DESIGNTECH ADHERES TO DESIGN CRITERIA OUTLINED IN THE 2021 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.

R301.2.1.1 DESIGN CRITERIA: MINIMUM DESIGN LOADS FOR BUILDINGS

R301.2.1.2 PROTECTION OF OPENINGS: WINDOWS IN BUILDINGS LOCATED IN WINDBORNE DEBRIS REGIONS SHALL HAVE GLAZED OPENINGS PROTECTED FROM WINDBORNE DEBRIS OR THE BUILDING SHALL BE DESIGNED AS A PARTIALLY ENCLOSED BUILDING IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. GLAZED OPENING PROTECTION FOR WINDBORNE DEBRIS SHALL MEET THE REQUIREMENTS OF THE LARGE MISSILE TEST OF AMERICAN SOCIETY OF TESTING AND MATERIALS REFERENCED THEREIN.

EXCEPTION: WOOD STRUCTURAL PANELS WITH A MINIMUM THICKNESS OF 7/16 INCH AND A MAXIMUM SPAN OF 8 FEET SHALL BE PERMITTED FOR 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.

R303.3 BATHROOM VENTILATION: BATHROOM MUST BE VENTED OUTSIDE AIR AT MINIMUM OF 50 CFM.

R307.2 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.

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

R311.4.3 LANDINGS AT DOORS: THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF EACH EXTERIOR DOOR. 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)

EXCEPTIONS:
1. WHERE A STAIRWAY OF TWO OR FEWER RISERS IS LOCATED ON THE EXTERIOR SIDE OF A DOOR, OTHER THAN THE REQUIRED EXIT DOOR, A LANDING IS NOT REQUIRED FOR THE EXTERIOR SIDE OF THE DOOR PROVIDED THE DOOR, OTHER THAN AN EXTERIOR STORM OR SCREEN DOOR DOES NOT SWING OVER THE STAIRWAY.
2. THE EXTERIOR LANDING AT AN EXTERIOR DOORWAY SHALL NOT BE MORE THAN 7 3/4 INCHES BELOW THE TOP OF THE THRESHOLD, PROVIDED THAT THE DOOR, OTHER THAN AN EXTERIOR STORM OR SCREEN DOOR, DOES NOT SWING OVER THE LANDING.
3. THE HEIGHT OF FLOORS AT EXTERIOR DOORS OTHER THAN THE EXIT DOOR REQUIRED BY SECTION R311.4.1 SHALL NOT BE MORE THAN 7 ¾ INCHES LOWER THAN THE TOP OF THE THRESHOLD. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A MINIMUM DIMENSION OF 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL.

R311.5.1 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 R311.5.8.

R311.5.2 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.

R311.5.3.1 RISER HEIGHT: THE MAXIMUM RISER HEIGHT SHALL BE 7 ¾ 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.

R311.5.3.2 TREAD DEPTH: 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 TREADS LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 10 INCHES MEASURED AS ABOVE AT A POINT FROM THE SIDE WHERE THE TREADS ARE NARROWER. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF 6 INCHES AT ANY POINT. WITHIN ANY FLIGHT OF STAIRS, THE GREATEST WINDER TREAD DEPTH AT THE 12 INCH WALK LINE SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH.

R311.5.6 HANDRAILS: HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS.

R311.5.6.1 HEIGHT: HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING, SHALL NOT BE LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES .

R311.5.6.2 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 ½ INCHES BETWEEN THE WALL AND THE HANDRAILS.

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

R312.2 GUARD OPENING LIMITATIONS: REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREAS, BALCONIES AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES WHICH DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES OR MORE IN DIAMETER.

R313.2 LOCATION (SMOKE ALARMS): 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 IF 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 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 THE CODE AND THE HOUSEHOLD FIRE-WARNING EQUIPMENT PROVISIONS OF NFPA 72.

R313.3 CARBON MONOXIDE DECTECTORS.
CARBON MONOXIDE SHALL BE INSTALLED OUTSIDE OF EACH SLEEPING AREAS IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

R314.5.3 & R314.5.4 ATTICS AND CRAWLSPACES: WITHIN ATTICS AND CRAWLSPACES, WHERE ENTRY IS MADE ONLY FOR SERVICE OF UTILITIES, FOAM PLASTICS SHALL BE PROTECTED AGAINST IGNITION.

R319 PROTECTION AGAINST DECAY
1. LOCATION REQUIRED IN AREAS SUBJUSTED TO DECAY DAMAGE AS ESTABLISHED BY TABLE R301.2 (1), THE FOLLOWING LOCATION SHALL REQUIRE THE USE OF AN APPROVED SPECIES AND GRADEOF LUMBER, PRESSURE TREATED IN ACCORDANCE WITH AWPA C1, C2, C3, C4, C9, C15, C18, C22, C23, C24, C28, C31, C33, P1, P2, P3, OR DECAY-RESISTANT HEARTWOOD OF REDWOOD, BLACK LOCUST, OR CEDARS.

R320 PROTECTION AGAINST TERMITES
1. TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDED APPLIED TO WOOD, OR OTHER APPRIOVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMITCIDE). UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREAMENT, A CERITFICATE OF COMPLIANE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY LICENSED PEST CONTROL COMPANY.

R321.1 PREMISES IDENTIFICATION: APPROVED NUMBERS OR ADDRESSES SHALL BE PROVIDED FOR ALL NEW BUILDINGS IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.

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.

R403.1.6 FOUNDATION ANCHORAGE: ANCHOR BOLT SHALL BE 5/8" X 10" WITH 3" X 3" X 1/8" WASHERS. THEEY WILL BE SPACED 18" O.C. AND WITHIN 12" OF CORNERS. MINIMUM EMBEDMENT IS 7". THE WALL MUST BE ANCHORED TO THE PLATE BY STRAPS THAT GO AROUND THE BOTTOM OF THE SILL PLATE AND UP THE STUD. THIS IS TO BE DONE EVERY OTHER STUD AT 16" CENTER. EACH STUD THAT IS STRAPPED AT THE BOTTOM WILL ALSO BE STRAPPED ACROSS IS DOUBLE TOP PLATE.

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.

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 MANUFACTURERS RECOMMENDATIONS OR WHERE THE EFFECTS OF SUCH ALTERATIONS ARE SPECIFICALLY CONSIDERED IN THE DESIGN OF THE MEMBER BY A REGISTERED DESIGN PROFESSIONAL.

R602.6 DRILLING AND NOTCHING STUDS: DRILLING AND NOTCHING OF STUDS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
1. 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 A SINGLE STUD WIDTH.
2. 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 MANUFACTURES 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.

R602.8 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 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 THAT OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF RUN. ENCLOSED SPACES BETWEEN STAIRS SHALL COMPLY WITH SECTION R314.8.
4. 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.
5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES, SEE SECTION R1001.16.
6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION.

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.

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 MANUFACTURERS 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.

N1101.2 COMPLIANCE (ENERGY EFFICIENCY): COMPLIANCE SHALL BE DEMONSTRATED BY EITHER MEETING THE REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE OR MEETING THE REQUIREMENTS OF THIS CHAPTER. CLIMATE ZONES FROM FIGURE N1101.2 OR TABLE N1101.2 SHALL BE USED IN DETERMINING THE APPLICABLE REQUIREMENTS FROM THIS CHAPTER.

N1101.3 IDENTIFICATION: MATERIALS, SYSTEMS AND EQUIPMENT SHALL BE IDENTIFIED IN A MANNER THAT WILL ALLOW A DETERMINATION OF COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THIS CHAPTER.

N1101.4 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.

N1101.5 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 N1015(1) AND N1101.5(2). THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF 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).

N1101.8 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.

N1102.4 AIR LEAKAGE: BUILDING ENVELOPE SHALL BE SEALED FROM AIR LEAKAGE WITH CONSIDERATION TO MOISTURE CONTROL.

E4102.1 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.

IRC M 1503.4 MAKEUP AIR REQUIRED

EXHAUST HOOD SYSTEMS CAPABLE OF 400 CUBIC FEET PER MINUTE (0.19M 3/s SHALL BE MECHANICAL OR NATURALLY PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH NOT LESS THAN ONE DAMPER. EACH DAMPER SHALL BE A GRAVITY DAMPER OR AN ELECTRICALLY OPERATED DAMPER THAT AUTMATICALLY OPENS WHEN THE EXHAUST SYSTEM OPERATES. DAMPERS SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION OR ANY OTHER DUCTS NOT CONNECTED TO THE DAMPER BEING INSPECTED, SERVICED, REPAIR, OR REPLACED.

PLANS ARE FOR THE INTENT OF OBTAINING BUILDING PERMIT. ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE. OWNER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS.

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE ATTACHED PLANS/SPECIFICATIONS COMPLY WITH ALL BUILDING CODE REQUIREMENTS, AND THAT DESIGNTECH IS NOT ADMINISTERING THE WORK.

IT IS RECOMMENDED THAT THE OWNER/CONTRACTOR CONSULT WITH THEIR INSURANCE COMPANY PRIOR TO CONSTRUCTION FOR ADDITIONAL REQUIREMENTS OR RECOMMENDATIONS

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IRC 2021
WFCM
IECC 2021
NEC 2020
140 MPH WIND SPEED
EXPOSURE: C
DESIGN MEETS THE PRESCRIPTIVE ENERGY CODE REQUIREMENTS
CLIMATE ZONE: 2
MANUAL J CALCULATIONS BY OTHERS

RESIDENCE IS LOCATED IN A WINDBORNE DEBRIS PROTECTION REGION

THERMAL COMPONENT CRITERIA
(U-FACTOR AND R-VALUE)
(MAX. SHGC = 0.25 FOR GLAZING)

MAXIMUM GLAZING (FENESTRATION) U-FACTOR	MIN. INSULATION R-VALUE		
	CLGS.	WALLS	FLOORS
0.40	R-38	R-13	R-13

R-8 DUCT INSULATION.
ATTIC ACCESS INSULATED
INSULATE HOT & COLD WATERLINE IN UNCONDITIONED ATTIC AND CRAWSPACES.

FURR OUT 2x RAFTERS AS REQUIRED FOR BATT INSULATION AT CATHEDRAL CEILINGS OR USE SPRAYED FOAM INSULATION IF ACCEPTABLE.

WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS IF REQUIRED

WHERE WIND SPEED EXCEEDS 120 MPH OR 110 MPH WITHIN 1 MILE OF THE GULF COASTAL MEAN HIGH WATER LINE, THE STRUCTURE IS CONSIDERED TO BE LOCATED WITHIN THE WIND BORN DEBRIS REGION

WINDOWS IN BUILDINGS LOCATED IN WINDBORNE DEBRIS REGIONS SHALL HAVE GLAZED OPENINGS PROTECTED FROM WINDBORNE DEBRIS. WOOD STRUCTURAL PANELS WITH A MIN. THICKNESS OF 7/16" AND A MAX. 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.

FASTENER TYPE	FASTENER SPACING		
	PANEL SPAN < 4 FOOT	4 FOOT PANEL SPAN < 6 FOOT	6 FOOT PANEL SPAN < 8 FOOT
2-1/2" #6 WOOD SCREWS	16"	12"	9"
2-1/2" #8 WOOD SCREWS	16"	16"	12"

SPECS

PLANS FOR:
DOUG & TINA FARGE
LOT 5, POINT CARR S/D.
ST. TAMMANY PARISH, LA

DesignTech
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St. Tammany Parish, LA.
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DATE 1-15-25

CODE	LIVING	AREA U. B.	INDEX
B4	3029	3479	13192

DESIGNED BY	FINISHED BY	CHECKED BY
DMH	JTB	DMH

A-0

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