

# TECHNICAL BULLETIN

## OBJECT : GRAPHITE FOR FR MEMBRANES

Changes have been made to the formulation of the bitumen used to manufacture membranes with a fire-retardant agent (FR membranes). These changes are intended to facilitate the obtainment of Class A according to CAN/ULC-S107 – Methods of Fire Tests of Roofing Coverings.

These changes were pre-approved by Underwriters Laboratories of Canada (ULC) and applied to all products that appear in the list of approvals of the standard.

**SOPREMA** uses expandable graphite as a flame-retardant agent in the manufacture of its cap sheet membranes. Many manufacturers of roofing membranes also use graphite technology for this purpose, including the manufacturers of modified bitumen and EPDM. When exposed to heat, graphite swells and reduces the supply of oxygen, which has the effect of inhibiting combustion of the material in which it is included. Graphite is an organic product that does not present any risk to the health of installers and the environment.

These changes do not affect the mechanical performance of membranes, and only help to reduce the flame-spread rating of cap sheet membranes.

When heat welding FR membranes, installers will notice a crackling phenomenon caused by the expansion of graphite. This phenomenon poses no risk to the workers or materials adjacent to the membranes.

The list of SOPREMA products approved by CAN/ULC-S107 Standard is publicly available on the ULC website at the following address: <http://canada.ul.com>.

- END OF TECHNICAL BULLETIN -

NOTE : This technical bulletin was prepared by SOPREMA Inc. for architects, engineers, building owners, and contractors, as a reference guide in designing, selecting and constructing roofing, and/or waterproofing and/or air/vapour barriers utilizing SOPREMA Inc. products. SOPREMA Inc. reserves the right to change, or modify, at our discretion, without prior notice, any information, recommendations, or specifications contained in this technical bulletin.