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The following represent a collection of comments from various individuals on the Green Building provisions:

- Negative effects on sustainable building design of the proposed provisions of Section 704, which has the title "Efficient Framing Techniques". In light frame construction, code mandated design loads and standards for sustainable building functioning such as weatherproofing and deflection control are based on historical, prescriptive framing practices such as those contained in IBC Section 2308 (Conventional Light Frame Construction). This is true whether the buildings are, in fact, "conventional" or engineered. To reduce those framing requirements, as indicated in this section, in on-site construction will result in damage and future loss of function for the buildings so constructed, thereby invalidating any perceived saving that these provisions intend.

  Building elements that depart from conventional standards and were based entirely on engineering analysis, when these elements were repetitive and were to be manufactured under controlled conditions and subject to testing and modification (this experience dates back to Operation Breakthrough in the 1970's) On-site construction, however, even with code mandated quality assurance and control procedures, depends on a certain amount of redundancy in framing elements in order to produce a minimum acceptable level of sustainability. Some of this redundancy would be lost if the proposed provisions were implemented. Therefore, the seven items listed under Section 704.1.2 should be deleted.

- In their place, requirements should be added to require more complete detailing of framing connections and weather protecting details on construction drawings submitted for building permit. This would reduce the occurrence of inappropriately constructed framing in the increasingly complex building configurations being produced today.
- The primary way to accommodate the proposed advanced wall framing provisions would be to require engineering for many components that are currently classified as non-engineered conventional light frame construction.
- If engineers and architects intend to rely on window frames and sills to resist vertical loads, wind and seismic forces acting on walls, notes on the plans would be required stating that future alterations that include the removal or replacement of window or door frames or portions of frames will require an engineer or architect to design the alterations. Such work would likely necessitate the shoring and lateral bracing of the portions of the walls, window and door frames that act as structural components.
- So while there is currently some redundancy consisting of extra lumber associated with the current practice of framing openings in wood walls, this practice allows designers and regulators to treat window and door trim components as nonstructural components since they do not rely on them to resist wall forces. The extra wood members in current practice allow

alterations and replacements of such components without engineering, shoring or lateral bracing.

- Local building department policies would have to be changed to require documentation that advanced wall framing exists in buildings. The presence of advanced wall framing would trigger structural considerations on many future alterations and repairs that would not normally be triggered using conventional construction details. So in the future, designers, window and door contractors, and inspectors could no longer assume that many types of minor alterations to buildings with advanced wall framing are nonstructural in scope.

- Advanced wall framing must be evaluated to provide comparison of the potential cost savings of lumber with the potential future risks and added costs of engineering both prior to initial construction and prior to future alterations, as well as the added costs of regulation that include engineered plan reviews, structural inspections by trained and qualified inspectors to ensure that appropriate shoring and lateral bracing are employed so that the wall systems resist forces during and after future alterations to components of wall openings including window and door frames.

- Positive load path to resist lateral force (wind as well as seismic)

- Architectural components (window glazing, for instance,) need to accommodate realistic displacement under in-plane lateral force.

- Let in braces weaken the stud strength as well as reduce stiffness and should not be used in SDC C to F.

- The 24 inch on center stud spacing is academic, and will cause practical issues in construction such as out-of-plane tolerance in straightness of mill lumber, the flexibility of drywall, additional labor in finish casework; and possibly more complaints from users.

- Single 2 x plate can be acceptable only for interior partitions where the plate is not spliced, and the partition is otherwise stayed by cross walls. Conventional 2 x plate provides nominal transfer of in-plane drag force.

- Impose requirements in the green building provision for architectural planning - layout should consider availability of even foot length of lumber or light-gage metal, rafters and beams, from ridge to eave on a sloping plane; also multiples of plywood sheathing width. Less cutting and waste (and save energy.)

- Similarly, layout for masonry buildings should adhere to block (or brick) module.

- Encourage under concrete section the efficient use of conventional lumber dimensions for forming such as edge form, beam soffit, column and wall.

- Where soil condition justifies, eliminate interior spread footing and allow a uniform slab (may need 5 to 6 inch thick) to support uniformly distributed loads and thicken slab to support “concentrated” loads. This saves labor and material.