



STANDARDS AND GUIDELINES FOR COMMUNICATION SITES



Document Copyrights

© 2005, Motorola, Inc. All rights reserved.

No duplication or distribution of this document or any portion thereof shall take place without the express written permission of Motorola, Inc. No part of this document may be reproduced, distributed, or transmitted in any form or by any means, electronic or mechanical, for any purpose without the express written permission of Motorola.

To order additional copies of this document contact your Motorola sales representative.

Disclaimer

While reasonable efforts have been made to assure the accuracy of the information contained in this document, Motorola, Inc. assumes no liability resulting from any errors or omissions in this document, or from the use of information obtained herein. The information in this document has been carefully checked and is believed to be entirely reliable. However, no responsibility is assumed for inaccuracies. Motorola, Inc. reserves the right to make changes to any products, procedures or practices described herein to improve reliability, function, or design, and reserves the right to revise this document and to make changes from time to time in content hereof with no obligation to notify any persons of revisions or changes. Any standards cited in this document are subject to change without notice.

Motorola, Inc. does not assume any liability arising out of the application or use of any product, circuit, design, recommendation or advice described herein; neither does it convey a license under its patent rights or the rights of others.

Trademark Information

 and Motorola are trademarks of Motorola, Inc.

Any brand or product names appearing in this manual are trademarks or registered trademarks of their respective holders.

Applicability

The standards and guidelines in this revision of this manual shall apply to new communication sites built after the publication date of this revision of the manual. Standards and guidelines in this manual are not required to be implemented at sites built prior to publication of this revision.

C.3.3 FLOORING

Carpeting or floor tiles within an equipment room or dispatch center, including raised flooring, should have a resistance to ground measurement of between 10^6 and 10^9 ohms when measured using the test method of ANSI/ESD STM7.1-2001 or later. Existing flooring that does not meet this requirement should be treated with a topical solution such as an antistatic floor wax or spray solution. The effectiveness of antistatic solutions is temporary and varies with floor material and relative humidity. Flooring resistance should be monitored every two weeks minimum to verify conformance to the above requirements. (ANSI T1.321-R2000, section 4.2 and ANSI/ESD STM7.1-2001)

When ESD protective flooring is used, the following should be observed:

- ESD protective flooring should be installed per the manufacturer's recommendations.
- ESD protective flooring and floor coverings should be installed, grounded, and tested by trained installers.
- Personnel entering the equipment room or dispatch area should wear ESD dissipative footwear or dissipative foot straps. The footwear should provide dissipative resistance values of less than 35×10^6 ohms as measured according to the measuring requirements within ANSI/ESD STM97.1-1999 or later. The footwear should also provide dissipative resistance values of less than 1.0×10^9 ohms as measured in accordance with the measuring requirements of ANSI/ESD STM9.1-2001 or later.

When ESD protective flooring is not installed at a dispatch position or equipment room, an ESD protective floor mat should be installed at the work areas. When ESD protective floor mats are installed, the following should be observed:

- The floor mat should provide dissipative resistance values between 10^6 and 10^9 ohms when measured using the test method of ANSI/ESD STM7.1-2001 or later.
- The floor mat should be effectively bonded to the common grounding point.
- Personnel should wear ESD dissipative footwear or dissipative foot straps. The footwear should provide dissipative resistance values of less than 35×10^6 ohms as measured according to the measuring requirements within ANSI/ESD STM97.1-1999 or later. The footwear should also provide dissipative resistance values of less than 1.0×10^9 ohms as measured in accordance with the measuring requirements of ANSI/ESD STM9.1-2001 or later.
- Personnel should stand on the floor mat before connecting to the headset jack or touching equipment or grounded objects.

C.3.4 CHAIRS

Chairs used in dispatch centers should be ESD protective and have a resistance to ground measurement of between 10^5 and 10^9 ohms when measured using the test method of ANSI/ESD STM12.1-1997 or later. Such chairs operate in conjunction with ESD protective flooring (see previous paragraph). (ANSI T1.321-R2000, section 4.3 and ANSI/ESD STM12.1-1997)

ESD protective chairs should incorporate a continuous path between all chair elements and the ground point. The ground point of a static dissipative chair should be the static dissipative chain or the conductive casters that provide electrical continuity to the ESD flooring material. (See FAA-STD-019d-2002 for additional information.)