

1 ORCHARD — MAIN LEVEL FLOOR PLAN

1/8" = 1'-0"

AREA SUMMARY

Conditioned area, main level
Total finished area
Covered deck / porch
Exterior panel wall
Interior partition

1,899 sq ft
1,899 sq ft
209 sq ft
204 lf
193 lf



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MODERN HOUSE PLANS · PRIME BLOCKS TECH

PROJECT

MODULAR LOFT — STOCK PLAN

DESIGN

ORCHARD

TYPE

FAMILY · 4 BED · 3 BATH

FOOTPRINT

58' × 44'

AREA

1,899 SQ FT

STRUCTURE

PBT SCIP — PBT160 WALL / PSG6-300 ROOF

FINISH

SAND MINERAL RENDER

SCALE

1/8" = 1'-0"

DATE

05 SEP 2026

DRAWN

MODULAR LOFT DESIGN STUDIO

GENERAL NOTES

- Dimensions are to face of panel unless noted.
- Wall / roof panels: EPS core with double galvanized welded mesh and 4,000 psi structural mortar applied to both faces (PBT SCIP system).
- Structural panel design, connections, foundation and lateral system to be sized and sealed by a registered design professional in the project jurisdiction. These sheets are not sealed.
- Verify all site, zoning, setback, flood, snow and wind criteria before construction.
- Egress, glazing area, stair geometry and smoke alarms to comply with the adopted residential code edition of the local jurisdiction.

PRELIMINARY

NOT FOR CONSTRUCTION

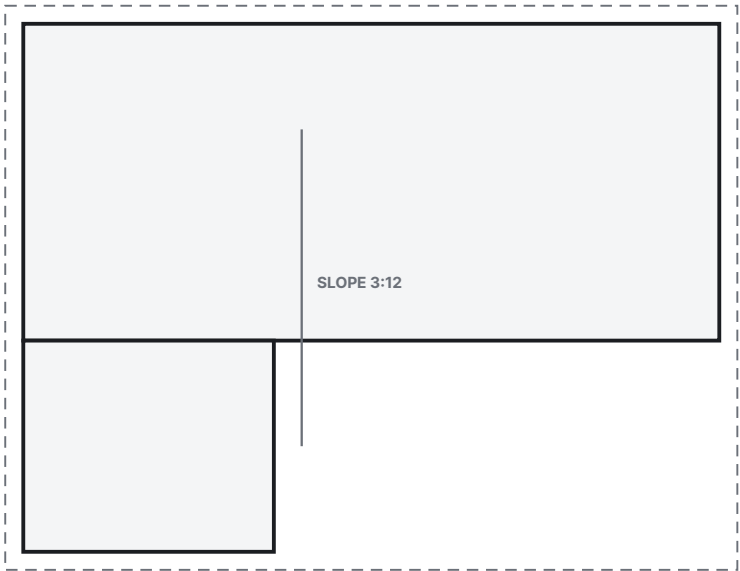
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MAIN LEVEL FLOOR PLAN

A-1.0

1 ORCHARD — ROOF PLAN

1/16" = 1'-0"

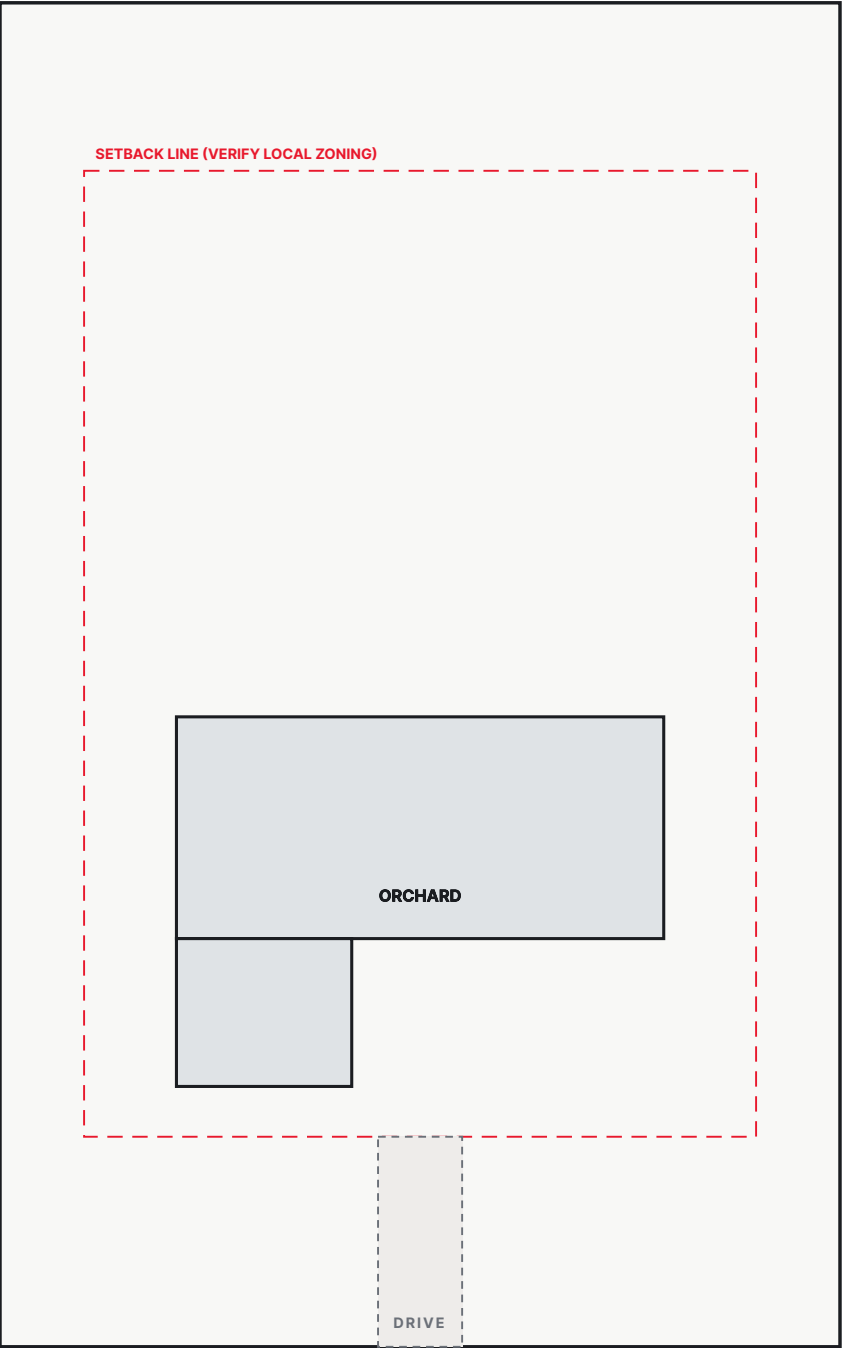


PSG6-300 roof panels spanning 32' max

2 ILLUSTRATIVE SITE PLAN

1" = 20'-0" (typ. lot shown)

TYPICAL 100' x 160' LOT SHOWN FOR ILLUSTRATION ONLY



STREET / ACCESS



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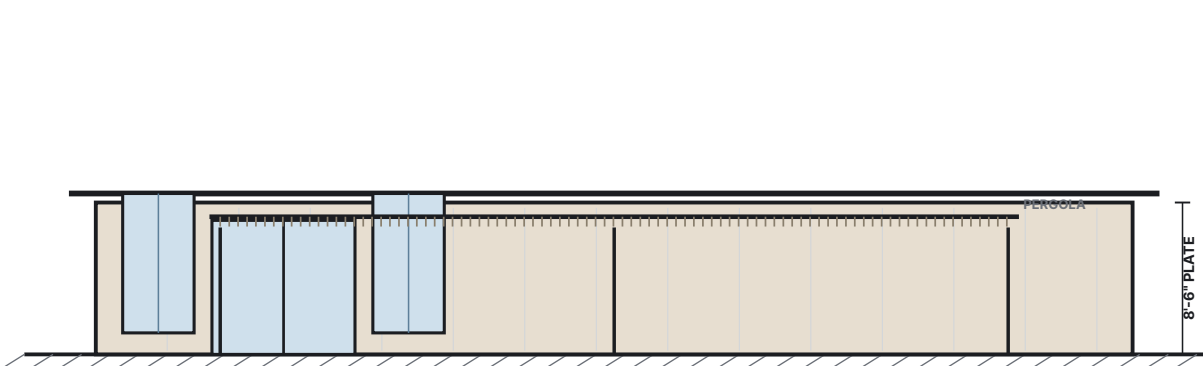
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ROOF PLAN + SITE PLAN

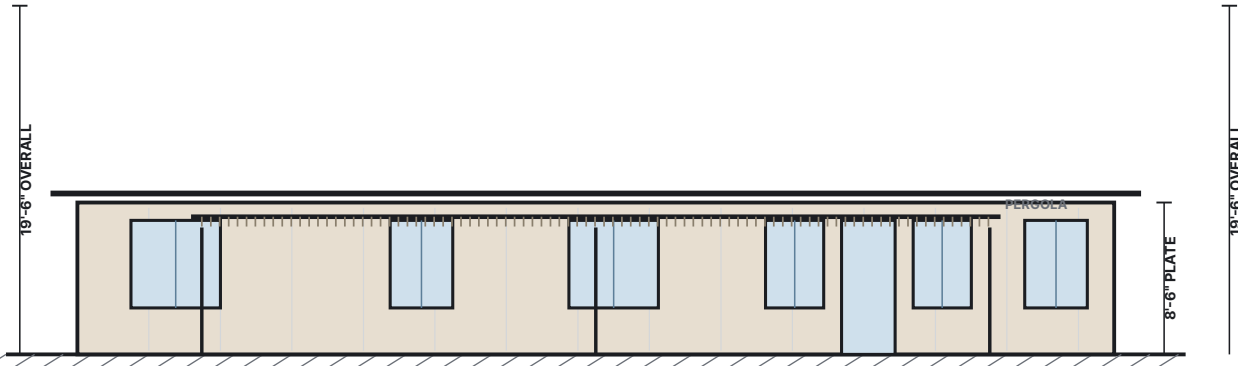
1 FRONT (SOUTH) ELEVATION

1.12" = 1'-0" approx.



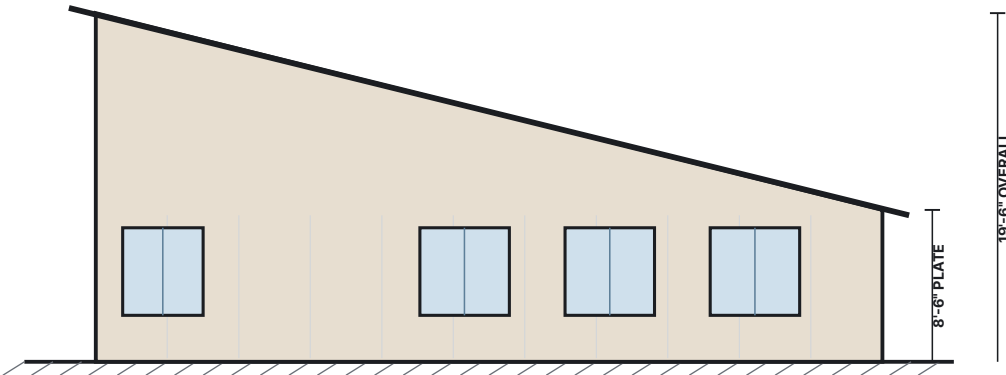
2 REAR (NORTH) ELEVATION

1.12" = 1'-0" approx.



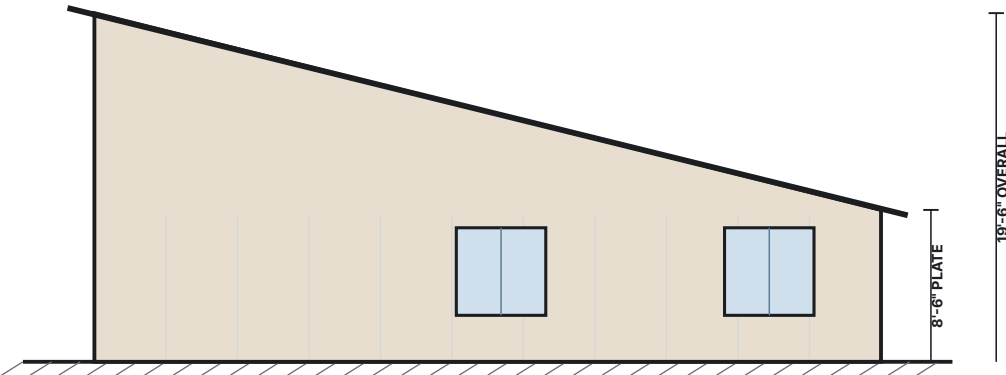
3 LEFT (WEST) ELEVATION

1.12" = 1'-0" approx.



4 RIGHT (EAST) ELEVATION

1.12" = 1'-0" approx.



EXTERIOR FINISH SCHEDULE

WALL	PBT160 SCIP panel, 7.6" finished - Sand mineral render, smooth trowel
ROOF	PSG6-300 panel deck, liquid membrane, gravel ballast, 3:12
SHADING	Timber batten pergola, 2x2 in battens at 6 in centres
SOFFIT / SCREENS	Iroko or thermally modified timber, oiled, 18" typical overhang
GLAZING	Thermally broken aluminium, anthracite, double glazed low-e
PAVING	Stone or in-situ concrete terrace with gravel margin

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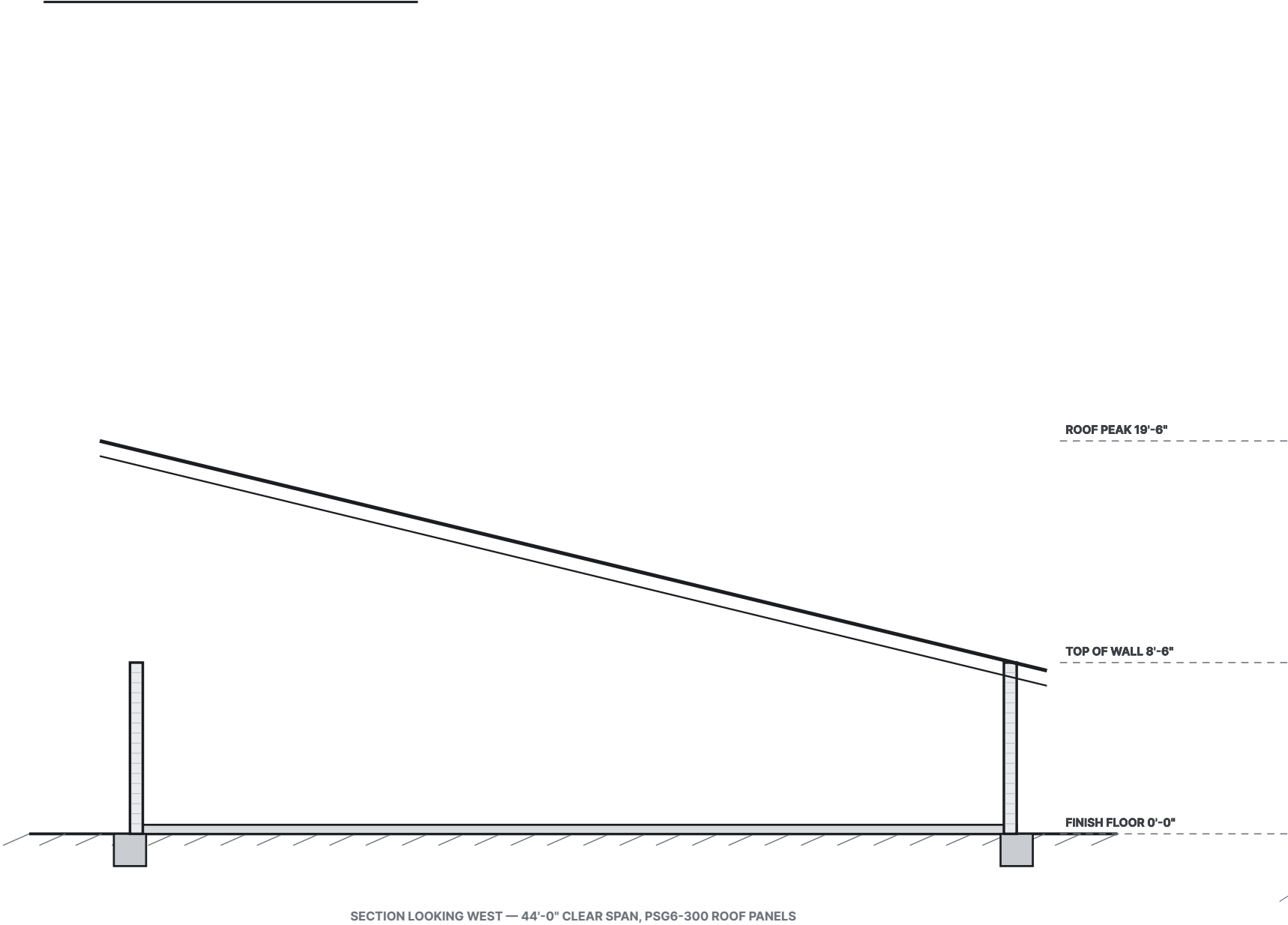
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EXTERIOR ELEVATIONS

A-2.0

1 BUILDING SECTION A-A

1.68" = 1'-0" approx.



3 PANEL ERECTION ELEVATION — LONG WALL

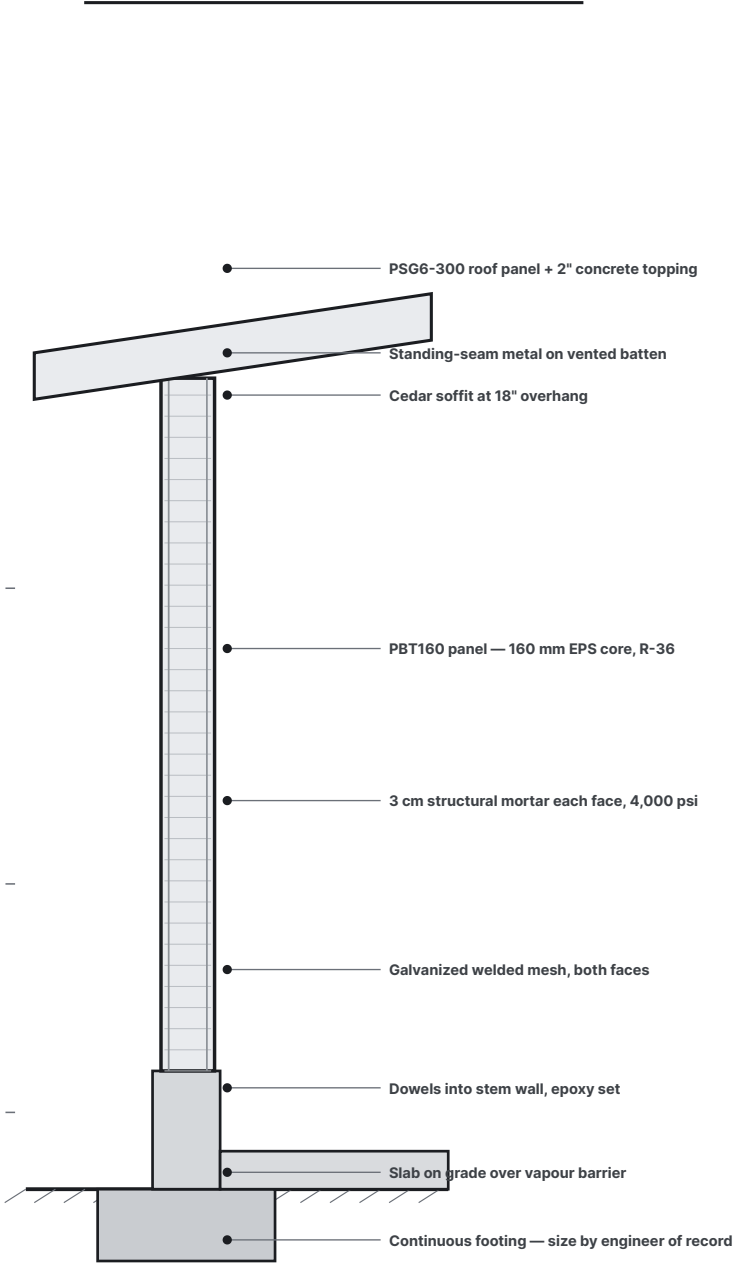
PANEL MODULE 4'-0"

W1-01	W1-02	W1-03	W1-04	W1-05	W1-06	W1-07	W1-08	W1-09	W1-10	W1-11	W1-12	W1-13	W1-14	
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15 wall panels at 4'-0" nominal — cut panel at end run. Panels arrive numbered and are set on the slab dowels, plumbed, braced, then rendered.

2 TYPICAL WALL SECTION

1 1/2" = 1'-0"



DESIGN CRITERIA — TO BE CONFIRMED BY THE ENGINEER OF RECORD

Wall panel	PBT160 — 160 mm EPS core, 7.6 in finished
Nominal thermal	R-36 wall assembly (core + render, before bridging)
Roof panel	PSG6-300, clear span to 32 ft
Mortar	4,000 psi structural mortar, 3 cm each face
Reinforcement	Double galvanized welded mesh, both faces, lapped at all joints
Fire rating	Not established by this drawing set — obtain a tested assembly report
Wind / seismic	Site specific — lateral system by engineer of record

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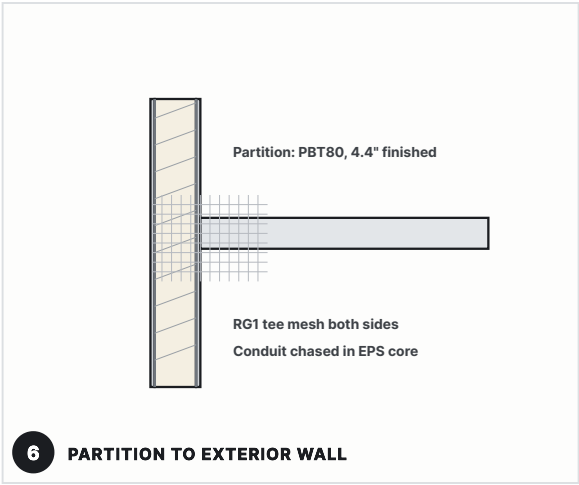
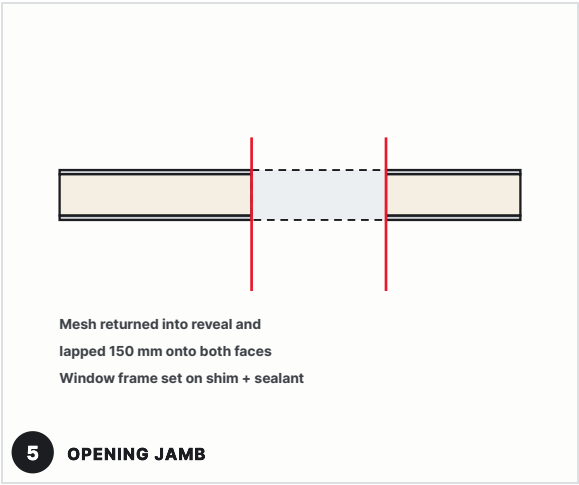
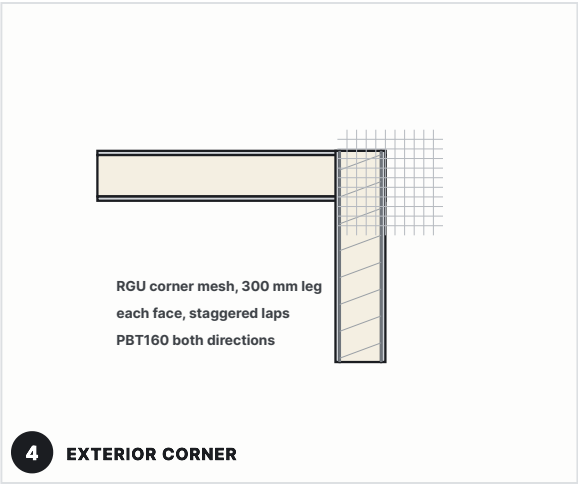
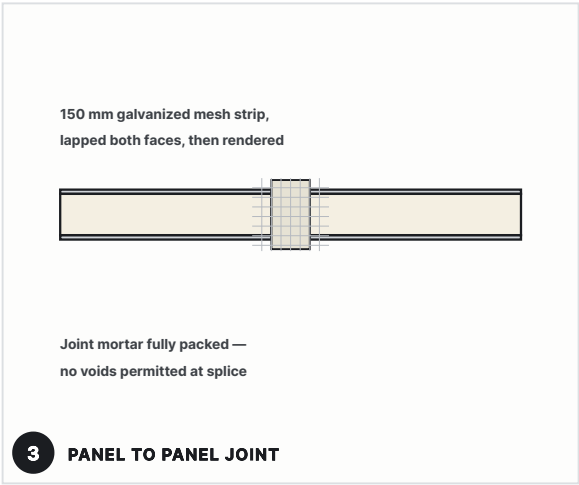
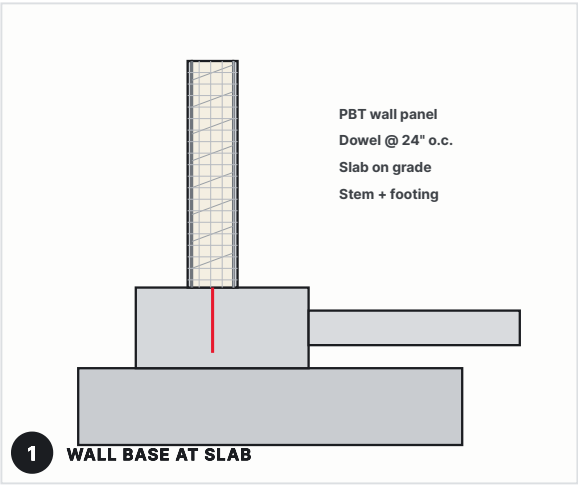
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BUILDING + WALL SECTION

A-3.0

ORCHARD — PBT PANEL DETAILS & SCHEDULES

DETAILS NOT TO SCALE



PANEL SCHEDULE

MARK	TYPE	CORE	FINISHED	R-VALUE	QTY / AREA
W1	PBT160 exterior wall	160 mm EPS	7.6 in	R-36	1,897 sq ft
P1	PBT80 partition	80 mm EPS	4.4 in	R-18	1,737 sq ft
R1	PSG6-300 roof	EPS + steel joist	3:12	—	2,631 sq ft

SHELL QUANTITIES (INDICATIVE)

Wall panel area	1,897 sq ft
Roof panel area	2,631 sq ft
Structural mortar (3 cm each face)	34.7 cu yd
Exterior wall length	204 lf
Interior partition length	193 lf
Interior doors	10
Windows	19

DOOR & WINDOW SCHEDULE

MARK	TYPE	SIZE	QTY
D1	Interior hinged	2'-10" × 6'-8"	4
D2	Interior hinged	2'-6" × 6'-8"	6
D3	Glass slider	8'-0" × 6'-8"	1
D4	Exterior entry	3'-0" × 6'-8"	1
W1	Fixed / operable unit	5'-0" × 4'-11"	10
W2	Fixed / operable unit	4'-6" × 4'-11"	1
W3	Fixed / operable unit	4'-0" × 4'-11"	2
W4	Fixed / operable unit	3'-6" × 4'-11"	4
W5	Fixed / operable unit	3'-3" × 4'-11"	2

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PBT DETAILS + SCHEDULES

A-4.0

1 ORCHARD — POWER, LIGHTING & ALARM PLAN

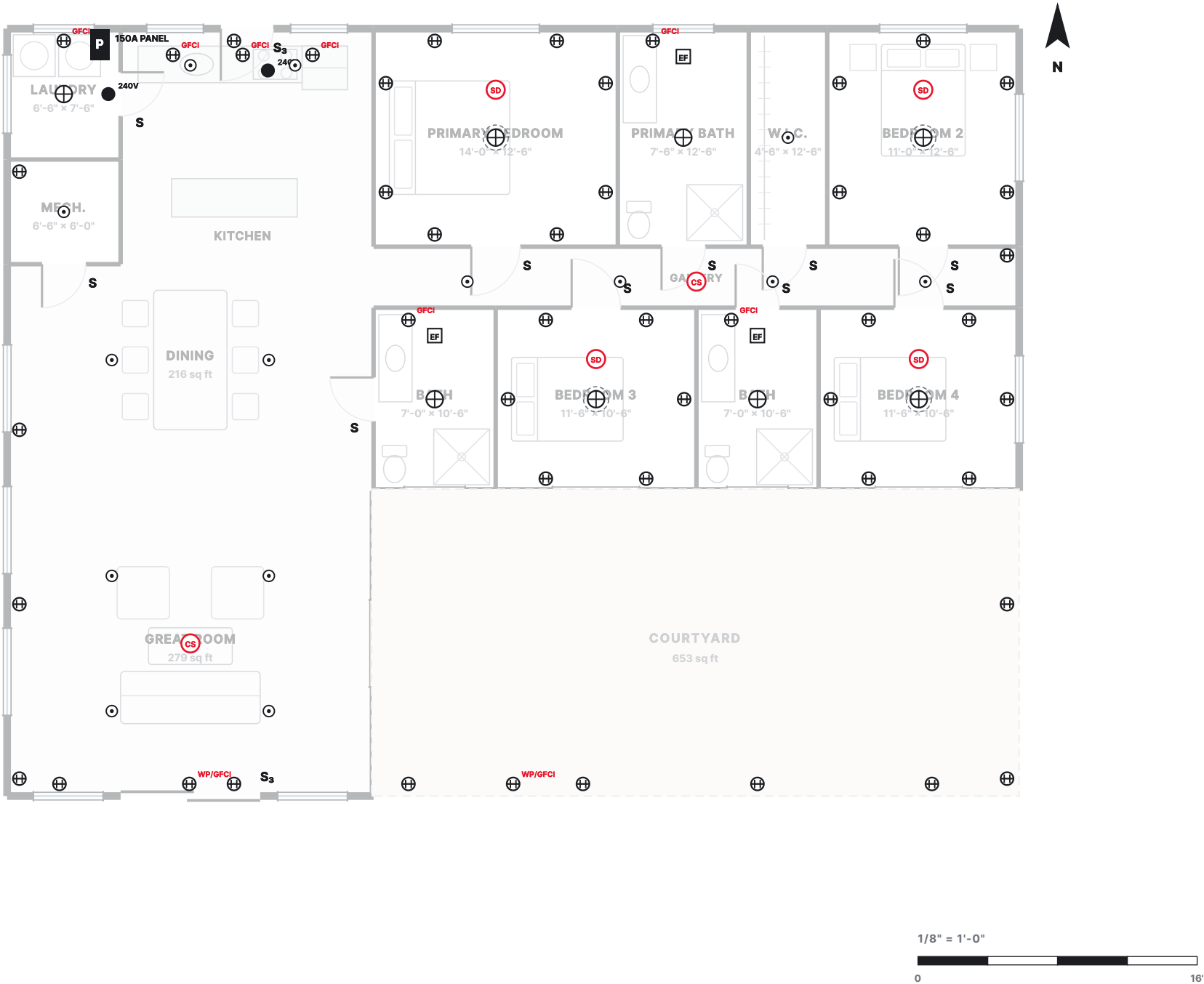
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LEGEND

- Duplex receptacle, 15 in a.f.f.
- GFCI receptacle — wet locations
- 240 V outlet — range, dryer, EV
- Surface / pendant fixture
- Recessed downlight
- Exhaust fan, ducted to outside
- Single-pole switch
- Three-way switch
- Smoke alarm, interconnected
- Smoke + CO alarm

ELECTRICAL NOTES

- Estimated connected load 63 kW after demand factors — confirm with a full load calculation.
- All 125 V, 15 and 20 A receptacles in kitchens, bathrooms, laundry, garage, exterior and within 6 ft of a sink to be GFCI protected.
- Arc-fault protection to all circuits serving habitable rooms.
- Alarms interconnected and provided with battery backup; one in each sleeping room, one outside each sleeping area, one per level.
- Conduit and boxes are chased into the EPS core of the PBT panel before rendering — coordinate device locations with the panel schedule.
- Circuiting and load calculation to be confirmed by the licensed electrical contractor against the adopted electrical code.



PANEL SCHEDULE — 150 A, 120/240 V, 1Ø, 3W

CKT	DESCRIPTION	P	TRIP	CONDUCTOR
1	Lighting 1	1	15 A	14-2
2	Lighting 2	1	15 A	14-2
3	Lighting 3	1	15 A	14-2
4	Lighting 4	1	15 A	14-2
5	General receptacles 1	1	20 A	12-2
6	General receptacles 2	1	20 A	12-2
7	General receptacles 3	1	20 A	12-2
8	General receptacles 4	1	20 A	12-2
9	Small appliance A	1	20 A	12-2
10	Small appliance B	1	20 A	12-2
11	Dishwasher	1	20 A	12-2

CKT	DESCRIPTION	P	TRIP	CONDUCTOR
12	Disposal	1	20 A	12-2
13	Range	2	50 A	6-3
14	Bathroom receptacles (GFCI)	1	20 A	12-2
15	Laundry receptacle	1	20 A	12-2
16	Dryer	2	30 A	10-3
17	Water heater	2	30 A	10-2
18	Mini-split / air handler 1	2	20 A	12-2
19	Mini-split / air handler 2	2	20 A	12-2
20	Mini-split / air handler 3	2	20 A	12-2
21	Exterior receptacles + site (GFCI)	1	20 A	12-2

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ELECTRICAL PLAN

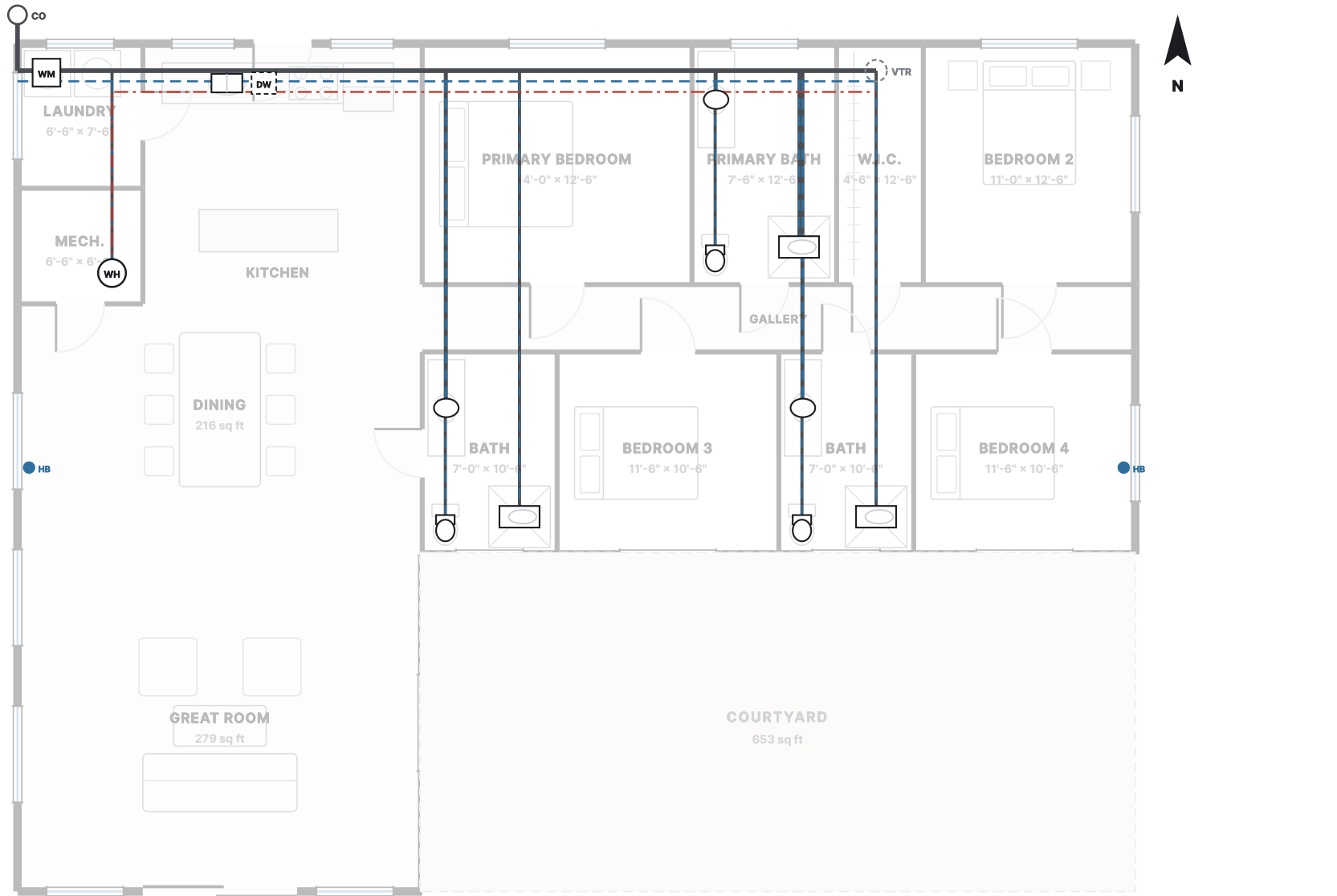
E-1.0

1 ORCHARD — PLUMBING PLAN

1/8" = 1'-0"

LEGEND

- Sanitary drain — sloped 1/4 in per ft
- Cold water supply
- Hot water supply
- Vent
- Water closet
- Lavatory
- Shower
- Bath tub
- Kitchen sink
- Dishwasher
- Washing machine
- Water heater
- Hose bibb, frost proof



FIXTURE SCHEDULE

MARK	FIXTURE	QTY	DFU EACH	DFU TOTAL
F1	Lavatory	3	1	3
F2	Water closet, 1.28 gpf	3	3	9
F3	Bath tub	3	2	6
F4	Washing machine	1	2	2
F5	Water heater	1	0	0
F6	Kitchen sink	1	2	2
F7	Dishwasher	1	2	2
F8	Hose bibb	2	0	0

DESIGN DATA

Total drainage fixture units	24 DFU
Building drain / sewer	4 in, 1/4 in per ft fall
Total water supply fixture units	33.4 WSFU
Water service line	1.25 in
Water heater	66 gal, or on-demand equivalent
Vent through roof	3 in, min. 6 in above roof

PLUMBING NOTES

- Supply and waste runs are shown diagrammatically. Final routing, pipe sizing and venting by the licensed plumbing contractor.
- Supply piping does not pass through the EPS core: run it in a furred service wall or in the partition, and sleeve every panel penetration.
- Provide accessible shut-offs at every fixture and a main shut-off at the service entry.
- Insulate hot water piping; protect any pipe in an unconditioned space against freezing.
- Fixture units and pipe sizes to be verified against the plumbing code adopted in the jurisdiction.



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