



Division 264302

Surge Protective Devices

DESIGN GUIDE

1 General

1.1 Introduction

- A. This section applies to the following:
 - 1. Surge Protection Devices (SPD)
- B. Surge protection is required for main switchboards and secondary distribution equipment.
- C. Surge protection is required for communications room panelboards, computer lab panelboards and other panelboards as directed by the ELSM.

2 Materials

2.1 Surge Protection Panels

- A. Manufacturers: Transtector Inc, Square D, GE, Advanced Protection Technologies, Eaton, Innovative Technology, or approved equal.
- B. Maximum continuous operating voltages of system component shall not be less than 115 % of the nominal system voltage on the service protection panel and 120 % on branch protection panels.
- C. Configuration: Preference for modular surge protection device (SPD) units consisting of user replacement MOV based modules (one per phase).



- D. Mounting: Preference for surge protection device to be mounted in a separate enclosure adjacent to the equipment served.
- E. Testing and Monitoring: Provide with audible alarm w/ silence & test function. Provide with contacts for remote monitoring.
- F. The SPD at switchboards and distribution equipment shall have a minimum surge current capacity of 360kA/phase.
- G. The SPD at branch panels shall have a minimum surge current capacity of 120kA/phase
- H. The SPD shall have a minimum operational life of 10 years without degradation in performance.
- I. The SPD capability shall be equal bi-directionally and treat both the positive and negative impulses with separate suppressor modules per phase.

3 Execution

3.1 Installation

- A. Install the SPD in accordance with manufacturer's instructions and make necessary power and control connections.

4 Appendix

4.1 Reserved for future.