

Table of Tables

<i>Table 2. 1 The anatomical structure measurement result for southern yellow pine</i>	37
<i>Table 2. 2 The anatomical structure measurement result for Scots pine.....</i>	37
<i>Table 2. 3 The anatomical structure measurement result for soft maple.....</i>	37
<i>Table 2. 4 Southern yellow pine model predicted tangential thermal conductivity values in the range of latewood percentage from 10% to 99% and MC from 0% to 30%.....</i>	61
<i>Table 2. 5 Southern yellow pine model predicted radial thermal conductivity values in the range of latewood percentage from 10% to 99% and MC from 0% to 30%.....</i>	62
<i>Table 2. 6 Scots pine model predicted tangential thermal conductivity values in the range of latewood percentage from 10% to 99% and MC from 0% to 30%.</i>	66
<i>Table 2. 7 Scots pine model predicted radial thermal conductivity values in the range of latewood percentage from 10% to 99% and MC from 0% to 30%.</i>	67
<i>Table 2. 8 Scots pine model predicted tangential thermal conductivity values in the range of latewood percentage from 5% to 99% and MC from 0% to maximum 178%.....</i>	72
<i>Table 2. 9 Scots pine model predicted radial thermal conductivity values in the range of latewood percentage from 5% to 99% and MC from 0% to maximum 178%.....</i>	72
<i>Table 2. 10 Maple model predicted radial and tangential thermal conductivity values, and the ratios (R/T) in the MC change from 0% to maximum 30%.....</i>	78
<i>Table 2. 11 Number of testing specimens for each test specified.....</i>	83
<i>Table 2. 12 The temperature set-ups on the R-MATIC instrument for each of the test.</i>	86
<i>Table 2. 13 Southern yellow pine thermal conductivity values from the experiments under the specified conditions (treatments) with one replication for each category.</i>	89
<i>Table 2. 14 Scots pine thermal conductivity values from the experiments under the specified conditions (treatments) with one replication for each category.....</i>	89
<i>Table 2. 15 Maple thermal conductivity values from the experiments under the specified conditions (treatments) with one replication for each category.....</i>	89
<i>Table 2. 16 Correlation between SYP radial thermal conductivity values and latewood percentage (LW%) measured from SYP radial boards.</i>	90
<i>Table 2. 17 Correlation between SYP tangential thermal conductivity values and latewood percentage (LW%) measured from SYP tangential boards.</i>	91
<i>Table 2. 18 Correlation between Scots pine radial thermal conductivity values and latewood percentage (LW%) measured from Scots pine radial boards.</i>	91

<i>Table 2. 19 Correlation between SYP specific gravity and latewood percentage measured from testing boards</i>	<i>92</i>
<i>Table 2. 20 Correlation between Scots pine specific gravity and latewood percentage measured from testing boards.....</i>	<i>92</i>
<i>Table 2. 21 Regression for the thermal conductivities as functions of temperature of the three species in the two directions.....</i>	<i>93</i>
<i>Table 2. 22 Thermal conductivities in two directions for the three species and specific gravities measured from the testing boards.</i>	<i>96</i>
<i>Table 2. 23 Testing results and models' estimations comparison for the thermal conductivity of three species.</i>	<i>97</i>
<i>Table 2. 24 Amended table for thermal conductivities from testing results and modified model estimations.</i>	<i>98</i>
<i>Table 3. 1 Average results from the measurements for the angle and latewood percent on the cross section of each testing block.</i>	<i>159</i>