

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of)	
)	
TK ACCESS SOLUTIONS CORP. f/k/a)	
THYSSENKRUPP ACCESS CORP.,)	
and)	CPSC DOCKET NO.: 21-1
)	
TK ELEVATOR CORP.)	
)	
Respondents.)	
)	

AMENDED COMPLAINT

Nature of the Proceedings

1. This is an administrative enforcement proceeding pursuant to Section 15 of the Consumer Product Safety Act (“CPSA”), as amended, 15 U.S.C. § 2064, for public notification and remedial action to protect the public from the substantial risks of injury presented by various models of residential elevators (“Elevators”), which were manufactured and distributed by TK Access Solutions, Corp., formerly known as thyssenkrupp Access Corp. (“TKAS”).

2. This proceeding is governed by the Rules of Practice for Adjudicative Proceedings before the Consumer Product Safety Commission (the “Commission”), 16 C.F.R. Part 1025.

Jurisdiction

3. This proceeding is instituted pursuant to the authority contained in Sections 15(c), (d), and (f) of the CPSA, 15 U.S.C. § 2064(c), (d), and (f).

Parties

4. Complaint Counsel consists of attorneys in the Division of Enforcement and

Litigation within the Office of Compliance and Field Operations representing the staff of the Commission. 16 C.F.R. § 1025.3(d). The Commission is an independent federal regulatory agency established pursuant to Section 4 of the CPSA, 15 U.S.C. § 2053.

5. TKAS is a Delaware corporation with its principal place of business in Missouri. TK Elevator Corp. (“TKE”) is a Delaware corporation with its principal place of business in Georgia. TKAS and TKE are collectively referred to as “Respondents” herein.

6. Upon information and belief, TKAS acquired Access Industries, Inc., a manufacturer of some of the Elevators, in or about 1999.

7. Upon information and belief, TKAS acquired National Wheel-O-Vator Company, Inc., a manufacturer of some of the Elevators, in or about 2008.

8. On or about January 31, 2013, ThyssenKrupp Access Manufacturing, LLC, a manufacturer of some of the Elevators, was merged into TKAS, with TKAS being the surviving entity.

9. Upon information and belief, TKE is the real corporate party in interest. TKAS and TKE are under common corporate control.

10. Upon information and belief, TKAS is undercapitalized and is funded by TKE.

11. Upon information and belief, TKAS’s assets are insufficient to meet its obligations to consumers to remedy its defective products.

12. Upon information and belief, TKAS and TKE (as the real corporate party in interest) are “manufacturer[s]” and “distributor[s]” of a “consumer product” that is “distribute[d] in commerce,” as those terms are defined in Sections 3(a)(5), (7), (8), and (11) of the CPSA, 15 U.S.C. § 2052(a)(5), (7), (8), and (11).

The Elevators

13. The Elevators are various models of residential elevators that were manufactured and/or distributed in U.S. commerce and offered for sale to consumers for their personal use in or around a permanent or temporary household or residence, school, in recreation or otherwise.

14. Upon information and belief, the Elevators include, but are not limited to, the following models: Chaparral, Destiny, LEV, LEV II, LEV II Builder, Rise, Volant, Windsor, Independence, and Flexi-Lift.

15. Upon information and belief, the Elevators were manufactured and distributed by Access Industries, Inc., formerly of Missouri; ThyssenKrupp Access Manufacturing, LLC and National Wheel-O-Vator Company, Inc., both formerly of Roanoke, Illinois; and by TKAS.

16. Upon information and belief, at least 16,872 Elevators were manufactured and distributed in U.S. commerce from 1996 through 2012.

17. Upon information and belief, an undetermined number of Elevators were manufactured and distributed in U.S. commerce through 2012.

18. Upon information and belief, most, if not all, of the Elevators were installed by third parties based upon guidance and instructions contained in materials provided by TKAS.

19. These materials include engineering drawings and instructional materials, including installation, design, and planning guides (collectively herein, "Installation Materials.").

20. Upon information and belief, the estimated price for a two-landing installation of the Elevators was between \$15,000 to \$25,000.

21. The Elevators have a passenger car that moves between the floors in an elevator shaft, or "hoistway."

22. Access to an Elevator is restricted at each floor by a hoistway door, which often

looks like a typical door installed in a consumer's residence.

23. Upon information and belief, when the Elevator is parked at a floor, the hoistway door is not locked from the exterior.

24. The Elevators also contain an interior door, the elevator car door, which is usually an accordion door or a scissor gate.

25. By design, accordion doors have v-shaped peaks and valleys that allow the door to collapse on one side of the car door and allow passengers to enter and exit the elevator.

26. This design leads to the creation of additional inches of space between the peak, which is closest to the hoistway door, and the valley, which is furthest away from the hoistway door.

27. Scissor gates are designed with metal grates and also collapse to the side of the car door to allow passengers to enter and exit the elevator.

28. Both accordion doors and scissor gates allow for deflection if pressure is exerted on the elevator car door.

29. Deflection creates additional space between the elevator car door and the hoistway door.

30. Upon information and belief, children 2-years-old and older can fit in the space between a hoistway and elevator car door if the space is greater than 4 inches.

31. The Elevators are commonly installed in homes, vacation rentals, and other premises where children are present.

The Entrapment Hazard Created by the Elevators

32. Children are likely to use an Elevator.

33. Children are likely to play in or around an Elevator.

34. Children can fit and become entrapped in the space between the hoistway door and the elevator car door when the space is greater than 4 inches (“Hazardous Space”).

35. Parents or caregivers are not likely to appreciate the danger posed by a Hazardous Space between the hoistway door and elevator car door.

36. When the elevator is not operating, children can open the unlocked hoistway door, step into the Hazardous Space between the hoistway door and elevator car door, and close the hoistway door behind them.

37. Hoistway doors are designed with interlock devices, which automatically lock when the Elevator is in operation.

38. If a child is in the Hazardous Space between the hoistway and elevator car doors, and the elevator is called to another floor, the hoistway door locks, trapping the child.

39. In such a situation, a child cannot escape because the hoistway door is locked.

40. In such a situation, a parent or caregiver will likely be unable to open the hoistway door to free the child while the elevator is in operation.

41. A child entrapped in the Hazardous Space between the hoistway door and the passenger car door when an elevator is in operation can suffer serious injury or death.

42. Upon information and belief, children as young as 2 and as old as 16 have become entrapped in the Hazardous Space between the hoistway door and the elevator car door.

The Elevator Defects

43. The Elevators are defective because they contain defects in the “contents, construction, finish, packaging, warnings, and/or instructions,” specifically through Respondent’s Installation Materials, and the Elevators contain design defects. *See* 16 C.F.R. § 1115.4.

44. The Installation Materials are defective because they direct, cause, or fail to adequately prevent installation of the Elevators in a manner that creates a Hazardous Space greater than 4 inches between the hoistway door and the elevator car door.

45. The head breadths of some children can be less than 5 inches.

46. Upon information and belief, because of these dimensions, children can fit in, and become entrapped between, the hoistway and elevator car doors.

47. Certain Installation Materials are defective because they do not contain specific instructions on how to measure the space between the hoistway door and elevator car door based on the elevator car door type (accordion or scissor).

48. Measuring to the valley versus the peak of an accordion elevator door can result in significant space variances, creating spaces much larger than 4 inches.

49. Installers using Installation Materials that do not specify how to measure are more likely to install the Elevators with a Hazardous Space because they are unlikely to appreciate the importance of minimizing the space between the hoistway door and elevator car door by measuring to the valley of the accordion door.

50. The Installation Materials that do contain specific instructions on how to measure the space do so in a manner that will create a Hazardous Space of greater than 4 inches.

51. Specifically, some of the Installation Materials affirmatively direct installers to measure the distance to the elevator car itself, the lead post of the car door, or the peak of the accordion door; all points that are inches closer to the hoistway door than the valley of the accordion door.

52. Thus, such direction makes it highly likely that installers will fail to measure to the valley of an accordion door—all but ensuring installation with a Hazardous Space of greater

than 4 inches.

53. The Installation Materials also are defective because they fail to state that these measurements are safety-critical and they fail to expressly warn about the entrapment hazard posed by the Hazardous Space.

54. The Installation Materials contain many fine print measurements; failure to identify the particular measurements as a critical safety element or identify the hazard means it is less likely that there will be strict adherence to these measurements, which may lead to the creation of a Hazardous Space.

55. The Installation Materials also are defective because they do not require the use of, or provide, a measurement tool.

56. Failure to require the use of or to provide a measurement tool to ensure precise measurements between the hoistway door and the elevator car door may lead to the creation of a Hazardous Space because installers may measure in a way to create such a space.

57. This is especially problematic when installing accordion doors, because of the additional space that can be created when measuring to the peaks of the doors and not the valleys.

58. Thus, failure to require the use of or provide a measuring tool may lead to installations where installers create a Hazardous Space by measuring to a part of the car door that would not minimize the space.

59. The Installation Materials also are defective because they fail to contain an elevator car door rigidity requirement to account for deflection of the elevator car door when minimal force is applied.

60. Deflection allows for the creation of an even larger Hazardous Space between the

hoistway and elevator car doors.

61. The larger space created by deflection allows older and larger children to push against the elevator car door and become entrapped in the Hazardous Space.

62. The Elevators also are defective because they fail to provide and require use of available safety features to mitigate against the hazard.

63. Upon information and belief, TKAS sold safety features to consumers as optional items.

64. Upon information and belief, none of the Elevators come with a required safety feature that prevents a child from becoming entrapped in the Hazardous Space when the Elevator is called to another floor.

65. The design of the Elevators allows the Elevators to move from floor to floor when a child is entrapped in the Hazardous Space, putting the child at risk of serious injury or death.

66. Upon information and belief, none of the Elevators come with a required safety feature that would prevent the Elevator from moving from floor to floor if a child is entrapped in the Hazardous Space.

67. Upon information and belief, the potential for a Hazardous Space to exist between the hoistway door and elevator car door is present on all Elevator models manufactured and distributed by TKAS.

68. Upon information and belief, the potential for the Elevators to operate and move from floor to floor even if a child is entrapped in the Hazardous Space is present on all Elevator models manufactured and distributed by TKAS.

Incidents Caused by the Defective Elevators

69. The defects associated with the Elevators have led to three incidents, including

the death of one child and serious and permanent injuries to another.

70. Upon information and belief, on or about December 24, 2010, a 3-year-old boy became entrapped in the Hazardous Space between the doors of a Destiny model elevator.

71. The elevator car door was an accordion door.

72. Upon information and belief, the child suffered a catastrophic brain injury when the Elevator moved between floors, and as a result, is permanently disabled.

73. The child will require constant care for the remainder of his life.

74. The Elevator was manufactured on or about September 28, 2007.

75. Upon information and belief, there were between 4.875 inches and 5 inches from the hoistway door to the peak of the accordion door, and 7.5 inches from the hoistway door to the valley of the accordion door.

76. TKAS's Installation Materials for this specific Elevator installation instructed the installer to measure 5 inches from the hoistway door to the "outside" or peak of the accordion gate.

77. Upon information and belief, on or about February 1, 2017, a 2-year-old boy died when he became entrapped in the Hazardous Space between the hoistway and accordion door of an LEV Elevator that was moving between floors.

78. Upon information and belief, the Elevator was manufactured on or about January 6, 2010.

79. Upon information and belief, on or about November 28, 2019, a 4-year-old child was entrapped in the Hazardous Space between the hoistway and accordion door of a Destiny Elevator.

80. Upon information and belief, while in the Hazardous Space, the child fell to the

basement and was pinned by the Elevator.

81. This Elevator was manufactured on or about May 4, 2000.

82. Upon information and belief, the space between the hoistway door and the elevator car sill was approximately 5 inches.

83. Upon information and belief, this child was deprived of oxygen for some period of time, was hospitalized as a result of the incident, and was later released.

TKAS's Knowledge of the Defects and the Hazard

84. Upon information and belief, TKAS knew of the deadly dangers of the Hazardous Space when it manufactured and distributed the Elevators.

85. Upon information and belief, on or about July 31, 2003, National Wheel-O-Vator Company, Inc. received an "Important Elevator Safety Information Bulletin" from the Otis Elevator Company.

86. Upon information and belief, this letter and a safety brochure that accompanied the letter, highlighted the importance of reducing the Hazardous Space by using space guards, which are safety devices that can be installed on the back of each hoistway door to eliminate some of the Hazardous Space.

87. The letter from Otis Elevator Company stated that, with space guards installed, "the likelihood of an entrapment between the door and gate and of serious injury or death is greatly reduced."

88. Upon information and belief, by 2006, members of the American Society for Mechanical Engineers A17 Residence Elevator Committee (the "Committee") publicly raised concerns regarding risks posed by the 5-inch space requirement between the hoistway door and the elevator car door found in the ASME A17.1 *Safety Code for Elevators and Escalators*.

89. Upon information and belief, various representatives for TKAS and National Wheel-O-Vator Company, Inc. participated in the Committee, including the task group manager for this issue, the vice chairman of the committee, and several other employees.

90. Upon information and belief, some Committee members noted that 5 inches between an elevator door and hoistway door could present an entrapment hazard.

91. Upon information and belief, the Committee also discussed the potential for measuring discrepancies between peaks and valleys of accordion doors.

92. Upon information and belief, the Committee also discussed the ability for accordion doors to be significantly more flexible due to deflection.

93. Upon information and belief, TKAS nevertheless made no changes to the Elevators or any Installation Materials.

94. Upon information and belief, in or about 2014, TKAS launched an information campaign, known as homeSAFE (Safety Awareness For Elevators).

95. Upon information and belief, as part of the homeSAFE campaign, TKAS offered space guards to consumers.

96. Upon information and belief, consumers were required to pay for 75% of the cost of each space guard.

97. Upon information and belief, purchasing space guards for multiple landings would cost consumers hundreds of dollars.

98. Upon information and belief, TKAS distributed approximately 422 total space guards.

99. As part of the homeSAFE campaign, on or about June 24, 2014, Respondent began recommending that “to help prevent child entrapments, make sure the space between the

hoistway door and the cab gate is no more than four inches . . . [and] taking measurements from the hoistway door to the back or rear post of the car gate.”

100. Upon information and belief, by the time that the homeSAFE campaign was launched, most, if not all, of TKAS’s Elevators would have already been installed with the defective Installation Materials that allowed for a Hazardous Space greater than 4 inches and did not recommend a precise measurement to the valley of the accordion door.

101. Upon information and belief, in or about 2018, TKAS stopped supporting the homeSAFE website.

102. Despite knowing for many years about the potential hazards associated with its Elevators, Respondent took no action to correct defects in its Installation Materials or its Elevators.

103. Because of TKAS’s inaction, two children were involved in incidents with Elevators manufactured after 2006; one child became permanently disabled in December 2010 and one child died in February 2017.

104. Further, two of the reported incidents occurred during or after Respondent’s homeSAFE campaign; the death of a child in February 2017 and the hospitalization of a child in November 2019.

The Substantial Risk of Injury Posed by the Elevators

105. Upon information and belief, children, a vulnerable population, have sustained grievous bodily injuries and death after becoming entrapped in the Hazardous Space between the hoistway door and the elevator car door on TKAS’s Elevators.

106. Upon information and belief, children are likely to interact with and playfully explore the Elevators, and it is foreseeable that children could become entrapped between the

hoistway and elevator car doors.

107. Parents and caregivers are not likely to know about or appreciate the safety hazard to children posed by the Hazardous Space between the hoistway and elevator car doors.

108. Once a child enters the Hazardous Space and the elevator is called to another floor, the child cannot escape.

109. If a child is in that Hazardous Space when the elevator is called to another floor, the child is at risk of crushing injuries that can prove fatal or permanently debilitating, such as massive head trauma, compression of the torso, broken bones, and other grievous bodily injuries.

110. Children can also suffer long term complications from being crushed or dragged by an Elevator.

111. A child in the Hazardous Space when the elevator is called to another floor is also at risk of falling into the elevator shaft and suffering serious or fatal injuries.

112. Upon information and belief, at least three children have become entrapped in the Hazardous Space due to the defects associated with the Elevators.

113. The defects present in the Elevators create a substantial risk of injury to children who are entrapped in the hazardous space between the hoistway and elevator car doors when the elevator is called to another floor.

114. Death, grievous bodily injuries, and serious injuries, as defined in 16 C.F.R. § 1115.6(c) and § 1115.12(d), are likely to occur and have occurred when children become entrapped in the Hazardous Space and the Elevator is called to another floor.

Legal Authority Under the CPSA

115. Under the CPSA, the Commission may order a firm to provide notice to the public and take remedial action if the Commission determines that a product “presents a

substantial product hazard.” 15 U.S.C. § 2064(c) and (d).

116. Under CPSA Section 15(a)(2), a “substantial product hazard” is “a product defect which (because of the pattern of defect, the number of defective products distributed in commerce, the severity of the risk, or otherwise) creates a substantial risk of injury to the public.” 15 U.S.C. § 2064(a)(2).

117. A product may contain a design defect even if it is manufactured exactly in accordance with its design and specifications if the design presents a risk of injury to the public. 16 C.F.R. § 1115.4.

118. A defect can also occur in a product's contents, construction, finish, packaging, warnings, and/or instructions.

119. A consumer product may contain a defect if the instructions for assembly or use could allow the product, otherwise safely designed and manufactured, to present a risk of injury. 16 C.F.R. § 1115.4.

Count I

The Elevators are a Substantial Product Hazard Because They Contain Defects That Create a Substantial Risk of Injury to the Public

120. Paragraphs 1 through 118 are hereby realleged and incorporated by reference as if fully set forth herein.

121. The Elevators are consumer products.

122. The Elevators contain defects because:

- a. the Installation Materials direct, cause, or fail to adequately prevent installation of the Elevators in a manner that creates a Hazardous Space between the hoistway door and elevator car doors in which children can become entrapped, including by failing to:

- i. contain adequate and correct instructions on how to measure the space between the hoistway door and elevator car door to avoid creating the Hazardous Space based on the elevator car door type;
 - ii. contain adequate instructions on how to avoid the creation of a larger Hazardous Space based on the deflection of the elevator car door;
 - iii. state that the measurement between the hoistway door and the elevator car door is safety-critical or expressly warn about the entrapment hazard; and
 - iv. require the use of, or provide, a measurement tool to ensure precise measurement and avoid the creation of a Hazardous Space.
- b. The design of the Elevators fails to require safety features that prevent a child from becoming entrapped in the Hazardous Space and that prevent the Elevator from moving between floors if a child is entrapped in the Hazardous Space.

123. These defects separately, and in combination, create a substantial risk of injury to the public because of the pattern of defect, the number of defective products distributed in commerce, the severity of the risk, or otherwise.

124. Therefore, the Elevators present a substantial product hazard within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2).

RELIEF SOUGHT

WHEREFORE, in the public interest, Complaint Counsel requests that the Commission:

A. Determine that the Elevators present a “substantial product hazard” within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2).

B. Determine that extensive and effective public notification under Section 15(c) of the CPSA, 15 U.S.C. § 2064(c), is required to adequately protect the public from the substantial product hazard presented by the Elevators, and order Respondents under Section 15(c) of the CPSA, 15 U.S.C. § 2064(c), to:

- (1) Notify all persons who distribute the Elevators, or to whom such Elevators have been sold or distributed, to immediately cease distribution of the Elevators;
- (2) Notify appropriate state and local public health officials;
- (3) Give prompt public notice of the defect in the Elevators, including the incidents and injuries associated with the use of the Elevators, including posting clear and conspicuous notice on Respondents' website(s), and providing notice to any third-party website on which Respondents have a presence, and provide further announcements in languages other than English and on radio, television, and social media;
- (4) Mail and email notice to each distributor, retailer, dealer and installer of the Elevators; and
- (5) Mail and email notice to every person to whom the Elevators were delivered or sold.

C. Determine that action under Section 15(d) of the CPSA, 15 U.S.C. § 2064(d), is in the public interest and additionally order Respondents to:

- (1) Repair the defect in the Elevators by providing a free inspection to consumers by a qualified inspector who will measure the gap between the hoistway and elevator doors;
- (2) Install, at no cost to consumers, a free space guard approved by

Commission staff that reduces the gap to no more than 4 inches;

(3) Make no charge to consumers, and to reimburse consumers, for any reasonable and foreseeable expenses incurred in availing themselves of any remedy provided under any Commission Order issued in this matter, as provided by Section 15(e)(1) of the CPSA, 15 U.S.C. § 2064(e)(1), including previous purchases of space guards or other safety devices, and all costs associated with those purchases, whether or not they were part of the homeSAFE campaign;

(4) Reimburse distributors, retailers, dealers, installers, and other third parties for expenses in connection with carrying out any Commission Order issued in this matter, including the costs of repairs or replacements, as provided by Section 15(e)(2) of the CPSA, 15 U.S.C. § 2064(e)(2);

(5) Submit a plan satisfactory to the Commission, within ten (10) days of service of the Final Order, directing that actions specified in Paragraphs B(1) through (5), and C(1) through (4) above be taken in a timely manner;

(6) Submit monthly reports, to the Commission, documenting the progress of the corrective action program;

(7) For a period of five (5) years after issuance of the Final Order in this matter, keep records of its actions taken to comply with Paragraphs B(1) through (5), C(1) through (4), above, and supply these records to the Commission for the purpose of monitoring compliance with the Final Order; and

(9) For a period of five (5) years after issuance of the Final Order in this matter, notify the Commission at least sixty (60) days prior to any change in its business (such as incorporation, dissolution, assignment, sale, or petition for

bankruptcy) that results in, or is intended to result in, the emergence of a successor corporation, going out of business, or any other change that might affect compliance obligations under a Final Order issued by the Commission in this matter.

D. Order that Respondents take other and further actions as the Commission deems necessary to protect the public health and safety and to comply with the CPSA.

ISSUED BY ORDER OF THE COMMISSION:

Dated this ____ day of February, 2022

By: Robert Kaye
Assistant Executive Director
Office of Compliance and Field Operations
(301) 504-6960

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

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TK ACCESS SOLUTIONS CORP. f/k/a)	
THYSSENKRUPP ACCESS CORP.,)	
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TK ELEVATOR CORP.)	
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Respondents.)	
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LIST AND SUMMARY OF DOCUMENTARY EVIDENCE

Pursuant to 16 C.F.R. § 1025.11(b)(3) of the Commission’s Rules of Practice for Adjudicative Proceedings, the following is a list and summary of documentary evidence supporting the charges in this matter. Complaint Counsel reserves the right to offer additional or different evidence during the course of the proceedings, or to withhold evidence on the basis of any applicable legal privileges.

1. Claims, complaints, records, reports, CPSC’s In-Depth Investigations, and lawsuits concerning incidents or injuries involving various models of residential elevators manufactured and distributed by Respondents (“Elevators”).
2. Engineering drawings and instructional materials, including installation, design, and planning guides (referred to as “Installation Materials”).
3. Design, manufacturing, distribution, warnings, instructions, and promotional materials associated with the Elevators.
4. CPSC Product Safety Assessments.
5. Correspondence between Respondents and CPSC staff related to the Elevators.

6. Documents and information related to the Elevators, including notices issued regarding the Elevators and similar products.
7. Documents and information related to Respondents's corporate structure and Respondents's acquisition of and merger with other manufacturers and distributors of the Elevators.

Dated this ____ day of February, 2022

Mary B. Murphy, Director
Gregory M. Reyes, Supervisory Attorney
Michael J. Rogal, Trial Attorney
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