



# Mezzanine floors are a quick, simple and cost efficient way to make your business more profitable.



**Building Regulation approval on an installation of this nature is mandatory. This application is required under the Building Act 1984 and applies to ANY installation of this nature and not simply to one built by Racking UK.**

**We emphasise - particularly for your own insurance purposes, Local Authority approval should not be ignored.**

## BUILDING AND FIRE REGULATIONS

### *What are Building Regulations?*

When you make alterations to your building those changes need to comply with Building and Fire Regulations. Structural stress calculations, specifications showing suitability of materials for their application and drawings showing fire routes and detailed designs, are submitted to your Local Authority for approval.

### *Fire protections and means of escape*

An integral part of Building Regulations is the Fire Regulations. Your Fire Officer will work alongside your Building Control Officer checking issues like, means of escape, the integrity of certain materials to hold back a fire for a given length of time thus giving personal time to escape in case of fire. Your Fire Officer will also address if necessary fire alarm systems, emergency lighting and fire fighting equipment. Both the Building Control Officer and Fire Officer have to agree on a design before approval is granted.

### *Why is building regulation approval necessary?*

For peace of mind, your insurance premiums, the safety of your staff and a guarantee that Racking UK standard of work and designs comply with all relevant British Standards.

We recommend that Building Regulation approval be sought and obtained before

installation. We pay considerable attention to the relevant British standards when preparing a quotation and try to anticipate the Building Control and Fire Officers requirements.

However we cannot guarantee that the Local Authority will view our proposals in the way we view them due to individual interpretation of the Building and Fire Regulations. Therefore any alterations to our designs or additional works requested by the Building Control or Fire Officer concerned are not covered in our quoted prices. There is a fee to pay for submitting Building Regulations applications to the approved inspector that will be added to our final invoice.

If you require installation to commence before obtaining official approval, we will carry out the work with a Building notice on approval from your local authority. This however will put you at risk if you decide to commence work on site prior to Building Regulation Approval because it is not possible for us to guarantee that our design will pass regulations without amendments (due to individual interpretations of the regulations). For that reason, any amendments will be charged to the contract as an extra. We would require an indemnity letter from you.



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**All specifications are subject to confirmation following submission of application and plans for necessary Building Regulation approval.**

**Unless otherwise stated our standard design is based on the following specifications.**

**DEFLECTION:** All steel members are designed with a maximum deflection of  $L/250$  in accordance with the requirements of BS5950 Part 1 : 200

**BASE PLATES:** We allow for maximum standard 300 x 300 x 12mm thick base plates.

**COLUMN LOADS:** Estimated maximum axial load 100kN (unfactored) to floor slab.

**STAIRCASES:** As specified.

**LANDINGS:** As specified.

**SURFACE FINISHES:** Wet applied paint - standard colour: BLUE

**DECKING MATERIAL:** Natural 38mm Particle board (Grade C, 750kg hand pallet truck maximum) Deck-beams and handrails: Galvanised.



Our price includes for the preparation of drawings and calculations as may be required by the Local Authority and fire officer concerned. We do not include for the preparation of a site plan (a drawing showing the location of the premises in relation to other buildings and roads) or a block plan (a scaled plan drawing showing the layout of the building including all internal structures such as offices and fire escapes).

### **Timing**

As you are aware Local Authority permission will need to be obtained for the mezzanine floor. Following placement of order we would carry out a complete site survey - to ensure everything is to your complete satisfaction we would carry out a complete site survey - to ensure everything is to your complete satisfaction, and produce a final set of drawings for your approval before submission for the necessary statutory permission.

In the interests of safe and statutory working practices all works must be undertaken in areas unimpeded by personnel, by arrangement.

### **Base Plates**

The standard base plates size specified (300 x 300 x 12mm thick) is adequate with 150mm thick reinforced concrete on 150mm thick hardcore, with 80kN/m<sup>2</sup> minimum ground bearing pressure.

It is the responsibility of the customer to confirm that the existing ground floor slab is suitable for these OR to provide information relating to the floor slab in order that more detailed calculations can be carried out; where this shows a requirement for larger base-plates than those included above then there would be a corresponding price increase. Any grouting or levelling is not included.

We have assumed that the floor slab, hardcore and foundations and fabric of the building are capable of withstanding the loads imposed by the proposed structure.



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find out  
how simple  
it is  
to make  
your wasted  
space  
work better  
for your  
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## Notes

**TOLERANCES** - structure will be supplied in accordance with National Structural Steelwork Specifications. Any closer tolerances will be subject to additional cost.

**FINISH** - we only include for touch-up of handling/erection damage on site and we do not include for any other site painting whatsoever.

**POINT LOADS** - where significant point loads are envisaged e.g. from shelving, racking or heavy duty/powerful pallet trucks please provide details of loads and foot-plate sizes for us to check point loads applied to the mezzanine decking material.

**DYNAMIC LOADS** - the mezzanine floor is designed to accept static loads only. It is the customer's responsibility to advise RACKING-UK of any machinery or equipment that may be positioned on the mezzanine floor that could apply a dynamic load.

**COLUMN POSITIONS** - if the column positions assumed in the stated grid layout are not possible due to floor slab joints or obstructions then additional costs may arise.

**FIXINGS** - All connections will be made using BZP Grade 8.8 bolts. We use mechanical tightening devices with torque settings and therefore do not include for a bolt tightness check.

**EXPANSION JOINTS** - none included or allowed for.

**FIRE PROTECTABLE COLUMNS** - Columns suitable for fire-rating have been selected for this quotation. The smallest size generally used is 70mm x 70mm x 3.5mm. Please contact RACKING-UK for a detailed breakdown of columns used if required.

**ACCESS** - we have assumed a clear and level (+/- 10mm) site at the start of installation, with free access adjacent to, and at the same level as, the mezzanine location via a roller shutter door (or similar) with minimum 3.5m x 3.5m opening, allowing unloading and handling with a single 2.0 tonne fork lift truck capable of reaching the highest part of the construction.

Unless specified otherwise suitable access equipment will be provided by others free of charge for exclusive use by Racking UK or persons working on behalf of Racking UK for the duration of the contract.

**STORAGE** - we will require a suitable secure lay-down and storage area, under cover, for our materials, plant and equipment. The exact dimensions of this area are to be agreed and will be defined during the detailed design stage.

**POWER AND LIGHTING** - we have assumed an adequate power supply will be available locally for small power tools, and that permanent or temporary lighting in the working area will be provided by others.

**SITE ELECTRICAL CONNECTION** - where an electrical truck is required, we have assumed that site electrical connection and disconnection for the battery charger will be carried out on our behalf by others and all power will be supplied free of charge.

**WASTE** - we will clear the site of our rubbish to a single on-site location for removal by others.

**WELFARE FACILITIES** - we will require suitable welfare facilities to be supplied free of charge, to include but not limited to the following: Canteen and toilet facilities for all site operatives.



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# Mezzanine Floor

## Do you require fire rating?

Please follow the guide below to determine if your mezzanine floor requires fire rating.

