CUSTOMER SUPPORT DOCUMENT

CLEANROOM DESIGN CHECKLIST

When you prepare for starting a project, there's a number of things you need to consider. We'll help you get started by identifying the most important ones before you speak to us.

WHAT DOES YOUR PROCESS LOOK LIKE?

What type of application will take place in the room? Please provide a high-level description of your product, process and activities, so we better understand your requirements.

WHICH ISO CLASS OR GMP GRADE DO YOU HAVE TO COMPLY WITH?

Please consider that building your whole facility to the cleanest ISO class or GMP grade will have a substantial effect on the initial investment, as well as on the operational running cost. Consider to create zones of cleanliness to mirror the exact requirements of your process.

TEMPERATURE AND HUMIDITY

Does your product or process require specific conditions in terms of temperature and humidity setpoints and tolerance? Please specify the requirements for each. Again, also for process parameter control, you should consider to create separate, dedicated zones.

WHAT ARE THE DIMENSIONS OF THE CLEANROOM?

If there's more than one main room to build, please provide a matrix of the rooms, including length, width and height, and the required classification for each of them. A provisional (sketch) lay out is very helpful at this conceptual stage.

WHAT ABOUT YOUR LOCATION

Now that you've identified what you need, please carefully check whether your location has enough floorspace and enough internal height to accommodate your layout. Please specify the dimensions of the available space.

We generally suspend the ceiling of the cleanroom from the existing building structure. If that's not possible, we will use a self-supporting design solution. We just need to know.

PEOPLE

What is the minimum, normal and maximum number of people working in a certain room? In case of a multiple room facility, please specify the number of people per room individually.

DO YOU NEED GOWNING ROOMS AND/OR AIRLOCKS?

You will probably need a gowning room before entering the main area. For GMP facilities additional airlocks might be needed to facilitate your entry protocol, create containment barriers, and to maintain pressure cascades.

INTERLOCK SYSTEM NEEDED?

An interlock prevents two doors from being (accidentally) opened at the same time. When a door is opened, the other doors are locked to maintain room and airlock integrity. Perhaps less of an issue for ISO rooms, but certainly a requirement to consider for GMP.

WINDOWS

You will probably want to put windows in the main and supporting rooms to increase worker comfort and to allow visibility of the people and processes in your cleanroom. You have to consider the quantity, sizes and locations.

DOORS

For the conceptual design of the floorplan we recommend you map your process by identifying the flow of products and people. It will help you to determine the quantity, location and type of doors you need to facilitate your process flow. Is a single door sufficient, double? Is a sliding door more convenient, or do you require a high-speed roller door?

PASS-THROUGH HATCHES

You probably have to move materials in and out of your rooms. Your mapped product flow will tell you where to position the hatches. You have to consider to make use of push-cart hatches, standard manually operated pass-through boxes or any customised solution.

FLOORING

We can provide loose-laid PVC tiles for lower cleanliness applications, up to fully welded, coved, high-duty PVC flooring for pharmaceutical manufacturing. We will assist you to select the most appropriate type of flooring for your specific application.

SERVICES

Electricity is quite obvious. But also consider water, drains, compressed air or specialty gasses. What about data and vacuum? Consider the quantity and locations for each service.

Now it's time to get in touch with us!