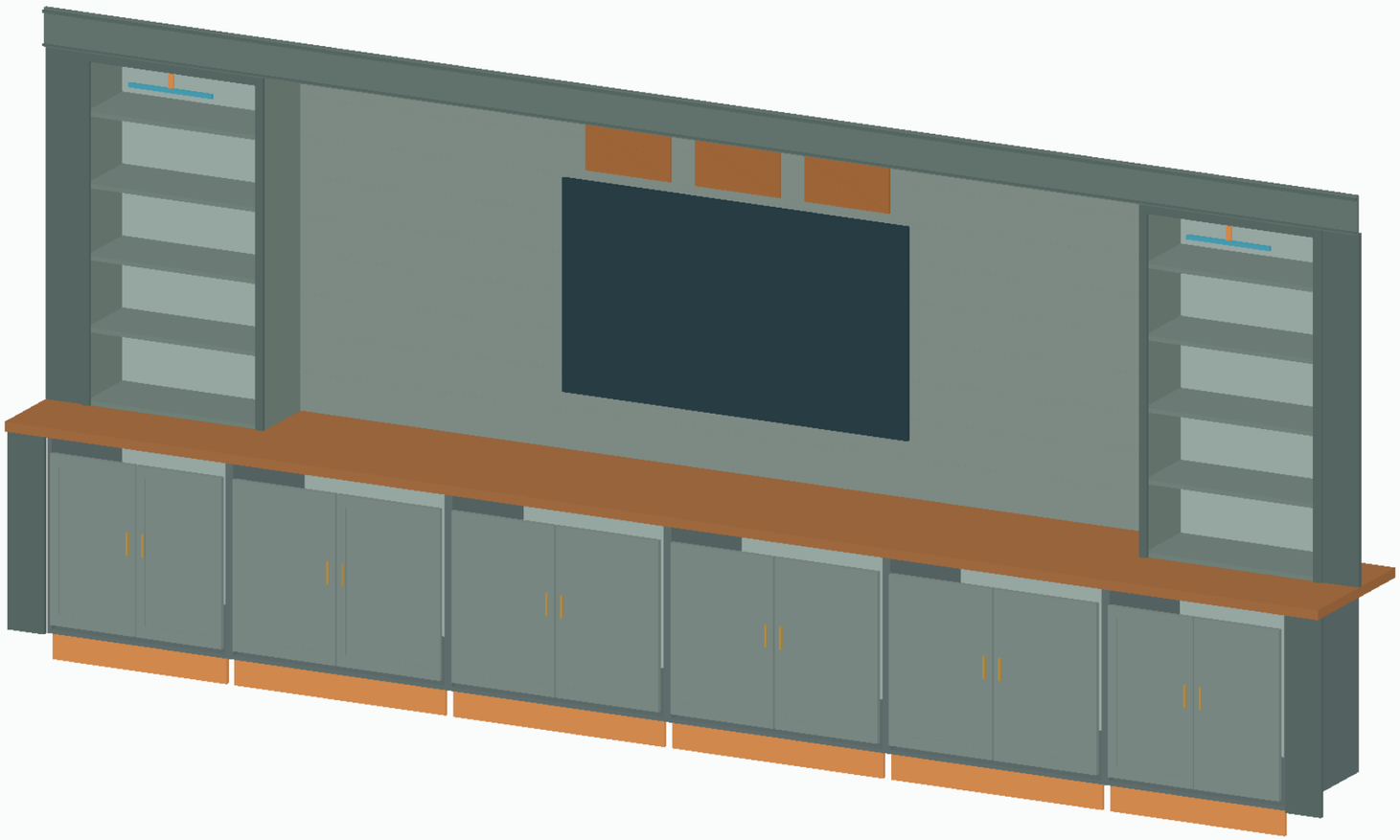
3D assembly - installed isometric

V-01 - FRONT-DOMINANT ISOMETRIC | full-size CAD geometry; view not to scale



REPRESENTATION KEY

- Construction / stock cabinetry
- Plywood, backing and wall panels
- Birch butcher block
- Custom trim and header
- TV product envelope
- Light / fitting envelopes
- Prototype-only placeholders
- Site-dependent: omitted

COORDINATE BASIS

Origin: rear-left, floor datum (0,0,0)

X: left to right / width

Y: floor to ceiling / height

Z: rear wall toward room / depth

Installed base lies on X-Z plane

Upright orientation: positive Y

ENVELOPE

216 in (5486.4 mm) W

HEIGHT

96 in (2438.4 mm)

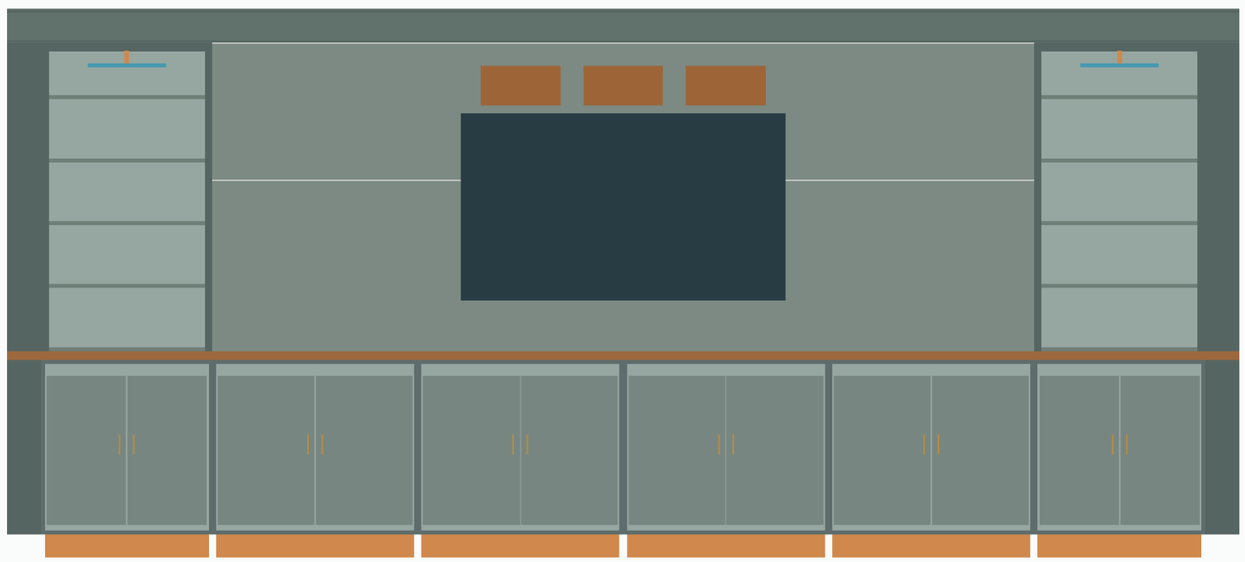
MAXIMUM DEPTH

25 in (635 mm)

Orthographic reconciliation

V-02 FRONT / V-03 TOP-PLAN / V-04 RIGHT SIDE - generated from 3D B-rep

V-02 FRONT / REPEATED SIX-MODULE RUN

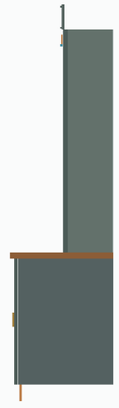


216 in (5486.4 mm) [DIM-001]

V-03 TOP / WALL DATUM AND 25-IN COUNTER



V-04 RIGHT SIDE



MODULE CHAIN (from left): 6 + 30 + 36 + 36 + 36 + 36 + 30 + 6 = 216 in

Base H: 34.5 in (876.3 mm); counter thickness: 1.5 in (38.1 mm); upper towers: 54 in (1371.6 mm)

Crown zone: 6 in (152.4 mm); tower depth: 11.75 in (298.5 mm); plywood: 0.703 in (17.856 mm)

EDITORIAL PROTOTYPE - NOT FOR CONSTRUCTION | USE DIMENSIONS - DO NOT SCALE

Primary dimensions in inches (mm)

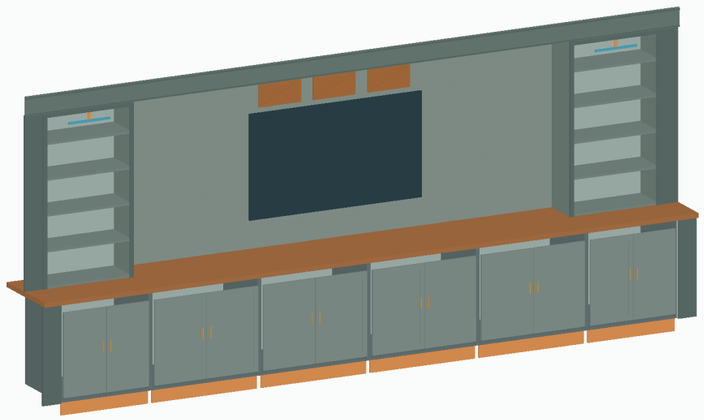
Construction visibility & model exclusions

V-05 ISOMETRIC CUTAWAY / V-06 REVERSE ISOMETRIC - component identity review

V-05 CUTAWAY / LEFT TWO DOORS + TV REMOVED FOR VISIBILITY



V-06 OPPOSITE ISOMETRIC / BACKING INTERFACES



PDF VISIBILITY PROOF - INSTALLED OCCURRENCES

4 x PROD-001 + 2 x PROD-002	V-02 / V-05	Six separate hollow cabinet proxies; 12 panel doors
3 x PROD-003 countertop cuts	V-01 / V-03	Three 72-in installed segments; joints X=72 and 144
2 x CMP-01 / PROD-004 towers	V-01 / V-05	Two plywood carcasses; 4 shelves in each (CMP-02)
2 x PROD-005 tower backing	V-06	Rear back panels; 0.188-in sourced panel stock
12 x PROD-015 brass-pull proxies	V-02	Individually distinguishable paired-door pulls
2 x PROD-014 light envelopes	V-02 / V-05	13.75-in published width; protrusion unverified
3 x CMP-06 geometric panels	V-01 / V-02	Original wood decoration; custom/prototype dimensions
9 x CMP-03 TV cladding bands	V-05 / V-06	Prototype MDF; not a structural wall
1 x PROD-011 TV envelope	V-01 / V-02	Published front W/H; thickness/standoff unverified

Commercial product schedule

One separate variant per source record; raw stock vs model geometry are distinct counts

ID	EXACT PRODUCT VARIANT	SOURCE QTY / STEP REPRESENTATION	EVIDENCE / GEOMETRY	MATERIAL - FINISH / NOTE
PROD-001	Hampton Bay KSB36-UF	4 modules / 4 proxies	Stock / factory geometry simplified	Painted Westchester Gray intent
PROD-002	Hampton Bay KSB30-UF	2 modules / 2 proxies	Stock / factory geometry simplified	Painted Westchester Gray intent
PROD-003	Hardwood Reflections BBCT1502598	3 stock blanks / 3 cuts	72-in installed pieces x 3	Birch natural sealed; seams pending
PROD-004	PureBond 165921 birch plywood	4 sheets P / 16 parts	0.703-in source thickness	Painted tower carcass and shelves
PROD-005	PureBond 165891 plywood	2 sheets P / 2 parts	0.188-in source thickness	Tower rear panels
PROD-006	Woodgrain 10004429 crown	4 lengths P / 3 proxies	Custom crown/header envelope	Painted SW 2849 intent
PROD-007	PrimeLinx 252909 face trim	9 lengths P / 6 pieces	Provisional flat face members	Painted SW 2849 intent
PROD-008	Extreme Bond B51W01150	Consumable / no solid	Preparation system / excluded	Primer, application conditional
PROD-009	Waterlox Universal Sealer TB1000	Consumable / no solid	Wood finish / excluded	On birch countertop
PROD-010	Waterlox Original Satin TB6044	Consumable / no solid	Wood finish / excluded	Countertop topcoat
PROD-011	TCL 65QM6K	1 / 1 envelope	56.9 x 32.7 in front verified	Thickness and Z position P
PROD-012	ECHOGEAR EGLT3	1 / omitted	Bracket body unverified	VESA 300 x 300 mm spec only
PROD-013	SANUS WSIWP1	1 / omitted	In-wall services unresolved	Do not model cable path
PROD-014	Smaller Blake USPLRLBLA099BRABRA	2 / 2 envelopes	13.75-in width supported	Other envelope axes P
PROD-015	Amerock BP36764CZ	12 / 12 proxies	Pull locations/shape not certified	Champagne Bronze styling
PROD-016	Titebond III 1414	Consumable / no solid	Assembly adhesive / excluded	Quantity TBD
PROD-017	DAP Alex Flex 18542	Consumable / no solid	Paintable sealant / excluded	Quantity TBD
PROD-018	Threshold potted privet	Optional / excluded	Styling not required for CAD	May appear in final renders
PROD-019	Threshold ceramic vase	Optional / excluded	Styling not required for CAD	May appear in final renders
PROD-020	Interior Design Handbook	Optional / excluded	Styling not required for CAD	May appear in final renders

P = provisional purchase allocation. Installed products and stock yields are not interchangeable quantities.

PROD-012 / PROD-013 geometry intentionally omitted because exact mount/stud/cable interface is not documented.

Custom component audit & dimensional links

Source-backed exterior dimensions and declared prototype modeling assumptions

CMP ID	COMPONENT / MATERIAL	NAMED STEP GROUP QUANTITY	GEOMETRY / BOUNDARY	UNCERTAINTY
CMP-01	Upper plywood tower carcass	2 complete towers	30 W x 54 H x 11.75 D in	Prototype, 0.703-in sides
CMP-02	Illustrative adjustable shelves	8 solid shelves	4 per tower / 28.594 clear W	Y locations illustrative
CMP-03	Backing, face, crown, fillers, MDF	2 backs; 6 trim; 3 crown; 4 fillers; 9 cladding	Detail identities P	Nosing edge and fixings TBD
CMP-04	Toe/plinth face proxy	6 toe faces	4-in nominal toe zone P	Actual stock cabinet toe unverified
CMP-05	Anchorage, fasteners, prep	0 physical CAD solids	Omitted / field design pending	Do not infer loading
CMP-06	Geometric wood wall ornaments	3 distinct solid panels	Raised diagonal design P	Custom decorative treatment

DIMENSION RECONCILIATION | AFTER SAVED STEP RE-IMPORT

REFERENCE	AUTHORITATIVE / IN	REIMPORTED / IN	RESULT
DIM-001	W 216	W 216.000	PASS - both units 5486.4 mm
DIM-002	H 96	H 96.000	PASS - both units 2438.4 mm
DIM-003/004	base 34.5 / counter 1.5	34.5 / 1.5	PASS - y=36-in counter top
DIM-005/009	tower 54 / crown zone 6	54 / 6	PASS - y=36 to 90 to 96

PRIMARY PROTOTYPE MODELING ASSUMPTIONS

ASM-P1: Cabinet door, toe, side/rail internals are hollow construction proxies, not manufacturer-authored cut parts.

ASM-P2: Tower four-shelf elevations are illustrative; load rating, pin spacing, nosing and field anchorage unverified.

ASM-P3: TV thickness/stand-off, cladding thickness, crown profile, pull geometry and picture-light projection are schematic.

ASM-P4: Cabinet fillers, countertop seam construction, and cabinet enamel system need job-specific review.

ASM-P5: Supplier sheet/trim allocations are provisional procurement quantities; not STEP component occurrences.

Saved STEP verification & field limitations

Model review confirms CAD geometry, not site/fabrication or electrical approval

STEP AP214 - SAVED FILE / INDEPENDENT B-REP RE-IMPORT

Length unit entity	SI_UNIT(.MILLI.,.METRE.)	**PASS - 1 coordinate unit = 1 mm**
Raw coordinate extents	X 0..5486.4; Y 0..2438.4; Z 0..635	**PASS**
Physical extents (millimetres)	5486.4 W x 2438.4 H x 635 D	**PASS**
Physical extents (inches)	216 W x 96 H x 25 D	**PASS**
B-rep validation	129 imported solids; 129 valid + positive volume	**PASS**
Named components	129 STEP occurrences, individual readable part names	**PASS**
Orientation / coordinates	X width; Y up; Z roomward; floor at Y=0	**PASS**
Form / negative spaces	6 cabinet bodies, inset door panels, 2 open towers	**PASS - review views V-01..06**
Analytic geometry register	0 required circles, arcs, radii or cylinders	**NOT APPLICABLE**
Saved analytic topology	CIRCLE 0; CYLINDER 0; LINE 5376	**PASS - source design is rectilinear**
External references	No image, XREF or mesh-only substitution	**PASS**

FIELD VERIFICATION REQUIRED BEFORE ACTUAL INSTALLATION

- Actual wall width/height, level, plumb, perimeter gaps, stairs and material access.
- Moisture and substrate assessment; determine wall framing, stud positioning and anchor capacity.
- Shelf loads and deflection, cabinet internal shelf positions, cabinet doors and clear movement.
- Countertop joint support, wood expansion/finish, finishing adhesion and curing protocols.
- TV mount manufacturer instructions, standoff, safety clearance, structural installation and wiring.
- In-wall power/cable routing and any work requiring a licensed electrical or construction specialist.

STEP is a neutral editable/importable solid exchange format; native parametric feature history is not included.

Examples of STEP-capable tools: SolidWorks, FreeCAD, Fusion, Onshape; none is required for this workflow.