How To Dry Lumber For Quality And Profit

Tuesday, Dec. 16

8:00 Course introduction

Why wood is dried

Safety

Softwood structure

9:30 Break

Moisture content

Oven-dry method (optional)

Wood variability

Measuring temperature and humidity

Psychrometrics, EMC

11:30 Lunch (on your own)

Shrinkage and strength

Water movement in wood

Factors affecting the drying rate

Stress development and relief

2:15 Break

Drying defects

Types of schedules

Time-based schedules

Q&A

4:00 Adjourn

Wednesday, Dec. 17

8:00 Equalization

Conditioning and cooldown

Selecting an air velocity

Additional schedule considerations

Other schedule considerations

9:30 Break

High-temperature drying

Continuous kiln schedules (Optional)

Kiln designs

Steam

Steam-heated kilns, steam delivery

11:30 Lunch (on your own)

Wednesday, Dec. 17 (cont)

Steam-heated kilns, condensate return

Direct-fired kilns (optional)

Venting and humidification

Fan systems

Baffling

Sorting in the sawmill

2:15 Break

Stacking

Loading the kiln

Preparing to dry

Q&A

4:00 Adjourn

Thursday, Dec. 18

8:00 Starting and running the kiln

Moisture meters

MC measurement at the kiln

9:30 Break

Maintenance, mechanical 1

Maintenance, mechanical 2

How the controller works

Maintenance, control system

11:30 Lunch (on your own)

Measuring airflow

Cost of drying

Energy

Minimizing downtime

2:15 Break

Describing data

Measuring and organizing data

Analysis techniques

Q&A

4:00 Closing remarks and adjorn