

The Bed Stacker stores up to 5 hospital beds vertically in a footprint slightly larger than a single bed.





Bed Stacker

The Bed Stacker is a hospital bed storage system which can accommodate hospitals auxiliary beds, beds in maintenance, and provide secure storage zones with a closer proximity to patient areas.

The Need

- Aisle and corridor egress is #1 cited issue in the Life Safety Code (LSC)
- The average building cost for a hospital is \$400 + per ft²
- Spare hospital beds are not readily accessible near patient areas
- At any given time 7 - 10% of all hospital beds are in maintenance or repairs.

Value Added

- Reduces hallways 'clutter' to address NFPA 101 – Life Safety Code.
- Floor space savings of, on average, 60ft² per unit.
- Time savings in labour for transporting hospital beds.
- Secure and protect hospital beds





Applications

The Bed Stacker is successful in hospital maintenance rooms, storage rooms, and zoned corridor space. Additionally, the most successful installations have multiple storage locations to reduce the response time for a required bed as well as reducing the labour to retrieve the hospital bed.

Who should you talk to?

- Hospitals
- Rehabilitation Centers
- Hospital Bed Manufacturers with Service/Maintenance programs
- Bed Rental/Leasing companies
- Service and Storage Companies
- Military Hospitals
- Architects

What titles are you looking for?

- Facility Managers
- Environmental Services
- Lean Champions
- Director of Engineering
- Director of Operations



Cost Savings

There are a number of factors that can be used to determine savings for the Bed Stacker. The cost of the space, offsite storage costs, hospital bed rental costs, and the cost of paying an employee to transfer beds around a hospital.

Rental and offsite storage costs will vary based on demographics but starting numbers for bed rentals are \$110 - \$138 per day with a minimum term of 5 days. Rentals are reported to last as long as 3 months.

Hospital Building Costs

A single hospital bed occupies approximately $8.5' \times 3.5' = 28 \text{ ft}^2$ of floor space. The footprint of the Bed Stacker is approximately $10' \times 4.5' = 45 \text{ ft}^2$ depending on the Bed Stacker model. The cost of new hospital construction is \$400.00 per ft^2

- 2 Capacity – floor space savings of 11 ft^2 / \$4,400
- 3 Capacity – floor space savings of 39 ft^2 / \$15,600
- 4 Capacity – floor space savings of 67 ft^2 / \$26,800
- 5 Capacity – floor space savings of 95 ft^2 / \$38,000



(6) SSG52745R occupy 270 ft^2 with a capacity for 30 hospital beds. The space required for the same amount of hospital beds without the Bed Stacker would be 840 ft^2

Before | After



Bed Stacker Specifications

Model	Height	Width	Depth	Positions	Bed Height	Bed Width	Bed Length	Bed Weight	Load Position
SSG32745R	8' 0"	4' 6"	10' 0"	3	26"	44.5"	95"	600 lbs.	Front
SSG42745R	10' 3"	4' 6"	10' 0"	4	26"	44.5"	95"	600 lbs.	Front
SSG52745R	12' 6"	4' 6"	10' 0"	5	26"	44.5"	95"	600 lbs.	Front
SSG23345X	7' 3"	4' 6"	9' 2"	2	32"	44.5"	95"	900 lbs.	Front
SSG33345X	9' 6"	4' 6"	10' 0"	3	32"	44.5"	95"	900 lbs.	Front
SSG43345X	12' 3"	4' 6"	10' 0"	4	32"	44.5"	95"	900 lbs.	Front
SSG32796S	8' 1"	8' 9"	4' 7"	3	26"	44.5"	95"	600 lbs.	Side load
SSG42796S	10' 4"	8' 9"	4' 7"	4	26"	44.5"	95"	600 lbs.	Side load
SSG32732N	8' 0"	3' 5"	10' 0"	3	26"	31.5"	95"	600 lbs.	Front
SSG42732N	10' 3"	3' 5"	10' 0"	4	26"	31.5"	95"	600 lbs.	Front
SSG52732N	12' 6"	3' 5"	10' 0"	5	26"	31.5"	95"	600 lbs.	Front



Bed Stacker _R

SSG32745R · SSG42745R · SSG52745R

- Designed for beds up to 600 lbs.
- Accommodates beds 95" x 44.5" x 26"
- Electrical Specifications:
 - SSG32745R – 110V, 1PH, 15 Amp
– 220V, 1PH, 10 Amp
 - SSG42745R – 220V, 1PH, 15 Amp
 - SSG52745R – 220V, 1PH, 15 Amp
- Lift Speed: max. 11.7 seconds per position
- cCSAus mark
- OSHPD certified



SSG32745R

- Exterior Dimensions
 - Height – 8' 0"
 - Width – 4' 6"
 - Depth – 10' 0"
- Positions: 3
- Motor: 1 x 1HP
- Weight: 1,345 lbs.

SSG42745R

- Exterior Dimensions
 - Height – 10' 3"
 - Width – 4' 6"
 - Depth – 10' 0"
- Positions: 4
- Motor: 1 x 1-1/2HP
- Weight: 1,649 lbs.

SSG52745R

- Exterior Dimensions
 - Height – 12' 6"
 - Width – 4' 6"
 - Depth – 10' 0"
- Positions: 5
- Motor: 1 x 1-1/2HP
- Weight: 2,049 lbs.



Bed Stacker_x

SSG23345X · SSG33345X · SSG43345X

- Designed for beds up to 900 lbs.
- Accommodates beds 95" x 44.5" x 32"
- Electrical Specifications:
 - SSG23345X – 110V, 1PH, 15 Amp
– 220V, 1PH, 10 Amp
 - SSG33345X – 220V, 1PH, 15 Amp
 - SSG43345X – 220V, 1Ph, 15 Amp
- cCSAus mark
- OSHPD certified



SSG23345X

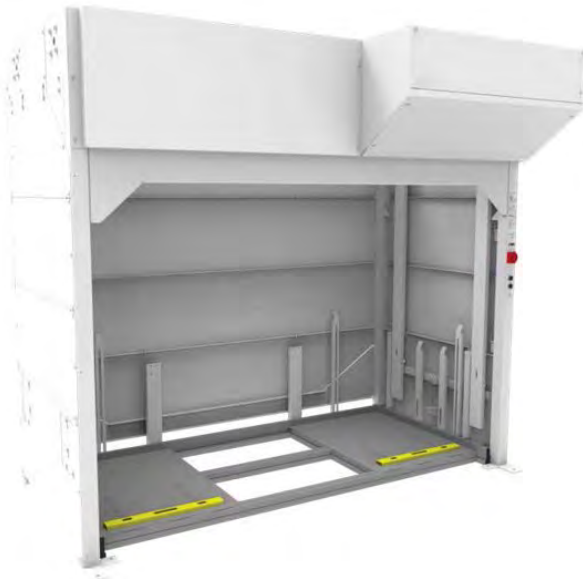
- Exterior Dimensions
 - Height – 7' 3"
 - Width – 4' 6"
 - Depth – 9' 2"
- Positions: 2
- Motor: 1 x 1HP
- Weight: 1,219 lbs.

SSG33345X

- Exterior Dimensions
 - Height – 9' 6"
 - Width – 4' 6"
 - Depth – 10' 0"
- Positions: 3
- Motor: 1 x 1-1/2HP
- Weight: 1,550 lbs.

SSG43345X

- Exterior Dimensions
 - Height – 12' 3"
 - Width – 4' 6"
 - Depth – 10' 0"
- Positions: 4
- Motor: 1 x 1-1/2HP
- Weight: 1,935 lbs.



Bed Stackers

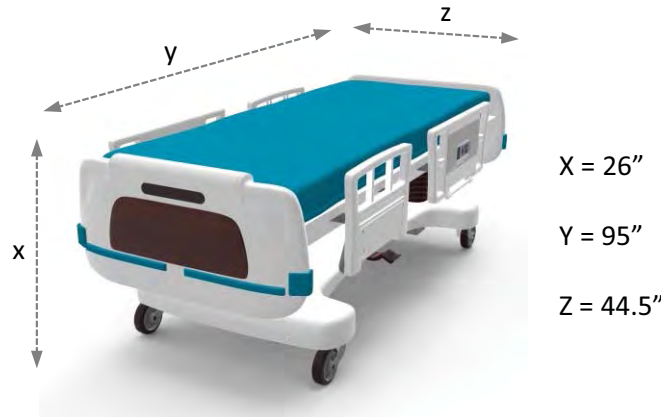
SSG32796S · SSG42796S

- Designed for beds up to 600 lbs.
- Accommodates beds 95" x 44.5" x 26"
- Electrical Specifications:
 - SSG32796S – 110V, 1PH, 15 Amp
– 220V, 1PH, 10 Amp
 - SSG42796S – 220V, 1PH, 15 Amp
- Lifting Speed: max. 11.7 seconds per position
- cCSAus mark



SSG32796S

- Exterior Dimensions
 - Height – 8' 1"
 - Width – 8' 9"
 - Base Depth – 4' 7"
 - Top Depth – 5' 8"
- Positions: 3
- Motor: 1 x 1HP
- Weight: 1,416 lbs.



SSG42796S

- Exterior Dimensions
 - Height – 10' 4"
 - Width – 8' 9"
 - Base Depth – 4' 7"
 - Top Depth – 5' 8"
- Positions: 4
- Motor: 1 x 1-1/2HP
- Weight: 1,743 lbs.

Bedlift_N

SSG32732N · SSG42732N · SSG52732N

- Designed for stretchers up to 600 lbs.
- Accommodates stretchers 95" x 31.5" x 26"
- Electrical Specifications:
 - SSG32732N – 110V, 1PH, 15 Amp
– 220V, 1PH, 10 Amp
 - SSG42732N – 220V, 1PH, 15 Amp
 - SSG52732N – 220V, 1PH, 15 Amp
- Lifting Speed: max. 11.7 seconds per position
- cCSAus mark

Model	Height	Width	Depth	Positions	Motor	Weight
SSG32732N	8' 0"	3' 5"	10' 0"	3	1 HP	1,271 lbs
SSG42732N	10' 3"	3' 5"	10' 0"	4	1-1/2 HP	1,582 lbs
SSG52732N	12' 6"	3' 5"	10' 0"	5	1-1/2 HP	1,828 lbs



OSHPD

OSHPD Pre-approval of Manufacturer's Certification (OPM)

Two seismic installation scenarios have been developed and approved through OSHPD for the installation of the Regular Capacity Bed Stacker and Extra Capacity Bed Stacker.

Bed Stacker OSHPD SDS Ratings

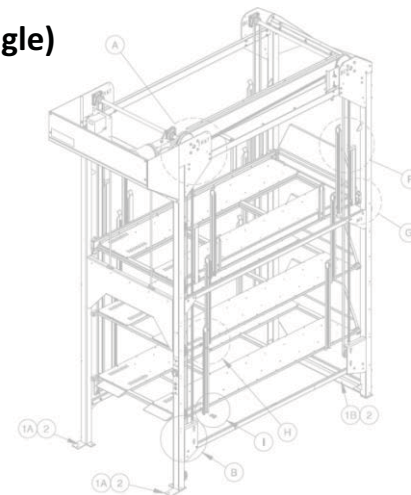
<u>Bed Stacker Model</u>	<u>Scenario 1 (single)</u>	<u>Scenario 2 (Multi)</u>
SSG32745R	2.07	2.5
SSGT42745R	1.4	1.83
SSG52745R	1.0	1.3
SSG23345X	2.5	2.5
SSG33345X	1.60	2.33
SSG43345X	0.97	1.43

General Notes:

- Requires the Bed Stacker to be anchored to the hospital buildings structure
- Covers ground floor installations only.
- Requires a minimum 4" Embedment
- Must be installed on a concrete slab on grade
 - Concrete must be at least 6" thick
 - Anchor's must have at least 10" separation from concrete slab edge.

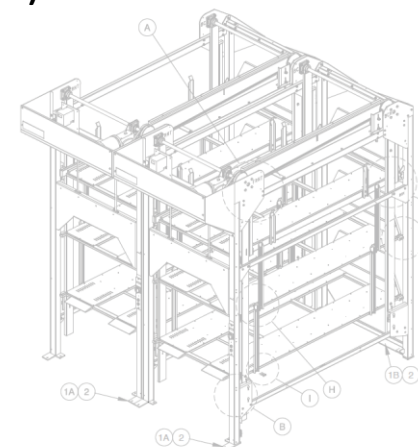
Seismic Installation Scenario 1 (Single)

Consists of an additional rear anchor kit and two additional front anchors. Will be required in every Bed Stacker installation that requires OSHPD approval. The package provides OSHPD coverage up to the SDS rating specified in the accompanying chart for a single Bed Stacker regardless of quantity or positioning.



Seismic Installation Scenario 2 (Multi)

In addition to the anchoring required in Seismic Installation Scenario 1, this consists of a side mounting kit to connect two units to one another to increase the SDS rating that multiple units are certified to. The package provides coverage up to the SDS rating specified in the accompanying chart for 2 units connected, side by side.



Further information can be found at:

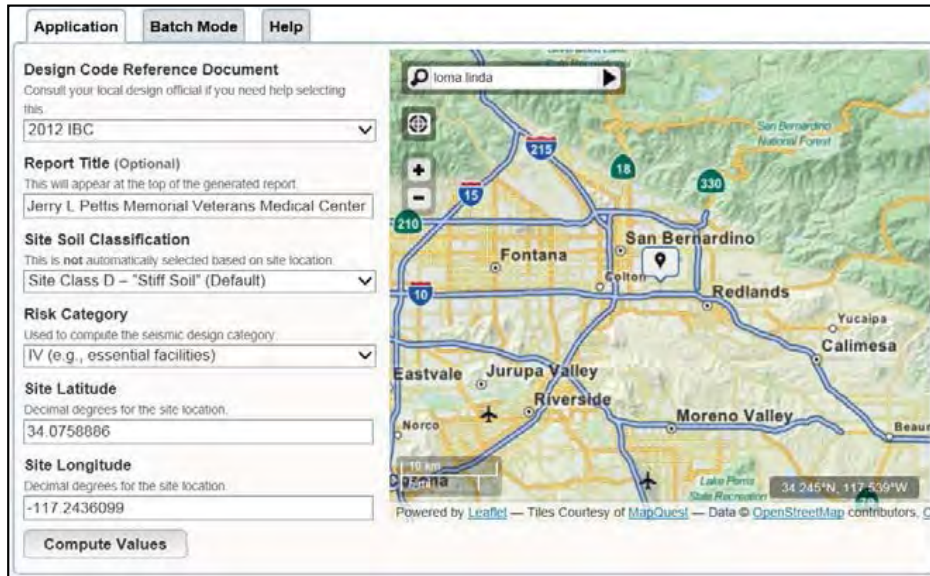
<http://www.oshpd.ca.gov/fdd/Pre-Approval/OPM-0051-13.pdf>

<http://www.oshpd.ca.gov/fdd/Pre-Approval/OPM-0145-13.pdf>




How to find local SDS numbers:

1. Visit the USGS website for U.S. Seismic Design Maps <http://earthquake.usgs.gov/designmaps/us/application.php>



2. Fill in the required fields with the information below:
 1. Design Code Reference Document: 2012 IBC
 2. Report Title: "Name of desired Hospital"
 3. Site Soil Classification: "Relevant soil classification if available" **or** Site Class D – "Stiff Soil" (Default)
 4. Risk Category: IV (e.g., essential facilities)
3. Using the in-map search field search for the hospital location.
4. Press "Compute Values"
5. Reference the reported SDS values from the "USGS Design Maps Summary Report" to the Bed Stacker SDS ratings.



USGS Design Maps Summary Report

[Print](#) [View Detailed Report](#)

User-Specified Input


Report Title Jerry L Pettis Memorial Veterans Medical Center
Loma Linda, CA

Building Code Reference Document 2012 International Building Code
(which utilizes USGS hazard data available in 2008)

Site Coordinates 34.07589°N, 117.24361°W

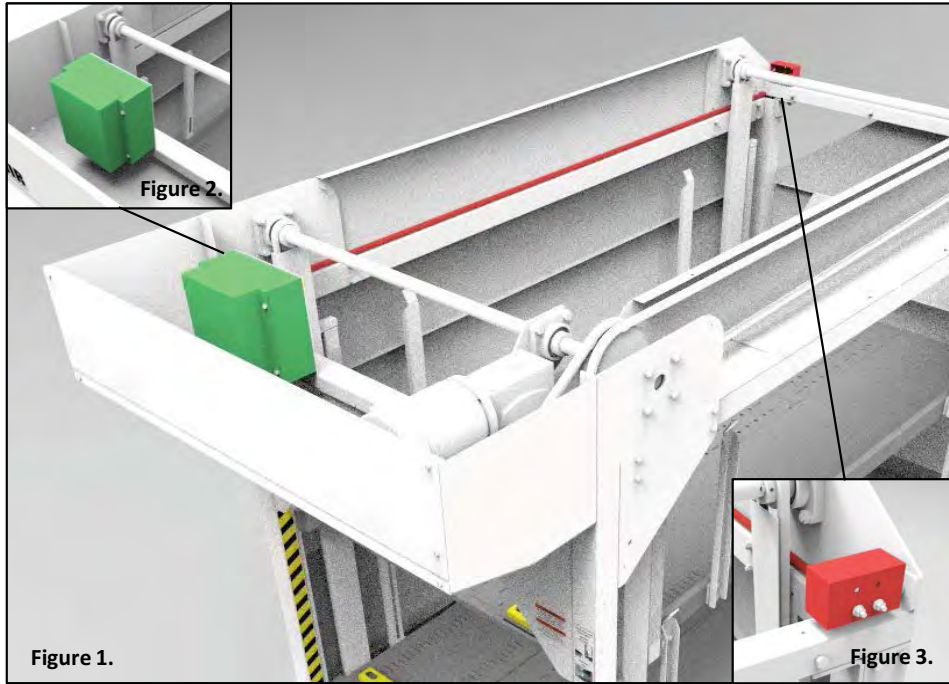
Site Soil Classification Site Class D – "Stiff Soil"

Risk Category IV (e.g. essential facilities)



USGS-Provided Output

$S_s = 2.017 \text{ g}$	$S_{MS} = 2.017 \text{ g}$	$S_{DS} = 1.345 \text{ g}$
$S_1 = 0.904 \text{ g}$	$S_{M1} = 1.356 \text{ g}$	$S_{D1} = 0.904 \text{ g}$



Electrical Specs (cont.)

- There are two junction boxes per Bed Stacker to allow for electrical drops from the ceiling or rear wall, one in the front as per Figure 2. and one in the back as per Figure 3.
- Each Bed Stacker should have a dedicated circuit and outlet which meets the electrical specifications outlined in Figure 4. and Figure 5. (includes a dedicated ground wire to the distribution source)
 - The electrician can hardwire the units on-site in lieu of providing a dedicated outlet.
- Each Bed Stacker is supplied with a 4' (1.2m) electrical cord. Additional lengths available upon request.
- The dedicated outlet should be located within 4' of the junction box
- Power supply cords must NOT run through walls, ceilings, floors, and similar openings in the building structure.

110/120V, 1Ph, 15 Amp

Available with: SSG23345X, SSG32745R, SSG32796S, and SSG32732N

- 110 VAC
- 15 Amp
- 60 Hz
- NEMA 5-15



220/240V, 1Ph, 15 Amp

Available with all units:

- 220 VAC
- 15 Amp
- 60 Hz
- NEMA 6-15



Figure 5.



Installation information to collect prior to sale:

Installation Location

- What floor will the unit(s) be installed on? Is an elevator required and what are the dimensions of the elevator?
- Provide a drawing of installation area with dimensions, as well as a description of the path from delivery area to installation area.

Installation Training

- If Southwest Solutions Group is providing installation training, a list of all trainees must be provided in advance. The trainees will be required to bring their own tools. Unloading Facilities

- Does the delivery location have a loading dock or ground level doors? If ground level doors, is their room to drive a semi-truck in to unload?

Delivery Location

- Will the unit(s) be delivered directly to the hospital or to a warehouse?

Contact Person

- What is the contact person for delivery's name and phone number?



Installation Equipment Requirements

- Unloading from a loading dock:
 - For multi unit orders a forklift will be required to unload the truck.
 - For single unit orders, 2 pallet jacks can be used.
- Unloading using ground level doors:
 - A forklift will be required to unload the truck.
- Moving the units from the truck to installation site:
 - (2) 4 wheel carts are ideally suited to transport the unit from loading to the installation site. Alternatively, pallet jacks can be used.
- Installing the Units (provide for the largest unit present)
 - (2) 4' ladders - Bed Stacker(s) with capacity for 2
 - (2) 6' ladders - Bed Stacker(s) with capacity for 3
 - (2) 8'-10' ladders - Bed Stacker(s) with capacity for 4*
 - ST433-45X requires 10' ladder
 - (2) 10' ladders - Bed Stacker(s) with capacity for 5
 - Fork Lift or Material Lift for Bed Stacker(s) with 4 or 5 bed capacity.



Frequently Asked Questions (FAQ)

1. Do you keep inventory on Bedlifts?

No, we build the units to order.

2. Is the only color choice the grey and white as depicted in the renderings?

No, the standard color scheme is white with grey accents but the units can be painted in any other RAL color for a \$500 upcharge per color.

3. Do Bedlifts require a dedicated outlet or are they hardwired?

The Bed Stacker is provided with all the necessary hardware to plug directly into a dedicated outlet upon installation as per the electrical specifications. The electrician can, at their discretion decide on-site whether or not to hardwire.

4. How many loading ramps come with an order?

An order for a single unit receives a single set of loading ramps. Multiple unit orders will receive 2 sets of loading ramps.

5. What is the estimated installation time for the Bed Stacker?

Approximately 6-8 hours per unit for 2 installers.

How do you handle freight?

We prefer to handle all shipping within North America to ensure that the product arrives on site in the same condition as it left our plant. Please contact us for current shipping rates.

7. Do you have any CAD blocks or other drawing tools to integrate in our designs?

Yes, these tools are available upon request.

