

Reference of standards in enforcement of regulations in Electrical and Electronics sector in Malaysia

Standards are strategic tools and guidelines to help companies tackle some of the most demanding challenges of modern business. They ensure that business operations are as efficient as possible, increase productivity and help companies access new markets. Many of these standards aim to improve compatibility, interchangeability and safety, or specify the requirements for harmonised test procedures for evaluating performance.

Use of standards are voluntary by nature but in circumstances which involve health, safety and protection of the environment, standards can be used as an intergral part of a regulatory framework. In Malaysia, compliance to standards becomes mandatory if a particular standards is being referred to in relevant acts and regulations. For Electrical and Electronics sector, Malaysian Standards (MS) on safety of electrical equipment and appliances are being referred by Acts and Regulations under 4 regulatory bodies namely Suruhanjaya Tenaga, Suruhanjaya Komunikasi dan Multimedia Malaysia (SKMM), Jabatan Bomba dan Penyelamat (JBPM) and Kementerian Perdagangan Dalam Negeri, Kooperasi dan Kepenggunaan (KPDNKK) (See Table 1).

No.	Regulatory agency	Act	Products/Scheme
1.		Electricity Supply Act 1990 [Act 447]	<ul style="list-style-type: none"> • 34 categories of controlled goods for E&E equipment • MEPS (Minimum Energy Performance Standards): <ol style="list-style-type: none"> i) Refrigerator ii) Air Conditioner iii) Television iv) Domestic Fan v) Lighting
2.		<ul style="list-style-type: none"> • Malaysian Communications and Multimedia Commission Act (1998) • Communications 	<ul style="list-style-type: none"> • Information Technology equipment • voltages and frequency for AC transmission and distribution systems • plugs, socket-outlets, adaptors

No.	Regulatory agency	Act	Products/Scheme
		and Multimedia Act (1998) • Strategic Trade Act (2010)	and connection units • flexible cords and cables
3.		Uniform Building By-Laws 1984	• Cable trunking and cable ducting systems • Electric cables under fire conditions
4.		Consumer Protection Act 1999 [Act 599]	• Electrical Toys

Table 1: Enforcement for the E&E sector

Note: The full list of Malaysian Standards referred in Acts and Technical Regulations is available at <http://www.jsm.gov.my/ms-implementation#>.

As of now there are 167 MS being referred to by the Electricity Supply Act 1990 [Act 447]. Household electrical appliances and plugs, socket-outlets, adaptors and connection units, flexible cords and cables regulated by ST is the most regulated area with 34 regulated electrical products. Some examples are MS 1578:2003 Specification for flat non-rewirable two-pole plugs, 2.5A, 250 V with cord for connection of Class II – Equipment for household and similar purposes and MS 1577:2003 Specification for 15A plugs and socket-outlets for domestic and similar purposes. This is followed by products related to information technology equipment, voltages and frequency for AC transmission and distribution systems that are regulated by SKMM. Electric cables under fire conditions are enforced by Bomba under UBBL 1984 while electrical toys are enforced by KPDNKK under Consumer Protection Act 1999.

Electrical equipments which have been approved for manufacturing shall enter the SIRIM QAS's Product Certification Scheme and shall affix the label issued by SIRIM QAS. For electrical equipment that have been approved for import into Malaysia, these equipment shall comply with the consignment test carried out by SIRIM QAS for every batch within the validity of the Certificate of Approval (COA) and shall affix the label issued by SIRIM QAS (see Figure 1).





Figure 1. SIRIM-ST label for electrical products regulated by Suruhanjaya Tenaga

MS ISO 9001 and MS ISO 14001 series of standards, and MS ISO/IEC 27001 are the most commonly used management system standards adopted by E&E industries to meet customers'/suppliers' requirements. These management system standards provide assurance on quality system and consistency of products manufactured as well as meeting market demand for green production and environmentally safe products. There is also an increasing trend of companies going for certification to MS ISO 50001 on energy management system.

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