

Flooring Specification Guide



Hedin USA Flooring Requirements

Introduction

The floor condition is an essential and integral part of any successful transport system. New installation or existing floor repair methods for air bearing use are generally different from those found in a typical plant or warehouse. Hedin USA designs, manufactures, and tests transporters to the floor requirements listed below. Compliance to these floor requirements will ensure that your transport system operates at its optimum performance levels for which it was designed.

Flatness

Floor flatness refers to the length and amplitude of waviness, humps, bulges, ridges, gullies, troughs or depressions. Floor undulations considered here must be non-abrupt with well rounded edges. Abrupt floor irregularities must be repaired or avoided. Ways to navigate cracks, expansion joints, holes, seams, etc. are discussed further below in this document. Hedin USA equipment is engineered to operate on floors that meet the following flatness specification:

Deviation under straight edge (inches)	1/4	1/2
Length of straight edge (feet)	3	10

Chart #1

Chart #1 (above) lists allowable depression deviations under various lengths of straight edges laid anywhere on the floor surface where the air bearing transportation system is intended to operate. Diagram #1 (below) illustrates the relative floor flatness of any given location.

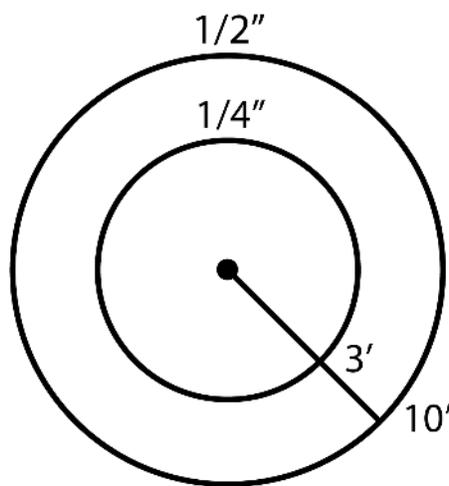


Diagram 1

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Levelness

Floor levelness is considered within the context the overall control and maneuverability of the transport system. For Hedin USA equipment, it is recommended that the floor not exceed a slope of 1/2 inch rise in any 10 feet. See Diagram #2 in which A = rise and B = run.

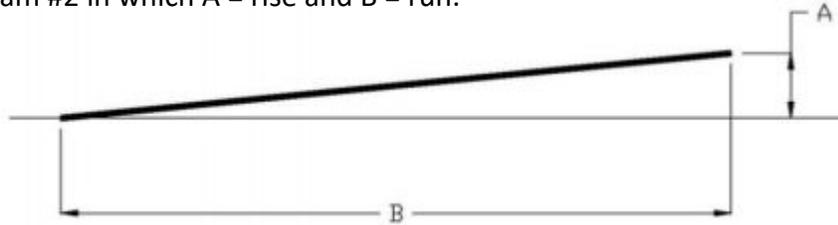


Diagram 2

General Clarifications

- If at all possible, expansion joints should be sanded flush to blend with the rest of the floor. If not possible, the expansion joint unlevelness should not exceed 1/4".
- Hedin USA equipment is generally designed and purposed for indoor applications in industrial settings, usually operating on finished concrete with or without epoxy surfaces. Hedin USA equipment can be used on similar surfaces in outdoor applications, subject to flooring specifications enclosed herein.
- Hedin USA equipment is generally specified to work on 1% grades. If your floor has a steeper grade, then load carrying capacity may need to be derated.
- To prevent premature wheel wear, it is recommended to remove sharp edges, shave down stab transition peaks, and keep floors clean, with special attention to removing metal chips or shaving.
- It should be noted that ratings are all predicated on oil free surfaces, if oil or waxes present on flooring then wheel slip may occur and reduce capacities.
- At Hedin USA, we always work to provide the largest diameter wheel formats possible in the design space. This is done to provide the longest lasting performance, reduced wheel loading, and the highest capacities available.
- Hedin USA transporters can be utilized on asphalt surfaces. However, reduced capacities are recommended as soft surfaces with low PSI characteristics can compress under loading. Please consult with factory prior to using on asphalt.
- Hedin USA's standard wheel offering is Blicke Polyurethane wheel with a GB quality 92 shore rating. This is selected for maximum capacity and longevity, but should not cut concrete surfaces.
- For rated performance, it is necessary for wheel contact with floor to be maintained. If the floor has significant elevation changes, dips, steps, etc., then wheel actuation may be required.

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Please note that in some instances, Hedin USA may have the ability to design transport systems which can be specially engineered to operate on floors conditions outside the parameters of the requirements listed in the document. Any such deviations to the flooring requirements must be specifically noted in our proposal.



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