CODE

11.2.3 Load distribution

11.2.3.1 Unless otherwise demonstrated by an analysis, the horizontal length of wall considered as effective for resisting each concentrated load shall not exceed the lesser of the center-to-center distance between loads, and the bearing width plus four times the wall thickness. Effective horizontal length for bearing shall not extend beyond vertical wall joints unless design provides for transfer of forces across the joints.

11.2.4 Intersecting elements

- 11.2.4.1 Walls shall be anchored to intersecting elements, such as floors and roofs; columns, pilasters, buttresses, or intersecting walls; and to footings.
- 11.2.4.2 For cast-in-place walls having $P_u > 0.2f_c'A_g$, the portion of the wall within the thickness of the floor system shall have specified compressive strength at least $0.8f_c'$ of the wall.

11.3—Design limits

11.3.1 Minimum wall thickness

11.3.1.1 Minimum wall thicknesses shall be in accordance with Table 11.3.1.1. Thinner walls are permitted if adequate strength and stability can be demonstrated by structural analysis.

Table 11.3.1.1—Minimum wall thickness h

Wall type	Minimum thickness h		
Bearing ^[1]	Greater of:	100 mm	(a)
		1/25 the lesser of unsupported length and unsupported height	(b)
Nonbearing	Greater of:	100 mm	(c)
		1/30 the lesser of unsupported length and unsupported height	(d)
Exterior basement and foundation ^[1]	190 mm		(e)

^[1]Only applies to walls designed in accordance with the simplified design method of 11.5.3.

11.4—Required strength

11.4.1 General

- **11.4.1.1** Required strength shall be calculated in accordance with the factored load combinations in Chapter 5.
- **11.4.1.2** Required strength shall be calculated in accordance with the analysis procedures in Chapter 6.

COMMENTARY

R11.2.4 *Intersecting elements*

- **R11.2.4.1** Walls that do not depend on intersecting elements for support, do not have to be connected to those elements. It is not uncommon to separate massive retaining walls from intersecting walls to accommodate differences in deformations.
- **R11.2.4.2** The 0.8 factor reflects reduced confinement in floor-wall joints compared with floor-column joints under gravity loads.

R11.3—Design limits

R11.3.1 Minimum wall thickness

R11.3.1.1 The minimum thickness requirements need not be applied to bearing walls and exterior basement and foundation walls designed by 11.5.2 or analyzed by 11.8.

R11.4—Required strength

R11.4.1 General

