

SIERRA COLLEGE

# Construction

*Energy Instructor*

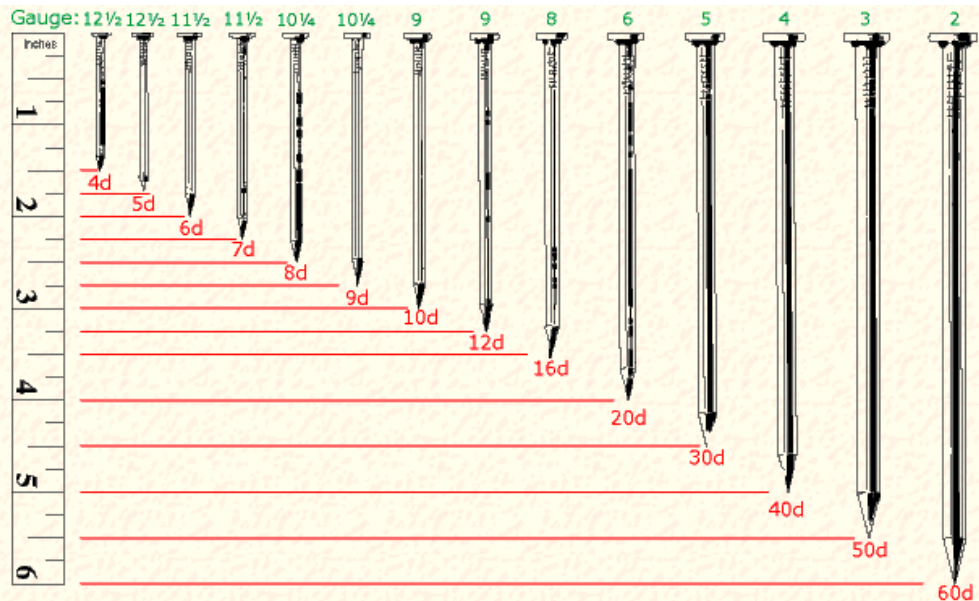
[www.energyinstructor.info](http://www.energyinstructor.info)



# Lesson Plan

- Residential Construction Basics
  - Materials
  - Framing
  - Lab exercise
- Next Week
  - Electrical basics

- Why do we care?
- Lumber
  - Studs, beams, rafters 2bys
  - Sheathing
- Nails
  - Common, Box, Sinker



### Platform Framing:

- Framing in which floor platforms are constructed independently.
- Walls are erected on each floor system.
- House goes up in stages, one floor at a time.

### Production Framing:

- Another name for “Platform Framing”
- Called this because of the speed and systematic framing approach.
- Incorporates engineered framing components like wooden I - Beams, tongue and groove “Strudi Floor” sub flooring, panelized wall systems, and roof trusses.

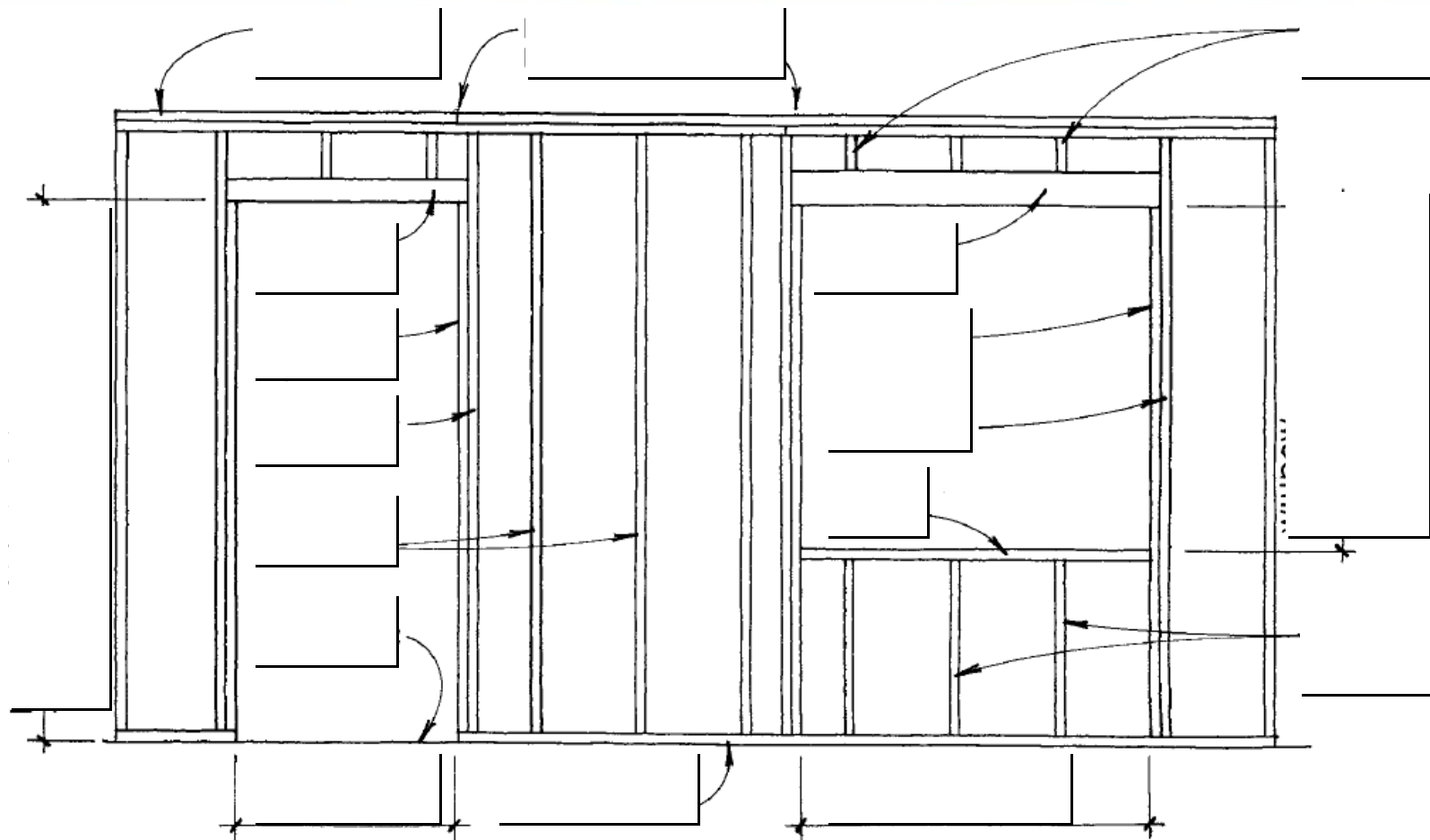
### Post & Beam Framing:

- AKA “California Post & Beam”
- Framing in which post support large beams that are design to span large openings.
- These framing units are the basic load-bearing members.
- Fewer framing members are required leaving more open space for functional use.

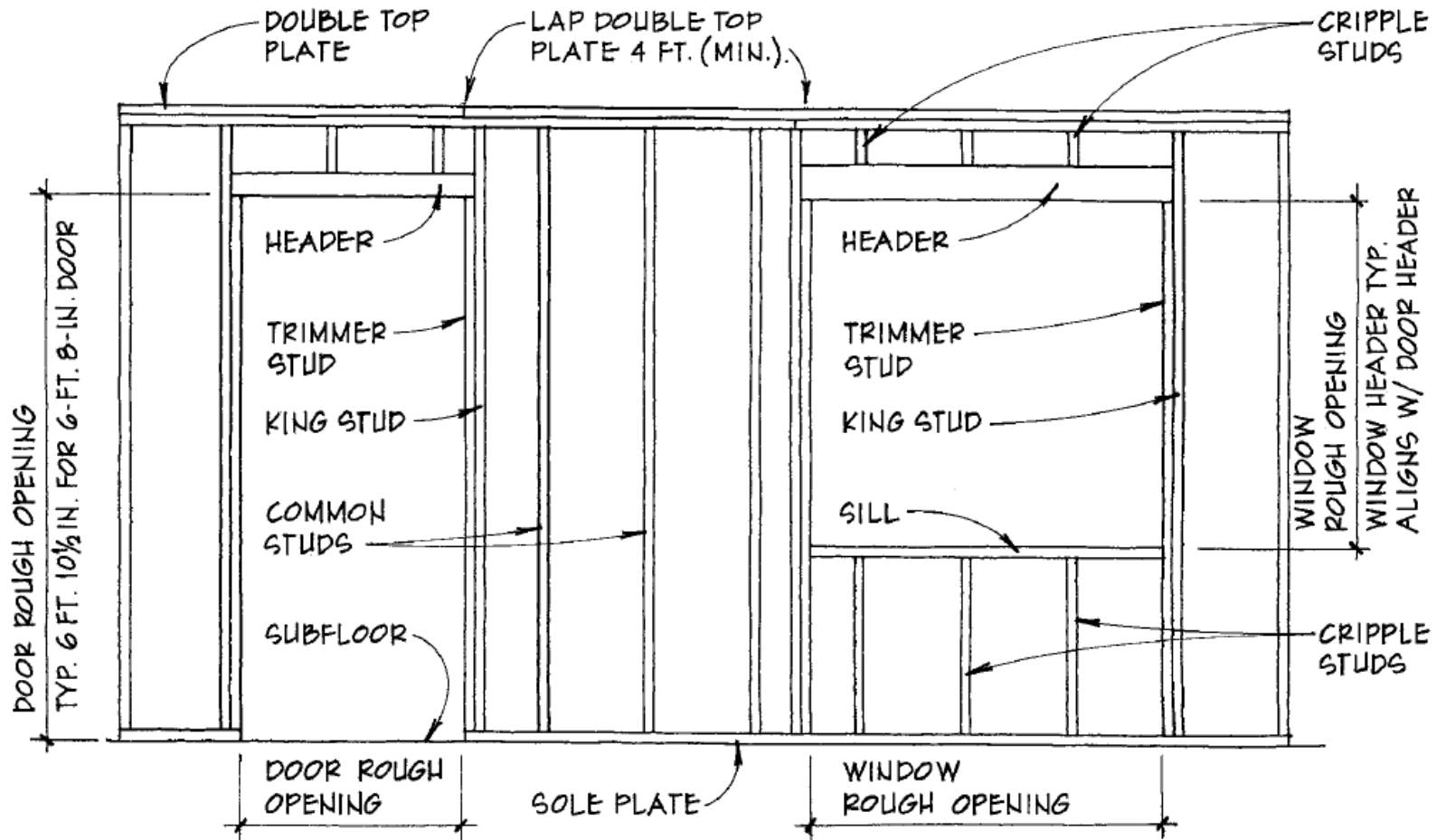
### Note:

1. It is not uncommon for houses to have more than one type of framing in the same structure.
2. Plywood in the 1950’s was revolutionary, ushering in a more modular approach to building.
3. Engineered framing products brought us the era of “Production Framing” where house now can be mass produced.

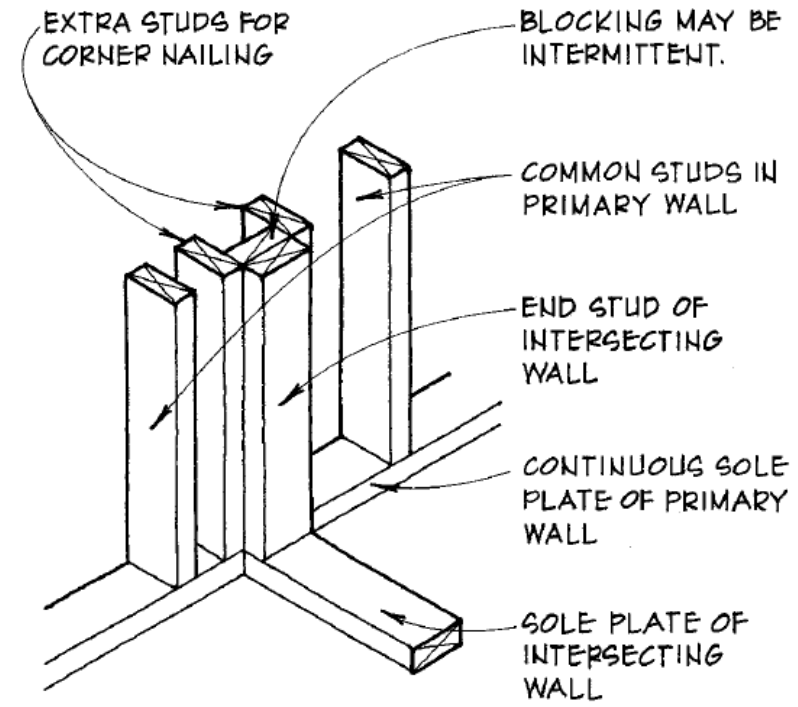
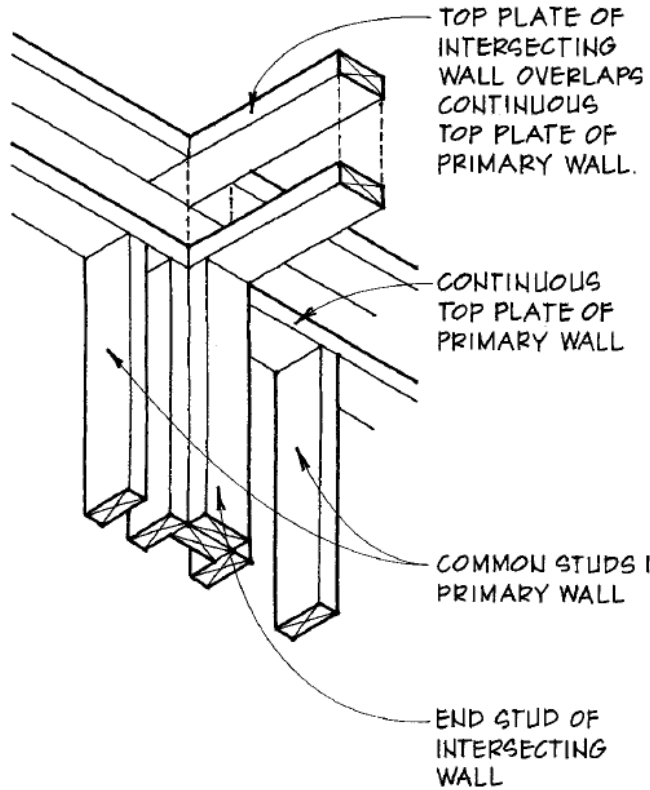
# Framing Walls



# Framing Walls

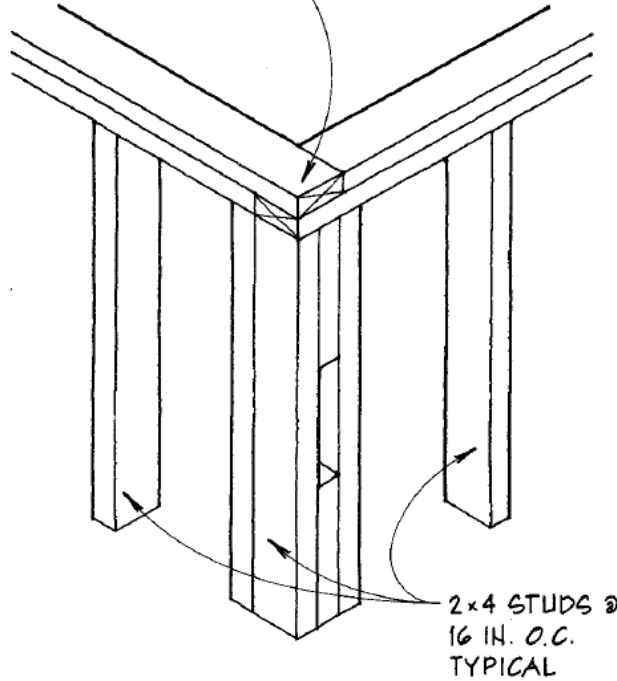


# Framing Walls

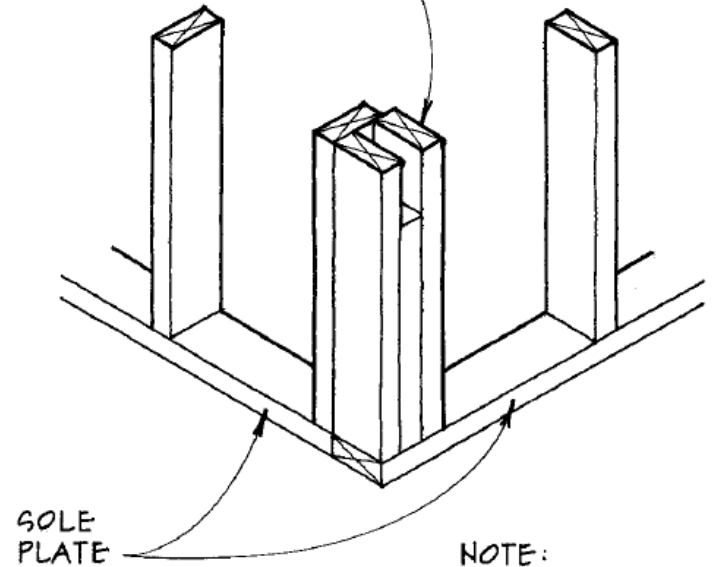


# Framing Walls

DOUBLE TOP PLATE OVERLAPS @ CORNERS TO LOCK TWO WALLS TOGETHER.



CORNER STUDS BUILT UP W/ 2x4 BLOCKING BETWEEN PROVIDES NAILING @ INSIDE CORNER.



NOTE:  
THIS DETAIL WORKS FOR BOTH INSIDE & OUTSIDE CORNERS.