

planning and the installation of services, and

**Internal lining, external cladding and insulation** (1½ days), covering the properties, manufacturing and benefits of glasswool insulation, acoustics, energy efficiency, environmental issues, storage and handling of glasswool, tools and installation methodology.

This is followed by the section on gypsum plasterboard, covering properties, storage and handling, cutting, tools and application for walls, ceilings and finishing.

Finally fibre cement board for external cladding is addressed, including the installation of the vapour permeable membrane, sizes and availability of fibre cement - boards and planks, fixing accessories, installation guidelines, and door and window frame installation detail is presented.

To ensure that the theoretical concepts are well understood, the course includes a **practical component**, consisting of setting out of wall frames, squaring, levelling, and erection of walls, erection of roof trusses, installation of plumbing, external cladding (FC boards, OSB and FC planks), insulation and internal lining (gypsum board), and internal joint finishing.

The students who enrolled for the course came from Gauteng, Swaziland, North West Province, and Mpumalanga. They generally had prior building industry experience. They all rated the course highly, especially mentioning the value of the practical work. As part of the course, the students have to write two tests to assess their understanding of the subject matter. All of the students on this course passed, and received SASFA certificates of successful completion of the course. This brings the total number of students who has successfully completed this course since its inception in 2009 to 325.

The SASFA members who supplied support for the course and made it possible were Marley Building Systems, Saint- Gobain, Everite, Marshall Hinds, Kare and Simpson Strong-tie. Bosch Tools illustrated their wide range of equipment suitable for use in the LSF industry.



## POLASA making steady progress

by Kobus De Beer, Director, Polasa



**During the past year POLASA (Powerline Association of South Africa) consolidated its membership and started working in various areas of common interest. An important objective was to participate in joint working groups between Industry and ESKOM to address problems and develop sustainable solutions.**

**POLASA was requested to look into methods and proposals to reduce the cost of construction of power lines. This request for input is testimony that Eskom has acknowledged POLASA as a valuable and powerful partner to achieve practical results.**

**Two of the six areas identified are briefly outlined below.**

### **Safety, health, environment, quality & training**

**Regular meetings are scheduled throughout the year alternating between the bi-monthly ESKOM Safety Meetings with all contractors and the regular POLASA Safety and Training meetings held with industry and ESKOM participating. All these meetings are held at Megawatt Park and an open invitation to all industry and ESKOM personnel applies. This results in a high degree of mutual support, the continuous search for better ways and the co-ordination of initiatives.**

**The following expectations from industry were listed:**

- A platform where industry would listen to the challenges experienced by Training and SHEQ Departments
- A common goal achieved by voicing and addressing true challenges and concerns and finding suitable solutions
- Understanding the true needs so that training providers can adapt the approach to provide more effective training and provide the support required





The following SHEQ and training challenges give a good idea of the work to be done and the content of discussions:

- Having to contract local labour that have no exposure to what the industry is about and the need to be inserted into the high risk industry and be operational within a short time span
- Lack of standards across industry for minimum requirements applicable to all contractors.
- Focus is only on mandatory training not other skills e.g. soft skills
- Majority of incidents involve local employees or sub-contractors.
- Supervisors sometimes of very low level of competency/literacy but technically competent.
- Supervisors hesitant to transfer over skills to new young employees.
- Registration to SACPCMP will shortly be requirement for construction supervision.
- Pressure on finishing the project leaves little time for training.
- Community expects contractor to employ and upskill - so need solutions that include them.
- Training is viewed as responsibility of training departments and providers, yet line management also have a responsibility of coaching and reinforcing.
- People with literacy problems are required to work with complicated machinery / procedures.
- Line managers sometimes create a wrong perception of safety officer “policing”.
- Stringent tender requirements for SHEQ personnel competency apply.
- Client SH Officers place unreasonable / inapplicable demands on contractor.
- Application to OSH Act and Regulations “cumbersome”.

### Design, engineering and SCOT (Steering Committee of Technology) for line construction

This working group seeks best practices for Line Construction that will benefit Eskom overhead Transmission & Distribution projects and contractors in terms of:

- Safety during construction.
- Improved construction methodologies.
- Keeping track of new technologies and innovations (including international practices).

- Providing input towards Method Statements in line with Construction Regulations.
- TRMSCAAC related issues.
- Training Centre Initiatives

These meetings cover a host of subjects such as SCOT resources from Technology Division Centre of Excellence (COEs) and the Operating Units within SCOT. Study Committees are effective in developing optimal and efficient technical solutions as well as transferring technical knowledge.

Care is taken to ensure that the technology direction is influenced by all affected parties and that standards are not developed in isolation. The functionally responsible manager benefits from engaging with other interested and affected parties within a SC.

Construction Care Group Structure / Work Groups:

- WG 1: Cross Rope structures. (Now referred to as “Guyed Structures”)
- WG 2: Method Statements & Improved Construction Methodologies.
- WG 3: TRMSCAAC Update, Contractor/Eskom Training & Steel Manufacturing quality related issues.
- WG 4: EAL Training Centre Initiative.
- WG 5: Line Crossing Systems.

Some progress already made:

- Introduction of the Proposed EAL (Eskom Academy of Learning) Training Facility - the intent is to make it a “world class training facility”.
- Trainees will be equipped to develop safe work methods for line construction and maintenance.
- To select the correct tools for the job.
- The facility will aim to develop a standardized approach for line construction activities and ensure alignment with Construction Regulations Practices.

Work is continuing on the other identified areas of common interest and will be reported on progressively: **Commercial & Contracting, Designation of Components & LAP lists, Project Execution and Influencing Stakeholders.**