

# STRUCTURAL - GENERAL NOTES

## GENERAL REQUIREMENTS

**GOVERNING CODE:** The design and construction of this project is governed by the "International Building Code (IBC)", 2012 Edition, hereafter referred to as the IBC, as adopted and modified by the City of Virginia Beach, VA understood to be the Authority Having Jurisdiction (AHJ).

**REFERENCE STANDARDS:** Refer to Chapter 35 of 2012 IBC. Where other Standards are noted in the drawings, use the latest edition of the standard unless a specific date is indicated. Reference to a specific section in a code does not relieve the contractor from compliance with the entire standard.

**DEFINITIONS:** The following definitions cover the meanings of certain terms used in these notes:

**"Architect/Engineer"** – The Architect of Record and the Structural Engineer of Record.

- "Structural Engineer of Record" (SER)** – The structural engineer who is licensed to stamp & sign the structural documents for the project. The SER is responsible for the design of the Primary Structural System.
- "Submit for review"** – Submit to the Architect/Engineer for review prior to fabrication or construction.
- "Per Plan"** – Indicates references to the structural plans, elevations and structural general notes.

- "Specialty Structural Engineer" (SSE)** – A professional engineer (PE or SE), licensed in the State where the project is located, (typically not the SER), who performs specialty structural engineering services for selected specialty-engineered elements identified in the Contract Documents, and who has experience and training in the Specialty. Documents stamped and signed by the SSE shall be completed by or under the direct supervision of the SSE.

- "Bidder-designed"** – Components of the structure that require the general contractor, subcontractor, or supplier who is responsible for the design, fabrication and installation of specialty-engineered elements identified in the Contract Documents to retain the services of an SSE. Submittals of "Bidder-designed" elements shall be stamped and signed by the SSE.

**SPECIFICATIONS:** Refer to the project specifications issued as part of the contract documents for information supplemental to these drawings.

**OTHER DRAWINGS:** Refer to the architectural, mechanical, electrical, civil and plumbing drawings for additional information including but not limited to: dimensions, elevations, slopes, door and window openings, non-bearing walls, stairs, finishes, drains, waterproofing, railings, mechanical unit locations, and other non-structural items.

**STRUCTURAL DETAILS:** The structural drawings are intended to show the general character and extent of the project and are not intended to show all details of the work. Use entire detail sheets and specific details referenced in the plans as "typical" wherever they apply. Similarly, use details on entire sheets with "typical" in the name wherever they apply.

**STRUCTURAL RESPONSIBILITIES:** The structural engineer (SER) is responsible for the strength and stability of the primary structure in its completed form.

**COORDINATION:** The Contractor is responsible for coordinating details and accuracy of the work; for conforming and correlating all quantities and dimensions; for selecting fabrication processes; for techniques of assembly; and for performing work in a safe and secure manner.

**PRE-CONSTRUCTION MEETINGS:** The Contractor is responsible for coordinating pre-construction meetings prior to commencing work. Pre-con meetings, scheduled approximately two weeks prior to the start of the relevant work, are required for the following phases of construction: Cold-Formed Steel and Demolition. Attendees for pre-construction meetings are to include contractor, relevant subcontractors, fabricators, inspectors, architect/engineer, and representative of the Authority Having Jurisdiction where required. Meeting agendas are to include review of the work scope, project schedule relevant to the work, contact information of responsible parties, inspection points, review of materials and any special cases or issues, procedures for clarifications if required, testing and acceptance, etc.

**MEANS, METHODS AND SAFETY REQUIREMENTS:** The contractor is responsible for the means and methods of construction and all job related safety standards such as OSHA and DOSH (Department of Occupational Safety and Health). Bolting and field welding at all member connections is to be completed prior to the release of the member from the hoisting mechanism unless reviewed and approved by the General Contractor's temporary bracing and shoring design engineer.

**BRACING/SHORING DESIGN ENGINEER:** The contractor shall at his discretion employ an SSE, a registered professional engineer for the design of any temporary bracing and shoring. Submit construction sequence to Architect/Engineer for review.

**TEMPORARY SHORING, BRACING:** The contractor is responsible for the strength and stability of the structure during construction and shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. It is the contractor's responsibility to be familiar with the work required in the construction documents and the requirements for executing it properly.

**CONSTRUCTION LOADS:** Loads on the structure during construction shall not exceed the design loads as noted in DESIGN CRITERIA & LOADS below or the capacity of partially completed construction as determined by the Contractor's SSE for Bracing/Shoring.

**CHANGES IN LOADING:** The contractor has the responsibility to notify the SER of any architectural, mechanical, electrical, or plumbing load imposed onto the structure that differs from, or that is not documented on the original Contract Documents (architectural / structural / mechanical / electrical or plumbing drawings). Provide documentation of location, load, size and anchorage of all undocumented loads in excess of 400 pounds. Provide marked-up structural plan indicating locations of any new equipment or loads. Submit plans to the Architect/Engineer for review prior to installation.

**NOTE PRIORITIES:** Plan and detail notes and specific loading data provided on individual plans and detail drawings supplements information in the Structural General Notes.

**DISCREPANCIES:** In case of discrepancies between the General Notes, Specifications, Plans/Details or Reference Standards, the Architect/Engineer shall determine which shall govern. Discrepancies shall be brought to the attention of the Architect/Engineer before proceeding with the work. Should any discrepancy be found in the Contract Documents, the Contractor will be deemed to have included in the price the most expensive way of completing the work, unless prior to the submission of the price, the Contractor asks for a decision from the Architect as to which shall govern. Accordingly, any conflict in or between the Contract Documents shall not be a basis for adjustment in the Contract Price.

**SITE VERIFICATION:** The contractor shall verify all dimensions and conditions at the site. Conflicts between the drawings and actual site conditions shall be brought to the attention of the Architect/Engineer before proceeding with the work.

**ALTERNATES:** Alternate products of similar strength, nature and form for specified items may be substituted with adequate technical documentation (proper test report, etc.) to the Architect/Engineer for review. Alternate materials that are submitted without adequate technical documentation or that significantly deviate from the design intent of materials specified may be returned without review. Alternates that require substantial effort to review will not be reviewed unless authorized by the Owner.

## DESIGN CRITERIA AND LOADS

<b>OCCUPANCY:</b>	Risk Category of Building per 2012 IBC Table 1604.5 =	II
<b>TENANT IMPROVEMENT:</b>		

<b>SEISMIC DESIGN (NONSTRUCTURAL):</b>	Seismic Design Category:	SDC =	B
	Site Classification per IBC 1613.3.2 & ASCE 7-10	Site Class =	D
	Component Importance Factor per ASCE 7-10 Section 13.1.3	$I_p$ (Typical TI) =	1.0
	Spectral Response Acceleration (Short Period)	$S_s$ =	0.091 g
	Spectral Response Acceleration (1-Second Period)	$S_1$ =	0.047 g
	Spectral Design Response Coefficient (Short Period)	$R_{DS}$ =	0.097 g
	Spectral Design Response Coefficient (1-Second Period)	$R_{D1}$ =	0.076 g
	Component Response Modification Factor:	$R_p$ (Typical TI) =	2.5
	Component Amplification Factor:	$a_p$ (Typical TI) =	1.0
	Horizontal Seismic Design Force	$F_p$ (Typical TI) =	0.047 $W_p$

DESIGN LIVE LOADS	AREA	LIVE LOADS (PSF) UNO	REMARKS & FOOTNOTES
	Assembly Areas, Lobbies, Corridors, Retail	100	2000 lbs. (Movable seats)
	Handrails & Pedestrian Guardrails	50 PLF or 200 LB	any direction or 200 lbs (1)

(1) To be applied horizontally at right angle to the top rail.

## SUBMITTALS

**SUBMIT FOR REVIEW:** SUBMITTALS of shop drawings, product data and mill tests are required for items noted in the individual materials sections and for bidder designed elements.

**SUBMITTAL REVIEW PERIOD:** Submittals shall be made in time to provide a minimum of TWO WEEKS or 10 WORKING DAYS for review by the Architect/Engineer prior to the onset of fabrication.

**GENERAL CONTRACTOR'S PRIOR REVIEW:** Prior to submission to the Architect/Engineer, the Contractor shall review the submittal for completeness. Dimensions and quantities are not reviewed by the SER, and therefore, must be verified by the General Contractor. Contractor shall provide any necessary dimensional details requested by the Detailer and provide the Contractor's review stamp and signature before forwarding to the Architect/Engineer.

**SHOP DRAWING REVIEW:** Once the contractor has completed his review, the SER will review the submittal for general conformance with the design concept and the contract documents of the building and will stamp the submittal accordingly. Markings or comments shall not be construed as relieving the contractor from compliance with the project plans and specifications, nor departures there from. The SER will return submittals in the form they are submitted in (either hard copy or electronic). For hard copy submittals, the contractor is responsible for submitting the required number of copies to the SER for review.

**SHOP DRAWING DEVIATIONS:** When shop drawings (component design drawings) differ from the requirements of the structural drawings they shall be designed and stamped by the responsible SSE.

## DEFERRED SUBMITTALS

**BIDDER-DESIGNED ELEMENTS**  
Submit "Bidder-Designed" deferred submittals to the Architect and SER for review. The deferred submittal shall also be submitted to the city for approval, if required by the city.

Design of prefabricated, "bidder designed", manufactured, pre-engineered, or other fabricated products shall comply with the following requirements:

- Design considers tributary dead, live, wind and earthquake loads in combinations required by IBC.
- Design within the Deflection Limits noted here and as specified in referenced in the IBC.
- Design shall conform to the specifications and reference standards of the governing code.
- Submittal shall include:
  - Calculations prepared, stamped and signed by the SSE demonstrating code conformance.
  - Engineered component design drawings prepared, stamped and signed by the SSE.
  - Product data, technical information and manufacturer's written requirements and Agency approvals as applicable.
  - SSE may submit to the Architect/Engineer, a request to utilize relevant alternate design criteria for similar materials of generally equivalency which is recognized by the Code and acceptable to the Authority Having Jurisdiction. Submit adequate documentation of design criteria.

DEFLECTIVE LIMIT	VERTICAL	LIMIT
	Floor Members, Total Load (TL) uno	L / 240
	Floor Live Load (LL) uno	L / 360
	Operable Partition Support Members	L / 600 or 1/4" maximum
	HORIZONTAL	LIMIT and FOOTNOTE
	Members Supporting Brittle Finishes	L / 240 (1)
	Members Supporting Flexible Finishes	L / 180 (1)

**GENERAL CONTRACTOR'S PRIOR REVIEW:** Once the contractor has completed his review of the SSE component drawings, the SER will review the submittal for general conformance with the design of the building and will stamp the submittal accordingly. Review of the Specialty Structural Engineer's (SSE) shop drawings (component design drawings) is for compliance with design criteria and compatibility with the design of the primary structure and does not relieve the SSE of responsibility for that design. All necessary bracing, ties, anchorage, proprietary products shall be furnished and installed per manufacturer's instructions or the SSE's design drawings and calculations. These elements include but are not limited to:

- Handrails, Guardrails and Balcony Rail Anchorages
- Metal Deck Edge Forms
- Mechanical, Electrical, Plumbing & Sprinkler Hanger Plans
- Temporary Shoring Systems
- Space Frames (Unistrut)

## INSPECTIONS, QUALITY ASSURANCE VERIFICATIONS AND TEST REQUIREMENTS

**INSPECTIONS:** Foundations, footings, under slab systems and framing are subject to inspection by the Building Official in accordance with IBC 110.3. Contractor shall coordinate all required inspections with the Building Official.

**SPECIAL INSPECTIONS, VERIFICATIONS and TESTS:** Special Inspections, Verifications and Testing shall be done in accordance with IBC Chapter 17 and the STATEMENT OF SPECIAL INSPECTIONS herein per IBC Sections 1704 and 1705 as applicable.

**SPECIAL INSPECTION AGENCY and SPECIAL INSPECTORS:** Owner shall retain an "approved agency" per IBC 1703 to provide Special Inspections for the project. Special Inspectors shall be qualified persons per IBC 1704.2.1.

**STATEMENT OF SPECIAL INSPECTIONS:** Special Inspections and Testing per IBC Sections 1704 and 1705 are required for the following:

**FABRICATION SHOP INSPECTION:** Where off-site Fabrication of gravity LOAD BEARING MEMBERS & ASSEMBLIES is performed, Special Inspector shall verify that the fabricator complies with IBC 1704.2.5

**STRUCTURAL STEEL** per IBC 1704.2.5.1

A qualified Special Inspector of an "approved agency" providing Quality Assurance (QA) Special Inspections for the project shall review and confirm the Fabricator and Erector's Quality Control (QC) procedures for completeness and adequacy relative to AISC 360-10 Chapter N, the AISC 303 Code of Standard Practice, AWS D1.1-2010 Structural Welding Code, and 2012 IBC code requirements for the fabricator's scope of work.

- QA Agency providing Special Inspections shall provide personnel meeting the minimum qualification requirements for Inspection and Nondestructive Testing NDT per AISC 360-10 Section N4.
- Verify Fabricator and Erector Quality Control Program per AISC 360-10 Section N2.

- Visual Welding Inspection of welds by both QC and QA personnel shall be per tables listed in AISC 360 Section N5.
- Inspection Tasks for Welding
  - Prior to Welding per AISC 360-10 Table N5.4-1.
  - During Welding per AISC 360-10 Table N5.4-2.
  - After Welding per AISC 360-10 Table N5.4-3.

- Nondestructive Testing (NDT) of welds:
  - Non-Destructive Testing (NDT) of welded joints per AISC 360-10 N.5.
  - Risk Factor for determination of extent of NDT per AISC 360 N5.5b is noted in the Design Criteria and Loads section of these General Requirements.
  - NDT performed shall be documented and reports shall identify the tested weld, piece mark and location in the piece.
  - For field work, the NDT report shall identify the tested weld, location in the structure, piece mark and location in the piece.

- Inspection Tasks for Bolting per AISC 360-10 Section N5.6
  - Prior to Bolting per AISC 360-10 Table N5.6-1. Not required for snug-tight joints.
  - During Bolting per AISC 360-10 Table N5.6-2. Not required for snug-tight joints.
  - After Bolting per AISC 360-10 Table N5.6-3.

- Additional Inspection Tasks per AISC 360-10 Section N5.7

**COLD-FORMED STEEL** per IBC Section 1707 shall be done in accordance with the following requirements:

- Periodic inspection required for Verification during or after erection:
  - Spot check inspections (minimum of 30 percent) for the following:
    - Verify that screw attachment, bolting, anchoring and other fastening of components within the gravity load system are per structural specifications.
    - Verify that stud and track size, yield strength and galvanized coating weight are per structural specifications.
    - Verify that all load bearing studs are seated with a maximum space of 1/16 inch between stud and track.
    - Verify that spacing between bottom track and support is less than 1/8 inch.
    - Verify that all pre-punched web holes are a minimum of ten inches from bearing ends and a minimum of 24 inches on center.
    - Verify that all load bearing and/or exterior studs, joists and tracks are plumb (within 1:1000).
    - Verify that all bundled studs and bundled joists are connected together per plans.
    - Verify that screw heads are flush with the steel surface and penetrate into the steel studs by a minimum of three exposed threads. Verify that connections are not stripped.
    - Verify that seismic straps are connected with the minimum required screws or bolts into each member.
    - Verify that screws are installed a minimum of 3/8 inches from steel edges with no less than 3/4" on center spacing.
    - Verify that all welding is done in accordance with the approved design or recognized design standard.
    - Verify that screws or pins in wood shear walls or horizontal diaphragms are driven so that the head is no more than 1/16" below the surface of the sheathing. Ensure that blocking or straps are provided at all panel edges if required on plans.

**POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY:** shall comply with IBC Section 1703. Inspections shall be in accordance with the requirements set forth in the approved ICC Evaluation Report and as indicated by the design requirements specified on the drawings. Refer to the POST INSTALLED ANCHORS section of these notes for anchors that are the basis of the design. Special inspector shall verify anchors are as specified in the POST INSTALLED ANCHORS section of these notes or as otherwise specified on the drawings. Substitutions require approval by the SER and require substantiating calculations and current 2012 IBC recognized ICC Evaluation Services (ES) Report. Special inspector shall document in their Special Inspection Report compliance with each of the elements required within the applicable ICC Evaluation Services (ES) Report.

**INSPECTION SUBMITTALS:** Special inspection reports shall be provided on a weekly basis. Final special inspection reports will be required by each special inspection firm per IBC 1704.2.4. Submit copies of all inspection reports to the Architect/Engineer and the Authority Having Jurisdiction for review.

**CONTRACTOR RESPONSIBILITY:** Prior to issuance of the building permit, the Contractor is required to provide the Authority Having Jurisdiction a signed, written acknowledgement of the Contractor's responsibilities associated with the above Statement of Special Inspections addressing the requirements listed in IBC Section 1704.4. Contractor is referred to IBC Sections 1705.11.6 and 1705.11.8 for architectural and MEP building systems that may be subject to additional inspections (based on the building's designated Seismic Design Category listed in the CRITERIA), including anchorage of HVAC ductwork containing hazardous materials, piping systems and mechanical units containing flammable, combustible or highly toxic materials, electrical equipment used for emergency or standby power, exterior wall panels and suspended ceiling systems.

**PREFABRICATED CONSTRUCTION:** All prefabricated construction shall conform to IBC Section 1703.

## POST-INSTALLED ANCHORS (INTO CONCRETE AND MASONRY)

**REFERENCE STANDARDS:** Conform to:

- IBC Chapter 19 "Concrete"
- ACI 318-11 "Building Code Requirements for Structural Concrete"
- IBC Chapter 21 "Masonry"
- ACI 530-11/ASCE 5-11/TMS402-11 "Building Code Requirements for Masonry Structures"

**POST-INSTALLED ANCHORS:** Install only where specifically shown in the details or allowed by the post-installed anchors types and locations shall be approved by the SER and shall have a current ICC-Evaluation Service Report that provides relevant design values necessary to validate the available strength exceeds the required strength. Submit current manufacturer's data and ICC ESR report to SER for approval regardless of whether or not it is a pre-approved anchor. Anchors shall be installed in strict accordance to ICC-ESR and manufacturer's instructions. No reinforcing bars shall be damaged during installation of post-installed anchors. Special inspection shall be per the TESTS and INSPECTIONS section. Anchor type, diameter and embedment shall be as indicated on drawings.

- ADHESIVE ANCHORS:** The following Adhesive-type anchoring systems have been listed in the design and shall be used for anchorage to CONCRETE and MASONRY. Embedment shall be in accordance with corresponding current ICC ESR report. Embedment length shall be as shown on drawings, or not less than 7 times the anchor nominal diameter (7D).
  - HILTI "HIT-HY 200" – ICC ESR-187 for anchorage to CONCRETE with embedment depth less than or equal to 2" (50mm).
  - HILTI "HIT-RE 500 SD" – ICC ESR-187 for anchorage to CONCRETE
  - SIMPSON "SET" – ICC ESR 2508 for anchorage to CONCRETE
  - POWERS "PE1000" – ICC ESR-2583 for anchorage to CONCRETE
  - HILTI "HY-150 MAX" – ICC ESR-187 – for anchorage to MASONRY Only
  - SIMPSON "SET" – ICC ESR-1772 – for anchorage to MASONRY Only

- EXPANSION ANCHORS:** The following Expansion type anchors are pre-approved for anchorage to CONCRETE or MASONRY in accordance with corresponding current ICC ESR report.
  - HILTI "KWIK BOLT TZ" – ICC ESR-1917 for CONCRETE Only
  - SIMPSON "STRONG-BOLT 2" – ICC ESR-3037 for CONCRETE Only
  - POWERS "POWER-STUD + SD1" – ICC ESR-2818 for CONCRETE Only and ICC ESR-2866 for MASONRY Only
  - HILTI "KWIK BOLT 3" – ICC ESR-1385 for anchorage to MASONRY Only
  - SIMPSON "WEDGE-ALL" – ICC ESR-1396 for anchorage to MASONRY Only

- SCREW ANCHORS:** The following Screw type anchor is pre-approved for anchorage to CONCRETE or MASONRY in accordance with corresponding current ICC ESR report:
  - SIMPSON "TITEN HD" – ICC ESR-2713 for CONCRETE Only and ICC ESR-1056 for MASONRY Only

- POWERS "WEDGE-BOLT"** – ICC ESR-2528 for CONCRETE Only and ICC ESR-1678 for MASONRY Only
- POWERS "SNAKE"** – ICC ESR-2272 for anchorage to CONCRETE Only
- HILTI "HUS-EZ"** – ICC ESR-3027 for anchorage to CONCRETE Only and ICC ESR-3056 for MASONRY Only

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- POWERS "WEDGE-BOLT"** – ICC ESR-2528 for CONCRETE Only and ICC ESR-1678 for MASONRY Only
- POWERS "SNAKE"** – ICC ESR-2272 for anchorage to CONCRETE Only
- HILTI "HUS-EZ"** – ICC ESR-3027 for anchorage to CONCRETE Only and ICC ESR-3056 for MASONRY Only

## COLD-FORMED STEEL FRAMING

**REFERENCE STANDARDS:** Conform to:

- AISI "North American Specification for the Design of Cold-Formed Steel Structural Members - 2007 Edition."
- AISI "Standard for Cold Formed Steel Framing – General Provisions"
- AISI "Standard for Cold Formed Steel Framing – Header Design"
- AISI "Standard for Cold Formed Steel Framing – Wall Stud Design"
- AISI "Standard for Cold Formed Steel Framing – Lateral Design"
- AWS D1.3 "Structural Welding Code - Sheet Steel."

## MATERIALS:

Structural Sections	54, 68 and 97-mil; ASTM A653 Grade D or ASTM A1011 Grade 50, Min Fy=50 KSI, 33 and 43-mil; ASTM A653 Grade A, or ASTM A1011 Grade 33, Min Fy=33 KSI
Sheet Metal Screws	Grabber or Buldex Self-Drilling #10 screws unless noted otherwise on drawings, ASTM C1613 or SER approved alternate
Fasteners to Steel	Hilti X-U Power Actuated Fasteners – ICC ESR-2269
Fasteners to Concrete	Hilti X-U Power Actuated Fasteners with 3/4" embedment – ICC ESR-2269
Weld Material	E60XX electrodes conforming to AWS D1.3

Studs and Track shall be galvanized in accordance with ASTM A653, G60, unless in contact with pressure treated wood. If in contact with pressure treated wood, use G90 or greater coatings. Fastenings not shown on the drawings shall be as recommended by the manufacturer.

**SIZE AND PROFILE:** Cold-formed steel framing members shall be as specified in the Steel Stud Manufacturer's Association ICC Evaluation Report ER-4943P and of the size and profile as shown on the drawings. Alternate members equivalent in shape, size, and strength by manufacturers not members of the Steel Stud Manufacturer's Association shall be subject to review and approval by the Architect / Engineer.

**JOISTS:** Provide C-shaped joists with stiffened flanges (S-sections in SSMA). Spans are assumed to be continuously sheathed at the top flange. A minimum 3-1/2" bearing shall be provided at each end of each joist. Add web stiffeners if bearing is less than 3-1/2", but no less than 1-1/2". All joists must be braced laterally at each end by track or blocking. Joist bridging shall be a maximum 8'-0" oc. All pre-punched web holes shall be a minimum of 10" inches from bearing ends and a minimum of 48" on center. If a punch-out falls within 10" of a bearing point, reinforcement is required.

**CONNECTORS and FASTENERS:** Connectors shall be installed per the manufacturer's instructions. All screws shall be snug with the steel surface and shall penetrate into steel studs by a minimum of three exposed threads. Connections shall not be stripped. Screws shall be installed a minimum of 3/8" from steel edges and with no less than 3/4" o.c. spacing.

When fastening to steel, Powder Actuated Fasteners shall be installed a minimum of 1/2" from steel edges and with no less than 1" o.c. spacing. When fastening to concrete, Powder Actuated Fasteners shall be installed a minimum of 3/4" from concrete edges and with no less than 4" o.c. spacing. Powder Actuated Fasteners shall not be used for hanging applications.

**BUNDLED STUDS and JOISTS:** Stud or joist groups of two or more members shall be shop welded together with double flare bevel welds by 1" inch long at 12" o.c., both sides. Stud or joist groups of two do not require welding if their webs are back-to-back and screwed together with (2) #10 at 12" o.c. Bundled joists that are framed in a box beam header style with a top and bottom track do not require welding. Box beam framing shall have #10 screws at 24" on center along each of the four track flanges. Box beam joist and track members shall be continuous. Box beams or headers shall be framed with unpunched joists.

**FULL-HEIGHT NON-LOAD-BEARING STUD WALLS:** Full height stud walls shall be attached to concrete slabs above with deflection track to allow for differential vertical floor deflections under live loads. Maintain 3/8" gap between top of studs and slab unless noted otherwise on plan.

**MEMBER CONDITION:** All structural cold-formed framing members must be in good condition. Damaged members, members with cracking in the steel at the bend radius locations, and members with significant rusting or scaling of the protective coating are unacceptable and must be replaced, unless approved by the SER. Members not meeting tolerances listed below shall be replaced prior to loading.

**OWNER:**  
**WILLIAMS-SONOMA, INC.**  
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San Francisco, CA 94109  
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**CALLISONRTKL A DESIGN CONSULTANCY OF ARCADIS**  
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173/177 Central Park Avenue  
Virginia Beach, VA 23462  
PROJECT #006-151817-00/#006-151412-00

ISSUED / REVISED	DATE
QA SET	11/22/17
LL CD SET	11/30/17
PERMIT SET	12/18/17
BID SET	01/04/18

**STRUCTURAL GENERAL NOTES**  
**S-101**