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Jennifer Steer
403.461.6714
archeform.net

Pre-Construction Drawing

Space Plan Review Checklist

Interior Design · Alberta Building Code (NBC Part 9) · AIA Standards

Project Name: _____ **Date:** _____

Designer: _____ **Project No.:** _____

Reviewer: _____ **Phase:** _____

ALBERTA BUILDING CODE — NBC PART 9 QUICK REFERENCE

Stair rise (residential)	**125–200 mm (5"–7■")**	Tread run + 25 mm nosing	**Min 235 mm run (9¼")**
Handrail height	**865–965 mm from nosing line**	Guardrail height	**Min 1070 mm (42") open edges**
Habitable ceiling min	**2300 mm — NBC 9.5.4.1**	Hallway / bathroom min	**2100 mm — NBC 9.5.4.2**
Stair headroom	**Min 1950 mm above nosing line**	Baluster spacing	**Max 100 mm — 4" sphere rule**

FLOOR PLAN ALIGNMENT — 6 items

- [ ] All floor plates aligned vertically between levels
  Confirm structural grid is consistent on every plan sheet
- [ ] Walls stack or transfer load correctly floor to floor
  Flag floating walls for structural coordination
- [ ] Column grid and beam lines coordinated across all levels
- [ ] Floor-to-floor heights confirmed and noted on sections
  This drives all stair and ceiling calculations — lock before proceeding
- [ ] Overall square footage cross-checked on each level
- [ ] Partition types drawn and tagged — majority of types shown at correct scale AIA
  AIA DD standard: most partition types drawn before advancing to CDs

ALBERTA BUILDING CODE — RESIDENTIAL BASICS — 13 items

- [ ] Every bedroom must have an egress window or exterior door ABC
  Min unobstructed opening 0.35 m2 (3.77 ft2), no dimension less than 380 mm (15") — NBC 9.9.10.1. Sill height recommended no higher than 1.5 m from floor
- [ ] Basement bedroom egress window wells require 760 mm clearance in front ABC
  Window well must allow a person to fully open the sash and escape — NBC 9.9.10.1
- [ ] Smoke alarms required on every storey, in every bedroom, and outside each sleeping area ABC
  Must be interconnected so activation of one triggers all — NBC 9.10.19. Photoelectric type required in houses with secondary suites

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- [ ] Carbon monoxide alarm required where fuel-burning appliance is present or where there is an attached garage — ABC
  CO is odourless and colourless — NBC 9.32.4.2. Attached garages at or below living space level create continuous pressure risk
- [ ] Natural light: windows must provide min 10% of floor area for all habitable rooms — ABC
  NBC 9.7.2 — confirm window sizes on plan are sufficient for each room before advancing to CDs
- [ ] Natural ventilation: operable windows must equal min 5% of floor area in habitable rooms — ABC
  NBC 9.32.2 — where mechanical HRV/ventilation is provided this may be relaxed; confirm with mechanical engineer
- [ ] Bathrooms and enclosed toilet rooms without an operable window require mechanical exhaust ventilation — ABC
  Min 25 L/s exhaust — NBC 9.32.3. Note on plans if window does not meet ventilation requirements
- [ ] Entrance, vestibule, and utility doors min 810 mm wide x 1980 mm high (NBC 9.5.5.1, Table 9.5.5.1) — ABC
  NBC 9.5.5.1 — applies to all swing-type and folding doors in dwelling units and secondary suites
- [ ] Corridors and hallways min 860 mm clear width; bathroom/toilet room doors min 760 mm wide — ABC
  NBC 9.9.5 & 9.5.5.3 — hallway may narrow to 710 mm only if bedrooms/bathrooms are at the far end with no other rooms beyond. Door hardware on principal entrance and exit doors must be openable from inside without keys or special devices (NBC 9.9.6.7)
- [ ] All attached garages must be fire-separated from the dwelling — air barrier system required at garage-to-house wall — ABC
  NBC 9.10.9.16 — garage wall and ceiling must prevent CO and fire spread into living areas; note on plans for framer
- [ ] Wood roof truss assemblies require an engineer (P.Eng.) authenticated design — ABC
  Alberta STANDATA 23-BCI-015R1 effective March 1, 2026 — all Part 9 buildings, including single-family homes. Flag for structural coordination early
- [ ] Radon rough-in required for all floors-on-ground — NBC(AE) 9.13.4.3 — ABC
  Requires: gravel gas-permeable layer below slab, poly air barrier, sealed wall-floor joints, min 100 mm pipe through floor with airtight labelled cap, and electrical rough-in for future fan. Calgary is a high-risk radon zone. Pipe must be labelled at cap and every 1.8 m per STANDATA 19-BCB-003. Note: rough-in is NOT a mitigation system; it enables easy future activation if testing exceeds Health Canada threshold of 200 Bq/m3
- [ ] Window fall protection required for openable windows less than 900 mm from floor and more than 1800 mm above exterior grade — ABC
  NBC 9.8.8.1 — restrictor device or compliant guard required; does not substitute for egress window requirement in bedrooms

STAIR LOCATION & PLAN FIT — 6 items

- [ ] Stair footprint fits within plan area — confirm landings top and bottom — ABC
  We prefer an 11" stair tread with a 1" nosing, allowing for a total of 12" to rest your foot as you climb the stairs
- [ ] Stair well opening dimensioned and structurally feasible
  Confirm framing direction; floor opening must be framed by structural
- [ ] Top and bottom landings min 860 mm depth (= stair width minimum) — ABC
- [ ] Door swings do not conflict with landing or first/last tread — ABC
- [ ] Stair width >= 860 mm (33-7/8") clear of handrails — ABC
  Handrail projections reduce clear width — account for them
- [ ] Headroom min 1950 mm (6'5") above nosing line maintained throughout — ABC
  Check at section; often missed where upper floor or dropped ceiling kicks down

RISE & RUN CALCULATIONS — 8 items

- [ ] Rise confirmed between 125-200 mm — target 175-190 mm for comfort — ABC
  2R + T = 600-635 mm ergonomic formula; nothing over 200 mm in residential
- [ ] All 11 risers consistent — max 9.5 mm variation per flight — ABC

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- [ ] Finish floor thickness subtracted from top and bottom risers
  Tile, hardwood, and carpet all affect riser height — adjust per confirmed finish
- [ ] Total rise measured finished floor to finished floor (not subfloor)
  Recalculate after floor finishes confirmed
- [ ] Nosing depth 25 mm (1") noted and shown on stair detail — ABC
- [ ] Handrail height 865-965 mm from nosing line shown on section or elevation — ABC
  Min 36" from line of nose; dimensions must be vertical not perpendicular
- [ ] Guardrail at open edges and landings min 1070 mm (42") — noted separately from handrail — ABC
- [ ] Baluster spacing max 100 mm; no climbable horizontal rails between 140-900 mm height — ABC

CEILING HEIGHTS & DROPPED CEILINGS — 8 items

- [ ] Ceiling height schedule confirmed for every room — noted on RCP — ABC
  Habitable rooms min 2300 mm; hallways/bathrooms min 2100 mm (NBC 9.5.4)
- [ ] Dropped ceiling zones shown in plan with extents dimensioned
  Include soffits over kitchen uppers, bulkheads, beam pockets, tray ceilings
- [ ] Dropped ceiling heights checked against mechanical/structural above
  HVAC ducts and structure often dictate actual available ceiling height
- [ ] Ceiling height transitions coordinated with interior elevations
  Every soffit or ceiling plane change must appear on at least one elevation
- [ ] Cove, tray, and cathedral ceiling profiles detailed or referenced to a detail sheet
- [ ] Headroom confirmed at stair and beneath beams/dropped zones over traffic paths — ABC
  Dropped ceiling must not reduce clear height below 1950 mm at stair or 2100 mm elsewhere
- [ ] Ceiling heights dimensioned in all section cuts — not left unmarked — AIA
  AIA standard: sections must call out finished ceiling heights
- [ ] RCP coordinated with structure above — no pot light landing on a joist or beam — AIA
  AIA DD checklist: RCPs drawn and coordinated before advancing

LIGHTING PLACEMENT — 8 items

- [ ] RCP complete — all fixtures located, coded, and referenced to fixture schedule — AIA
  Every fixture type, finish, and electrical code accounted for
- [ ] Fixture layout centered and balanced within ceiling panels, soffits, and beams
  Align pot lights to room geometry — avoid fixtures splitting beams or landing on joists
- [ ] Under-cabinet and cove lighting shown with control zone noted
  Cove lighting requires min 75-100 mm depth to conceal strip — confirm dimension
- [ ] Switch locations shown on plan — 3-way switching at top and bottom of stairs — ABC
  Code requires switching at each entry of habitable room and both ends of stair
- [ ] Dimmer compatibility noted for all LED fixtures in schedule

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- [ ] Pendant and chandelier heights cross-checked against actual ceiling height
  Pendants over islands min 1800-2100 mm to counter surface
- [ ] Exterior lighting shown on exterior elevation and RCP for covered soffits — Exterior
- [ ] Lighting coordinated with structural — MEP devices do not conflict with framing — AIA
  AIA standard: architectural space must be sufficient to show MEP equipment

FLOORING FINISH TAGS — 10 items

- [ ] Floor finish plan complete — every room tagged with schedule code — AIA
  Consistent abbreviation system throughout (e.g. HWD-1, TL-2, CPT-3)
- [ ] All tags cross-referenced to finish schedule — no orphaned codes — AIA
  AIA: products on drawings must appear in the schedule
- [ ] Flooring transitions shown — thresholds, reducers, change-of-material lines dimensioned
  Transitions located to avoid undercuts of doors and cabinetry
- [ ] Tile layout origin and pattern direction shown for all tile areas
  Specify grout joint width and direction — diagonal vs straight noted
- [ ] Heated floor zones indicated where specified — electrical or hydronic noted
- [ ] Wood floor direction arrow shown — direction change locations noted
  Direction typically runs parallel to longest wall or toward primary view
- [ ] Base profile type and height noted on elevations and finish schedule
- [ ] Floor finish thickness accounted for in door reveals and stair riser calculations
  Tile on concrete adds more height than hardwood on subfloor — adjust risers
- [ ] Exterior-to-interior transition materials noted at all thresholds — Exterior
- [ ] Slip resistance noted for wet areas — bathroom/entry floor >= 0.6 DCOF — AIA
  Confirmed in finish schedule; coordinate with tile specification

INTERIOR ELEVATIONS — 9 items

- [ ] Elevations drawn for all four walls of key rooms — kitchen, bathrooms, millwork walls — AIA
  Every wall with tile, feature material, or built-in must have a drawn elevation
- [ ] All materials labeled using same codes as finish schedule — AIA
  Wall tile, base, crown, paneling, and wallcovering all tagged consistently
- [ ] Ceiling height and dropped ceiling shown on every elevation with dimension — AIA
  Do not leave ceiling unmarked — AIA: elevations drawn with dimensions and notes
- [ ] Window and door sill/head heights dimensioned from finished floor
  Head height should align with door heights for a consistent datum
- [ ] Millwork, cabinetry, and shelving drawn to scale and fully dimensioned — AIA
  Heights, depths, widths, reveals, and toe kick all called out
- [ ] Plumbing fixture centerlines confirmed and dimensioned on elevation

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403.461.6714
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- [ ] Outlet, switch, and data locations shown on feature wall elevations
  Coordinate with electrical — avoid outlets inside tile patterns without a plan

- [ ] Section cuts referenced on elevations where details are required — AIA
  AIA: show section cuts on elevations where details will be drawn

- [ ] Interior elevation symbols on floor plan match sheet references
  Every bubble must reference the correct sheet and detail number

EXTERIOR ELEVATIONS — 9 items

- [ ] All four exterior elevations complete — Exterior, AIA
  North, south, east, west — all exposed faces for non-orthogonal buildings

- [ ] Floor lines shown level and consistent across all elevations — Exterior
  If floor is not level (sloped site), indicate datum and slope clearly

- [ ] Grade lines drawn accurately — existing and proposed grade both shown — Exterior
  Confirm grade does not conflict with window wells, doors, or drainage

- [ ] Exterior level changes shown — stairs, ramp, or slope detail referenced — Exterior, ABC
  Any change in exterior floor plane must show how it is managed

- [ ] Exterior entry stairs dimensioned — rise/run complies with residential NBC — Exterior, ABC

- [ ] All cladding types, material changes, and trim profiles labeled — Exterior, AIA
  Call out material change lines with dimension from datum

- [ ] Window and door schedule references shown on exterior elevation — AIA
  Sill/head heights consistent with interior elevations

- [ ] Exterior lighting, outlets, and hose bib locations shown — Exterior

- [ ] Elevations coordinated with wall sections — cladding and assembly consistent — AIA, Exterior
  AIA: architectural drawings coordinated with structural and envelope

ROOF SLOPES & BUILDABILITY — 10 items

- [ ] All roof slopes labeled on roof plan with pitch notation (e.g. 4:12) — Roof
  Use consistent notation throughout the document set

- [ ] Similar slopes used across building — consistent visual story — Roof
  Mixing 4:12 and 8:12 on the same face reads as unresolved

- [ ] Existing roof slopes recorded and incorporated into new addition layout — Roof
  New additions must respond to existing pitch — match, complement, or differentiate with intent

- [ ] All ridge, hip, and valley intersections studied in 3D or section — Roof
  Asymmetric valleys occur when different pitches meet — check buildability

- [ ] Minimum slope for specified roofing material confirmed — Roof
  Asphalt shingles min 4:12; low-slope membrane min 1:12 — confirm with roofing consultant

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- [ ] Roof slope checked against interior ceiling plan — vaulted ceilings coordinated — Roof
  Steep pitch over flat ceiling wastes attic volume and may cause condensation
- [ ] Eave heights and soffit depths consistent on matching-pitch faces — Roof, Exterior
  Matching pitches starting at different eave heights create unresolved rooflines
- [ ] Overhangs dimensioned and coordinated with window head heights — Roof, Exterior
  Wide overhang blocking a window is a common error — check on section
- [ ] Roof drainage direction and downspout locations confirmed against grading plan — Roof, Exterior
- [ ] Roof-to-wall intersections detailed — step flashing and kickout flashing noted — Roof, Exterior
  Flag for structural/envelope coordination

AIA DRAWING QC & COORDINATION — 12 items

- [ ] All design elements depicted accurately and coordinated across all sheets — AIA
  AIA Ch 10.06: depiction must be accurate and coordinated
- [ ] Dimensions correct on all drawings — strings add up to overall — AIA
  AIA: dimensions must be correct; strings must sum to overall dimension
- [ ] Dimensioning uses a consistent fixed reference point throughout — AIA
  AIA: use centerline or interior/exterior finish face as datum — not a mix
- [ ] Horizontal dimensions on plans; vertical dimensions on sections and elevations — AIA
  AIA dimensioning discipline — do not mix horizontal/vertical conventions
- [ ] Dimensions not duplicated across sheets for the same element — AIA
  AIA: only dimension important information; do not repeat across multiple drawings
- [ ] All symbols and abbreviations clearly defined in a legend — AIA
  AIA Ch 10.06: all symbols and abbreviations must be explained
- [ ] Standard discipline sheet format followed — G, A, I, S, M, E, P prefix convention — AIA
  National CAD Standard discipline prefixes for consistency across all consultants
- [ ] Architectural drawings coordinated with structural, MEP, and civil drawings — AIA
  AIA NC JCR-60: coordinate all disciplines before issuing for construction
- [ ] No conflicts between drawings and specifications — all tagged materials have a spec section — AIA
  AIA: drawings and specs are one document; every tagged finish must have a spec entry
- [ ] Typical wall sections drawn at 1/2" or 3/4" scale with notes and dimensions — AIA
  AIA DD checklist: complete typical wall sections required before advancing to CDs
- [ ] Independent reviewer (not the drafter) has checked all documents before release — AIA
  AIA Ch 10.06: qualified staff member not involved in preparation must review
- [ ] After any revision, updated prints distributed to all parties immediately — AIA
  AIA: revised drawings go to all consultants when changed

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GENERAL PLAN READINESS

10 items

- [ ] All dimensions to finished face of wall — not stud face
- [ ] Room labels, areas, and use confirmed on all floors
- [ ] All sheets cross-referenced — section bubbles, detail callouts, and elevation keys correct — AIA
  AIA: every reference must lead somewhere — no dead or mismatched bubbles
- [ ] North arrow, scale bar, and title block current on all sheets
- [ ] MEP coordination — stairs and dropped ceilings clear of ducts and pipes
- [ ] Finish schedule complete — every tag corresponds to a schedule entry — AIA
- [ ] Wall blocking called out for handrails, heavy fixtures, TV mounts, and art rails
- [ ] Door and room finish schedule complete for all spaces — AIA
  AIA DD checklist: door and room finish schedules must be complete
- [ ] Accessibility review completed — NBC/ADA access requirements checked — AIA
  AIA: review drawings for compliance with accessibility codes
- [ ] Client sign-off on space plan received before releasing to CD phase