

Charter of Electrical Safety Forum Bangladesh

Background:

Electrical Safety is an important issue for all citizens. Electricity is an immediate and essential part of our daily lives, providing power for residential, industrial and commercial places. Every year people come into unsafe contact with electricity and are killed or severely injured. This makes safety paramount for all. Safety programs are to be designed so that everyone can use electricity safely. At this backdrop, in 2019 Department of Electrical & Electronic Engineering (EEE), **Bangladesh University of Engineering & Technology (BUET)** in association with **The International Copper Association India (ICA India)** initiated an endeavor to start **Electrical Safety Forum Bangladesh**.

Bangladesh University of Engineering & Technology (BUET) is the premier institute for engineering education in Bangladesh. It has more than 7000 students and 500 full time faculties. It has a high international reputation because of its excellence in teaching and research. It organizes workshops, Seminars, National and International Conferences on a regular basis to connect researchers & Academicians around the globe. BUET plays a vital role for the development of nation, sustainable growth of the country and maintaining collaboration with industries, academicians and businessmen. BUET has several engineering faculties, Institutes and R & D centers for the advancement of knowledge and development of human resources in the respective branch of engineering and technology.

The International Copper Association India (ICA India), member of Copper Alliance, is the Indian arm of the **International Copper Association Limited (ICA)**, the leading non-profit organization for the promotion of copper worldwide set up in 1959. Copper Alliance consists of 37 member companies which represent 80% of the world refined copper output and are among the largest copper producers and copper alloy fabricators in the world.

Preview:

On November 24, 2012 a fire broke out in the Tazreen Fashions plant outside Dhaka, Bangladesh. It was the worst industrial accident in the history of Bangladesh, resulting in 111 deaths and provoking widespread calls for improved safety measures in the country's garment industry.

In the four weeks since the Tazreen fire, 17 additional conflagrations have broken out in Bangladeshi textile and garment factories, based on reports in the local press that were compiled by the Dhaka office of Solidarity Center, an organization affiliated with the AFL-CIO. In one case, a worker died as panic-

stricken employees jammed a stairwell to escape their workplace. A separate case involved no fire, but workers rushed out of a factory after an electric short circuit made a loud noise.

Recently, a devastating fire broke out on the night of February 20, 2019 at Haji Wahed Mansion in Chawkbazar's Churihatta area, Dhaka where death toll raised to 70 over several days. Again, on March 28, 2019 there was another devastating fire in a commercial building named FR tower in Gulshan causing 25 deaths and more than 70 injured. Fire broke out in a Dhanmondi residential building causing death of an elderly woman and huge loss of property.

According to reported sources, about 80% of the fire incidents in Bangladesh are initiated from electrical sources, like short circuits, faulty wiring, or sudden power surges.

Need:

Electricity is one of the essential commodities for human being today. If uncontrolled, it can present a serious threat of injury to persons or livestock's or damage to properties by fire. Thus, rules and regulations have framed to govern the practice to ensure that all Electrical installations provide adequate degree of safety from fire and shock risks, to those who operate the installations and related apparatus, equipment's & machines. Every person who is involved in design and construction of electrical installation must be familiar with the principal set of regulations issued by the Standards Institutions of Bangladesh for Electrical Installations, commonly known as the wiring regulations. It is also required to be familiar with the International requirements of other regulations, some of which are statutory. The IEC regulation has evolved over the past century and is a set of recommendations for safe selection and erection of wiring system. Good practices could be embedded from International codes like IEC / BS and such codes to have highest standards of Electrical Safety in **Bangladesh**.

To ensure safety in 'Bangladesh Electrical Environment' there is an immediate need of key industry stakeholders coming together for modification, up-gradation and implementation of Electrical Standards in Bangladesh in line with current International Standards & Codes i.e. IEEE / IEC and establish code of practice that is adhered to. National Building Code or National Electric Code could provide key guidelines. This will ensure safe and latest wiring methods in Buildings (Residential, Commercial & Industrial) and help to reduce the electrical accidents and loss of Life & property.

Objectives of the Bangladesh Electrical Safety Forum:

Electrical Safety Forum Bangladesh aims to create awareness amongst key stakeholders, from building construction industries to common people, on the urgent need to adopt safe electrical installation practices as per Bangladesh National Standards & Regulations, which will ensure reliability of Electrical infrastructure and safety of occupants.

Vision & Mission of Safety Forum:

- To improve overall Electrical safety in Bangladesh by leveraging both National and International Experiences and Best Practices
- To aid in the development of standards mandating safe code of practices during Electrical Installation and its maintenance in future
- To support National Standards & Regulatory provisions for introducing stringent norms for Electrical Infrastructure in country and ensure strict implementation of same
- To form an advocacy group for supporting adherence to Electrical Safety Code of Practices by each stakeholder of the society

Scope of Activities of the Forum:

- To improve the electrical safety standards in Bangladesh by utilizing both national and international experiences in the field. Bangladesh has developed its own national Building Code (standards) which includes Electrical installation guidelines.
- To support creating good practice codes / guidelines for safe electrical installations.
- To support creating consumer awareness through activities or campaign
- To support skill development / Train the Trainers program for practicing Electrical Engineers
- To promote Electrical Safety awareness campaign amongst dealers & distributors network for better implementation of safety practices
- To create awareness by differentiating Quality Products (Wires) from substandard products (Wires) with the introduction of Quality Seal Mark
- To standardize Periodic Electrical Inspection of old Buildings
- To support BSTI to strengthen quality of electrical products

Key Stakeholders:

The key stakeholders of Bangladesh Electrical safety forum can be classified into few groups such as:

Private Segment:

- Builders
- Architects
- Electrical Contractors

- Electrical Designers / Consultants
- Electricians

Industry Associations:

- BKMEA
- BGMEA
- Transformers manufacturers Association
- Wires & Cables Manufacturers
- BEMMA

Government Segment:

- Concerned Ministries like Ministries of Power and Energy, Industries, Labor, Housing and Public Works
- Bangladesh Electrical License Board
- DIFE
- RAJUK/CDA/KDA/RDA etc.
- BSTI
- Educational Institutions/Hospitals
- Urban development authority

Civil Society Segment / NGOs: CAB

Professional Bodies: IEB, IAB

Safety Forum Membership:

BUET & ICA are in engagement with reputed wire manufacturers and industry stakeholders for conducting various activities in line with its message of quality Building wiring practices. This partnership enables BUET & ICA to provide ready information/option to the target segment about the quality wiring and related products available in the market under one roof. Another dimension of Membership is to create a pool of skilled electricians who are at the bottom of the pyramid and could be meaningfully employed for national sustainable growth.

There will be two types of membership namely 1. Full Member 2. Associate Member

1. Full Member: Any organization working closely in electrical sector can be a full member of the forum by paying a onetime 500,000 (Five Hundred Thousands) BDT membership fee and 20,000 (Twenty Thousands) BDT annual subscription fee. Full member will be entitled to be a member of the executive committee of the forum and

will have the voting right. Public universities/institutes or other public organizations can be a full member without paying any fee.

2. Associate Member: Any organization can be an associate member by paying annual subscription fees of 20,000 (Twenty Thousands) BDT. Associate members cannot be a member of the executive committee of the forum and will have no voting right.

Executive Committee of the Forum:

The executive committee of the forum will consist of a president, two vice presidents, one general secretary (preferably from EEE department, BUET), one treasurer, one membership secretary and four members. The president of the forum will be the head of EEE department, BUET by default. Other members of executive committee will be selected/elected from the full members of the forum by the opinion/vote of the full members. In addition, there will be a panel of experts for communicating technical matters with media and others related to different electrical safety issues. If requires and finance permits, forum may have its own office. Otherwise, EEE department of BUET will provide meeting space and support the activities of the forum.

Finance:

The forum will open a bank account. The signatory of the account will be the president or the general secretary and the treasurer. The forum will run from the subscription fees, annual fees, event fees and donations.

Benefits of Forum Membership:

The forum will enable its member to reach wide array of target audience across the country on a regular basis. Some of the key benefits for the forum members are:

- Provides a neutral objective and focused platform for all members to exchange, share experience and access information from the worldwide electrical community through international organizations like ICA.

- Opportunity to participate and display products during Electrical Safety related activities like seminars / Workshop / train the trainers programs / Safety Campaigns targeting both private and government segment.
- Access to the database of target audience generated through different activities across the country.
- Opportunity to participate in joint awareness campaign for different govt. departments.
- Access to market intelligence generated through forum activities.
- Member's name/logo will be displayed on the BUET/ICA website, during all forum activities, all reading materials and marketing collaterals.