



Based on more than 10 years of experience in the world of complex modular data centres, we have learnt that conducting a data centre design project early in the process is very important in order to avoid unaddressed and inconsistent project requirements that can cause later delays and unexpected costs.

An early design project covering the full project scope helps to establish and prioritise detailed customer requirements and strongly contributes to overall project predictability in terms of time, cost and quality.

A key element of modular data centre design is expansion planning, including all systems – power, cooling, fire fighting, etc. – such that a data centre can grow to accommodate a customer’s growing needs over time. Flexenclosure operates fully independently of equipment manufacturers and brands and will always use the optimal solution for every customer on a case-by-case basis. Designs can be created for data centre tier levels (1 through 4).

<b>Design Project Scope</b>	The design project scope typically includes:	
	Modular buildings, including data centres, switching centres, energy centres, staging areas, NOC rooms, office space, warehouses, etc.	
	Exterior design, including cladding materials if required (steel, stone, wood, aluminium)	
	All interior design, ranging from stairs to cable trays	
	Cooling systems, including selection of cooling method, distribution and rack containment	
	Power system, including HV switch gear, synchronised genset solution, uninterruptible power and distribution	
	Modular expansion plan including all systems: power, cooling, fire fighting, etc.	
	Access, DCIM, and security systems	Racks and data network
	Civil works	Towers
<b>Design Project Deliverables</b>	Design project deliverables typically include:	
	Structural drawings and calculations	
	Architectural drawings and data centre layouts	
	Electrical drawings and wiring diagrams	
	Electrical calculations, short circuit, voltage drop	
	Heating, ventilation and air conditioning (HVAC) calculations	
	Detailed technical specifications	
	Full project timeline with milestones for customer approvals	
	Operations and technical documentation	
Scope of delivery	Design philosophy	

## Design Project Timeline

Flexenclosure uses a unique, proven project model including milestones, customer approvals and deliverables.

