



**Characteristics of the Radio-Frequency/Vacuum Drying of Heavy Timbers for Post and Beam of Korean Style Housings Part II: For Korean Red pine heavy timbers with 250 × 250 mm, 300 × 300 mm in Cross Section and 300 mm in Diameter, and 3,600 mm in Length**

<https://research.thinkwood.com/en/permalink/catalogue1508>

Author: Nam-Ho Lee  
 Xue-Feng Zhao  
 Ik-Hyun Shin  
 Moon-Jae Park  
 Jung-Hwan Park  
 Joo-Saeng Park

Publisher: The Korean Society of Wood Science Technology

Year of Publication: 2011

Country of Publication: Korea

Format: Journal Article

Material: Solid-sawn Heavy Timber

Application: Wood Building Systems

Topic: Moisture

Keywords: Radio-Frequency/Vacuum Drying  
 Moisture Gradient  
 Shrinkage  
 Case Hardening  
 Surface Checks  
 Compressive Load

Language: Korean

Research Status: Complete

Series: Journal of the Korean Wood Science and Technology

Online Access: Free

**Resource Link**

<http://doi.org/10.5658/WOOD.2011.39.2.132>



## Durability of Structural Lumber Products after Exposure at 82C and 80% Relative Humidity

<https://research.thinkwood.com/en/permalink/catalogue784>

Author: David Green  
James Evans  
Cherilyn Hatfield  
Pamela Byrd

Organization: Forest Products Laboratory

Year of Publication: 2005

Country of Publication: United States

Format: Report

Material: LSL (Laminated Strand Lumber)  
LVL (Laminated Veneer Lumber)  
Solid-sawn Heavy Timber

Application: General Application

Topic: Mechanical Properties  
Moisture

Keywords: Aspen  
Douglas-Fir  
Modulus of Elasticity  
Modulus of Rupture  
Southern Pine  
Poplar  
Relative Humidity  
SPF  
Temperature  
Flexural Properties

Language: English

Research Status: Complete

Abstract:

Solid-sawn lumber (Douglas-fir, southern pine, Spruce– Pine–Fir, and yellow-poplar), laminated veneer lumber (Douglas-fir, southern pine, and yellow-poplar), and laminated strand lumber (aspen and yellow-poplar) were heated continuously at 82°C (180...

Online Access: Free

### Resource Link

[https://www.fpl.fs.fed.us/documnts/fplrp/fpl\\_rp631.pdf](https://www.fpl.fs.fed.us/documnts/fplrp/fpl_rp631.pdf)



## Effect of Low Relative Humidity on Properties of Structural Lumber Products

<https://research.thinkwood.com/en/permalink/catalogue793>

Author: David Green  
James Evans

Publisher: Society of Wood Science and Technology

Year of Publication: 2003

Country of Publication: United States

Format: Journal Article

Material: LSL (Laminated Strand Lumber)  
LVL (Laminated Veneer Lumber)  
Solid-sawn Heavy Timber

Application: General Application

Topic: Mechanical Properties  
Moisture

Keywords: Flexural Properties  
Modulus of Elasticity  
Modulus of Rupture  
Relative Humidity  
Tensile Properties  
Moisture Content  
Analytical Model

Language: English

Research Status: Complete

Series: Wood and Fiber Science

**Abstract:**

Wood used in industrial settings, and in some arid parts of the United States, may be subjected to very low relative humidity (RH). Analytical models available for predicting the effect of moisture content (MC) on the properties of solid-sawn lumber imply significant strength loss at very low MC...

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**Resource Link**

<https://wfs.swst.org/index.php/wfs/article/view/193/193> [↗](#)



# Effect of Reserve Air-Drying of Korean Pine Heavy Timbers on High-Temperature and Low-Humidity Drying Characteristics

<https://research.thinkwood.com/en/permalink/catalogue1506>

Author: Chang-Jin Lee  
Nam-Ho Lee  
Moon-Jae Park  
Joo-Saeng Park  
Chang-Deuk Eom

Publisher: The Korean Society of Wood Science Technology

Year of Publication: 2014

Country of Publication: Korea

Format: Journal Article

Material: Solid-sawn Heavy Timber

Application: General Application

Topic: Moisture

Keywords: Moisture Content  
Temperature  
Humidity  
Pine  
Air Drying  
Shrinkage  
Internal Checks  
Twist  
Case Hardening

Language: Korean

Research Status: Complete

Series: Journal of the Korean Wood Science and Technology

Online Access: Free

## Resource Link

<http://doi.org/10.5658/WOOD.2014.42.1.49>



## Effects of Climate Change on Structural Behavior of Wood to Wood Connections

<https://research.thinkwood.com/en/permalink/catalogue1561>

Author: Gi Young Jeong  
So Sun Lee

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: Solid-sawn Heavy Timber

Application: Beams  
Columns

Topic: Connections  
Moisture

Keywords: Moisture Content  
Dovetail  
Beam-to-Beam  
Column-to-Column  
Structural Behavior

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria  
p. 1464-1471

### Abstract:

Dovetail connections were applied for connecting column to column, and beam to beam in traditional timber framed buildings. Previous studies were mainly focused on mechanical behaviour of the connection. However, there was a lack of study on the structural behaviour of the connection under different moisture contents. The goal of this...

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### Resource Link

<http://repositum.tuwien.ac.at/obvutwoa/content/pageview/1607695>