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FRT & Modeling Thermal Degradation

List of Publications:

- F1. Winandy, J. E., H. M. Barnes, J.M Hill. 2016. Effect of specimen width when evaluating laboratory-manufactured fire retardant-treated strandboard. *Wood and Fiber Science* 48(1):2-12. (refereed).
- F2. Barnes, H.M., J.E.Winandy, J.M Hill. 2015. Development of a testing protocol for effects on strength of laboratory-manufactured fire retardant-treated strandboard. *Wood and Fiber Science* 47(1):50-55. (refereed).
- F3. Winandy, J. E., H. M. Barnes, P. D. Jones, and C. R. McIntyre. 2014. Laboratory and field exposures of fire retardant-treated plywood: Part 3—modeling exposure relationships. 46(4):563-572. (refereed).
- F4. Winandy, J.E., Barnes, H.M., Jones, P.D. 2014. Modeling the relationship between laboratory and field exposure of FRT plywood. IN: *Proc. of 57th International Convention of the Society of Wood Science and Technology*, June 23-27, 2014, Zvolen, Slovakia. Ed: H.M.Barnes & V.H Herian. Monona, WI.
- F5. Winandy, J. E., 2013.. Effects of Fire-retardant-treatments on chemistry and engineering properties of wood. *Wood and Fiber Science*. 45(2):131-148. (refereed).
- F6. Barnes, H.M., Winandy, J.E., McIntyre, C.M. 2010. Laboratory and field exposures of FRT plywood: Part 2 – Mechanical properties. *Wood and Fiber Science*. 42(1):30-45. (refereed).
- F7. Barnes, H.M., Winandy, J.E., McIntyre, C.M. 2008. Laboratory and field exposures of FRT plywood: Part 1 – Physical test data. IRG-WP 08-40426, Int. Res. Group on Wood Protection. IRG Secretariat, Stockholm, SWEDEN.
- F8. Winandy, J. E., Wang, Q., White, R. H.. Fire-retardant-treated strandboard: Properties and fire performance. *Wood and Fiber Science*. 40(1):62-71. (refereed).
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- F9. White, R. H., Winandy, J. E. 2006. Fire performance of oriented strandboard. *Proc. of the conference on recent advances in flame retardancy of polymeric materials*. BCC Research Norwalk, CT. ISBN: 1-59623-221-8. Vol 17. Pg 297-309.
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- F10. Wang, Q., Wang, W., Winandy, J.E. 2005. Effects of a new GUP-B fire retardant on mechanical properties of Korean pine when exposed to elevated temperature. *Forest Products Journal* 55(12):214-220. (refereed)
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- F11. Wang; Qingwen; Li, Jian; Winandy, Jerrold. 2004. Chemical mechanism of fire retardance of boric acid on wood. *Wood Science and Technology* 38(2004):375-389. (refereed) http://www.fpl.fs.fed.us/documnts/pdf2004/fpl_2004_wang002.pdf
- F12. Winandy, J. E., M. J. Richards. 2003. Evaluation of boron-nitrogen, phosphate-free fire-retardant: Part I. Evaluation of Douglas-fir plywood according to ASTM D5516-96. *ASTM Journal of Testing and Evaluation* 31(2): 133-139. (refereed).
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- F13. Winandy, J. E., D. Herdman. 2003. Evaluation of boron-nitrogen, phosphate-free fire-retardant: Part II. Evaluation of small, clear specimens according to Methods A and B of ASTM D5664-95. *ASTM Journal of Testing and Evaluation* 31(2): 140-147. (refereed).
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- F14. Winandy, J. E., W. McNamara. 2003. Evaluation of boron-nitrogen, phosphate-free fire-retardant: Part III. Evaluation of full-size 2 by 4 lumber according to Method C of ASTM D5664-95. *ASTM Journal of Testing and Evaluation* 31(2): 148-153. (refereed).
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- F15. Lebow, P. K.; Winandy, J.E. 2003. Using Kinetic Models to Predict Thermal Degradation in Fire-Retardant Treated Plywood Roof Sheathing. In: Proc. of 31st Conf. of the North American Thermal Analysis Society. Albuquerque NM. Paper#048.
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- F24. Lebow, S. T., J. E. Winandy. 1998. The role of grade and thickness in the degradation of fire-retardant-treated plywood. *Forest Products Journal* 48(6):88-94. (refereed).
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