



## P R O D U C T F E A T U R E S

- **WELD SEAMS**

Substrate at seams is protected by electrochemical behavior of the Al and Al-Fe coating layers.

- **RE-ROLLED ENDS**

The double corrugation process at pipe ends does not adversely affect the performance of Type 2.

- **LOCKSEAMS/  
SPIRAL RIBS**

Coating fissures are plugged as a result of the electrochemical behavior of the coating.



## A L U M I N I Z E D S T E E L T Y P E 2

### Pipe Fabrication and Corrosion Behavior

In the fabrication of corrugated metal pipe, some mechanical effects of the manufacturing process on the metallic coatings can be expected. The resultant potential impact on corrosion of the substrate must be addressed by the metallic coating. In the case of the Aluminized Steel Type 2 coating, the steel substrate is protected in service over the long term due to the electrochemical behavior of the bi-layer, duplex coating. The aluminum layer of the coating provides low-level galvanic protection that directly retards long-term substrate corrosion. This also modifies the corrosion process to produce a partially protective corrosion-product scale that hinders the advance of corrosion. Additionally, substrate corrosion is further retarded due to insulating films that form naturally on the Al and Al-Fe coating layers and suppress the electrochemical action that powers substrate corrosion. All of these electrochemical mechanisms combine to protect against corrosion problems.

