

# 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

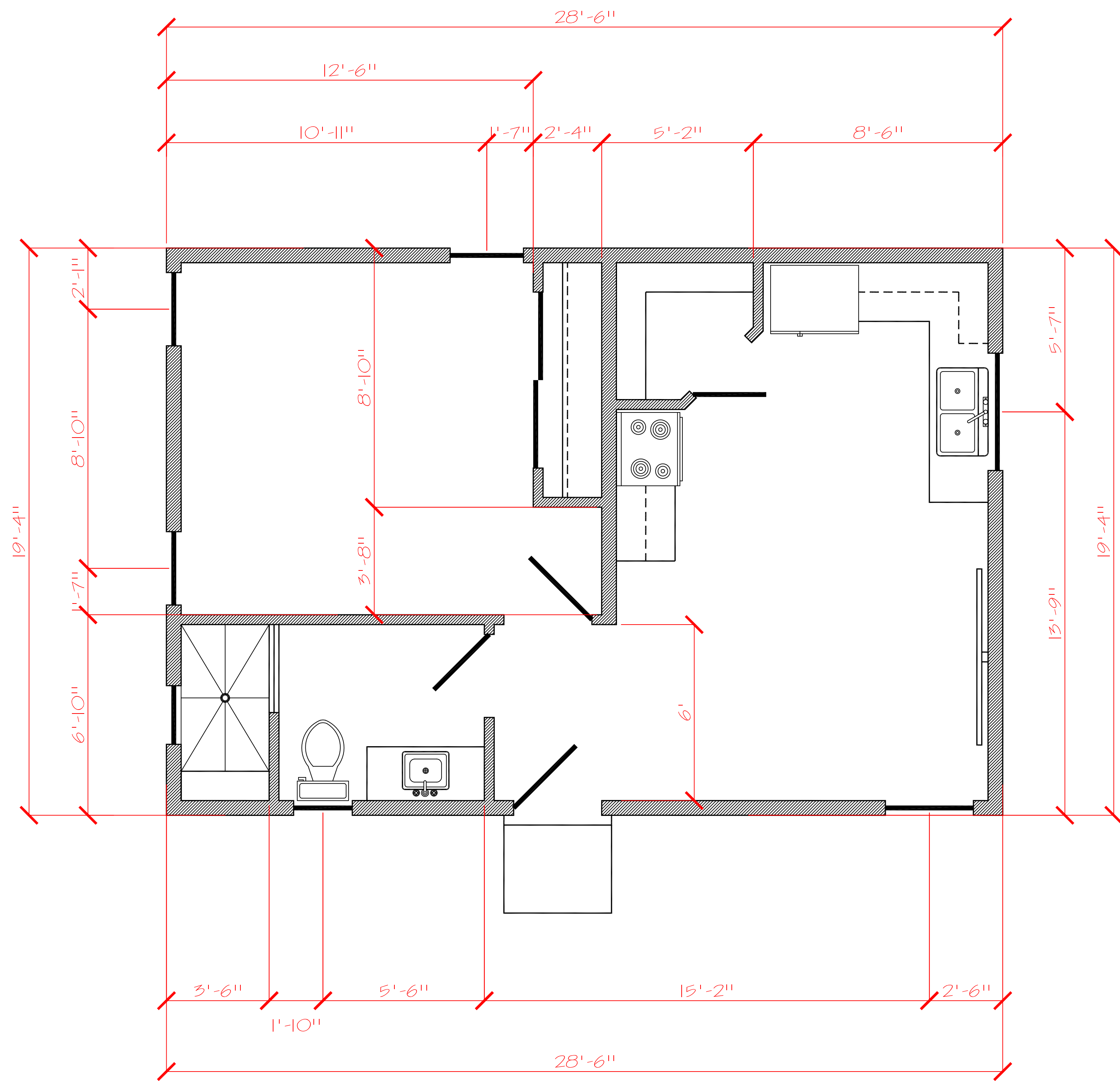
### Applicable Code Editions:

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: 2/14/2024

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



# Dimensions

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## 2021 NM Residential Energy Conservation Code Table R402.1.3, with Climate Zone 4 except Marine

1. Fenestration U-Factor	0.30
2. Skylight U-factor	0.55
3. Ceiling R-Value	R-49
5. Mass Wall R-Value	R-8 (Exterior), R-13 (Interior)
6. Floor R-Value	R-19
7. Basement Wall R-Value	R-10ci / R-13
8. Slab R-Value & Depth	
9. Crawl Spaces R-Value	R-10ci / R-13

## 2021 NM Residential Building Code

Specifications:

Concrete

2500 PSI For Concrete Slab, Footings, and Retaining Walls Unless Noted.  
 3.5" Concrete Slab Minimum W/ Optional #4 @ 10' / 10' Welded Wire Mesh.  
 Broom Finish All Exterior Concrete.  
 2-#4 Re-bar Continuous in Footings and Thickened Slabs Min. 40 Diameters Lap, and Wire Tight. All Stem Walls Fully Grouted.  
 1/2" (10") Anchor Bolts A-56 To Footings  
 2-1/2" Embedded #4 As stem Wall.  
 2" Urethane Insulation at Perimeter of Building and at heated, Unheated Transition at Garages.

Walls/ Exterior

All Walls To Be Framed with #2 or Better Grade Lumber SPF, 7/16" OSB at Corners For Shear Strength. All Exterior Sheathing to be solid 7/16" O.S.B. Waterwood, Block all edges of panels.  
 Exterior Walls To Be Covered With 2 Layers Grade D Building paper or Optional 2 Layers Tyvek House Wrap.  
 17 Gauge Stucco Netting W/ 3 Coat Stucco or Optional 20 Gauge Netting W/ 2 Coat Power Wall or Western 1 Coat Fiberglass Reinforced Stucco System.  
 All Exterior Windows Double Glass Low-E Units.  
 All Exterior Doors To Have Threshold and Weather stripping Caulked To Concrete or Subfloor.

Walls Interior

2x4 Studs 16" OC on all Non-loadbearing Walls.  
 2x4 studs 16" OC at all interior Load bearing walls.  
 2x6 16" OC at garage thr. separation wall.  
 1/2" Gypsum board at walls and ceiling with texture per Owners Preference. Tape and Dred all Joints.  
 Cement, Fiber-cement and glass mat gypsum backers gypsum backers to be installed in tub and shower behind tile and panels. Green gypsum board not permitted in shower or tub enclosures.  
 All interior doors to be 6'8 high unless otherwise noted.

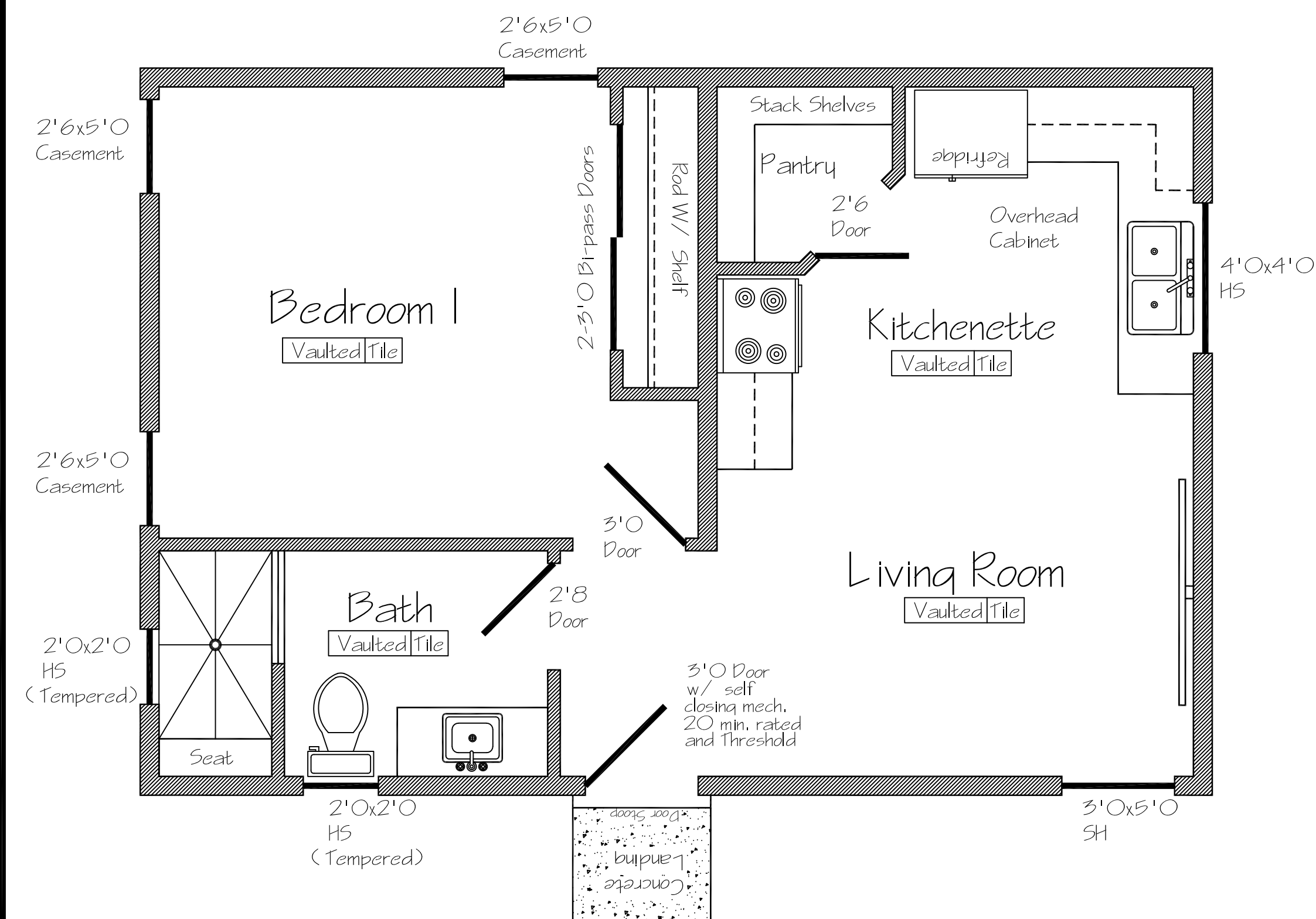
Roof

All Membranes to meet or exceed 900 lb. 7/16" OSB with H clips at Roof sheathing Stagger all Joints. Poly vapor Barrier Optional w/ R49 Batt Insulation at Ceiling.  
 R-21 At Floor Between 1st Floor unheated and 2nd floor Heated.  
 All Sloping Flat Roofs to have Min. 1/4" PLF Slope with 3-ply Built-up Roofing.  
 All Trusses To Be Installed per Manufacturers Specifications and all Lateral Bracing per Truss Engineering Locations.  
 Sloping Roof Trusses Min. 3/12 Pitch.  
 See attached Engineering for Exact truss Construction and Installation Specs.

Mechanical \* Plumbing \* Electrical

All Mechanical, Electrical, and Plumbing Contractors To Permit all Work on Project and install Per UPC, and all applicable Codes and Code Books. When Reviewing Notify Builder Of All Conflicts for Chase Locations and Chase Sizes. See Electrical Mechanical Plan For Further Notes.

Heated Area  
 1st Floor 550 Total Heated 550

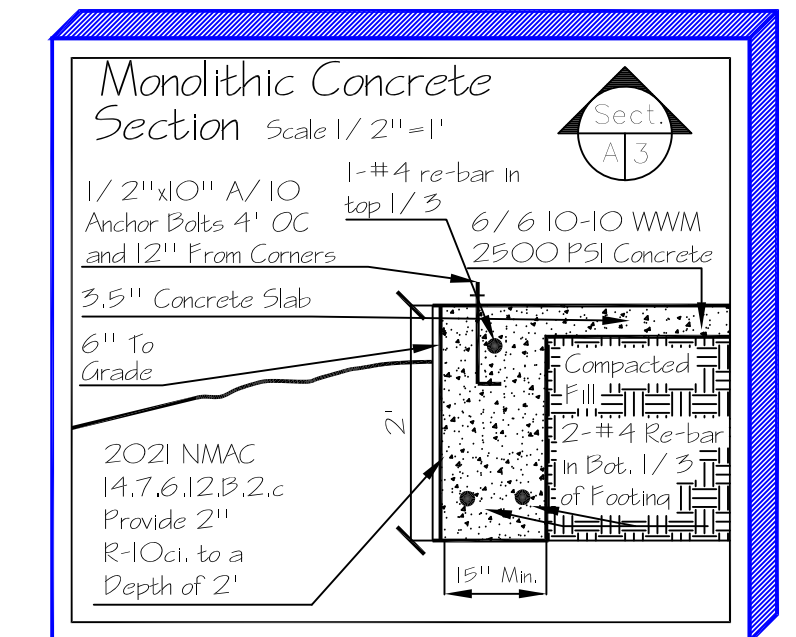
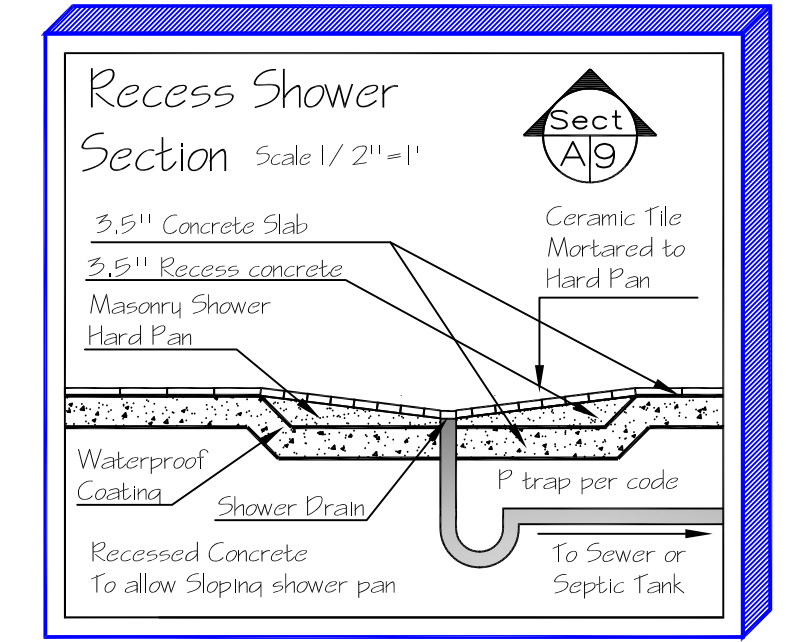
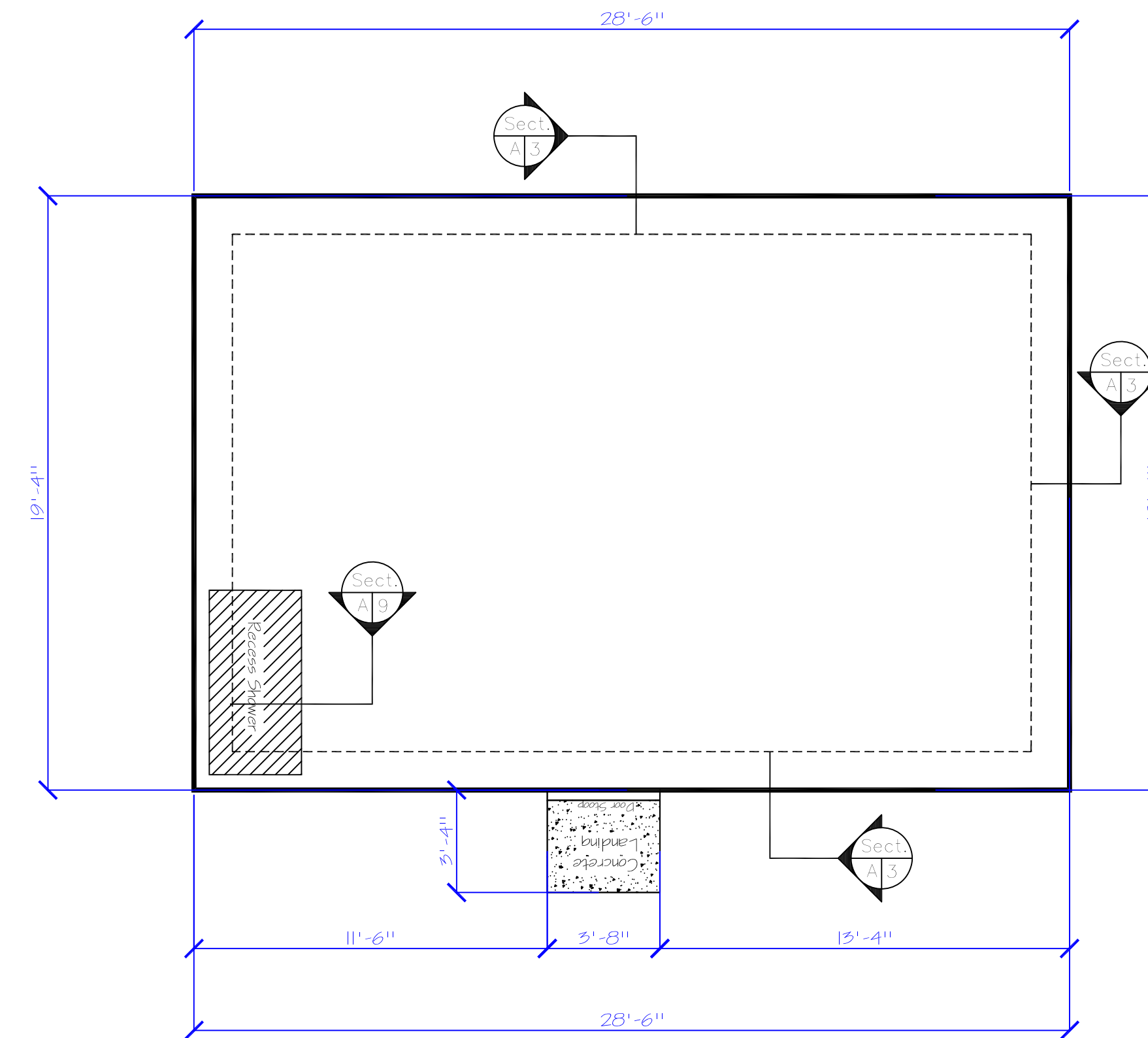
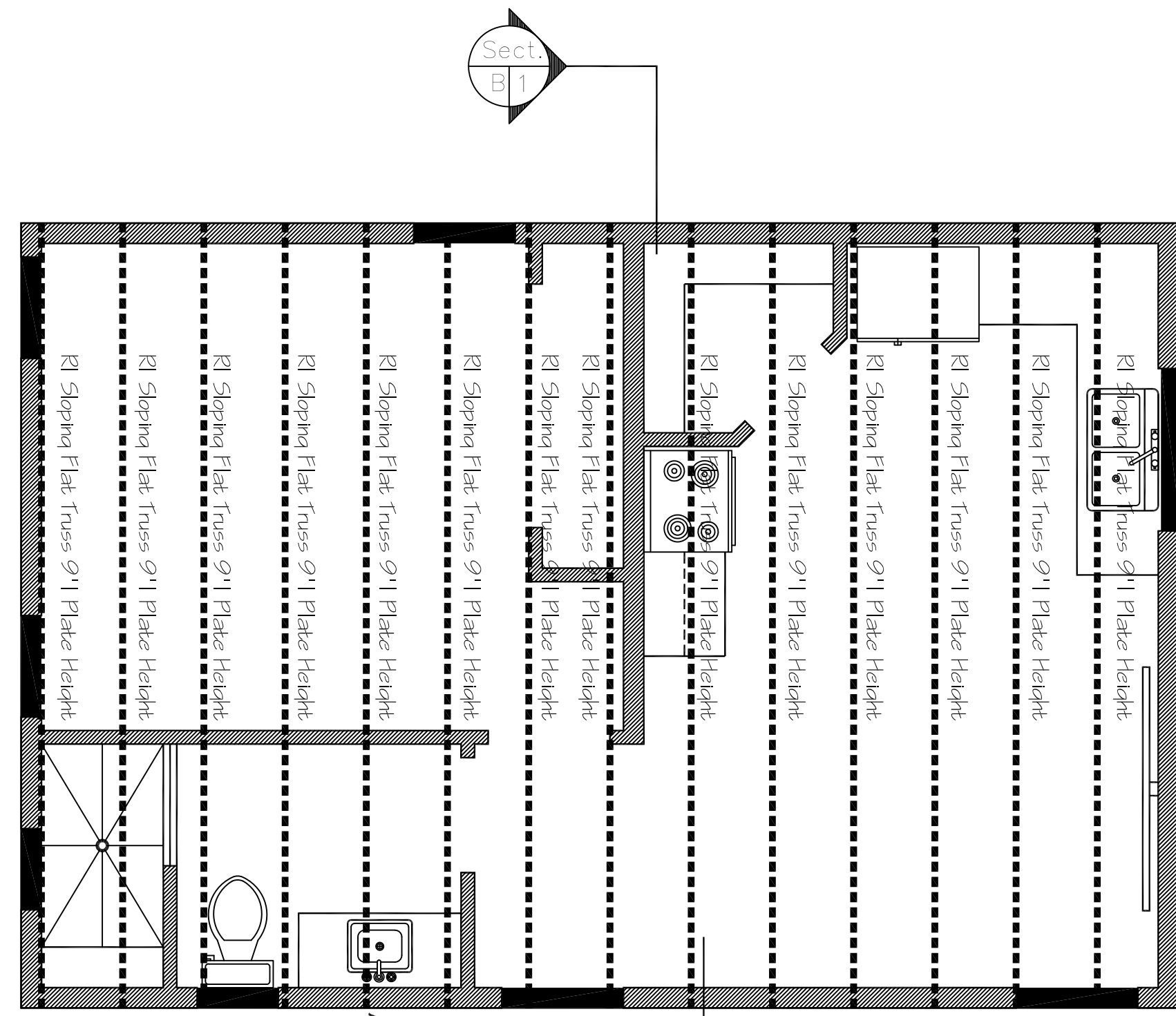


# Floor Plan

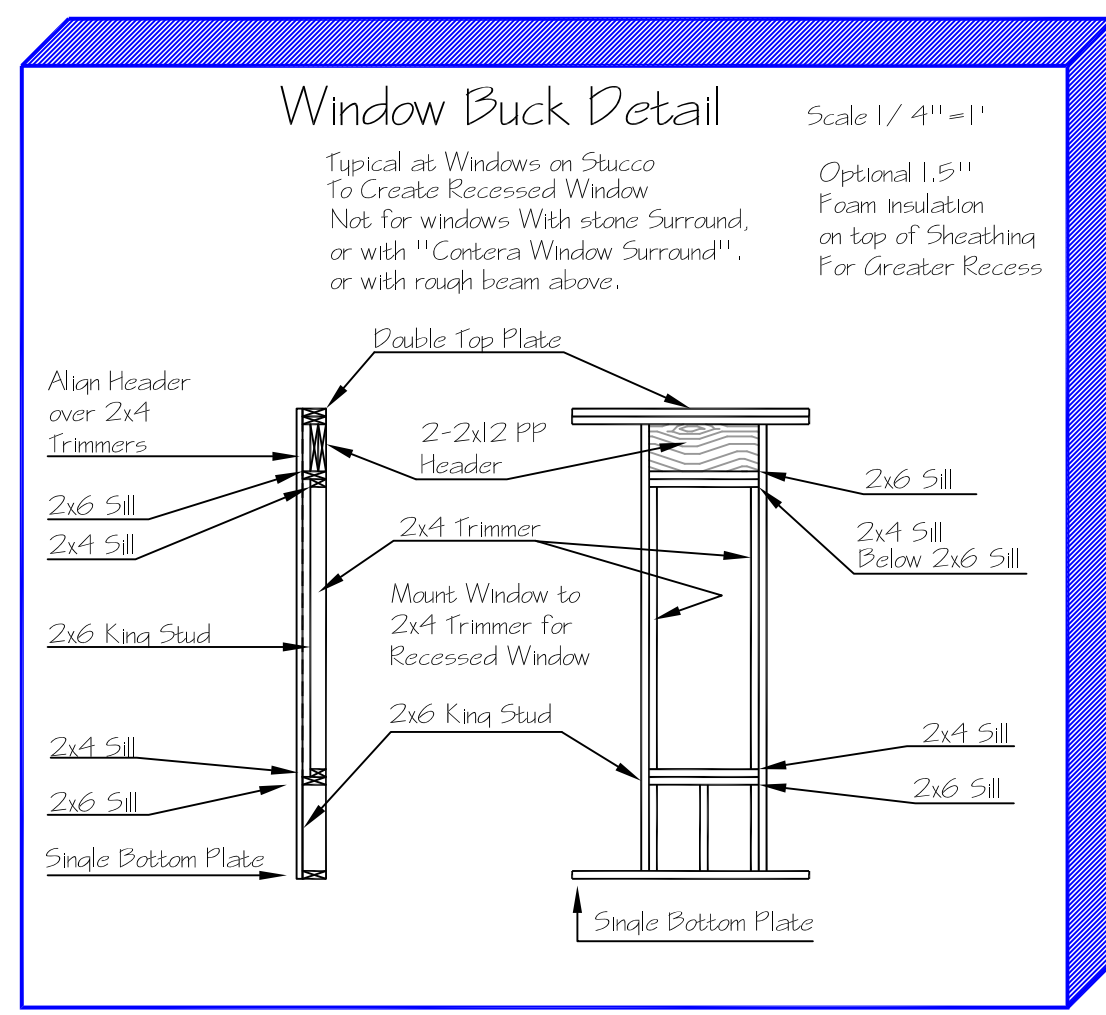
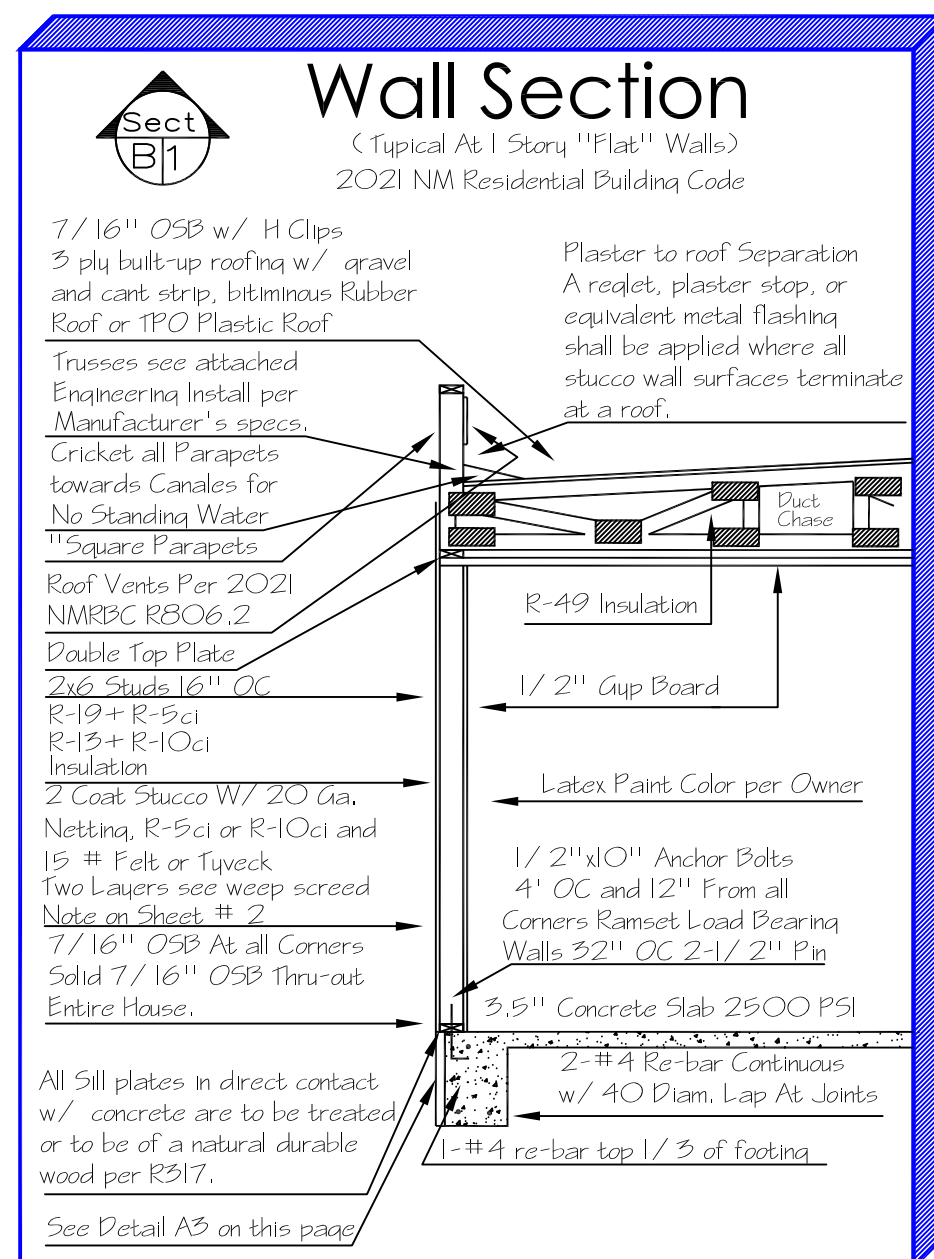
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SHEET	CITY OF ALBUQUERQUE
2 OF 6	ABQ ADU Model 550 FLAT ROOF

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.



**Roof Overframe Schedule**  
2x12 Ridge on all over frame's 1-1/2' x 4' x 4' Microlam ridge on all 2x12 overframe's  
1. Lay 2x12 flat on valley line so as to equally disperse overframe rafters load on existing roof.  
2. 2x4 Rafters from zero to 4'  
3. 2x6 Rafters from 4' to 8'  
4. 2x8 Rafters from 8' to 12'  
5. 2x10 Rafters from 12' to 14'  
6. 2x12 Rafters from 14' to 16'  
7. Collar Ties on all rafters below ridge

Provide Attic Access Per 2021 NMRBC R507.1

**Concrete Notes**  
2021 NM Residential Building Code  
1. Concrete Strength: 2500 PSI Min. 3 1/2" Minimum Thick Slab on Compacted Fill.  
2. All Footings: Min. 15" Wide, 22" Thick with an Excavation Depth of 18" West of Sandia Mountains, 21" East of Mountains at All Exterior Walls.  
3. All CMU Walls For Foundation To Be 8" x 8" x 16" Min. With Joint Reinforcement: 18" OC Vertical, 48" OC Max.  
4. Anchorage: 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.  
5. Re-bar: 2-#4 Re-bar Continuous at All Footings with Min. 40 Diam. Lap At Joints. Reinforcement Steel Secured in Place, Min. 5" Coverage.  
6. Interior Load Bearing Footings: 12" Min Width x 12" Min. Depth at All Interior Footings.  
7. All Adbse 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)  
8. Foundation Insulation: 2" x 24" R-10.0 At Exterior Perimeter Of Heated Space and at Garage/ House Wall. Wood Floors Require a Minimum Of R-21 Insulation. Insulation Shall Extend From Top Of Slab 24" Down, or continue Horizontally Under Slab For a Total Of 24".  
9. 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 23; 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

2021 NMRBC R311.3 Landings at Doors Leading to outside. Note: Min., 3' Landing Outside Of all Doors Leading Outside Of Building See Concrete Plan For Exact Locations.

**Critical Note:**  
All Trusses to have Uplift Hurricane Strap, To be installed on Exterior Walls and Load Bearing Walls only.

**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.F., 975 E-1.1 Unless Otherwise Noted.  
Minimum 1.5" Bearing at All Headers and Beams to 6" Width. All Headers 6" and Pledger 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".  
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 Plate 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.

**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".

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

**Frame Plan**  
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**Concrete**  
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SHEET 3 OF 6  
CITY OF ALBUQUERQUE  
ABQ ADU Model 550  
FLAT ROOF

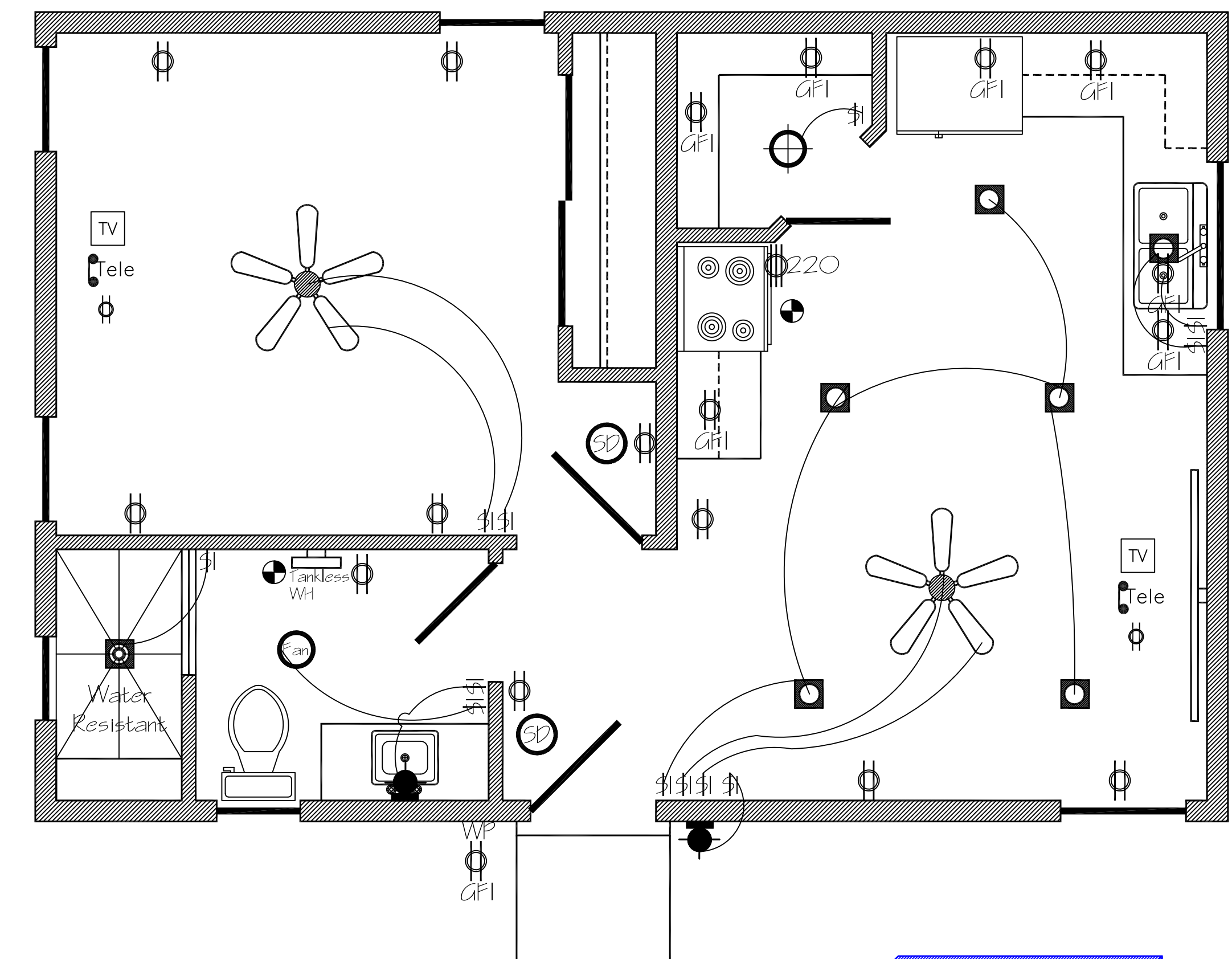
Lighting Legend 2021 NMRBC	
	Mini Recess Light Caulk and seal to ceiling Energy Star Rated, Energy Star Bulb
	Bulb-in Recess Caulk and seal to ceiling Energy Star Rated, Energy Star Bulb
	Full Recess Light Caulk and seal to ceiling Energy Star Rated, Energy Star Bulb
	Wall Sconce or Light Bar Energy 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 cell 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.

**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 Through-out 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.  
Plumbing Notes:  
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.



Plug Switch Legend NM 2015 IRC	
	Wall Plug
	Ground Fault Interrupt Counter Plug
	Waterproof Ground Fault Interrupt Exterior Plug
	220 Volt 20 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
	SD / CO Detector

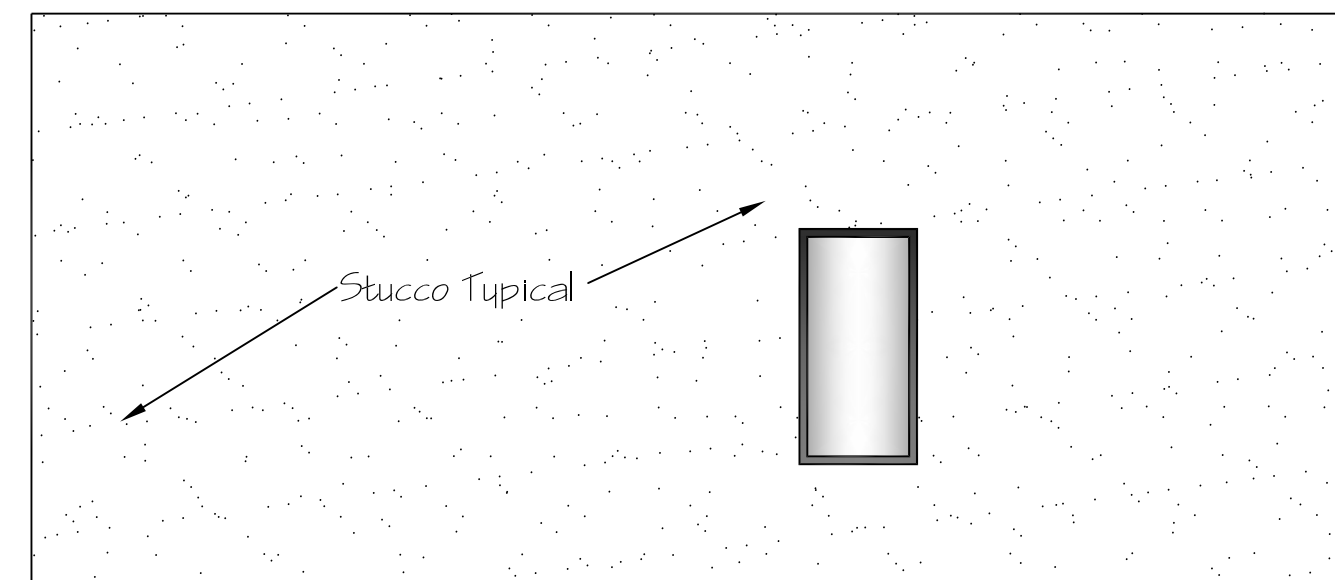
**Note:**  
Provide WP / GFI Protected Receptacle within 25' of Exterior Mechanical Equipment

**Note:**  
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.

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

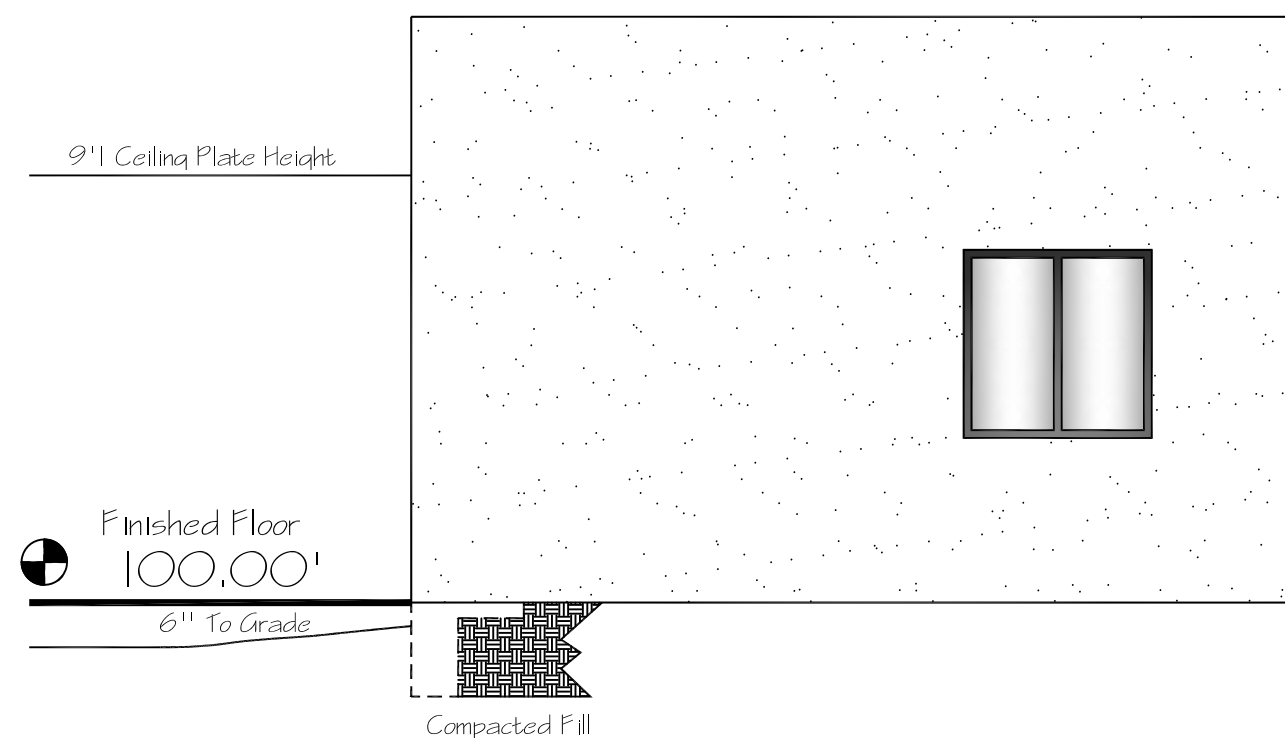
# Electrical

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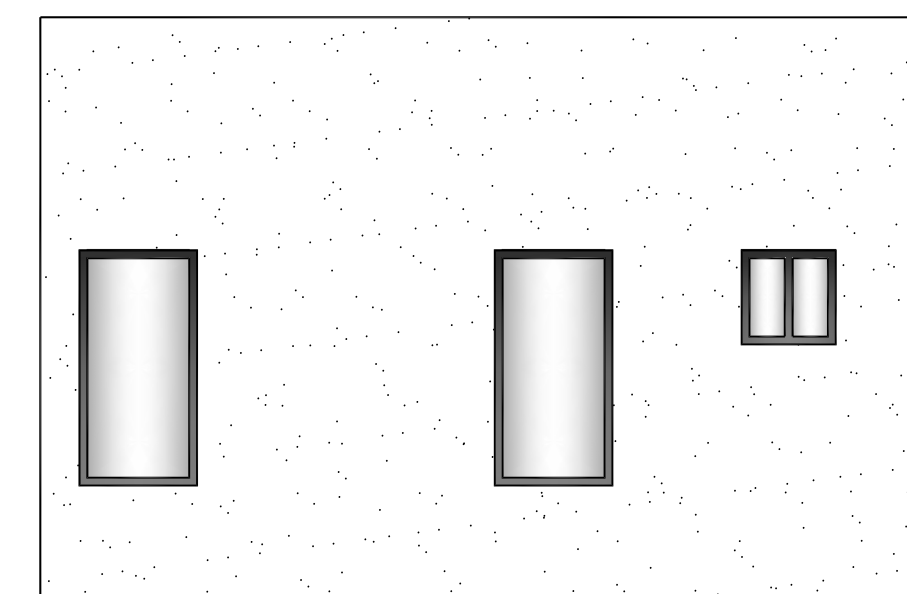
Back Elevation

Provide 2" Recessed Windows



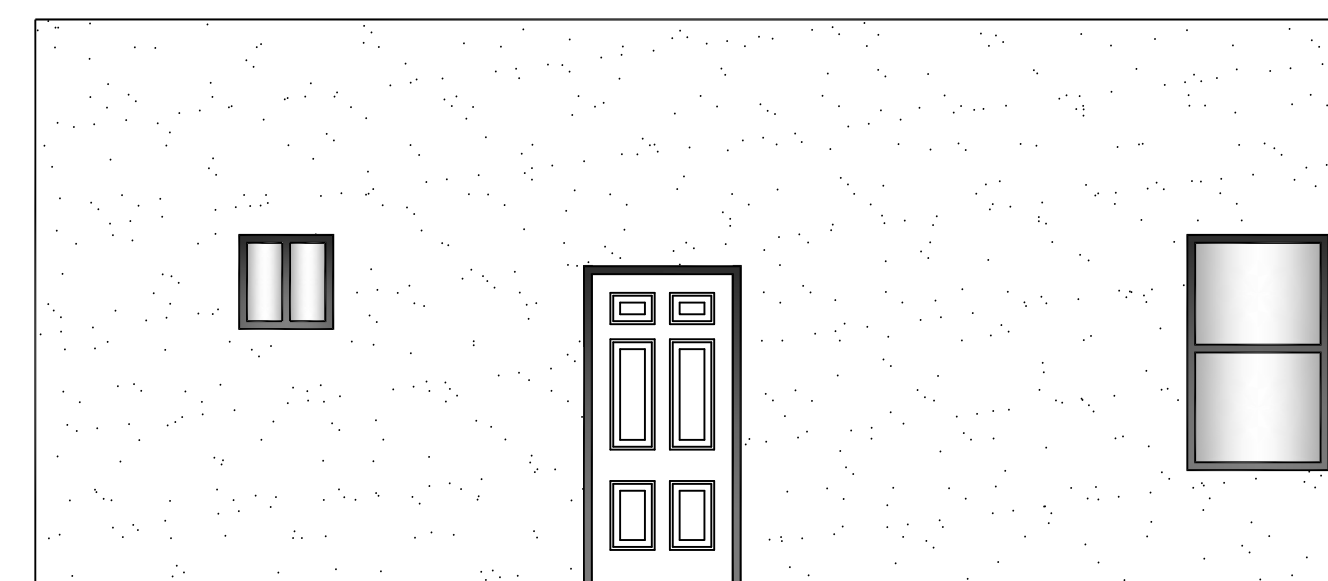
Right Elevation

Provide 2" Recessed Windows



Left Elevation

Provide 2" Recessed Windows



Front Elevation

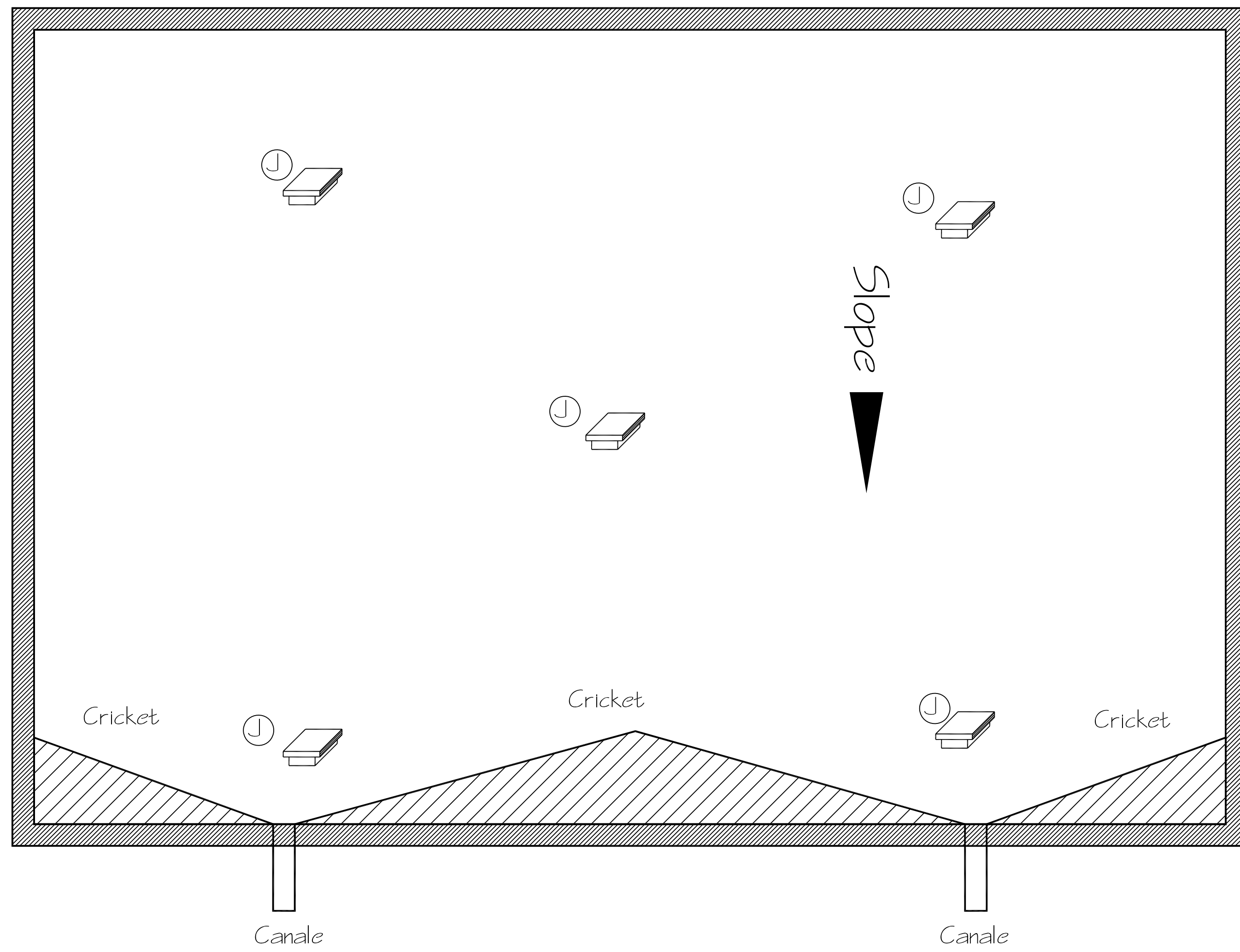
Provide 2" Recessed Windows

# Elevations

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4 OF 6	ABQ ADU Model 550 FLAT ROOF

LAST REVISION DATE: 2/14/2024



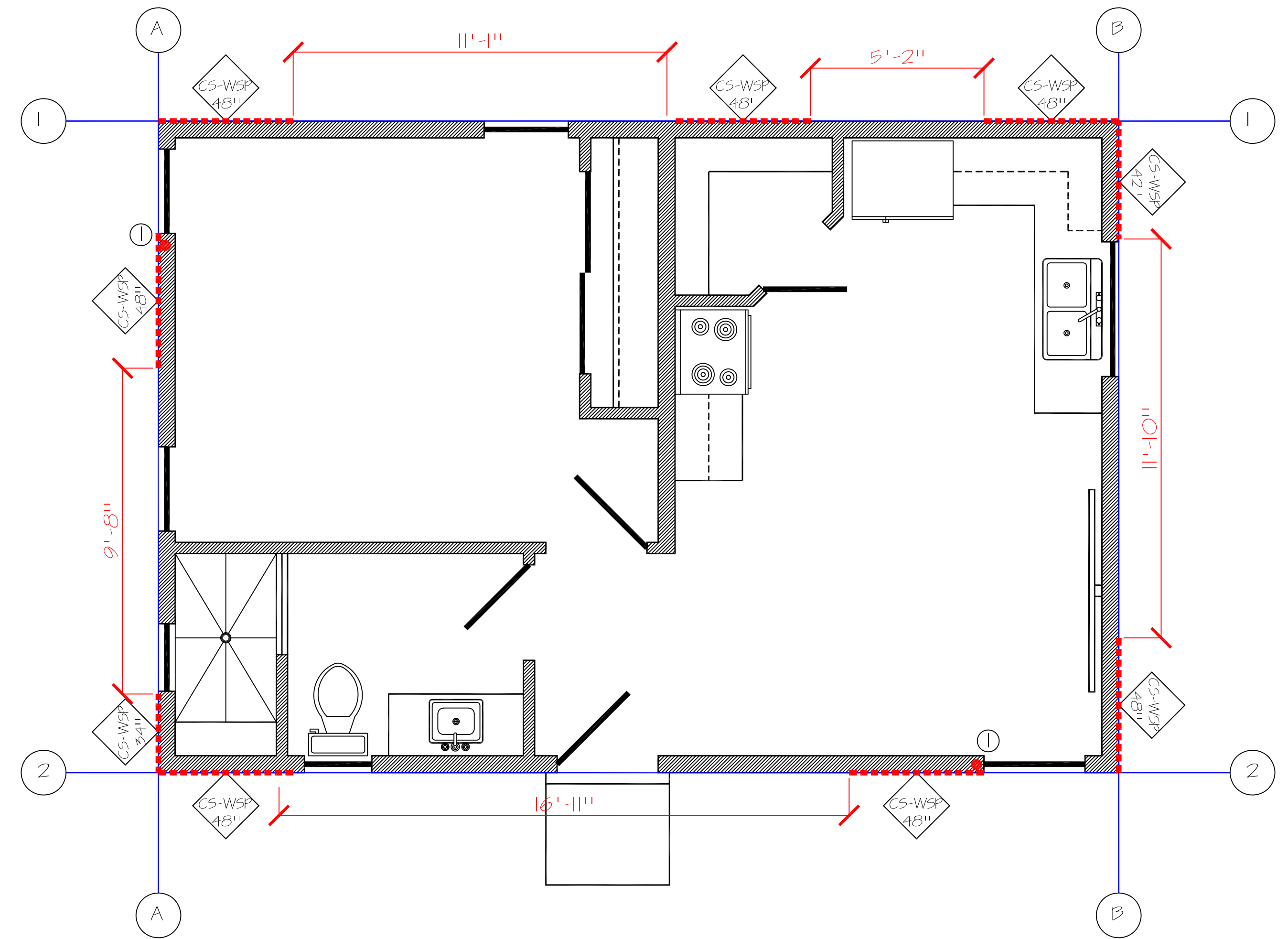
Mass # 1			
Vent.	Quantity	Net Free Area	Total Square Inches
⊙	4	144	576
Grand Total		576 / 144 = 4.0	

Venting Required/ Provided			
Mass # 1	Total Area	Pitched or Flat	Venting Required
	600	600/150 = 4.0	4.0
			Venting Provided
			4.0

# Ventilation

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Attic Venting Chart			
Key	Vent Type	Brand	Net Free Area
⊙	8" x 16" Soffit Vent	Lomanco	65 Square Inches
⊙	Soffit vent strip	Tamlyn	12 Square Inches per Foot
⊙	18" x 24" Gable vent	Lomanco	190 Square Inches
⊙	18" Round Gable vent	Mul America Inc.	26 Square Inches
⊙	22" Round Gable vent	Mul America Inc.	64 Square Inches
⊙	14" x 22" Archtop Gable vent	Mul America Inc.	50 Square Inches
⊙	8" x 16" Soffit Vent	CMJ Inc.	81 Square Inches
⊙	14" x 16" Gable vent	Lomanco	56 Square Inches
⊙	12" x 22" Gable Vent	Lomanco	106 Square Inches
⊙	155 20" x 25" x 7.75"	Lomanco	144 Square Inches
⊙	VN 5050 21" x 21" W/ Bird Screen	C.J. Metal Products	420 Square Inches
⊙	Tile Ridge Vent TRV-1	Lomanco	18 Square Inches Per Linear Ft.
⊙	Soffit vent strip	Tamlyn	12 Square Inches per Foot
⊙	O'Hagan	O'Hagan's, Inc.	72 Square Inches
⊙	Shingle and Metal Ridge Lo-Omnifall	Lomanco	11 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	288 Square Inches

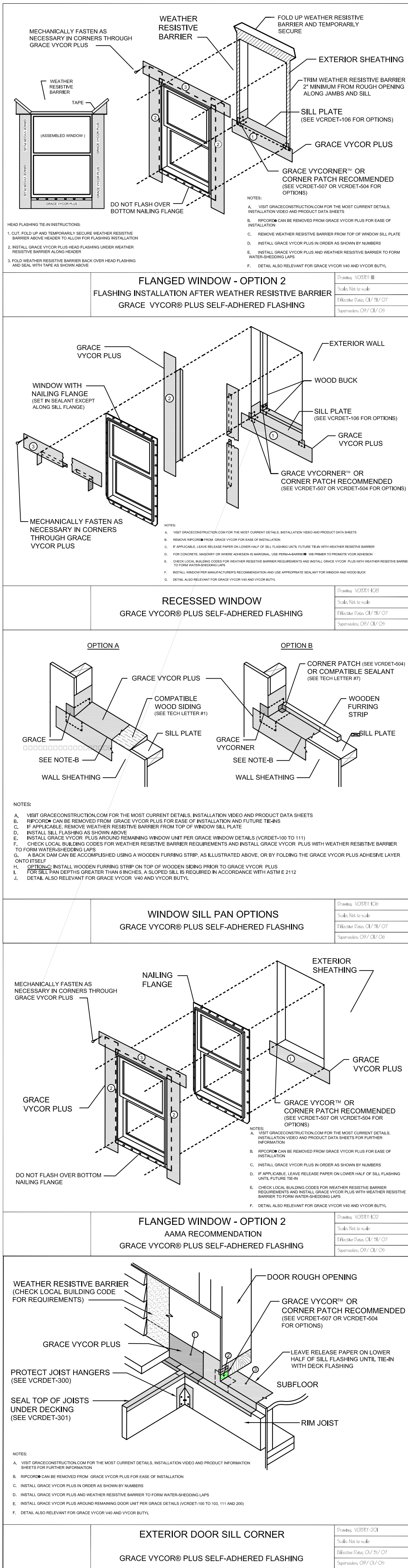


Hold downs Schedule		
⊙	• DIT22	1025 lbs

# Wall Brace

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5 OF 6	ABQ ADU Model 550 FLAT ROOF

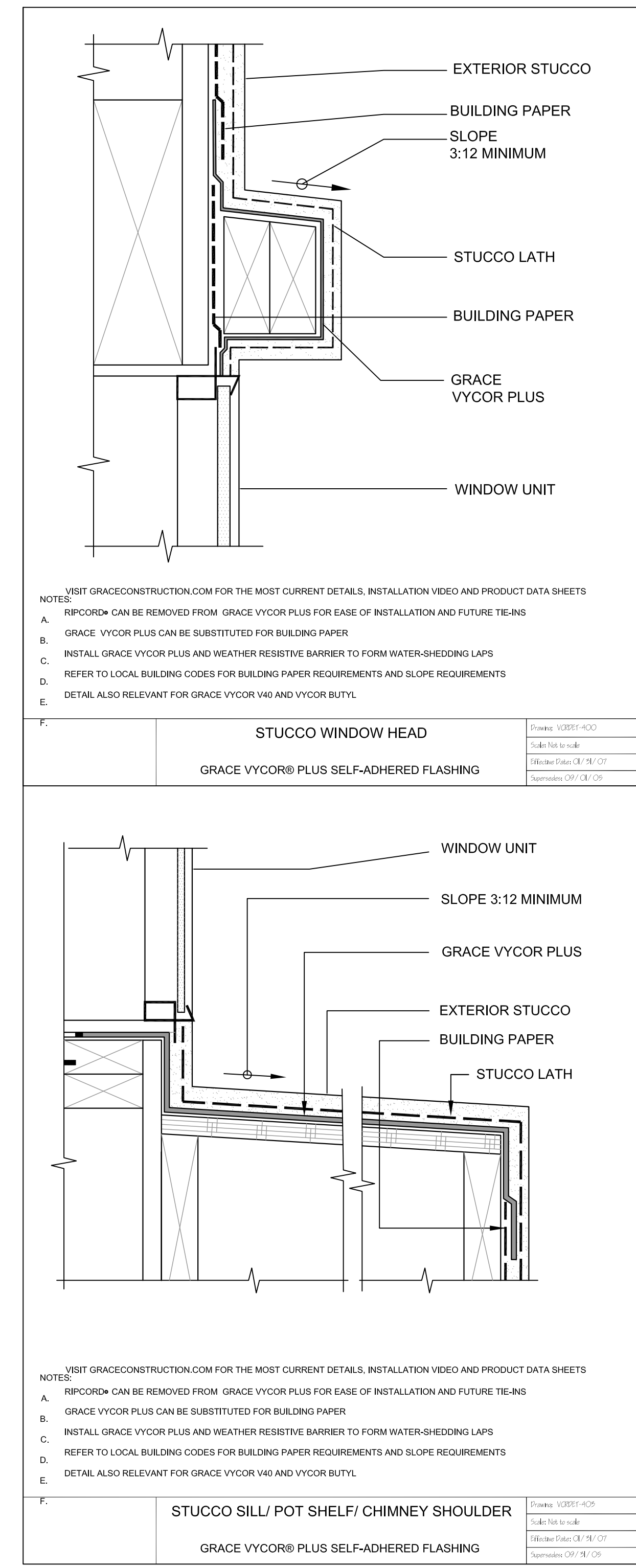
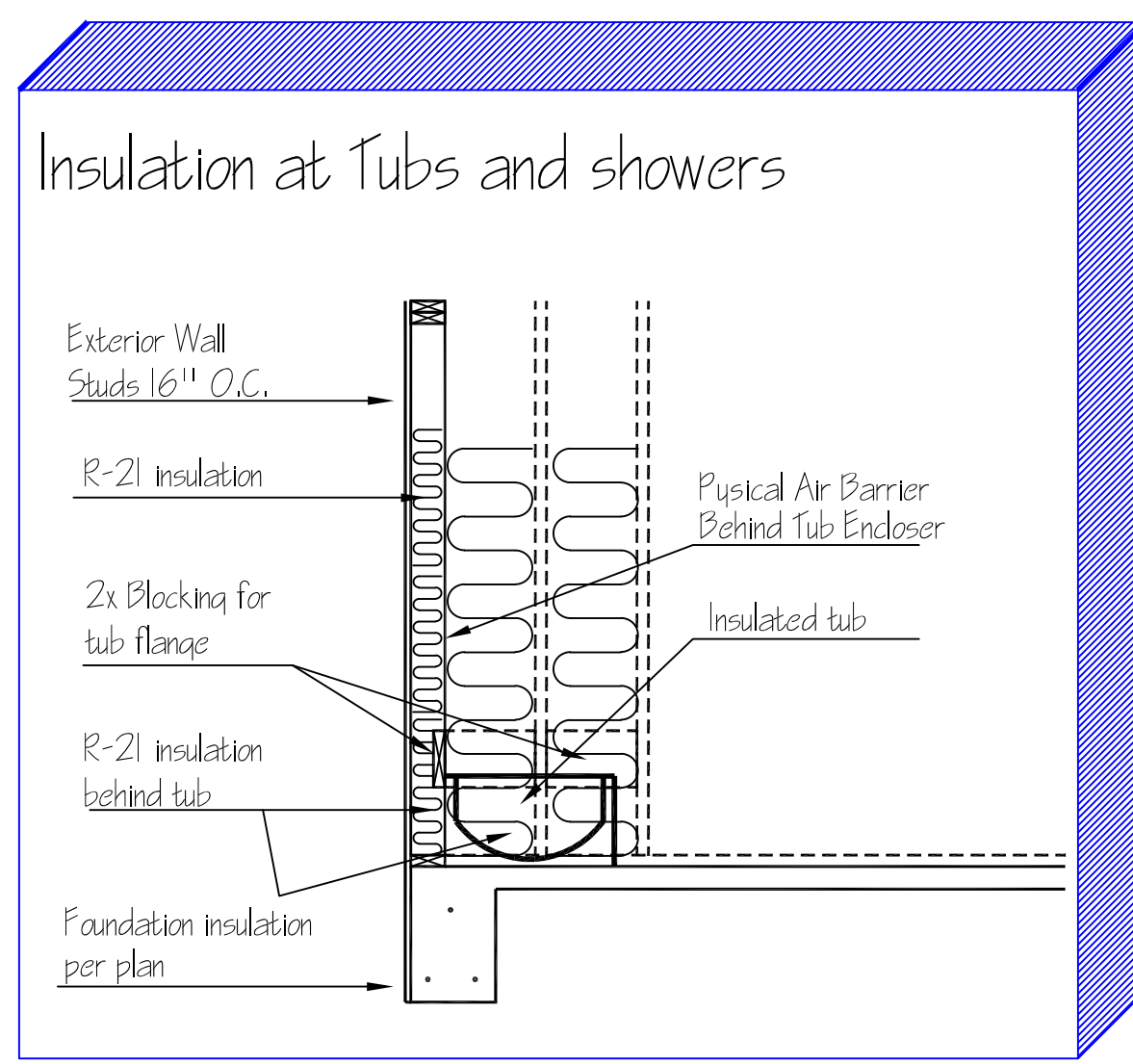
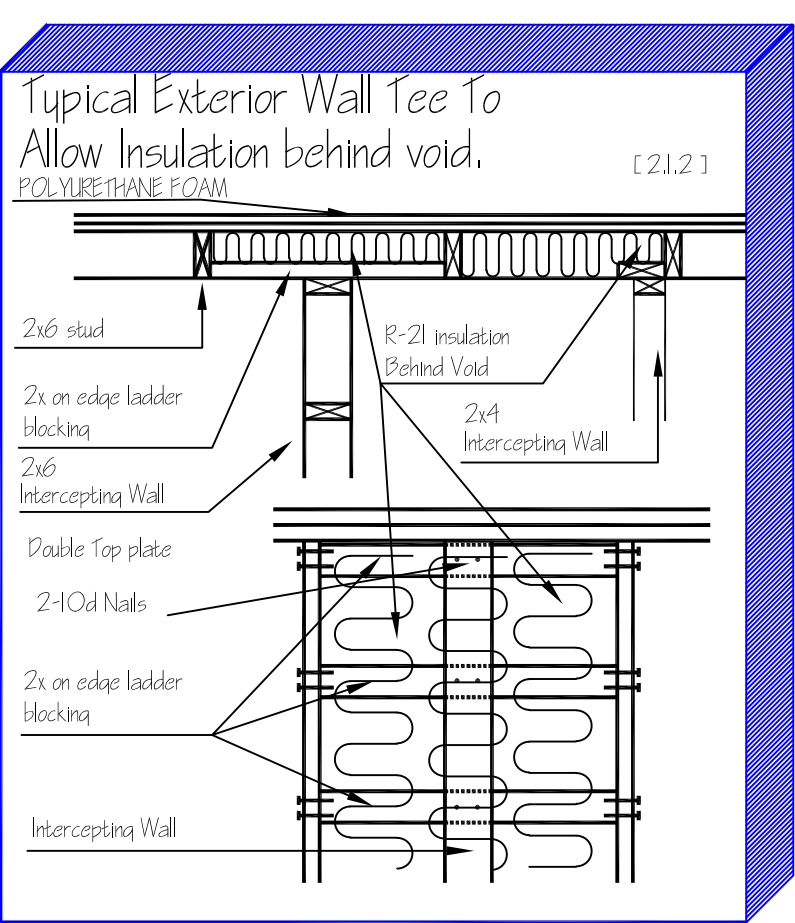
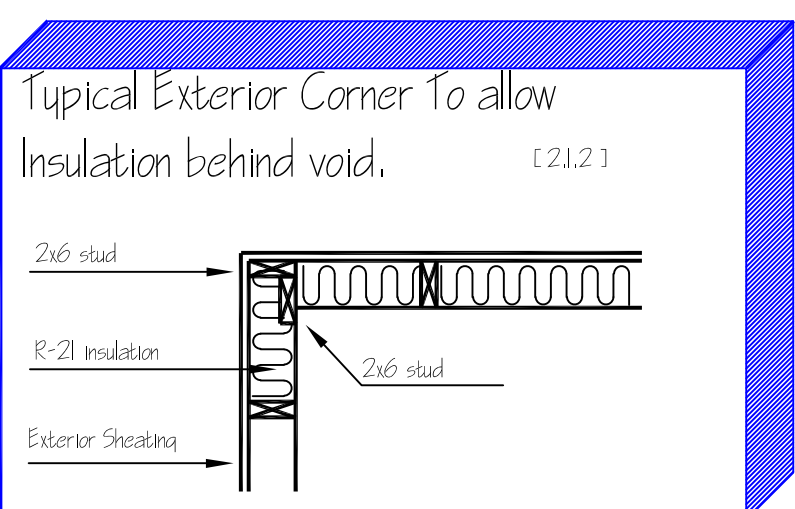


**Air Leakage**  
Building Thermal Envelope.  
The Building thermal envelope shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The Following shall be caulked, gasketed, weather stripped or otherwise sealed with an air barrier material, suitable film or solid material.

**FLASHING:**  
Provide Flashing per 2021 NMRBC R703.4

**Solar Reflectivity:**  
All Flat Roof Area's to be coated with "Solar Mastic"™ 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: 2/14/2024