Hard Wall V/S Soft Wall. Which is Better for Laboratory

In medical as well as other fields, there is the requirement of clean rooms, which helps to maintain the sterile environment to prevent the contamination of the substance on which research is being gone on. There are two types of cleanrooms, ie. Soft wall clean room and hard wall cleanroom. Both the clean rooms have their importance; even though both have the same work, they both have their significance.

- **Costing:** Pricing of anything is a matter of concern in all businesses. In the same way, there is a difference in the price of both the hard wall and the soft wall cleanroom. Soft wall cleanroom is much cheaper as compared to that of the hard wall. Here obviously is the difference in the quality of the clean rooms; the hard wall has higher quality than that of the soft wall.
- **Portability:** soft room clean rooms are highly portable and can be easily reconfigured and modified as required. Whereas in the case of the rigid wall cleanroom is fixed in one place, and even there cannot be a change in the size of the cleanroom.
- **Physical factors difference:** in the case of the rigid wall, there is the high-quality material used, and there are various other factors like temperature and humidity control and air filter control with the help of the HEPA filters are present. Whereas as the <u>softwall cleanroom</u> is cheaper, so there is not much high quality of the substances used. So if the person needs the cleanroom and the air quality can be compromised, so the soft room clean is the best one.
- **Shelf Life:** if we see the life of the cleanroom, then the hard wall cleanroom has more life as compared to that of the soft wall cleanroom. So if the person wants the cleanroom on the basis of life and he wants that the cleanroom should be used for a longer time, then he has to go with the hard wall.
- **Deliverable Time:** the Time of the delivery of the soft wall cleanroom is significantly less as compared to that of the hard wall cleanroom. As the soft wall cleanroom is manufactured very early, so it gets delivered in very little time. So if a user wants to get the cleanroom in a significantly less period of time, then he should go for the soft clean room as in the case of the hard wall, the material use in that is hefty, and even it takes a huge Time to be manufactured.
- **Quality of the material used:** the quality of making the cleanroom also matters a lot. As all the factors, ie. Chemical or physical depends upon the quality of the cleanroom. Now, as we compare the quality of the cleanroom, so there is a massive difference in the quality of the cleanroom. The material used in the case of the soft wall is of lower quality, and the quality of the hard wall is much higher.
- **Time and place of work:** Time and place of work also matter a lot while spending in buying the clean rooms. If the researcher wants to buy a clean room and has to work at one place for a short time, then he should go for the soft wall cleanroom as it is easily manufactured and delivered and even it is portable and can be easily reconfigured and converted to any size or equipment can be added to it as required.

But if the researcher has a permanent place to work, then he should go for the hard wall as the hard wall cleanroom has much high quality along with the features as compared to the soft wall. The hard wall is a bit costlier than the soft wall but is better and has a more shelf life.

Conclusion

As above, we have discussed the hard wall and the soft wall; both have their own significance. A soft wall cleanroom is better for the person who may have fewer funds. Have to travel from one place to the other, there may be growth in coming Time, or there is no as such requirement of the air quality so in that case, the soft wall cleanroom is better. It is better in other ways; also, it can be easily reconfigured, or the size of the cleanroom can be modified.

In the case of the hard room, there is the thing that there is better control of the physical factor like temperature, pressure, humidity, air control, and various other factors. If a person has to use a clean room for a more extended period of time, then he might go for a hard wall.