

## CODE

(b) Connections between precast wall panels shall have at least two vertical integrity ties, with a nominal tensile strength of at least 44 kN per tie.

**16.2.5** *Integrity tie requirements for precast concrete bearing wall structures three stories or more in height*

## COMMENTARY

**R16.2.5** *Integrity tie requirements for precast concrete bearing wall structures three stories or more in height*

Section 16.2.4 gives requirements for integrity ties that apply to all precast concrete structures. The specific requirements in this section apply only to precast concrete bearing wall structures with three or more stories, often called large panel structures. If the requirements of this section conflict with the requirements of 16.2.4, the requirements in this section control.

These minimum provisions for structural integrity ties in large panel bearing wall structures are intended to provide an alternate load path in case of loss of a bearing wall support (**Portland Cement Association 1980**). Tie requirements calculated for specific load effects may exceed these minimum provisions. The minimum integrity tie requirements are illustrated in Fig. R16.2.5, and are based on PCI's recommendations for design of precast concrete bearing wall buildings (**PCI Committee on Precast Concrete Bearing Wall Buildings 1976**). Integrity tie strength is based on yield strength. Appendix B of the *PCI Design Handbook* (**PCI MNL 120**) provides a review of structural integrity and minimum integrity ties for precast concrete bearing wall structures.