

PROGRAMME OF WORKS CHALLENGE INSTRUCTION CARD

Read through each card to figure out which order the tasks must go in.

Draw up the construction programme using the “Programme of Works” document in your pack.

Use the highlighter pen to block out where along the time line each task will take place (remember that some tasks will start whilst others are still taking place).

Note: *Your company will be penalised if the building works go over 47 weeks. Ensure that it all fits together so that you finish on time!*

Groundworks

Before you can build upward you must ensure you have a good solid foundation. This section of the works involves digging out the ground to the right level, laying the foundations and the lift pits (the bottom of the lift shaft) and putting in the drains.

This is a big job and takes 12 weeks, although you can start the next task during the last two weeks of this time.



Structural Steel

Most large buildings are constructed using a framework of steel to take the weight of the loads exerted upon it (from the floors/roof plus the people and furniture inside). This means that internal walls are not 'load bearing' and thus can be moved, allowing for greater flexibility of use.

This job will take 6 weeks, but you can start the next task during the last week.



Envelope Works

The envelope of a building is what is needed to make it secure and protected from the elements. In this case, the outside walls will be made out of cladding. Smaller frames will be secured around the perimeter of the building to which panels will be fixed to form an insulated layer. Various finishes will be attached to these panels to give the appearance of brick or stone to the outside.

This is a big job which will take 14 weeks to complete. However after the first 3 weeks internal work can start on the building.



Roof

The roof is what protects the building from the elements, especially the rain. It needs to be completed as soon as possible to protect the fabric of the new building however there must be a structure for it to protect!

This is a 5 week job but other tasks can be undertaken during this time.



Floor Screed

In a large and well-used building such as a school the floor needs to be made out of concrete. This is because it is hard wearing and is good for fire and sound-proofing.

There is a lot of floor space so this job will take 6 weeks, but those jobs which don't require access to the internal floors can take place during this time.



Plant and Initial Services

In construction 'plant' does not mean what you find in your garden, it is the machinery used to deliver the services we need for modern life. In a home you would expect to find a boiler, a fuse box and a gas meter. In a large and complex building such as a school the machinery needed is far bigger and uses a great deal of power.

This job takes 7 weeks in total. The first 3 weeks of this job involves fitting the large machines.



Partition Walls

The steel framework has taken all the weight of the building but we still need to fit 'partition' walls to break up the space into usable rooms. You don't want to do this whilst large machinery is being moved into the building but you do want to make sure that the services are in the right place for these new rooms.

This job takes 6 weeks and then the rooms will be ready for the next stage.



Installing Lifts

Sometimes lifts are designed to carry goods as well as people, but in this case we just need the lift to carry people from one floor to another.

This job takes 6 weeks and can only happen once the plant and the initial services have been installed.



Ceilings and Walls

The walls may have been partitioned but they still have a rough look so we need to get the plasterers in to give it a nice smooth finish. We also need to fit the 'false ceilings'. False ceilings hang a distance from the 'real' ceilings. This extra space is needed to hide all those wires and pipes needed to service the building.

This job takes 7 weeks but after 3 weeks some of the building will be ready for the next stage.



Decorate

Every building needs to be made to look good so you need to get the decorators in to paint the walls and the woodwork. There may also be some wallpapering to be done.

This job will take 5 weeks but other works can be done during this time.



Services Final Fit and Commission

This is when all of the plug sockets, light switches, cookers in the food technology block etc. get put in and turned on. All the circuits must also be checked.

This job takes 8 weeks but can be done whilst other tasks are taking place – it is good to overlap this with decoration.



Flooring

This could be real wood or laminate boards, carpet, vinyl, tiles etc. depending on what the floor is to be used for.

This job will take 5 weeks. You want to try to avoid new floors from getting dirty or stained by the building works.



Furniture

Having furniture that is comfortable and functional is important to the end user. It can help to create the right look and feel to a room.

A school requires a lot of furniture so this job will take 4 weeks, although it can be done during other works



Snag and Clean

Snagging refers to the time when the owners of the building check all the construction work to make sure everything is done correctly before they sign it off as completed. With all that construction work going on the building will need a really good clean before it's ready to be used.

This job takes 7 weeks overall but much of it overlaps with other jobs. However there must be at least a week where nothing else happens.

