



How our durable building materials save lifes and safeguard goods in the military in case of fire.



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2. WHY IS PASSIVE FIRE PROTECTION SO IMPORTANT?



What happens to the structure in case of a fire?

Steel

- Starts losing its load bearing capacity above 500°C
- Risk of collapse



Concrete

- Severe risk of spalling at surface temperature over 380°C
- Exposure of rebar structure
- Los of load bearing capacity
- Risk of collapse
- · Risk of damage due to flying debris



3. WHY IS PASSIVE FIRE PROTECTION (PFP) SO IMPORTANT?



- FACT CHECK: "Steel & concrete structures can stand fire and don't collapse".

 Wrong!! They start losing their load bearing capacity at high temperatures, with risk of collapse.

 Concrete already above 380°C, and steel above 500°C. Both, with risk of collapse!
- PASSIVE FIRE PROTECTION (PFP), despite its name, it is always working. It will prevent a fire from spreading.
- PFP is structural and built into the building.
- People have time to escape from a building that has a fire thanks to fire-resistant walls, floors, ceilings and fire doors



2. VERMICULITE, THE MAGIC KEY COMPONENT OF ALL OUR PRODUCTS





Characteristics

- 100% natural mineral, ecologically sustainable, unlimited durable
- superior fireproof performance (> 4 ½ hours at > 1.100 °C)

Application sectors of PFP projects

- INFRASTRUCTURE: airports, harbours, warehousing, tunnels, buildings, military
- PLANTS: industrial, power, chemical, military
- O&G, HYDROCARBON, offshore & tank installations

3. SLV, NESTAAN'S SPRAYED MORTAR, AS DURABLE PFP SOLUTION Sprayed cement-based PFP mortar: strengths



- 1. Extremely fast and easy to apply
- Robust adhesion
- 3. Safe and time-saving application. No drilling, no need for nail guns or drill machines. So fewer safety problems on site thanks to our mesh and pins glued with high temperature adhesive
- 4. Ideal for all types of columns, beams or concrete
- 5. Additional corrosion protection
- 6. Practically no weather implications. Moisture resistant
- 7. Resistant, long life, 100% ongoing functioning of vermiculite
- 8. Few maintenance and simple repairs
- 9. Very competitive in Life Cycle Cost (LCC) and Total Cost of Ownership (TCO)

REFERENCES Training & Aircraft Maintenance Centre MEA Beirut (Military) Libanon - 2013

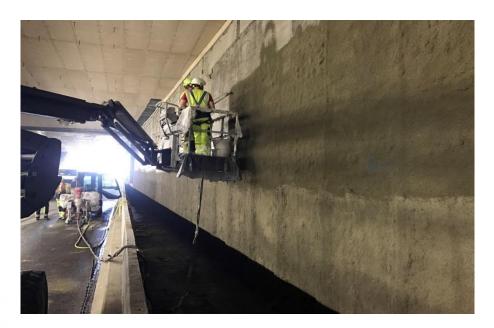


Assignment

Make a huge open covering roof, under which the airplanes were stationed during maintenance, completely PFP-proofed for 2 hours.



Annie Cordy tunnel Brussels - Belgium





Tupras refinery Izmit – Turkey

