

Designation: F1694-96(Reapproved 2004) Designation: F1694 - 09

Standard Guide for Composing Walkway Surface <u>Investigation</u>, Evaluation and Incident Report Forms for Slips, Stumbles, Trips, and Falls¹

This standard is issued under the fixed designation F 1694; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

- 1.1 This guide provides a listing of items that may be useful in recording and evaluating the conditions of a walkway surface, including ramps and stairs, that may involve a slip, stumble, or trip that may result in a fall.
- 1.2 This guide provides a listing of data that may be useful in <u>investigating</u>, evaluating, and reporting a slip, stumble, trip, slip and fall, stumble and fall, or trip and fall incident.
 - 1.3 Nomenclature is provided to obtain uniform language for reports.
- 1.4Field lengths and codes are provided, in the appendixes, and are appropriate for recording data in a computerized database and for obtaining uniformity between databases.
- 1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.
- 1.5 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 ASTM Standards:²

F 1646 Terminology Relating to Safety and Traction for Footwear

3. Terminology

- 3.1See Terminology F1646 for the following term used in this guide: OVICW
- 3.1.1*SIC*
- 3.1 Definitions:
- 3.1.1 The standard terms listed in Section 6 shall be used. F1694-09
- 3.1.2 The standard terms listed in Terminology F 1646 shall be used when there is no term(s) provided in this guide.

4. Significance and Use

- 4.1 This guide provides recommendations for recording walkway surface <u>investigation</u>, evaluation, and incident report data pertaining to slips, trips, stumbles, and falls. It is intended to aid individuals or entities in the development of their own special reporting system. It is recognized that a user may use this guide in its entirety or may extract only those segments providing the level of information required. Depending on the intended use, a report form may be designed to be used alone or as a supplement to or incorporated within another report form. This guide is not a final report form. It lists items considered appropriate for inclusion into a questionnaire, document, or report.
- 4.2 Potential users include persons interested in the prevention and investigation of slip, trip, stumble, and fall phenomena, such as insurance company loss control specialists, industrial and commercial safety professionals, plant and facilities management personnel, forensic engineers, and research personnel concerned with factor correlation, statistics acquisition, loss control, and cost control. Data on record maintenance may be of special interest in the preparation of documents for firms seeking ISO 9000 certification.
- 4.3This guide provides a systematic approach to creating a report form suitable for entry into a computerized database. Uniform data recording provides ready comparison of data between databases or evaluation within one database.

1

¹ This guide is under the jurisdiction of ASTM Committee F13 on Pedestrian/Walkway Safety and Footwear and is the direct responsibility of Subcommittee F13.50 on Walkway Surfaces.

Current edition approved June 1, 2004. Published June 2004. Originally approved in 1996. Last previous edition approved in 1996 as F1694-96.

Current edition approved Jan. 1, 2009. Published February 2009. Originally approved in 1996. Last previous edition approved in 2004 as F 1694 – 96 (2004).

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.



4.4This guide provides uniform language appropriate for creating a form for manually recording information regarding pedestrian walkway evaluations and slip, trip, and fall incidents.

4.5

- 4.3 This guide provides uniform language appropriate for creating a form for manually recording information regarding pedestrian walkway evaluations and slip, trip, and fall incidents.
- <u>4.4 Requirements for Reporting</u>—Information specific to site location and case identification is given in 6.2; information specific to walkway evaluation is given in 6.3; information specific to slip, trip, and fall incidents is given in 6.4.

5. Procedure

5.1 *Preparing Report Form(s)*—Use the requirements of 6.1-6.3 to prepare a floorwalkway surface evaluation report. Use all of the requirements of Section 6, including 6.4, to prepare slip and fall, stumble and fall, and trip and fall incident reports and reports of near falls.

6. Report

- 6.1 Form of Report—The report may be narrative or coded. The form may be written or computerized, or the original data may be written and then computerized.
- 6.1.1Field Length—Items for which the computer entry of data may be desirable are listed in Appendix X2, along with a recommended field length.
- 6.1.2This guide offers a multitude of possible answers for some requirements, as for footwear bottom materials and walkway surface materials. A form may be composed with a simply stated question on the form. Possible responses may be listed adjacent to the question, in a supplement, in instructions that the entity issues regarding the form, or on the reverse side of the form. The responses suggested in this guide may be supplemented by responses or products unique to the entity requiring the report. The report may be in narrative form or coded. The form may be hard copy or electronic media, or the original data may be hard copy and then made electronic or computerized. The form of the report will be left up to the user.
- 6.1.1 A form may be composed with a simply stated question on the form. Possible responses may be listed adjacent to the question, in a supplement, in instructions that the entity issues regarding the form, or on the reverse side of the form. See X1.3 for a sample walkway evaluation report form and X1.4 for a sample incident report form.
 - 6.2 Case Identity:
- 6.2.1 Date of Report—Enter indicates the mmddyy, where mm indicates the month, 01 through 12; dd indicates the day of the month, 01 through 31; and yy indicates the last two digits of the year.
 - 6.2.2Case Number or Identifier—Use a private alpha-numeric designation, as desired, for identifying a single case.
- 6.2.3—Enter date as mmddyy, where mm indicates the month, 01 through 12; dd indicates the day of the month, 01 through 31; and yy indicates the last two digits of the year.
 - 6.2.2 Report Type—Walkway evaluation only or incident. An incident report will should include a walkway evaluation.
 - 6.2.46.2.3 Owner Location—Report the company name, mailing address, city, state, mail zip code, and country. 6.2.4.1
- <u>6.2.3.1</u> Contact Person at Owner Location— Record the last name, first name, and middle initial; and telephone number, including area code; telephone extension; and facsimile machine number.
- 6.2.4.2Corporate Identifier—Use a designation, as desired. Examples are World Headquarters, XYZ Manufacturing Division, Plant number, Organizational Unit, etc.
- 6.2.4.3Accounting Code or Expense Code— Use a designation, as desired. Examples are estimated cost, actual cost, medical cost, compensation cost, and other contributing costs.

6.2.5

- <u>6.2.4</u> Site Location—Record the site name, physical address, city, state, zip code, country and specific location on the property, and SIC number. property.
 - 6.2.5.16.2.4.1 Interior or Outdoors—Record as interior or outdoors.

6.2.5.2

- <u>6.2.4.2 Contact Person at Site Location</u>— Record the last name, first name, and middle initial; telephone number, including area code; telephone extension; and facsimile machine number.
- 6.2.5.3Date of Examination of Walkway Enter mmddyy, where mm indicates the month, 01 through 12; dd indicates the day of the month; and yy indicates the last two digits of the year.

6.2.6

- <u>6.2.5</u> Person Preparing Report—Record the last name, first name, and middle initial; company name; mailing address first field, mailing address second field, city, state, mail zip code, and country; and telephone number, telephone extension, and facsimile machine number.
 - 6.3 Walkway Evaluation:
- 6.3.1 Slip Resistance Measurement—The investigator determines which measurements are necessary and the instrument(s) used to make the measurements. The choice of whether to test a walkway surface with a standard test foot, a test foot directly related to an incident, or a test foot selected for other reasons lies with the investigator. Details of the surface test are recorded in

- accordance with 6.3.1.1. The details of tests the investigator may require for a particular sole material, or a particular heel material, with a surface other than the walkway under investigation, are recorded according to 6.3.1.2and 6.3.1.3.
- 6.3.1.1 Walkway Surface Slip Resistance— Record the identity of the instrument used to measure the surface slip resistance. This may be the ASTM standard for the instrument or the make and model. Record a description of the surface tested, instrument test foot material, slip resistance of the surface clean and dry, and slip resistance of surface contaminated. Record contaminant(s).
- 6.3.1.2 *Footwear Sole Slip Resistance* Footwear Sole and Heel Slip Resistance—Record the ASTM standard for the measuring instrument, or otherwise identify the instrument. Record the instrument test foot sole material, test surface material, contaminant(s), slip resistance of the sole material dry, and slip resistance of the sole material contaminated.
- 6.3.1.3Footwear Heel Slip Resistance— Record the ASTM standard for the measuring instrument, or otherwise identify the instrument. Record the instrument test foot heel material, test surface material, contaminant(s), slip resistance of the heel material dry, and slip resistance of the heel material contaminated.
 - 6.3.2 Walkway Structure:
- 6.3.2.1 Walkway Type—Record one of the following: curb, floor, parking lot, ramp, sidewalk, stair, street, threshold, unpaved ground, or other. —Record one of the following: curb, floor, parking lot, ramp, sidewalk, stair, street, threshold, unpaved ground, or other. Drawings/sketches may be used to aid in documentation, especially if the walkway type is complex or comprised of multiple types.
- 6.3.2.2 Walkway Construction Material— Record one of the following standard walkway constructions: abrasion-resistant eoating, surface coatings (acrylic, urethane, or epoxy), asphalt plank flooring, asphaltic concrete paving, brick, carpet sheet, carpet tile, carpet indoor/outdoor type, ceramic tile and mosaics, concrete, conductive elastomeric liquid flooring, conductive resilient, conductive terrazzo, cut natural stone tile, earth, elastomeric liquid flooring, epoxy marble chip, flagstone flooring, floor mat, fluid-applied resilient, foot grille, granite, granular paving, crushed stone or cinders, grass, gratings, magnesium oxychloride, marble, mastic fills, metal floor plates, pedestal flooring, plastic laminate flooring, portland cement concrete paving, quarry tile, resilient tile flooring, resilient sheet flooring, resilient flooring static control, resinous, rugs, seamless quartz, slip-resistant finishes, slate, steel deck, stone, thin brick tile, portland cement terrazzo, precast terrazzo, conductive terrazzo, plastic matrix terrazzo, pressed concrete unit flooring, quarry tile, synthetic grass surfacing, vinyl composition tile or vinyl flooring, tile, wood, wood decking, wood block, wood composition, wood parquet, wood strip, other, or as assigned by the Master List of Titles and Numbers for the Construction Industry (see X1.2). other.
- 6.3.2.3 *Surface Texture*—Record whether abrasive, button, or cross-cut grooving; note the direction of grooves in relation to the travel path, texturing, or other means intended to render the surface slip resistant; describe smooth, coarse, carpet unidentified surface, carpet runner plastic, or carpet runner other than plastic; and describe carpet shag, carpet with smooth nap, or carpet with medium nap.
- 6.3.2.4 Walkway Structural Condition and Irregularities —Note whether the walkway is stable, planar, flush, and even. Record the nature of the irregularities. Examples for carpet condition are as follows: regular, irregular carpet; and raised edge, open seam, torn, worn, and buckled. Examples for other surfaces are as follows: broken, even, rough, smooth, uneven.
- 6.3.2.5 Walkway Load—Record whether the walkway meets the requirements for safely sustaining intended loads. Record in a written report comments and stipulations such as the nature of the irregularities or deviations from the requirements.—Record any known walkway load support issues based on applicable load requirements. Record in a written report comments and stipulations such as the nature of the irregularities or deviations from applicable requirements.
- 6.3.2.6 Surface Levelness—Record whether the walkway changes in level comply with standards. Record in a written report standards applying to the walkway and comments and qualifications such as the nature of the irregularities or deviations from the requirements. Surface Changes in Elevation—Record whether the walkway includes any changes in elevation (such as stairs, ramps, or other walkway height transitions) and whether such transitions comply with applicable standards/requirements. Record in a written report standards applying to the walkway and comments and qualifications such as the nature of the irregularities or deviations from the requirements.
- 6.3.2.7 *Handrails/Guardrails*—Record whether the location complies with the requirements for handrails and guardrails. Note applicable requirements such as those in the building code, those relating to the disabled, such as the Americans with Disabilities Act (ADA) and related regulations, and occupational safety and health (OSHA) regulations and standards. Describe the construction of those not in compliance, and note how they are deficient.
 - 6.3.2.8 Intended Use—Record whether this surface is intended for use as a walkway.
 - 6.3.3 Surface Contaminants:
- 6.3.3.1 *Contaminants Present*—Record the contamination status at the time of examination: clean, cleaning solution, dirt (soil, unidentified), dust, grease, ice, liquid (other than substances in this listing), oil, overspray, particulate (paper clips, paper), o refuse (food waste), refuse, snow, water, or other (identify).
- 6.3.3.2 *Expected Contaminants*—Record the contaminants expected to be present on the walkway surface even though not present when the walkway was examined.
 - 6.3.4 Janitorial Practices:
- 6.3.4.1 *Manufacturer's Instructions for Use*—Record whether the manufacturer's recommendations are available to the users. Record deviations from the instructions when using janitorial products at this location. Specify instances in which the



manufacturer's instructions are not followed.

- 6.3.4.2 *Scrubbers*—Record how often squeegees on automatic scrubbers are replaced and whether automatic scrubbers are maintained if/as applicable, so they do not leave a trail of water on the floor.
 - 6.3.4.3 Floor Dust—Record whether floor dust is mopped immediately after burnishing to remove particulate residue.
 - 6.3.4.4 *Products*—Record whether the contents of all products used on or in the vicinity of the walkway are known.
 - 6.3.4.5 *Mats*—Record whether walk-off mats are placed adjacent to outside entrances and wet carpet.
 - 6.3.4.6 Rugs and Mats—Record whether rugs and mats have slip-resistant backing that is functional.—Record whether rugs and mats have a slip-resistant backing that is functional, if/as applicable. Record whether the rug or mat lies flat in the area of intended use. Additionally, record whether the edges are flush and planar with the walkway surface (that is, no curling of edges). Also record the length of mat and number of mats used in the path of travel. If possible, measure the vertical change in elevation at the mat or rug edge to the nearest ½2 in. If applicable, record whether any residual contaminant, normally denoted by footprints, exists on the walkway surface beyond the last mat or rug of an entrance.
 - 6.3.4.7 *Spray Products*—Record whether sprays used in the vicinity of the floor contain mineral oil, silicone, other lubricants, or ingredients that may contaminate a walkway surface.
 - 6.3.4.8 *Contaminants and Refuse*—Record whether spilled contaminants and refuse are required to be cleaned up promptly. Record observed or reported failures to clean residue promptly.
 - 6.3.4.9 *Surface Process*—Record whether sealed, polished, coated, or no surface process. Record the name by brand and manufacturer, polish, sealer, wax, ultra high-speed buffing polish, plastic type polish, or spray buff product.
 - 6.3.4.10 *Cleaning Method*—Record the cleaning method as mopped, wet mop, dry buff, dry mop, machine washed, shampoo (carpet), spot clean, strip, dusted, or other. Describe prior cleaning methods if different from most recent cleaning methods. Describe other processes specific for wood, terrazzo, marble, concrete, metal, or other types of walkway material, if/as applicable.
 - 6.3.4.11 *Buffing or High-Speed Burnishing Method*—Record the brand, model, and revolutions per minute of the buffing or burnishing machine(s). Record the coarseness/color and manufacturer of the buffing pad.
 - 6.3.4.12 *Products Used on Floor*—Record the brand name, manufacturer, and other identifying product information. Note known incompatibilities between products. Such products may include stripper, sealer, polish or wax, spray buff product, general purpose cleaner, cleaner used in automatic scrubber, spot cleaning product, aerosol products such as metal cleaners used in vicinity of the floor (as on door guards), buffing burnishing machine, buffing pads, dust mop, wet mop, and other products.
 - 6.3.4.13 *Compliance with Standards*—Record which janitorial products are in compliance with the applicable slip resistance or safety standards and which are not in compliance. Record the standard(s).
 - 6.3.5 Maintenance Records—Record whether there are service and maintenance records and whether the maintenance records are maintained regularly.
 - 6.3.5.1 *Record Retention Policy*—Summarize the record retention policy. Record whether the required records are maintained in accordance with the policy.
 - 6.3.5.2 Janitorial Products—Record whether a record is kept for the brand and name of each janitorial product used on the floor.
 - 6.3.5.3 *Janitorial Procedures*—Record whether a record is kept of the date and time each maintenance procedure was performed.
 - 6.3.5.4 Janitorial Employee—Record whether a record is kept of who performed each service.
 - 6.3.5.5 Incident Reports—Record whether a record is kept of slip, trip, stumble, and fall incidents.
 - 6.3.5.6 *Time of Service*—Record whether a log is kept of the time of service and the kind of service and whether the log is maintained in a timely manner.
- 6.3.6 Safety Program—Record whether there is regular-consideration of slip and fall issues and appropriate enforcement in the safety program.
- 6.3.6.1 *Review*—Record whether there is a policy for the regular review of incident reports. —Record whether there is a policy for the review of incident reports for trending or follow-up, or both.
- 6.3.6.2 *Training Program*—Record whether there is a regular training program for personnel and environmental services staff regarding safety procedures and slip and fall prevention.
 - 6.3.7 Signs and Warnings:
 - 6.3.7.1 Describe whether caution and warning signs are used at the examination site.
 - 6.3.7.2 Record whether the warning signs comply with the standards, applicable standards/requirements.
 - 6.3.7.3 Record whether the warning signs are temporary or permanent.
 - 6.3.7.4Name6.3.7.4 Describe other warning methods used and the specific conditions cautioned against.
 - 6.3.8 Walkway Illumination—Record the illumination as bright, dim, or dark.
 - 6.3.8.1Is the illumination in compliance with the standards?
 - 6.3.8.2Does the illumination cause glare on the walkway surface?
 - 6.3.8.3Is the illumination distracting or does it interfere with the pedestrian's ability to see?
- 6.3.8.4Are obscuring shadows east by pedestrians on walkways, especially stairs?—Record the illumination level as measured by an appropriate illumination-measuring device (such as a light meter), device used, and location of illumination measurement(s).
 - 6.3.8.1 Record whether the illumination is in compliance with applicable standards/requirements.



- 6.3.8.2 Record whether the illumination causes glare on the walkway surface.
- 6.3.8.3 Describe if the illumination is distracting or interferes with the pedestrian's ability to see the walkway surface.
- 6.3.8.4 Describe if obscuring shadows are cast by pedestrians on the walking surface, especially at changes in elevation.
- 6.3.8.5 Record the source and type(s) of illumination.
- 6.3.9 Headroom Clearance:
- 6.3.9.1 Is there minimum headroom clearance of 6 ft 8 in. (2.03 m)?
- 6.3.9.2 Is a low headroom clearance safely padded?
- 6.3.9.3 Is a low headroom clearance marked with safety contrast color coding?
- 6.4 *Incident Report*:
- 6.4.1 *Case Types*—Define case types as follows: ankle roll, ankle and fall, heel slip, heel slip and fall, toe slip, toe slip and fall, stumble, stumble and fall, trip, and trip and fall.
- 6.4.2 *Date of Incident*—Record the numerical designation of mmddyy, where mm indicates the month, 01 through 12; dd indicates the day of the month; and yy indicates the last two digits of the year.
- 6.4.3 *Time of Day*—Record the time that the incident occurred using a 24-h system in the form "hhmm," where hh represents the hour of day and mm represents the minutes. Examples are 0908 is 8 min after 9 a.m., and 2108 is 8 min after 9 p.m. When the incident occurred during employment, additionally record the hour of the shift or after the beginning of the workday or the time when required by the individual company policy, using a field length and private alphanumeric designation, as desired.
 - 6.4.4 Weather Conditions—Record whether rain, snow, sleet, dry, or not applicable (indoors).
 - 6.4.4.1 Record as reported for the time of the incident.
 - 6.4.4.2 Record the weather conditions during the period immediately previous to the incident.
 - 6.4.4.3 Record the weather conditions during the 12 to 24 h previous prior to the incident.
 - 6.4.5 Natural Outdoor Light—Record whether sunny, overcast, twilight, night dark, night moonlit, or other, and describe.
- 6.4.6 *Number of People Involved*—Prepare a separate report using the data listed in 6.4 for each person. A copy of the information included in 6.2 and 6.3 may be attached to each report.
- 6.4.7 *Incident Category*—Record whether personal injury, property damage, personal injury and property damage, or no personal injury and no property damage.
 - 6.4.7.1 Height—Record as a fall on the same level or a fall from elevation.
 - 6.4.7.2Degree—Record whether a fatality, lost day, lost time, or no lost time.
 - 6.4.7.3—Record as a fall on the same level or a fall from elevation. If a fall from elevation, record the measurement of fall height.
- 6.4.7.2 *Incident Severity*—Record incident severity whether a fatality, lost time, or no lost time, or other applicable measure of incident severity.
- 6.4.7.3 Lost Work Time—Record the days lost or hours lost, if/as applicable. Record as work days lost for full days lost and work hours lost for partial days lost.
 - 6.4.7.4 Property Damage—Describe the damage, and estimate the cost of repair or replacement, or both.
- 6.4.8 *Individual*—Record the name: last, first, and middle initial; and record the residence address: mailing address and physical address.
- 6.4.8.1 *Personnel or Visitor Category* Record whether an employee, non-employee, volunteer, visitor, customer, inpatient, outpatient, client, or other (describe), or unknown.
 - 6.4.8.2 Sex—Record as male or female.
- 6.4.8.3 *Date of Birth*—Enter a numerical designation of mmddyy, where mm indicates the month, 01 through 12; dd indicates the day of the month; and yy indicates the last two digits of the year. When the date is not available, leave blank.
 - 6.4.8.4 Age—When the date of birth is not available, record as child, adult, teen, adult, aged.
 - 6.4.8.5 Employer—If not an employee, record the employer name, mailing address, and physical address.
 - 6.4.8.6*Mode*
 - <u>6.4.8.6 Case Type</u>—Record whether heel slip, toe slip, ankle roll, trip, or stumble.
 - 6.4.8.7 Result—Record whether recovered or fell.
 - 6.4.8.8 Part of Body Affected—Use standard nomenclature designated by the entity for whom the report is written.
 - 6.4.8.9 Nature of Injury—Use standard nomenclature designated by the entity for whom the report is written.
- 6.4.8.10Personal Disabilities—Note the nature of the disability such as, but not limited to, the following: decreased level of eonsciousness, dementia, intoxicated, mental, mental retardation, reekless behavior; physical walking appliances such as cane, walker, crutches, and condition of cane, walker, or crutches tip material and kind of material; and medication, diminished eyesight requiring correction. Note whether the person was wearing eyesight devices, such as corrective eyeglasses, contact lenses, sunglasses, or protective glasses. Note the condition of the various appliances, including eye protection.
- 6.4.8.10 Eyesight Devices—Note whether the person was wearing eyesight devices, such as corrective eyeglasses, contact lenses, sunglasses, or protective glasses. Note the condition of the various appliances, including eye protection.
 - 6.4.9 Type of Locomotion and Activity Performed at Time of Incident:
 - 6.4.9.1 Gait—Record whether a run, stand, walk, normal, abnormal (describe), or other (describe).
 - 6.4.9.2 Activity at Time of Incident—Record whether carrying, lifting, moving, pulling, pushing, standing, or distracted (talking



to a companion or not looking at the tread surface while moving).

- 6.4.10 *Footwear*—Record the brand name, style, and model designation. Describe the footwear materials that contact the walkway surface, as described in the following sections.
- 6.4.10.1 *Type of Footwear*—Record whether athletic, barefoot, protective toe, work >6-in. (152-mm) height, work <6-in. (152-mm) height, men's dress laced, men's dress slip-on, women's dress laced, women's dress pump, sling back, mule, heel height, overshoes, rubber boots, slippers, or other.
 - 6.4.10.2 Fit of Footwear—Record whether good, poor (describe), or loose.
- 6.4.10.3 Footwear Condition (Appearance)— Record whether new, moderate wear (includes upper surface scuffing), heavy wear, and lace(s) not tied.
- 6.4.10.4— Record whether new, moderate wear (includes upper surface scuffing), heavy wear, and describe closure method. Describe if closure method is improperly secured (such as lace(s) not tied).
- <u>6.4.10.4</u> *Heel Material*—When the heel contains a lift, record both the heel material and the lift material. Include a sketch showing the location of the lift on the heel. Typical heel materials may be barefoot, crepe, elastomer, leather, Neolite[®], plasticized poly(vinyl chloride) (PVC), rubber, or other (describe). plasticized poly(vinyl chloride) (PVC), rubber, or other (describe). The heel may need to be sent to a firm qualified to test and evaluate its contents.
 - 6.4.10.5 Heel Condition—Record whether new, worn rear edge, or worn contacting surface (general wear).
 - 6.4.10.6 Heel Wearing Surface Texture—Record whether smooth, ribbed, pattern, or other (describe).
 - 6.4.10.7Heel Insert—Record whether elastomer, leather, metal, Neolite®, 3 rubber, or other (describe).

6.4.10.8

6.4.10.7 Heel Hardness—Record whether Shore A or D and the value.

6.4.10.9

<u>6.4.10.8</u> *Sole Material*—Record whether barefoot, elastomer (unidentified), (ethylene vinyl acetate (EVA)), leather, Neolite[®], other (describe), polyurethane, PVC, rubber, natural rubber, nitrile butadyene rubber (NBR), styrene butadyene rubber (SBR), thermoplastic rubber, crepe (TPR), or vulcanized rubber.

6.4.10.10

6.4.10.9 Sole Tread—Record whether ribbed, pattern, or smooth.

5 4 10 11

6.4.10.10 Sole Hardness—Record whether Shore A or D and the value.

6.4.10.12

- 6.4.10.11 Defects—Record whether loose sole, missing heel, missing heel lift, strap broken, and other defects.
- 6.4.11 Contaminants at Time of Incident and Last Surface Process:
- 6.4.11.1 *Shoe Surface Contaminants*—Record whether the shoe(s) are contaminated by dust, grease, oil, water, particulate, or other shoe contaminants. Include contaminants tracked in from another location(s) and that are not necessarily the contaminants that may be present on the walkway surface.

 ASTM F1694-09
- 6.4.11.2 Walkway Surface Contaminants—List the contaminants present at the time of the incident, whether clean, cleaning solution, dirt (soil, unidentified), dust, grease, ice, liquid (other than substances in this listing), oil, overspray, particulate (paper clips, paper, or food waste), refuse, snow, water, or other (identify).
- 6.4.11.3 *Type of Last Surface Process Before Incident* —Describe the last surface process on the walkway as polished, spray buffed, dry mopped, wet mopped, machine scrubbed, buffed, high-speed burnished, dust mopped, spot cleaned, or other surface process.
 - 6.4.11.4 Date and Time of Last Surface Process—Record the date and time of the last surface process before the incident.
 - 6.4.12 Summary of Causes of Incident:
 - 6.4.12.1 Summary of Contributing Factors—Summarize significant items from 6.3 and 6.4.
 - 6.4.12.2 Cause—State an opinion as to the primary and secondary causes of the incident.

7. Keywords

7.1 accident; computer; evaluation; examination; fall; floor; footwear; incident; ramp; report; report form; slip; stair; stumble; trip; walkway

APPENDIXES

(Nonmandatory Information)

X1. RELATED ASTM STANDARDS AND OTHER DOCUMENTS

X1.1 ASTM Standards:²

C 1028 Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the

³ Neolite® is a registered trademark of the Goodyear Tire and Rubber Co., Shoe Product Division, 24 Hampshire Dr., Hudson, NH 03051.