

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

GAP INC., a Delaware corporation,

Plaintiff,

v.

DYSON, INC., a Delaware corporation;

EXCEL DRYER, INC., a Massachusetts

corporation, and, NSF INTERNATIONAL, SGS

NORTH AMERICA, INC., UL SOLUTIONS LLC,

SMART EPD LLC, and ANNA LASSO,

individually

Defendants.

Case No. _____

COMPLAINT FOR:

- (1) Breach of Express Warranty
- (2) Breach of Implied Warranty
- (3) Negligent Misrepresentation
- (4) Products Liability—Design Defect
- (5) Products Liability—Failure to Warn
- (6) Violation of California Business
and Professions Code § 17200
- (7) Violation of California Business
and Professions Code § 17500

JURY TRIAL DEMANDED

I. INTRODUCTION

The Test

1. The claims made in this case can be verified effortlessly by anyone in a few minutes. They can be experienced directly, without scientific equipment, without expert testimony, without specialized knowledge. Visit any public restroom equipped with an electric hand dryer claiming compliance with or certified by the NSF P335 or UL

PCR standards. Wash your hands. Place them in the dryer for 15 seconds—the least stringent drying time standard among all claims made by Defendants. We begin by giving Defendants the benefit of the doubt. Observe three things: (1) Watch where the water goes as it leaves your hands. (2) Remove your hands at 15 seconds. They will be visibly and obviously wet. (3) Look at the walls and floor near the dryer's air outlet. Note the growing mold, dirt and water staining originating from that point.

The Hypothetical

2. All aspects of hand dryer performance can be understood if you remove it from the room. Does a dryer improve or degrade the room by being there?



The Nature of This Case

3. This case concerns commercial hand dryers manufactured and sold by Defendants Dyson, Inc. and Excel Dryer, Inc. Plaintiff Gap Inc., through its Old Navy retail brand, purchased these products in reliance on Defendants' representations regarding drying time, hygiene, and environmental benefits. Every material representation was false.
4. Defendants represented that their hand dryers would dry hands in 8 to 14 seconds. Independent scientific testing of 460 dryer trials across three manufacturers—including both Defendants—established a 0% compliance rate at claimed drying

times. Zero dryers achieved manufacturer specifications. The failure is not marginal; actual drying requires 70 to 90 seconds, a discrepancy of 7 to 10 times.

5. Defendants represented that their hand dryers were hygienic. Independent scientific testing established that 100% of hand dryers tested amplified microbial contamination—136 consecutive tests showing amplification with zero reductions, yielding a probability under the null hypothesis of $p < 10^{-41}$. Median amplification was 49.6 to 110.5 times ambient air levels. Defendants' products do not reduce contamination; they amplify it and disperse it throughout the room.
6. Defendants represented that their hand dryers provided environmental benefits through reduced energy consumption and carbon emissions compared to paper towels. These calculations were predicated on 8 to 14 second drying cycles. Because actual drying requires 70 to 90 seconds, energy consumption is 600 to 900 percent higher than claimed, and the purported carbon advantage over paper towels collapses entirely.
7. The failures documented herein are not manufacturing defects, installation errors, or maintenance failures. They are inherent to the products' design. Independent testing revealed that different manufacturers using different engineering approaches produce functionally identical failure curves, with correlation coefficients exceeding $r = 0.99$ across all pairwise comparisons. Physics does not negotiate. All dispersal-type hand dryers hit the same physical limitation: water trapped in skin texture by capillary action resists removal regardless of air velocity or blade design.
8. Plaintiff purchased Defendants' products for installation in retail restrooms used by the public. Plaintiff's customers, employees, and visitors have been exposed to contamination amplification, inadequate hand drying, and the resulting increased risk of pathogen transfer. Plaintiff's facilities have sustained property damage from

water dispersal and mold colonization. Plaintiff seeks damages and injunctive relief.

SAMPLE

II. PARTIES

9. Plaintiff Gap Inc. is a Delaware corporation with its principal place of business at 2 Folsom Street, San Francisco, California 94105. Gap Inc. owns and operates retail stores under multiple brands including Old Navy, Gap, Banana Republic, and Athleta, with more than 2,800 stores globally. Plaintiff purchased hand dryers manufactured by Defendants for installation in restrooms at its retail locations.
10. Defendant Dyson, Inc. is a Delaware corporation that designs, manufactures, markets, distributes, and sells commercial hand dryers, including the Dyson Airblade product line. Dyson, Inc. is a subsidiary of Dyson Limited, a United Kingdom company. Defendant Dyson conducts substantial business in this District and throughout California.
11. Defendant Excel Dryer, Inc. is a Massachusetts corporation with its principal place of business in East Longmeadow, Massachusetts. Excel Dryer designs, manufactures, markets, distributes, and sells commercial hand dryers, including the XLERATOR and XLERATOReco product lines. Defendant Excel Dryer conducts substantial business in this District and throughout California.

III. JURISDICTION AND VENUE

12. This Court has subject matter jurisdiction under 28 U.S.C. § 1332 (diversity jurisdiction). Plaintiff is a citizen of Delaware and California. Defendant Dyson, Inc. is a citizen of Delaware. Defendant Excel Dryer, Inc. is a citizen of Massachusetts. Complete diversity exists among all parties. The amount in controversy exceeds \$75,000, exclusive of interest and costs.
13. This Court has personal jurisdiction over Defendants. Defendants conduct substantial business in California, have purposefully availed themselves of the privilege of conducting business in this state, and have specifically targeted

California consumers and businesses with their products and marketing. Plaintiff's claims arise from Defendants' business activities in California.

14. Venue is proper in this District under 28 U.S.C. § 1391(b). Plaintiff's principal place of business is located in this District. A substantial part of the events giving rise to Plaintiff's claims occurred in this District, including Plaintiff's receipt of Defendants' marketing materials, Plaintiff's purchasing decisions, and the installation and operation of Defendants' products.

IV. FACTUAL ALLEGATIONS

A. Defendants' Representations

15. Defendants marketed their hand dryer products with specific, quantified performance claims regarding drying time, hygiene, and environmental impact. These representations formed the basis of Plaintiff's purchasing decisions.

Dyson's Representations

16. Defendant Dyson represented in its marketing materials, product specifications, and website that its Airblade hand dryers achieve complete hand drying in 10 to 14 seconds to a residual moisture threshold of 0.1 grams, as measured under NSF Protocol P335.
17. Defendant Dyson represented that its products are "hygienic," "independently proven safe," and "help to create a cleaner, more hygienic washroom." Dyson's marketing materials state: "Dyson Airblade™ hand dryers have been independently proven to aerosolize no more than paper towels."
18. Defendant Dyson represented that its products provide environmental benefits, including reduced CO₂ emissions compared to paper towels, with carbon footprint claims "measured and verified by the Carbon Trust in accordance with ISO 14067."
19. Defendant Dyson represented that its HEPA filtration system captures 99.97% of particles and delivers "HEPA-purified air, not dirty air," implying hygienic operation.
20. Defendant Dyson explicitly represented awareness of the relationship between hand dryness and bacterial transfer. Dyson's marketing materials cite Patrick et al. on three separate occasions, stating: "Damp hands can spread up to 1,000 times more bacteria than dry hands." Dyson represented that its products address this concern through rapid, hygienic drying.

21. Defendant Dyson represented that its products were "the only hand dryer certified by the NSF International Protocol P335," invoking third-party certification as validation of its hygiene claims.
22. Defendant Dyson's marketing materials include a "Handwashing guide" described as "Adapted from WHO and CDC hand washing guidelines," with URLs to official WHO and CDC resources. Steps 1 through 9 accurately reproduce public health guidance. Step 10 inserts Dyson's false drying claims: "Dry hands hygienically with Dyson Airblade™ technology and HEPA-purified air" with specific model claims of 10 to 14 second drying times. This document appropriates public health authority to legitimize Defendants' commercial claims.
23. Defendant Dyson represented that its drying time claims were "determined using Dyson test method 769 based on NSF P335 to a measurement of 0.1g residual moisture." This representation explicitly identified the standard and threshold against which Dyson warranted its products would perform.

Excel Dryer's Representations

24. Defendant Excel Dryer represented in its marketing materials, product specifications, Environmental Product Declarations, and website that its XLERATOR hand dryers achieve complete hand drying in 8 seconds or less.
25. Defendant Excel Dryer represented "95% Cost Saving vs. Paper Towels" and "Up to 88% Reduction of Carbon Footprint vs. Paper Towels"—calculations predicated entirely on the claimed 8-second drying cycle.
26. Defendant Excel Dryer represented "> 80% Less Energy Than Conventional Hand Dryers," a comparison that assumes Excel's products achieve their claimed drying times.

27. Defendant Excel Dryer represented "Over a Decade of Proven Performance" and "Less Than 1% Failure Rate," implying reliable achievement of product specifications.
28. Defendant Excel Dryer marketed optional "Electrostatic HEPA (eHEPA®) Filtration" as a hygiene feature, representing that filtration addresses contamination concerns.
29. Defendant Excel Dryer obtained and marketed Environmental Product Declarations certifying 8-second drying times and corresponding energy consumption of 3.680 watt-hours per use. These declarations were presented to purchasers as third-party validated performance specifications.
30. Defendant Excel Dryer represented that its products were tested to a residual moisture threshold of 0.25 grams—a standard 2.5 times weaker than the NSF P335 threshold of 0.1 grams, though this distinction was not disclosed to purchasers.

B. The Transaction

31. Plaintiff operates more than 2,800 retail stores globally under the Old Navy, Gap, Banana Republic, and Athleta brands. Each store includes restroom facilities used by customers, employees, and visitors.
32. Plaintiff, through its facilities management and procurement functions, purchased hand dryers manufactured by Defendants for installation in restrooms at its retail locations. Old Navy locations predominantly utilize Defendant Dyson's Airblade V model. At least one Old Navy location utilizes Defendant Excel Dryer's XLERATOR model.
33. Plaintiff's purchasing decisions were made in reliance on Defendants' representations regarding drying time, hygiene, cost savings, and environmental benefits. Plaintiff selected Defendants' products over alternatives, including paper towel dispensers, based on these representations.

34. Plaintiff paid substantial sums—ranging from approximately \$500 to \$2,000 per unit depending on model and configuration—for products warranted to perform specific functions. Plaintiff incurred additional costs for installation, electrical work, and integration into restroom facilities.

35. Plaintiff purchased Defendants' products through authorized distribution channels. Defendants marketed their products directly to retail facilities including Plaintiff, provided marketing materials and representations directly to Plaintiff's decision-makers, and specifically targeted large retail operations for adoption of their products. Defendants' express representations regarding hygiene, drying time, and environmental benefits were directed to Plaintiff as the ultimate purchaser and end user, and were intended to induce Plaintiff's purchase decisions regardless of the distribution channel.

C. The Science: Exposed Performance Failures

36. The performance failures alleged herein are documented in an eleven-study research program conducted between August 2023 and December 2025, comprising approximately 1,500 individual measurements across more than 200 retail locations. The research is archived with registered DOIs through Zenodo and Harvard Dataverse, with complete chain-of-custody documentation comprising 1.3 terabytes across approximately 13,000 files available for independent verification.

37. These are not "studies that suggest" or "evidence that indicates." These are physical facts established to scientific certainty.

Finding 1: Drying Time Failure (0% Compliance)

38. Independent testing of 460 hand dryer trials across three manufacturers—Dyson, Excel Dryer (XLERATOR), and World Dryer—established universal failure to achieve claimed drying times. Zero of 460 trials achieved manufacturer specifications at claimed times. The failure rate is 100%. (Blouch, R.A. Jr. (2025), "Catastrophic Time-To-Dry Failures by Dyson, Excel and World Dryer Hand Dryers via the Bi-Modal Loose Water and Bound Water Mechanism," DOI: 10.5281/zenodo.17869567)

39. Defendant Dyson claims its Airblade V achieves 0.1 grams residual moisture at 12 seconds. Actual measured residual moisture at 12 seconds: mean 2.29 grams—2,190% above the claimed threshold. The best-performing Dyson unit tested left 1.80 grams residual moisture, still 1,700% above specification.

40. Defendant Excel Dryer claims its XLERATOR achieves 0.25 grams residual moisture at 8 seconds. Actual measured residual moisture at 8 seconds: mean 2.87 to 3.02 grams—1,048% to 1,108% above the claimed threshold.

41. Statistical analysis confirms the finding is not measurement error: $t(20) = 22.91$, $p < 0.001$, Cohen's $d = 5.00$. This effect size indicates the discrepancy between claimed and actual performance is not marginal but categorical.

42. Actual time to achieve manufacturer-specified dryness thresholds: 70 to 90 seconds—not 8 to 14 seconds. The discrepancy is 7 to 10 times. Defendant Dyson's Airblade V first achieved compliance with the 0.25-gram threshold at 80 seconds but never achieved consistent compliance with its own 0.1-gram specification at any tested interval through 105 seconds. Defendant Excel Dryer's XLERATOR Standard first achieved its 0.25-gram threshold at 50 seconds, with consistent compliance at 80 seconds.

Finding 2: Microbial Amplification (100% of Units)

43. Independent testing established that commercial hand dryers amplify microbial contamination in 100% of units tested. Of 136 valid paired tests comparing dryer output air to ambient room air, 136 showed higher organism counts in dryer output—a 100% amplification rate with zero reductions. The probability of this result under the null hypothesis (that dryers do not systematically amplify contamination) is $p < 10^{-41}$. (Blouch, R.A. Jr. (2025), "Transmission of Bacteria and Fungus via Dyson and Xlerator Hand Dryers," DOI: 10.5281/zenodo.15504115; validated in Blouch, R.A. Jr. (2025), "Validation of Hand Dryer Microbial Amplification Using Broad-Spectrum Growth Media," DOI: 10.5281/zenodo.17859894)

44. Median amplification: 49.6 times ambient air levels using LB agar; 110.5 times ambient using broad-spectrum TSA media. Ambient room air showed median 1 to 2 colony-forming units (CFU) per sample. Hand dryer output showed median 67 to 200 CFU per sample.

45. Defendants Dyson and Excel Dryer showed no significant difference in contamination amplification despite Dyson's HEPA filtration claims. Mann-Whitney comparison: $p = 0.803$. HEPA filtration of intake air provides zero demonstrated hygiene benefit because contamination originates downstream—from water dispersed off users' hands and from biofilm accumulation within the device.

46. Brand-new dryers in a pristine newly-constructed facility with zero detectable ambient contamination immediately produced 45 CFU per sample, establishing that contamination is inherent to operation rather than attributable to age or maintenance.
47. Diversity analysis revealed dryer output contained 6 to 10 morphotypes versus 2 to 3 in ambient air, with diversity exceeding ambient in 100% of tests. Hand dryers contribute organisms not present in the surrounding environment—they do not merely concentrate room air.

Finding 3: Water Dispersal (7.3 Grams Per Use)

48. Patrick et al. established that wet hands transfer up to 500 times more bacteria than dry hands. Defendants' products leave hands wet at claimed drying times, creating the precise condition the research warns against—then amplify the contamination and disperse it throughout the room. (Blouch, R.A. Jr. (2025), "Visual Analysis of Water Dispersion Patterns During Hand Drying," DOI: 10.5281/zenodo.15503304)
49. Mean water mass on freshly washed hands: 6.85 grams (95% CI: 6.70 to 7.00 grams). This water must go somewhere during dryer operation. (Blouch, R.A. Jr. (2025), "Baseline Water Mass on Freshly Washed Hands," DOI: 10.5281/zenodo.17858834)
50. High-speed videography at 1,000 frames per second documented water dispersal patterns. Hand dryers produce dense clouds of visible droplets surrounding hands during operation, with droplets remaining airborne for three or more seconds and settling on walls, floors, fixtures, and users' clothing—forearms, torso, thighs, and faces.
51. Defendants' documentation contains zero statements addressing where water goes after air jets strike it. Excel Dryer's only comment in any reviewed materials: water "drips onto the floor, where it evaporates naturally." This is false. Water disperses

onto environmental surfaces where it does not evaporate but instead supports mold colonization.

52. At 150 million daily United States hand dryer uses, 7.3 grams of water dispersal per use equals 4.6 million cups of water sprayed into public restrooms daily—1.7 billion cups annually. Paper towels disperse effectively zero.

Finding 4: Mold Colonization (100% of Installations)

53. Visual audit of 127 public restrooms across six states, with paired microbiological sampling at all locations, established that dispersal-type hand dryers show visible wall mold in 100% of installations (50 of 50 dispersal-type units). Plumes averaged 10 square feet, originating narrow at the device (median 1.0 foot) and fanning outward toward the floor (median 3.0 feet), consistent with aerosol dispersion physics. (Blouch, R.A. Jr. (2025), "The Wandering Plume of Filth: A Randomized, Empirical Assessment of Visible Wall Contamination," DOI: 10.5281/zenodo.17860971)
54. Independent EPA-certified laboratory analysis (Hayes Microbial Consulting, EPA Laboratory ID: VA01419) confirmed fungal presence in 70% of wall plume samples: *Aspergillus*, *Penicillium*, *Alternaria*, *Cladosporium*, and *Chaetomium*—organisms documented to cause allergic reactions, hypersensitivity pneumonitis, and mycotoxin production.
55. Compare to white paper towel dispensers: 12.8% mold rate—an 7.8-fold difference ($\chi^2 = 72.0$, $p < 0.001$).
56. Every person entering a restroom with a dispersal-type hand dryer enters a space with confirmed mold colonization, regardless of whether that person uses the dryer.

Finding 5: Energy and Environmental Claim Invalidity

57. Every energy and environmental claim made by Defendants is predicated on drying times of 8 to 14 seconds. Because actual drying requires 70 to 90 seconds, these

claims are categorically false. (Blouch, R.A. Jr. (2025), "An Empirical Refutation of Green Energy Claims for Dyson and Xlerator Hand Dryers," DOI: 10.5281/zenodo.17859198)

58. Defendants claim 3 to 4 watt-hours and approximately 2 to 4 grams CO₂ per drying cycle. At empirically verified drying times, actual consumption is 25 to 37 watt-hours and 12 to 18 grams CO₂ per use—600% to 900% higher for energy and 500% to 800% higher for carbon emissions.
59. The claimed 85% to 90% CO₂ advantage over paper towels collapses entirely at actual drying times. Under conservative analysis, hand dryers and paper towels are statistically equivalent in carbon impact. Under comprehensive analysis accounting for primary energy and full lifecycle impacts, hand dryers are 2 to 3 times worse than paper towels.
60. Scaled nationally, the discrepancy represents 5.8 to 45 terawatt-hours of excess energy consumption and 2.85 to 20 million metric tons of excess CO₂ annually—equivalent to powering 550,000 to 4.3 million American homes.

Finding 6: Paper Towel Superiority

61. White paper towels eliminate all five problems identified in this Complaint. White paper towels are frequently sterile (55.6% showed zero colonies), tested as statistically indistinguishable from ambient air (Wilcoxon W = 312, p = 0.192), achieve hand drying in 10 to 15 seconds through absorption rather than dispersal, cause no microbial amplification, create no water dispersal onto walls or floors, and produce no mold colonization (12.8% versus 100% for dispersal-type dryers). The solution is simpler than the problem. (Blouch, R.A. Jr. (2025), "Bacterial and Fungal Contamination Assessment of Paper Towel Types," DOI: 10.5281/zenodo.15504144)

D. The Bimodal Mechanism: Why All Dryers Fail Identically

62. The 460-trial dataset revealed an extraordinary finding: correlation coefficients across different manufacturers exceeded $r = 0.99$. Different blade designs, different motor specifications, different air delivery systems—yet functionally identical drying curves. Dyson versus XLERATOR Standard: $r = 0.9996$. Dyson versus XLERATOR ECO: $r = 0.9995$. XLERATOR Standard versus ECO: $r = 0.9992$. World Dryer versus all others: $r > 0.99$.
63. This convergence has a physical explanation. Water on hands exists in two states with dramatically different resistance to removal:
64. **Loose Water (0 to 20 seconds):** Droplets, pooled water, and surface films held weakly by surface tension. This water strips rapidly under air shear—it is the dramatic visible spray, the water blown onto walls, floors, and clothing. Loose water accounts for 70% to 80% of water removed in the first 15% to 20% of total drying time. This is what Defendants measure, what certifiers test, and what marketing demonstrates.
65. **Bound Water (20+ seconds):** Water trapped in skin texture, cuticles, finger creases, and hair follicles by capillary action and molecular adhesion. This water resists mechanical shear regardless of air velocity. Bound water accounts for 20% to 30% of total water but requires 80% to 85% of total drying time to remove. Physics does not negotiate.
66. Defendants' specifications describe loose water removal while implying complete drying. When Defendant Excel Dryer claims "8-second dry time," it measures loose water removal—the point at which visible pooled water is gone. Users need bound water removal, which requires 70 to 90 seconds regardless of engineering approach.
67. The framework generated a pre-registered prediction: any third manufacturer would demonstrate the same convergence because bound water resistance cannot be

engineered around. This prediction was formally documented on December 4, 2025. Field testing of World Dryer VerdeDri units on December 5, 2025 confirmed the prediction—correlation coefficients exceeded $r = 0.99$ with both Dyson and Excel Dryer curves. Three manufacturers, three different engineering philosophies, effectively identical performance limitations. The joint probability of this convergence occurring by chance is $p < 0.000000001$.

68. The defect alleged herein is not a manufacturing flaw in particular units. The defect is the design itself. All dispersal-type hand dryers are physically incapable of achieving claimed performance because they cannot overcome bound water adhesion in claimed timeframes.

E. Timeliness

69. **Continuing Conduct.** Defendants' false representations are ongoing. The same drying time claims, hygiene representations, and environmental assertions appear on Defendants' current websites, in current marketing materials, and on current product packaging. Each sale made today repeats the misrepresentations. Defendants' false advertising continues to this day.

70. **Continuing Relationship.** Plaintiff has purchased replacement units, additional units for new store locations, and maintenance services in ongoing reliance on Defendants' representations. The commercial relationship between Plaintiff and Defendants is continuous.

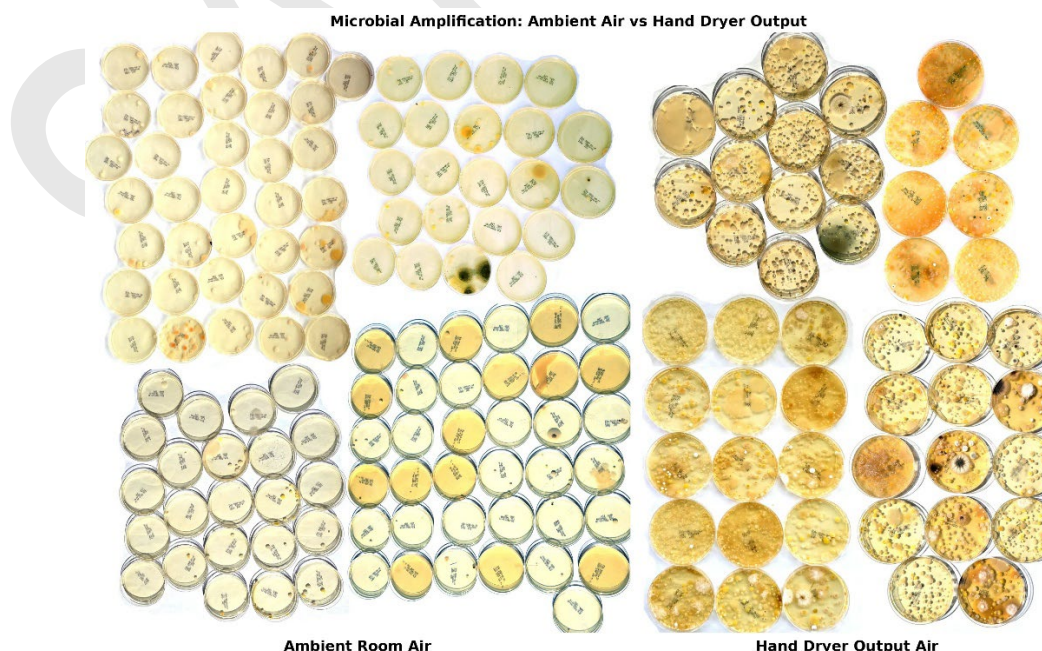
71. **Discovery Rule.** The scientific research establishing the specific nature and magnitude of Defendants' specification failures was conducted between 2023 and 2025. Prior to this research, the bimodal drying mechanism was not understood, the 7 to 10 times discrepancy between claimed and actual performance was not quantified, the 100% mold colonization rate was not documented, and the causal chain from water dispersal to wall contamination was not established with scientific precision. Plaintiff could not reasonably have discovered the full scope of

Defendants' misrepresentations until this research was published and disseminated.

72. Defendants' Superior Knowledge. Defendants possessed information and testing capabilities that would have revealed the falsity of their claims. Defendant Dyson's marketing materials state that "Dyson microbiologists sampled drain tanks and detected high levels of bacteria," establishing in-house microbiological testing capability. Defendant Dyson cites Patrick et al. three times in its marketing materials, establishing knowledge that wet hands pose hygiene risks—yet continued to sell products that leave hands wet at claimed times. Defendant Excel Dryer had four representatives on the committee that developed the UL Product Category Rules for hand dryers, with access to testing methodologies and performance data. Defendants' superior knowledge of product performance limitations tolls any applicable limitations period.

The Hypothetical

73. All aspects of hand dryer performance can be understood if you remove it from the room. Does a dryer improve or degrade the room by being there?



V. CAUSES OF ACTION

FIRST CAUSE OF ACTION

Breach of Express Warranty

(Against All Defendants)

74. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.

75. Defendants made express warranties regarding their hand dryer products.

Defendant Dyson expressly warranted that its Airblade products would dry hands in 10 to 14 seconds to a residual moisture threshold of 0.1 grams. Defendant Excel Dryer expressly warranted that its XLERATOR products would dry hands in 8 seconds or less to a threshold of 0.25 grams. Both Defendants expressly warranted that their products were hygienic and provided environmental benefits.

76. These express warranties were made in Defendants' marketing materials, product specifications, websites, Environmental Product Declarations, and communications directed to Plaintiff and other purchasers. The warranties were part of the basis of the bargain between Plaintiff and Defendants.

77. Defendants' products do not conform to these express warranties. Zero of 460 trials achieved claimed drying specifications. 100% of units tested amplified microbial contamination rather than providing hygienic operation. Energy consumption and carbon emissions are 600% to 900% higher than warranted.

78. Plaintiff provided Defendants with reasonable opportunity to cure. The nonconformity is incurable because it is inherent to product design rather than attributable to manufacturing defects or maintenance failures.

79. As a direct and proximate result of Defendants' breach of express warranty, Plaintiff has suffered damages including but not limited to the purchase price of

nonconforming products, installation costs, excess energy costs, property damage from water dispersal and mold colonization, and costs of remediation.

SECOND CAUSE OF ACTION

Breach of Implied Warranty of Merchantability

(Against All Defendants)

80. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.
81. Defendants are merchants with respect to hand dryer products. Defendants sold hand dryers to Plaintiff in the ordinary course of business.
82. Under California Commercial Code § 2314, a warranty of merchantability is implied in every sale by a merchant. To be merchantable, goods must be fit for the ordinary purposes for which such goods are used.
83. The ordinary purpose of a hand dryer is to dry hands. Defendants' products do not dry hands at claimed times. Devices that leave 2.29 to 3.02 grams of residual moisture at claimed drying times—when specifications require 0.1 to 0.25 grams—are not fit for the ordinary purpose of drying hands.
84. Defendants' products are further unfit for their ordinary purpose because they amplify microbial contamination by 49.6 to 110.5 times ambient levels, disperse water onto walls and floors causing property damage, and create mold colonization in 100% of installations. Products that degrade restroom hygiene are not fit for installation in restrooms.
85. As a direct and proximate result of Defendants' breach of the implied warranty of merchantability, Plaintiff has suffered damages.

THIRD CAUSE OF ACTION

Negligent Misrepresentation

(Against All Defendants)

86. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.

87. Defendants made representations of material fact regarding their products' drying time, hygiene performance, and environmental benefits. These representations were made in the course of Defendants' business and for the purpose of inducing Plaintiff and other purchasers to buy Defendants' products.

88. Defendants failed to exercise reasonable care in obtaining and communicating information regarding product performance. Defendants represented specific, quantified performance metrics—8 to 14 second drying times, 0.1 to 0.25 gram moisture thresholds, 85% to 95% cost and emissions reductions—without exercising reasonable care to verify that products would achieve these specifications under real-world conditions.

89. Defendants had access to information demonstrating the falsity of their claims:

90. Defendant Dyson possessed in-house microbiological testing capability, as evidenced by its marketing statement that "Dyson microbiologists sampled drain tanks and detected high levels of bacteria." Defendant Dyson cited Patrick et al. three times in marketing materials, establishing knowledge that wet hands pose hygiene risks. Reasonable testing would have revealed that Dyson products leave hands wet at claimed drying times.

91. Defendant Excel Dryer had four representatives serving on the committee that developed the UL Product Category Rules for hand dryers. The UL PCR contains a hypothetical drying curve used to illustrate calculation methodology. Defendant Excel Dryer obtained certifications based on 8-second drying claims that independent testing proves are physically impossible to achieve.

92. Plaintiff justifiably relied on Defendants' representations. Defendants held themselves out as experts in commercial hand drying technology. Defendants invoked third-party certifications and scientific studies to bolster their credibility. Plaintiff lacked the specialized knowledge to independently verify Defendants' technical claims and reasonably relied on Defendants' expertise.
93. As a direct and proximate result of Defendants' negligent misrepresentations, Plaintiff purchased products that do not perform as represented and has suffered damages.

FOURTH CAUSE OF ACTION

Products Liability—Design Defect

(Against All Defendants)

94. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.

95. Defendants designed, manufactured, and sold hand dryer products installed in Plaintiff's retail facilities.

96. The defect is the design itself, not a manufacturing flaw. All dispersal-type hand dryers share the same fundamental design characteristic: they attempt to remove water from hands by blowing it into the surrounding environment. This design is inherently defective because:

97. Under the consumer expectations test, Defendants' products do not perform as safely as an ordinary consumer would expect. Consumers expect hand dryers to dry hands within claimed timeframes and to operate hygienically. Defendants' products fail both expectations: they leave hands wet at claimed times (facilitating 500 times increased bacterial transfer) and amplify contamination by 49.6 to 110.5 times ambient levels while dispersing water onto walls, floors, and users.

98. Under the risk-utility test, the risks of Defendants' design outweigh its benefits. The risks include: (a) inadequate hand drying at claimed times, facilitating pathogen transfer; (b) microbial amplification exposing users to contamination 50 to 110 times ambient levels; (c) water dispersal causing property damage to walls, floors, and fixtures; (d) mold colonization in 100% of installations, creating ongoing health hazards and building damage; and (e) false environmental claims inducing environmentally-motivated purchasing decisions. These risks substantially outweigh any utility of the dispersal design.

99. A reasonable alternative design exists. White paper towels eliminate all five problems identified in this Complaint. White paper towels are frequently sterile (55.6% showed zero colonies), tested as statistically indistinguishable from ambient air ($p = 0.192$), achieve hand drying in 10 to 15 seconds through absorption rather than dispersal, cause no microbial amplification, create no water dispersal onto walls or floors, and produce no mold colonization (12.8% versus 100% for dispersal-type dryers). The solution is simpler than the problem.

100. The defective design was a substantial factor in causing harm to Plaintiff, including property damage distinct from the hand dryers themselves—specifically, damage to walls, floors, and fixtures from water dispersal and mold colonization requiring drywall replacement, repainting, tile repair, and fixture replacement.

FIFTH CAUSE OF ACTION

Products Liability—Failure to Warn

(Against All Defendants)

101. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.

102. Defendants' hand dryer products present risks that were known or knowable through reasonable testing:

- (a) That hands would not be dry at specified times, exposing users to 500 times increased bacterial transfer;
- (b) That water would disperse onto walls, floors, and users rather than evaporating;
- (c) That microbial contamination would be amplified by 50 to 110 times ambient levels;
- (d) That mold colonization would occur at the point of water dispersal;

(e) That users face increased pathogen transfer risk whether they leave early with wet hands or remain for extended periods exposed to amplified contamination.

103. Defendants failed to warn purchasers or users of these known or knowable risks. Defendants' marketing materials, product packaging, and user instructions contain no warnings regarding inadequate drying performance, contamination amplification, water dispersal, or mold colonization.

104. Defendants' failure to warn was a substantial factor in causing harm to Plaintiff. Had Plaintiff been warned of these risks, Plaintiff would not have purchased Defendants' products or would have taken measures to mitigate the harms.

SIXTH CAUSE OF ACTION

Violation of California Business and Professions Code § 17200

(Unfair Competition Law—Against All Defendants)

105. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.

106. California Business and Professions Code § 17200 prohibits unfair competition, including any unlawful, unfair, or fraudulent business act or practice and unfair, deceptive, untrue, or misleading advertising.

107. Defendants engaged in unlawful business practices by breaching express and implied warranties, negligently misrepresenting product performance, and selling defective products, as alleged herein.

108. Defendants engaged in unfair business practices by marketing products with performance claims that are physically impossible to achieve, by failing to disclose known product limitations, and by continuing to make false claims despite the availability of information demonstrating their falsity.

109. Defendants engaged in deceptive business practices by making specific, quantified performance representations—drying times of 8 to 14 seconds, moisture thresholds of 0.1 to 0.25 grams, cost savings of 95%, emissions reductions of 85% to 88%—that reasonable consumers would interpret as achievable product specifications, when in fact these specifications are never achieved in real-world operation.

110. As a direct and proximate result of Defendants' unfair competition, Plaintiff has suffered injury in fact and has lost money or property.

SEVENTH CAUSE OF ACTION

Violation of California Business and Professions Code § 17500

(False Advertising—Against All Defendants)

111. Plaintiff incorporates by reference all preceding paragraphs as though fully set forth herein.

112. California Business and Professions Code § 17500 prohibits disseminating any statement concerning property or services that is untrue or misleading, and which is known, or which by the exercise of reasonable care should be known, to be untrue or misleading.

113. Defendants disseminated advertising statements that are untrue or misleading, including but not limited to:

(f) Statements that Defendants' products dry hands in 8 to 14 seconds, when actual drying requires 70 to 90 seconds;

(g) Statements that Defendants' products are "hygienic" and create "cleaner" restrooms, when Defendants' products amplify contamination by 50 to 110 times and cause 100% mold colonization;

- (h) Statements that Defendants' products provide 85% to 95% cost savings and emissions reductions compared to paper towels, when these calculations are predicated on false drying time assumptions;
- (i) Statements invoking third-party certifications as validation of performance claims that are never achieved in real-world operation.

114. Defendants knew or should have known these statements were untrue or misleading. Defendants possessed testing capabilities, had access to performance data, and received information demonstrating the falsity of their claims, yet continued to disseminate false advertising.

115. As a direct and proximate result of Defendants' false advertising, Plaintiff has suffered injury in fact and has lost money or property.

VI. DAMAGES

116. As a direct and proximate result of Defendants' conduct, Plaintiff has suffered damages including but not limited to:

- (j) The purchase price of hand dryer units that do not perform as warranted;
- (k) Installation costs for defective products;
- (l) Excess electricity costs resulting from actual drying times of 70 to 90 seconds versus claimed times of 8 to 14 seconds—an increase of 600% to 900%;
- (m) The cost of repairing or replacing walls, floors, and fixtures damaged by water dispersal and mold colonization—property distinct from the hand dryers themselves—including drywall replacement, repainting, tile repair, grout replacement, and fixture replacement in restrooms where mold growth has compromised building materials;
- (n) Costs of mold remediation in affected facilities;
- (o) Costs of removing defective equipment and installing alternative hand drying solutions;
- (p) Loss of the benefit of the bargain—the difference between the value of products as warranted and the value of products as delivered;
- (q) Such other damages as may be proven at trial.

117. Plaintiff is further entitled to restitution and disgorgement of profits under California Business and Professions Code §§ 17200 and 17500.

118. Plaintiff is further entitled to injunctive relief ordering Defendants to cease making false and misleading representations regarding their products' performance.

VII. JURY DEMAND

119. Plaintiff demands a trial by jury on all issues so triable.

VIII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff Gap Inc. respectfully prays for judgment against Defendants Dyson, Inc. and Excel Dryer, Inc. as follows:

120. For compensatory damages in an amount to be proven at trial;

121. For restitution and disgorgement of Defendants' profits attributable to their unlawful conduct;

122. For injunctive relief ordering Defendants to cease making false and misleading representations regarding product performance;

123. For pre-judgment and post-judgment interest as allowed by law;

124. For costs of suit incurred herein;

125. For attorneys' fees as allowed by law; and

126. For such other and further relief as the Court deems just and proper.

Dated: _____

Respectfully submitted,

Attorney for Plaintiff Gap Inc.

[Attorney Name]

[State Bar No.]

[Firm Name]

[Address]

[Phone]

[Email]

EXHIBITS

Journal Preprints

[EXHIBIT-A] Transmission of Bacteria and Fungus via Dyson and Xlerator Hand Dryers, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15504115; Journal Preprint 1 of 11

[EXHIBIT-B] Testing the Validity of Hand Dryer Drying Time Specifications, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15503698; Journal Preprint 2 of 11

[EXHIBIT-C] Visual Analysis of Water Dispersion Patterns, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15503304; Journal Preprint 3 of 11

[EXHIBIT-D] Bacterial and Fungal Contamination Assessment of Paper Towel Types, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15504144; Journal Preprint 4 of 11

[EXHIBIT-E] Systematic Performance Failure in Commercial Hand Dryers, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17858443; Journal Preprint 5 of 11

[EXHIBIT-F] Baseline Water Mass on Freshly Washed Hands, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17858834; Journal Preprint 6 of 11

[EXHIBIT-G] An Empirical Refutation of Green Energy Claims, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17859198; Journal Preprint 7 of 11

[EXHIBIT-H] Catastrophic Time-To-Dry Failures via Bi-Modal Mechanism, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17869567; Journal Preprint 8 of 11

[EXHIBIT-I] Validation of Hand Dryer Microbial Amplification, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17859894; Journal Preprint 9 of 11

[EXHIBIT-J] The Wandering Plume of Filth, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17860971; Journal Preprint 10 of 11

Complete List of Testing Data Files

[EXHIBIT-K] Complete Data File Index, Blouch 2025

Dryer Time Test Results Graphs

[EXHIBIT L] Comprehensive All-Trials Time-To-Dry Hand Dryer Data Graph

Petri Dish Images

[EXHIBIT-M] 136 Ambient Room Air Petri Dish Images Sampled In Front of Machines, Blouch, R. A. Jr. (2025)

[EXHIBIT-N] 60 Hand Dryer Output Air Jet Petri Dish Sample Images, Blouch, R. A. Jr. (2025)

[EXHIBIT-O] 28 Brown Paper Towel Petri Dish Sample Images, Blouch, R. A. Jr. (2025)

[EXHIBIT-P] 47 White Paper Towel Petri Dish Sample Images, Blouch, R. A. Jr. (2025)

Plume of Filth Images

[EXHIBIT-Q] Hand Dryer Plume of Filth Images

[EXHIBIT-R] Hand Dryer Mold Images with Corroborating Petri Dish Test Images

Comprehensive summary articles

[EXHIBIT-S] Comprehensive Hand Washing and Hand Drying Efficacy Studies, 59, AI, (December 2025)

[EXHIBIT-T] Comprehensive Functioning Hand Dryer Output Air Studies, 18, AI, (December 2025)

Lab Testing

[EXHIBIT-U] Hayes Microbial Consulting Report (EPA Laboratory ID: VA01419)

Evidence of Plaintiff Exposure

[EXHIBIT-V] Evidence of Plaintiff Exposure — Starbucks Rewards History + M&T Bank Statements

Standards documents

[EXHIBIT-W] UL PCR for Hand Dryers (July 13, 2016)

[EXHIBIT-X] NSF Protocol P335: Hygienic Commercial Hand Dryers (April 2007)

[EXHIBIT-Y] ISO 14025 Environmental Standards Principles and Procedures

[EXHIBIT-Z] ISO 14044 Life Cycle Assessment Requirements and Guidelines

Certifications

[EXHIBIT-AA] Smart EPD Certificate SmartEPD-2023-002-0006-01 (XLERATOR)

[EXHIBIT-BB] SGS Performance Test Report No. 2774929EFF-001 (Sept. 7, 2012)

[EXHIBIT-CC] UL Environment EPD No. 4787137936.102.1 — XLERATOR Hand Dryer certification; July 25, 2017

[EXHIBIT-DD] UL Environment EPD No. 4787616201.106.1 — Hokwang 2200 Hand Dryer certification; April 1 2022

[EXHIBIT-EE] TrueNorth Collective LCA (May 2023): Comparative Life Cycle Assessment of Hand Drying Systems: Excel Hand Dryers and Paper Towel Systems

[EXHIBIT-FF] MIT Materials Systems Laboratory Lifecycle Assessment — Document 6-1, September 2011.

[EXHIBIT-GG] NSF P335 Dyson Certified Live Listing 251231

[EXHIBIT-HH] XLERATOR LEED v4.1 Document

[EXHIBIT-II] DYSON LEED May 2014 Document

Collusion Network Structures

[EXHIBIT-JJ] Personnel and Committee Connections Master Reference Document

[EXHIBIT-KK] Standards and Certification Chronology UL to Smart EPD, Lasso, Blouch 2025

Defendant Source Documents

[EXHIBIT-LL] Anna Lasso, The First Sustainable Hand Dryer, Excel UK Website December 2025

Journalistic Industry Analysis and History

[EXHIBIT-MM] Hand dryers v paper towels, The Guardian_files, The Guardian, 25 April, 2019

Excel V Dyson Court Documents — Case_3:12-cv-30211-MAP_(D._Mass.)

[EXHIBIT-NN] Excel V Dyson Original Complaint, PACER

[EXHIBIT-OO] Denis Gagnon Affidavit Excel V Dyson, PACER

[EXHIBIT-PP] Toby Saville Affidavit Excel V Dyson, PACER

[EXHIBIT-PP-A] Toby Saville Claimed Dry Times Versus Ron Blouch Data, a Detailed Comparison

[EXHIBIT-QQ] Dyson's Answer, Statement of Defenses, and Counterclaims — Document filed February 22, 2013.

[EXHIBIT-RR] Defendant Dyson, Inc.'s Memorandum of Law in Opposition to Plaintiff Excel Dryer, Inc.'s Motion for Preliminary Injunction

[EXHIBIT-SS] Excel Reply to Dyson Opposition — Document 32, Filed February 4, 2013; includes Second Declaration of Denis Gagnon (Document 32-1)

[EXHIBIT-TT] MIT-QUANTIS Letter in response to dry time testing conflicts, 17 October 2012

[EXHIBIT-UU] Excel White Paper: “An Ultrafast, Comfortable Hand Dryer”

ITC Complaint

[EXHIBIT-VV] ITC COMPLAINT; Excel Dryer V Multiple Respondents, China; DN 3159; June 24, 2016

False Claims Summary Documents

[EXHIBIT-WW] False Advertising Claims Analysis Dyson

[EXHIBIT-XX] False Advertising Claims Analysis Excel

[EXHIBIT-YY] False Claims Analysis NSF with UL Supplemental Analysis

[EXHIBIT-ZZ] False Claims Supporting Screenshots and Document Images

Global Dryer Statistical Estimates

[EXHIBIT-AAA] US Dryer Use Estimates Annual and Per Use with microbe estimates, Blouch 2025

[EXHIBIT-BBB] US Dryer Use Estimates Annual and Per Use with energy estimates, Blouch 2025

[EXHIBIT-CCC] US Dryer Use Estimates Annual and Per Use with LEED estimates, Blouch 2025

Hokwang Dryer Product Sheets, UL

[EXHIBIT-DDD] Hokwang 2200W product sheet with UL certification, December 2025

[EXHIBIT-EEE] Hokwang high speed EcoHygiene product sheet without UL certification, December 2025

Journal Preprint

[EXHIBIT-FFF] Performance Failures in Commercial Hand Dryers: An Historical Synthesis and Sequential Summary Review of an Eleven-Study Research Program, Blouch, R. A. Jr. (2026); DOI: 10.5281/zenodo.18322481; Journal Preprint 11 of 11

[EXHIBIT-GGG] Dyson False Advertising Claims, Blouch 2025

[EXHIBIT-HHH] Excel False Advertising Claims, Blouch 2025

[EXHIBIT-III] NSF False advertising Claims, Blouch 2025

[EXHIBIT-JJJ] Screenshot False Advertising Claims Supporting Material

[EXHIBIT-KKK] Grand Central Terminal Excel Case Study

[EXHIBIT-LLL] US Green Building Council Excel Case Study

[EXHIBIT-MMM] Northwestern University Hospitals Excel Case Study

[EXHIBIT-NNN] Seabury Excel Case Study

[EXHIBIT-OOO] USDA Excel Case Study

[EXHIBIT-PPP] Dyson Energy Saving Signs

[EXHIBIT-QQQ] Excel Energy Savings Signs

[EXHIBIT-RRR] Gia AIRMID study

[EXHIBIT-SSS] Xlerator Hygiene Technical Data Sheet

[EXHIBIT-TTT] Unified Certifiers Civil Complaint, Blouch 2026

SAMPLE