


Bellevue Bothell Burien Duvall Issaquah Kenmore Kirkland						
 MyBuildingPermit.com <small>a service of eCityGov.net</small>			STRUCTURAL TIP SHEET Engineered Lateral Design Over Prescriptive Design July 2007			
Mercer Island Mill Creek Sammamish Snohomish County Snoqualmie Woodinville						

2006 IRC

The 2006 International Residential Code (IRC) states that portions of a prescriptively designed structure may be designed by engineering (R301.1.3). The question then arises, can prescriptive design support engineered design above? The IRC also states that structures are required to be designed/constructed to safely support all loads (including dead, live, roof, flood, snow, wind and seismic loads) and that the construction of structures is required to result in a system that provides a **complete load path that meets all requirements for the transfer of all loads from their point of origin through the load-resisting elements to the foundation** (R301.1).

MyBuildingPermit.com has established the following policy regarding Engineered Lateral Design over Prescriptive **Foundations**:

- 1) The design engineer/professional responsible for the engineered design is required to provide a letter stating that the prescriptive foundation is capable of safely supporting the lateral loads imposed upon it by the Engineered Lateral Design.
- 2) When determined by the building official, the design engineer/professional is required to provide calculations to substantiate the adequacy of the prescriptive foundation to resist loads imposed on it from above.

MyBuildingPermit.com has established the following policy regarding Engineered Lateral Design over Prescriptive Lateral Design:

- 1) A complete load path must be provided from engineered lateral elements to the foundation. For example, engineered lateral design for an element on the 2nd Floor requires engineered lateral design for the supporting 1st Floor element or elements.
- 2) Prescriptive systems of lateral bracing are permitted to be supported by engineered lateral systems.