


Mokuzai Gakkaishi  JWRS
The Japan Wood Research Society

[Available Issues](#) | [Japanese](#) >> [Publisher Site](#)

Author: Keyword: [ADVANCED](#)



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1880-7577

PRINT ISSN : 0021-4795

Mokuzai Gakkaishi

Vol. 53 (2007) , No. 3 p.117-126

[\[PDF \(997K\)\]](#) [\[References\]](#)

Current Issues of Timber Construction

Takuro Hirai¹⁾

1) Research Faculty of Agriculture, Hokkaido University

(Received November 10, 2006)

(Accepted December 4, 2006)

Abstract: Current research issues of timber construction are discussed. Initial resistance design, durability design and post life design are considered, in a broad sense, as the components of structural design of timber construction. The following main issues are discussed here for each component.

1. Initial resistance design

1)Appropriate structural modeling ; 2)Relative resistance of structural members and joints ; 3)Practical simplification of stiffness calculation for semi-rigid structures ; 4)Reasonable synthesis of horizontal resistance of structural components ; 5)Site-work performance factor ; 6)Target resistance based on use and risk ; 7)Dynamic behavior of structural components and whole structures ; 8)Clear distinction between allowable resistance design and ultimate resistance design.

2. Durability design

1)Control of wood decay ; 2)Structural plan considering risk of decay ; 3)Initial design considering maintenance ; 4)Estimation of residual resistance.

3. Post life design

1)Reinforcement design considering degradation of members ; 2)Initial design considering reuse/recycling.

Keywords: timber construction, structural design, initial resistance design, durability design, post life design

[\[PDF \(997K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

To cite this article:

Takuro Hirai: Mokuzai Gakkaishi Vol. 53, No. 3, 117-126 (2007) .

doi:10.2488/jwrs.53.117

JOI JST.JSTAGE/jwrs/53.117

Copyright (c) 2007 by The Japan Wood Research Society



[Japan Science and Technology Information Aggregator, Electronic](#)

