
HOW TO CALCULATE A COMBINED TOG





PERFORMANCE

How to calculate the combined tog rating of a carpet and underlay

One of the questions we're asked quite often from the sales force and carpet retailers alike is how you can calculate the combined tog rating for a carpet and underlay and what is suitable for under floor heating systems.

Underfloor heating systems are becoming more and more popular and so this question keeps raising its head.

Sometime ago the Underfloor Heating Manufacturers' Association and The Carpet Foundation organised testing at BSRIA to determine the correct levels.

BS EN 1264 covers wet under floor heating systems and it mentions a maximum thermal resistance of just 1.5 Tog for any floor covering laid upon a heated floor. However, this doesn't help where carpet is concerned as the insulation effect is a combination of the underlay and the carpet – hence the tests.

The tests – which are said to be the most exhaustive covering this topic – showed that the tested combinations of carpet and underlay functioned as if they had a resistance of around 1 Tog less than their combined published Tog values. Therefore, it was demonstrated that some of the carpet/underlay combinations with combined published values of 2.5 Tog were shown to have “real life” resistances that are within the BS EN 1264 guidelines.

So, this research by the Carpet Foundation and the Underfloor Heating Manufacturers' Association gives a formula that looks like:

Underlay Tog value + Carpet Tog value – 1 Tog = In situ combined Tog Value.

And as mentioned above the guidelines in BS EN 1264 require a Tog Value of 1.5 Tog as suitable for under floor heating systems.



INSTALLATION



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