



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT**  
**ARIYALUR**  
**ELECTRICAL MANUAL**

Issue No:02	Rev. No: 00	Effective Date: 01.11.2019	ELEC/SOP/061
Issued By: M.R		Approved By: HOD - ELECTRICAL	
SOP for Electric Shock Treatment			

**Scope** : All Electrical HT & LT Panels, Boards.

**Responsibility** : Engineer/Electricians

**Accountability** : Electrical Manager

**PPE:**

1. Nose mask
2. Goggles
3. Safety shoes
4. Safety helmet
5. Rubber hand gloves

**Tools:**

1. Hot Stick
2. Insulated tools

**Hazards:**

**Risk Associated**

Electrical Shock  
Minor body injury  
Electrocution (Fatal)

**Mitigating Measures**

Tested Electrical Rubber Hand Gloves  
Safety shoes, gloves, helmet, goggles  
Re- fresher Training

**Training needs:**

1. Emergency preparedness
2. First aid including CPR training
3. Electrical safety training

**Procedure:**

**1. BREAK THE ELECTRICAL CONTACT :**

Free the Victim from electrical contact promptly, Switch of supply immediately if possible.  
Otherwise use a Dry stick, dry rope, dry cloth or other nonconductor to separate the victim from the electrical contact. DONT USE BARE HANDS WITHOUT PROTECTION



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**2. INSPECT THE VICTIM:**

- Quickly feel the victim's mouth and throat and remove any foreign body (tobacco, false teeth, etc...).If the mouth is tight shut, pay no more attention to it. Can be looked later. Begin artificial respiration immediately. ALSO SEND FOR DOCTOR .DELAY MAY RESULT DEATH.
- In case of prolonged artificial respiration, the victim can be laid on a Door or other flat surface so that his head and chest are six to eight inches lower than his feet. Flow of Blood to the Heart will be promoted and there will be better chance for recovery
- The victim should not be moved from the place of artificial respiration until he is breathing normally on his own. He may than be moved but only in the lying position.

**3. ARTIFICIAL RESPIRATION:**

Position 1:



Place the victims face down with his arm folded one over the other and head resting on them.

Kneel down with one or both of your knees / near the victims head.

Place your hand on the on the victims back beyond the line of armpits, with your fingers spread outwards and downwards and thumbs touching each other.

Position 2:



As you count one, two, three, move forward, keeping arm straight until they are nearly vertical, thus steadily pressing the victims back. This completes expiration.

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**Position 3:**



As you proceed to count four, move backward releasing pressure and slide your hand down wards along the victims arm and grasp his upper arms just above the elbows. Continue to move backwards

**Position 4:**



As you move back counting five, six, seven raise and pull the victims arms towards you, until you feel tension in his shoulders. This expands his chest and results in respiration. As you count eight, lower the victim's arms, and move your hands up to the initial position.

Repeat above cycle 12 times a minute. When the victim starts breathing synchronize your steps with his breathing until he breaths strongly. Then stop

**4. ARRANGE FOR STANDBY OPERATOR:**

- In carrying out artificial respiration, it may be necessary to change the operator. This must be done without losing the rhythm of respiration.
- Continual artificial respiration for at least four hours. Breathing has returned even after eight hours in case of electric shock, but in such instances the victim will show some signs of recovery which will call for continued effort on the part of rescuers.
- After obtaining the Doctors advice on arrival, the victim can be shifted, and artificial respiration can also give simultaneously, if necessary.
- A brief return of natural respiration is not a certain indication for stopping the resuscitation permanently. The victim, after a temporary recovery of respiration, may stop breathing again. The victim must therefore be watched and if natural breathing stops, artificial respiration should be resumed immediately.



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5. Never give an unconscious man anything to drink. It may choke him

**Emergency / Emergency Shut OFF:**

1. If any injury or electrical shock is there, give First aid and inform to the Safety department or Call Emergency number 3108/9865152222/9750963761.

**Records/Annexure:**

1. JSA as enclosed below.

**JOB SAFETY ANALYSIS:(JSA)**

<b>Job Safety Analysis</b>	Job: Trouble shooting in live panel	Date:	Analysis by: Section engineer	Reviewed by: Section head
Title of employee doing job: Engineer / Electrician	Supervisor: Section Engineer	Department: Electrical	Section: Plant	Approved by: HOD
Reqd./recommended PPE: Tested Electrical rubber hand gloves, Safety shoes, Safety helmet, Safety Goggle				
<b>Sequence of Basic Job Steps</b>	<b>Potential Hazards</b>	<b>Recommended Safe Job Procedure</b>	<b>What Could Go Wrong</b>	<b>Corrective Action</b>
Opening of live panel cover	Electric Shock	Use Rubber Hand Gloves	Gloves validity may be expired	Inspect before use
	Panel flash over and Burned injury	Keep yourself beside the panel	Not follow the procedure	Tool box talk/Proper Training
		Wear safety Goggles	Damaged goggles/non standard goggles/ Not wearing Goggle.	Periodic replacement/ Proper training