

Introduction

The following sections contain applicable load information from the 1994 Uniform Building Code, design procedures, examples and tables for Allowable Uniform Loads, Concentrated Loads, Shear Walls, Lintels, Retaining, and Basement Walls.

The PERFORM WALL® building system can be used for: exterior load bearing walls under axial and lateral loads. Interior load or non-load bearing walls, shear walls to resist in-plane shear loads, slender walls with combined eccentric axial and out-of-plane loads, columns carrying concentrated loads, especially on the side of openings partition walls curved walls lintels and beams carrying gravity and lateral loads elevated slabs with reinforcement post tensioned slabs carrying gravity and lateral loads basement and retaining walls foundation stem walls free-standing fences and planters, curved or straight roofs, flat or gabled.

Note:

Based upon full-scale testing the following factors have been generated:

Shear Walls: Strength Reduction Factor $\phi := .85$

Perform Wall Shape Reduction Factor $I := .85$

Slender Walls: Equivalent Thickness 4.75 for 6" diameter core

Shape Reduction Factor 6.75 for 8" diameter core

DESIGN TABLES

The following tables are an outline of possible designs and load bearing capacities. High exposures to wind and seismic loads have been assumed. The tables, however, are not supposed to set limitations to design possibilities. For various exposures, see equations in Chapter 3, "Design Procedures" of the comprehensive **Engineering Design Manual**.