



2600SEG106

**SAFETY STANDARD FOR WORKS UNDER ELECTRICAL ATMOSPHERIC ACTIVITY
(THUNDERSTORMS)**

APPENDIX A FACTS ON ELECTRICAL STORMS

1. An average lightning is 5-6-miles long. It has an extremely powerful impact: up to 30 million volts at a flow of 100,000 amperes in less than 1/10 of a second.
2. An average storm is 6-10 miles long and moves at an average 25 miles per hour speed.
3. Once the point or front of the storm is within a 10-mile range, you are in immediate danger because of the possibility of being hit by a lightning from the upper point of the storm, which usually has a *flattened top or anvil shape* and protrudes or goes much farther from the center of the storm's body. This is why many deaths and injuries occur under clear skies.
4. The sound of a thunder travels at an average 1-mile per 5 seconds speed, or approximately 1 kilometer per 3 seconds.
5. Usually, when a storm is coming, a fresh breeze is felt as a result of the down draft; and often this breeze extends less than 3 miles in front of the storm. When you feel this breeze, the storm may be less than 3 miles away.
6. Most bolts of lightning strike in the afternoon – 70% between noon and 6:00 p.m. When the temperature rises, evaporation increases. This warm and humid air goes up and evaporates, forming cumulus clouds. If more humidity accumulates, the cloud gets dark and changes into a stormy cloud with an anvil shape at the top. The top of this cloud may be 40,000 feet or more ahead of the storm's body.
7. In most cases the bolt of lightning represents a current flow from negative to positive, and may move from the lower to the upper part of the cloud, from cloud to cloud, and most dangerously, from the cloud to the ground. It is most probable that the bolt of the lightning strikes at the highest point of the area that it finds when nearing the ground.