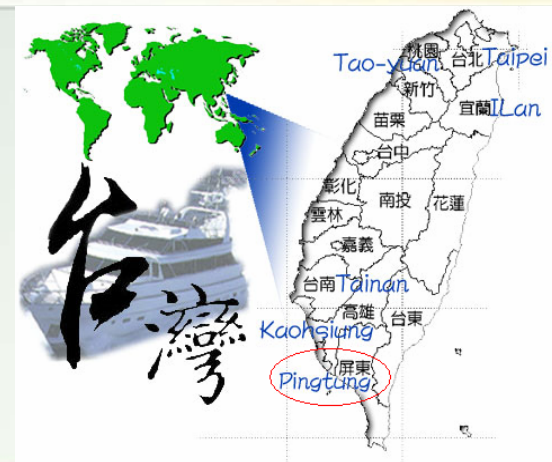


SHEAU HORNG LIN and QUAN ZHEN JI

# The Effect of Door leaf Constructions on Fire Endurance of Wood-based Fire Doors

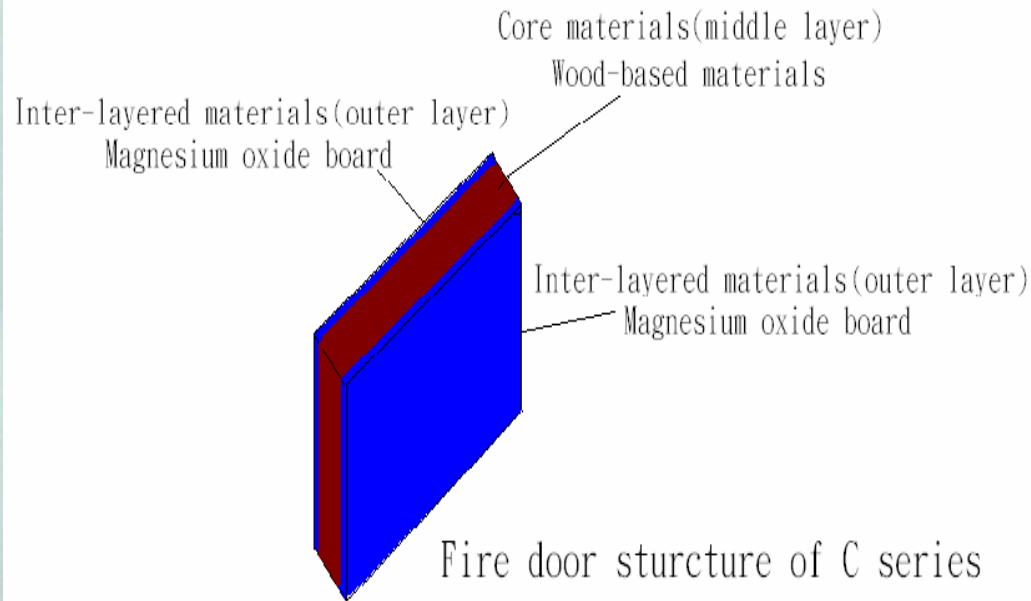
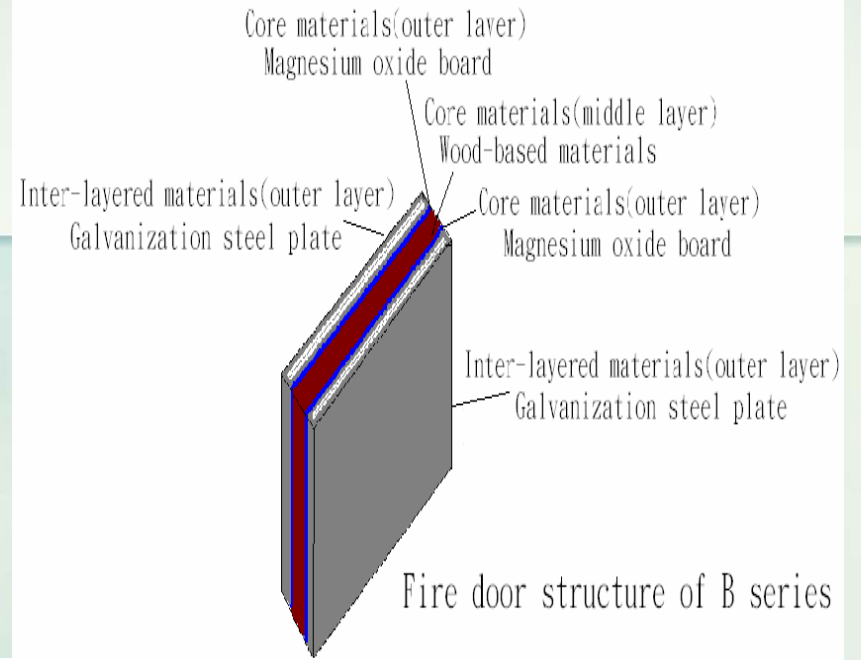
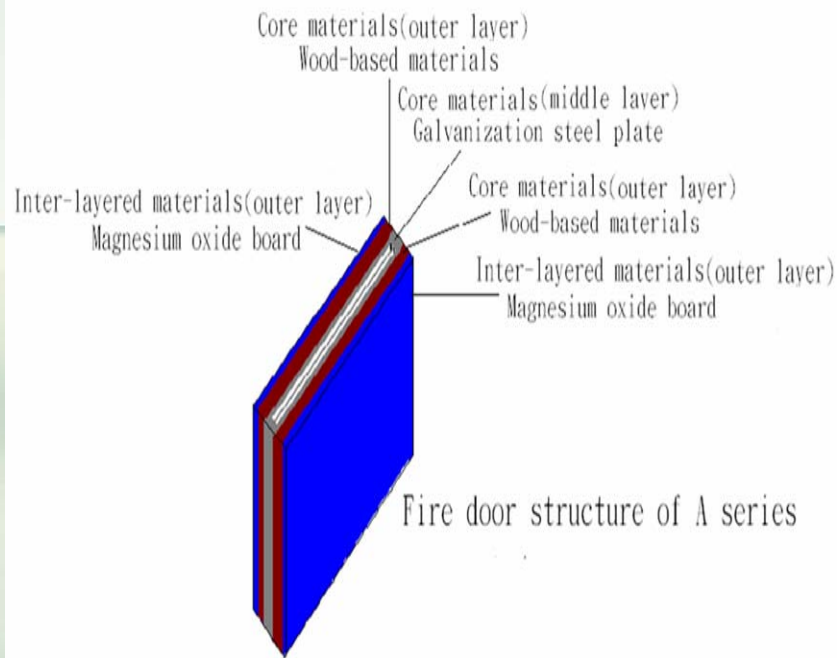
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## *Aim of work and methods*

Door is the main path to get in and out, thus if it can't stop fire at the initial stage, it would cause serious life and property damage. Therefore, this research investigate the development of one hour fire rated of wood-based fire doors based on CNS 11227 with design 3 series door leaf constructions by using:

- ◆ Galvanization steel plate
- ◆ Magnesium oxide board
- ◆ Wood-based materials ( plywood, particleboard, flaxboard and MDF )



## *Conclusion*

- ◆ Comparison of the fire endurance performance among three wood-based materials construct the fire doors, the MDF is the better than those of other three materials.
- ◆ The superior to construction of specimens were A-4 series
- ◆ The worst were B series
- ◆ After burned test, a square log in woodworking of door frame showed better than that of the nail for conventional method.

■ *Thank you*

*for your attention!!*