Liquid absorbency - Soft cushioning materials will have less protective or cushioning value at high moisture content than at low moisture content. Also, most cushioning, when wet, will cause corrosion of metal surfaces. For this reason, absorbent materials must be protected from long exposures to high humidities with a sealed vapour proof barrier.

Other considerations:

- Many cushioning materials can be made fungus-resistant by means of chemicals introduced during the manufacturing process. Treated materials, however, are often very corrosive to metal surfaces and need to be isolated from them.
- Loose fills are difficult to get around a product's irregular overhangs.
- Fibreboard braces are abrasive and can scuff polished surfaces.
- Cushioning characteristics of some plastic materials can change dramatically with temperature drops.
- Humidity affects all wood cellulose products, changing both the cushioning characteristics and increasing the possibility of corrosion.
- All plastic materials can contribute to static problems, unless specially treated.
- Some materials have a resiliency that is recovered even after major shocks (they bounce back). Other materials, such as corrugated, or rigid foam, provide protection by collapsing themselves, but their effectiveness thereafter is reduced.