

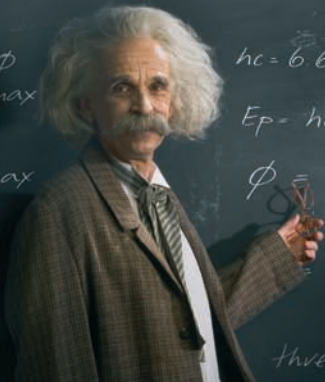
Insurance companies love our calculations

Calculation:

$$hf = KE_{max} + \phi$$

$$\phi = hc/\lambda - KE_{max}$$

$$\phi = E_p - KE_{max}$$



$$hc = 6.6260693 \times 10^{-34} \text{ Js} \times 299792458 \text{ m/s} = 1.9864 \times 10^{-25} \text{ Jm}$$

$$E_p = hc/\lambda = 1.9864 \times 10^{-25} \text{ Jm} / (220 \times 10^{-9} \text{ m}) = 9.0291 \times 10^{-19} \text{ J}$$

$$\phi = 9.0291 \times 10^{-19} \text{ J} - 61 \times 10^{-20} \text{ J} = 2.9291 \times 10^{-19} \text{ J}$$

$$= 2.9291 \times 10^{-19} \text{ J} / (6.6260693 \times 10^{-34} \text{ Js}) = \frac{4.4206 \times 10^{14}}{s}$$

threshold frequency is 44.2 THz

Einstein used his famous theory to predict many things. To an insurance company, assessing risk is like making a prediction. It will ask itself: "what is the likelihood that a building with EPS panels will suffer a fire?" Then it will look at the evidence:

1. Devastating fires in Britain, America, Australia and New Zealand.
2. Many incidents involve significant losses of stock and equipment as well as major business interruption.
3. Polystyrene foam is thermoplastic. It softens when heated to 70°C, combusts at 200°C, and melts and drips, causing fire to spread.

Conclusion: higher premiums or even "Pass."

Kingspan Firesafe FM Approved PIR insulation panel systems are based on the concept of reducing risks by engineering a high resistance to combustion into the materials. Kingspan Firesafe panel core materials can withstand in excess of 75 minutes under a blowtorch at 1,000°C. They are safe and have an excellent historical fire performance and insurance loss record.

The calculation is simple: Kingspan equals lower insurance premiums. Einstein would approve.

"All these [predictions] can be arrived at by the principle of looking for the mathematically simplest concepts and the link between them." **Albert Einstein.**

