ELEVATOR TYPES & CORE SYSTEMS

1. Home Lift

A <u>home lift</u> is a compact residential elevator designed to move people between floors safely and comfortably inside a house, offering accessibility and luxury without major construction.

2. Residential Elevator

A <u>residential elevator</u> is a private lift system installed within a home for seniors, family convenience, and multi-floor mobility, enhancing property value and lifestyle.

3. Vacuum Elevator

A <u>vacuum elevator</u> uses air pressure differences to move the cabin, eliminating cables, pit, and machine room, making it one of the most space-saving lifts for modern homes.

4. Pneumatic Lift

A <u>pneumatic lift</u> operates using controlled air pressure, creating smooth vertical travel with minimal power use and a clean, plug-and-play installation system.

5. Air-Driven Technology

Air-driven technology powers the lift using atmospheric pressure, ensuring silent operation, low maintenance, and energy-efficient movement ideal for residential use.

6. Vacuum Pump

A vacuum pump creates the suction needed to lift the cabin upward; it is the core component behind pneumatic elevator motion and efficiency.

7. Machine Room-Less Lift (MRL)

A Machine Room-Less lift has no external machine room, saving space and reducing construction work while keeping the motor inside the shaft system itself.

8. Pitless Elevator

A pitless elevator requires no deep pit at the bottom, making it perfect for existing homes, retrofits, and installations without major civil modifications.

9. Compact Home Lift

A <u>compact home lift</u> is a small-footprint elevator designed for tight spaces, offering smooth vertical mobility while fitting easily into modern and small homes.

NIBAV PRODUCT SERIES

10. Nibav Series III Standard

<u>Nibav Series III Standard</u> is a compact residential vacuum elevator designed for 2–3 floors, offering 360° panoramic visibility, low power use, and quick plug-and-play installation.

11. Nibay Series III Max

Nibav Series III Max is a larger cabin variant built for more comfort and space, ideal for wheelchair users and multi-level homes needing smooth mobility and accessibility.

12. Nibav Series IV Standard

<u>Nibav Series IV Standard</u> is an advanced home lift with upgraded technology, smoother movement, quieter operation, and a refined design suitable for premium home interiors.

13. Nibay Series IV Max

<u>Nibav Series IV Max</u> offers a more spacious cabin, luxury aesthetics, improved safety layers, and compatibility for up to 4 people or wheelchair accessibility with ease.

STRUCTURAL DESIGN & MATERIALS

14. Zero Pit

Zero Pit means the elevator requires no pit or deep foundation, allowing installation directly on existing floors without civil work.

15. Unbreakable Glass Made of Polycarbonate

Polycarbonate unbreakable glass is a high-strength transparent material offering 52x stronger durability than regular glass, ensuring safety with a premium panoramic look.

16. Self-Supported Lightweight Hybrid Shaft

A hybrid shaft is a lightweight, self-standing structure that doesn't rely on building walls, allowing installation anywhere inside the home.

17. Hybrid Shaft Construction

Hybrid shaft construction combines metal and polycarbonate for strength, stability, and noise reduction, ideal for modern residential elevators.

18. Self-Supporting Structure

A self-supporting structure means the elevator holds its own weight without wall support, reducing civil work and installation time.

19. Unicylinder Design

Unicylinder design features a single tube-style shaft that looks modern, saves space, and enhances aesthetic appeal in small home layouts.

20. Curved Designer Profile

A curved designer profile adds a sleek architectural flow to the elevator frame, enhancing style and blending with luxury interiors.

21. Cabin Base Cover Plates

Cabin base cover plates are decorative and protective elements that keep the base sealed, neat, and free from visible mechanical parts.

22. Ceiling Cover Plates

Ceiling cover plates provide a smooth finish to the cabin top, concealing hardware and enhancing the overall premium elevator design.

POWER & ENERGY EFFICIENCY

23. Single Phase Power Consumption

Single phase power consumption means the lift runs on a regular household electrical supply, eliminating the need for industrial power connections.

24. Zero Power While Descend

Zero Power While Descend means the lift uses no electricity when moving down, relying on gravity and air pressure for energy-saving operation.

25. Power Consumption

Power consumption refers to the total electricity the elevator uses during operation, with vacuum lifts known for low energy usage compared to hydraulic or traction systems.

26. Energy-Efficient Operation

Energy-efficient operation ensures the elevator consumes minimal electricity, making it cost-effective for daily usage in modern homes.

27. Voltage Requirement

Voltage requirement indicates the electrical input needed for installation and smooth operation, typically compatible with standard home supply.

INSTALLATION & CONSTRUCTION

28. CKD Kit (Completely Knocked Down)

A CKD kit means the elevator is delivered as pre-manufactured parts for easy on-site assembly, ensuring a fast, clean installation in homes.

29. Plug & Play Installation

Plug & Play installation allows the lift to be set up without heavy construction — simply assemble, connect power, and operate.

30. Retrofit Installation

Retrofit installation enables the lift to be added to an existing home without structural modifications, ideal for upgrades and ageing-in-place solutions.

31. Installation Timeline

The installation timeline is the total time required to set up the lift, typically shorter than that of traditional elevators due to prefabricated components.

32. Floor Cut-Out

Floor cut-out is the opening created between levels for elevator passage when internal shaft alignment is required.

33. Civil Work

Civil work includes basic modifications like cut-outs or alignment to place the lift—minimal for vacuum elevators compared to hydraulic models.

34. Hoistway

A hoistway is the vertical path where the elevator cabin travels; in vacuum lifts, it is built-in as a cylindrical structure.

35. Installation Handover

Installation handover is the completion stage where the lift is tested, verified, and officially handed over for homeowner use.

DIMENSIONS & CAPACITY

36. External Cylinder Diameter

External cylinder diameter refers to the total outer width of the lift's shaft, helping homeowners plan space allocation during installation.

37. Internal Cabin Diameter

Internal cabin diameter measures the usable space inside the elevator cabin, indicating comfort level and wheelchair fitment.

38. Cabin Height

Cabin height denotes the vertical space inside the lift cabin, impacting headroom and passenger comfort.

39. Travel Height

Travel height is the total vertical distance the elevator can move between the lowest and highest floor.

40. Maximum Stops

Maximum stops indicate the number of floors the lift can connect, typically suitable for multi-storey homes.

41. Clear Space Required

Clear space required is the minimum area needed to install the lift, helping designers plan layouts efficiently.

42. Headroom Requirement

Headroom requirement defines the minimum overhead clearance needed above the top floor for smooth installation.

43. Capacity

Capacity specifies the maximum weight the elevator can handle safely during operation.

44. No. of People Accommodated

This defines how many passengers can comfortably travel inside the cabin at once.

45. Wheelchair Compatibility

Wheelchair compatibility means the cabin is designed wide enough for wheelchair entry and movement.

46. Pit Depth Required

Pit depth required indicates how deep the base recess must be—vacuum lifts generally require zero or minimal pit.

SAFETY FEATURES & CERTIFICATIONS

47. Safety Layers

Safety layers are built-in protection mechanisms ensuring secure travel, preventing free-fall, and maintaining passenger safety at all times.

48. Certifications

Certifications are official quality approvals confirming the lift meets international safety and performance standards.

49. DC Powered Cabin

DC-powered cabin allows the lift to operate even during power fluctuations with smoother control and lower energy use.

50. Rapid Rescue Latch (RRL)

Rapid Rescue Latch ensures quick manual retrieval of passengers during unexpected power failure situations.

51. Dual HCC Brakes (Hardened Cross Compound)

Dual HCC brakes provide two-layer braking support for enhanced safety and controlled stopping.

52. Zero Sharp Edges Improving Safety

Zero sharp edges eliminate injury risks, making the lift safe for children and seniors.

53. AUX Battery to Power Light, Fan, Alarm and Phone

AUX battery powers essential cabin features during outages, ensuring comfort, ventilation, and communication.

54. Battery 2.0

Battery 2.0 is an upgraded emergency power backup that supports extended standby safety features longer.

55. Electric Door Lock for Safety Triangle

Electric door lock secures the cabin and landing doors, preventing accidental openings during operation.

56. Emergency Alarm

Emergency alarm allows passengers to signal assistance instantly in case of an unexpected situation.

57. Cabin Phone with GSM

A GSM cabin phone enables direct communication outside the lift for emergency support.

58. EEM (Electric, Electronic & Mechanical) Landing Door

EEM landing door uses a triple safety mechanism for advanced locking and impact-resistant performance.

59. Child Safety Switch

Child safety switch restricts unauthorized usage, preventing kids from operating the lift unsupervised.

60. Dual Cabin Door

Dual cabin door provides an extra layer of enclosure, increasing overall passenger safety.

61. Smart Overload Alert

Smart overload alert warns when weight exceeds cabin capacity to avoid lift strain or malfunction.

62. Emergency Descent

Emergency descent allows controlled lowering of the cabin to the nearest floor during power outages.

63. Fire Safety Compliance

Fire safety compliance ensures materials used resist heat and meet fire protection regulations.

64. Zero-Pit Entry

Zero-pit entry lets users walk directly into the cabin without steps, ideal for elderly or wheelchair users.

PERFORMANCE & OPERATION

65. Patented Fused Locking Technology (FLT)

FLT is a patented locking system that secures the cabin during travel, ensuring stability and preventing slippage.

66. PLL (Precision Landing Levers)

PLL ensures precise floor-level stopping, making entry and exit smooth without height mismatch.

67. Silent Main Board with Software Updates

A silent main board reduces electronic noise and supports periodic software updates for feature enhancements.

68. Error Logs with Usage History

Error logs store operational records and fault history for easier troubleshooting and maintenance.

69. Auto Return When Unused

Auto return moves the lift to the ground floor if idle, ensuring availability and safety readiness.

70. High Performance Seal – Carbon Edition

This carbon-based seal reduces friction and improves airtight elevator movement for smoother travel.

71. ROS (Return of Space)

ROS indicates how much usable area is saved because of the compact elevator design.

72. Suspension 2.0

Suspension 2.0 is an upgraded suspension system designed for quieter and vibration-free travel.

73. Motor 2.0

Motor 2.0 is a refined power system delivering efficient performance with less noise output.

74. Quiet 3.0

Quiet 3.0 indicates advanced sound reduction technology for near-silent elevator operation.

75. 30 lbs Weight Reduction

The elevator uses lightweight components, improving stability and reducing operational load.

76. Programmable Auto Return

Programmable auto return lets users set a preferred default floor for cabin resting.

77. Rated Speed

Rated speed is the maximum operational travel speed the lift achieves during movement.

78. Soft Start & Stop

Soft start & stop prevents jerks by gradually accelerating and decelerating the cabin.

79. Ride Smoothness

Ride smoothness reflects how stable and vibration-free the elevator experience feels.

80. Noise Level

Noise level measures operational sound, with vacuum lifts known for quiet performance.

DESIGN & AESTHETICS

81. 360° Panoramic Glass View

A 360° panoramic glass view offers complete visibility throughout travel, delivering a premium open-cabin experience.

82. No Connector Holes on the Shaft Joints

No connector holes ensure a seamless shaft finish that improves aesthetics and prevents dust accumulation.

83. Cylinder Joint Cover - Matching Designer Profile

Cylinder joint covers hide connection lines for a clean look that aligns perfectly with the lift's design profile.

84. Concealed Hinges

Concealed hinges keep door fittings invisible, enhancing the modern and sleek appearance of the cabin.

85. Concealed Sensors

Concealed sensors are built into the structure for a minimal design without visible wiring or hardware.

86. Cabin Colour Matching to Lift Colour

Cabin colour matching creates a uniform visual theme for a premium interior aesthetic.

87. Panoramic Frameless Aluminium Door

A frameless aluminium door provides wide visibility with a lightweight, durable, and stylish structure.

88. Door Handles Painted to Match Lift Colour

Colour-coated handles blend with the lift body, enhancing design continuity.

89. Zero Visible Screws on Shaft / Cabin & Doors

Zero visible screws keep surfaces clean, modern, and luxury-grade with no exposed mechanical parts.

90. No Visible Springs on Cabin Base

Spring-free visible design improves visual appeal and prevents cluttered mechanical exposure.

91. Largest Panoramic Cabin

A large panoramic cabin maximises interior visibility and space for a spacious travel feel.

92. Wireless Cabin

Wireless cabin operation reduces wiring inside the lift, improving aesthetics and simplifying maintenance access.

CUSTOMIZATION & COLOR OPTIONS

93. No. of Colours

Indicates how many colour options are available for exterior and cabin customisation to match home interiors.

94. Carpet Colours Available

Refers to the variety of carpet finishes homeowners can select for the cabin flooring.

95. Standard Colours

Standard colours are pre-defined finish options included without extra customisation cost.

96. Metallic Colours

Metallic colours offer premium glossy finishes with a reflective sheen for luxury aesthetics.

97. Textured Edition

Textured edition provides surface patterns that add depth and a modern designer feel to the lift.

98. Hydro Edition (Matte)

Hydro matte finish delivers a smooth, non-glossy appearance that creates a contemporary look.

99. Hydro Edition (Glossy)

Hydro glossy finish offers a reflective, shine-rich surface for a bold and luxurious visual appeal.

100. Leather Finishes

Leather finishes bring a premium interior touch by integrating soft, elegant cabin textures.

101. Standard Concealed Fan

A built-in hidden fan provides airflow without visible elements, preserving interior aesthetics.

102. Ambient Glow Light

Soft glow lighting enhances mood and visibility inside the cabin with a premium ambience.

103. Custom Built Engraving Inside Cabin

Custom engraving lets homeowners add personalised designs or branding for a unique lift interior.

104. Colour Adjustable Cabin Lights

Adjustable lighting allows users to change cabin light shades to suit the mood or décor.

105. Accent and Highlight LEDs

Accent LEDs add decorative highlights that elevate the visual appeal of the cabin.

106. Leather Wrapped Ceiling

Leather-wrapped ceiling adds a luxury finish, creating a high-end interior experience.

SMART TECHNOLOGY & CONNECTIVITY

107. Mobile App Connectivity

Mobile app connectivity allows users to monitor and control elevator functions remotely using a smartphone.

108. Alexa Integration

Alexa integration enables voice commands for operating the lift hands-free through smart home automation.

109. Al-Enabled Gesture Control

Gesture control uses AI recognition to operate the lift with hand movements, offering a touchless experience.

110. Automatic Live SOS

Automatic Live SOS sends real-time distress alerts during emergencies for quick assistance.

111. Full Touchscreen Control

A touchscreen panel inside the cabin provides intuitive one-touch operation for floor selection and settings.

INSTALLATION COMPONENTS

112. Built-In Head Unit

A built-in head unit means the motor and control system are integrated within the shaft top, saving space and reducing external machinery.

113. Split Head Unit

A split head unit divides components for flexible installation in low-ceiling areas or compact homes.

114. Wall Clearance Requirement

Wall clearance requirement defines the minimum distance needed between the lift and surrounding walls for safe installation.

115. Lift Footprint

Lift footprint refers to the total floor area occupied by the elevator base, helping plan space layout accurately.

116. 3 Axis Adjustable Door Hinges

3-axis adjustable hinges allow precise alignment of cabin doors for smooth opening, closing, and long-term performance.

OPTIONAL ACCESSORIES & UPGRADES

117. Foldable Cabin Chair

A foldable cabin chair provides seating inside the lift and can be folded to save space when not in use.

118. Handrail

A handrail offers added support for seniors and mobility-sensitive users during travel.

119. Earthquake Brackets

Earthquake brackets enhance shaft stability during vibrations or seismic activity for extra safety.

120. Cabin Base Cover Plates

Cabin base cover plates conceal mechanical parts at the base for a clean interior finish.

121. Ceiling Cover Plates

Ceiling cover plates hide hardware above the cabin, maintaining a premium look.

122. GRANDE

GRANDE refers to an expanded cabin upgrade option that offers more interior space and enhanced comfort.

123. Leather Wrapped Ceiling

Leather-wrapped ceiling adds luxury styling with soft, premium surface texture.

124. Ambient LED Mood Lighting

Mood lighting creates customizable colour glow effects inside the cabin for ambience and aesthetics.

MAINTENANCE & SERVICE

125. Annual Maintenance Contract (AMC)

AMC is a yearly service agreement ensuring regular inspection, lubrication, and optimal lift performance.

126. Preventive Maintenance

Preventive maintenance involves scheduled check-ups to avoid breakdowns and extend lift lifespan.

127. Remote Diagnostics

Remote diagnostics allow technicians to monitor system errors digitally and resolve issues faster.

128. Service Request Ticket

A service request ticket is raised by customers for support, repair, or technical assistance.

129. Service Part Replacement

Part replacement refers to swapping worn components to keep the lift functioning safely and smoothly.

OPERATIONAL CONTROLS & USER INTERFACE

130. Landing Call Button

A landing call button is placed on each floor to call the lift to that specific level.

131. Cabin Control Panel

The cabin control panel inside the elevator lets users select floors and manage basic operational functions.

132. Emergency Ventilation

Emergency ventilation ensures continuous airflow in the cabin during power cuts for passenger comfort and safety.

TECHNICAL SPECIFICATIONS

133. Isolation Pads

Isolation pads reduce vibration transfer to floors and walls, ensuring quieter and smoother lift operation.

134. Invisible Sensors

Invisible sensors are discreet safety detectors integrated into the structure to monitor motion and protect users without affecting aesthetics.

135. Springless Cabin Bottom

A springless cabin bottom eliminates conventional spring mechanisms for more stability and long-lasting structural reliability.

136. Motor Power Rating

Motor power rating indicates the electrical capacity required to run the elevator efficiently under load.

137. Circuit Breaker

A circuit breaker safeguards the lift system by cutting power automatically in case of overload or short circuit.

138. GLE Technology (Grease Less Elevator)

GLE means the lift operates without grease or heavy lubrication, ensuring cleaner operation and low maintenance.

HOME ARCHITECTURE & PLACEMENT

139. Multi-Storey Home

A multi-storey home refers to residences with two or more floors, ideal for installing home elevators to improve mobility.

140. Duplex House

A duplex house is a two-level home where home lifts enhance convenience, especially for seniors and families.

141. Villa Lift Installation

Villa installation refers to placing elevators in high-end homes, prioritizing luxury, accessibility, and design integration.

142. Balcony Cut-Out Lift Placement

Balcony cut-out placement means installing the lift through a floor opening near the balcony, saving interior space.

143. Living Room Placement

Living room placement installs the elevator centrally for easy access while adding a stylish interior feature.

REGULATORY COMPLIANCE & STANDARDS

144. TÜV NORD Certification

TÜV NORD certification verifies the elevator meets international safety and quality standards, ensuring reliable performance and compliance.

145. ISO 9001:2015 Certification

ISO 9001:2015 certification confirms that the lift manufacturer follows global quality management processes for consistent product excellence.

146. Accessibility Standards

Accessibility standards ensure the elevator design is suitable for seniors, disabled individuals, and wheelchair users, promoting safe and inclusive mobility.