

## POINT LOADING ADVICE ON SCREEDED FLOORS

## ADVISE TO TAKE INTO ACCOUNT WHEN DETERMINING POINT LOADS THROUGH FLOOR SCREEDS ON INSULATION.

A load put upon a screeded floor is supported by the floor covering as well as the screed. These layers disperse the point load across the floor. The load is also supported by the insulation layer below the screed. If the load exerted on the floor is excessive, it could cause the insulation layer to compress, this in turn, could cause the screed to crack under the load due to the compressive strength of the insulation being insufficient to support the load.

This generally occurs in buildings where heavy equipment is used, such as high level access platforms, cherry pickers, mobile elevating work platforms (MEWPs), motor vehicles etc. Insulation products are available with varying degrees of compressive strength to suit different loads. It is vital that this compressibility is taken in account when determining the insulation requirement. On these applications, calculations need to be carried out by a structural engineer to determine the force transmitted through the insulation and the strength and type of insulation required.

Here are a number of factors that affect the load calculation.

- The point load
- Weight of the vehicle
- Number of wheels
- The area of the load in contact with the floor
- Depth and type of screed
- The angle of the load through the floor.
- Depth of insulation.



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VERY IMPORTANT, the screed and any floor coverings must be fully cured to full strength before any loads can be applied to it.

## These calculations should always be carried out by a qualified structural engineer.

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