



ENVIRONMENT & WELLBEING

Fire Rated Construction and Products of Combustion

Fire rated materials are used to protect life and property by delaying the development of a fire. During fire development, building materials will be heated in a generally low oxygen environments producing combustion products containing Nitrous compounds, which under these conditions can form dangerously toxic gases.

XFLAM and EPS both have chemistries where the dominant chemical make-up is from hydrogen and carbon resulting in relatively harmless combustion products. EPS is known for producing black smoke in these conditions which is raw carbon soot and while a nuisance is not toxic.

XFLAM is a cellular foam product which uses air filled cells to deliver exceptional thermal resistance.

The use of air ensures safety due to the absence of alternative types of gas present in some other insulation materials to improve thermal performance.

This also ensures the insulation performance of XFLAM remains constant throughout its service life.

Recyclability

As installed panel reaches the end of its life in a building, the insulation core may be recovered and returned to the plant for recycling. XFLAM and EPS are fully recyclable and may incorporate a proportion of granulated offcuts, eliminating production waste, whilst enhancing performance. The steel skins similarly are recovered and recycled into “new” steel, a process which can be repeated indefinitely.