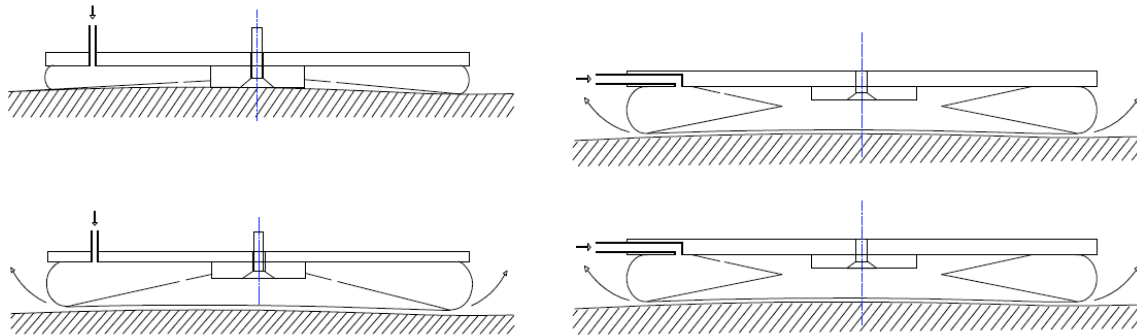


## FLOOR SPECIFICATIONS

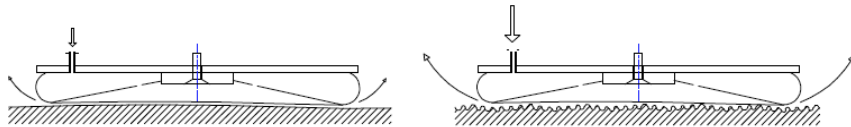
The floor is an integral part of the aircushion transport system.

The right condition for the correct functioning of aircushion systems is offered by a **NON POROUS, SMOOTH** and **LEVEL** floor. Appropriate is a mechanically trowelled floor with a smooth even finish. The surface can be impregnated to prevent dust, porosity and reduce wear. The joints can be filled using a silicone kit or plastic tape.



### SMOOTH

smooth floors ensure the air film to be as thin as possible. The air film determines the air consumption. The aircushion principle is based on the escape of excess air between the membrane and the floor. This air film allows the load to float almost without friction.



### NON POROUS

non porous floors are necessary to enable the aircushions to be inflated with air and keep the loss of air to a minimum.

### LEVEL

level floors prevent the load from drifting away, this will happen with a sloping floor

### JOINTS

Expansion joints can be filled with a Urethane or Silicone kit. The top shape of the filler should be rounded and convex, not concave (ca. 0,2 of the width).

## FLOOR CLASSIFICATION

To provide an example of the influence of the operating surface on air consumption we made a comparison between several surfaces. These have been given a suitable rating: 1 = optimum, 10 = unacceptable

- |  |         |
|--|---------|
| 1. Glass   | 1       |
| 2. Epoxy floor   | 1 – 2   |
| 3. Galvanized steel plate                                | 1 – 2   |
| 4. Hardboard, plastic, linoleum, spray painted chipboard | 1 – 2   |
| 5. Concrete floor, impregnated                           | 2       |
| 6. Concrete floor, not treated                           | 3 – 3   |
| 7. Concrete floor, not treated, new to 3 months          | 5 – 6   |
| 8. Concrete, manually trowelled (not acceptable)         | 8 – 10  |
| 9. Asphalt (not acceptable)                              | 10 – 15 |

# A

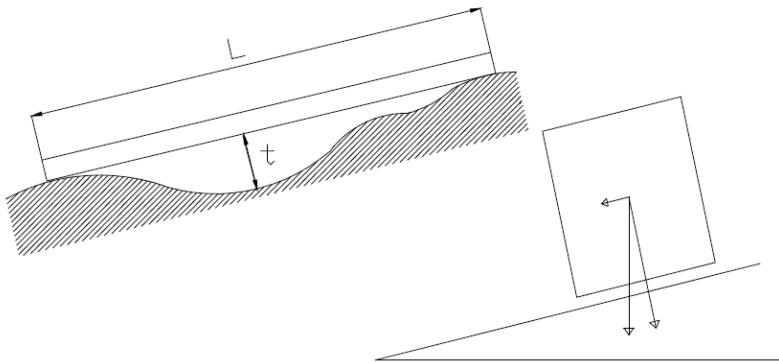
## OLD FLOORS.

Old floors can be suitable if they are smooth and there are no dents or cracks, otherwise improvement is necessary. For minimum costs paint or an impregnation can be applied. When, however, a new topcoat is necessary, a good attaching to the original surface is very important when applying aircushion transport.

## NEW FLOORS.

New floors are very appropriate if they are comparable to the following standard:

- BSI-8204 Part 2 (USA) or similar.
- (UK), ASTM-E1155 M-87



Deviation (t) in mm	1	3	9	12	15
Length (L) in m	0,1	1	4	10	15

## POROUS FLOORS

On a porous floor the loss of air may be so high, that insufficient air is supplied to create a satisfactory air film. The average concrete floor without special treatment is to a certain degree porous. Normally, painting or sealing a concrete floor is sufficient treatment to overcome porosity.

## UNEVEN FLOORS

Aircushions can, due to their elasticity, give limited adaptation to unevenness in the floor up to a maximum of 2 % of the aircushion diameter. Large fluctuations can work like a slope. An object on aircushions will, because of the

low friction, drift away on a sloping floor. The extra power, necessary to push the load “uphill” again, will be: “slope percentage x weight i.e. 1% x 10.000 kg = (100 kg) 1.000 N.

## INCIDENTAL TRANSPORT

A floor can always be made suitable for aircushion transport by covering it with f.i. a metal or plastic sheet. Joints and cracks can be covered or taped. Thresholds or steps can be overcome by using the tilt possibility of the aircushions and some filling material.

under the following conditions  
an AIRCUSHION TRANSPORT SYSTEM functions  
ALWAYS and EVERYWHERE

- 1 – sufficient air supply                      2 – aircushions are parallel to the floor                      3 – a suitable floor  
4 – no over/under loading. Aircushions need a minimum loading of ca. 20 %