

# 5

# THINGS YOU SHOULD KNOW ABOUT RETAINING WALLS



# 1

## 4 FEET

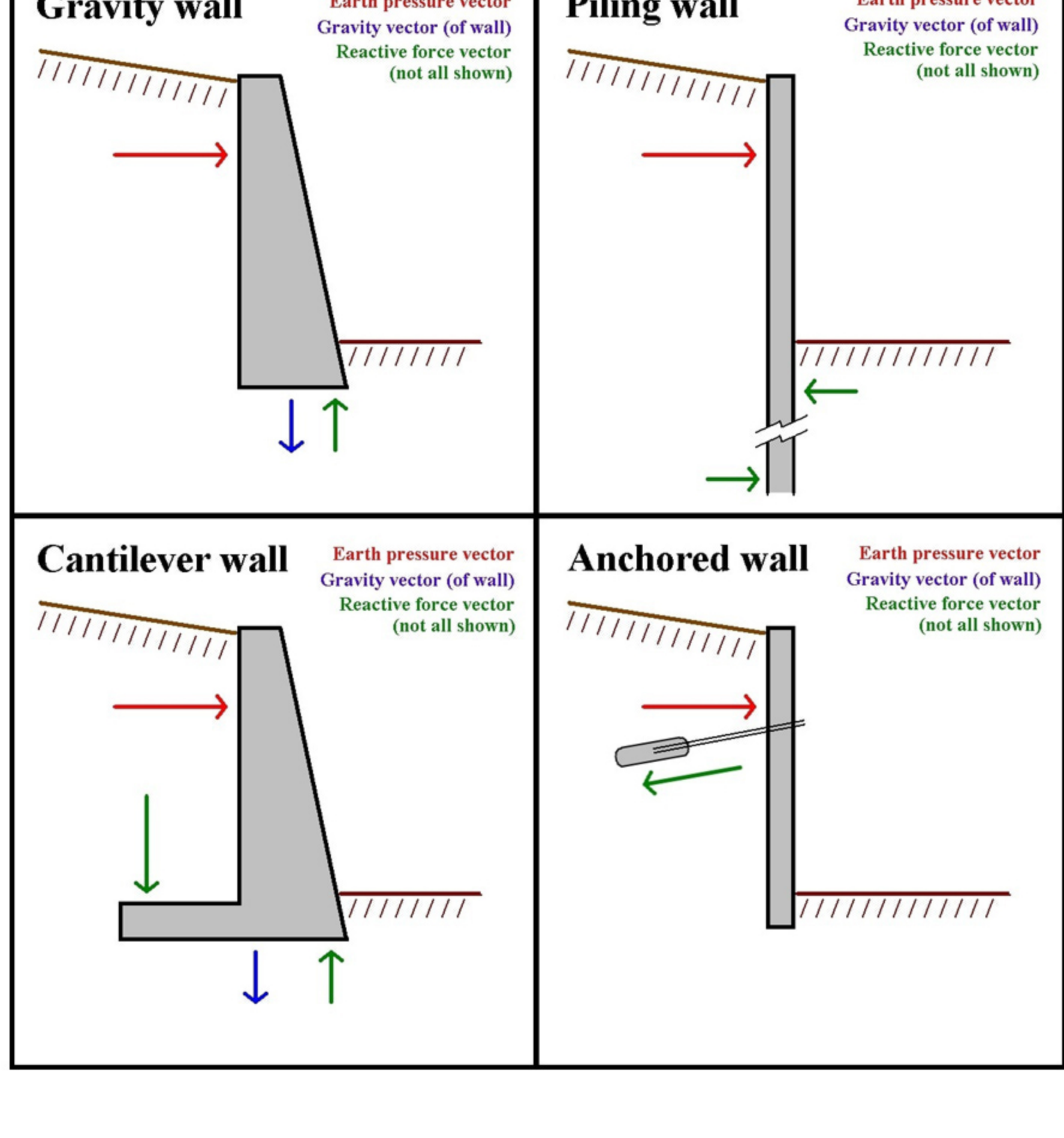
In most states, retaining walls taller than four feet must be designed by or approved by a qualified, licensed professional engineer.

"It is important to check with and adhere to local building codes prior to design and construction."



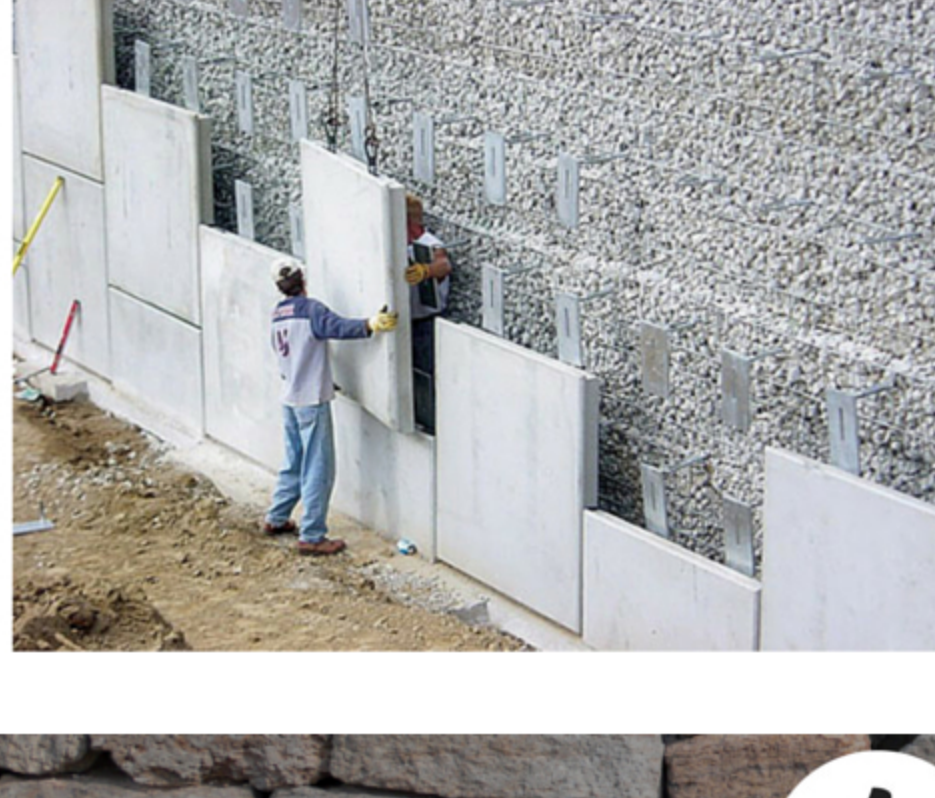
# 2

Nearly ALL retaining walls are broken down into four simplified types:



# 3

There are several variables that can affect the design of a retaining wall:



- Inclination of the backfill
- Grade at the toe of the slope
- Overall slope height
- Soil type
- Moisture/groundwater/surface water conditions
- The intended use of the area of retained soils.

# 4

The most common failures of brick, timber and concrete retaining walls include:

**CRACKING**

**TILTING**

**BOWING**



# 5



"Ultimately, all retaining walls serve to hold back a vertical or near vertical face of soil that would, without adequate retention, cave, slump, or slide to a more natural slope."



When it comes to finding the right solution to meet specific challenges, it is important to consult a professional wall designer. At Shield Engineering, we have experienced retaining wall designers that can help meet your needs.

For information on how we can help you, please fill out the form on our website or call **800-395-5220** to speak to a Shield team member.



shieldengineering.com