



Lightweight Fire Resistant Material (LFRM) for Transportation Applications

LFRM is a low density material having superior mechanical, thermal insulation properties, high temperature stability, and outstanding fire and sea water resistance. Main applications of LFRM includes transportation such as ships, subway trains, submarines etc and building construction wherever the fire is a primary issue. ARIS has pioneered the production and customization of this material for aerospace, marine, transportation and construction industries.

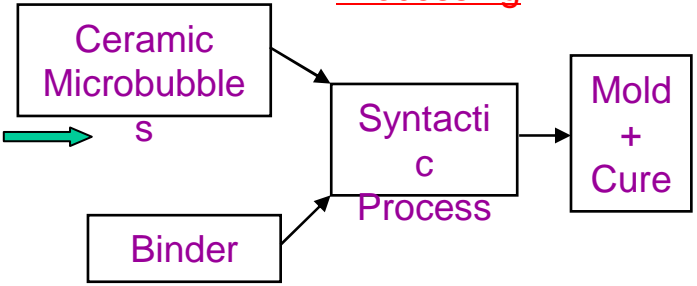
All Composite Minesweeper Fire (2003)



Mitigate Fire?
→

Hypothesis

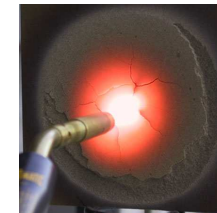
- Fire
- Cannot be stopped
- Mitigated/contained



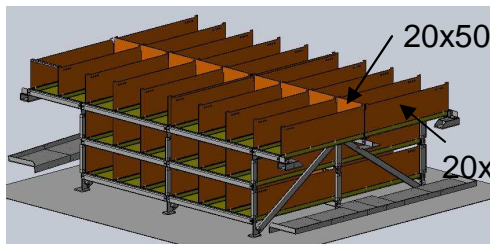
Processing



Burn Through Test

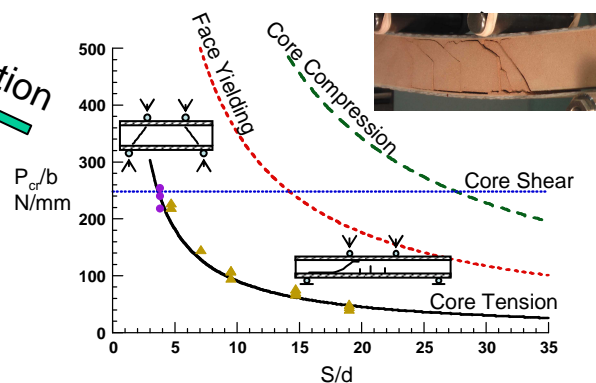


Technology Demonstration NAVSEA (SBIR Phase II)

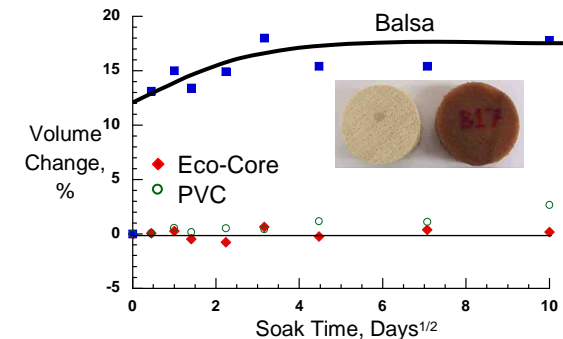


Application
←

Design



Resistance to Seawater



For details see next page

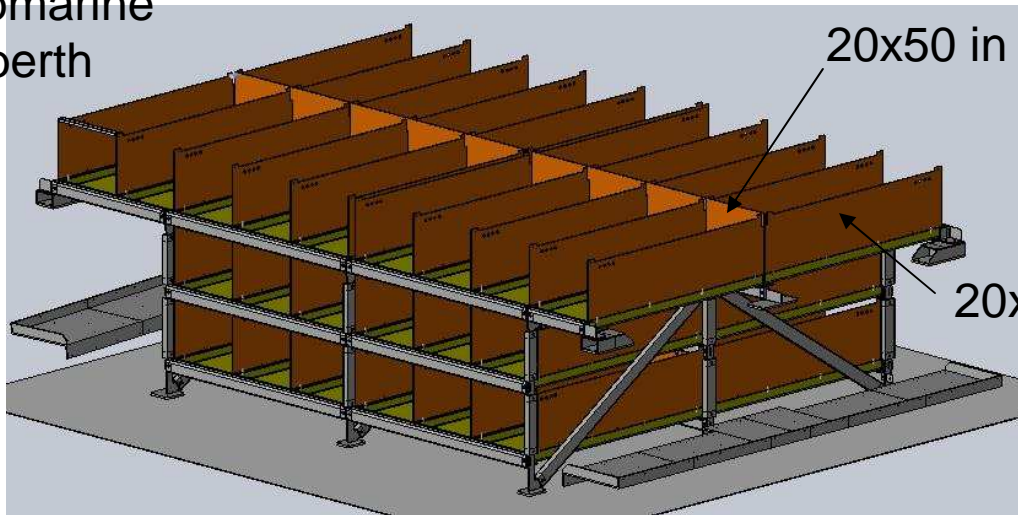




Fire Separators for Submarine Berth (NAVSEA)

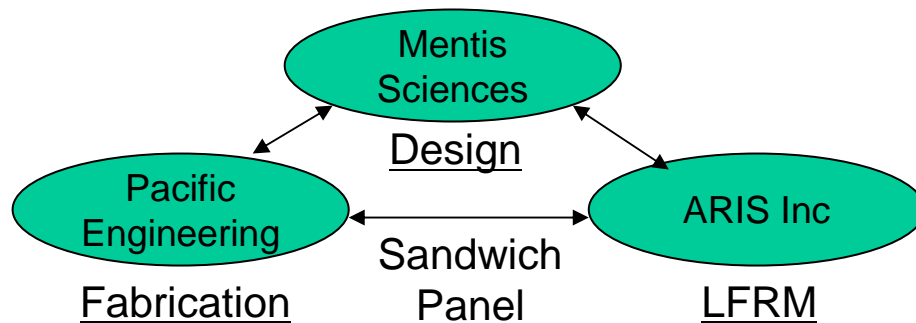
SBIR Phase II Topic MDA2004-041

Submarine berth



Fire separator made by LFRM and phenolic face sheet

The Team



LFRM Sandwich Panel

