

City of Albuquerque

ADU/ CASITA DRAWING SET



550 SF UNIT

Unit Floorplan Area:

Heated Area: 550 SF
Storage Area: 0 SF
Porch/Patio Area: 0 SF
Total Area: 550 SF

Applicable Code Editions:

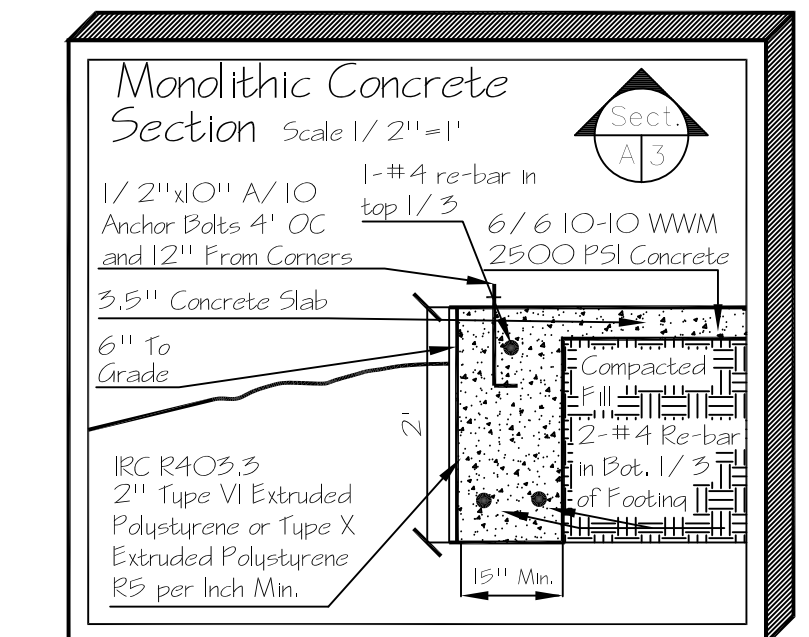
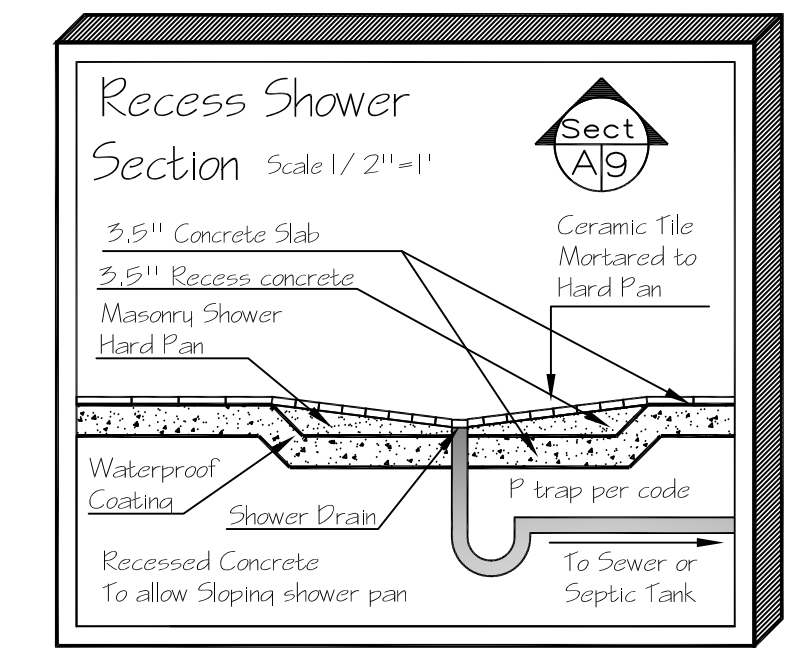
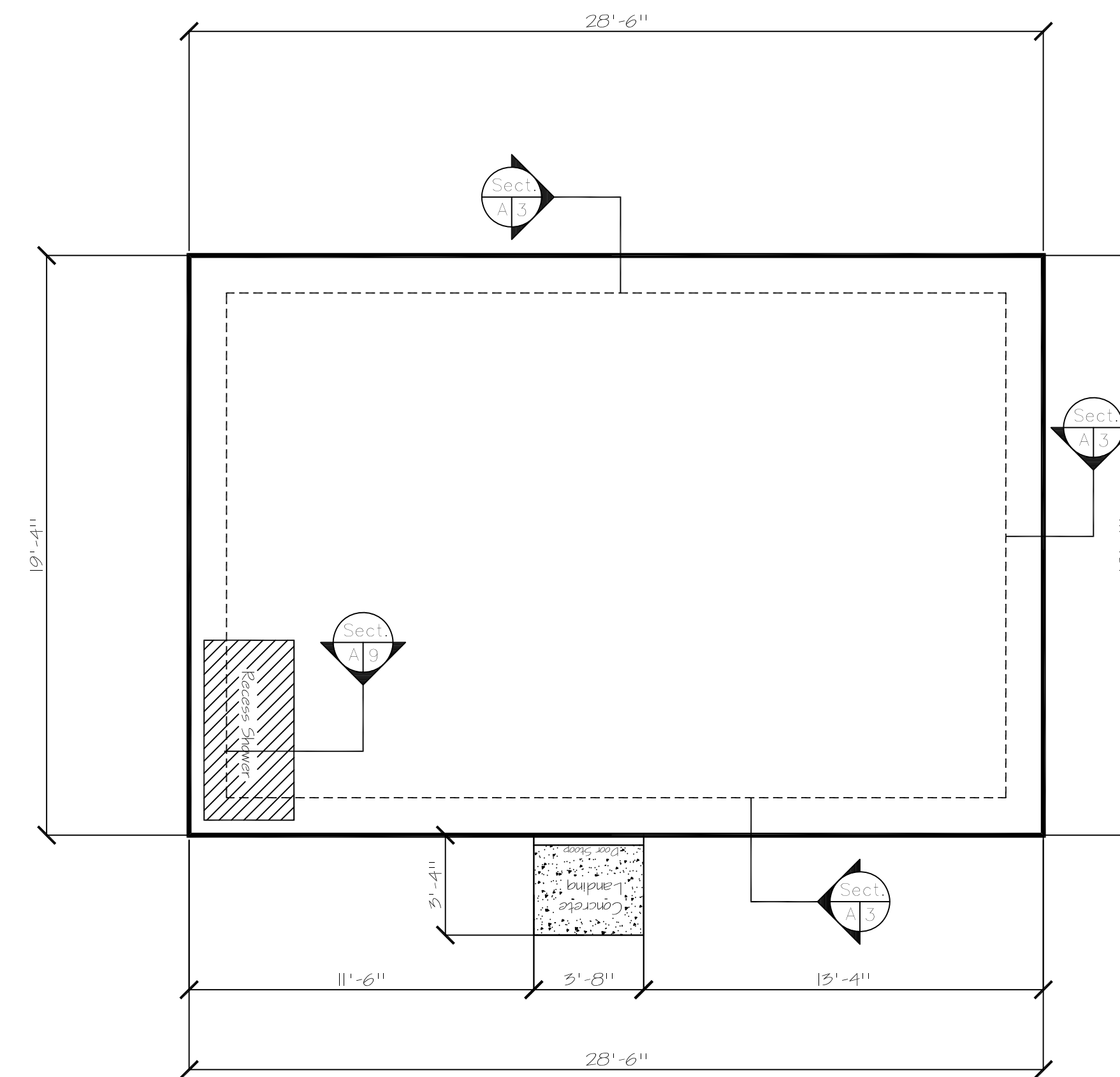
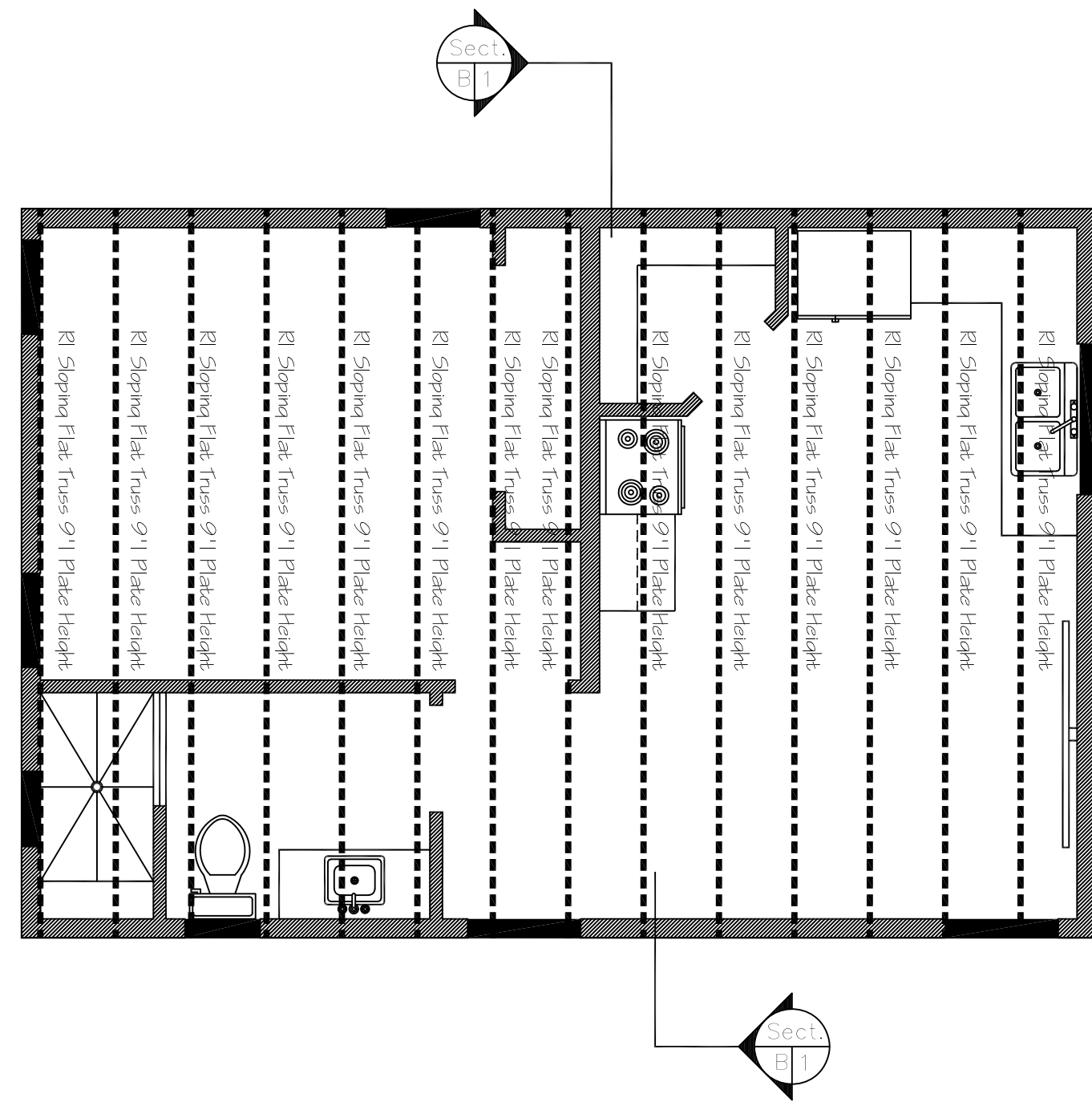
2021 NM Residential Building Code
2020 NM Electrical Code
2021 NM Mechanical Code
2021 NM Plumbing Code

IMPORTANT NOTICE: This plan set complies with all applicable technical construction codes in the City of Albuquerque, New Mexico, in effect on December 20, 2023. No warranty or representation of any type is made or intended, implicitly or explicitly, regarding compliance with codes in other jurisdictions.

LAST REVISION DATE: 12/20/2023

SHEET	CITY OF ALBUQUERQUE
1 OF 6	ABQ ADU Model 550 PITCHED ROOF

All Structural steel rebar and re-mesh to be spaced in bottom 1/3 of slab/ footing w/ plastic highchairs



Note:
An Electrode Encased By at Least 2" of Concrete, Located Within and Near the Bottom of a Concrete Foundation or Footing, That is in Direct Contact with the Earth, Consisting of at Least 20' of one or more electrically conductive Steel Reinforcing Re-bar of Not less than 1/2" Diam.

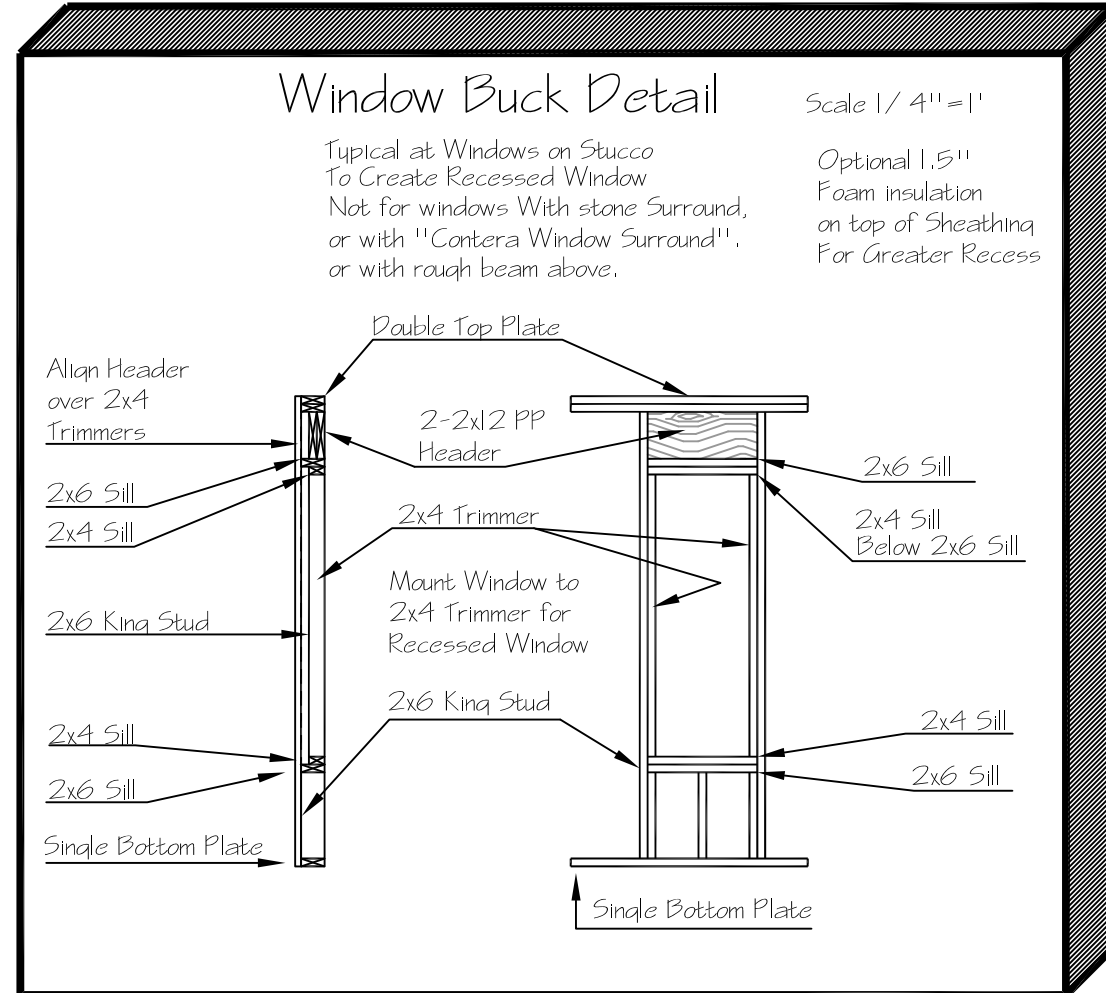
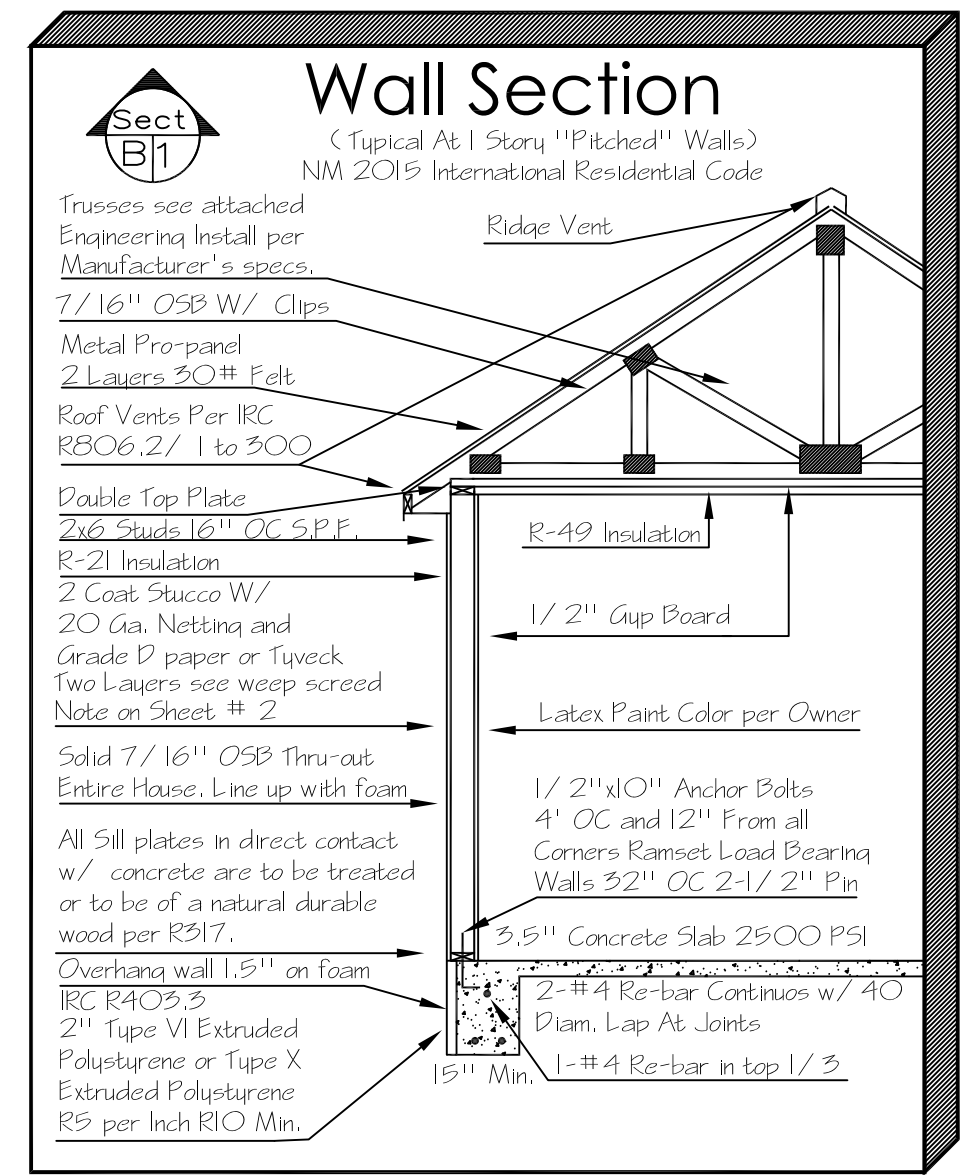
Typical at All Exterior Footings
18" Depth below grade, 6" Above Grade. 24" Total Footing from top of slab to bottom of footing.

R401.3 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 to drain surface water away from foundation walls. The grade shall fall a minimum of 6" within the first 10 feet.

R311.4.3
Landings at Doors Leading outside. Note: Min., 3' Landing Outside Of all Doors Leading Outside Of Building. See Concrete Plan For Exact Locations.

Concrete Notes
2021 NM Residential Building Code

- Concrete Strength: 2500 PSI Min. 3/2" Minimum Thick Slab on Compacted Fill.
- All Footings Min. 15" Wide, 22" Thick with a Excavation Depth of 18" West of Sandoz Mountains, 21" East of Mountains at All Exterior Walls.
- All CMU Walls For Foundation To Be 8" x 8" x 16" Min. With Joint Reinforcement 16" OC Vertical, 48" OC Max.
- Anchoring: Min. 1/2" x 10" Anchor Bolts @ 4' OC Max. and Within 12" From End Of Plate. Powder Actuated Fasteners @ 24" OC Max. and Within 12" From End Plate For Interior Bearing Sole Plates Not Permitted For CMU Stem Walls.
- Re-bar: 2-#4 Re-bar Continuous at All Footings with Min. 40 Diam. Lap At Joints. Reinforcement Steel Secured in Place. Min. 3" Coverage.
- Interior Load Bearing Footings: 12" Min Width x 12" Min. Depth at All Interior Footings.
- All Adobe Wall Footings To Be 2" Wider Than Wall, 4" Above Floor Stabilized Bond Beam Min. 6" x 10" With 2#4 Re-bar. (Radiant Heated Slabs R15)
- Foundation Insulation: 2" x 24" R.I.O. At Exterior Perimeter Of Heated Space and at Garage/ House Wall. Wood Floors Require a Minimum OTR-21 Insulation. Insulation Shall Extend From Top Of Slab 24" Down, or continue Horizontally Under Slab For a Total Of 24".
- Under Floor Clearance: 18" To the Bottom Of Wood Joists and 12" To the Bottom of Wood Girders. Provide a Min. Under Floor Access of 18" x 24" Provide cross Ventilation of Minimum 1 Sq. Ft. Per 150 Sq. Ft. of Under Floor Area Excavations and Foundations: To Conform to Chapter 18 and 33: Ascending and Descending Slopes, Cuts, Cut/ Fills, All Footings Must Extend a Minimum of 12" into Undisturbed Soil or a Soil Investigation Report and a Report of Satisfactory Placement Of Fill Shall Be Provided To Permit Office For Review and Approval.



Roof Sheathing Note:
Attach Roof Sheathing w/ 8d Nails @ 6" O.C. on Edges & 12" o.c. Field. Typical unless Noted Otherwise.

Critical Note:
All Trusses, TJI's or 2x Joists or rafters To Have Simpson H2.5A Hurricane Straps For uplift at top plate to Rafter/ Joist Connection, Exterior Walls and Load Bearing Walls only.

Electrical Panel Note:
At Electrical Panel, Place (2) Full Height Studs on Either side of Blockout. Wall Top plates to be continuous over box Blockout and support studs. Max. Blockout opening width is 16". Actual R.O. Width is 14.5".

Fire Blocking
Fireblocking: In combustible construction, fireblocking shall be provided to cut off both vertical and horizontal concealed draft openings 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 and parallel rows of studs or staggered studs, as follows:
1.1. Vertically at the ceiling and floor levels.
1.2. Horizontally intervals not exceeding 10 feet.

Framing Notes:
2021 NM Residential Building Code

All Headers at Exterior Walls to be Doubled 2x12 or a Single 4x12 P.P.-975 E-I Unless Otherwise Noted.

Minimum 1.5" Bearing at All Headers and Beams to 6" Width. All Headers 6" and Plyer to Have Doubled Trimmers at Both Bearing Points.

All Trusses 24" OC Unless Noted on Plans. All "Flat" Roof's and "Flat Trusses" To have Positive Drainage Min. 1/4" PLF Slope.

All Interior Load Bearing Walls to be Spaced 16" OC to 10'1" Plate Height.

Solid Bearing Points under all Beams, if Beam is on Second Floor Continue Bearing Between Trusses and First Floor To Solid Concrete Footing.

All Micro lams to be Nailed 12" O.C. With 4- #10 Nails All 4 Member Micro lams and 4 Member Trusses to be Bolted 16" O.C. with 1/2" x 8" Bolts w/ 1-1/4" Washers.

All Sill plates in direct contact w/ concrete are to be treated or to be of a natural durable wood per R317.

All Post's in Direct Contact with Concrete to have Post Base with Min. 1" Air Gap or 1-1/2" Treated Plate Ramset to Concrete with Post Nailed on Top.

All Splices in Bottom Plates at All Load Bearing Walls to be Shot w/ 2-1/2" Ramset Powder Actuated pins. Also 12" From All Corners Unless an Anchor Bolt is Present. Ramset all Interior Load Bearing Walls 32" O.C. With 2-1/2" Pins w/ Washers.

Frame Plan

Scale 1/4" = 1'

Concrete

Scale 1/4" = 1'

SHEET	CITY OF ALBUQUERQUE
3 OF 6	ABQ ADU Model 550
	PITCHED ROOF

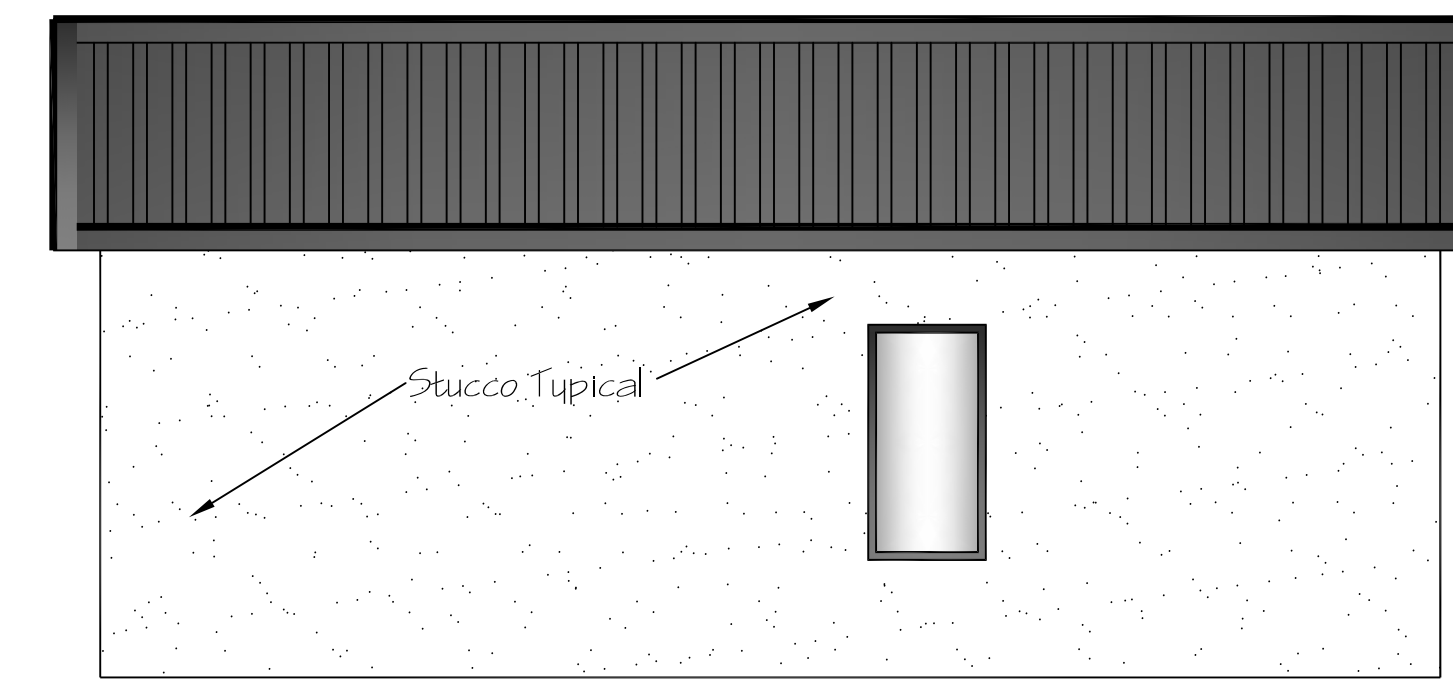
Lighting Legend NM 2015 IRC	
	Mini Recess Light Caulk and seal to ceiling Energy Star Rated, Energy Star Bulb
	Bulb-in Recess Caulk and seal to ceiling Energy Star Rated, Energy Star Bulb
	Full Recess Light Caulk and seal to ceiling Energy Star Rated, Energy Star Bulb
	Wall Sconce or Light Bar Energy Star Rated, Energy Star Bulb
	Track Light Caulk and seal to ceiling Energy Star Bulb
	Exhaust Fan Energy Star Rated, to have Occupancy Sensor or automatic-timer switch 20 cfm cont.
	Ceiling Fan w/ Reverse Switch separate light switch, Energy Star rated w/ energy star Rated Bulbs.
	Pendant Lighting Energy star Rated w/ energy star Bulbs
	Motion Light w/ Motion Sensor and Photo light call Detector

Note:
An Electrode Encased By at Least 2" of Concrete, Located Within and Near The Bottom of a Concrete Foundation or Footing That is in Direct Contact with the Earth, Consisting of at Least 20' of one or more electrically conductive Steel Reinforcing Re-bar of Not less than 1/2" Diam.

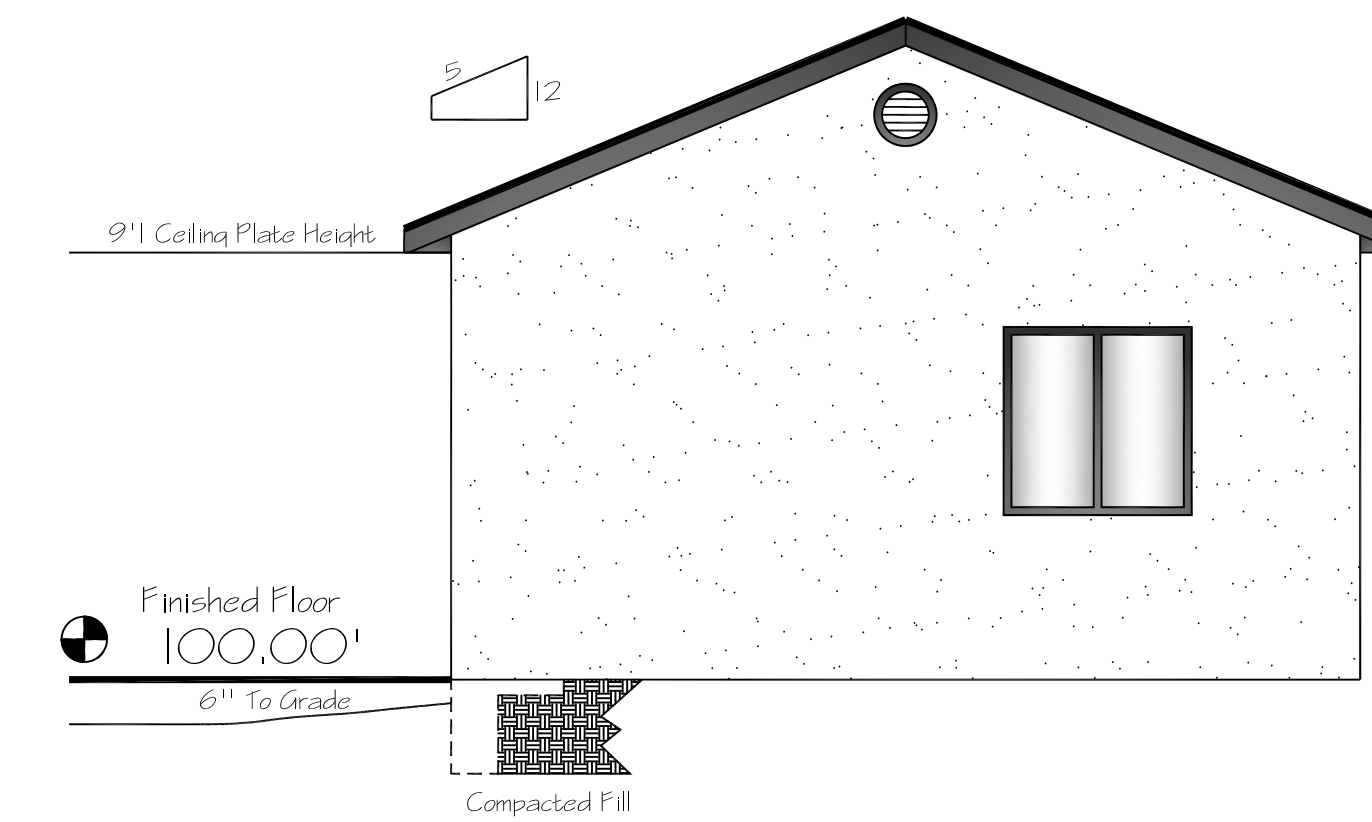
Smoke Detector/Carbon Monoxide Detector
Smoke Detector to have Carbon Monoxide detection as well as smoke Detection. All smoke detectors to be hard wired together.
This symbol on plan is for smoke/ carbon Monoxide Detector.

Electrical Notes:
All Outlets Shall Be 12" From Finish Floor unless Otherwise Noted.
All Outlets in Kitchen, Utility Room, and Garage to Be 44" above Floor and To Be Ground Fault Interrupt Protected.
Copper Wire To Be Used Throughout House and all Exterior light fixtures, outlets, and switches to be Weatherproof, and Ground Fault Interrupt.
All Bathroom Outlets To Be Ground Fault interrupt device Equipped.
Swamp Coolers To have High-Low Switch Settings and To be Located per Owner, Mech. Contractor Locations.
All Smoke Detectors To Have Battery Back-up and To be Hardwired Together in a loop with an Audible Alarm. Smoke Det. to have Carbon Monoxide Warning as well.

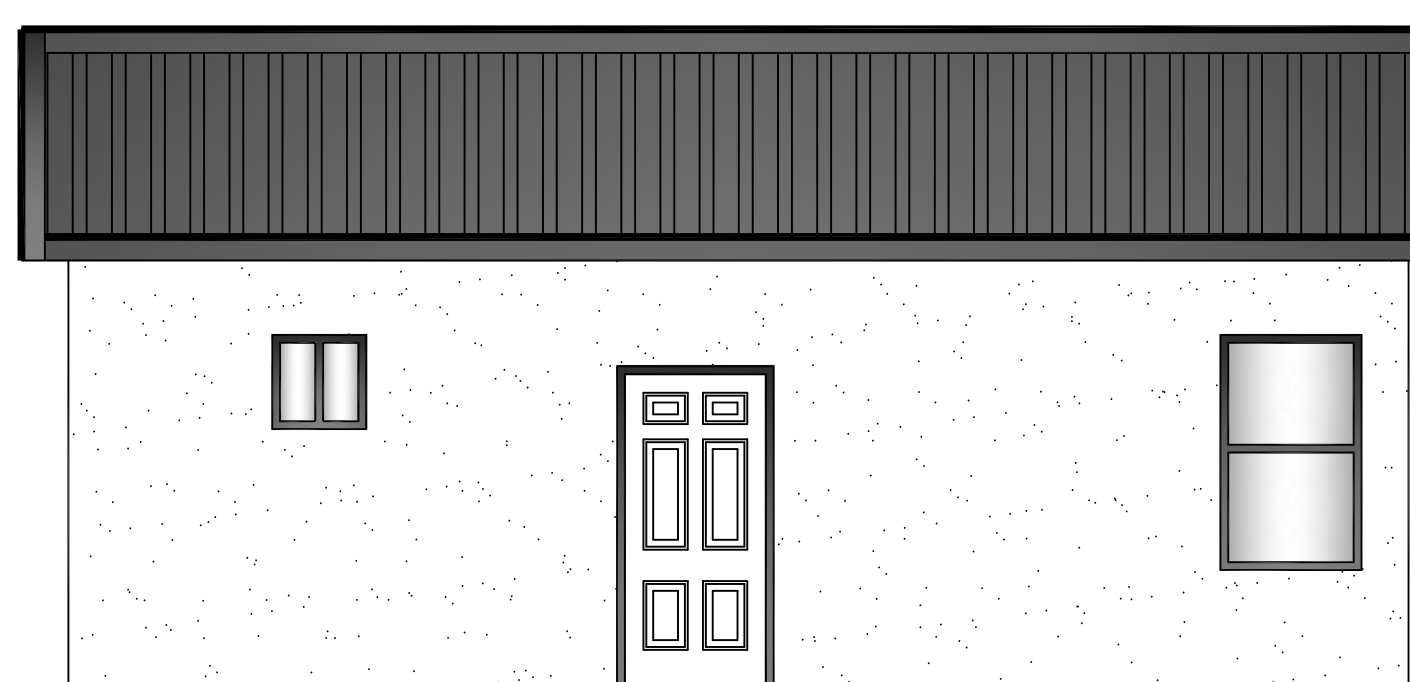
If Required Whirlpool Switch to be located not less than 5' from tub or to have an air activated switch.
All Ceiling Fans to have variable speed control.
1" Lead-in pipe from well or public water supply. Minimum 100' from well to septic system.
Hose Bib to be Located at front, Back, sides per Owners Locations.
All Plumbing to be permitted and Executed as per Uniform Plumbing Code, Ice Maker Rough-in to be located behind Refrigerator.
Electrical to be Grounded to Copper water Lines as Well as with a grounding rod. See Attached note For Grounding specs to Foundation Re-bar.



Back Elevation



Left Elevation

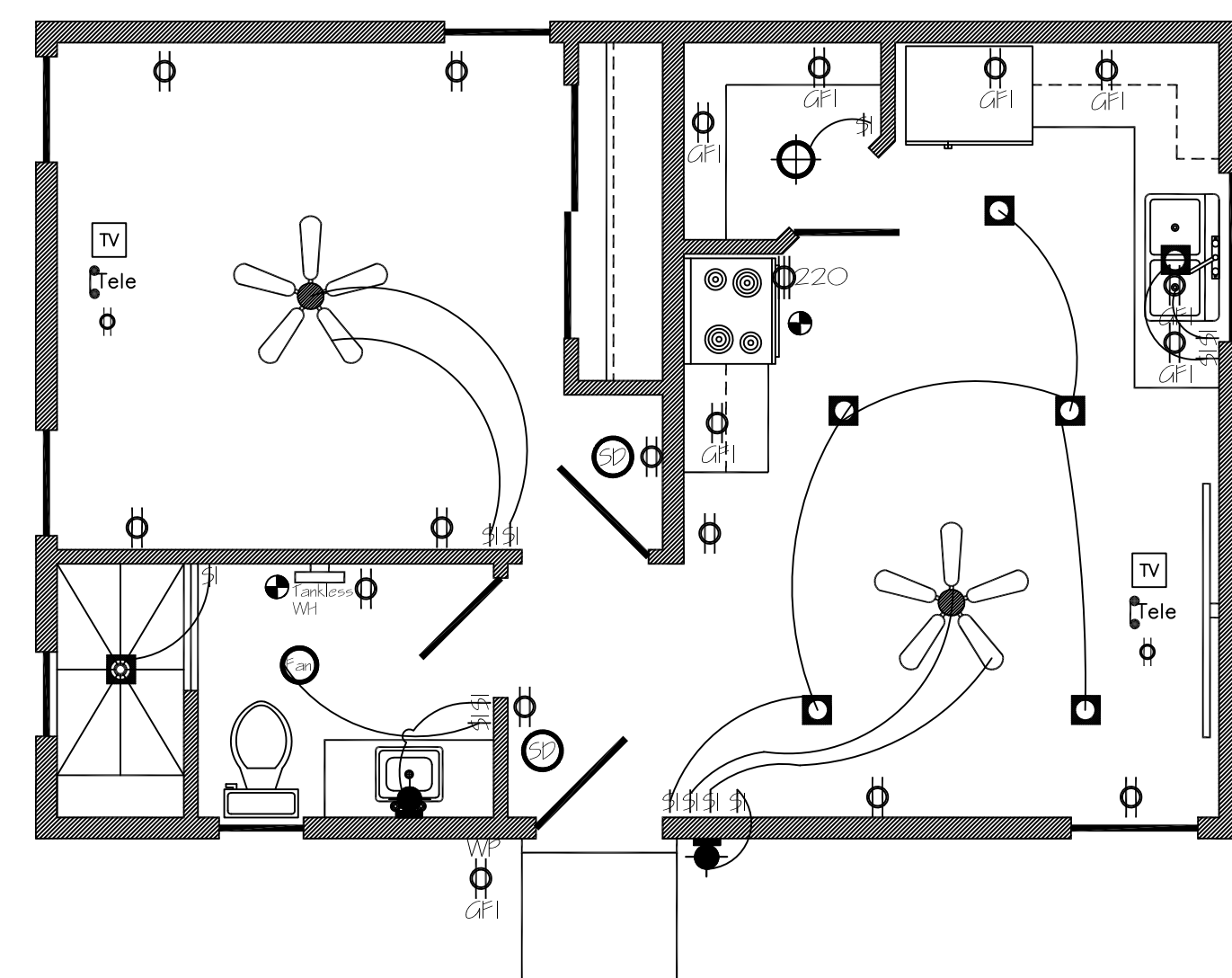


Front Elevation

Elevations

Scale 1/4" = 1'

Critical Notes:
Provide Electrical for Refrigerated Air Units Locations per Owner HVAC Contractor.
Units to have Back up Heat as well as Cooling Size per UMC/ LPC for Altitude and Square Footage of House.
Plumber To Be Responsible For Condensation Line From Condenser.



Plug Switch Legend NM 2015 IRC	
	Wall Plug
	Ground Fault Interrupt Counter Plug
	Waterproof Ground Fault Interrupt Exterior Plug
	220 Volt 30 amp plug
	Natural Gas or Propane
	Telephone Connection plug
	Cable TV or Satellite Outlet
	Programmable Thermostat one for Each Heating Unit
	One Way Operated Switch
	Two Way Operated Switch
	Three Way Operated Switch
	Timer Operated Switch
	Motion Sensor Switch
	Floor Plug

Note: 2
Arc-Fault Circuit-Interrupter Protection Shall Be Provided in All Rooms, 15 and 20 Amp Receptacles and all Branch Circuits to be Protected by Arc-Fault Circuit-Interrupter's. All Receptacles to be tamper resistant.

Water Heater Specs.
1. Storage Type Stored
2. Capacity _____
3. Manufacturer _____
4. Model # _____
5. Efficiency Rating _____
6. Energy Star Rated? Yes
7. WH w/ vertical pipe risers to have a heat trap on both inlet & outlet of the Water Heater or is equipped 2/ an integral heat trap

Electrical Panel Note:
At Electrical Panel, Place (2) Full Height Shields on Either side of Blockout. Wall Top plates to be continuous over box Blockout and support studs.
Max. Blockout opening width is 16".
Actual R.O. Width is 14.5".

All electrical work must be accordance with the 2020 NM Electrical Code

Electrical

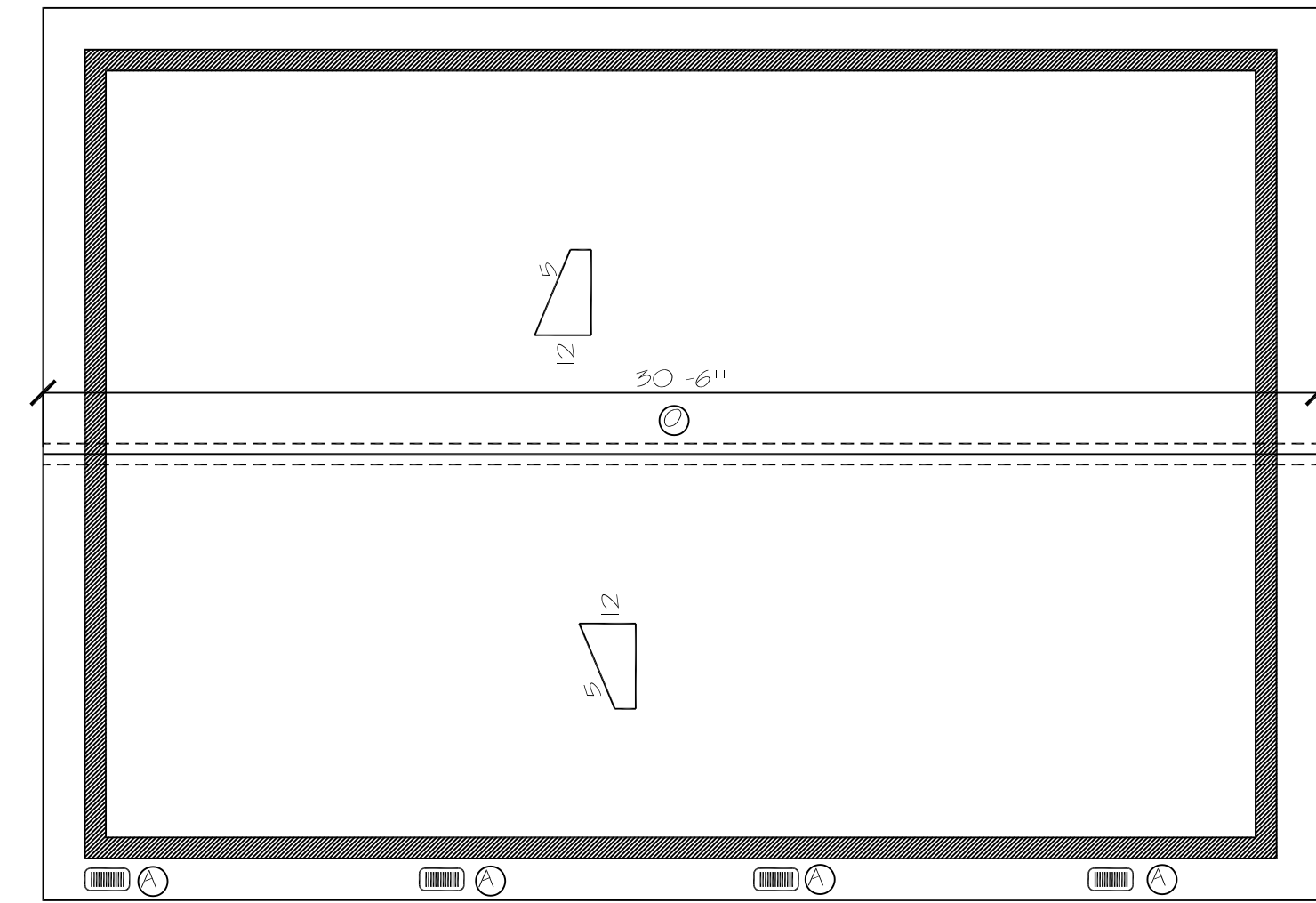
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SHEET	CITY OF ALBUQUERQUE
4 OF 6	ABQ ADU Model 550
	PITCHED ROOF

R 905.5.8 Flashing
 At the juncture of roof vertical surface, flashing and counterflashing shall be provided in accordance with this chapter and the manufacturer's installation instructions and, where of metal, shall be not less than 0.019 inch (.05 mm) (No.26 galvanized sheet steel) corrosion-resistant metal. The valley flashing shall extend not less than 11 inches (279mm) 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 lap of not less than 4 inch (102 mm). For roof slopes of three units vertical in 12 units horizontal (25-percent slope) and greater, valley flashing shall have a 3/8 inch-wide (9.14 mm) 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 structural 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-resistant 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 copings.
 3. Under and at the ends of masonry, wood or metal copings 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
 2021 NIMBPC 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 1/200 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 1/300 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.



Mass # 1	Vent.	Quantity	Net Free Area	Total Square Inches
	Ⓐ	4	65	260
	Ⓑ	30	11	330
	Grand Total	590	144	4.0

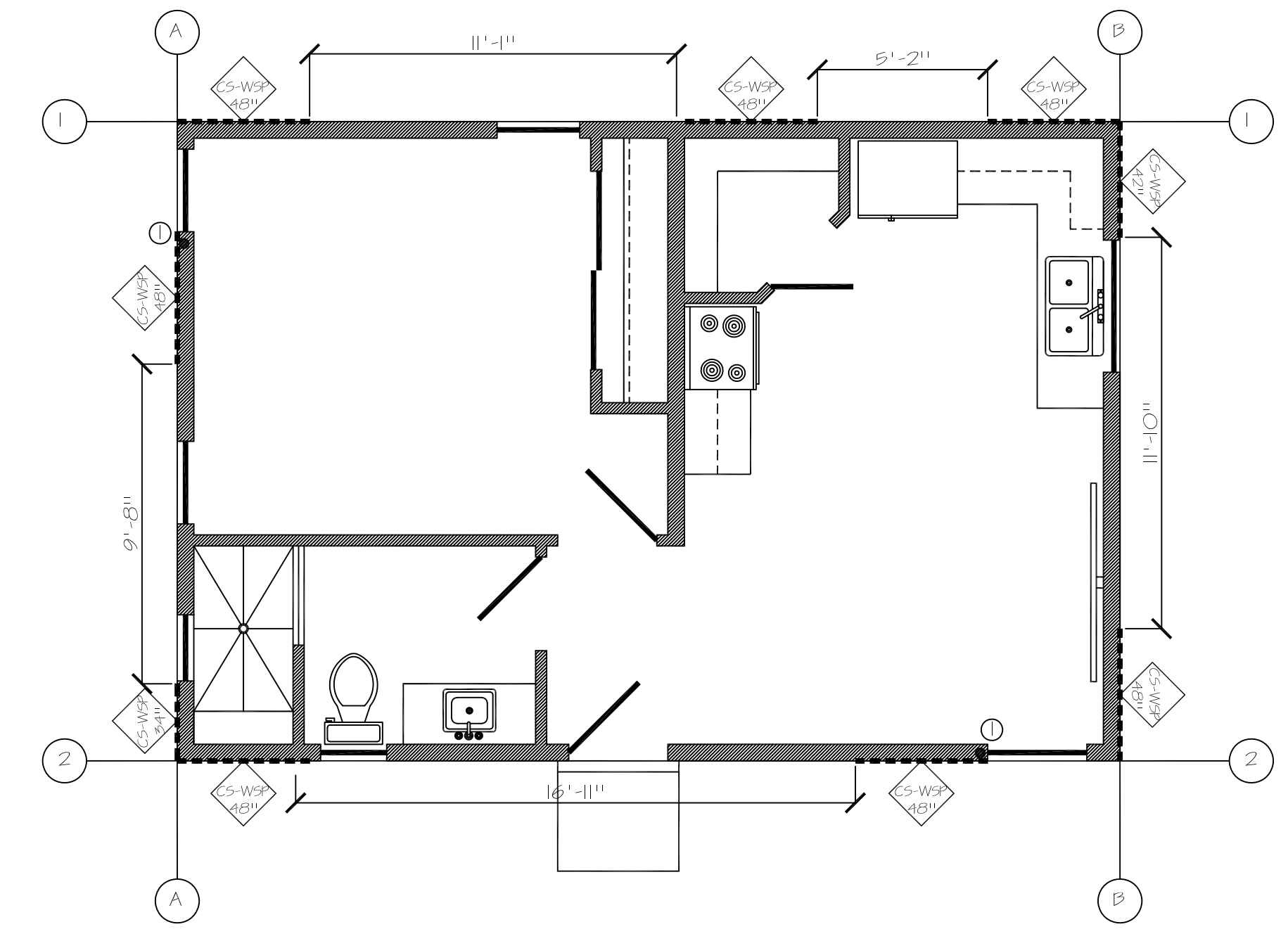
Attic Access 2021 Shall Be Provided in Accordance With Sec. R807.1 of IRC to Have a Minimum 22" x 30" Opening and 30" Min. Unobstructed Head Room. Attic to Have Light and Switch

Key	Vent Type	Brand	Net Free Area
Ⓐ	8" x 16" Soffit Vent	Lomanco	65 Square Inches
Ⓑ	Soffit vent strip	Timberline	12 Square Inches per foot
Ⓒ	18" x 24" Gable vent	Lomanco	180 Square Inches
Ⓓ	18" Round Gable vent	Mid America Inc.	26 Square Inches
Ⓔ	22" Round Gable vent	Mid America Inc.	54 Square Inches
Ⓕ	14" x 22" Arched Gable vent	Mid America Inc.	50 Square Inches
Ⓖ	8" x 16" Stucco Vent	CM Inc.	81 Square Inches
Ⓗ	14" x 18" Gable vent	Lomanco	56 Square Inches
Ⓘ	12" x 12" Gable Vent	Lomanco	106 Square Inches
Ⓚ	195 20" x 29" x 7.75" W/ Blind Screen	Lomanco	144 Square Inches
Ⓛ	VN 3030 21" x 21" W/ Blind Screen	C.J. Metal Products	420 Square Inches
Ⓜ	Tile Rake Vent TRV-1	Lomanco	15 Square Inches Per Linear Ft.
Ⓝ	Soffit vent strip	Timberline	12 Square Inches per foot
Ⓟ	O'Hagan	O'Hagan's, Inc.	72 Square Inches
Ⓡ	Shingle and Metal Rake Lo-Omnifit	Lomanco	15 Square Inches Per Linear Ft.
Ⓢ	TV-9 Tile Vent	Lomanco	56 Square Inches
Ⓣ	DA-4 Edge Vent	Lomanco	56 Square Inches
Ⓤ	140 Continuous Soffit Vent	Lomanco	88 Square Inches

Venting Required/Provided					
Mass # 1	Total Area	Pitched or Flat		Venting Provided	
		Pitched	Flat	Low	High
650	650/300 = 2.2	1.1/	1.1/	1.8/	2.2/
		2.2	2.2	4.0	4.0

Ventilation

Scale 1/4" = 1'



Hold downs Schedule		
Ⓐ	● D11ZZ	1829 lbs
Ⓑ	● D11ZZ-5092.5	2149 lbs
Ⓒ	● D11Z-5092.5	2079 lbs
Ⓓ	● M5157	1729 lbs

Table R602.10.4 Bracing Methods			
Bracing Method	Method Description	Connection Criteria	
		Fasteners	Spacing
WSP	Wood structural panel Min. thickness 5/8"	For exterior sheathing see Table R602.5(5) For interior sheathing see Table R602.5(1 or 2)	6" eaves 12" Field
GB	Gypsum board - Steele sided with finish material Min. thickness 5/8" or 3/4" Perforated Gypsum board - Double sided Min. thickness 5/8" or 3/4" Perforated	For more details on exterior braced wall sheathing see Table R602.5(1) IRC 2015 For interior gypsum board nail or screw size, see Table R702.5.5 IRC 2015	7" spacing at panel edges including top and bottom plates 7" Field
ABW	Alternate braced wall SDC A, B & C Alternate braced wall SDC D	See section R602.10.6.1	See section R602.10.6.1
PFH	Intermittent portal frame with hold-downs Min. thickness 2"	See section R602.10.6.2	See section R602.10.6.2
PFA	Intermittent portal frame at garage door openings Min. thickness 2"	See section R602.10.6.3	See section R602.10.6.3
CS-WSP	Continuous wood structural panel sheathing Min. thickness 5/8"	Exterior sheathing per Table R602.5(5) Interior sheathing per Table R602.5(1 or 2)	6" eaves 12" Field Varies by fastener
CS-PF	Continuous portal frame Min. thickness 2"	See Section R602.10.6.4	See Section R602.10.6.4
CS-A	Continuous sheathing - wood structural panel adjacent to garage door openings and supporting roof loads only	See Method CS-WSP	See Method CS-WSP

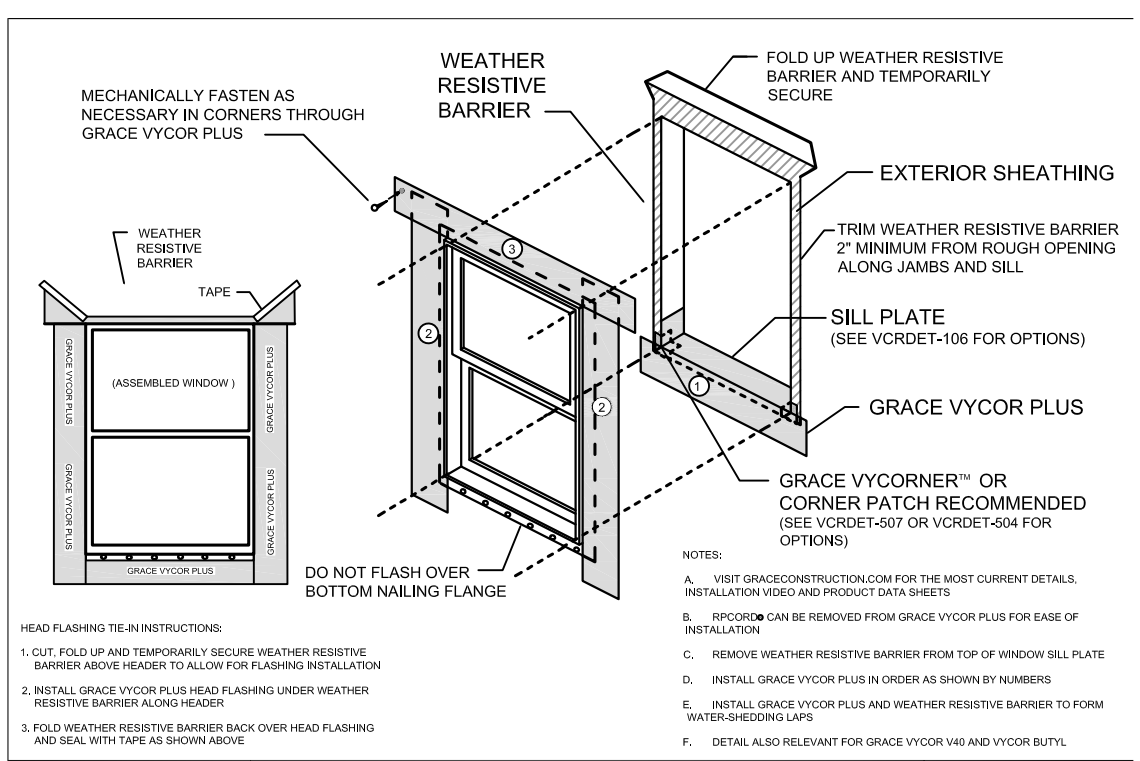
Wind Factor

IRC Table R602.10.3 (2)	IRC 2015	Numbered Wall Lines	Lettered Wall Lines
(1) Exposure Category		1.2	1.2
(2) Roof Eave to Ridge Height		1.0	1.0
(3) Wall Height		.95	.95
(4) Number of Braced Wall Lines		.00	.00
Wind Factor Total		(Multiply All)	(Multiply All)

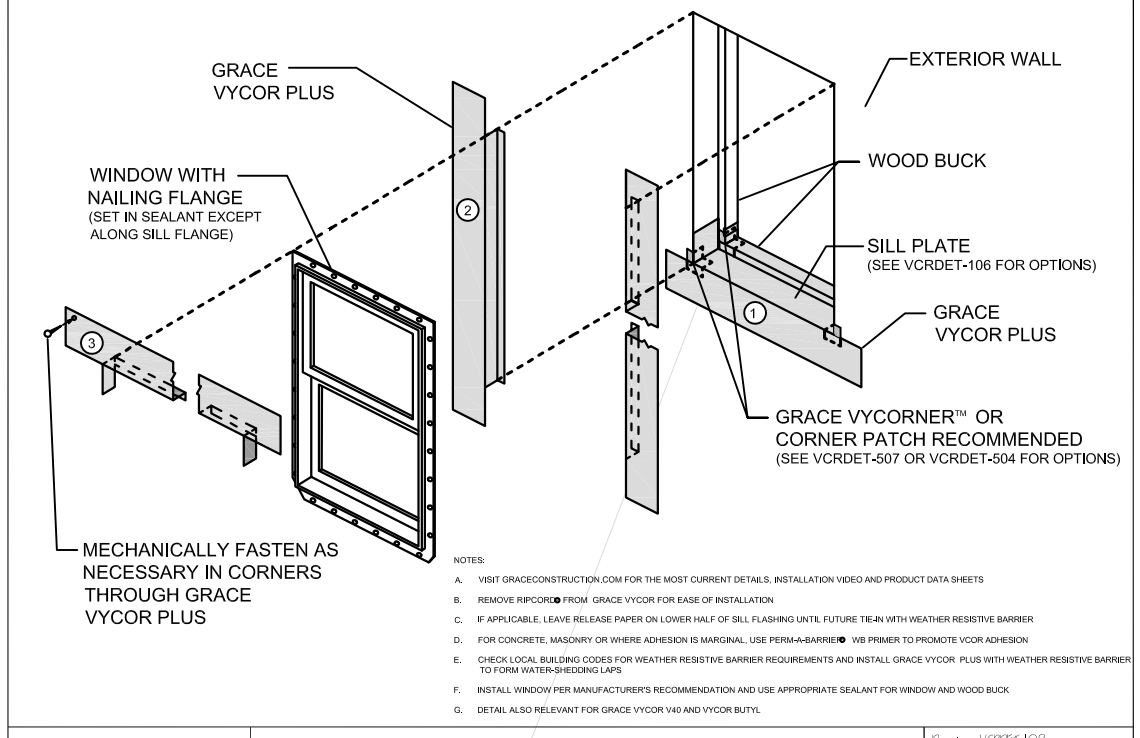
Wall Brace

Scale 1/4" = 1'

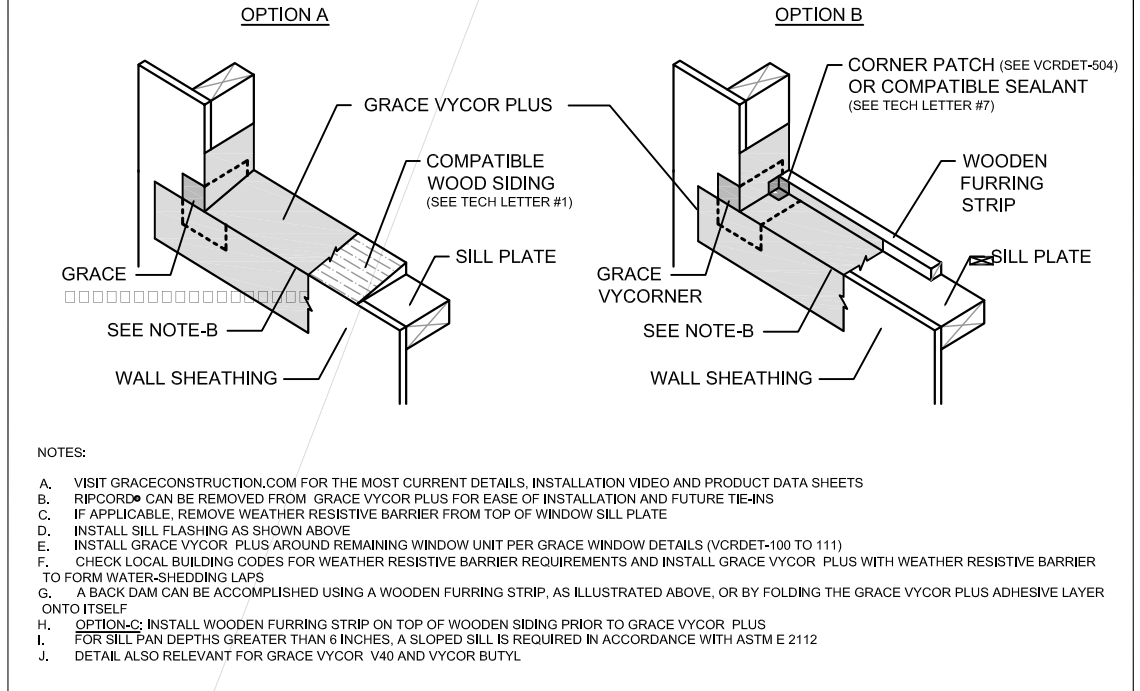
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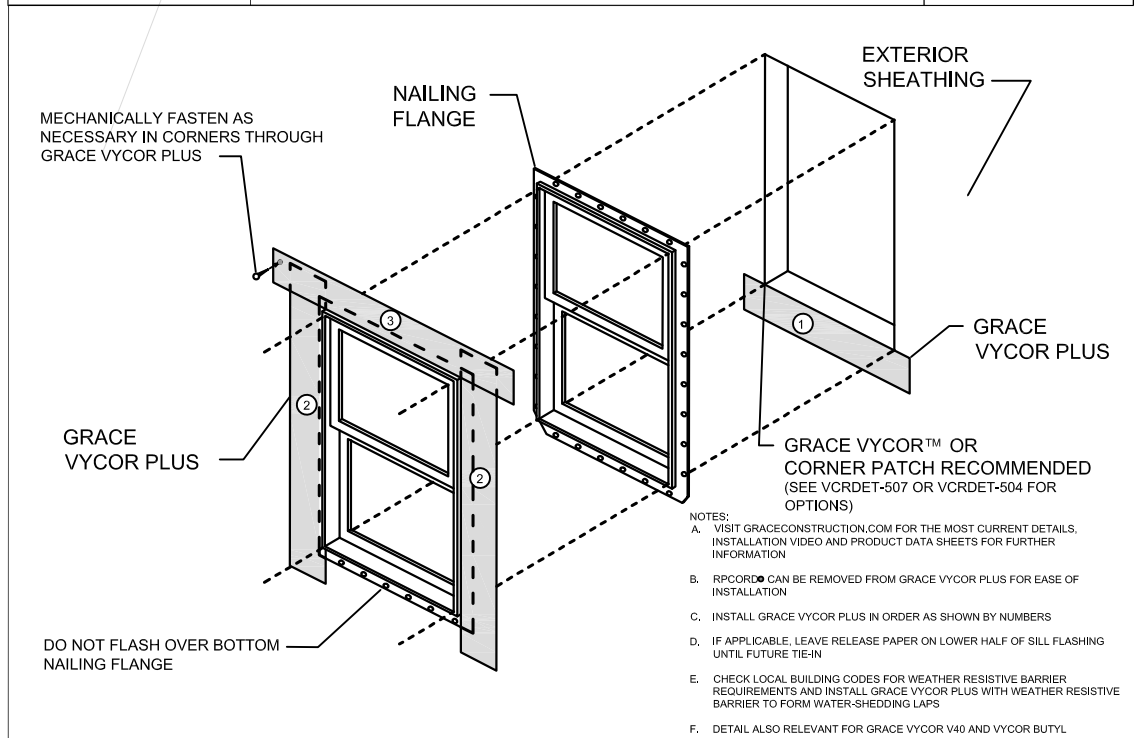
FLANGED WINDOW - OPTION 2
FLASHING INSTALLATION AFTER WEATHER RESISTIVE BARRIER
GRACE VYCOR PLUS SELF-ADHERED FLASHING



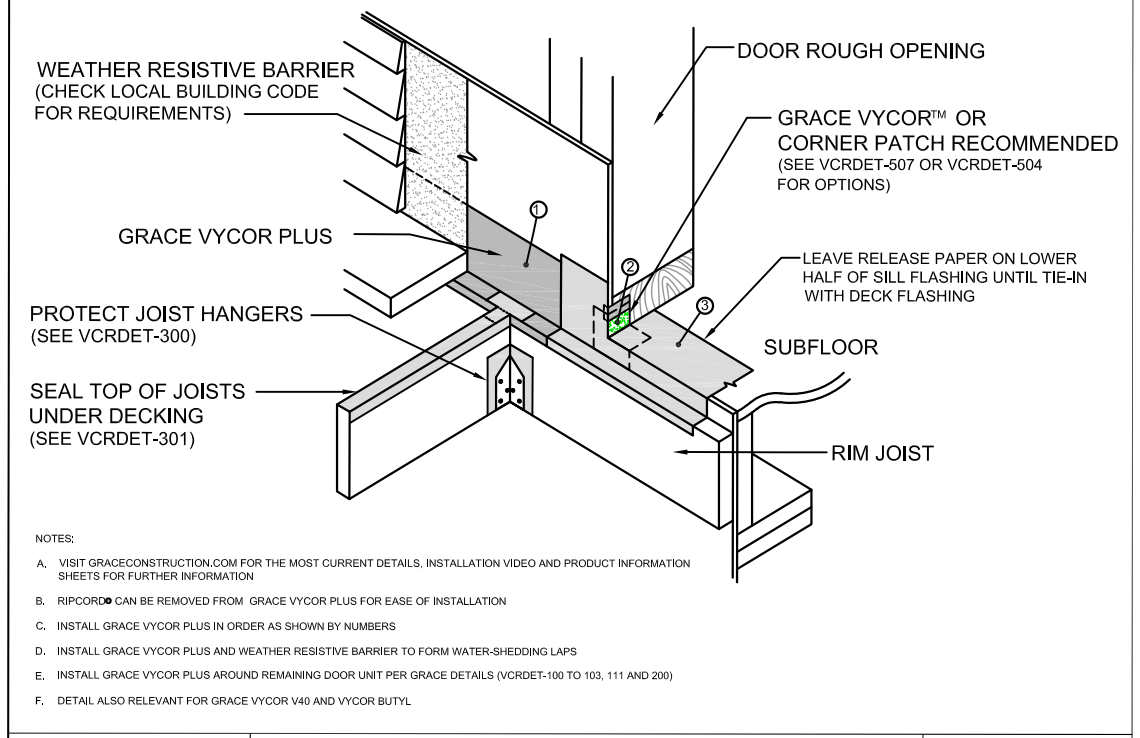
RECESSED WINDOW
GRACE VYCOR PLUS SELF-ADHERED FLASHING



WINDOW SILL PAN OPTIONS
GRACE VYCOR PLUS SELF-ADHERED FLASHING



FLANGED WINDOW - OPTION 2
AAMA RECOMMENDATION
GRACE VYCOR PLUS SELF-ADHERED FLASHING



EXTERIOR DOOR SILL CORNER
GRACE VYCOR PLUS SELF-ADHERED FLASHING

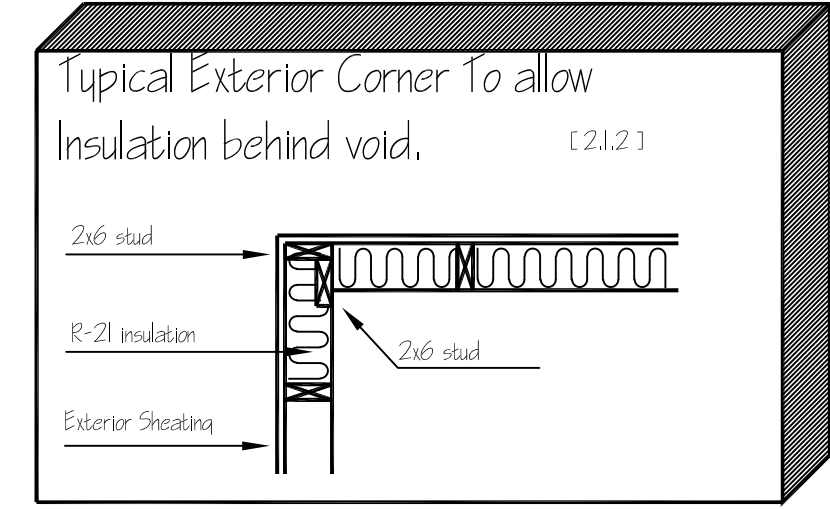
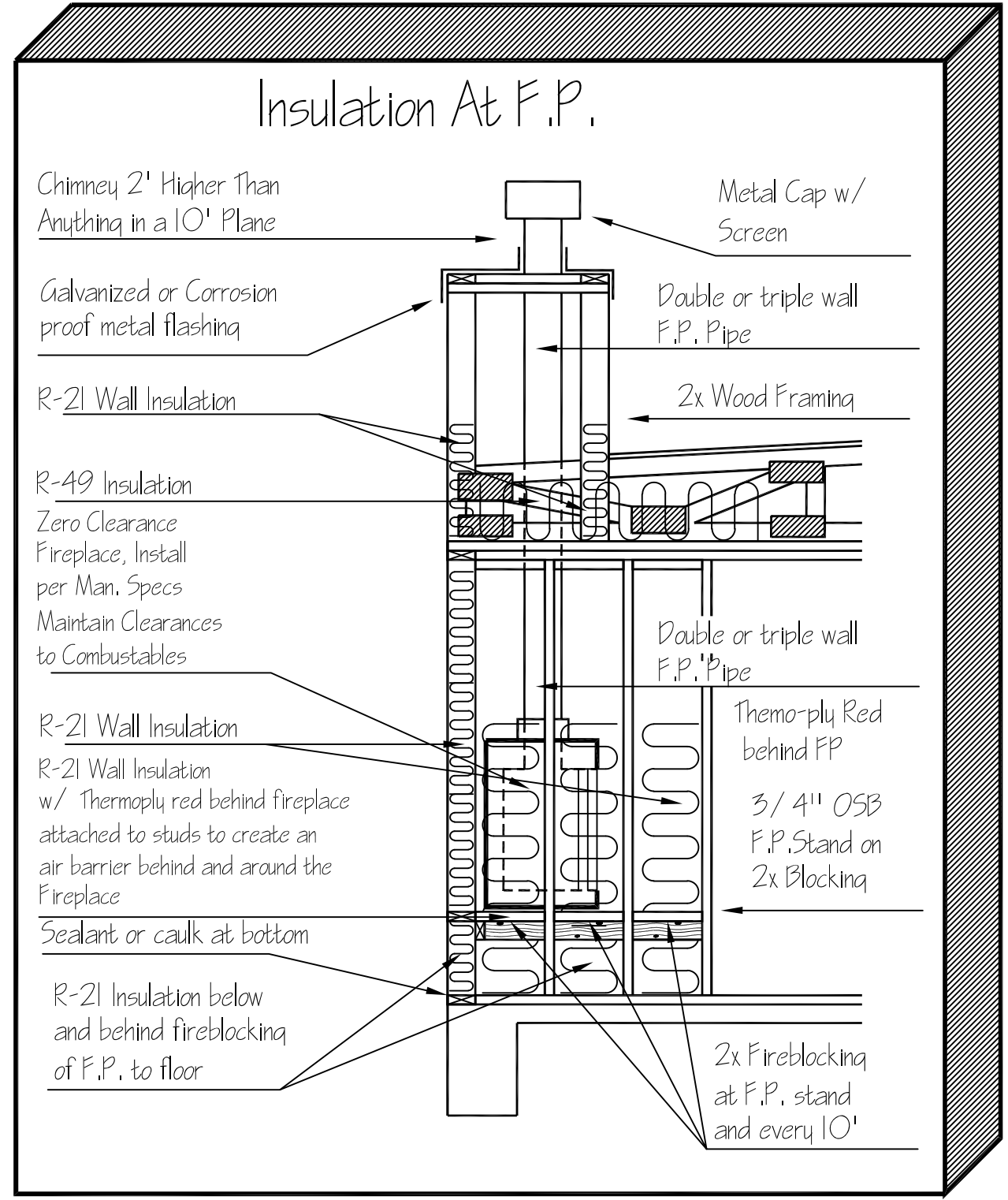
Air Leakage
Building Thermal Envelope

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, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.

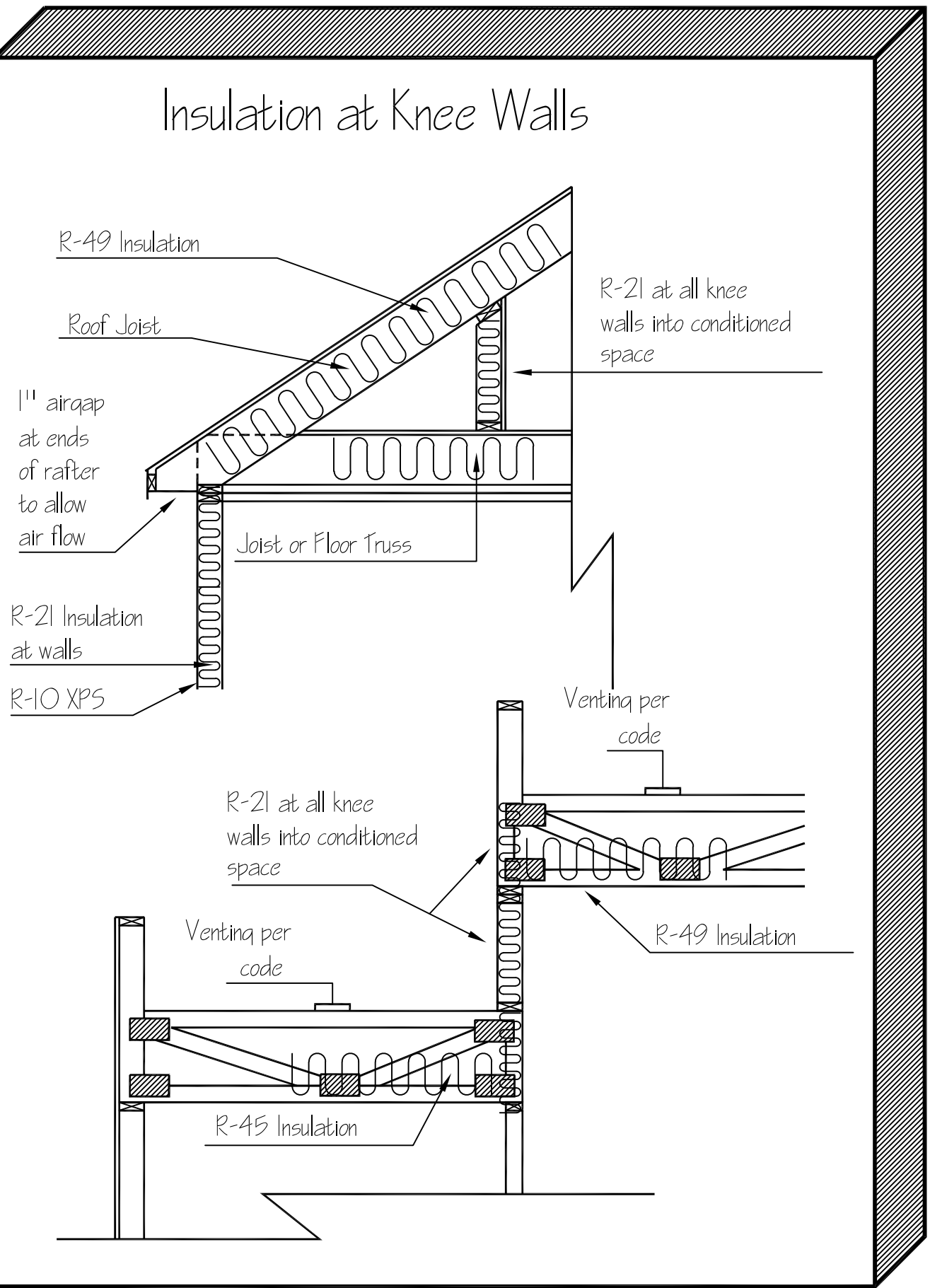
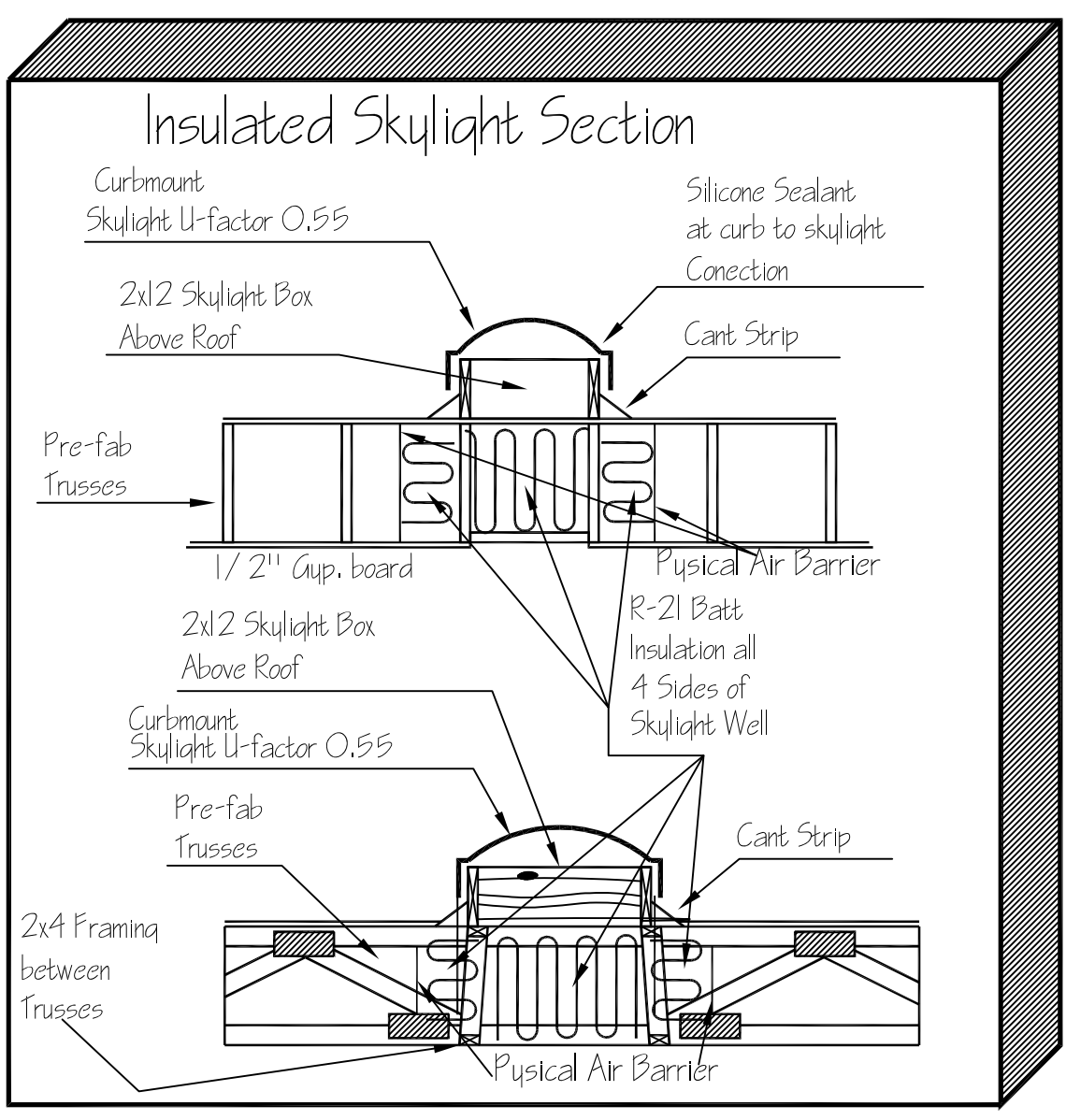
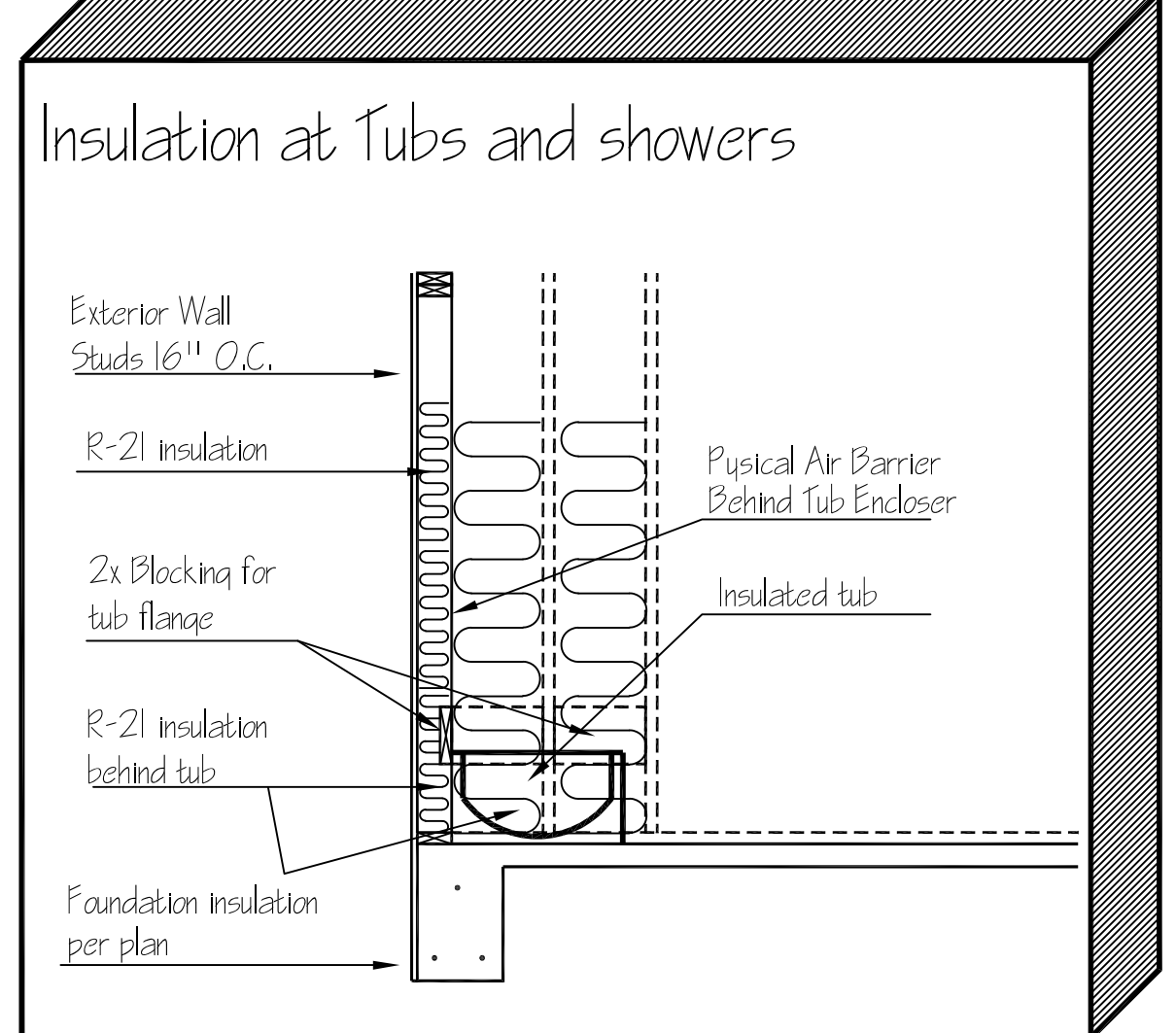
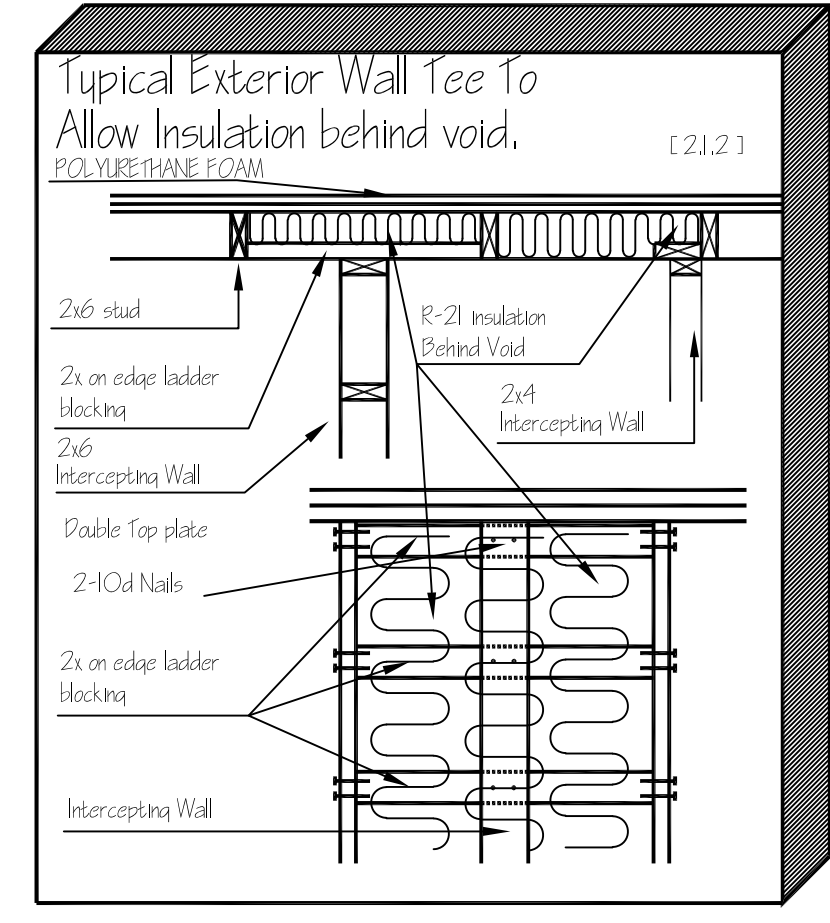
Flashing R702.4

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 structural framing components. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashing 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 chimney or other masonry construction with frame or stucco wall, with projecting lips on both sides under stucco copings.
3. Under and at the ends of masonry, wood or metal copings 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.



Window Trim (21.9)
Use BullNose Trim On All Interior Doors and Windows



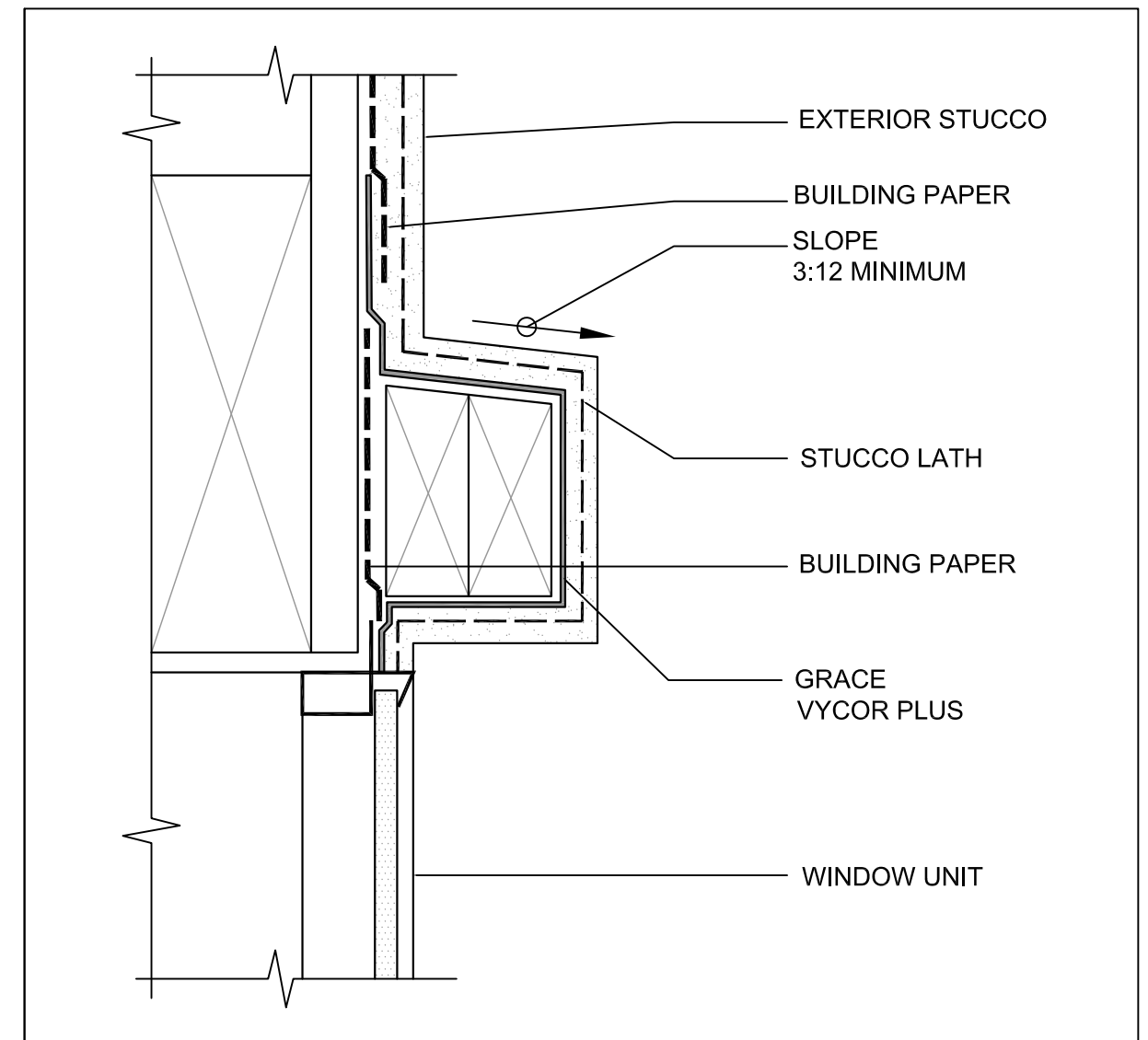
Solar Reflectivity:
All Flat Roof Area's to be coated with "Solar Mastic" TM Ultra premium cool roof coating or Equivalent in White or Desert Tan, per energy code.

Critical Note:
All Windows, doors and skylights to be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.

Insulation Details

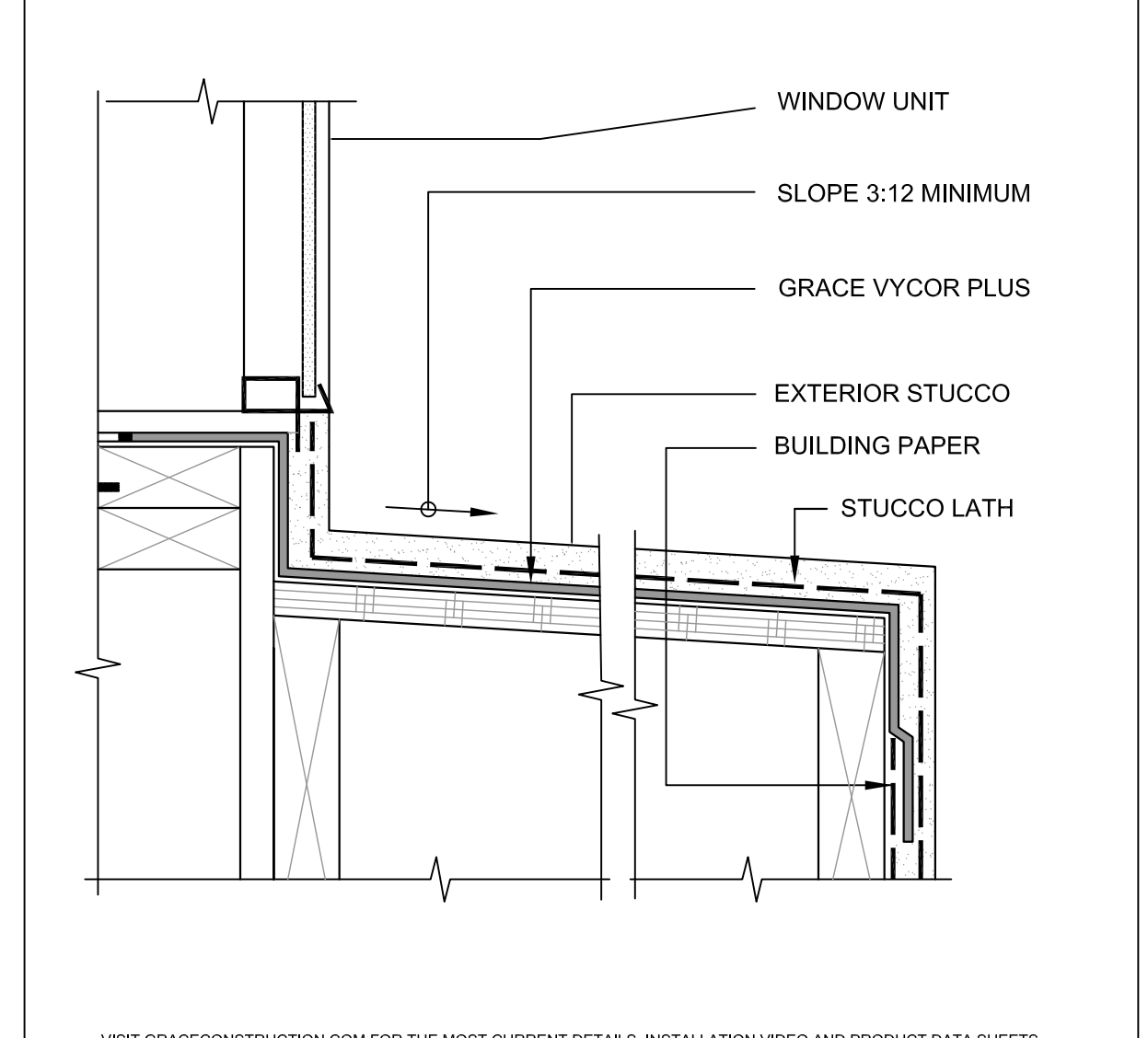
Scale 1/4" = 1'

LAST REVISION DATE: 12/20/2023



NOTES:
VISIT GRACECONSTRUCTION.COM FOR THE MOST CURRENT DETAILS, INSTALLATION VIDEO AND PRODUCT DATA SHEETS
A. RIPCORN® CAN BE REMOVED FROM GRACE VYCOR PLUS FOR EASE OF INSTALLATION AND FUTURE TIE-INS
B. GRACE VYCOR PLUS CAN BE SUBSTITUTED FOR BUILDING PAPER
C. INSTALL GRACE VYCOR PLUS AND WEATHER RESISTIVE BARRIER TO FORM WATER-SHEDDING LAPS
D. REFER TO LOCAL BUILDING CODES FOR BUILDING PAPER REQUIREMENTS AND SLOPE REQUIREMENTS
E. DETAIL ALSO RELEVANT FOR GRACE VYCOR V40 AND VYCOR BUTYL

STUCCO WINDOW HEAD
GRACE VYCOR PLUS SELF-ADHERED FLASHING



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A. RIPCORN® CAN BE REMOVED FROM GRACE VYCOR PLUS FOR EASE OF INSTALLATION AND FUTURE TIE-INS
B. GRACE VYCOR PLUS CAN BE SUBSTITUTED FOR BUILDING PAPER
C. INSTALL GRACE VYCOR PLUS AND WEATHER RESISTIVE BARRIER TO FORM WATER-SHEDDING LAPS
D. REFER TO LOCAL BUILDING CODES FOR BUILDING PAPER REQUIREMENTS AND SLOPE REQUIREMENTS
E. DETAIL ALSO RELEVANT FOR GRACE VYCOR V40 AND VYCOR BUTYL

STUCCO SILL / POT SHELF / CHIMNEY SHOULDER
GRACE VYCOR PLUS SELF-ADHERED FLASHING

Building Thermal Envelope Table 402.1.2
3011 Climate Zone 4 Albuquerque NM

1. Penetration U-Factor	0.32
2. Skylight U-Factor	0.85
3. South, East, West Facing Glazed Penetration	SHGC 0.40 Low E Glass Required
4. Ceiling R-Value	R-49
5. Wood Frame Wall R-Value	R-21 2x6 Walls R-15 + R-5 core's Ins.
6. Mass Wall R-Value	R-8/15
7. Floor R-Value	R-49
8. Basement Wall R-Value	R-15 / R-15
9. Slab R-Value & Depth	R-15 / 2ft. Unheated Slabs
10. Crawl Space R-Value	R0 / R5