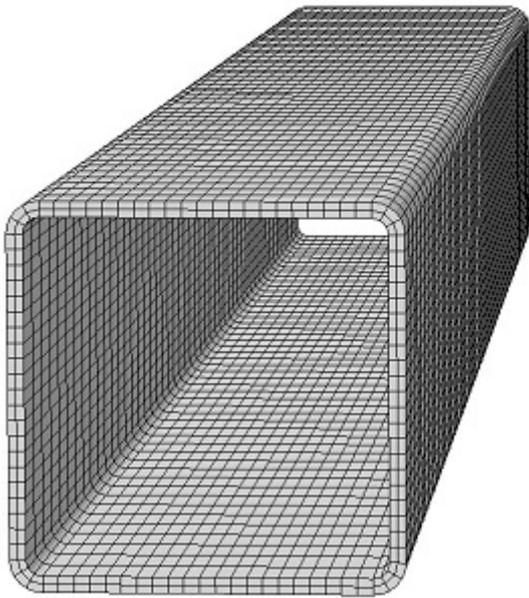
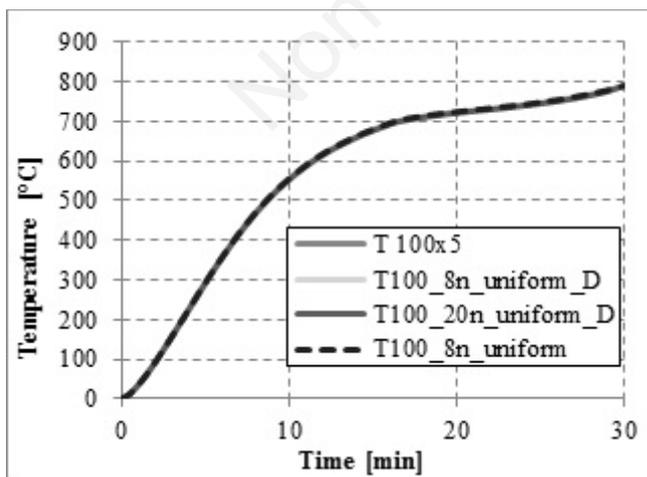


Appendix

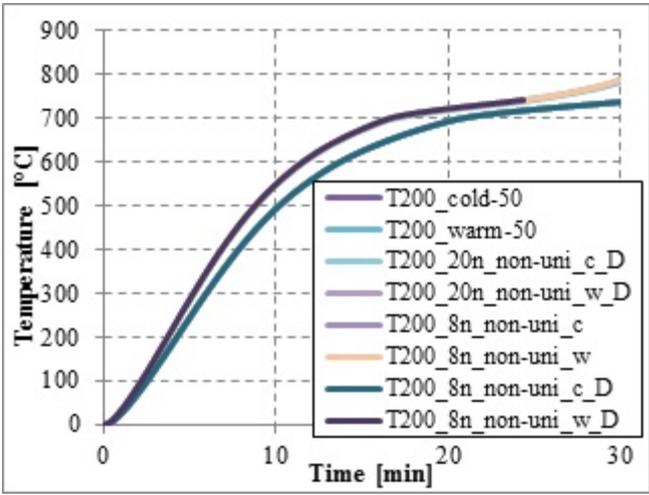
Fire Research #42 - Effect of radiation inside square hollow section under moderate non-symmetric fire



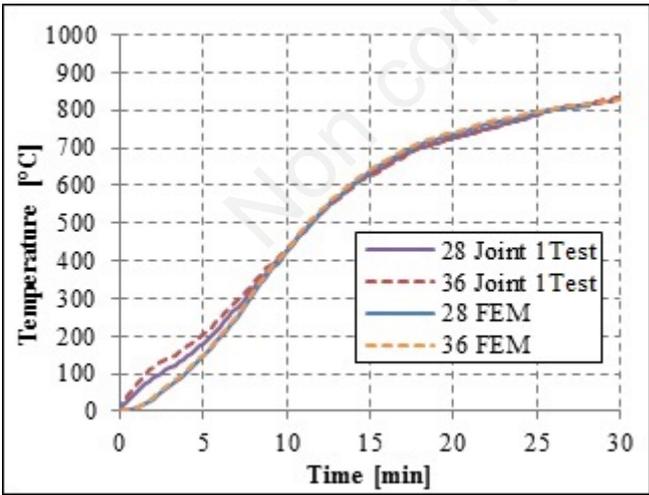
Appendix Figure 1. Mesh of the cross-section.



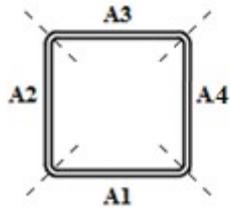
Appendix Figure 2. Verification of model for symmetric heat distribution.



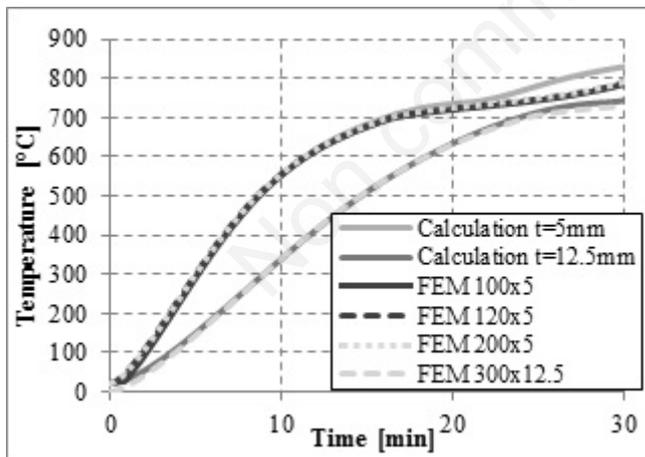
Appendix Figure 3. Verification of 200×5 SHS section model with non-symmetric heating.



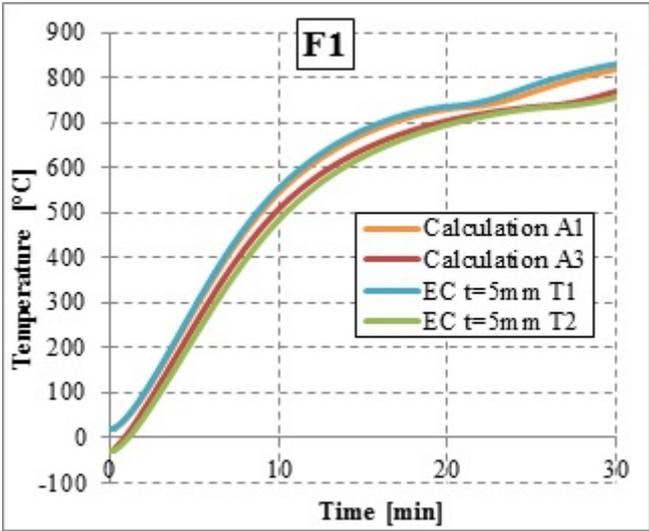
Appendix Figure 4. Validation of FE model for a beam.



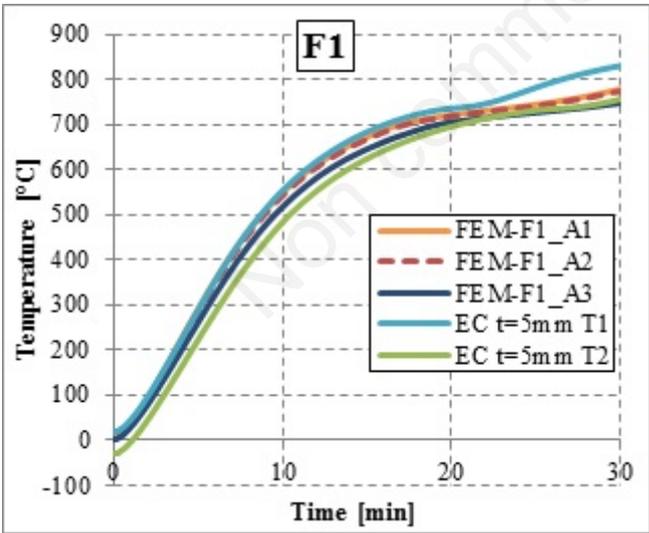
Appendix Figure 5. Cross-section divided into areas and temperatures ranges.



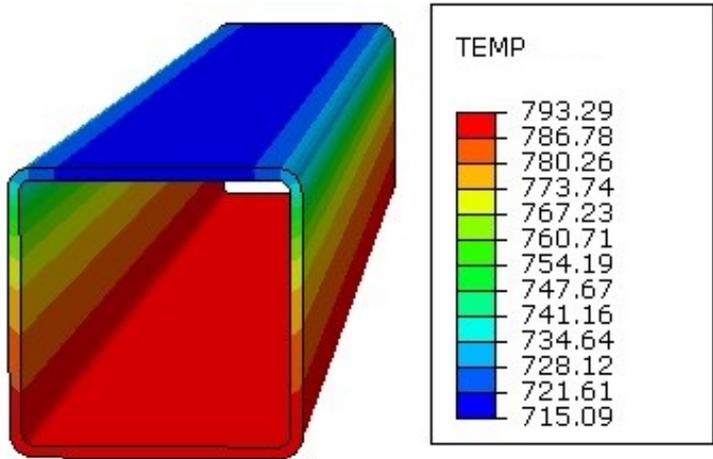
Appendix Figure 6. Comparison of analytical calculations based on EC 3 with FE results.



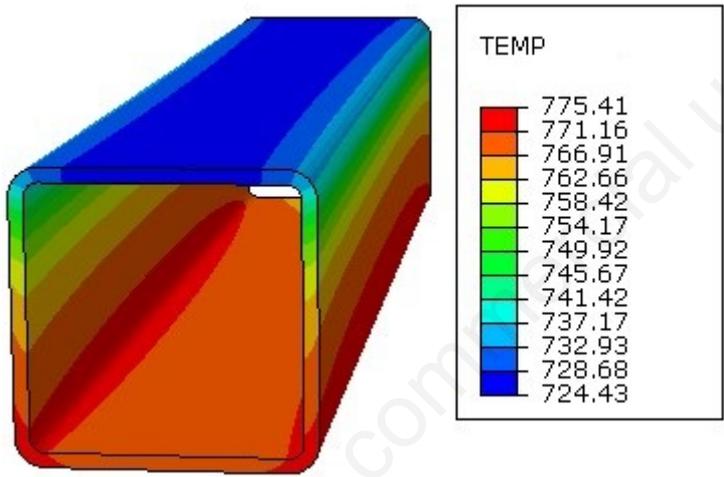
Appendix Figure 7. Temperature distribution for steel hollow section 100×100×5 in case F1 for $\Delta T=50^{\circ}\text{C}$; analytical calculations compared to EC 3.



Appendix Figure 8. Temperature distribution for steel hollow section 100×100×5 in case F1 for $\Delta T=50^{\circ}\text{C}$; FE results compared with EC 3.

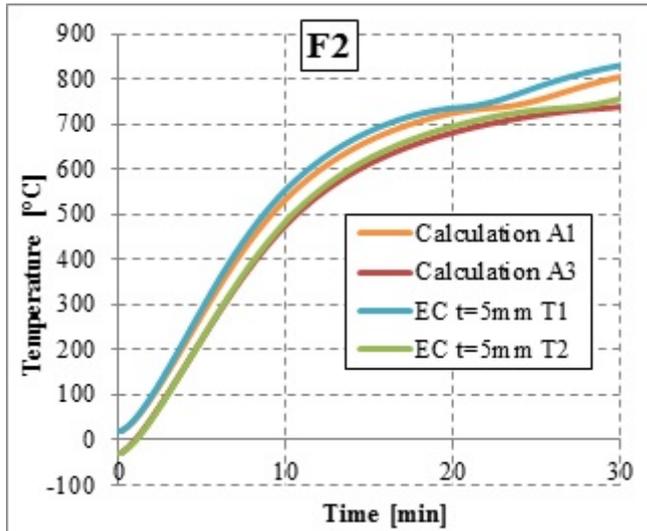


A

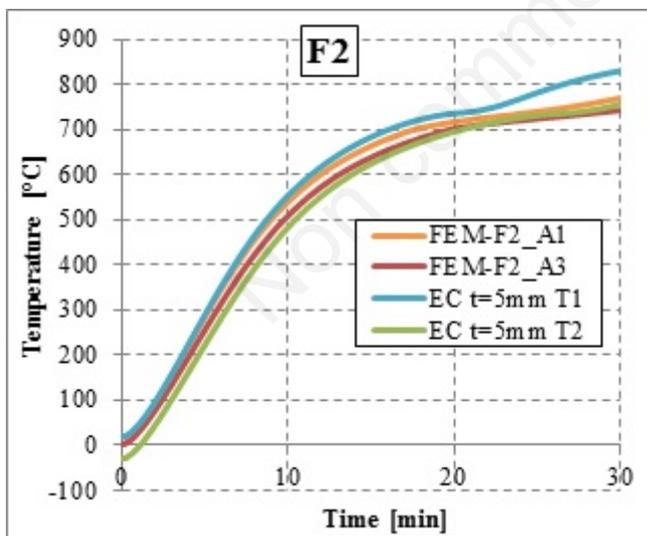


B

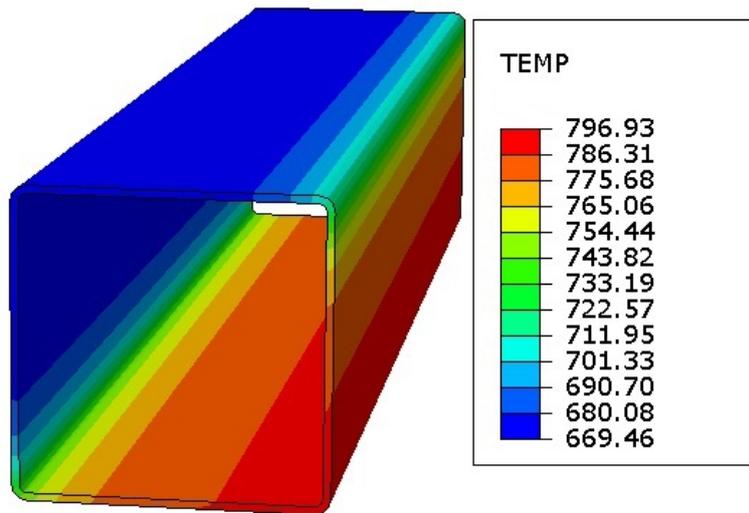
Appendix Figure 9. Thermal distribution for case F1 for $\Delta T=50^{\circ}\text{C}$: A) no radiation included; B) radiation included.



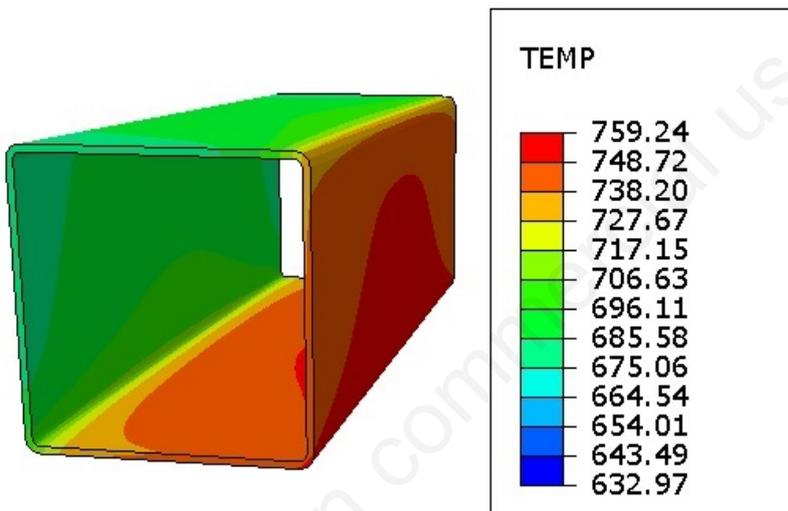
Appendix Figure 10. Temperature distribution for steel hollow section 100×100×5 in case F2 for $\Delta T=50^{\circ}\text{C}$; analytical calculations compared with EC 3.



Appendix Figure 11. Temperature distribution for steel hollow section 100×100×5 in case F2 for $\Delta T=50^{\circ}\text{C}$; FE results compared with EC 3.



A



B

Appendix Figure 12. Thermal distribution for case F2 for $\Delta T=50^{\circ}\text{C}$: A) no radiation included; B) radiation included.