



**CLEANROOM**  
Design,  
Procurement,  
Construction,  
Management  
(EPCM)

# About 'CRITICAL'

Was founded in 2011, the activities are in design, supply, installation, repair, service and maintenance of **Mechanical, Electrical and Process (MEP)** utilities works

Today, the group is an unique Engineering Services firm that offers unsurpassed critical facility support, with extensive experience in consulting, project and construction management and services for critical facilities environments. This allows us to extend our expertise and services throughout the region, providing MEP solutions for critical facilities covering the following areas;

- Manufacturing Plants & Factories
- **CLEANROOMS**
- DATA CENTER, CALL CENTER, TOC, NOC, NMC
- Military
- Telecommunication Industries
- Hospitals & Medical Centers
- Laboratories
- Government Buildings & Educational Institutions
- Commercial Building & Complex

Our experience allows us to understand clients' needs to optimize and deliver services to meet our clients' specific needs, standards and requirements, by providing the highest level of professionalism and total customer satisfaction.



## THE PROFESSIONAL

Each and every one which involve in the design build construction projects are internationally certified and qualified to carry out their task, to fulfil to the customer expectation, namely;



# THE CLEANROOM

A **cleanroom** is a facility ordinarily utilized as a part of specialized industrial production or scientific research, including the manufacture of pharmaceutical items and microprocessors.

Cleanrooms are designed to maintain extremely low levels of particulates, such as dust, airborne organisms, or vaporized particles.

Cleanrooms typically have an cleanliness level quantified by the number of particles per cubic meter at a predetermined molecule measure.



## CLEANROOM CLASSIFICATION

US FED-STD-209E was a United States federal standard. It was officially cancelled by the General Services Administration on November 29, 2001, but is still widely used.

Class	Maximum Particles/ft <sup>3</sup>					ISO Equivalent
	=> 0.1um	=> 0.2um	=> 0.3um	=> 0.5um	=> 5um	
1	35	7.5	3	1	0.007	ISO3
10	350	75	30	10	0.07	ISO4
100	3,500	750	300	100	0.7	ISO5
1,000	35,000	7,500	3,000	1,000	7	ISO6
10,000	350,000	75,000	30,000	10,000	70	ISO7
100,000	3,500,000	750,000	300,000	100,000	830	ISO8



# Regional Offices in Malaysia



## Sales & Services Offices

PG

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11920 Bayan Lepas, Penang, Malaysia

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KL

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## Test & Assembly Factory

PG

Plot 41, Jalan Perusahaan Valdor,  
Kawasan Perusahaan Valdor,  
14110 Simpang Ampat, Penang, Malaysia

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