**Carpet and Underfloor Heating – The Facts**

Underfloor heating is growing in popularity. Suppliers have stated that carpet must have a thermal resistance of no more than 1.5/1.7 tog. This is not the case.

In conjunction with the Underfloor Heating Manufacturers Association, the Carpet Foundation carried out a research project.

Five different carpet types and two different underlays were tested over an underfloor heating installation in a test chamber that was 4m square by 3m high. The combined laboratory tested thermal resistance of these was in the range 2.6-3.4 tog.

The results showed that:

None of the carpet/underlay combinations interfered with the efficient warming of the airspace in the room above.

The tog values of the carpet (using the test chamber as a life size ‘tog meter’) were significantly lower than previous tests had shown.

The laboratory test method used, while accurate in predicting the prevention of heat loss downwards through a floor where conventional heating (ie radiators) was used, was of no value when considering underfloor heating.

The Carpet Foundation now advises manufacturers to subtract a conservative 1 tog from the tested thermal insulation to provide a measure of the ‘real’ thermal insulation of their product when it is used over underfloor heating systems.

A ‘real’ thermal insulation figure of 2.5 tog is now considered a realistic maximum limit for carpet and underlay combined.

Carpet can be used with confidence over underfloor heating systems and will not impair their performance. We do, however, recommend that underlays with tog values of less than 1.3tog are used.