

## XPRESS II DESIGN AND PLANNING GUIDE

Inclined platform lift for straight stairways



## Table of contents

Garaventa - the world's #1 choice for accessibility solutions.....	3
What is an Inclined Platform Lift?.....	4
Finishes.....	5
How it Works.....	5
Component Identification .....	6
Standard Platform Safety Features.....	7
Optional Platform Features .....	8
Drive System.....	9
Guide Rails.....	9
Call Stations.....	9
Additional Safety Options.....	10
Outdoor Applications.....	10
Attachment Methods .....	12
Pedestrian Grab Rail.....	13
Wall Height Requirement for Direct Mounting.....	15
Xpress II Loading Diagram.....	15
Typical Wiring Layout.....	16
Technical Reference of Standard Features .....	17

## **Garaventa - the world's #1 choice for accessibility solutions.**

Garaventa has been dedicated to developing safe and reliable accessibility solutions since 1978, and is now an industry leader worldwide. Years of hard work and an uncompromising commitment to quality have enabled us to perfect the internationally renowned Garaventa Stair-Lift. This same commitment has led Garaventa to develop the Xpress II inclined platform lift and the Genesis vertical platform lift.

Developed in 1998, the Genesis vertical platform lift incorporates state of the art features with elegant styling and quiet operation. The Genesis is available in a variety of models and configurations with many standard and optional features to choose from. With the development of the Genesis vertical platform lift, Garaventa has taken a significant step towards being able to solve most accessibility challenges for building owners.

In 1999 Garaventa introduced the Xpress II, the next generation inclined platform lift for straight stairways. The sleek and attractive Xpress II can be installed indoors or outdoors and is a cost-effective access solution.

Our expertise in providing accessibility solutions has enabled our design team to take on the most challenging access situations, and develop innovative solutions for schools, places of worship, offices, hotels, airports, subways and a wide range of public and private buildings around the world.

We have built our business on service. Please contact us and let us help solve your access challenges.



©2008 Garaventa Lift

As we are continuously improving our products, specifications outlined in this guide are subject to change without notice.

## **What is an Inclined Platform Lift?**

An inclined platform lift easily transports a passenger in a wheelchair or someone who has difficulty maneuvering stairs up and down a stairway. The lift can be operated independently or by an attendant with an attendant remote control (optional item). Compatible for indoor and outdoor applications, the **Garaventa Inclined Platform Lift** is a versatile, attractive and cost-effective accessibility solution.

### ***Why an Inclined Platform Lift?***

#### **No Building Renovations (Modifications)**

Inclined platform lifts fit easily into most stairways and do not require specially constructed hoist ways.

#### **Preserve Heritage Buildings**

Flexibility in design enables Garaventa's designers to adapt an inclined platform lift to virtually any building site with very little or no structural modifications. The availability of many colors and finishes ensures the lift will blend with its environment and preserve the look of a heritage building.

#### **Save Valuable Floor Space**

Building floor space, whether a business or a school is valuable. Inclined platform lifts utilize very little of this expensive commodity.

#### **Meet ADA Requirements**

Garaventa inclined platform lifts are approved in the ADA Accessibility Guidelines as a means to provide public building access when licensed for independent operation. They may also be used as an accessible means of egress when equipped with an auxiliary standby power system.

### ***Design Assistance***

With over 25 years of experience, Garaventa is willing and able to overcome almost any design challenge you face. Please call our Design Hot Line or email us with your accessibility challenge.

Phone:           1-800-663-6556  
                      1+604-594-0422

Email:           productinfo@garaventa.ca

## Finishes

### Standard Color

The Xpress II rails and loading ramps are made of champagne anodized aluminum. The non-aluminum components of the lift are finished in a durable polyester powder paint coating that is electrostatically applied and baked at 210° C (410° F). Garaventa's standard color, Satin Grey (fine textured), complements a variety of modern and traditional decors (color samples are available upon request). The conveyance cover is made of beige colored high quality ABS/PVC.

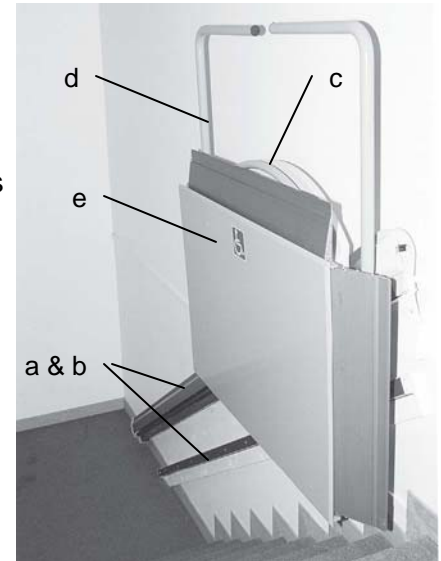
### Custom Colors (Optional)

Garaventa also offers a choice of colors from the internationally accepted RAL color charts (color samples are available upon request).

The following list of items will be powder coated to the specified color when a custom color is ordered (see picture on right):

- (a) upper and lower rails, (b) upper rail slot cover,
- (c) platform grab rail, (d) curved arms, (e) sensing plate,
- (f) call stations, (g) towers (if ordered),
- (h) pedestrian grab rail.

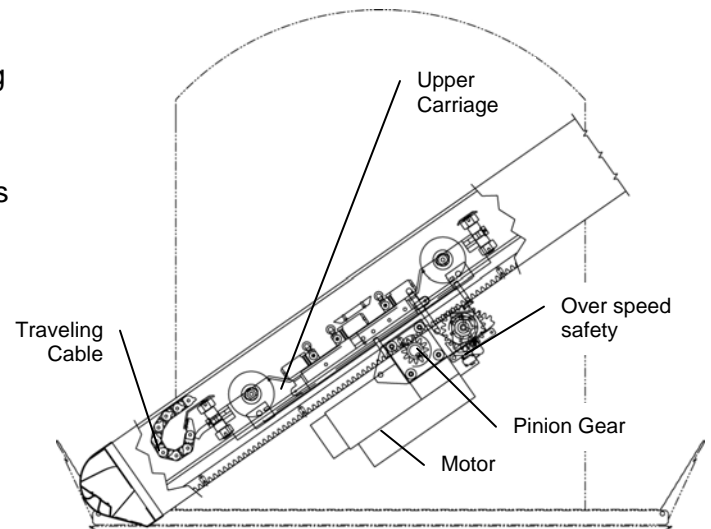
Optional paint finishes include brass and stainless effects.



**Custom Finishes**

## How it Works

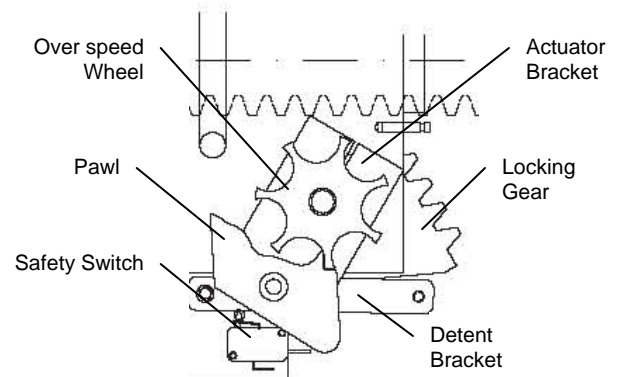
The platform of the Xpress II travels along two custom designed aluminum rails that can be mounted either directly to the wall or to support posts (towers). The upper rail houses a gear rack and a traveling cable while the lower rail provides lateral support. The platform is propelled by means of a carriage mounted rack and pinion drive system.



**Platform and Drive Systems**

### Over speed Safety

The Over speed Safety located in the upper carriage on the platform, consists of a mechanical pawl and electrical cutout switch. In the unlikely event that the lift should descend too quickly, both the mechanical and electrical safety will activate simultaneously and stop the platform from moving.

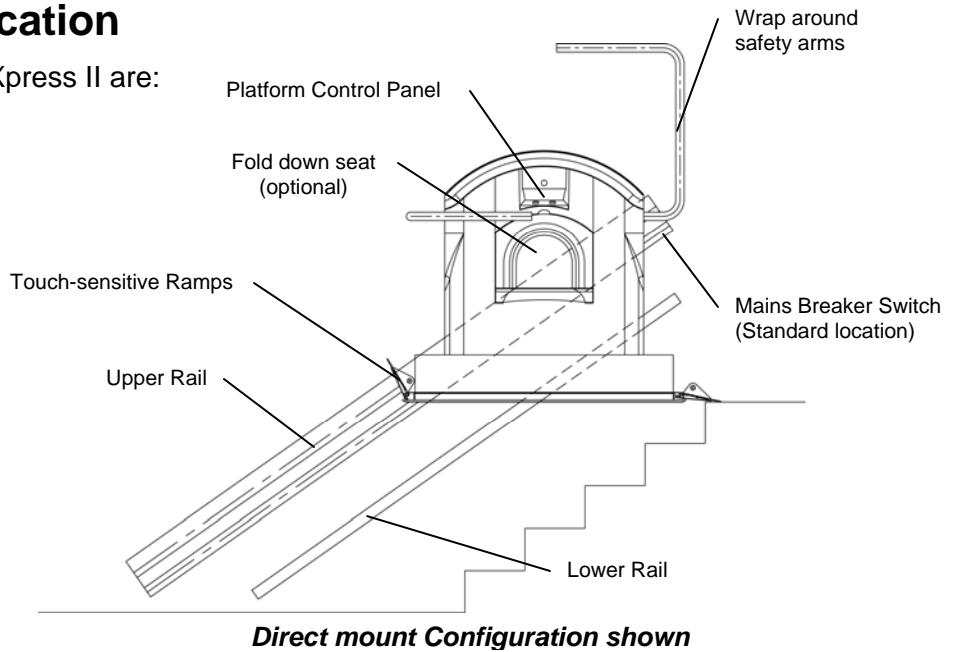


**Over speed Safety**

## Component Identification

The main components of the Xpress II are:

**Platform**  
**Drive**  
**Guide Tubes**  
**Call Stations**



## Platform

### Platform Sizes

The platform is available in three standard sizes, with a rated load of 225 kg. (495lbs.).

-800 x 1220mm (31 1/2" x 48")

-800 x 1000mm (31 1/2" x 39 3/8")

-750 x 900mm (29 1/2" x 35 1/2")

For narrower staircases 2 optional platforms are available:

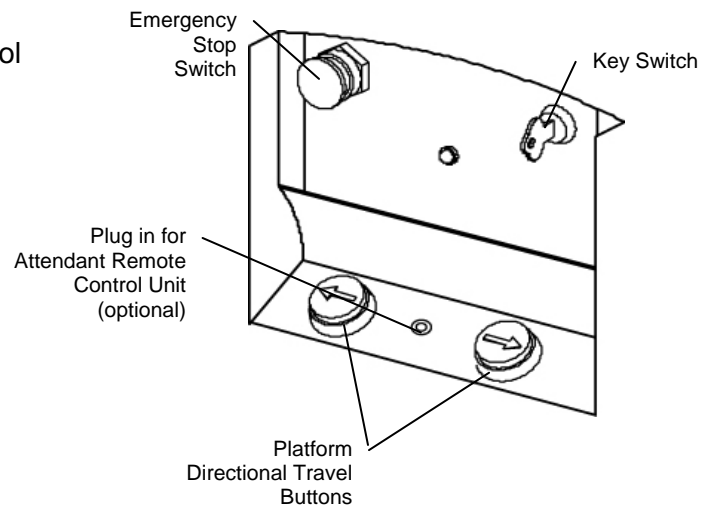
-725 x 1000mm (28 1/2" x 39 3/8")

-675 x 1000mm (26 1/2" x 39 3/8")

*\*Curved safety arms not available on 675 x 1000mm platform, powered straight arms can be provided.*

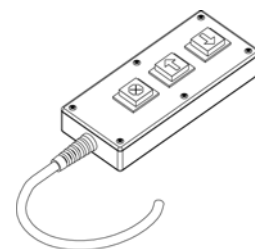
### Platform Controls

The durable and vandal resistant platform control panel is mounted to the platform hanger. The standard platform controls consist of two large illuminated Directional Buttons for independent operation and an Emergency Stop Button (with illumination optional).



### Attendant Remote Control Unit

The platform can be equipped with an optional **Attendant Remote Control** that overrides the **Directional Buttons** during attendant operation. The remote control unit can be removed when not required.



## Standard Platform Safety Features

### ***Emergency Stop Button***

Located on the platform control panel, this large red button is used to stop the lift in an emergency (an illuminated stop button with alarm is also available).

### ***Safety Sensing***

The platform is equipped with safety sensors listed below. These sensors will automatically stop the lift when activated by 1.8 kg (4 lbs.) of pressure. The platform can then be backed away from the obstruction allowing the object to be removed.

### ***Leading Ramp Sensor***

When the platform is called to or from the landing area in the folded up position the leading ramp is sensitive to obstructions.

### ***Under Platform Sensing Plate***

The under platform sensing plate detects obstacles underneath the platform.

### ***Bi-Directional Ramp Sensing***

The ramps are designed to be obstruction sensitive in the direction of travel on the outside of the ramps as well as from within the platform. The internal ramp sensor prevents a wheelchair from being off-center on the platform deck.

### ***Platform Grab Rail***

This safety feature increases the ease with which passengers may load and unload from the platform.

### ***Emergency Fold***

In an emergency the platform is able to be manually folded and will lock in the folded position.

### ***Curved Safety Arms***

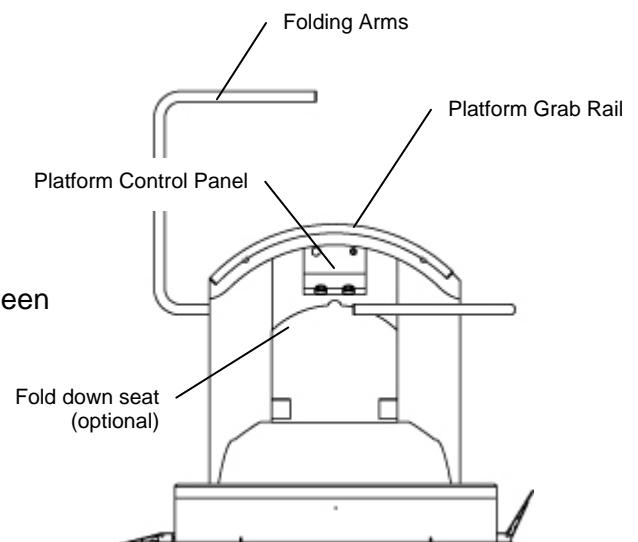
Fully automatic curved safety arms are available to further increase the safety of the Xpress II inclined platform lift.

### ***Hour Counter***

The hour counter enables the owner to determine the amount of time the Xpress II inclined platform lift has been used. This is a helpful tool in determining times for preventive maintenance.

### ***Keyless Platform***

The platform comes standard without key.



### ***Manual Emergency Lowering***

Included in standard offer: Lowering hand wheel, allowing the user to lower the platform in case of an emergency

## **Optional Platform Features**

### ***Folding Seat Assembly***

Designed for use by semi-ambulatory passengers, the folding seat is equipped with a safety belt.

### ***Side Load***

Designed for confined lower landing areas, this feature opens a side ramp simultaneously with the end ramp. This allows the passenger to wheel onto the platform diagonally offering easier access.

### ***Auto Fold***

This feature will allow the lift to automatically fold, if left unattended for a period of time at a landing. This ensures the stairway remains clear in the event someone forgets to fold the lift. The time delay is adjustable in the field by an authorized Garaventa technician.

### ***Emergency Battery Lowering***

During a power outage this feature allows the lift to be lowered to the bottom landing. The Battery Lowering System is located on the lift inside the platform.

### ***Illuminated Emergency Stop Button and Alarm***

The emergency stop button can be illuminated and activate an onboard alarm when required by code.

### ***Change of Direction Time Delay Kit***

In applications where a time delay is required when changing directions, either by code or user preference, the lift can be equipped with a variable time delay.

### ***Keyed platform***

For additional protection against unauthorized usage.

### ***Platform lock***

An additional safety feature that locks the platform and protects the unit from vandalism.

*Note: In some areas certain optional features are either not permitted or mandatory depending on local codes. Please consult your local Garaventa representative for clarification*

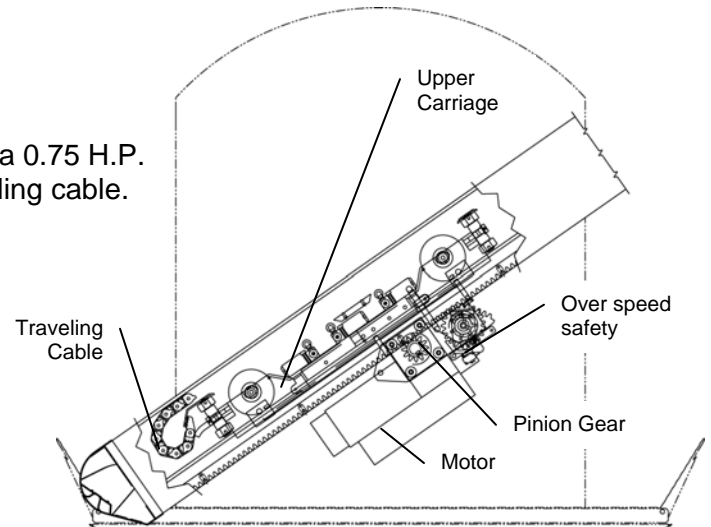


## Drive System

The carriage mounted drive system consists of a 0.75 H.P. motor, a gearbox, pinion gear and flexible traveling cable.

## Mains Power

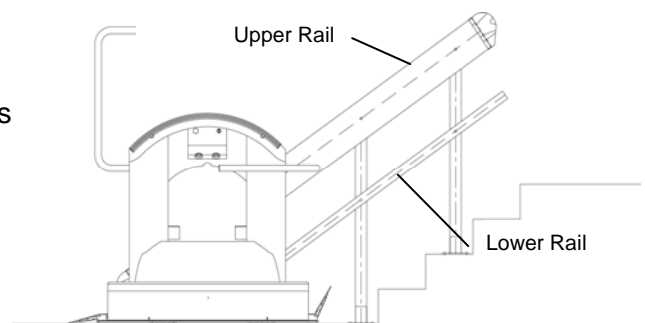
The mains power requirement is 208 to 240VAC, single phase, on a dedicated circuit (North America: 20 ampere, Europe: 16 ampere). A lockable supplementary mains disconnect switch is mounted at the end of the upper rail.



**Platform and Drive System**

## Guide Rails

Two aluminum extrusions make up the guide rail assembly. The upper rail houses the rack that the platform's pinion gear utilizes for travel. The platform is mechanically attached to this upper rail. The lower rail is used as a guide track for the rollers of the lower carriage assembly. The upper and lower rail heights are based on the stair angle and the platform size. For more information on rail heights see page 14.



## Call Stations

Each landing is equipped with a call station. The call station enables the user to unfold the platform with a touch of a button. If the platform is not at their landing the user simply presses the directional button to bring the platform to their landing.

## Call Station Options

To meet customer or code requirements an optional Emergency Stop Button and an Attendant Call Switch can be added to the call station.

## Keyless (adjustable in field)

This feature allows the user to operate the lift without a key. The standard key switches on the call stations are removed and plugged.

## Call with Platform Open (adjustable in field)

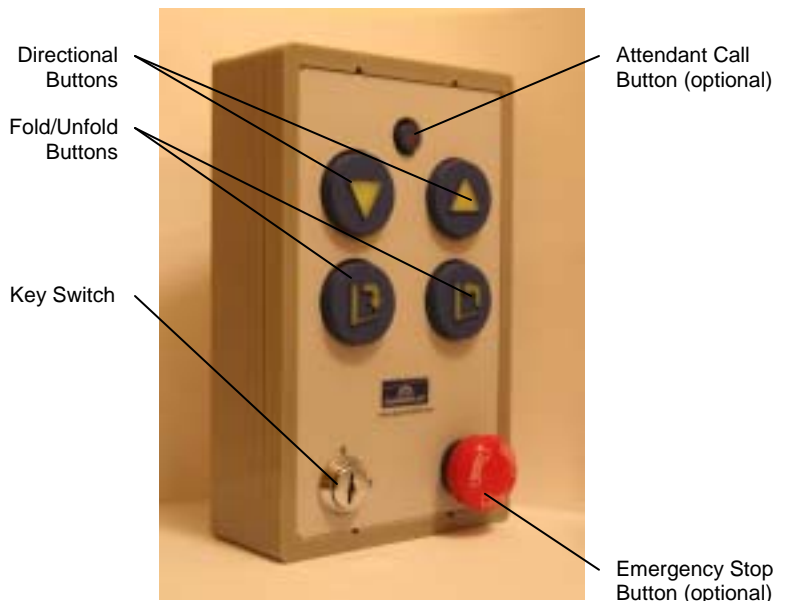
This option is typically used when the lift can not be called from a call station due to overhead clearance issues. With this option, the lift travels with the arms in the horizontal position and platform folded down only. This option can be enabled by a jumper setting on site, an appropriate label (#37033) has to be ordered, which is replacing the regular "operating instructions" manual.

## Remote Platform Fold

This feature allows the platform to be folded up from any call station should the platform be left folded down.

## Mounting Options

The call stations can be mounted on the wall (surface or flush mounted). Flush mount call stations can be pre-wired during the construction or building renovations resulting in a cleaner appearance with no surface wiring. The optional flush call station box dimensions are Length: 185 mm (7 ¼"), Width: 115 mm (4 ½") and Depth: 52 mm (2")



## Additional Safety Options

The Xpress II can be equipped with a number of additional safety features:

### Audio Visual Alert

When the lift is in use, a wall mounted strobe light and audible chime cautions pedestrians in the vicinity that the lift is in operation. The volume of the audible chime can be adjusted on site.

### Fire Alarm Integration (Fire Service)

Designed to interface with a building's fire safety system and interrupt power to the lift when the fire alarm sounds. This ensures the lift will not obstruct stairway traffic during evacuation. If the lift is in use when the alarm sounds, the lift will only allow the passenger to use the constant pressure direction button to travel to the designated landing with the emergency exit.

### Auxiliary Power

This feature ensures that the **lift continues to operate during a power outage**. The self-contained battery unit **can be located up to 4.5 meters (15')** away from the drive system and will **power the lift up to one hour at full capacity**.

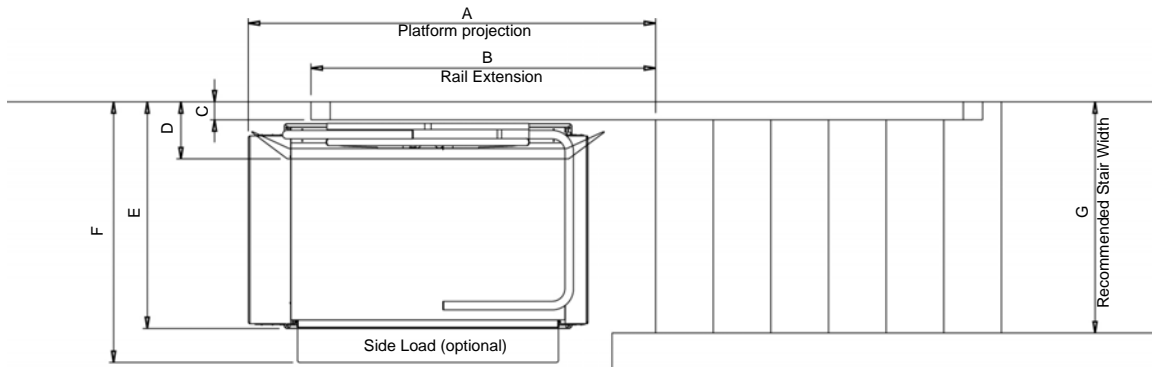
**Box Size: 597 mm (23 1/2") high x 444 mm (17 1/2") wide x 192 mm (7 5/8") deep**

### Attendant Remote Control

The platform can be equipped with an optional **Attendant Remote Control** that overrides the **Directional Buttons** during attendant operation. The remote control unit can be removed when not required.

## Outdoor Applications

Because most components of the Xpress II are made of anodized aluminum they are already prepared for outdoor use. Any components that are not made of aluminum are zinc plated. If the Xpress II is to be used outdoors or in an extreme environment (e.g. near swimming pools, hot tubs, chemicals, etc.) it is necessary to use stainless steel fasteners and support towers (if required, see Attachment Methods). An outdoor platform cover can be purchased (optional) to assist in protection in severe weather areas.



Note: Dimension F only applies at lower landing when the side load ramp is in the open position.

### Platform Projection and Rail Extensions

Stair Angle	10°	15°	20°	25°	30°	35°	40°	45°	50°
<b>Dimension A - Platform Projection</b>									
800 x 1220mm Platform (31 1/2" x 48")	2833 111 1/2	2369 93 1/4	2133 84	1991 78 3/8	1894 74 5/8	1824 71 3/4	1769 69 5/8	1726 68	1690 66 1/2
800 x 1000mm Platform (31 1/2" x 39 3/8")	2618 103 1/8	2154 84 3/4	1918 75 1/2	1776 69 7/8	1679 66 1/8	1609 63 3/8	1554 61 1/8	1511 59 1/2	1475 58 1/8
750 x 900mm Platform (29 1/2" x 35 1/2")	2502 98 1/2	2052 80 3/4	1818 71 5/8	1676 66	1579 62 1/4	1509 59 1/2	1454 57 1/4	1411 55 5/8	1375 54 1/8
<b>Dimension B - Rail Extension</b>									
800 x 1220mm Platform (31 1/2" x 48")	2538 99 7/8	2086 82 1/8	1855 73	1714 67 1/2	1614 63 1/2	1536 60 1/2	1470 57 7/8	1411 55 1/2	1356 53 3/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	2430 95 5/8	1976 77 3/4	1745 68 3/4	1604 63 1/8	1504 59 1/4	1426 56 1/8	1360 53 1/2	1301 51 1/4	1246 49
750 x 900mm Platform (29 1/2" x 35 1/2")	2365 93 1/8	1924 75 3/4	1695 66 3/4	1554 61 1/4	1454 57 1/4	1376 54 1/4	1310 51 5/8	1251 49 1/4	1196 47

Note: These dimensions are based on a first riser height of **190mm (7 1/2")**. The platform projection and rail extension will be shorter than indicated for shallow stairs below 25° as they may have shorter first risers, please consult Garaventa Lift.

### Stair Width Clearance Dimensions for Different Attachment Methods

Clearance Width Dimensions	C		D		E		F		G	
	Rail Protrusion	Platform Folded	Platform Unfolded	Side Load Ramp	Stair Width	mm	in	mm	in	
<b>800 x 1220 mm (31 1/2" x 48") &amp; 800 x 1000 mm (31 1/2" x 39 3/8") Platforms</b>										
Direct Mount	81	3 1/4	260	10 1/4	1020	40 1/8	1175	46 1/4	1040	41
Towers	145	5 3/4	325	12 3/4	1084	42 5/8	1239	48 3/4	1104	43 1/2
<b>*750 x 900 mm (29 1/2" x 35 1/2") Platform</b>										
Direct Mount	81	3 1/4	299	11 3/4	927	36 1/2	N/A	N/A	947	37 1/4
Towers	145	5 3/4	364	14 3/8	992	39	N/A	N/A	1012	39 7/8
<b>725 x 1000 mm (28 1/2" x 39 3/8") Platform</b>										
Direct Mount	81	3 1/4	260	10 1/4	945	37 1/4	1100	43 1/4	965	38
Towers	145	5 3/4	325	12 3/4	1009	39 3/4	1164	45 7/8	1029	40 1/2
<b>675 x 1000 mm (26 1/2" x 39 3/8") Platform</b>										
Direct Mount	81	3 1/4	260	10 1/4	895	35 1/4	1050	41 3/8	915	36
Towers	145	5 3/4	325	12 3/4	959	37 3/4	1114	43 7/8	979	38 1/2

Note: For direct mount with 2"x8" board, add 1 1/2" to all direct mount dimensions  
 \*750x900 platform uses fixed kick plate; not recommended for North America

## Attachment Methods

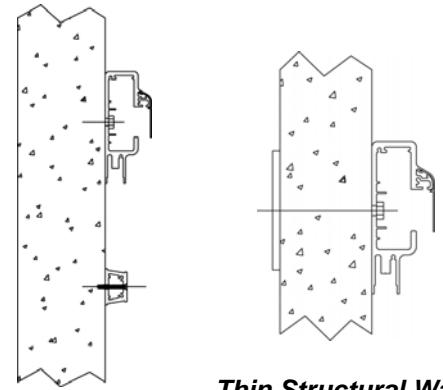
The aluminum guide and support rails can be directly mounted to the wall or attached to steel support towers. There are various attachment methods used to support the XpressII.

### Direct Mount Anchored to Solid Walls

solid concrete (152mm (6") thick minimum)  
 concrete block (203mm (8") minimum without reinforcement or 152mm (6") minimum with reinforcement)

Wood support posts located in wall (4" x 6" minimum). Locations determined by Garaventa.

Steel support posts located in wall (76mm x 76mm x 6mm wall) (3" x 3" x 1/4") minimum. Locations determined by Garaventa.



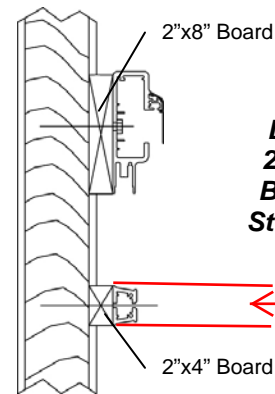
Direct mount to Wall

Thin Structural Wall (Through-Bolting maybe applied)

### Direct Mount Anchored to Wood Stud or Thin Block Walls

The upper rail must be attached to a 2" x 8" board that is secured to the wall. For the lower rail, a 2" x 4" board can be used. Each board must be fastened into every available wall stud with minimum two screw fasteners.

Note: Not Suitable for Steel Stud Applications.



Direct Mount to 2"x8" and 2"x4" Boards on Wood Stud or Thin Block Wall

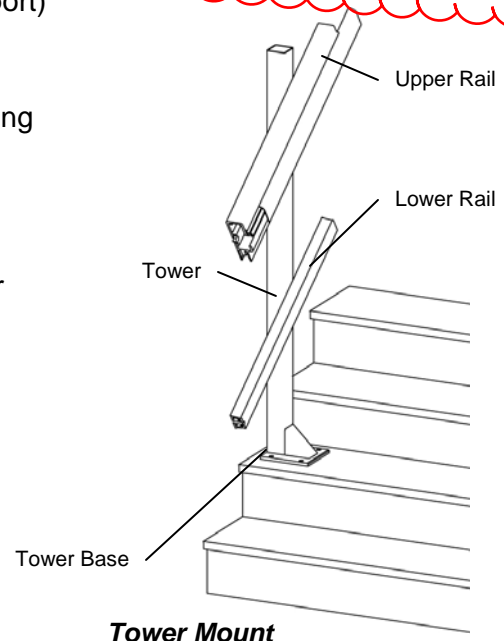
### Freestanding Support Towers

Required where no existing support walls are, or when the lift must be located away from a wall structure.

- solid concrete stairs/landings
- wood stairs/landings over 76.2mm (3") thick
- concrete steel pan treads (towers must be secured back to the stringer with brackets for extra support)

### Open Balustrade (Towers in the core)

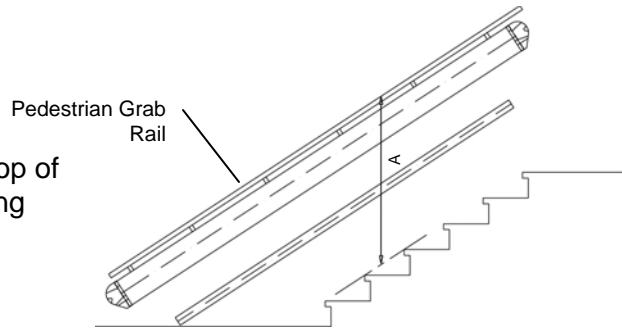
In situations where the stairs cannot support freestanding towers and where direct mounting is not feasible, it may be possible to install support towers in the open core. This may also be a solution where there is insufficient clearance with towers on the treads. The towers are fastened to the floor and secured to walls or stringers.



Tower Mount

## Pedestrian Grab Rail

A pedestrian grab rail can be mounted to the top of the upper rail section to assist pedestrians using the stairs



### Pedestrian Grab Rail Heights

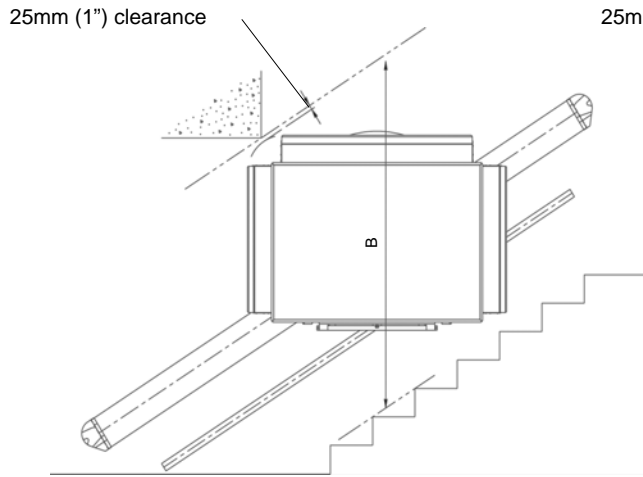
Stair Angle	10°	15°	20°	25°	30°	35°	40°	45°	50°
<b>Dimension A – Handrail Height</b>									
800 x 1220mm Platform (31 1/2" x 48")	797 31 3/8	862 33 7/8	935 36 3/4	1013 39 7/8	1103 43 3/8	1204 47 3/8	1322 52	1462 57 1/2	1633 64 1/4
800 x 1000mm Platform (31 1/2" x 39 3/8")	778 30 5/8	833 32 3/4	895 35 1/4	962 37 7/8	1039 40 7/8	1127 44 3/8	1230 48 3/8	1352 53 1/4	1503 59 1/8
750 x 900mm Platform (29 1/2" x 35 1/2")	770 30 3/8	820 32 3/8	876 34 1/2	939 37	1010 39 3/4	1092 43	1188 46 3/4	1302 51 1/4	1443 56 7/8

### Overhead Clearances Required

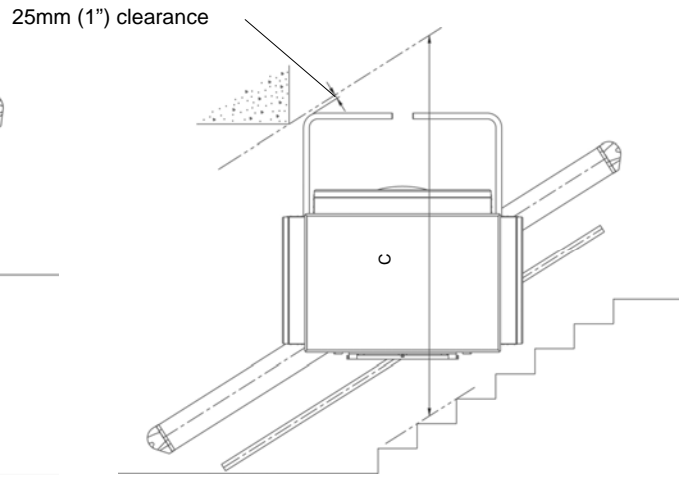
Stair Angle	10°	15°	20°	25°	30°	35°	40°	45°	50°
<b>Dimension B - Overhead Clearance Platform Folded Up (No Arms)</b>									
800 x 1220mm Platform (31 1/2" x 48")	1424 56 1/8	1542 60 3/4	1668 65 5/8	1804 71	1954 76 7/8	2123 83 5/8	2316 91 1/8	2543 100 1/8	2816 110 7/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	1386 54 5/8	1483 58 3/8	1588 62 1/2	1701 67	1827 71 7/8	1969 77 1/2	2131 83 7/8	2323 91 1/2	2554 100 1/2
750 x 900mm Platform (29 1/2" x 35 1/2")	1317 51 7/8	1374 54 1/8	1440 56 3/4	1516 59 3/4	1606 63 1/4	1735 68 3/8	1896 74 5/8	2083 82	2306 90 7/8
<b>Dimension C - Overhead Clearance Platform Folded Up (With Arms)</b>									
800 x 1220mm Platform (31 1/2" x 48")	1914 75 3/8	2027 79 3/4	2146 84 1/2	2274 89 1/2	2415 95 1/8	2573 101 1/4	2752 108 3/8	2962 116 5/8	3215 126 5/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	1876 73 7/8	1968 77 1/2	2066 81 3/8	2172 85 1/2	2288 90 1/8	2419 95 1/4	2568 101 1/8	2742 108	2952 116 1/4
750 x 900mm Platform (29 1/2" x 35 1/2")	1863 73 3/8	1950 76 3/4	2043 80 1/2	2145 84 1/2	2256 88 7/8	2380 93 3/4	2524 99 3/8	2691 106	2891 113 7/8
<b>Dimension D - US Code for Overhead Clearance (1524mm (60") above Platform)</b>									
800 x 1220mm Platform (31 1/2" x 48")	1842 72 1/2	1957 77 1/8	2078 81 3/4	2208 86 7/8	2349 92 1/2	2505 98 5/8	2683 105 5/8	2889 113 3/4	3135 123 3/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	1803 71	1898 74 3/4	1998 78 5/8	2105 82 7/8	2222 87 1/2	2351 92 1/2	2498 98 3/8	2669 105 1/8	2873 113 1/8
750 x 900mm Platform (29 1/2" x 35 1/2")	1781 70 1/8	1867 73 1/2	1958 77 1/8	2056 81	2162 85 1/8	2279 89 3/4	2413 95	2569 101 1/8	2754 108 1/2
<b>Dimension E - Canadian Code for Overhead Clearance (1500mm (59") above Centerline of Platform)</b>									
800 x 1220mm Platform (31 1/2" x 48")	1710 67 3/8	1770 69 5/8	1832 72 1/8	1900 74 3/4	1973 77 5/8	2123 83 5/8	2316 91 1/8	2543 100 1/8	2816 110 7/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	1691 66 5/8	1740 68 1/2	1792 70 1/2	1848 72 3/4	1909 75 1/8	1977 77 7/8	2131 83 7/8	2323 91 1/2	2554 100 1/2
750 x 900mm Platform (29 1/2" x 35 1/2")	1676 66	1723 67 7/8	1770 69 3/4	1822 71 3/4	1878 74	1940 76 3/8	2012 79 1/4	2095 82 1/2	2194 86 3/8

Note: Please consult the local Garaventa representative for local code requirements.

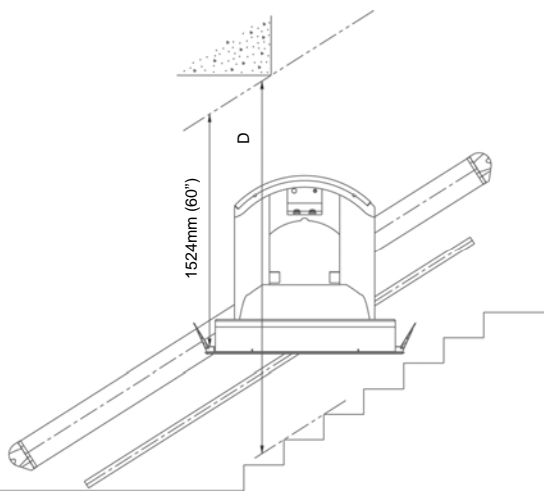
\*Platform folded up requires more overhead space than 1500mm (59") above centerline of platform numbers reflect platform requirement



**Overhead Clearances required for platform folded up (without arms)**



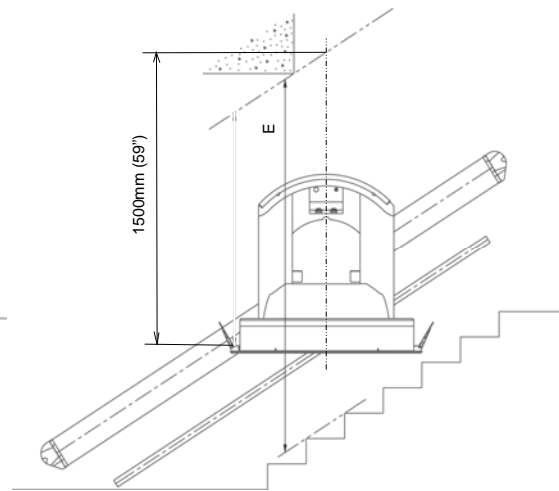
**Overhead Clearances required for platform folded up (with arms)**



**Overhead Clearances to meet US Code Requirements (ASME A18.1b)**

1524mm (60") overhead clearance required to any point above the platform deck. Refer to Dimension D in the chart on page 12

*Note: Consult the local representative for status of the new ASME A18.1b code requirements (some areas are exempt)*

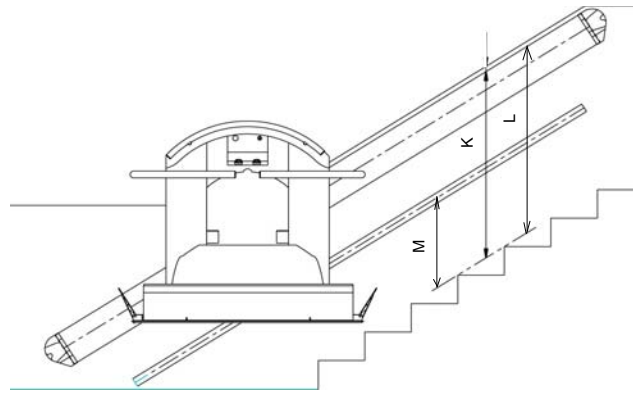


**Overhead Clearances to meet Canadian Code Requirements (CSA B355-2000)**

1500mm (59") overhead clearance required to centerline of the platform. Refer to Dimension E in chart on page 12

## Wall Height Requirement for Direct Mounting

\*K dimension is to top of upper rail for placement of 2"x8" (if required). True wall height is dimension K plus 35 mm (1 3/8")



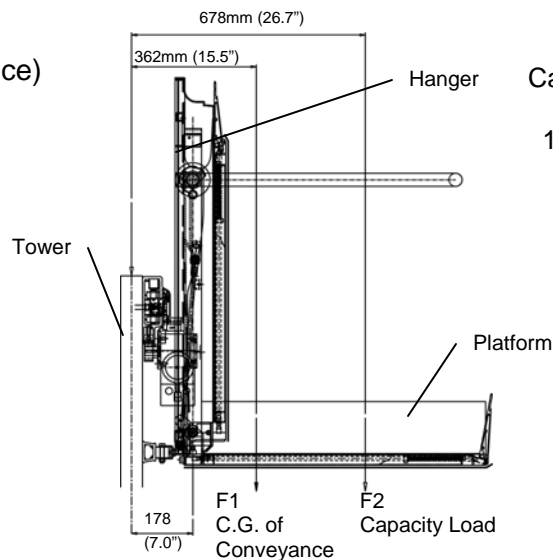
Stair Angle	10°	15°	20°	25°	30°	35°	40°	45°	50°
<b>Dimension K - Min. Wall Height for Wall Mount</b>									
800 x 1220mm Platform (31 1/2" x 48")	759 29 7/8	823 32 3/8	894 35 1/4	968 38 1/8	1055 41 1/2	1151 45 3/8	1263 49 3/4	1395 54 7/8	1556 61 1/4
800 x 1000mm Platform (31 1/2" x 39 3/8")	740 29 1/8	794 31 1/4	853 33 5/8	918 36 1/8	991 39	1074 42 1/4	1171 46 1/8	1285 50 5/8	1426 56 1/8
750 x 900mm Platform (29 1/2" x 35 1/2")	709 28	758 29 7/8	812 32	873 34 3/8	941 37	1019 40 1/8	1110 43 3/4	1217 48	1349 53 1/8
<b>Dimension L - Upper Rail Height</b>									
800 x 1220mm Platform (31 1/2" x 48")	724 28 1/2	788 31	859 33 7/8	933 36 3/4	1020 40 1/8	1116 43 7/8	1228 48 3/8	1360 53 1/2	1521 59 7/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	705 27 3/4	759 29 7/8	818 32 1/4	883 34 3/4	956 37 5/8	1039 40 7/8	1136 44 3/4	1250 49 1/4	1391 54 3/4
750 x 900mm Platform (29 1/2" x 35 1/2")	697 27 1/2	746 29 3/8	800 31 1/2	860 33 7/8	927 36 1/2	1004 39 1/2	1094 43 1/8	1200 47 1/4	1331 52 3/8
<b>Dimension M - Lower Rail Height</b>									
800 x 1220mm Platform (31 1/2" x 48")	242 9 1/2	302 11 7/8	367 14 1/2	435 17 1/8	511 20 1/8	595 23 3/8	692 27 1/4	803 31 5/8	938 36 7/8
800 x 1000mm Platform (31 1/2" x 39 3/8")	222 8 3/4	273 10 3/4	327 12 7/8	384 15 1/8	448 17 5/8	518 20 3/8	599 23 5/8	693 27 1/4	807 31 3/4
750 x 900mm Platform (29 1/2" x 35 1/2")	215 8 1/2	260 10 1/4	308 12 1/8	361 14 1/4	418 16 1/2	483 19	557 22	643 25 3/8	747 29 1/2

## Xpress II Loading Diagram

- F1: 121 kg (center of gravity of conveyance)  
1179 N (265 lbf)
- F2: 225 kg (max. loading capacity)  
2207 N (495 lbf)
- d1: 362mm (15.5")
- d2: 678mm (26.7")

Moment at center of tower  
 $M = \text{Force (F)} \times \text{distance (d)}$   
 $M = F1 \times d1 + F2 \times d2$

Maximum Moment  
 $M = 1923.1 \text{ kNm}$   
 $M = 17022.1 \text{ in.lbf}$



Loading Calculations are based on a 1220 platform

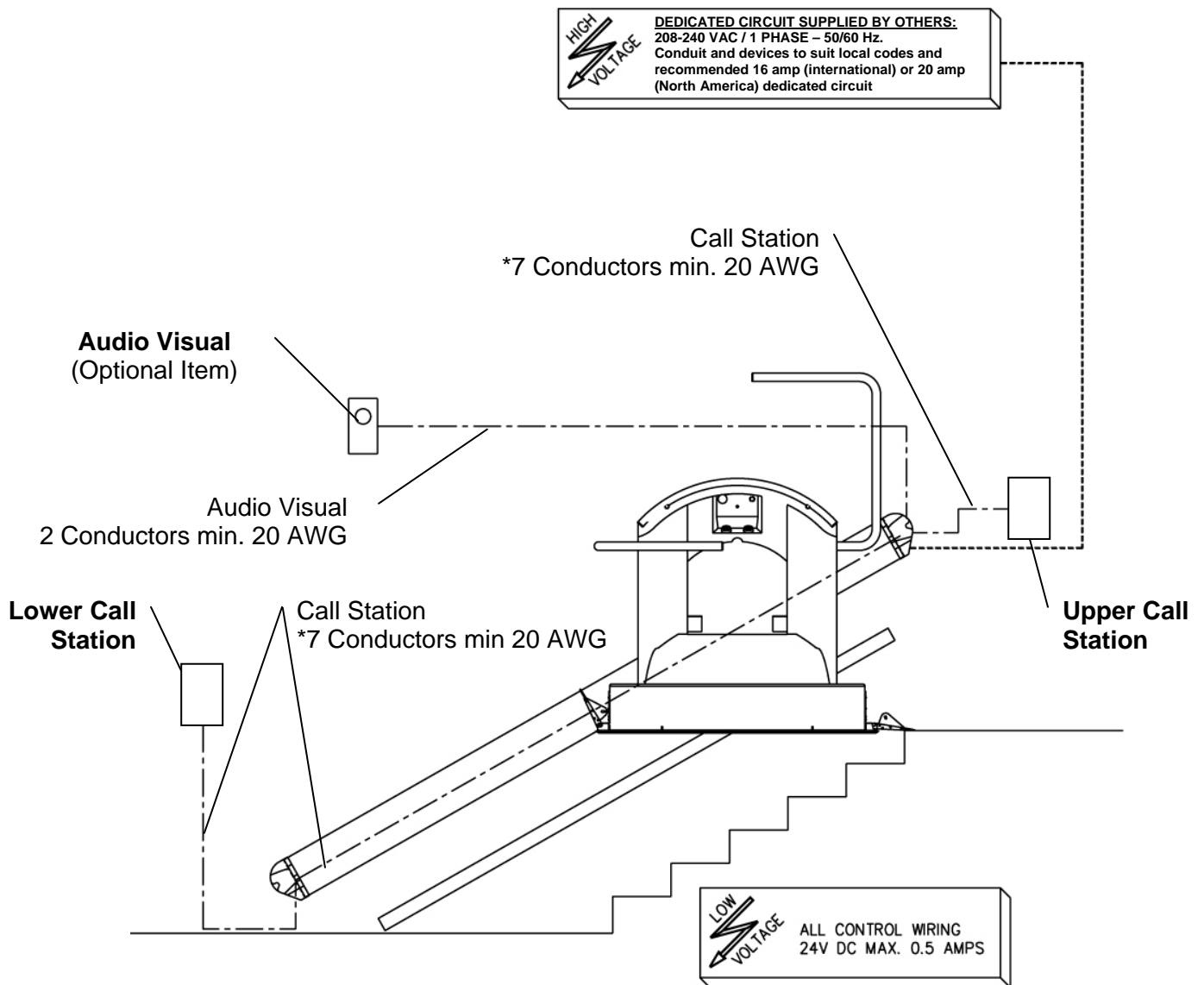
## Typical Wiring Layout

Actual wiring and number of conductors may vary depending on options. Some of the options that will affect the wiring include:

- Emergency Stop switches (requires 2 additional conductors to each call station)
- Additional Audio Visual Alerts (requires 2 additional conductors to each A/V)
- Attendant Call (requires 2 additional conductors to each call station)

The following options require field wiring by others:

- Fire Service
- Auxiliary Power System
- and possibly others



\*Add 2 additional Conductors for Attendant Call (optional) & for Emergency Stop Button (optional)



## Technical Reference of Standard Features

### **Platform Sizes:**

800 x 1220mm (31 1/2" x 48") – ADA compliant  
800 x 1000mm (31 1/2" x 39 3/8")  
750 x 900mm (29 1/2" x 35 1/2")  
725 x 1000mm (28 1/2" x 39 3/8") – optional  
675 x 1000mm (26 1/2" x 39 3/8") – optional

### **Curved Safety Arms:**

Fully automatic, 32mm (1 1/4") diameter safety arms (optional) required in some jurisdictions for code compliance.

### **Rated Load:**

225 kg. (495 lbs.)

### **Speed:**

Up: 4m (13ft) per minute, Down: 5m (16ft) per minute

### **Operating Controls:**

#### **Call Stations (Std):**

Constant pressure directional buttons, one touch fold & unfold buttons, 24VDC power, and keyed operation.

#### **Platform (Std):**

Constant pressure buttons, 24VDC power, Emergency Stop button (manual reset) and keyed operation.

### **Drive System:**

#### **Motor:**

0.75 H.P. located on the platform

#### **Power Requirements:**

208-240 VAC, 50/60 HZ single phase on a dedicated circuit (North America: 20 ampere, Europe: 16 ampere).

#### **Power Transmission:**

Rack and pinion.

#### **Emergency Use:**

A hand wheel is provided. Auxiliary power system available.

#### **Over speed Safety:**

Mechanical over speed sensor and brake with electrical drive cut-out protection.

### **Rail System:**

Champagne anodized aluminum extrusion with integrally mounted zinc plated gear.

This lift is built in accordance to ASME A18.1, CSA B44.1/ ASME A17.5, CSA B355, ASME A17.1

A variety of optional features and custom modifications are available. For more information about custom features not included in the Xpress II Design and Planning Guide and code requirements for your area consult your local Garaventa representative or Garaventa Lift.

<h3><b>Need Assistance Writing the Specification?</b></h3>
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Xpress II specifications will vary from one building site to another based on the stairway configuration, building materials, user requirements and local codes. **Your Local Authorized Garaventa Dealer has the expertise to assist and develop an appropriate design specification for your accessibility project.**

**Authorized Garaventa Dealers can be found Worldwide.**

1-800-663-6556 or 1+604-594-0422 or email

[productinfo@garaventa.ca](mailto:productinfo@garaventa.ca) for the Dealership nearest you.

In addition, professional designers at Garaventa Lift are available to answer your technical questions and to assist you with the design and specs.

## Garaventa Lift Products

Garaventa is dedicated to helping you find quality accessibility solutions. Our design team has worked on many different projects for schools, offices, hotels, airports, subways, places of worship and a wide range of public and private buildings around the world.

Stair-Lift GSL Artira



Stair-Lift Xpress II



Genesis Shaftway and Enclosure Models



Genesis OPAL Model



The Stair-Lift GSL Artira is a versatile access solution suitable for indoor and outdoor applications with a maximum of seven steps. This model is designed for turning or curving stairways following the inside or outside radius of the stairways, or on straight stairways with intermediate landings.

The Stair-Lift Xpress II is designed for straight stairways. When good looks and fast installation times are considerations, the Xpress II is the answer. The Xpress II is safe, durable, code compliant and built with the quality and reliability you expect from Garaventa.

The Garaventa Genesis is a vertical platform lift designed to provide access into or within public buildings. It travels inside a complete, self-contained enclosure or can be located in a shaftway constructed by others. Our unique anodized design is strong, durable and attractive.

The Genesis OPAL is a reliable, cost effective accessibility solution for public buildings or private residences. This vertical lift is ADA compliant and suitable for indoor or outdoor applications requiring vertical transportation up to five feet.

Visit our Architects Resource Center at [www.garaventa.ca](http://www.garaventa.ca)



[www.garaventa.ca](http://www.garaventa.ca)

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Authorized Garaventa Lift Representative

