

R 905.3.8 FLASHING

AT THE JUNCTURE OF ROOF VERTICAL SURFACE, FLASHING AND COUNTERFLASHING SHALL BE PROVIDED IN ACCORDANCE WITH THIS CHAPTER AND THE MANUFACTURER'S INSTALLATION INSTRUCTION AND, WHERE OF METAL, SHALL BE NOT LESS THAN 0.019 INCH (.05mm) (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL. THE VALLEY FLASHING SHALL EXTEND NOT LESS THAN 11 INCHES (274mm) FROM THE CENTERLINE EACH WAY AND HAVE A SPLASH DIVERTER RIB NOT LESS THAN 1 INCH (25mm) IN HEIGHT AT THE FLOW LINE FORMED AS PART OF THE FLASHING. SECTIONS OF FLASHING SHALL HAVE AN END LAY OF NOT LESS THAN 4 INCH (102mm). FOR ROOF SLOPES OF THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25 PERCENT SLOPE) AND GREATER, VALLEY FLASHING SHALL HAVE A 36 INCH WIDE (914mm) UNDERLAYMENT RUNNING THE FULL LENGTH OF THE VALLEY, IN ADDITION TO OTHER REQUIRED UNDERLAYMENT SHALL BE SOLID-CEMENTED TO THE ROOFING UNDERLAYMENT FOR SLOPES LESS THAN SEVEN UNITS VERTICAL IN 12 UNITS HORIZONTAL (58 PERCENT SLOPE) OR BE OF SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET.

- R 703.4 FLASHING**
- APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN SUCH A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURE FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:
1. EXTERIOR WINDOW AND DOOR OPENINGS, FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE.
 2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALL WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COTINGS.
 3. UNDER AND AT THE ENDS OF MASONRY WOOD OR METAL COTINGS AND SILLS.
 4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.
 5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.
 6. AT WALL AND ROOF INTERSECTIONS.
 7. AT BUILT-IN GUTTERS.

ATTIC, ROOF VENTILATION
NM 2015 IRC R806

1. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/16" MIN TO 1/4" MAX OPENINGS.

R806.2 THE MINIMUM NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT REDUCTION OF THE TOTAL AREA TO 1/300 IS PERMITTED, PROVIDED THAT AT LEAST 40% AND NOT MORE THAN 50% OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET 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 1/200 WHEN A VAPOR BARRIER HAVING A TRANSMISSION RATE NOT EXCEEDING 1 PERM IS INSTALLED ON THE WARM IN WINTER SIDE OF THE CEILING.

R806.3 WHERE EAVE OR CORNICE VENTS ARE INSTALLED INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MIN. OF A 1" INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT.

SOLAR REFLECTIVITY;

ALL FLAT ROOF AREAS TO BE COATED WITH "SOLAR MASTIC" TM ULTRA PREMIUM COOL ROOF COATING OR EQUIVALENT IN WHITE OR DESERT TAN, PER ENERGY CODE.

CRITICAL NOTE;

ALL WINDOWS, DOORS, AND SKYLIGHTS TO BE CAULKED, GASKETED, WEATHERSEAL-STRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL, SUITABLE FILM OR SOLID MATERIAL.

AIR LEAKAGE

402.4.1 BUILDING THERMAL ENVELOPE.

THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHER STRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL SUITABLE FILM OR SOLID MATERIAL.

1. ALL JOINTS, SEAMS AND PENETRATIONS.
2. SITE BUILT WINDOWS, DOORS, AND SKYLIGHTS
3. OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THEIR RESPECTIVE JAMBS AND FRAMING.
4. UTILITY PENETRATIONS.
5. DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE.
6. KNEE WALLS.
7. WALLS AND CEILINGS SEPARATING A GARAGE FROM CONDITIONED SPACES.
8. BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS.
9. COMMON WALLS BETWEEN DWELLING UNITS.
10. OTHER SOURCES OF INFILTRATION.

AREA 2			
VENT	QUANTITY	NET FREE AREA	TOTAL SQUARE INCHES
C	5	144	720
GRAND TOTAL 720/144 = 5			

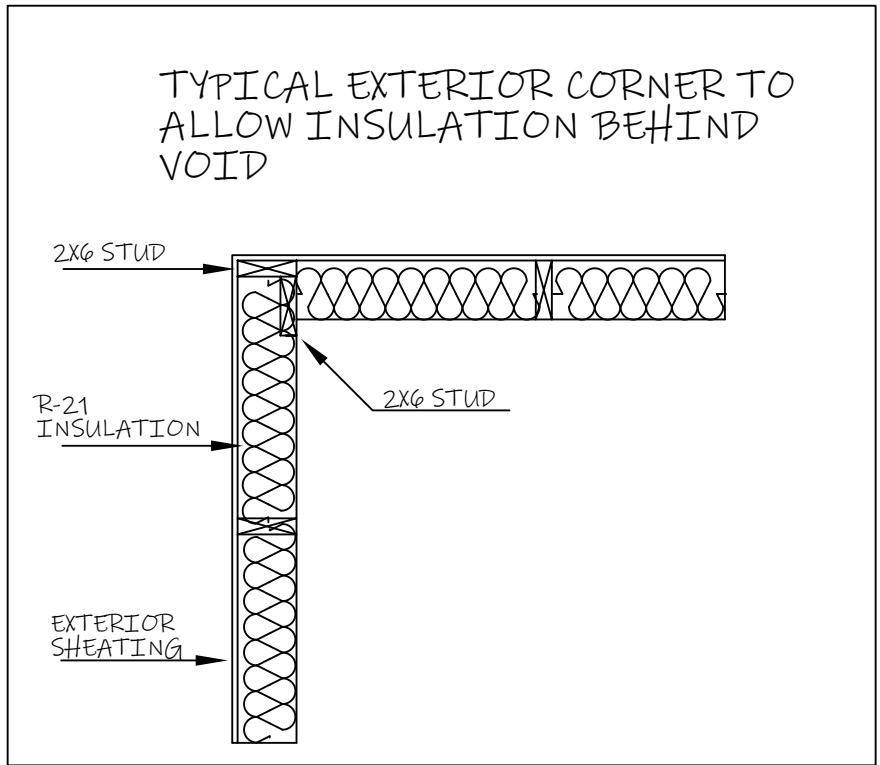
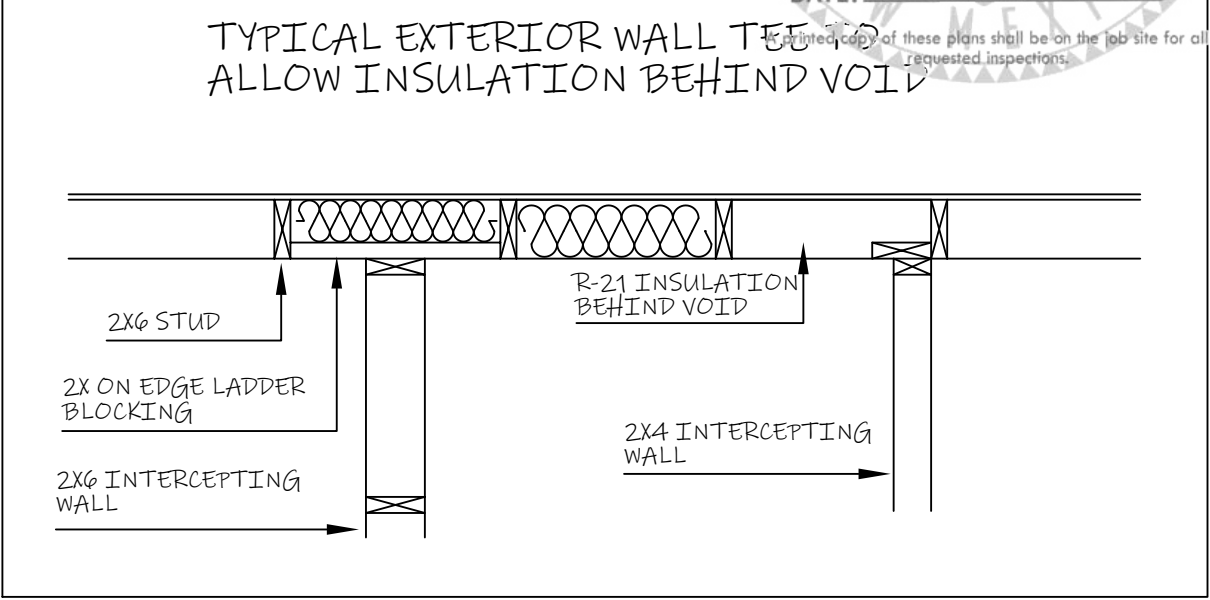
AREA 1			
VENT	QUANTITY	NET FREE AREA	TOTAL SQUARE INCHES
A	15	65	975
B	21	11	231
GRAND TOTAL 1206/144 = 8.4			

BUILDING THERMAL ENVELOPE TABLE 402.1.1	
301.1 CLIMATE ZONE 4 ALBUQUERQUE, NM	
1. FENESTRATION U-FACTOR	0.04
2. SKYLIGHT U-FACTOR	0.06
3. SOUTH, EAST, WEST FACING GLAZED FENESTRATION	LOW E GLASS REQUIRED
4. CEILING R-VALUE	R-49
5. WOOD FRAME WALL R-VALUE	R-12 + R-5 INSULATED SHEATH
6. MASS WALL R-VALUE	R-5
7. FLOOR R-VALUE	R-21
8. BASEMENT WALL R-VALUE	R-10 / R-13
9. SLAB R-VALUE & DEPTH	R-10 / 2FT. HEATED SLAB R-5 / 2FT. UNHEATED SLAB
CRAWL SPACES R-VALUE	R-10 / R-13

SKYLIGHTS

NM IRC 2015 R308.6.8 CURBS OF SKYLIGHTS. ALL UNIT SKYLIGHTS INSTALLED IN A ROOF WITH A PITCH FLATTER THAN 3/12 SHALL BE MOUNTED ON A CURB EXTENDING AT LEAST 4" ABOVE THE PLANE OF THE ROOF UNLESS OTHERWISE SPECIFIED IN THE MANUFACTURERS INSTALLATION INSTRUCTIONS. SKYLIGHT U-FACTOR 0.60

ATTIC ACCESS 2015 SHALL BE PROVIDED IN ACCORDANCE WITH SEC. R807.1 OF IRC TO HAVE A MINIMUM 22" X 30" OPENING AND 30" MIN. UNOBSTRUCTED HEAD ROOM. ATTIC TO HAVE LIGHT AND SWITCH



AREA 3			
VENT	QUANTITY	NET FREE AREA	TOTAL SQUARE INCHES
C	4	144	576
GRAND TOTAL 576/144 = 4			

VENTING REQUIRED/PROVIDED								
AREA	TOTAL AREA	PITCHED OR FLAT	VENTING REQUIRED			VENTING PROVIDED		
			LOW	HIGH	TOTAL	LOW	HIGH	TOTAL
#1	2276	$2276/300 = 7.6$	3.8		7.6	4.2		8.4
#2	622	$622/150 = 4.1$	4.1			5		
#3	530	$530/150 = 3.5$	3.5			4		

- (A) 8" X 16" SOFFIT VENT LOWMANCO 65 SQUARE INCHES
- (B) SHINGLE AND METAL RIDGE LO-OMNIROLL LOWMANCO 11 SQUARE INCHES PER LINER FT.
- (C) 135 - 20"X23"X7.75" LOWMANCO 144 SQUARE INCHES

VENTILATION/INSULATION PLAN

SCALE; 3/16"=1'-0"

2 G DESIGN

4520 LOWER TERRACE CIRCLE NE
ALBUQUERQUE, NM. 87111
505-362-2009

APRIL 5, 2021

VENTILATION/INSULATION

AKASH & NIKI PATEL

CUSTOM HOME

ALBUQUERQUE, NM.

SHEET

21

OF 10 SHEETS