CODE

- **16.3.6.1** At the base of a precast column, pedestal, or wall, the connection to the foundation shall satisfy 16.2.4.3 or 16.2.5.2.
- **16.3.6.2** If the applicable load combinations of 16.3.3 result in no tension at the base of precast walls, vertical integrity ties required by 16.2.4.3(b) shall be permitted to be developed into an adequately reinforced concrete slab-on-ground.

16.4—Horizontal shear transfer in composite concrete flexural members

16.4.1 *General*

- **16.4.1.1** In a composite concrete flexural member, full transfer of horizontal shear forces shall be provided at contact surfaces of interconnected elements.
- **16.4.1.2** Where tension exists across any contact surface between interconnected concrete elements, horizontal shear transfer by contact shall be permitted only where transverse reinforcement is provided in accordance with 16.4.6 and 16.4.7.
- **16.4.1.3** Surface preparation assumed for design shall be specified in the construction documents.

16.4.2 Required strength

- **16.4.2.1** Factored forces transferred along the contact surface in composite concrete flexural members shall be calculated in accordance with the factored load combinations in Chapter 5.
- **16.4.2.2** Required strength shall be calculated in accordance with the analysis procedures in Chapter 6.

16.4.3 Design strength

16.4.3.1 Design strength for horizontal shear transfer shall satisfy Eq. (16.4.3.1) at all locations along the contact surface in a composite concrete flexural member, unless 16.4.5 is satisfied:

$$\phi V_{nh} \ge V_u \tag{16.4.3.1}$$

where nominal horizontal shear strength V_{nh} is calculated in accordance with 16.4.4.

- **16.4.3.2** ϕ shall be determined in accordance with 21.2.
- 16.4.4 Nominal horizontal shear strength

COMMENTARY

R16.4—Horizontal shear transfer in composite concrete flexural members

R16.4.1 General

R16.4.1.1 Full transfer of horizontal shear forces between segments of composite members can be provided by horizontal shear strength at contact surfaces through interface shear, properly anchored ties, or both.

R16.4.1.3 Section 26.5.6 requires the licensed design professional to specify the surface preparation in the construction documents.

R16.4.4 Nominal horizontal shear strength

