

# DIRTY FACTS



## Dirt and Dust

### ❖ **APPEARANCE**

- “91% of shoppers select a store to shop in because of its appearance.” (Progressive Grocer)
- When asked, “What’s the first thing you look at when judging cleanliness?” the most popular first response of consumers was “Floors” (42%). (CDI Research, 1991)
- “A 10-year long study released in 1999 also underscores the importance of entranceways, finding that students, when visiting colleges, largely based their selections on the appearance of the campus – specifically entranceways, restrooms and the grounds.” (Cleaning & Maintenance Management)
- When customers choose a restaurant, cleanliness ranks at the top for fast-food destinations. (Restaurants & Institutions, 1994)

### ❖ **LABOR**

- “It is estimated that 90% of building maintenance cost is labor.” (Cleaning Management)
- The estimated cost of removing a single pound of dirt from a modern building can exceed \$600. (International Sanitary Supply Association)
- “A dollar spent keeping soil out of a building will save 10 dollars in removing the soil once it’s inside.” (Cleaning & Maintenance Management)
- 39% of all custodial time is devoted to floor care maintenance. (National Executive Housekeepers Association)
- Proper matting alone can save approximately 200 labor hours in the average home per year. (Mr. Don Aslett, America’s #1 Cleaning Expert)

### ❖ **HEALTH**

- About 10% of Americans are allergic to some component of dust. (Dr. Robert Pumbhrey, Washington, D.C.)
- Indoor air is found to be up to 70 times more polluted than outdoor air; (Environmental Protection Agency) and most people spend 60-90% of their time indoors. (American Lung Association)
- American businesses are spending upwards of \$100 billion a year as a result of lost worker productivity due to poor indoor air quality and “Sick Building Syndrome”. (Consumer Federation of America)

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- Medical research has proven that most headaches are allergic reactions to dust. (Medical Digest)

## ❖ **MECHANICAL BREAKDOWN**

- A buildup of .042 inches of dirt on a heating or cooling coil can decrease efficiency by 21%. (Environmental Protection Agency)
- Dirt and dust cause nine out of ten system failures. (Louisiana Cooperative Extension Service)

## ❖ **INVOLUNTARY ACTS**

- 100 grams (1/4 pound) per day per 1000 people can be tracked into a commercial building during dry weather conditions. Twelve times as much dirt is tracked in during wet weather conditions based on field tests conducted by BST Laboratory over an 11-month period.
- Without entrance matting, 1,500 people can remove 42% of the finish from the floor. (3M)
- 86 billion pounds of dust settle over the US each year. ("All the Real Dirt on Dust", Discover Magazine, 1986)
- 70-80% of the dust, dirt and grime in public buildings is tracked in from the outside and spread throughout the floors. (International Sanitary Supply Association) It can be as high as 90% according to the Institute's Custodial Technical Handbook.
- Up to 24 pounds of dirt can be tracked in by just 1,000 people coming through an entrance over a 20-day work period. (ISSA)
- A major source of indoor air pollutants is street dust, carried in on shoes and captured in carpeting. ("The indoor Clean Air Quality Challenge", Spray Technology Magazine, 1993)
- 30% of the dirt tracked in is trapped in the first 3 feet of a typical mat, 85% of the dirt gets trapped within a 15-foot length of typical matting. (ISSA)

## ❖ **SCIENTIFIC STUDIES**

- "We estimate that only about 10% of the dirt is removed from mats with a vacuum cleaner." (Georgia State University Test)
- Studies show that one square yard of commercial grade carpeting can accumulate one pound of dirt over a one-week period and up to twice as much during inclement weather. (International Sanitary Supply Association)
- The average six-room dwelling takes in 40 pounds of dust in a year. A private home may have between 800,000 and 1,600,000 tiny bits of dust and particulate matter in every cubic inch of air. (TRSA Report "Dust Where We Work")
- Entrance matting should cover 15 to 18 feet of an entrance, (long enough for 5-6 footsteps of the average adult stride) preventing 80-90% of dirt from coming into the facility. (Cleaning & Maintenance Management)

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- It's estimated over 43 million tons of dust falls on the United States annually. (National Air Pollution Central Administration)

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## Slips and Falls

### ❖ **AGE**

- “There are 34 million Americans over the age of 60”. A person age 65 or older is 10 times more likely to be the victim of a debilitating slip-and-fall accident than a person under 30. (National Floor Safety Institute)
- 60% of fall-related deaths occur among people 65 and older. Falls are the No. 1 cause of injury-related death for males 80 and older and for females 75 and older. (NSC) The world’s population age 65 and older is growing by an unprecedented 800,000 people a month. (U.S. Census Bureau)

### ❖ **EXPENSE**

- The average slip-and-fall claim is \$4,000. (NFSI)
- The average cost of a slip-related injury exceeds \$12,000. (Wausau Insurance Co.)
- The average cost to defend against a slip-and-fall lawsuit is \$50,000. (NFSI)
- Fall-related medical expenses cost Americans more than \$20 billion each year. Projections show these expenses will climb to more than \$32 billion over the next 20 years. (Centers for Disease Control and Prevention)
- For every dollar spent on floor maintenance products, the average supermarket will spend \$3 paying for slip and fall accidents. (NFSI)
- Preventing workplace injuries makes it easier for a company to reach its financial goals. For example, a company with \$100,000 of costs related to workplace injuries will have to produce an additional \$2 million in revenue just to cover the expense, assuming a 5% profit margin. (Liberty Mutual)

### ❖ **FOOD CHAIN**

- In the US each year, an average of 7.75 claims per 1 million supermarket customers are filed due to slips and falls. (Food Marketing Institute)
- Grocery stores around the country spend \$450 million annually to defend slip-and-fall claims. The average slip-and-fall claim nationwide is for \$3,900, while the cost to litigate a lawsuit has reached \$100,000. (NFSI) Approximately 25,000 people a day are victims of slip-and-fall accidents. The expense resulting from these injuries is running \$3.5 million per hour, every hour of the day every day of the year. That is well over \$30 billion per year. (National Safety Council)
- The average restaurant has 3-9 slip/fall accidents each year. (NSC)
- The foodservice industry’s leading cause of employee injury is slipping and falling. (Liberty Mutual)

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## ❖ HAZARDS

- In 1987 there were 12 million injuries caused by falls requiring at least one day of medical attention. Two-thirds of the falls happened at the floor level. (National Safety Council)
- 9 out of 10 slip-and-fall incidents occur on wet surfaces. (Professional Retail Store Maintenance)
- The flooring material, floor hazards or improper maintenance accounts for approximately 50% of slip-and-fall accidents. (NFSI)
- Slip-and-fall accidents most often occur on wet or dirty surfaces. Slips, trips and falls are the leading cause of occupational accidents and result in more than 300,000 disabling injuries each year. (National Safety Council)

## ❖ HEALTH

- Falls caused or led to 15,400 deaths in America in 2001. (NSC)
- Falls are the second leading cause of accidental death and percentage-wise, it is growing three times faster than any other cause. (National Safety Council)
- More than 1 million people suffer an injury from a slip, trip or fall in the U.S. each year. Over 11,000 people die as a result of falls alone. Slips, trips and falls account for 15 to 20% of all workers compensation costs. (Professional Retail Store Maintenance)
- Over 30% of worker injuries are slip-related. (Wausau Insurance Co.)
- Every year there are more than 12 million slip-and-fall accidents in the U.S., resulting in more than 100,000 disabling injuries annually. (NSC)
- The 10 leading causes of disabling workplace injuries account for 86% of the estimated \$40 billion in wage and medical payments made to workers injured on the job in 1999. The direct cost of workplace injuries (payments to injured workers and their medical care providers) rose 3.6% to \$40.1 billion in 2001 from \$38.7 billion in 2000. The total financial impact of both direct and indirect costs (lost productivity, overtime, etc.) is estimated to be as much as \$240 billion. In 1999, falls on same level was the second leading cause of disabling workplace injuries that resulted in employees missing five or more days of work. (Liberty Mutual)
- “Four thousand people die from falling over on the same level on the job.” (Tom Leamon, Vice President of Liberty Mutual)

## ❖ RETAIL

- Wal-Mart stores receive 100 million visitors a week. Wal-Mart gets sued almost once every two hours every day of the year. Many of the suits are slip-and-fall related. (USA Today)
- The retail industry has the highest incidence of “same level” falls when compared with all other industries. These types of claims account for approximately 17.1% of worker’s compensation claims. (Liberty Mutual Research Center for Safety and Health)

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## Ergonomics

- Standing fatigue is not just a matter of personal discomfort. It also causes physical injury, costing employers time, productivity and money. (National Safety Council)
- Workers who stood on anti-fatigue mats were able to reduce the level of fatigue and discomfort by as much as 50%. (Mark Redfern, Ergonomist at the Center of Ergonomics at the University of Michigan)
- Productivity drops by 33% for a person standing 8 hours on a concrete floor. Standing on an anti-fatigue mat increases productivity by 20-50%. (OSHA)