CLAIMS

1. A method of producing a fireproofing composition, the method comprising:

(i) forming a slurry comprising a binder, at least one latex polymer, at least one silicone, and water;

(ii) conveying the slurry to a length of hose; and

(iii) introducing an amount of gas into the slurry in the length of hose at a flow rate and pressure sufficient to cause the slurry to foam and to convey the foam through the length of hose.

2. The method of claim 1, wherein the binder is selected from the group consisting of portland cement, pozzolanas, pozzolanic cement, quicklime, plaster and calcium aluminate cement.

3. The method of claim 1, wherein the latex polymer is selected from the group consisting of a polyvinyl acetate, a vinyl acetate copolymer, a polyacrylate, a polyacrylate copolymer, a polyvinyl acrylate, a vinyl acrylate copolymer, a polyethylene, a polyethylene copolymer, a polystyrene, a polystyrene copolymer, a polyvinyl chloride, a polyvinyl chloride copolymer, a polyvinyl ester, a polyvinyl ester copolymer, a poly(ethylene-vinyl acetate) (PEVA), a PEVA copolymer, a styrene butadiene rubber (SBR), a styrene/acrylate copolymer, and combinations thereof.

4. The method of claim 1, comprising about 0.1 wt% and about 20 wt% of a latex polymer in the composition.

5. The method of claim 1, wherein the composition has a density of less than about 90 pounds per cubic foot.

6. The method of claim 1, wherein the silicone is selected from the group consisting of silicone resins, siloxanes and silanes.

7. The method of claim 1, comprising about 0.1 wt% and about 15 wt% of silicone in the composition.

8. The method of claim 1, comprising about 0.1 wt% and about 30 wt% of both latex polymer and silicone in the composition.

9. The method of claim 1, further comprising spray applying the foam to a substrate and allowing it to harden on the substrate.

10. The method of claim 1, wherein water repellency of a metal containing substrate coated with the foam is increased by at least about 10% as compared to a similar coating composition not containing the at least one latex polymer and the at least one silicone.

11. The method of claim 1, wherein strength of a metal containing substrate coated with the foam is increased by at least about 5% as compared to a similar coating composition not containing the at least one latex polymer and the at least one silicone.