

CATHEY RESIDENCE

THIS DESIGN ADHERES TO DESIGN CRITERIA OUTLINED IN THE 2012 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.

CHAPTER 3: BUILDING PLANNING

R301.2.1.1 DESIGN CRITERIA: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (AMERICAN SOCIETY OF CIVIL ENGINEERING-7).

R302.1.1.2 PROTECTION OF OPENINGS: EXTERIOR GLAZING IN BUILDINGS LOCATED IN WINDBORNE DEBRIS REGIONS SHALL BE PROTECTED FROM WINDBORNE DEBRIS (SEE FIGURE R302.1(4)C)

EXCEPTION: WOOD STRUCTURAL PANELS WITH A MINIMUM THICKNESS OF 7/16 INCH AND A MAXIMUM SPAN OF 8 FEET SHALL BE PERMITTED FOR OPENING PROTECTION IN ONE AND TWO-STORY BUILDINGS. PANELS SHALL BE PRECUT TO COVER THE GLAZED OPENINGS WITH ATTACHMENT HARDWARE PROVIDED. ATTACHMENTS SHALL BE PROVIDED IN ACCORDANCE WITH TABLE R301.2.1.2 OR SHALL BE DESIGNED TO RESIST THE COMPONENTS AND CLADDING LOADS DETERMINED IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE.

R302.6 DWELLING/GARAGE FIRE SEPARATION: THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. THIS PROVISION DOES NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT.

- SEPARATION FROM THE RESIDENCE & ATTICS - NOT LESS THAN 1/2" GYP. BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE
- SEPARATION FROM ALL HABITABLE ROOMS ABOVE THE GARAGE - NOT LESS THAN 5/8" TYPE X GYP. BOARD OR EQUIVALENT
- SEPARATION FROM STRUCTURES SUPPORTING FLOOR/CEILING ASSEMBLIES USED FOR SEPARATION REQUIRED BY SECTION R302 - NOT LESS THAN 1/2" GYP. BOARD OR EQUIVALENT
- SEPARATION FROM GARAGES LOCATED LESS THAN 3 FEET FROM A DWELLING UNIT ON THE SAME LOT - NOT LESS THAN 1/2" GYP. BOARD OR EQUIVALENT APPLIED TO THE INTERIOR SIDE OF EXTERIOR WALLS THAT ARE WITHIN THIS AREA

R302.7 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 GYPSUM BOARD.

R302.11 FIREBLOCKING: IN COMBUSTIBLE CONSTRUCTION, 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:

- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS: VERTICALLY AT THE CEILING AND FLOOR LEVELS, AND HORIZONTALLY AT 10 FOOT INTERVALS
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH THAT OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS.
- IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF RUN. ENCLOSED SPACES BETWEEN STAIRS SHALL COMPLY WITH SECTION R302.7.
- AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
- FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES. SEE SECTION R1003.19.
- FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION.

R302.2 BATHTUB AND SHOWER SPACES: BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWERHEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR.

R310.1 EMERGENCY ESCAPE AND RESCUE REQUIRED: EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR EXTERIOR DOOR OPENING FOR EMERGENCY ESCAPE AND RESCUE. OPENINGS PROVIDED AS A MEANS OF ESCAPE AND RESCUE THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR.

R310.1.1 MINIMUM OPENING AREA: ALL EMERGENCY ESCAPE AND RESCUE OPENING SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (EXCEPTION: GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5 SQUARE FEET).

R310.1.2 MINIMUM OPENING HEIGHT: THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES (610 MM).

R311.3 LANDINGS AT EXTERIOR DOORS: THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A MINIMUM DIMENSION OF 36 INCHES IN THE DIRECTION OF TRAVEL. THE FLOOR OR LANDING AT THE EXTERIOR DOOR SHALL NOT BE MORE THAN 1.5 INCHES LOWER THAN THE TOP OF THE THRESHOLD. THE LANDING SHALL BE PERMITTED TO HAVE A SLOPE NOT TO EXCEED 0.25 ON 12 (2-PERCENT)

R311.7.1 WIDTH: STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES IN CLEAR WIDTH AT ALL POINTS ABOVE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM ABOVE THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDING SHALL NOT BE LESS THAN 31.5 INCHES WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES.

EXCEPTION: THE WIDTH OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.7.9.1

R311.7.2 HEADROOM: THE MINIMUM HEADROOM IN ALL PARTS OF THE STAIRS SHALL NOT BE LESS THAN 6 FEET 8 INCHES MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING PLATFORM.

R311.7.5.1 RISERS: THE MAXIMUM RISER HEIGHT SHALL BE 7 3/4 INCHES. THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCHES.

R311.7.5.2 TREADS: THE MINIMUM TREAD DEPTH SHALL BE 10 INCHES. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANS OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH.

R311.7.5.2.1 WINDER TREADS: WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 10 INCHES MEASURED BETWEEN THE VERTICAL PLANE OF THE FOREMOST PROJECTION OF THE ADJACENT TREADS AT THE INTERSECTIONS WITH THE WALKLINE. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 6 INCHES AT ANY POINT WITHIN THE CLEAR WIDTH OF THE STAIR.

R311.7.8 HANDRAILS: HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS.

R311.7.8.1 HEIGHT: HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING, SHALL NOT BE LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.

R311.7.8.2 CONTINUITY: HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL 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 1/4 INCHES BETWEEN THE WALL AND THE HANDRAILS.

EXCEPTIONS:

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

R312.2 OPENING LIMITATIONS: REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT WHICH ALLOW THE PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.

R314.3 LOCATION: SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

- IN EACH SLEEPING ROOM.
- OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
- ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS BUT NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS.

R315 CARBON MONOXIDE ALARMS
CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. CARBON MONOXIDE DETECTORS SHALL COMPLY WITH UL2034 AND INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

R316.5.3 & R316.5.4 ATTICS AND CRAWL SPACES: WITHIN ATTICS AND CRAWL SPACES, WHERE ENTRY IS MADE ONLY FOR SERVICE OF UTILITIES, FOAM PLASTICS SHALL BE PROTECTED AGAINST IGNITION.

R318 TERMITE PROTECTION SHALL BE PROVIDED AS TERMITE PROBABILITY PER FIGURE R301.2(6) IS "VERY HEAVY."

R319.1 ADDRESS NUMBERS: BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.

R322.1.8 FLOOD-RESISTANT MATERIALS. BUILDING MATERIALS USED BELOW THE BASE FLOOR ELEVATION SHALL BE FLOOD-RESISTANT

CHAPTER 4: FOUNDATIONS

R401.2 REQUIREMENTS: FOUNDATION CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS ACCORDING TO SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING SOIL. FILL SOILS THAT SUPPORT FOOTINGS AND FOUNDATION SHALL BE DESIGNED, INSTALLED AND TESTED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

R403.1.4 MINIMUM DEPTH: ALL EXTERIOR FOOTINGS SHALL BE PLACED AT LEAST 12 INCHES BELOW THE UNDISTURBED GROUND SURFACE

R403.1.7.3 FOUNDATION ELEVATION: ON GRADE SITE, THE TOP OF ANY EXTERIOR FOUNDATION SHALL EXTEND ABOVE THE STREET GUTTER AT THE POINT OF DISCHARGE OR THE INLET OF AN APPROVED DRAINAGE DEVICE A MINIMUM OF 12 INCHES PLUS 2 PERCENT. ALTERNATE ELEVATIONS ARE PERMITTED SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL, PROVIDED IT CAN BE DEMONSTRATED THAT REQUIRED DRAINAGE TO THE POINT OF DISCHARGE AND AWAY FROM THE STRUCTURE IS PROVIDED AT ALL LOCATIONS ON THE SITE.

R404.1.6 HEIGHT ABOVE FINISHED GRADE: CONCRETE AND MASONRY FOUNDATION WALLS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 4 INCHES WHERE MASONRY VENEER IS USED AND A MINIMUM OF 6 INCHES ELSEWHERE

CHAPTER 5: FLOORS

R502.8.1 SAWN LUMBER: NOTCHES IN SOLID LUMBER JOISTS, RAFTERS AND BEAMS SHALL NOT EXCEED ONE-SIXTH THE DEPTH OF THE MEMBER; SHALL NOT BE LONGER THAN ONE-THIRD OF THE DEPTH OF THE MEMBER; SHALL NOT BE LOCATED IN THE MIDDLE ONE-THIRD OF THE SPAN. NOTCHES AT THE ENDS OF THE MEMBER SHALL NOT EXCEED ONE-FORTH THE DEPTH OF THE MEMBER. THE TENSION SIDE OF MEMBERS 4 INCHES OR GREATER IN NOMINAL THICKNESS SHALL NOT BE NOTCHED EXCEPT AT THE ENDS OF THE MEMBERS. THE DIAMETER OF THE HOLES BORED OR CUT INTO MEMBER SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE MEMBER. HOLES SHALL NOT BE CLOSER THAN 2 INCHES TO THE TOP OR BOTTOM OF THE MEMBER OR TO ANY OTHER HOLE LOCATED IN THE MEMBER. WHERE THE MEMBER IS ALSO NOTCHED, THE HOLE SHALL NOT BE CLOSER THAN 2 INCHES TO THE NOTCH.

R502.8.2 ENGINEERED WOOD PRODUCTS: CUTS, NOTCHES AND HOLES BORED IN TRUSSES, STRUCTURAL COMPOSITE LUMBER, STRUCTURAL GLUE-LAMINATED MEMBERS OR I-JOISTS ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATIONS OR WHERE THE EFFECTS OF SUCH ALTERATIONS ARE SPECIFICALLY CONSIDERED IN THE DESIGN OF THE MEMBER BY A REGISTERED DESIGN PROFESSIONAL...

CHAPTER 6: WALL CONSTRUCTION

R602.6 DRILLING AND NOTCHING—STUDS: DRILLING AND NOTCHING OF STUDS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- NOTCHING. ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. STUDS IN NONBEARING PARTITIONS MAY BE NOTCHED TO A DEPTH NOT TO EXCEED 40 PERCENT OF ITS WIDTH.
- DRILLING. ANY STUD MAY BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60 PERCENT OF THE STUD WIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 5/8 INCH TO THE EDGE OF THE STUD, AND THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH. STUDS LOCATED IN EXTERIOR WALLS OR BEARING PARTITIONS DRILLED OVER 40 PERCENT AND UP TO 60 PERCENT SHALL ALSO BE DOUBLED WITH NO MORE THAN TWO SUCCESSIVE DOUBLED STUDS BORED. SEE FIGURES R602.6 (1) AND R602.6 (2).

EXCEPTION: USE OF APPROVED STUD SHOES IS PERMITTED WHEN THEY ARE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

R602.6.1 DRILLING AND NOTCHING OF TOP PLATE: WHEN PIPING OR DUCTWORK IS PLACED IN OR INTERIOR, BRACED OR LOAD-BEARING WALL, NECESSITATING A CUTTING OF THE TOP PLATE BY MORE THAN 50 PERCENT OF ITS WIDTH, A GALVANIZED METAL TIE IS NOT LESS THAN 0.054 INCH (16 GAUGE) AND 1.5 INCHES WIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING WITH NOT LESS THAN EIGHT 16D NAILS AT EACH SIDE OR EQUIVALENT. SEE FIGURE R602.6.1

EXCEPTION: WHEN THE ENTIRE SIDE OF THE WALL WITH THE NOTCH OR CUT IS COVERED BY WOOD STRUCTURAL PANEL SHEATHING.

R602.6 FIREBLOCKING REQUIRED: FIREBLOCKING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R302.11

CHAPTER 7: WALL COVERING

R703.7.6 WEEPHOLES: WEEPHOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS AT A MAXIMUM SPACING OF 33 INCHES ON CENTER. WEEPHOLES SHALL BE LOCATED IMMEDIATELY ABOVE THE FLASHING.

CHAPTER 9: ROOF ASSEMBLIES

R905.2.2 SLOPE: ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12) OR GREATER. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.2.7.

R905.2.6 ATTACHMENT: ASPHALT SHINGLES SHALL HAVE THE MINIMUM NUMBER OF FASTENERS REQUIRED BY THE MANUFACTURER. FOR NORMAL APPLICATION, ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. WHERE THE ROOF SLOPE EXCEEDS 20 UNITS VERTICAL IN 12 UNITS HORIZONTAL (20:12), SPECIAL METHODS OF FASTENING ARE REQUIRED. FOR ROOFS LOCATED WHERE THE BASIC WIND SPEED PER FIGURE R301.2(4) IS 110 MPH OR HIGHER, SPECIAL METHODS OF FASTENING ARE REQUIRED. SPECIAL FASTENING METHODS SHALL BE TESTED IN ACCORDANCE WITH ASTM D3161, CLASS F. ASPHALT SHINGLE WRAPPERS SHALL BEAR A LABEL INDICATING COMPLIANCE WITH ASTM D3161, CLASS F.

R905.2.7 UNDERLAYMENT APPLICATION: FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17 PERCENT SLOPE) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33 PERCENT SLOPE) UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER. APPLY A 19-INCH STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 38-INCH WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE. FOR ROOFS OF 4 UNITS VERTICAL IN 12 UNITS HORIZONTAL (33 PERCENT SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE OFFSET BY 6 FEET.

R905.2.7.2 UNDERLAYMENT AND HIGH WIND: UNDERLAYMENT APPLIED IN AREAS SUBJECT TO HIGH WINDS (GREATER THAN 110 MPH (177 KM/H) PER FIGURE R301.2 (4)) SHALL BE APPLIED WITH CORROSION-RESISTANT FASTENERS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. FASTENERS ARE TO BE APPLIED ALONG THE OVERLAP NOT FARTHER THAN 36 INCHES (914 MM) ON CENTER.

CHAPTER 10: CHIMNEYS AND FIREPLACES

R1004.1 GENERAL: FACTORY-BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.

R1005.1 LISTING: FACTORY-BUILT CHIMNEYS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED AND TERMINATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

R1001.9 HEARTH EXTENSIONS: MASONRY FIREPLACE HEARTHS AND HEARTH EXTENSIONS SHALL BE CONSTRUCTED OF CONCRETE OR MASONRY, SUPPORTED BY NONCOMBUSTIBLE MATERIALS, AND REINFORCED TO CARRY THEIR OWN WEIGHT AND ALL IMPOSED LOADS. NO COMBUSTIBLE MATERIAL SHALL REMAIN AGAINST THE UNDERSIDE OF HEARTHS AND HEARTH EXTENSIONS AFTER CONSTRUCTION.

CHAPTER 11: ENERGY EFFICIENCY

N1101.2 INTENT: THIS CODE SHALL REGULATE THE DESIGN AND CONSTRUCTION OF BUILDINGS FOR THE EFFECTIVE USE AND CONSERVATION OF ENERGY OVER THE USEFUL LIFE OF EACH BUILDING. THIS CODE IS INTENDED TO PROVIDE FLEXIBILITY TO PERMIT THE USE OF INNOVATIVE APPROACHES AND TECHNIQUES TO ACHIEVE THIS OBJECTIVE. THIS CODE IS NOT INTENDED TO ABRIDGE SAFETY, HEALTH OR ENVIRONMENTAL REQUIREMENTS CONTAINED IN OTHER APPLICABLE CODES OR ORDINANCES.

N1101.12 IDENTIFICATION: MATERIALS, SYSTEMS AND EQUIPMENT SHALL BE IDENTIFIED IN A MANNER THAT WILL ALLOW A DETERMINATION OF COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THIS CODE.

N1101.12.1 BUILDING THERMAL ENVELOPE INSULATION: AN R-VALUE IDENTIFICATION MARK SHALL BE APPLIED BY THE MANUFACTURER TO EACH PIECE OF BUILDING THERMAL ENVELOPE INSULATION 12 INCHES OR MORE WIDE. ALTERNATELY, THE INSULATION INSTALLERS SHALL PROVIDE A CERTIFICATION LISTING THE TYPE, MANUFACTURER AND R-VALUE OF INSULATION INSTALLED IN EACH ELEMENT OF THE BUILDING THERMAL ENVELOPE. FOR BLOWN OR SPRAYED INSULATION (FIBERGLASS AND CELLULOSE), THE INITIAL INSTALLED THICKNESS, SETTLED THICKNESS, SETTLED R-VALUE, INSTALLED DENSITY, COVERAGE AREA AND NUMBER OF BAGS INSTALLED SHALL BE LISTED ON THE CERTIFICATION. FOR SPRAYED POLYURETHANE FOAM (SPF) INSULATION, THE INSTALLED THICKNESS OF THE AREA COVERED AND R-VALUE OF THE INSTALLED THICKNESS SHALL BE LISTED ON THE CERTIFICATE. THE INSULATION INSTALLER SHALL SIGN, DATE AND POST THE CERTIFICATE IN A CONSPICUOUS LOCATION ON THE JOB SITE.

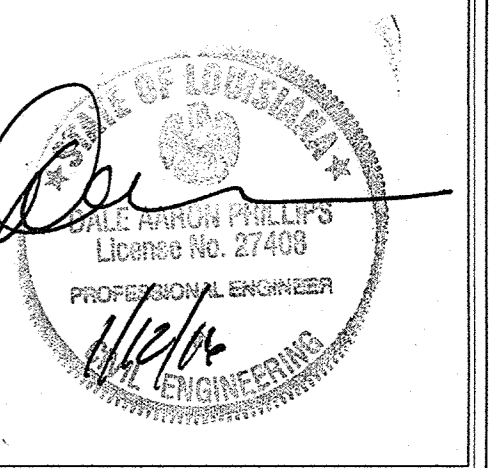
N1101.12.3 FENESTRATION PRODUCT RATING: U-FACTORS OF FENESTRATION PRODUCTS (WINDOWS, DOORS AND SKYLIGHTS) SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100 BY AN ACCREDITED INDEPENDENT LABORATORY, AND LABELED AND CERTIFIED BY THE MANUFACTURER. PRODUCTS LACKING SUCH A LABELED U-FACTOR SHALL BE ASSIGNED A DEFAULT U-FACTOR FROM TABLES N1101.5(1) AND N1101.5(2). THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF GLAZED FENESTRATION PRODUCTS (WINDOWS, GLAZED DOORS AND SKYLIGHTS) SHALL BE DETERMINED IN ACCORDANCE WITH THE NFRC 200 BY AN ACCREDITED, INDEPENDENT LABORATORY AND LABELED AND CERTIFIED BY THE MANUFACTURER. PRODUCTS LACKING SUCH A LABELED SHGC SHALL BE ASSIGNED A DEFAULT SHGC FROM TABLE N1101.5(3).

N1101.16 CERTIFICATE: A PERMANENT CERTIFICATE SHALL BE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL. THE CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL. THE CERTIFICATE SHALL LIST THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (SLAB, BASEMENT WALL, CRAWLSPACE WALL AND/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES; U-FACTORS FOR FENESTRATION; AND SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL LIST THE TYPE AND EFFICIENCY OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT.

CHAPTER 42: SWIMMING POOLS (IF APPLICABLE)

E4201.1 GENERAL (WIRING METHODS FOR POOLS, SPAS, HOT TUBS AND HYDROMASSAGE BATHTUBS): WIRING METHODS USED IN CONJUNCTION WITH PERMANENTLY INSTALLED SWIMMING POOLS, SPAS, HOT TUBS OR HYDROMASSAGE BATHTUBS SHALL BE INSTALLED IN ACCORDANCE WITH TABLE E4102.1 AND CHAPTER 37 EXCEPT AS OTHERWISE STATED IN THIS SECTION. STORABLE SWIMMING POOLS SHALL COMPLY WITH SECTION E4107.

REV.	REVISION DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	.



IRC2012 CODE SUMMARY

INTERNATIONAL RESIDENTIAL CODE FOR ONE & TWO FAMILY DWELLINGS

STORY LIMITATION: **3 STORIES**

AREA LIMITATION: **UNLIMITED**

SEE DRAWING S1 FOR ASCE-7 CODE COMPLIANCE & DESIGN LOADS

FLOOD HAZARD ZONE: **V**
DESIGN BASE FLOOD ELEVATION: **15.0 FT**
EXISTING GRADE ELEVATION: **5.0 FT**
BOTTOM FINISHED FLOOR ELEV. (FFE): **T.B.D.**

NOTE: THE BOTTOM FLOOR OF THE STRUCTURES LOCATED IN FLOOD ZONE A SHALL BE ABOVE THE BASE FLOOD ELEVATION. ENCLOSED SPACES LOCATED IN FLOOD ZONE A SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASCE-24 SECTION 2.6.2.2 FOR EQUALIZATION OF HYDROSTATIC FLOOD FORCES.

NOTE: THE LOWEST HORIZONTAL STRUCTURAL MEMBER SHALL BE LOCATED ABOVE THE BASE FLOOD ELEVATION FOR STRUCTURES LOCATED IN FLOOD ZONE V. WALLS LOCATED BELOW THE BASE FLOOD ELEVATION IN FLOOD ZONE V SHALL BE CONSTRUCTED TO BE BREAK-AWAY WALLS IN ACCORDANCE WITH ASCE-24

NOTE: BUILDING MATERIALS USED BELOW THE BASE FLOOD ELEVATION SHALL BE FLOOD-RESISTANT

CLIMATE ZONE: **2A (MOIST, WARM & HUMID)**
MANUAL J CALCULATIONS BY OTHERS
DESIGN MEETS THE PRESCRIPTIVE ENERGY CODE REQUIREMENTS

INSULATION & FENESTRATION REQUIREMENTS BY COMPONENT

[SEE IRC 2012 SECTION 1102 FOR INFORMATION NOT SHOWN]

FENESTRN.	GLAZING	CEILING	WALLS	SUBFLOORS
U-FACTOR	SHGC	R-VALUE	R-VALUE	R-VALUE
0.40 (MAX.)	0.25 (MAX.)	R-38 (MIN.)	R-13 (MIN.)	R-13 (MIN.)

WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS

R301.2.1.2 PROTECTION OF OPENINGS: EXTERIOR GLAZING IN BUILDINGS LOCATED IN WINDBORNE DEBRIS REGIONS SHALL BE PROTECTED FROM WINDBORNE DEBRIS. GLAZED OPENING PROTECTION FOR WINDBORNE DEBRIS SHALL MEET THE REQUIREMENTS OF THE LARGE MISSILE TEST OF ASTM E 1998 AND ASTM E 1886 REFERENCED THEREIN. THE APPLICABLE WIND ZONES FOR ESTABLISHING MISSILE TYPES IN ASTM E 1998 ARE SHOWN IN FIGURE R301.2(4)(C). GARAGE DOOR GLAZED OPENING PROTECTION FOR WINDBORNE DEBRIS SHALL MEET THE REQUIREMENTS OF AN APPROVED IMPACT-RESISTING STANDARD OR ASNIGASMA 115.

EXCEPTION: WOOD STRUCTURAL PANELS WITH A MINIMUM THICKNESS OF 7/16 INCH AND A MAXIMUM SPAN OF 8 FEET SHALL BE PERMITTED FOR OPENING PROTECTION IN ONE AND TWO-STORY BUILDINGS. PANELS SHALL BE PRECUT AND ATTACHED TO THE FRAMING SURROUNDING THE OPENING CONTAINING THE GLAZED OPENING. ATTACHMENTS SHALL BE PREPARED AS REQUIRED FOR THE ANCHORAGE METHOD AND SHALL BE SECURED WITH THE ATTACHED FASTENERS. ATTACHMENTS SHALL BE DESIGNED TO RESIST THE COMPONENT AND CLADDING LOADS DETERMINED IN ACCORDANCE WITH TABLE R301.2(4)(C). ATTACHMENTS SHALL BE CORROSION-RESISTANT ATTACHMENT HARDWARE PROVIDED AND ANCHORS PERMANENTLY INSTALLED ON THE BUILDING OR FRAME WITH ACCORDANCE WITH TABLE R301.2.1.2 IS PERMITTED FOR BUILDINGS WITH A MEAN ROOF HEIGHT OF 35 FEET OR LESS WHERE LOCATED IN WIND ZONES 1 AND 2 IN ACCORDANCE WITH FIGURE R301.2(4)(C).

FASTENER TYPE	FASTENER SPACING (INCHES)		
	PANEL SPAN < 4 FEET	4 FEET < PANEL SPAN < OR = 8 FEET	8 FEET < PANEL SPAN < OR = 8 FOOT
#8 WOOD SCREWS	16"	10"	8"
#10 WOOD SCREWS	16"	12"	9"

COVER SHEET

COVER

CATHEY RESIDENCE
LOT 17, PONTLAKE ESTATES S/D
SLIDELL, LA
ST. TAMMANY PARISH

Cypress Engineering

FDN AREA 2323	AREA U. B. 3481	PROJECT No. 15-0295FE
DRAWN BY CE	CHECKED BY DAP	DRAWING

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NOTE:

- NO FIELD SUPERVISION PROVIDED UNDER THIS SEAL. IT IS UNDERSTOOD THAT THE AUTHORITY HAVING JURISDICTION (A.H.J) WILL INSPECT THE WORK.
- PLANS ARE TO BE USED FOR THE SPECIFIED SITE AND FOR A ONE TIME USE ONLY. REPRODUCTION OF THESE PLANS WITHOUT THE EXPRESS WRITTEN CONSENT OF CYPRESS IS STRICTLY PROHIBITED.
- NO CONSTRUCTION ADMINISTRATION PROVIDED UNDER THIS SEAL UNLESS SPECIFICALLY INCLUDED IN CONTRACT.
- ALL WORK/MATERIALS SHALL CONFORM TO LOCAL, STATE AND FEDERAL CODES. THE STRICTER PROVISIONS OF CODES, SPECIFICATIONS AND THESE NOTES AND NOTES ON INCLUDED DRAWINGS SHALL GOVERN. CYPRESS ENGINEERING DOCUMENTS HAVE BEEN PREPARED FOR USE BY KNOWLEDGEABLE & EXPERIENCED LICENSED GENERAL CONTRACTORS.
- CONTRACTOR SHALL COORDINATE STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER TRADES.
- DO NOT SCALE DRAWINGS. USE PRINTED DIMENSIONS OR REQUEST INFORMATION FROM ENGINEER.
- COMMUNICATION FROM CONTRACTOR TO ENGINEER SHALL BE IN WRITING.
- CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF MISSING INFORMATION OR QUESTIONS REGARDING DRAWINGS BY CYPRESS ENGINEERING. CONTRACTOR SHALL SUBMIT PROPOSED DEVIATIONS FROM PROJECT DOCUMENTS TO ENGINEER IN WRITING.

REVIEW AND SEAL OF PLANS BY THE ENGINEER IS FOR THE INTENT OF OBTAINING BUILDING PERMIT. ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE