SAME ROOM AS THE APPLIANCE, NOT FURTHER THAN 6 FEET (1829 mm) FROM THE APPLIANCE, AND SHALL BE INSTALLED UPSTREAM FROM THE UNION, CONNECTOR, OR QUICK DISCONNECT SUCH SHUTOFF VALVES SHALL BE PROVIDED WITH READY ACCESS.

ALLIED HOME INSPECTION SERVICES

APPENDIX R-5

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION 2418 (408.4) SEDIMENT TRAP PAGE 352
SECTION G2419 (409) GAS SHUTOFF VALVES PAGE 352

G 2418 (408.4) SEDIMENT TRAP

WHERE A SEDIMENT TRAP IS NOT INCORPORATED AS A PART OF THE GAS UTILIZATION EQUIPMENT, A SEDIMENT TRAP SHALL BE INSTALLED AS CLOSE TO THE INLET OF THE EQUIPMENT AS PRACTICAL. THE SEDIMENT TRAP SHALL BE EITHER A TEE FITTING WITH A CAPPED NIPPLE IN THE BOTTOM OPENING SEDIMENT TRAP. ILLUMINATING APPLIANCES, RANGES, CLOTHES DRYERS, AND OUTDOOR GRILLES NEED NOT BE SO EQUIPPED.

G 2419 (409) GAS SHUTOFF VALVES

G. 2419.1.2. (409.1.2) PROHIBITED LOCATIONS

SHUTOFF VALVES SHALL BE PROHIBITED IN CONCEALED LOCATIONS AND SPACES USED AS PLENUMS.

G. 2419.1.3 (409.1.3) ACCESS TO SHUTOFF VALVES

SHUTOFF VALVES SHALL BE LOCATED IN PLACES SO AS TO PROVIDE ACCESS FOR OPERATION AND SHALL BE INSTALLED SO AS TO BE PROTECTED FROM DAMAGE.

G 2419.5. (409.5) EQUIPMENT SHUTOFF VALVES

EACH APPLIANCE SHALL BE PROVIDED WITH A SHUTOFF VALVE SEPARATE FROM THE APPLIANCE. THE SHUTOFF VALVE SHALL BE LOCATED IN THE SAME ROOM AS THE APPLIANCE, NO FURTHER THAN 6 FEET (1829mm) FROM THE APPLIANCE, AND SHALL BE INSTALLED UPSTREAM FROM THE UNION, CONNECTOR, OR QUICK DISCONNECT DEVICE IT SERVES. SUCH SHUTOFF VALVE SHALL BE PROVIDED WITH READY ACCESS.

EXCEPTION:

SHUTOFF VALVES FOR VENTED DECORATIVE APPLIANCES AND DECORATIVE APPLIANCES FOR INSTALLATION IN VENTED FIREPLACES SHALL NOT BE PROHIBITED FROM BEING INSTALLED IN AN AREA REMOTE FROM THE APPLIANCE WHERE SUCH VALVES ARE PROVIDED WITH READY ACCESS. SUCH VALVES SHALL BE PERMANENTLY IDENTIFIED AND SHALL SERVE NO OTHER EQUIPMENT.

ALLIED HOME INSPECTION SERVICES

APPENDIX S-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000

SECTION: SECTION R 806 PAGE 248

SECTION R 808.1 PAGE 249

ROOF VENTILATION

R 806.1

ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/8 " (3.2 mm) MINIMUM TO 1/4 " (6.35 mm) MAXIMUM OPENINGS.

R 806.2

THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1 TO 150 OF THE SPACE VENTILATED EXCEPT THAT THE TOTAL AREA IS PERMITTED TO BE REDUCED TO 1 TO 300 PROVIDED AT LEAST 50 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET (914 mm) ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. AS AN ALTERNATIVE, THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1 TO 300 WHEN A VAPOR BARRIER HAVING A TRANSMISSION RATE NOT EXCEEDING 1 PERM (57.4 mg/s * m² * Pa) IS INSTALLED ON THE WARM SIDE OF THE CEILING.

R 806.3

WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF 1 INCH (25.4 mm) SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AT THE LOCATION OF THE VENT.

R 808.1

COMBUSTIBLE INSULATION SHALL BE SEPARATED A MINIMUM OF 3 INCHES (76 mm) FROM RECESSED LIGHTING FIXTURES, FAN MOTORS, AND HEAT-PRODUCING DEVICES.

EXCEPTION:

WHEN HEAT-PRODUCING DEVICES ARE LISTED FOR LESSER CLEARANCES, COMBUSTIBLE INSULATION COMPLYING WITH THE LISTING REQUIREMENTS SHALL BE SEPARATED IN ACCORDANCE WITH THE CONDITIONS STIPULATED IN THE LISTING.

RECESSED LIGHTING FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL MEET THE REQUIREMENTS OF SECTION N 1101.3

ALLIED HOME INSPECTION SERVICES

APPENDIX U-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION R 801 PAGE 213

ROOF-CEILING CONSTRUCTION

R 801.3 ROOF DRAINAGE

IN AREAS WHERE EXPANSIVE OR COLLAPSIBLE SOILS ARE KNOWN TO EXIST, ALL DWELLINGS SHALL HAVE A CONTROLLED METHOD OF WATER DISPOSAL FROM ROOFS THAT WILL COLLECT AND DISCHARGE ALL ROOF DRAINAGE TO THE GROUND SURFACE AT LEAST 5 FEET (1524 mm) FROM FOUNDATION WALLS OR TO AN APPROVED DRAINAGE SYSTEM.

ALLIED HOME INSPECTION SERVICES

APPENDIX V-1

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION AG 105 PAGES 545 & 546

SWIMMING POOLS, SPAS, AND HOT TUBS BARRIER REQUIREMENTS

AG 105.1

THE PROVISIONS OF THIS CHAPTER SHALL CONTROL THE DESIGN OF BARRIERS FOR RESIDENTIAL SWIMMING POOLS, SPAS, AND HOT TUBS. THESE DESIGN CONTROLS ARE INTENDED TO PROVIDE PROTECTION AGAINST POTENTIAL DROWNINGS AND NEAR-DROWNINGS BY RESTRICTING ACCESS TO SWIMMING POOLS, SPAS, AND HOT TUBS.

AG 105.2

AN OUTDOOR SWIMMING POOL, INCLUDING AN IN-GROUND, ABOVE GROUND OR ON-GROUND POOL, HOT TUB OR SPA SHALL BE PROVIDED WITH A BARRIER WHICH SHALL COMPLY WITH THE FOLLOWING:

- 1 THE TOP OF THE BARRIER SHALL BE AT LEAST 48 INCHES (1219 mm) ABOVE GRADE MEASURED ON THE SIDE OF THE BARRIER WHICH FACES AWAY FROM THE SWIMMING POOL. THE MAXIMUM VERTICAL CLEARANCE BETWEEN THE GRADE AND THE BOTTOM OF THE BARRIER SHALL BE 2 INCHES (51 mm) MEASURED ON THE SIDE OF THE BARRIER WHICH FACES AWAY FROM THE SWIMMING POOL. WHERE THE TOP OF THE POOL STRUCTURE IS ABOVE GRADE, SUCH AS AN ABOVEGROUND POOL, THE BARRIER MAY BE AT GROUND LEVEL, SUCH AS THE POOL STRUCTURE, OR MOUNTED ON TOP OF THE POOL STRUCTURE. WHERE THE BARRIER IS MOUNTED ON TOP OF THE POOL STRUCTURE, THE MAXIMUM VERTICAL CLEARANCE BETWEEN THE TOP OF THE POOL STRUCTURE AND THE BOTTOM OF THE BARRIER SHALL BE 4 INCHES (102 mm).
- 2 OPENINGS IN THE BARRIER SHALL NOT ALLOW PASSAGE OF A 4-INCH DIAMETER (102 mm) SPHERE.
- 3 SOLID BARRIERS WHICH DO NOT HAVE OPENINGS, SUCH AS A MASONRY OR STONE WALL, SHALL NOT CONTAIN INDENTATIONS OR PROTRUSIONS EXCEPT FOR NORMAL CONSTRUCTION TOLERANCES AND TOOLED MASONRY JOINTS.
- 4 WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS LESS THAN 45 INCHES (1143 mm), THE HORIZONTAL MEMBERS SHALL BE LOCATED ON THE SWIMMING POOL SIDE OF THE FENCE. SPACING BETWEEN VERTICAL MEMBERS SHALL NOT EXCEED 1.75 INCHES (44 mm) IN WIDTH. WHERE THERE ARE DECORATIVE CUTOUTS WITHIN VERTICAL MEMBERS, SPACING WITH THE CUTOUTS SHALL NOT EXCEED 1.75 INCHES (44 mm) IN WIDTH.

ALLIED HOME INSPECTION SERVICES

APPENDIX V-2

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION AG 105 PAGES 545 & 546

BARRIER REQUIREMENTS

AG 105.2 OUTDOOR SWIMMING POOL

- 5 WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS 45 INCHES (1143 mm) OR MORE, SPACING BETWEEN VERTICAL MEMBERS SHALL NOT EXCEED 4 INCHES (102 mm). WHERE THERE ARE DECORATIVE CUTOUTS WITH VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL NOT EXCEED 1.75 INCHES (44 mm) IN WIDTH.
- 6 MAXIMUM MESH SIZE FOR CHAIN LINK FENCES SHALL BE A 1.25 INCH (32 mm) SQUARE UNLESS THE FENCE IS PROVIDED WITH SLATS FASTENED AT THE TOP OR THE BOTTOM WHICH REDUCE THE OPENINGS TO NOT MORE THAN 1.75 INCHES (44 mm).
- 7 WHERE THE BARRIER IS COMPOSED OF DIAGONAL MEMBERS, SUCH AS A LATTICE FENCE, THE MAXIMUM OPENING FORMED BY THE DIAGONAL MEMBERS SHALL NOT BE MORE THAN 1.75 INCHES (44 mm).
- 8 ACCESS GATES SHALL COMPLY WITH THE REQUIREMENTS OF SECTION AG 105.2 ITEMS 1 THROUGH 7, AND SHALL BE EQUIPPED TO ACCOMMODATE A LOCKING DEVICE. PEDESTRIAN ACCESS GATES SHALL OPEN OUTWARD AWAY FROM THE POOL AND SHALL BE SELF-CLOSING AND HAVE A SELF-LATCHING DEVICE. GATES OTHER THAN PEDESTRIAN ACCESS GATES SHALL HAVE A SELF-LATCHING DEVICE. WHERE THE RELEASE MECHANISM OF THE SELF-LATCHING DEVICE IS LOCATED LESS THAN 54 INCHES (1372 mm) FROM THE BOTTOM OF THE GATE, THE RELEASE MECHANISM AND OPENINGS SHALL COMPLY WITH THE FOLLOWING:
 - 8.1 THE RELEASE MECHANISM SHALL BE LOCATED ON THE POOL SIDE OF THE GATE AT LEAST 3 INCHES (76 mm) BELOW THE TOP OF THE GATE, AND
 - 8.2 THE GATE AND BARRIER SHALL HAVE NO OPENING GREATER THAN 0.5 INCH (12.7 mm) WITHIN 18 INCHES (457 mm) OF THE RELEASE MECHANISM.

ALLIED HOME INSPECTION SERVICES

APPENDIX V-3

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION AG 105 PAGE 546

SWIMMING POOLS, SPAS, AND HOT TUBS BARRIER REQUIREMENTS

AG 105.2 OUTDOOR SWIMMING POOL

- 9 WHERE A WALL OF A DWELLING SERVES AS PART OF THE BARRIER ONE OF THE FOLLOWING CONDITIONS SHALL BE MET:
- 9.1 THE POOL SHALL BE EQUIPPED WITH A POWERED SAFETY COVER IN COMPLIANCE WITH ASTM F1346; OR
- 9.2 ALL DOORS WITH DIRECT ACCESS TO THE POOL THROUGH THAT WALL SHALL BE EQUIPPED WITH AN ALARM WHICH PRODUCES AN AUDIBLE WARNING WHEN THE DOOR AND ITS SCREEN, IF PRESENT, ARE OPENED. THE ALARM SHALL SOUND CONTINUOUSLY FOR A MINIMUM OF 30 SECONDS IMMEDIATELY AFTER THE DOOR IS OPENED AND BE CAPABLE OF BEING HEARD THROUGHOUT THE HOUSE DURING NORMAL HOUSEHOLD ACTIVITIES. THE ALARM SHALL AUTOMATICALLY RESET UNDER ALL CONDITIONS. THE ALARM SYSTEM SHALL BE EQUIPPED WITH A MANUAL MEANS, SUCH AS A TOUCHPAD OR SWITCH, TO TEMPORARILY DEACTIVATE THE ALARM FOR A SINGLE OPENING. SUCH DEACTIVATION SHALL LAST FOR NOT MORE THAN 15 SECONDS. THE DEACTIVATION SWITCH (ES) SHALL BE LOCATED AT LEAST 54 INCHES (1372 mm) ABOVE THE THRESHOLD OF THE DOOR; OR
- 9.3 OTHER MEANS OF PROTECTION, SUCH AS SELF-CLOSING DOORS WITH SELF-LATCHING DEVICES, WHICH ARE APPROVED BY THE GOVERNING BODY, SHALL BE ACCEPTABLE SO LONG AS THE DEGREE OF PROTECTION AFFORDED IS NOT LESS THAN THE PROTECTION AFFORDED BY ITEM 9.1 AND 9.2 DESCRIBED ABOVE.
- 10 WHERE AN ABOVEGROUND POOL STRUCTURE IS USED AS A BARRIER OR WHERE THE BARRIER IS MOUNTED ON TOP OF THE POOL STRUCTURE, AND THE MEANS OF ACCESS IS A LADDER OR STEPS, THEN:
- 10.1 THE LADDER OR STEPS SHALL BE CAPABLE OF BEING SECURED, LOCKED OR REMOVED TO PREVENT ACCESS, OR:
- 10.2 THE LADDER OR STEPS SHALL BE SURROUNDED BY A BARRIER WHICH MEETS THE REQUIREMENTS OF SECTION AG 105.2, ITEMS 1 THROUGH 9. WHEN THE LADDER OR STEPS ARE SECURED, LOCKED OR REMOVED, ANY OPENINGS CREATED SHALL NOT ALLOW THE PASSAGE OF A 4-INCH-DIAMETER (102 mm) SPHERE.

ALLIED HOME INSPECTION SERVICES

APPENDIX V-7

**SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2006
SECTION: SECTION AG 105.2 PAGE 610**

**SWIMMING POOLS, SPAS, AND HOT TUBS
ACCESS GATES**

AG 105.2

- 8 ACCESS GATES SHALL COMPLY WITH THE REQUIREMENTS OF SECTION AG 105.2. ITEMS 1 THROUGH 7, AND SHALL BE EQUIPPED TO ACCOMMODATE A LOCKING DEVICE. PEDESTRIAN ACCESS GATES SHALL OPEN OUTWARD AWAY FROM THE POOL AND SHALL BE SELF-CLOSING AND HAVE A SELF-LATCHING DEVICE. GATES OTHER THAN PEDESTRIAN ACCESS GATES SHALL HAVE A SELF-LATCHING DEVICE. WHERE THE RELEASE MECHANISM OF THE SELF-LATCHING DEVICE IS LOCATED LESS THAN 54 INCHES (1372 mm) FROM THE BOTTOM OF THE GATE, THE RELEASE MECHANISM AND OPENINGS SHALL COMPLY WITH THE FOLLOWING:**
 - 8.1 THE RELEASE MECHANISM SHALL BE LOCATED ON THE POOL SIDE OF THE GATE AT LEAST 3 INCHES (76 mm) BELOW THE TOP OF THE GATES; AND**
 - 8.2 THE GATE AND BARRIER SHALL HAVE NO OPENING LARGER THAT 1/2 INCH (13 mm) WITHIN 18 INCHES OF THE RELEASE MECHANISM.**

ALLIED HOME INSPECTION SERVICES

APPENDIX X-1

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION 35 SERVICES PAGES 439 & 440

ELECTRICAL OVERHEAD SERVICE DROP

E 3504.1 CLEARANCE FROM BUILDING OPENINGS

OPEN CONDUCTORS AND MULTICONDUCTOR CABLES WITHOUT AN OVERALL OUTER JACKET SHALL HAVE A CLEARANCE OF NOT LESS THAN 3 FEET (914 mm) FROM THE SIDES OF DOORS, PORCHES, DECKS, STAIRS, LADDERS, FIRE ESCAPES, AND BALCONIES, AND FROM THE SIDES AND BOTTOM OF WINDOWS THAT OPEN.

E 3504.2 VERTICAL CLEARANCES

THE VERTICAL CLEARANCES OF ALL SERVICE-DROP CONDUCTORS SHALL BE BASED ON A CONDUCTOR TEMPERATURE OF 60 DEG. F (15 DEG. C), WITH NO WIND AND WITH FINAL UNLOADED SAG IN THE WIRE, CONDUCTOR OR CABLE. SERVICE-DROP CONDUCTORS SHALL NOT HAVE READY ACCESS AND SHALL COMPLY WITH SECTIONS E 3504.2.1 AND E 3504.2.2.

E 3504.2.1 ABOVE ROOFS

CONDUCTORS SHALL HAVE A VERTICAL CLEARANCE OF NOT LESS THAN 8 FEET (2438 mm) ABOVE THE ROOF SURFACE. THE VERTICAL CLEARANCE ABOVE THE ROOF LEVEL SHALL BE MAINTAINED FOR A DISTANCE OF NOT LESS THAN 3 FEET (914 mm) IN ALL DIRECTIONS FROM THE EDGE OF THE ROOF.

EXCEPTIONS:

- 1 CONDUCTORS ABOVE A ROOF SURFACE SUBJECT TO PEDESTRIAN TRAFFIC SHALL HAVE A VERTICAL CLEARANCE FROM THE ROOF SURFACE IN ACCORDANCE WITH SECTION E 3504.2.2.
- 2 WHERE THE ROOF HAS A SLOPE OF 4 INCHES (102 mm) IN 12 INCHES (305 mm), OR GREATER, THE MINIMUM CLEARANCE SHALL BE 3 FEET (914 mm).
- 3 THE MINIMUM CLEARANCE ABOVE ONLY THE OVERHANGING PORTION OF THE ROOF SHALL NOT BE LESS THAN 18 INCHES (457 mm) WHERE NOT MORE THAN 6 FEET (1829 mm) OF CONDUCTOR LENGTH PASSES OVER 4 FEET (1219 mm) OR LESS OF ROOF SURFACE MEASURED HORIZONTALLY AND SUCH CONDUCTORS ARE TERMINATED AT A THROUGH-THE-ROOF RACEWAY OR APPROVED SUPPORT.
- 4 THE REQUIREMENT FOR MAINTAINING THE VERTICAL CLEARANCE FOR A DISTANCE OF 3 FEET (914 mm) FROM THE EDGE OF THE ROOF SHALL NOT APPLY TO THE FINAL CONDUCTOR SPAN WHERE THE SERVICE DROP IS ATTACHED TO THE SIDE OF THE BUILDING.

ALLIED HOME INSPECTION SERVICES

APPENDIX X-2

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION 35 SERVICES PAGE 441

ELECTRICAL OVERHEAD SERVICE DROP

E 3504.2.2 VERTICAL CLEARANCE FROM GRADE

SERVICE-DROP CONDUCTORS SHALL HAVE THE FOLLOWING MINIMUM CLEARANCES FROM FINAL GRADE:

FOR SERVICE-DROP CABLES SUPPORTED ON AND CABLED TOGETHER WITH A GROUNDED BARE MESSENGER WIRE, THE MINIMUM VERTICAL CLEARANCE SHALL BE 10 FEET (3048 mm) AT THE ELECTRIC SERVICE ENTRANCE TO BUILDINGS, AT THE LOWEST POINT OF THE DRIP LOOP OF THE BUILDING ELECTRIC ENTRANCE, AND ABOVE AREAS OR SIDEWALKS ACCESSED BY PEDESTRIANS ONLY. SUCH CLEARANCE SHALL BE MEASURED FROM FINAL GRADE OR OTHER ACCESSIBLE SURFACES.

TWELVE FEET (3658 mm) - OVER RESIDENTIAL PROPERTY AND DRIVEWAYS.

EIGHTEEN FEET (5486 mm) - OVER PUBLIC STREETS, ALLEYS, ROADS OR PARKING AREAS SUBJECT TO TRUCK TRAFFIC.

E 3504.3 POINT OF ATTACHMENT

THE POINT OF ATTACHMENT OF THE SERVICE-DROP CONDUCTORS TO A BUILDING OR OTHER STRUCTURE SHALL PROVIDE THE MINIMUM CLEARANCES AS SPECIFIED IN SECTIONS E 3504.1 THROUGH E 3504.2.2. IN NO CASE SHALL THE POINT OF ATTACHMENT BE LESS THAN 10 FEET (3048 mm) ABOVE FINISHED GRADE.

E 3504.4 MEANS OF ATTACHMENT

MULTICONDUCTOR CABLES USED FOR SERVICE DROPS SHALL BE ATTACHED TO BUILDINGS OR OTHER STRUCTURES APPROVED FOR THIS PURPOSE.

E 3504.5 SERVICE MASTS AS SUPPORTS

WHERE A SERVICE MAST IS USED FOR THE SUPPORT OF SERVICE-DROP CONDUCTORS, IT SHALL BE OF ADEQUATE STRENGTH OR BE SUPPORTED BY BRACES OR GUYS TO WITHSTAND THE STAIN IMPOSED BY THE SERVICE-DROP. WHERE THE RACEWAY-TYPE ONLY POWER SERVICE DROP CONDUCTORS SHALL BE PERMITTED TO BE ATTACHED TO A SERVICE MAST.

E 3504.6 SUPPORTS OVER BUILDINGS

SERVICE-DROP CONDUCTORS PASSING OVER A ROOF SHALL BE SECURELY SUPPORTED. WHERE PRACTICAL, SUCH SUPPORTS SHALL BE INDEPENDENT OF THE BUILDING.

ALLIED HOME INSPECTION SERVICES

APPENDIX Y

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) 2000
SECTION: SECTION 36 BRANCH CIRCUIT AND FEEDER REQUIREMENTS PAGE 452

LOCATIONS AND ACCESSIBILITY OF ELECTRICAL BREAKER BOXES

E 3605.7 LOCATION OF OVERCURRENT DEVICES IN OR ON PREMISES

OVERCURRENT DEVICES SHALL:

- 1 BE READILY ACCESSIBLE
- 2 NOT BE LOCATED WHERE THEY WILL BE EXPOSED TO PHYSICAL DAMAGE
- 3 NOT BE LOCATED WHERE THEY WILL BE IN THE VICINITY OF EASILY IGNITIBLE MATERIALS SUCH AS IN CLOTHES CLOSETS.
- 4 NOT BE LOCATED IN BATHROOMS.

EXCEPTIONS:

- 1 THIS SECTION SHALL NOT APPLY TO SUPPLEMENTARY OVERCURRENT PROTECTION THAT IS INTEGRAL TO UTILIZATION EQUIPMENT.
- 2 OVERCURRENT DEVICES INSTALLED ADJACENT TO THE UTILIZATION EQUIPMENT THAT THEY SUPPLY SHALL BE PERMITTED TO BE ACCESSIBLE BY PORTABLE MEANS.

E 3605.8 READY ACCESS FOR OCCUPANTS

EACH OCCUPANT SHALL HAVE READY ACCESS TO ALL OVERCURRENT DEVICES PROTECTING THE CONDUCTORS SUPPLYING THAT OCCUPANCY.

E 3605.9 ENCLOSURES FOR OVERCURRENT DEVICES

OVERCURRENT DEVICES SHALL BE ENCLOSED IN CABINETS OR CUTOUT BOXES EXCEPT WHERE AN OVERCURRENT DEVICE IS PART OF AN ASSEMBLY THAT PROVIDES EQUIVALENT PROTECTION. THE OPERATING HANDLE OF A CIRCUIT BREAKER SHALL BE PERMITTED TO BE ACCESSIBLE WITHOUT OPENING A DOOR OR COVER.

E 3606 PANELBOARDS

E 3606.2 PANELBOARD CIRCUIT IDENTIFICATION

THE USE OR PURPOSE OF ALL PANELBOARD CIRCUITS SHALL BE LEGIBLY MARKED AND IDENTIFIED ON A CIRCUIT DIRECTORY LOCATED ON THE FACE OR INSIDE THE DOOR OF THE ENCLOSURE.

ALLIED HOME INSPECTION SERVICES

APPENDIX Y-2

SOURCE: NATIONAL ELECTRICAL CODE 2002

SECTION: ARTICLE 250, SECTION V BONDING, 250.92 SERVICES PAGE 70-109

ARTICLE 250.84 SECTION IV ENCLOSURE, RACEWAY AND ENCLOSURES PAGE 70-108

250.92 SERVICES

(B) METHOD OF BONDING AT THE SERVICE

ELECTRICAL CONTINUITY AT SERVICE EQUIPMENT, SERVICE RACEWAYS, AND SERVICE CONDUCTOR ENCLOSURES SHALL BE ENSURED BY ONE OF THE FOLLOWING METHODS:

(1) BONDING EQUIPMENT TO THE GROUNDED SERVICE CONDUCTOR IN A MANNER PROVIDED IN 250.8

(2) CONNECTIONS UTILIZING THREADED COUPLINGS OR THREADED BOSSES ON ENCLOSURES WHERE MADE UP WRENCHTIGHT

(3) THREADLESS COUPLINGS AND CONNECTORS WHERE MADE UP TIGHT FOR METAL RACEWAYS AND METAL-CLAD CABLES

(4) OTHER APPROVED DEVICES, SUCH AS BONDING-TYPE LOCKNUTS AND BUSHINGS.

BONDING JUMPERS MEETING THE OTHER REQUIREMENTS OF THIS ARTICLE SHALL BE USED AROUND CONCENTRIC OR ECCENTRIC KNOCKOUT COVERS THAT ARE PUNCHED OR OTHERWISE FORMED SO AS TO IMPAIR THE ELECTRICAL CONNECTION TO GROUND. STANDARD LOCKNUTS OR BUSHINGS SHALL NOT BE THE SOLE MEANS FOR THE BONDING REQUIRED IN THIS SECTION.

250.84 UNDERGROUND SERVICE CABLE OR CONDUIT

(A) UNDERGROUND SERVICE CABLE

THE SHEATH OR ARMOR OF A CONTINUOUS UNDERGROUND METAL-SHEATHED SERVICE CABLE SYSTEM THAT IS METALLICALLY CONNECTED TO THE UNDERGROUND SYSTEM SHALL NOT BE REQUIRED TO BE GROUNDED AT THE BUILDING. THE SHEATH OR ARMOR SHALL BE PERMITTED TO BE INSULATED FROM THE INTERIOR CONDUIT OR PIPING.

B) UNDERGROUND SERVICE CONDUIT CONTAINING CABLE

AN UNDERGROUND SERVICE CONDUIT THAT CONTAINS A METAL-SHEATHED CABLE BONDED TO THE UNDERGROUND SYSTEM SHALL NOT BE REQUIRED TO BE GROUNDED AT THE BUILDING. THE SHEATH OR ARMOR SHALL BE PERMITTED TO BE INSULATED FROM THE INTERIOR CONDUIT OR PIPING.

SECTION V BONDING

250.9 GENERAL

BONDING SHALL BE PROVIDED WHERE NECESSARY TO ENSURE ELECTRICAL CONTINUITY AND THE CAPACITY TO CONDUCT SAFELY ANY FAULT CURRENT LIKELY TO BE IMPOSED.

ALLIED HOME INSPECTION SERVICES

APPENDIX Y-3

SOURCE: NATIONAL ELECTRICAL CODE 2002

ARTICLE 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

SECTION 110.12 MECHANICAL EXECUTION OF WORK PAGE 70-41

SECTION 110.13 MOUNTING AND COOLING OF EQUIPMENT PAGE 70-41

SECTION 110.14 ELECTRICAL CONNECTIONS PAGE 70-42

110.12 MECHANICAL EXECUTION OF WORK

ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER.

A. UNUSED OPENINGS

UNUSED CABLE OR RACEWAY OPENINGS IN BOXES, RACEWAYS, AUXILIARY GUTTERS, CABINETS, CUTOUT BOXES, METER SOCKET ENCLOSURES, EQUIPMENT CASES, OR HOUSINGS SHALL BE EFFECTIVELY CLOSED TO AFFORD PROTECTION SUBSTANTIALLY EQUIVALENT TO THE WALL OF THE EQUIPMENT. WHERE METALLIC PLUGS OR PLATES ARE USED WITH NONMETALLIC ENCLOSURES, THEY SHALL BE RECESSED AT LEAST 6 mm (1/4 in.) FROM THE OUTER SURFACE OF THE ENCLOSURE.

B. SUBSURFACE ENCLOSURES

CONDUCTORS SHALL BE RACKED TO PROVIDE READY AND SAFE ACCESS IN UNDERGROUND AND SUBSURFACE ENCLOSURES INTO WHICH PERSONS ENTER FOR INSTALLATION AND MAINTENANCE.

(C) INTEGRITY OF ELECTRICAL EQUIPMENT AND CONNECTIONS

INTERNAL PARTS OF ELECTRICAL EQUIPMENT, INCLUDING BUSBARS, WIRING TERMINALS, INSULATORS, AND OTHER SURFACES, SHALL NOT BE DAMAGED OR CONTAMINATED BY FOREIGN MATERIALS SUCH AS PAINT, PLASTER, CLEANERS, ABRASIVES, OR CORROSIVE RESIDUES. THERE SHALL BE NO DAMAGED PARTS THAT MAY ADVERSELY AFFECT SAFE OPERATION OR MECHANICAL STRENGTH OF THE EQUIPMENT SUCH AS PARTS THAT ARE BROKEN, BENT, CUT, OR DETERIORATED BY CORROSION, CHEMICAL ACTION, OR OVERHEATING.

110.13 MOUNTING AND COOLING OF EQUIPMENT

(A) MOUNTING

ELECTRICAL EQUIPMENT SHALL BE FIRMLY SECURED TO THE SURFACE ON WHICH IT IS MOUNTED. WOODEN PLUGS DRIVEN INTO HOLES IN MASONRY, CONCRETE, PLASTER, OR SIMILAR MATERIALS SHALL NOT BE USED.

110.14 ELECTRICAL CONNECTIONS

(B) SPLICES

CONDUCTORS SHALL BE SPLICED OR JOINED WITH SPLICING DEVICES IDENTIFIED FOR THE USE OR BY BRAZING, WELDING, OR SOLDERING WITH A FUSIBLE METAL OR ALLOY. SOLDERED SPLICES SHALL FIRST BE SPLICED OR JOINED SO AS TO BE MECHANICALLY AND ELECTRICALLY SECURE WITHOUT SOLDER AND THEN BE SOLDERED. ALL SPLICES AND JOINTS AND THE FREE ENDS OF CONDUCTORS SHALL BE COVERED WITH AN INSULATION EQUIVALENT TO THAT OF THE CONDUCTORS OR WITH AN INSULATING DEVICE IDENTIFIED FOR THE PURPOSE. WIRE CONNECTORS OR SPLICING MEANS INSTALLED ON CONDUCTORS FOR DIRECT BURIAL SHALL BE LISTED FOR SUCH USE.

ALLIED HOME INSPECTION SERVICES

APPENDIX Z

SOURCE: SBCCI STANDARD GAS CODE, 1997 EDITION
SECTION: SECTION 403 PAGE 34

APPLIANCE CONNECTIONS TO BUILDING PIPING

403.1.2 CONNECTION GAS APPLIANCES

EACH GAS APPLIANCE SHALL HAVE AN ACCESSIBLE GAS SHUTOFF VALVE OR LISTED GAS CONVENIENCE OUTLET LOCATED NO FARTHER THAN 6 FEET (1829 mm) FROM THE APPLIANCE, INSTALLED UPSTREAM FROM THE UNION, CONNECTOR OR QUICK-DISCONNECT DEVICE THEY SERVE, AND IN THE SAME ROOM AS THE APPLIANCE. THIS SECTION SHALL NOT PROHIBIT THE USE OR THE INSTALLATION OF GAS SHUTOFF VALVES IN THE FIREBOX OF FIREPLACES SERVING LISTED GAS DECORATIVE APPLIANCES.

ALLIED HOME INSPECTION SERVICES

SOURCE: NATIONAL ELECTRICAL CODE - 2008 EDITION

SECTION: 110.14 ELECTRICAL CONNECTIONS

PAGE: 70-33

BECAUSE OF DIFFERENT CHARACTERISTICS OF DISSIMILAR METALS, DEVICES SUCH AS PRESSURE TERMINAL OR PRESSURE SPLICING CONNECTORS AND SOLDERING LUGS SHALL BE IDENTIFIED FOR THE MATERIAL OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED AND USED.

RECOMMENDED INSTALLATION INSTRUCTIONS FOR ALUMINUM WIRE TERMINATION.

WHEN USING CONNECTORS MARKED FOR AL USE, THE FOLLOWING IS A GUIDE TO PREVENT OVERHEATING:

- 1 CAREFULLY STRIP INSULATION, TAKING CARE NOT TO NICK OR STRIP WIRES.**
- 2 THOROUGHLY CLEAN STRIPPED PORTION WITH A WIRE BRUSH. DO NOT ABRASE SURFACES OF CONNECTORS.**
- 3 IMMEDIATELY COAT CLEANED WIRE WITH ANY RECOGNIZED INHIBITING JOINT COMPOUND SUCH AS:

BLACKBURH - CONTAX PASTE
BURNDY - PENTROX PASTE
PENN-UNION CUAL-AID**
- 4 INSERT WIRE INTO CONNECTOR, MAKING CERTAIN ALL STRANDS ARE INCLUDED, AND SECURELY TIGHTEN CONNECTOR CLAMPING SCREWS. REFER TO WIRING DIAGRAM INSIDE LOAD CENTER DOOR FOR PROPER TORQUE.**
- 5 WIPE EXCESS COMPOUND FROM CONNECTION AREA.**

**NOTE:
SOME COMPOUNDS ARE CONTACT AIDING WITH CONDUCTIVE PARTICLES, WHICH CAN REDUCE THE DIELECTRIC STRENGTH OF EQUIPMENT ISULATION SYSTEM**

- 6 TORQUE WIRE PRESSURE SCREWS FOR ALL CONDUCTORS. FOR PROPER TORQUE VALUES, REFER TO THE SPECIFICATIONS LABEL ON CIRCUIT BREAKERS AND INSIDE OF LOADCENTER DOOR**

ALLIED HOME INSPECTION SERVICES

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS (2006))

**SECTION: E3305.2 PAGE: 472
WORKING CLEARANCES FOR ENERGIZED EQUIPMENT AND PANELBOARDS**

EXCEPT AS OTHERWISE SPECIFIED IN CHAPTERS 33 THROUGH 42, THE DIMENSION OF THE WORKING SPACE IN THE DIRECTION OF ACCESS TO PANELBOARDS AND LIVE PARTS LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE WHILE ENERGIZED SHALL BE NOT LESS THAN 36 INCHES (914mm) IN DEPTH. DISTANCES SHALL BE MEASURED FROM THE ENERGIZED PARTS WHERE SUCH PARTS ARE EXPOSED FOR FROM THE ENCLOSURE FRONT OR OPENING WHERE SUCH PARTS ARE ENCLOSED. IN ADDITION TO THE 36-INCH DIMENSION (914mm), THE WORK SPACE SHALL NOT BE LESS THAN 30 INCHES (762mm) WIDE IN FRONT OF THE ELECTRICAL EQUIPMENT AND NOT LESS THAN THE WIDTH OF SUCH EQUIPMENT. THE WORK SPACE SHALL BE CLEAR AND SHALL EXTEND FROM THE FLOOR OR PLATFORM TO A HEIGHT OF 6.5 FEET (1981mm). IN ALL CASES, THE WORK SPACE SHALL ALLOW AT LEAST A 90-DEGREE OPENING OF EQUIPMENT DOORS OR HINGED PANELS. EQUIPMENT ASSOCIATED WITH THE ELECTRICAL INSTALLATION LOCATED ABOVE OR BELOW THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO EXTEND NOT MORE THAN 6 INCHES (152mm) BEYOND THE FRONT OF THE ELECTRICAL EQUIPMENT.

**INTERNATIONAL RESIDENTIAL CODE
FOR ONE AND TWO FAMILY DWELLINGS
CODE AND COMMENTARY VOLUME II PAGE 33-7**

WHEN A WORKER IS STANDING IN FRONT OF PANELBOARD OR AIR CONDITIONER DISCONNECT SWITCH, FOR EXAMPLE, HE OR SHE SHOULD BE ABLE TO WALK UP TO IT AND STAND IN A CLEAR SPACE WITH NO OBSTRUCTIONS WITHOUT HAVING TO LEAN OR CLIMB OVER ANOTHER PIECE OF ELECTRICAL EQUIPMENT OR OTHER OBSTRUCTION.

ALLIED HOME INSPECTION SERVICES

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) (2006)

SECTION: E3603.2 PAGE: 492
KITCHEN & DINING ROOM AREA
RECEPTACLES

THE KITCHEN COUNTERTOP RECEPTACLES SHALL BE SERVED BY A MINIMUM OF TWO 20-AMPERE-RATED BRANCH CIRCUITS

EITHER OR BOTH OF WHICH SHALL ALSO BE PERMITTED TO SUPPLY OTHER RECEPTACLE OUTLETS IN THE KITCHEN, PANTRY, BREAKFAST AND DINING AREA INCLUDING RECEPTACLE OUTLETS FOR REFRIGERATION APPLIANCES.

EXCEPTION:
THE REFRIGERATION RECEPTACLE IS PERMITTED TO BE SUPPLIED FROM AN INDIVIDUAL BRANCH CIRCUIT.

ALLIED HOME INSPECTION SERVICES

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS (2006))

**SECTION: PANELBOARDS
E3606.2 PANELBOARD CIRCUIT IDENTIFICATION PAGE 497**

ALL CIRCUITS AND CIRCUIT MODIFICATIONS SHALL BE LEGIBLY IDENTIFIED AS TO THE CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE.

THE IDENTIFICATION SHALL INCLUDE SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS.

THE IDENTIFICATION SHALL BE INCLUDED IN A CIRCUIT DIRECTORY LOCATED ON THE FACE OF THE PANELBOARD OR INSIDE THE PANEL DOOR.

ALLIED HOME INSPECTION SERVICES

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) (2006)

SECTION: E3801.2.1 PAGE: 505
RECEPTACLE OUTLET - SPACING

RECEPTACLES AT NO POINT MEASURED MORE THAN SIX (6) FEET..

E3801.2.2 PAGE: 505
ANY SPACE THAT IS 2 FEET OR MORE IN WIDTH.

ALLIED HOME INSPECTION SERVICES

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS) (2006)

SECTION: E3801.4 PAGE: 506
COUNTERTOP RECEPTACLES
WALL COUNTER SPACE

A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER 12 INCHES OR WIDER.

RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES, MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.

ALLIED HOME INSPECTION SERVICES

SOURCE: IRC (INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS (2006))

**SECTION: RECEPTACLE OUTLETS
E3801.6 BATHROOM PAGE 507**

AT LEAST ONE WALL RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS AND SUCH OUTLET SHALL BE LOCATED WITHIN 36 INCHES OF THE OUTSIDE EDGE OF EACH LAVATORY BASIN.

THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL THAT IS ADJACENT TO THE LAVATORY BASIN LOCATION

RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN A FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS IN A BATHROOM BASIN LOCATION

ALLIED HOME INSPECTION SERVICES

SOURCE: NATIONAL ELECTRICAL CODE - 2008 EDITION

SECTION: 210.12 ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION

PAGE: 70-49

(A) DEFINITION: ARC-FAULT CIRCUIT INTERRUPTER (AFCI)

A DEVICE IS INTENDED TO PROVIDE PROTECTION FROM THE EFFECTS OF ARC FAULTS BY RECOGNIZING CHARACTERISTICS UNIQUE TO ARCING AND BY FUNCTIONING TO DE-ENERGIZE THE CIRCUIT WHEN AN ARC FAULT IS DETECTED.

(B) DWELLING UNITS

ALL 120 VOLT, SINGLE PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNITS FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.

EXCEPTION NO. 1

WHERE RMC, IMC, EMT OR STEEL ARMORED CABLE, TYPE AC, MEETING THE REQUIREMENTS OF 250.118 USING METAL OUTLET AND JUNCTION BOXES IS INSTALLED FOR THE PORTION OF THE BRANCH CIRCUIT BETWEEN THE BRANCH-CIRCUIT OVERCURRENT DEVICE AND THE FIRST OUTLET, IT SHALL BE PERMITTED TO INSTALL A COMBINATION AFCI AT THE FIRST OUTLET TO PROVIDE PROTECTION FOR THE REMAINING PORTION OF THE BRANCH CIRCUIT.

EXCEPTION NO. 2

WHERE A BRANCH CIRCUIT TO A FIRE ALARM SYSTEM INSTALLED IN ACCORDANCE WITH 760.41(B) AND 760.12(B) IS INSTALLED IN RMC, IMC, EMT, OR STEEL ARMORED CABLE, TYPE AC, MEETING THE REQUIREMENTS OF 250.118, WITH METAL OUTLET AND JUNCTION BOXES, AFCI PROTECTION SHALL BE PERMITTED TO BE OMITTED.

ALLIED HOME INSPECTION SERVICES

SOURCE: NATIONAL ELECTRICAL CODE - 2008 EDITION

SECTION: 406.11 TAMPER-RESISTANT RECEPTACLES IN DWELLING UNITS

PAGE: 70-261

IN ALL AREAS SPECIFIED IN 210.52, ALL 125-VOLT, 15 AND 20-AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

210.52 DWELLING UNIT RECEPTACLE OUTLETS

PAGE: 70-52

THIS SECTION PROVIDES REQUIREMENTS FOR 125-VOLT, 15 AND 20-AMPERE RECEPTACLE OUTLETS. THE RECEPTACLES REQUIRED BY THIS SECTION SHALL BE IN ADDITION TO ANY RECEPTACLE THAT IS:

- (1) PART OF A LUMINARIES OR APPLIANCE, OR**
- (2) CONTROLLED BY A WALL SWITCH IN ACCORDANCE WITH 210.70 (A)(1) EXCEPTION NO. 1, OR**
- (3) LOCATED WITHIN CABINETS OR CUPBOARDS, OR**
- (4) LOCATED MORE THAN 1.7 m (5 1/2 FT.) ABOVE THE FLOOR**

PERMANENTLY INSTALLED ELECTRIC BASEBOARD HEATERS EQUIPPED WITH FACTORY-INSTALLED RECEPTACLE OUTLETS PROVIDED AS A SEPARATE ASSEMBLY BY THE MANUFACTURER SHALL BE PERMITTED AS THE REQUIRED OUTLET OR OUTLETS FOR THE WALL SPACE UTILIZED BY SUCH PERMANENTLY INSTALLED HEATERS. SUCH RECEPTACLE CUTLETS SHALL NOT BE CONNECTED TO THE HEATER CIRCUITS.

FPN: LISTED BASEBOARD HEATERS INCLUDE INSTRUCTIONS THAT MAY NOT PERMIT THEIR INSTALLATION BELOW RECEPTACLE OUTLETS.

ALLIED HOME INSPECTION SERVICES

SOURCE: NATIONAL ELECTRICAL CODE - 2008 EDITION

SECTION: NEC 410,16 LUMINAIRES IN CLOTHES CLOSETS

PAGE: 70-269

A. LUMINAIRES IN CLOTHES CLOSETS

**(A) LUMINAIRE TYPES PERMITTED:
LISTED LUMINAIRES OF THE FOLLOWING TYPES SHALL BE
PERMITTED TO BE INSTALLED IN A CLOSET:**

- 1 A SURFACE-MOUNTED OR RECESSED INCANDESCENT LUMINAIRE WITH A COMPLETELY ENCLOSED LAMP.**
- 2 A SURFACE-MOUNTED OR RECESSED FLUORESCENT LUMINAIRE**
- 3 SURFACE-MOUNTED FLUORESCENT OR LED LUMINAIRES IDENTIFIED AS SUITABLE FOR INSTALLATION WITHIN THE STORAGE AREA.**

B. LUMINAIRE TYPES NOT PERMITTED:

INCANDESCENT LUMINAIRES WITH OPEN OR PARTIALLY ENCLOSED LAMPS AND PENDANT LUMINAIRES OR LAMP HOLDERS SHALL NOT BE PERMITTED.

C. LOCATION.

THE MINIMUM CLEARANCE BETWEEN LUMINAIRES INSTALLED IN CLOTHES CLOSETS AND THE NEAREST POINT OF STORAGE SPACE SHALL BE AS FOLLOWS:

- 1 300 mm (12 IN.) FOR SURFACE-MOUNTED INCANDESCENT OR LED LUMINAIRES WITH A COMPLETELY ENCLOSED LIGHTSOURCE INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING.**
- 2 150 mm (6 IN.) FOR SURFACE-MOUNTED FLUORESCENT LUMINAIRES INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING**
- 3 150 MM (6 IN.) FOR RECESSED INCANDESCENT OR LED LUMINAIRES WITH A COMPLETELY ENCLOSED LIGHT SOURCE INSTALLED IN THE WALL OR THE CEILING**
- 4 150 MM (6 IN.) FOR RECESSED FLUORESCENT LUMINAIRES INSTALLED IN THE WALL OR THE CEILING**
- 5 SURFACE-MOUNTED FLUORESCENT OR LED LUMINAIRES SHALL BE PERMITTED TO BE INSTALLED WITHIN THE STORAGE SPACE WHERE IDENTIFIED FOR THIS USE.**