

White Paper - Mezzanine Floors

Avanta Mezzanine Flooring and Mezzanine Floors

Definition

A mezzanine floor is an intermediate floor between main floors of a building, and therefore typically not counted among the overall floors of a building. Often, a mezzanine is low-ceilinged and projects in the form of a balcony. The term is also used for the lowest balcony in a theatre, or for the first few rows of seats in that balcony. The word mezzanine comes from Italian mezzano “middle.

In industrial applications, mezzanine floor systems are semi-permanent floor systems typically installed within buildings, built between two permanent original stories. These structures are usually free standing and in most cases can be dismantled and relocated. Commercially sold mezzanine structures are generally constructed of three main materials; steel, aluminium, and fibreglass. The decking or flooring of a mezzanine will vary by application but is generally composed of b-deck underlayment and wood product finished floor or a heavy duty steel, aluminium or fibreglass grating.

The mezzanine is often used in shops and similar spaces for storage of tools or materials. The high roof of the shop is ideal for a mezzanine, and offices can be put either below or above it. Mezzanines are frequently used in industrial operations such as warehousing, distribution or manufacturing. These facilities have high ceilings, allowing unused space to be utilized within the vertical cube. Industrial mezzanine structures are typically either structural, roll formed, rack-supported, or shelf-supported, allowing high density storage within the mezzanine structure.

Avanta UK Ltd – Mezzanine Floor Process

From receipt of your mezzanine floor enquiry you will be allocated an account manager who will be your sole contact for the initial stages of the mezzanine floor quotation. They will base costing on a detailed site survey and will provide you with a detailed proposal including CAD designs. If the quotation is acceptable, the following procedure will take place.

Detailed Site Survey – Includes detailed measures and site assessment.

Mezzanine Floor Design – Our design team will use industry standard CAD software to design the floor.

Site Specific Drawing – This drawing is to be signed off and amendments can not be made after this point without incurring additional charges.

Submit a Building Regulations request to the Local Authority for Certification. Avanta UK Ltd will take full responsibility for obtaining all building control and fire regulation requirements.

At this stage the account manager will hand the project to a dedicated contracts manager.

Commence and complete **Mezzanine Floor manufacture to BS5950**

Deliver to site at pre-agreed date whereby the site is deemed ready to accept delivery and installation of the mezzanine floor. For example, access is clear for delivery, fork trucks are on site etc.

Installation of Mezzanine Floor in line with CDM & HSE guidelines. The Avanta installation team is fully accredited and trained in the installation of mezzanine floors. However the client has the option of installing there own mezzanine floor.

Handover to client on pre-arranged date after sign off.

White Paper - Mezzanine Floors

FAQ's

Does the mezzanine floor need to be fire rated?

- Floor usage – Floors can be used for storage, automated storage and maintenance purposes and not be fire rated.

Any other use then the mezzanine floor would have to be fire rated.

- If the floor area exceeds 400m²
- If any edge is in excess of 20 linear metres
- Size of mezzanine floor is more than 50% of the room it is installed in.
- More than 3 people are to be working on the floor at any one time.

You can extend the sprinkler system to the underside of the mezzanine floor to avoid fire rating the floor, however this could be uneconomic.

What weight can I put on a mezzanine floor?

Using British Standard load table classifications are: -

- Light use 4.8Kn/m² (480kg per square metre)
- Medium use 7.32Kn/m² (732Kg per square metre)
- Heavy usage 9.6Kn/m² (960Kg per square metre)
- Please consult with our representative(s).

Does a mezzanine floor need to be approved by building regulations?

Yes, mezzanine flooring will need building regulations approval. Avanta will take care of this for you. Occasionally we will be required to submit floor slab details and a building plan showing the fire exits. Approval takes approximately 48 hours.

What type of floor decking is used?

38mm thick high density flooring grade chipboard is used for a typical internal mezzanine floor. Steel chequer plate can be used if the floor is to be exposed to liquids. External floors should be galvanised steel chequer plate or galvanised steel open mesh to prevent rotting and rusting in the weather.

References

- International Code Council - International Building Code 2006 (IBC 2006)
- Online Etymology Dictionary. "mezzanine". Accessed January 14, 2011.

External links

Chisholm, Hugh, ed (1911). "mezzanine". Encyclopaedia Britannica (Eleventh ed.). Cambridge University Press.