

Residential addition

A measured sample of the addition floor and three exterior wall faces, supported by drawing excerpts, formulas and explicit ordering assumptions.

Measured basis	Quantity	Use
Gross addition footprint	180 SF	12 ft x 15 ft; framing footprint
Clear finished floor	159.50 SF	11 ft x 14 ft 6 in; flooring
Net interior wall band	223.33 SF	0-8 ft high; three faces; provisional door deductions
Drywall layout / purchase	11 / 13 sheets	11 blank panels + rounded 10% reserve; 4 x 8 sheets

What this package proves

Each included area is tied to a wall or opening ID on the marked-up plan. The workbook separates gross areas, deductions, waste, stock conversions and unresolved scope. Quantities are not priced.

Defined scope

F1 flooring/subfloor; W1-W3 wall finishes, sheathing and selected material quantities within the 0-8 ft wall band. Selected plate lengths and opening counts are included. The open connection to the existing kitchen is not counted as a fourth full wall.

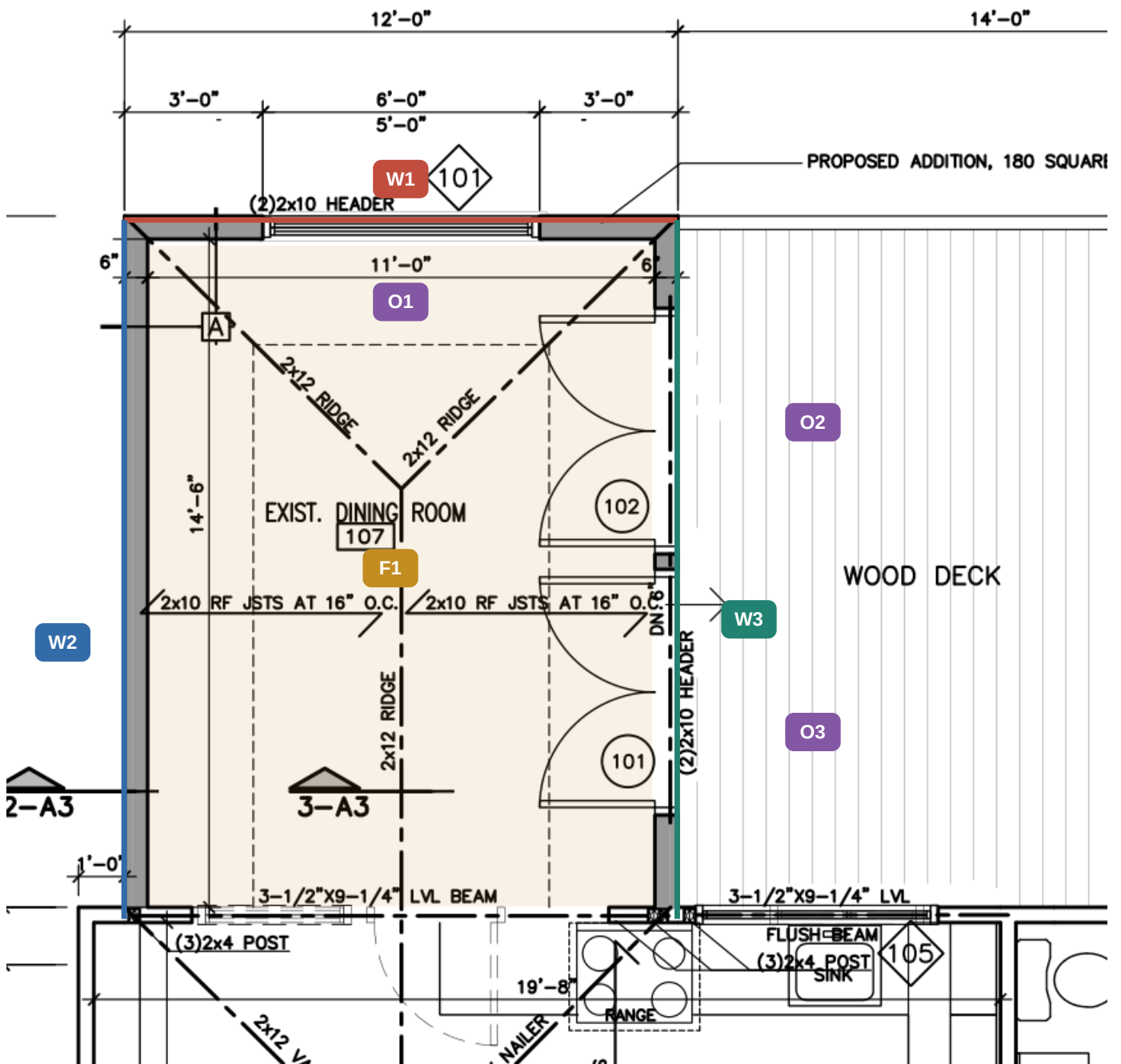
Review status

This is a historical drawing-based demonstration, not completed client work. Door-frame rough openings and ceiling/roof conflicts remain unresolved. Roof, ceiling, foundation, deck, demolition, MEP and the rest of the house are excluded. The workbook flags assumptions rather than substituting invented specifications.

Architectural design: Douglass Asral, AIA / Asral Architect, 2019.
Source set: five sheets issued 04 June 2019. Quantity analysis and overlays: Plan to Price Estimating. Owner/property identifiers are omitted from the public excerpts.

Follow the quantity IDs

A-1 addition excerpt. Colored overlays locate quantities; they are not scaled construction dimensions. Use the written dimensions and schedules.



W1 rear/window wall W2 left solid wall W3 deck-side door wall
F1 clear floor O1 window 101 O2 door pair 102 O3 door pair 101

Gross to net

Source: A-1 written dimensions and schedules. The selected wall band is 8 ft high. Ceiling geometry and upper wall surfaces are separately held under R1.

Surface	Gross calculation	Deduction	Net SF
F1 clear floor	11 x 14.5	None in selected rectangle	159.50
W1 inside	11 x 8 = 88	O1: 6 x 5 = 30 SF	58.00
W2 inside	14.5 x 8 = 116	No openings shown	116.00
W3 inside	14.5 x 8 = 116	2 x 5 x 6.6667 = 66.67 SF	49.33
Inside total	320.00 SF	96.67 SF	223.33
Outside total	(12 + 15 + 15) x 8 = 336	96.67 SF	239.33

Opening	Count	Deduction dimensions	Source meaning
O1 / mark 101	1 assembly	6 ft x 5 ft	Window schedule explicitly gives rough opening.
O2 / mark 102	1 pair	5 ft x 6 ft 8 in	Pair of two 2 ft 6 in leaves; nominal only.
O3 / mark 101	1 pair	5 ft x 6 ft 8 in	Pair of two 2 ft 6 in leaves; nominal only.

R2 matters: the two door deductions use the scheduled leaves as a provisional opening size. Their frame rough openings may be larger. Final wall quantities, stud locations and trim lengths must be updated when those dimensions are known.

Avoid double counting: window tag 101 and door tag 101 belong to different schedules. Two door pairs mean four leaves, not four additional assemblies. Interior and exterior surfaces are separate material faces.

Floor and drywall

References W1-W3 and F1 are located on page 2. Measurement rows and blank-panel components are not additional purchase quantities.

Item / material	Gross - deduct / net	Waste / adjusted	Quantity basis	Qualification
F01 Hardwood flooring, 3/4 in	159.5 - 0 159.5 SF	10% 175.45	175.45 SF	F1 clear floor; purchase packs/product not selected.
F02 3/4 in T&G; plywood subfloor	180 - 0 180 SF	10% 198	7 SHEET	F1 framing footprint; 4 x 8 area conversion; layout/edge support to confirm.
W01 1/2 in drywall, W1	88 - 30 58 SF	0% 58	58 SF	Measured net wall band; sheet procurement is D04, not this row.
W02 1/2 in drywall, W2	116 - 0 116 SF	0% 116	116 SF	Measured net wall band; sheet procurement is D04.
W03 1/2 in drywall, W3	116 - 66.67 49.33 SF	0% 49.33	49.33 SF	Nominal door deductions R2; sheet procurement is D04.
D01 W1 vertical blank panels	3 - 0 3 SHEET	0% 3	3 SHEET	4 ft + 4 ft + 3 ft widths; openings cut out, no reuse credited.
D02 W2 vertical blank panels	4 - 0 4 SHEET	0% 4	4 SHEET	4 ft + 4 ft + 4 ft + 2.5 ft widths; H limited to 8 ft.
D03 W3 vertical blank panels	4 - 0 4 SHEET	0% 4	4 SHEET	No reuse of door cutouts; opening edge joints require final layout.
D04 Drywall sheet purchase total	11 - 0 11 SHEET	10% 12.1	13 SHEET	Only drywall purchase total. D01-D03 are its components; do not add again.
D05 Drywall fastening model	396 - 0 396 EA	10% 435.6	436 EA	36 screws/blank panel ASSUMPTION; verify spacing, board and opening details R5.
D06 Vertical joint tape	96 - 0 96 LF	10% 105.6	1 ROLL	8 field joints + 2 corners + 2 assumed existing-wall ties; excludes ceiling seam.

Envelope and framing

Board counts use an explicit blank-panel model. Insulation remains assembly coverage; final cavity and pack quantities require the product and framing layout.

Item / material	Gross - deduct / net	Waste / adjusted	Quantity basis	Qualification
E01 1/2 in exterior plywood, W1	96 - 30 66 SF	0% 66	66 SF	Net wall coverage; sheet purchase E04.
E02 1/2 in exterior plywood, W2	120 - 0 120 SF	0% 120	120 SF	Net wall coverage; sheet purchase E04.
E03 1/2 in exterior plywood, W3	120 - 66.67 53.33 SF	0% 53.33	53.33 SF	Nominal door deductions R2; sheet purchase E04.
E04 Wall sheathing blank panels	11 - 0 11 SHEET	10% 12.1	13 SHEET	8 ft band; 3 + 4 + 4 blanks, openings cut out; no reuse credited.
E05 Housewrap coverage	336 - 0 336 SF	15% 386.4	386.4 SF	Gross wrap across openings + 15% laps/cuts; product roll count pending.
E06 Siding coverage, wall band	336 - 96.67 239.33 SF	10% 263.27	263.27 SF	Profile/pack, gable, trims and overhang areas unresolved R4.
I01 R-19 wall insulation coverage	336 - 96.67 239.33 SF	10% 263.27	263.27 SF	Assembly-area allowance includes framing; not a net cavity/batt count.
I02 R-30 floor insulation coverage	180 - 0 180 SF	10% 198	198 SF	Gross framing footprint; cavity widths/product packs not resolved.
P01 2 x 6 double top plates	84 - 0 84 LF	10% 92.4	6 16 FT PC	LF supply conversion only; laps/splice/cutting layout to confirm.

Openings and finishes

Opening counts, trim reference perimeters and coating application areas are kept separate from product purchase quantities.

Item / material	Gross - deduct / net	Waste / adjusted	Quantity basis	Qualification
P02 2 x 6 sole plate, installed	42 - 10 32 LF	10% 35.2	3 16 FT PC	Door widths deducted; temporary threshold plates not included.
O01 Window 101 assembly	1 - 0 1 EA	0% 1	1 ASSEMBLY	6 x 5 ft RO; verify model and units per combined assembly.
O02 Door 101/102 pairs	2 - 0 2 PAIR	0% 2	2 PAIR	Two pairs, each 2 leaves at 2 ft 6 in x 6 ft 8 in; frame RO pending.
O03 Door leaf count	4 - 0 4 LEAF	0% 4	4 LEAF	Informational component of O02; not four additional door assemblies.
T01 Interior baseboard	40 - 10 30 LF	10% 33	33 LF	Three walls only, deduct door widths; profiles/stock lengths to confirm.
T02 Window casing reference	22 - 0 22 LF	0% 22	22 LF	RO perimeter only; not a trim purchase length. Reveals/miters to add.
T03 Door casing reference	36.67 - 0 36.67 LF	0% 36.67	36.67 LF	Interior three-sided nominal perimeter only; reveals/miters to add.
F03 Wall paint area per coat	223.33 - 0 223.33 SF	0% 223.33	223.33 SF	Wall band only; excludes ceiling, trim and upper/gable surfaces.
F04 Wall primer application area	223.33 - 0 223.33 SF	0% 223.33	223.33 SF-COAT	One primer coat per T-1; gallons pending approved product coverage.
F05 Wall finish application area	223.33 - 0 223.33 SF	0% 223.33	223.33 SF-COAT	One scheduled finish coat; T-1 calls for recoat if substrate visible.

Area is not a sheet layout

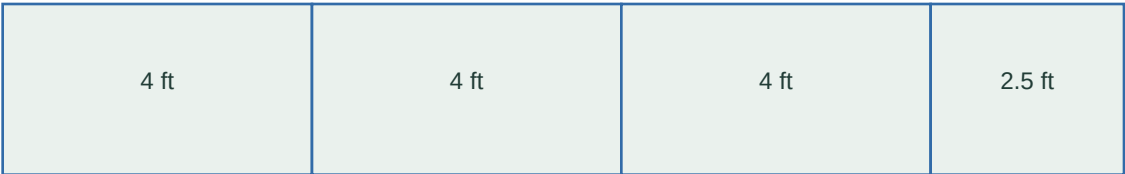
The diagram below shows blank-panel divisions only. Openings are cut from the blanks; no reuse credit is taken. Final joints, edge support and cuts around openings remain subject to R5.

W1



8 ft high; 3 blank panels

W2



8 ft high; 4 blank panels

W3



8 ft high; 4 blank panels

Calculation	Result	Meaning
3 + 4 + 4 panels	11 sheets	Blank coverage before spare stock
ROUNDUP(11 x 1.10)	13 sheets	Whole-sheet purchase model; 2 reserve sheets
11 x 36 screws x 1.10	436 screws	Assumed model, rounded up; no product pack selected
(8 field joints + 4 corner/tie lines) x 8 ft	96 LF tape	Vertical joints only; ceiling junction excluded
96 x 1.10 / 250 LF roll, rounded up	1 roll	105.6 LF modeled demand; assumed 250 LF roll

Net drywall area is 223.33 SF. An area-only conversion with 10% waste would give 8 sheets; the conservative blank-panel model gives 13. Optimized reuse may reduce the latter. Neither number substitutes for an approved installation layout. Model is scoped to the shown 8 ft band.

Questions kept visible

Resolve these drawing and product questions before turning this sample into a live bid or material order. The workbook retains every item alongside its takeoff treatment.

R1 / A-1 room finish schedule and reflected ceiling label show 8 ft; A-1 roof geometry and A-3 detail 2 show a raised ceiling.

Only selected wall band from 0-8 ft is quantified. Ceiling and upper walls are held.

Required: Confirm actual finished wall heights, ceiling slopes, ridge/flat center dimensions and finish extent.

R2 / Door schedule gives paired leaf sizes, not frame/rough-opening dimensions.

Use 5 ft x 6 ft 8 in per pair provisionally for wall deductions. Do not release ordering dimensions.

Required: Confirm frame rough openings for 101/102, clear offsets, thresholds and opening heights.

R3 / A-1 and detail 2/A-3 show 2x10 roof joists; detail 3/A-3 says 2x8. Roof sheathing is 1/2 in in detail 2 and 5/8 in in detail 3.

No roof lumber, roof board or roofing purchase quantity issued.

Required: Obtain architect clarification of governing roof assembly, sheathing, pitch, hips, ridge and overhangs.

R4 / Detail 2/A-3 calls for vertical siding per owner selection; detail 1 calls for vinyl siding to match.

Report wall-band coverage only. No product packs, J-channel, corner posts or starter profiles.

Required: Confirm siding system, exposure, trim components, gable limits and accessories.

Why roof and ceiling quantities are held

The finish schedule supports an 8 ft reference, but raised/hipped ceiling geometry is also shown. The roof details disagree on rafter and sheathing sizes. Applying a roof-pitch multiplier to the floor area would not resolve these differences.

Finish the agreed scope

This package completes the stated measurement model and identifies what must change before purchase quantities can be released.

R5 / Final panel joint layout, fastening, finish level and product yields are not specified for this sample scope.

Vertical blanks are an estimating layout, not an installation detail. Screw count uses an explicit 36-per-board model.

Required: Confirm joints relative to openings, support/blocking, screw type and spacing, tape/compound and manufacturer requirements.

R6 / New and existing work meet at the open kitchen interface; connection framing is shown but installation conditions are not verified.

Exclude fourth full wall; allow two vertical finish ties in tape quantity. No demolition or existing-house patch area included.

Required: Confirm posts/beams, finish returns, concealed conditions and patching boundaries.

R7 / Source is the 04 June 2019 permit-issue set.

Historical drawing-based sample; quantities are not a current construction instruction.

Required: For an actual order or bid, confirm current issued drawings, revisions and field dimensions.

R8 / Foundation detail contains inconsistent level labels; full foundation and deck work are outside selected scope.

No excavation, concrete, masonry, structural deck, MEP or permit scope quantified.

Required: Separate takeoff only after scope and governing dimensions/details are reconciled.

Excluded from this takeoff

Foundation/excavation; deck/stairs/rails; demolition; existing-house finishes and patching; full stud/joist/header engineering and ordering; roof and ceiling materials; mechanical, electrical and plumbing; costs and labor; permits and taxes.

Workbook use

Takeoff contains formulas for gross, deductions, net, reserve and purchase conversions. Measurements holds source dimensions and editable assumptions. Clarifications records the open questions. Do not sum unlike units or add component rows to their purchase totals. Changes beyond the stated 8 ft band require a revised layout.

Schedules and wall assembly

Selected readable excerpts from A-1 and A-3. Cropped copies omit owner/property identifiers. Architectural design remains attributable to Asral Architect, 2019.

FIRST FLOOR SCHEDULES

WINDOW SCHEDULE					
MARK	ROUGH OPENING WIDTH HEIGHT	MANUFACTURER	MODEL NO.	TYPE	NOTES

1. ALL EXPOSED WINDOW MUST PROVIDE A MINIMUM OF 5.3 SQUARE FEET OF CLEAR OPENING WITH A MINIMUM CLEAR WIDTH OF 20 INCHES AND A MAXIMUM SILL HEIGHT OF 44 INCHES. CONFIRM THESE DIMENSIONS FOR ANY SUBSTITUTES.
2. WINDOW SILL HEIGHTS NOT TO EXCEED 2'-0" ABOVE FINISH FLOOR AT LOCATIONS WHERE THE FLOOR LEVEL IS 4 FEET ABOVE GRADE.
3. SEE DRAWING 2 FOR FLASHING.
4. TEMPORARY GLAZING REQUIRED AT:

A. WINDOWS WITHIN 60 INCHES OF A TUB OR SHOWER

B. WINDOWS WITHIN 24 INCHES OF A DOOR JAMB

C. WINDOW GLAZING WITHIN 18 INCHES OF FINISHED FLOOR
5. ALL WINDOWS TO INCLUDE FOLLOWING:

1. INSULATING DOUBLE FRAME GLAZING

2. INERT SPOKES

3. PRE-FINISHED INTERIOR FINISH

4. SIMULATED DIVIDED LIGHT GRILLES
6. CONFIRM EXISTING WALL OPENING DIMENSIONS IN FIELD PRIOR TO ORDERING

DOOR SCHEDULE							
MARK	DOOR			HARDWARE		SET	NOTES
	W x H	THICK.	MATERIAL	GLAZING	MNFR.		
101	PR 2'-0" x 6'-8"	1 3/4"	WOOD	TEMPERED	ANDERSEN	---	---
102	PR 2'-0" x 6'-8"	1 3/4"	WOOD	TEMPERED	ANDERSEN	---	---

ROOM FINISH SCHEDULE									
ROOM NO.	ROOM NAME	FLOOR	FLOOR FINISH	WALLS				CEILING	HEIGHT
				N	S	E	W		
101	LIVING ROOM	HARDWOOD	POLYURETHANE	1/2" OYP. BD.	1/2" OYP. BD.	1/2" OYP. BD.	1/2" OYP. BD.	OYP. BD.	8'-0"
104	EXIST. KITCHEN	3/4" HD. WD.	POLYURETHANE	OYP. BD. 1/2"	OYP. BD. 1/2"	OYP. BD. 1/2"	OYP. BD. 1/2"	OYP. BD. 1/2"	8'-0"
107	EXIST. DINING ROOM	3/4" HD. WD.	POLYURETHANE	OYP. BD. 1/2"	OYP. BD. 1/2"	OYP. BD. 1/2"	OYP. BD. 1/2"	OYP. BD. 1/2"	8'-0"

- NOTES-FIRST FLOOR
8. WOOD, PLASTICS

(E) REGRADING STAIR, HARDWOOD TREADS, LANDINGS, HANDRAIL, 34" AIR RIGID, 30" HT. GUARDRAIL AT TOP OF STAIR W/ BALUSTERS SPACED AT 4" MAX AS SELECTED BY OWNER

(E) CONFIRM NUMBER OF RISERS DOWN TO GRADE IN FIELD 8" MAXIMUM HEIGHT PER RISER INSTALL GUARDS AND HANDRAILS AT STAIRS & LANDINGS WITH FOUR (4) OR MORE RISERS

(E) COMPOSITE FRAMING, SICOING AND NEWELL, TYPICAL

A. 2x4 HANDRAIL, 34" ABOVE TREAD NOSING

B. 5/8" COMPOSITE DECKING

C. GUARD RAILS 3'-0" HT. MIN.

1. CONSTRUCT TO RESIST 200 LB. FORCE APPLIED AT ANY POINT

2. 2x4 COMPOSITE CAP AT GUARD RAIL

3. 5/8" COMPOSITE SQUARE BALUSTERS AT 3'-3/4" SPACING

(E) STAIR NOTE: MAINTAIN 81" MINIMUM HEAD CLEARANCE ABOVE STAIR TREADS WITH 4" MAX TREADS AND 8-1/4" MAX RISERS. CONFIRM NUMBER OF RISERS IN FIELD TO ACCOMMODATE CHANGE IN HEIGHT FROM FINISH FLOOR TO FINISH FLOOR OR GRADE.
9. FINISHES

(E) 1/2" OYPEN BOARD FINISH AT WALLS AND CEILING

(E) PRIME AND PAINT

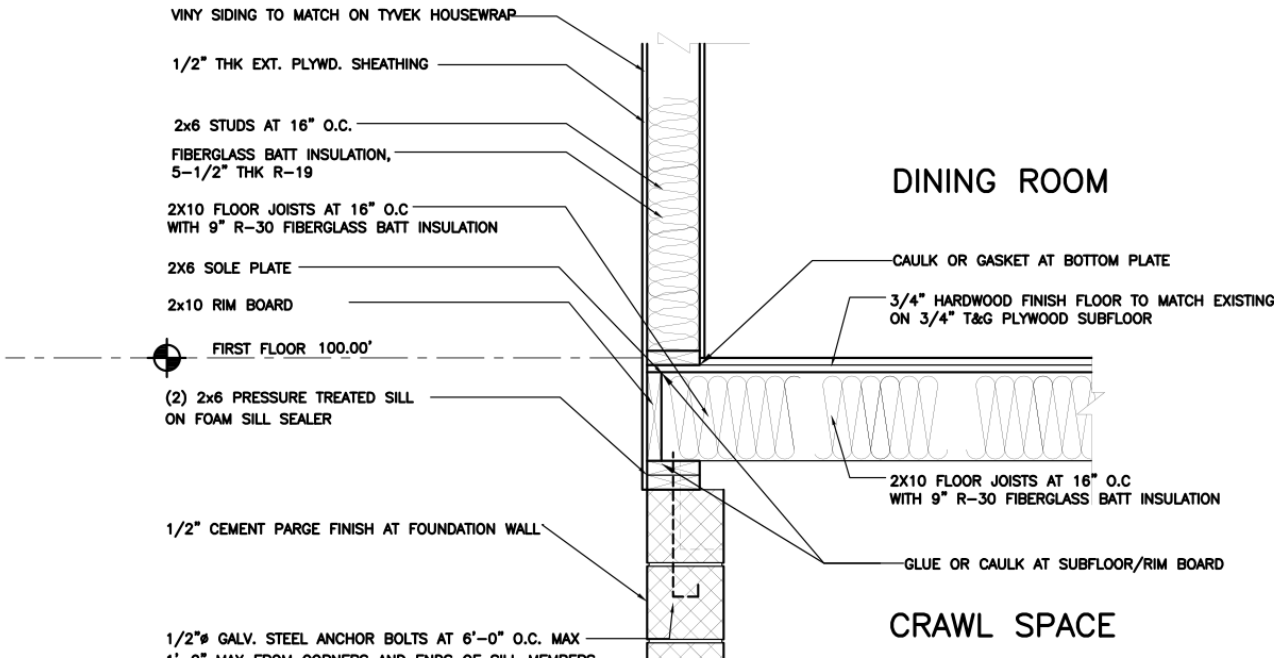
(E) 3/4" THICK x 2-1/4" HARDWOOD FLOORING
15. MECHANICAL

(E) INSTALL MAKE-UP AIR VENT & DAMPER WITH HOODS EXHAUSTING MORE THAN 400 CFM. SEE DIAGRAM ON A-1

(E) COLD WATER SUPPLY AT REFRIGERATOR
16. ELECTRICAL

(E) KITCHEN: MINIMUM SEPARATE 20 AMP GROUND FAULT CIRCUITS AT COUNTERTOP APPLIANCE RECEPTACLES 12 GAUGE WIRING

A-3 / Detail 1 - wall and floor materials



Source material notes identify 2x6 studs at 16 in OC, 1/2 in exterior plywood, housewrap, R-19 wall insulation, 3/4 in hardwood flooring, 3/4 in T&G subfloor and R-30 floor insulation. These are source specifications, not a claim that every assembly component has a released purchase count.