

2003 IRC

## Framing Rough-In Inspections: Residential

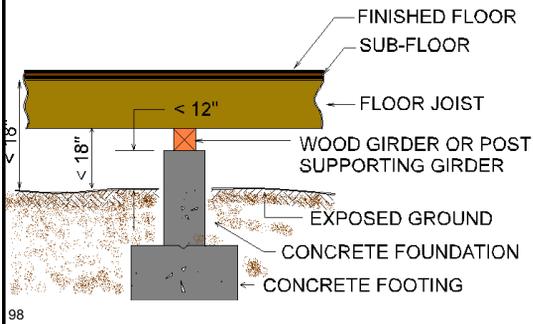
Office of Education & Data Management  
Career Development  
September 2012

## Framing Rough-In Inspections

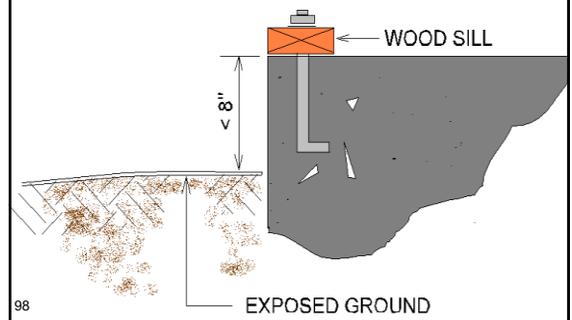
This program will provide an overview of framing inspections

- Decay Protection
- Wall Construction
- Rafters
- Ceiling and Floor Joists
- Girders and Headers
- Fastening Schedules

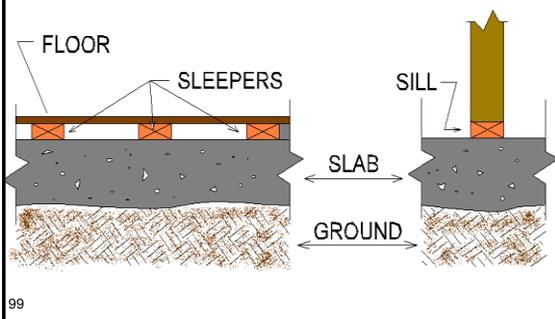
### Decay Protection



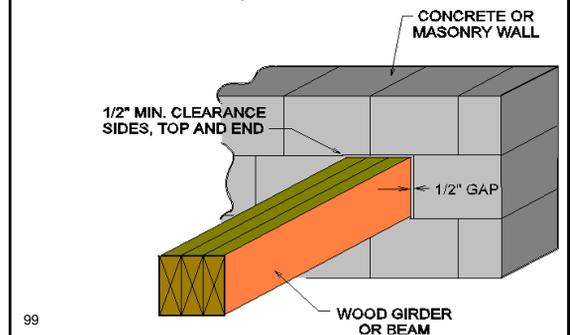
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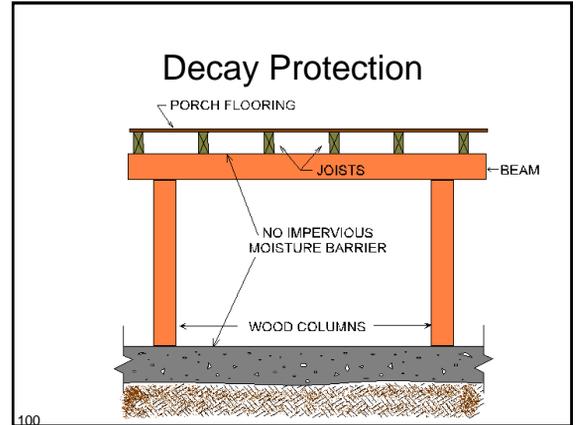
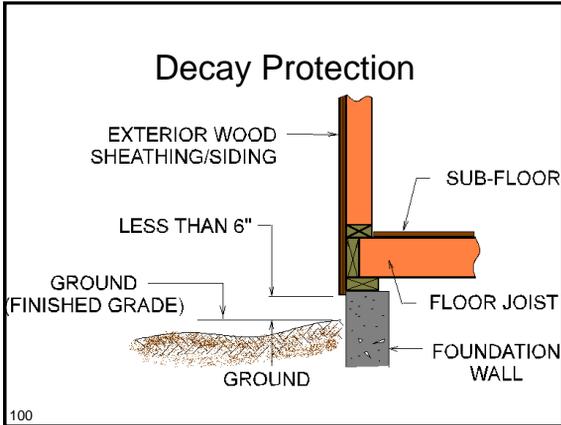


### Decay Protection

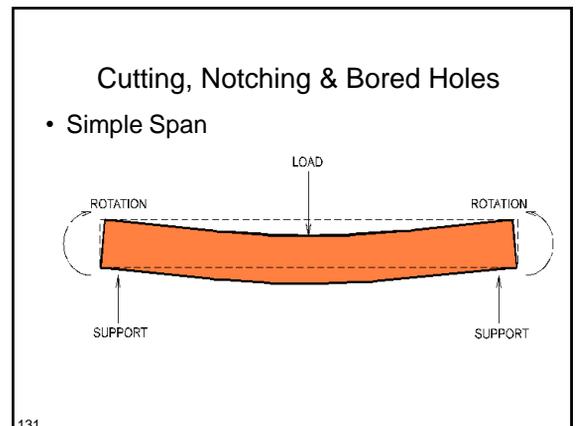
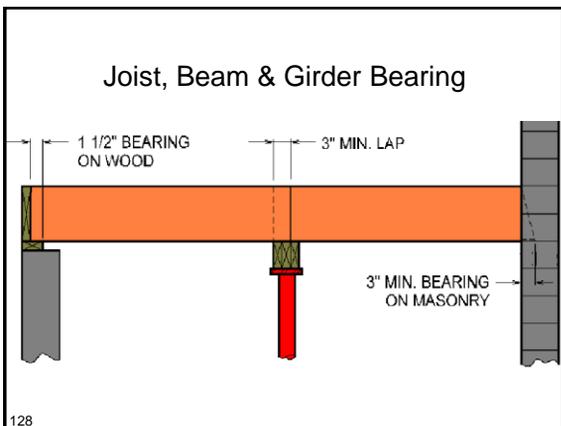
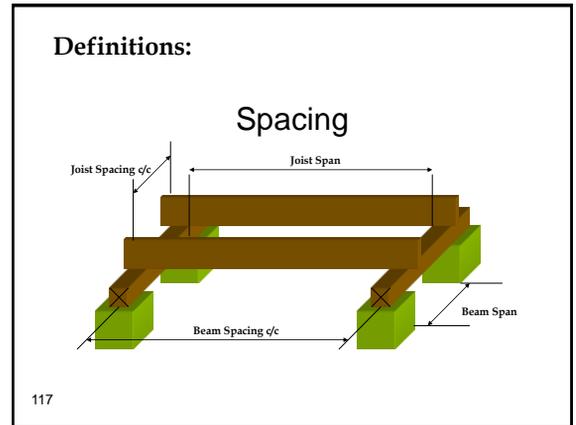


### Decay Protection



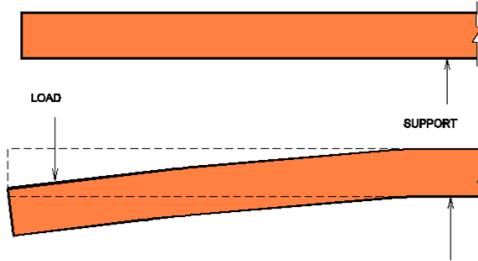


- ### Definitions
- Load
  - Live Loads
  - Dead Loads
  - Lateral Loads
  - Deflection
- 116



### Cutting, Notching & Bored Holes

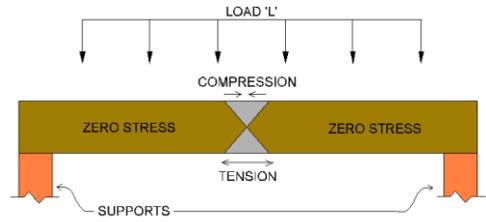
- Cantilever



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### Cutting, Notching & Bored Holes

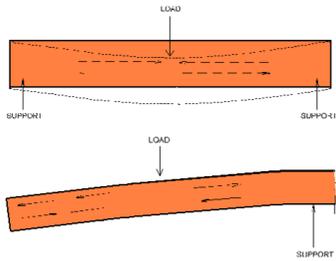
- Repetitive Members



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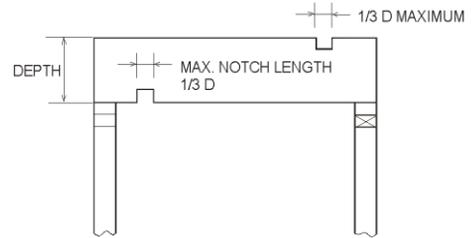
### Cutting, Notching & Bored Holes

- Tension vs. Compression



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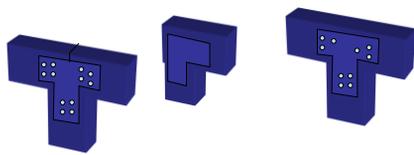
### Cutting, Notching & Bored Holes



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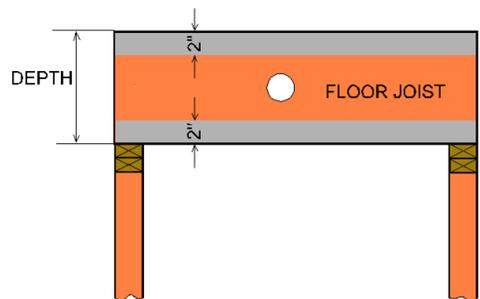
### Beams

- Gusset plates



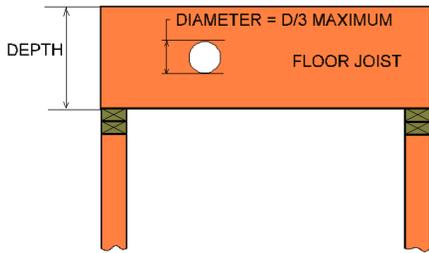
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### Cutting, Notching & Bored Holes



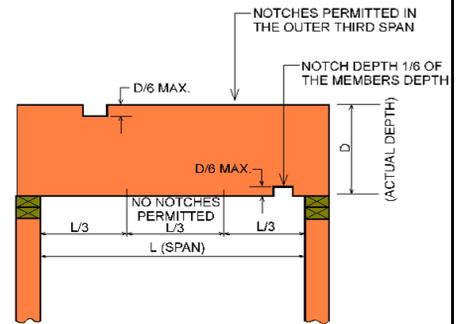
139

### Cutting, Notching & Bored Holes



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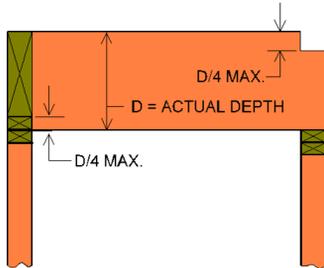
### Cutting, Notching & Bored Holes Summary



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### Cutting, Notching & Bored Holes

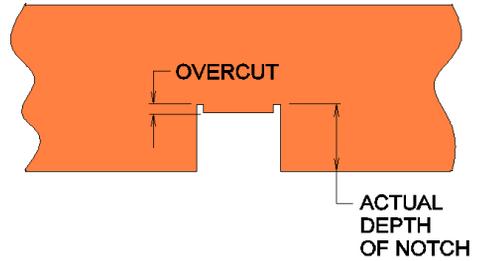
Summary continued



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### Cutting, Notching & Bored Holes

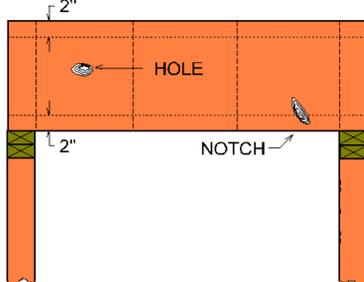
Overcut



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### Cutting, Notching & Bored Holes

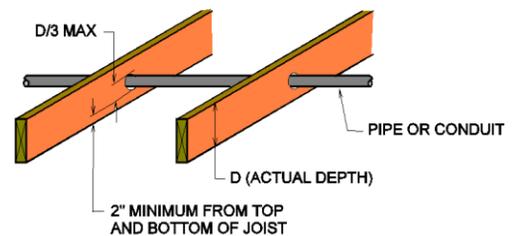
Out of Grade Lumber



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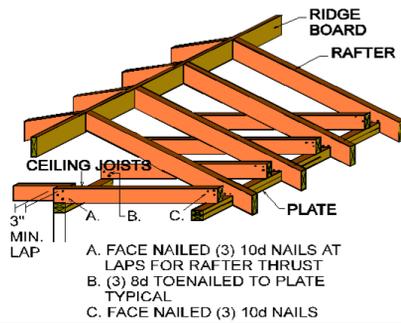
### Cutting, Notching & Bored Holes

Bored Holes



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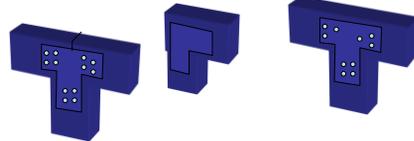
## Roof and Ceiling Framing Construction



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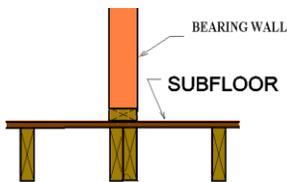
## Ceiling Joists

- If post are used to support beams and girders, then determine if positive connections are installed.



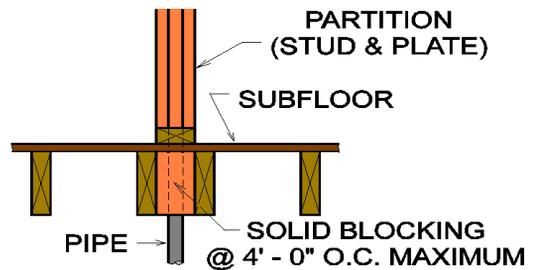
## Floor & Ceiling Header Inspection

- Determine if the joists parallel to bearing walls above are of adequate size to support the load



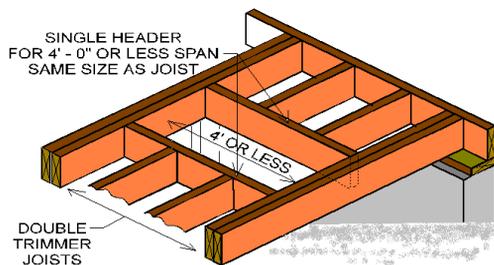
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## Floor & Ceiling Header



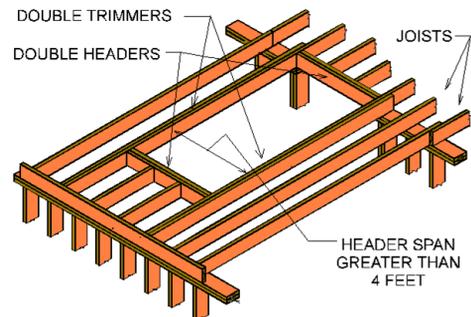
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## Floor & Ceiling Header



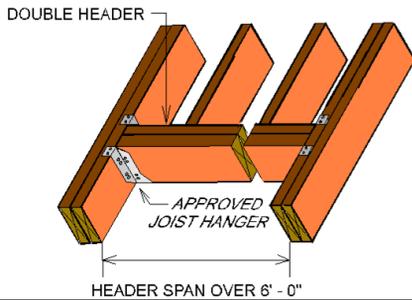
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## Floor & Ceiling Header



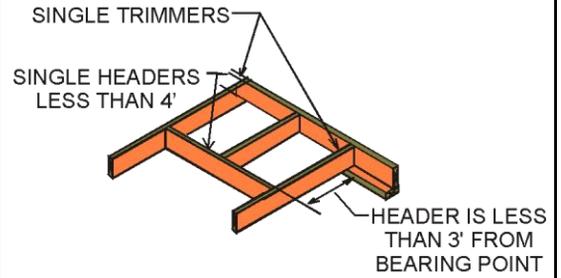
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### Floor & Ceiling Header



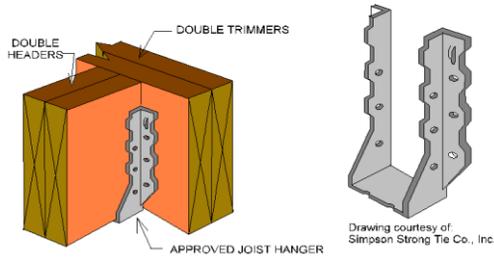
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### Floor & Ceiling Header



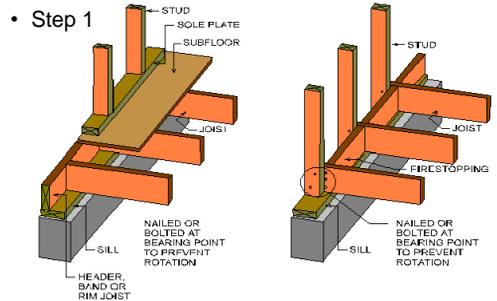
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### Floor & Ceiling Header



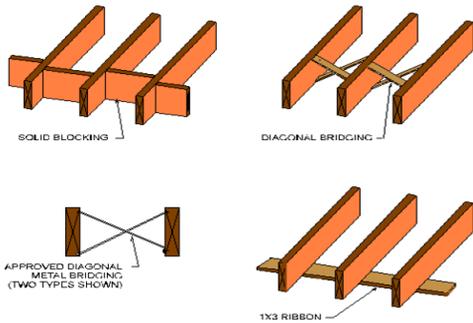
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### Joist Lateral Support & Bridging



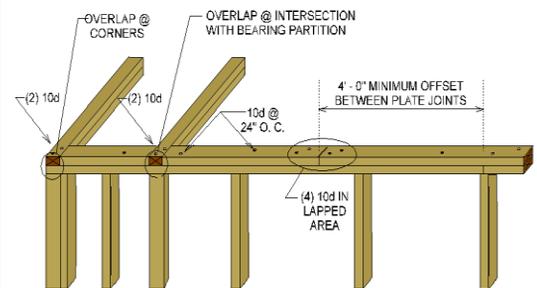
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### Joist Lateral Support & Bridging

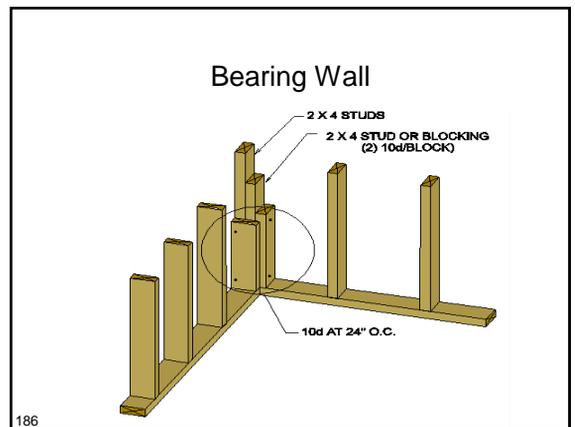
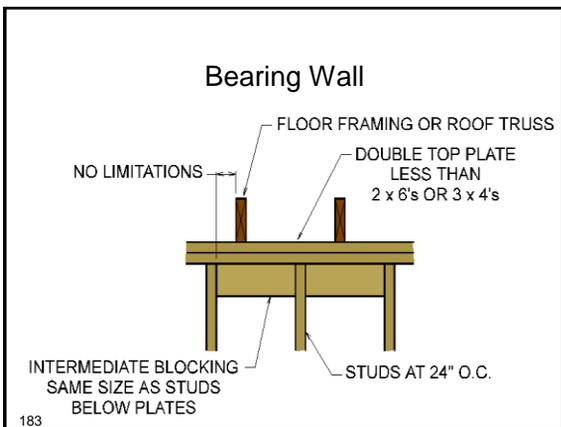
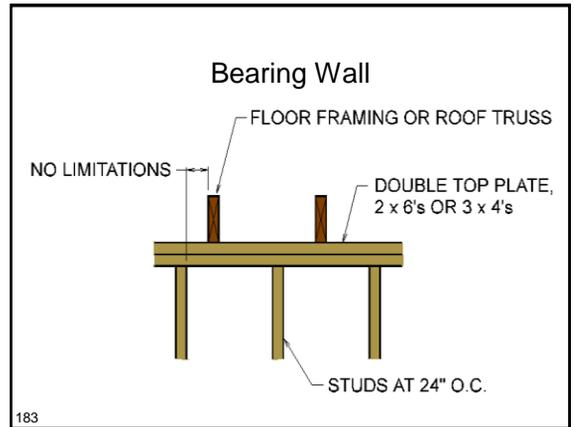
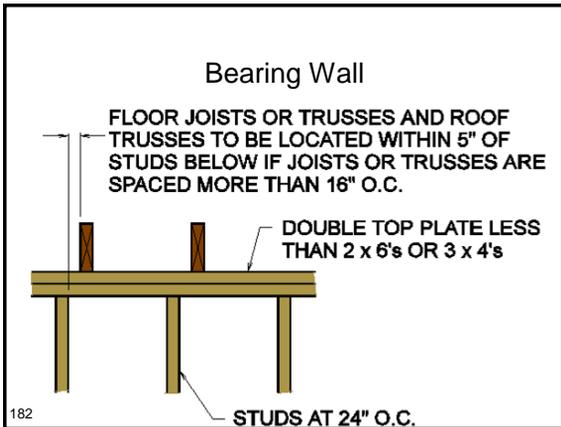
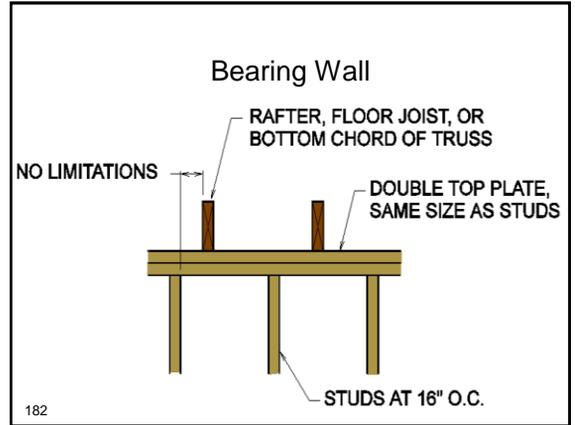
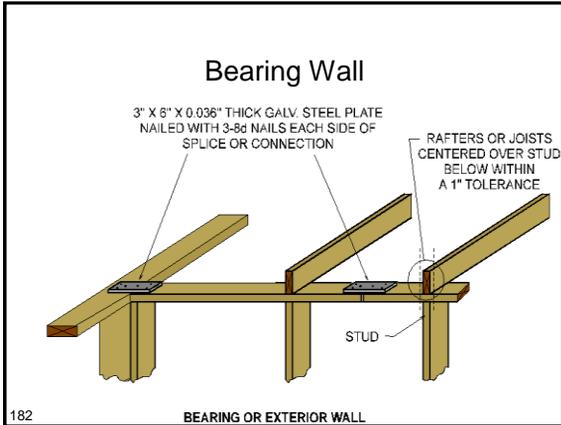


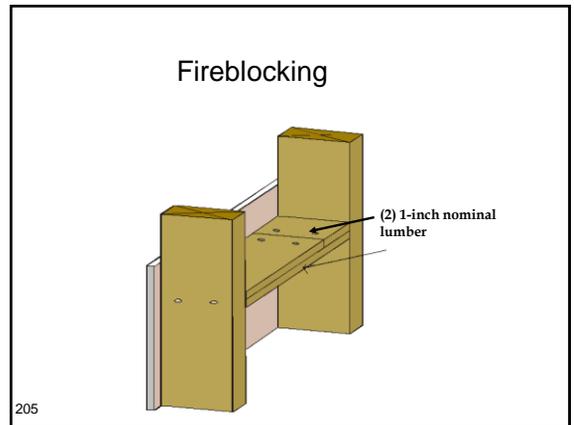
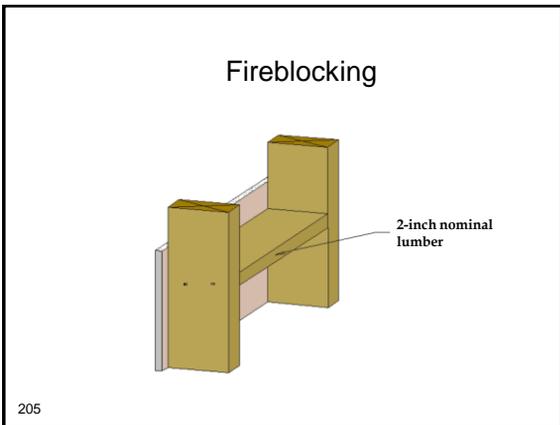
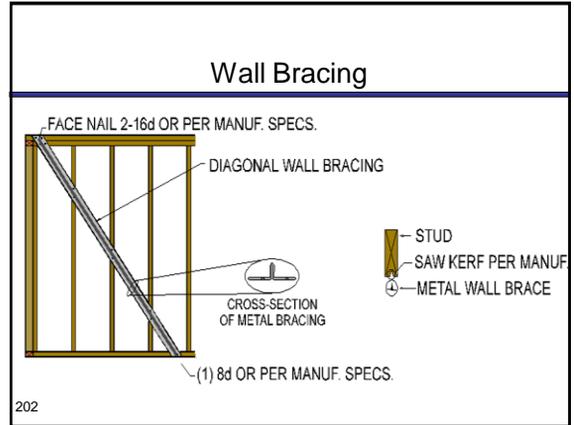
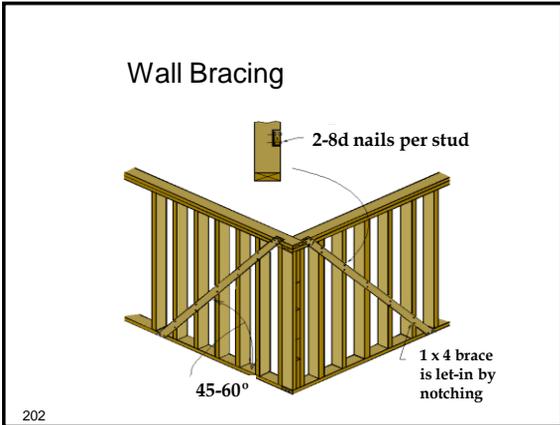
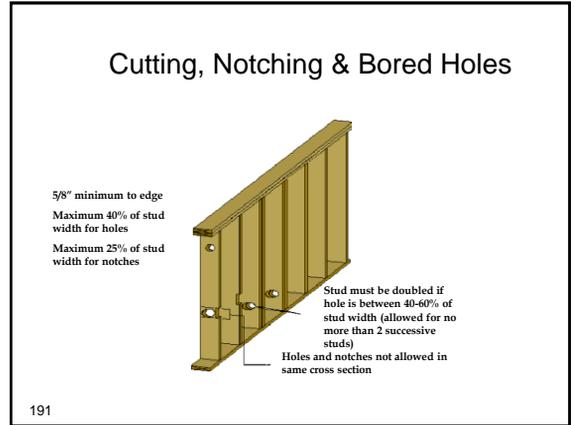
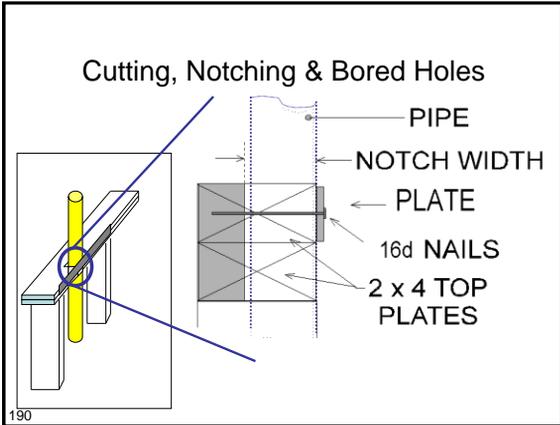
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### Bearing Wall

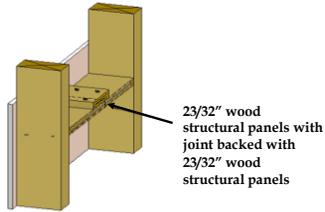


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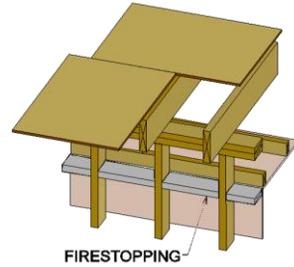


### Fireblocking



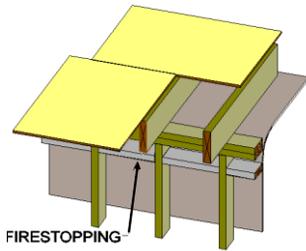
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### Fireblocking



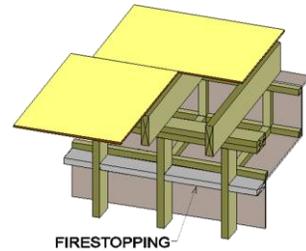
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### Fireblocking



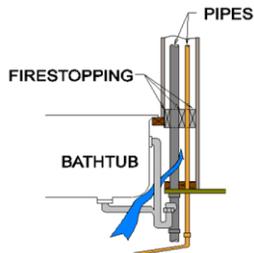
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### Fireblocking



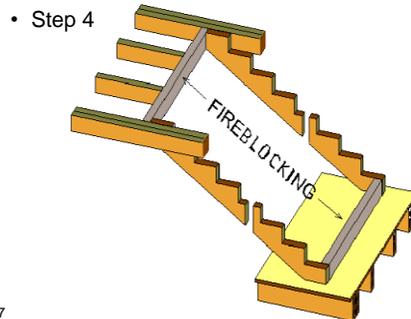
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### Fireblocking



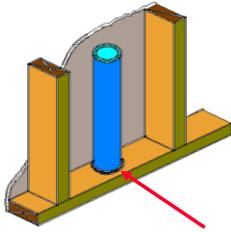
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### Fireblocking



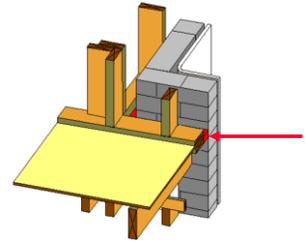
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### Fireblocking



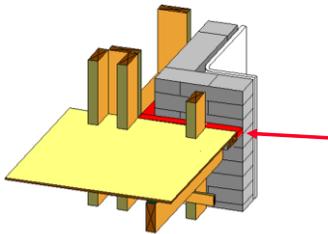
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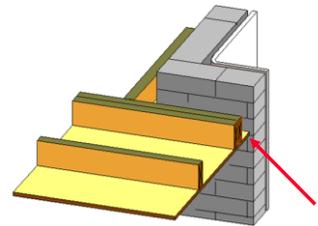
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### Firestopping

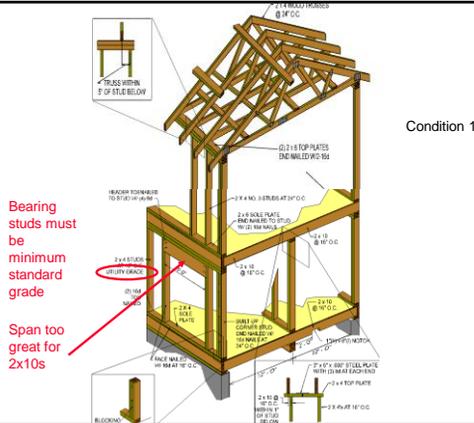


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### Firestopping



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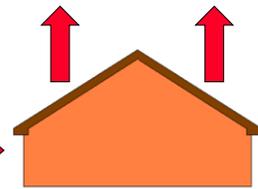


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### Rafter Materials & Allowable Spans Inspection

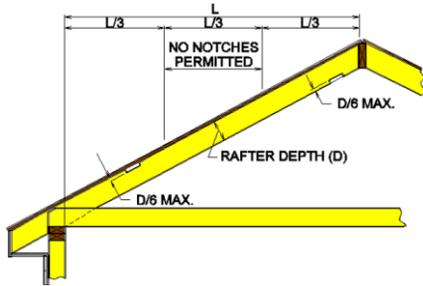
Definitions: loads

Horizontal design load per basic wind speed map from Appendix M of CT supplement



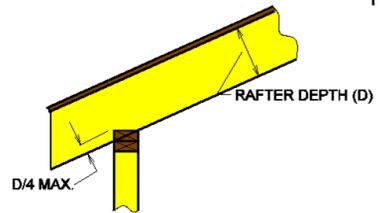
224

### Rafter Cutting, Notching & Bored Holes Inspection



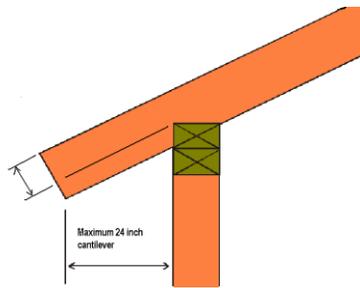
231

### Rafter Cutting, Notching & Bored Holes Inspection



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### Rafter Cutting, Notching & Bored Holes

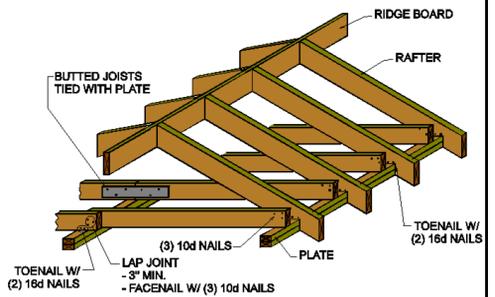


Minimum 4 inches nominal remaining after notching

Maximum 24 inch cantilever

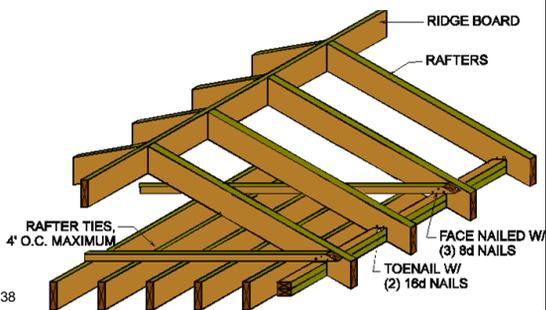
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### Roof Framing Construction



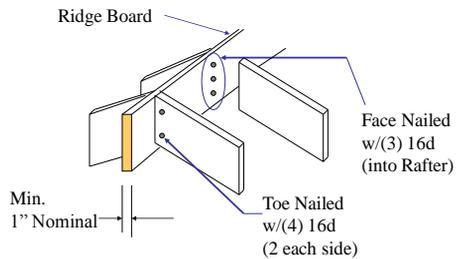
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### Roof Framing Construction



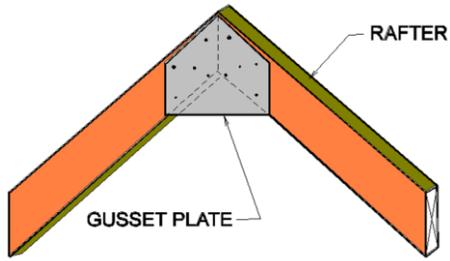
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### Roof Framing Construction



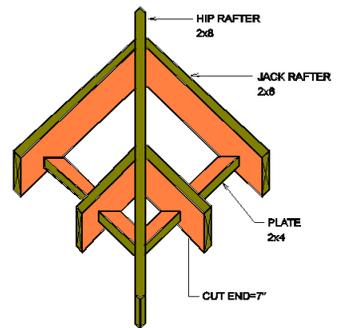
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### Roof Framing Construction



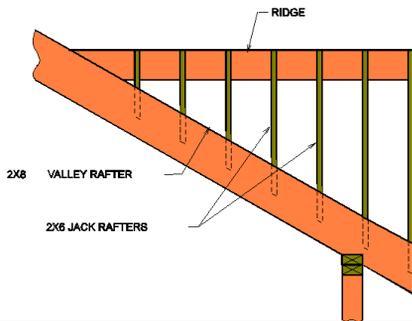
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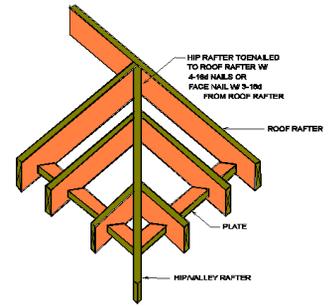
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### Roof Framing Construction



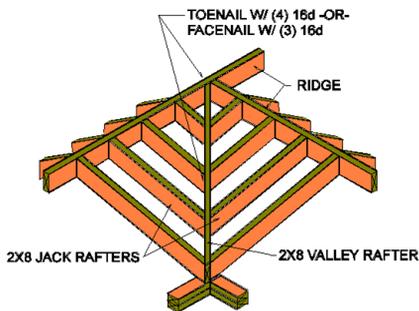
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### Roof Framing Construction



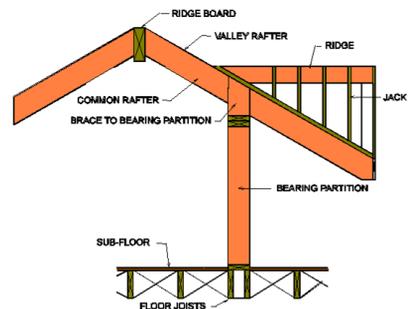
240

### Roof Framing Construction



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### Roof Framing Construction



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Questions???



Thank-You!



**State of Connecticut**  
**Department of Construction Services**

- Office of the State Building Inspector  
– (860) 685 - 8310
- Office of the State Fire Marshal  
– (860) 685 - 8380
- Office of Education and Data Management  
– (860) 685 - 8330

Office of Education and Data  
Management

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