

How To Maximise Storage Capacity in Odd Shape Areas

Let's get straight to the point. Even so called experts do NOT always get the best out of easy rectangular rooms and warehouses. This can be down to a number of factors including a lack of skill, experience, restricted product range or simple laziness.

But introduce columns, recesses, unequal corners and curves and a poorly designed storage solution will become even worse value for money.

The bottom line is that space will always cost you more than the storage equipment over the life of a project. It is therefore vital that you do everything in your power to ensure that you are squeezing every available centimetre of storage.

It is no exaggeration to say that by being able to change the size or include an extra level of shelving could literally save you thousands of pounds over the life cycle of the product.

The Key To Success

The secret to designing effective and efficient storage solutions in these environments is to use every available means of maximise storage area including non-standard shelving bays to work with the various widths, heights and depths, adjustable shelving brackets and shelving accessories.

But to do this requires an extensive survey of the area, the items being stored and the accessibility being required.

Once the survey has been carried out the secret is to exploit every centimetre of wall space, height and floor space whilst taking full consideration into the required levels of capacity, accessibility and work areas.

Sound straight forward? Not always.

It may seem like common sense to use non-standard products, use high density storage systems such as small parts storage, or build around protruding areas but many companies - even the so called large manufacturers - have a limited product range and more importantly limited experience in practical installations and so look for the easy and safe option.

For example, some on line suppliers will offer a pallet racking range of as little as 24 bay sizes, whereas our range exceeds 67 million, excluding specials and colour options! The same differences apply to all our racking and shelving based solutions.

Using a series of standard 1200mm bays of shelving may prove to be easier and quicker on the installation but capacity is going to be compromised greatly.

This one dimensional approach to storage will provide short term savings and is obviously going to be appealing to the client and therefore makes the solution easier to sell however

these short term savings are completely eradicated when the limited capacity is reached and the entire solution has to be replaced.

The questions that therefore need to be asked are:

- What is the standard capacity?
- What is the potential maximum capacity?
- What is the additional investment required to achieve that maximum capacity?

Any supplier worth their salt must provide you with all the options and allow you to make an informed decision that will provide you with a long term solution to your storage capacity.

But what are the potential issues that can create these issues? And what are the potential solutions?

Problems With Pillars?

In one project where a local authority was looking to increase its storage capacity in an existing archive storage area, our project manager identified that some areas of the facility had been untapped because of critical building structures such as pillars which were preventing combinations of the standard 1200mm shelving bays being used in all spaces.

The result was gaps between shelves and pillars and because of the sizes of the archive boxes being used the actual shelving bays had an extra 150mm in space which couldn't be capitalised upon.

The solution was to use bays of non-standard shelving.

By using 1100mm bays of shelving, the client was able to store the same number of boxes per shelf (remember there was an extra 150mm of space on each shelf) and add an extra 17 bays to these restricted areas. We also maximise the available height by tweaking the shelf spacing to create an additional layer of shelving and so transform each bay of shelving from 4 shelves to 5 shelves per bay.

Our actions enable the client to achieve a massive increase of 39% more boxes stored.

Loads of Storage Potential in L-Shaped Rooms

Pillars are one thing - what do you do when you are looking to create a high density storage solution but are faced with an L-shaped room?

The obvious solution would be to fit a mobile shelving solution into the largest area but is that the best solution in terms of capacity and accessibility?

In one example where we were creating a storage facility to facilitate a busy hospital theatre, Thistle's project team developed an innovative solution which incorporated a wall

of static shelving plus designed a split mobile system that stepped from 3 bays to a single bay to fit perfectly within the unusual layout.

A split mobile shelving solution is a relatively common way of boosting accessibility - particularly in large mobile systems and is achieved by featuring a static bay of shelving midway in the system to create two or more accessible areas.

The split mobile solution not only created a feeling of continuity in the storage area but also added an extra 15% of storage capacity.

To further maximise the storage capacity Thistle's design team incorporated a run of static shelving along the remaining wall to provide quick access to theatre packs. However as the majority of theatre packs cannot be stacked - i.e. placed on top of each other, we used a system that allowed the flexible positioning of shelves to minimise any excess space.

Making The Right Decision

So the next time you are faced with a situation where you are looking to redesign or upgrade your storage system, ensure your supplier isn't just looking at the easiest solution. If you are not exploiting all the available areas and examining every potential design layout you will probably regret it.

If you feel that your current storage solution isn't maximising the capacity of the available area, why not give us a call. One of our project managers would be happy to discuss your current system and arrange for a free site visit to carry out a full survey.

For more information visit www.thistlesystems.co.uk or to discuss any aspect of storage and corporate interiors call us on 01236 453888.