

*ANSI/ESD STM11.31-2018*

# *ESD Association Standard Test Method*

*ANSI/ESD STM11.31-2018*  
*Revision of ANSI/ESD STM11.31-2012*

*For Evaluating the Performance of  
Electrostatic Discharge Shielding  
Materials –*

*Bags*



*Electrostatic Discharge Association  
7900 Turin Road, Bldg. 3  
Rome, NY 13440*

*An American National Standard  
Approved XXXXXXXXXXXX*



*ESD Association Standard Test Method  
for Evaluating the Performance of  
Electrostatic Discharge Shielding  
Materials –  
Bags*

Approved July 26, 2018  
EOS/ESD Association, Inc.



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## FOREWORD

It is the intent of this standard test method<sup>1</sup> to provide the industry with a common, repeatable method for testing and determining the discharge shielding abilities of electrostatic discharge shielding bags.

This standard test method was originally approved on June 23, 1994, and was designated ESD S11.31-1994. ANSI/ESD STM11.31-2001 was a reaffirmation, re-designation of ESD S11.31-1994 and approved on February 4, 2001. ANSI/ESD STM11.31-2006 was a reaffirmation of ANSI/ESD STM11.31-2001 and approved on September 10, 2006. ANSI/ESD STM11.31-2012 is a reaffirmation of ANSI/ESD STM11.31-2006 and was approved on February 12, 2012. ANSI/ESD STM11.31-2018 is a revision of ANSI/ESD STM11.31-2012 and was approved on July 26, 2018.

At the time ANSI/ESD STM11.31-2018 was prepared, the 11.0 Packaging Subcommittee had the following members:

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<sup>1</sup>**ESD Association Standard Test Method (STM):** A definitive procedure for the identification, measurement and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or process that yield a **reproducible test** result.

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## TABLE OF CONTENTS

<b>1.0 PURPOSE AND SCOPE</b> .....	<b>1</b>
1.1 PURPOSE .....	1
1.2 SCOPE .....	1
<b>2.0 REFERENCED DOCUMENTS</b> .....	<b>1</b>
<b>3.0 DEFINITIONS</b> .....	<b>1</b>
<b>4.0 PERSONNEL SAFETY</b> .....	<b>1</b>
<b>5.0 REQUIRED EQUIPMENT</b> .....	<b>2</b>
5.1 ESD SIMULATOR .....	2
5.2 WAVEFORM VERIFICATION EQUIPMENT.....	2
5.2.1 Oscilloscope.....	2
5.2.2 Current Probe.....	2
5.2.3 High Voltage Resistor.....	2
5.3 CAPACITIVE PROBE .....	2
5.4 DISCHARGE ELECTRODE AND GROUND ELECTRODE.....	2
5.5 BAG SIZE .....	2
5.6 COMPUTER / SOFTWARE .....	3
5.7 CONTROLLED TEST ENVIRONMENT .....	3
<b>6.0 ESD SIMULATOR WAVEFORM VERIFICATION PROCEDURE</b> .....	<b>3</b>
<b>7.0 SYSTEM VERIFICATION PROCEDURE</b> .....	<b>5</b>
<b>8.0 TEST PROCEDURE / CONDITIONING</b> .....	<b>6</b>
<b>9.0 REPORTING</b> .....	<b>7</b>
 <b>ANNEXES</b>	
Annex A (Informative): Energy Calculation Program .....	8
Annex B (Informative): Revision History of ANSI/ESD STM11.31.....	9
 <b>FIGURES</b>	
Figure 1: ESD Simulator Waveform Verification Apparatus .....	4
Figure 2: Current Waveform through a 500-Ohm Resistor .....	4
Figure 3: Current Waveform through a 500-Ohm Resistor (Expanded Scale).....	5
Figure 4: Parallel Plate Capacitive Probe .....	6
Figure 5: System Verification Apparatus .....	6
Figure 6: Test Procedure Apparatus.....	7

**ESD ASSOCIATION STANDARD TEST METHOD FOR EVALUATING THE PERFORMANCE OF ELECTROSTATIC DISCHARGE SHIELDING MATERIALS – BAGS**

**1.0 PURPOSE AND SCOPE**

**1.1 Purpose**

The purpose of this document is to ensure that testing labs, bag manufacturers, and end users of bags, using this test method to evaluate electrostatic discharge shielding bags, will obtain similar reproducible results.

**1.2 Scope**

This document evaluates the attenuation ability of electrostatic discharge shielding bags.

**2.0 REFERENCED DOCUMENTS**

Unless otherwise specified, the following documents of the latest issue, revision or amendment form a part of this standard to the extent specified herein:

ESD ADV1.0, ESD Association's Glossary of Terms<sup>2</sup>

ANSI/ESD STM11.11 – Surface Resistance Measurement of Static Dissipative Planar Materials<sup>2</sup>

ANSI/ESDA/JEDEC JS-001, Human Body Model (HBM) – Component Level<sup>2</sup>

ASTM D257, Standard Test Methods for DC Resistance or Conductance of Insulating Materials<sup>3</sup>

**3.0 DEFINITIONS**

The terms used in the body of this document are in accordance with the definitions found in ESD ADV1.0, ESD Association's Glossary of Terms available for complimentary download at [www.esda.org](http://www.esda.org).

**4.0 PERSONNEL SAFETY**

**THE PROCEDURES AND EQUIPMENT DESCRIBED IN THIS DOCUMENT MAY EXPOSE PERSONNEL TO HAZARDOUS ELECTRICAL CONDITIONS. USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR SELECTING EQUIPMENT THAT COMPLIES WITH APPLICABLE LAWS, REGULATORY CODES AND BOTH EXTERNAL AND INTERNAL POLICY. USERS ARE CAUTIONED THAT THIS DOCUMENT CANNOT REPLACE OR SUPERSEDE ANY REQUIREMENTS FOR PERSONNEL SAFETY.**

**GROUND FAULT CIRCUIT INTERRUPTERS (GFCI) AND OTHER SAFETY PROTECTION SHOULD BE CONSIDERED WHEREVER PERSONNEL MIGHT COME INTO CONTACT WITH ELECTRICAL SOURCES.**

**ELECTRICAL HAZARD REDUCTION PRACTICES SHOULD BE EXERCISED, AND PROPER GROUNDING INSTRUCTIONS FOR EQUIPMENT SHALL BE FOLLOWED.**

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<sup>3</sup> American Society for Testing and Materials (ASTM) 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, 877-909-2786, [www.astm.org](http://www.astm.org)