
SECTION HEADING

CRPT 2234: Construction Techniques

Description

Construction Techniques discusses the theory behind hand-built roof systems. Students will be taught how to use a framing square and roof terminology. Finishing of the interior and exterior portions of these systems will be taught on site.

Credits

3

Prerequisite

None

Corequisite

None

Topics to be Covered

1. Parts of common rafters, hip rafters, valley rafters and jack rafters
2. Proper cutting common, hip, valley and jack rafters.
3. Rafter and ceiling joist layouts

Learning Outcomes

1. Identify the parts of a common rafter.
2. Define slope and pitch.
3. Use a framing square and rafter tables to calculate rafter lengths.
4. Use a framing square to layout cut on rafters.
5. Make all plumb cuts and seat cuts on a common rafter.
6. Calculate length of common rafters for a given span and roof slope.
7. Accurately cut all plumb cuts and seat cuts on a common rafter.
8. Layout and install common rafters on a top plate.
9. Cut rafter tails and install lookouts.
10. Install fascia board to the ends of rafters.
11. Calculate the length of hip, valley and jack rafters using the framing square.
12. Erect ridge board, common rafters, hip rafters, valley rafters and jack rafters on a given roof.

Credit Details

Lecture: 1

Lab: 2

OJT: 0

MnTC Goal Area(s): None