



Florida Department of Transportation

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**TO: DISTRICT MATERIALS RESEARCH ENGINEERS
DISTRICT CONSTRUCTION ENGINEERS
DISTRICT MAINTENANCE ENGINEERS**

FROM: Timothy J. Ruelke, P.E., Director, Office of Materials
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SUBJECT: COATING OF STRUCTURAL STEEL: SOLUBLE SALT TESTING AND CAULKING

Soluble Salt:

Currently Sections 560 and 561 require that soluble salt test kits meet the requirements of SSPC Guide 15, Class A retrieval method; patch or sleeve extraction. Due to recent technological advances with electronic devices that measure salt concentrations on steel substrates, it is necessary to provide additional means of measuring salt concentrations. Two electronic instruments have been identified and are now approved for use on Department coating projects. They are the ARP Soluble Salt meter, Model # RPCT-07-001, and the Salt Smart from Innovative Productivity Inc. Both measure conductivity in units of micro-Siemens per centimeter. As an alternative to SSPC Guide 15 measurement technique used in conjunction with SSPC TU4 NV2 which establishes allowable concentration thresholds, coaters may use either of these electronic instruments and a maximum in conjunction with a surface conductivity below 70 micro-Siemens as acceptable for coatings applications.

Caulking of faying surfaces:

Sections 560 and 561 specify that all faying surfaces are to be caulked. It is unnecessary to caulk cracks and crevices less than 3 mils wide located on the interior surface area of box girders.

TR/DS/TL/pv