

Optima Plus Vertical Dumbbell Rack

OP-DBV

Owner's Manual



User and Service Documents Link

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*Also check www.lifefitness.com for local representation or distributor/dealer

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1. Safety

Safety Information

It is the sole responsibility of the purchaser of LIFE FITNESS products to read the owner's manual and warning labels and instruct all individuals, whether they are the end user or supervising personnel, on proper usage of the equipment.

UNDERSTANDING EACH AND EVERY WARNING TO THE FULLEST IS IMPORTANT. IF ANY OF THESE WARNINGS ARE UNCLEAR, CONTACT LIFE FITNESS CUSTOMER SERVICE IMMEDIATELY AT 1-800-351-3737.

This equipment is categorized as class S per EN ISO 20957-1. As such this equipment is only intended for commercial, institutional and/or studio facilities. It is not intended for home use. Contact LIFE FITNESS with any questions regarding this classification.

It is recommended that all users of LIFE FITNESS exercise equipment be informed of the following information prior to use.

Access Control

LIFE FITNESS recommends that all commercial fitness equipment be used in a supervised area. It is recommended that the equipment be located in an access controlled area. Control is the responsibility of the facility owner.

Installation

SECURING EQUIPMENT - LIFE FITNESS recommends that all equipment be secured to a solid, level surface to stabilize it and eliminate rocking or tipping over. This must be performed by a licensed contractor. See [Bolt to Floor Guidelines](#) for installation procedure.


Proper Usage

- Do not use any equipment in any way other than designed or intended by the manufacturer. It is imperative that LIFE FITNESS equipment is used properly to avoid injury.
- Injuries may result if exercising improperly or excessively. It is recommended that all individuals consult a physician prior to commencing an exercise program. If at any time during exercise you feel faint, dizzy or experience pain, STOP EXERCISING and consult your physician.
- Keep body parts (hands, feet, hair, etc.), clothing and jewelry away from moving parts to avoid injury.
- When adjusting any seat, knee hold down pad, range of motion limiter, foothold pad, pulley or any other type of adjuster, make certain that the adjusting pin is fully engaged in the hole to avoid injury.

Inspection

- DO NOT use or permit use of any equipment that is damaged and/or has worn or broken parts. For all LIFE FITNESS equipment use only replacement parts supplied by LIFE FITNESS.
- Cables and belts pose an extreme liability if used when frayed. Always replace any cable at first sign of wear (consult LIFE FITNESS if uncertain).
- Routinely inspect all accessory clips that join attachments to the cables and replace them at the first sign of wear.
- MAINTAIN LABELS AND NAME PLATES - Do not remove labels for any reason. They contain important information. If unreadable or missing, contact LIFE FITNESS for a replacement.
- EQUIPMENT MAINTENANCE - Preventative maintenance is the key to smooth operating equipment as well as to keep your liability to a minimum. Equipment needs to be inspected at regular intervals.
- Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so. LIFE FITNESS will provide service and maintenance training at our corporate facility upon request or in the field if proper arrangements are made.
- Before any use, examine all accessories approved for use with the LIFE FITNESS equipment for damage or wear.
- DO NOT ATTEMPT TO USE OR REPAIR ANY ACCESSORY APPROVED FOR USE WITH THE LIFE FITNESS EQUIPMENT WHICH APPEARS TO BE DAMAGED OR WORN.

Operating Warnings

 **WARNING:** This product can expose you to chemicals including Methyl Isobutyl Ketone, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <http://www.P65Warnings.ca.gov>

- It is the purchaser's sole responsibility to properly instruct its end users and supervising personnel as to the proper operating procedures of all equipment.
- Keep children away from strength equipment. Parents or others supervising children must provide close supervision of children if the equipment is used in the presence of children.
- Do not allow users to wear loose fitting clothing or jewelry while using equipment. It is also recommended to have users secure long hair back and up to avoid contact with moving parts.
- All bystanders must stay clear of all users, moving parts and attached accessories and components while machine is in operation.

Plate Loaded, Free Weight, and Body Weight Systems

- If the unit is equipped with weight rods, use only Olympic style weight plates (2.0" bore) for training weight. Do not use dumbbells or any means other than those stated to increase weight resistance - See machine specific section for more information.
- Always utilize weight plate retention devices such as clamps or pins.
- Only add weight plates up to the load limits of the unit. Make sure all weight plates are completely placed on the weight rod.
- Never exceed the load rating for any plate loaded station, body weight station, bench or other free weight device; including specific weight rod and band peg limits. See machine specific section for load limit information.
- Contact a LIFE FITNESS representative with any questions regarding proper weights and loading.

Warnings and Cautions

Warning labels indicate a potentially hazardous situation that could result in serious injury or death if the precautions are not observed.

Caution labels indicate a potentially hazardous situation that could result in serious injury or damage to machine if the precautions are not observed.

Contact [Customer Support Services](#) to replace any worn or damaged labels.

Product Labels

General Warning

⚠ WARNING

SERIOUS INJURY CAN OCCUR ON THIS EQUIPMENT.
YOU MUST FOLLOW THESE PRECAUTIONS TO AVOID INJURY!

<ol style="list-style-type: none"> 1. Before using, read all the warnings and obtain instruction on the use of this machine. Use only for intended exercise. DO NOT modify the machine. 2. Obtain a medical exam before beginning any exercise program. 3. Keep body, hair and clothing free of all moving objects. 4. Inspect the machines before use. DO NOT use if it appears damaged. DO NOT attempt to fix a broken or jammed machine. Notify staff immediately. 	<ol style="list-style-type: none"> 5. Children must not be allowed near this machine. Supervise teenagers. 6. Manufacturer recommends that all equipment be secured to the floor to stabilize and eliminate rocking or tipping over. Use a licensed contractor. 7. DO NOT REMOVE THIS LABEL. REPLACE IF DAMAGED.
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Serial Number

LifeFitness
 9525 WEST BRYN MAWR AVE.
 ROSEMONT, IL 60018
 USA 1-800-351-3737
 CAGE Code: 0CMY5




www.lifefitness.com
Class: S Studio

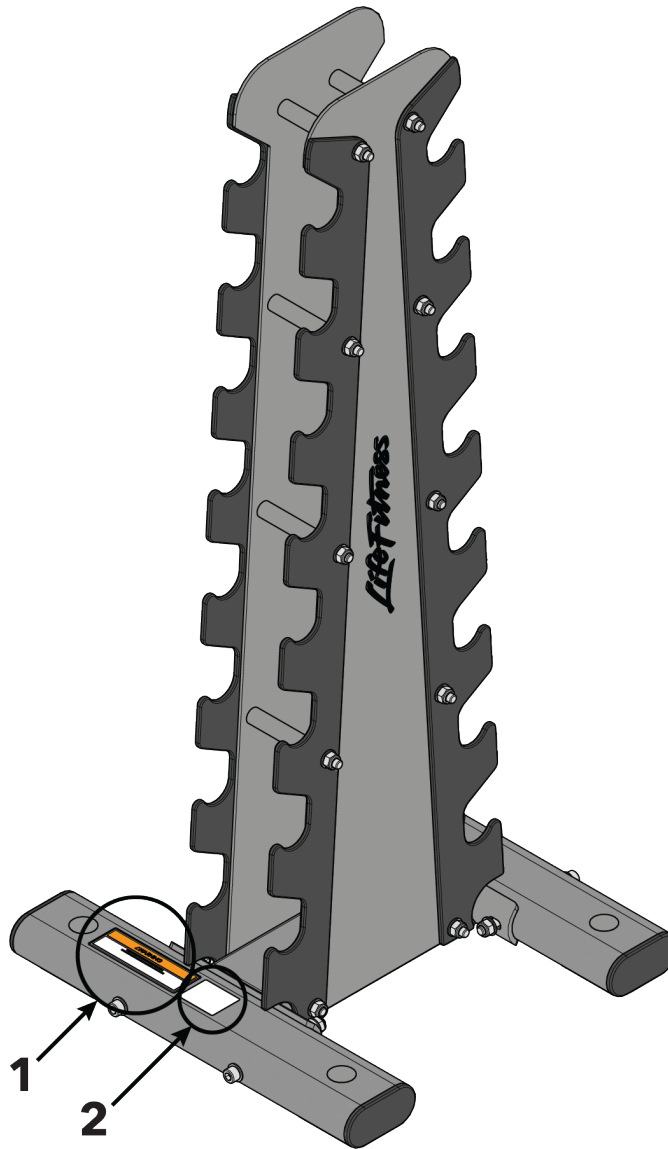
Model: XXXXXX
 Manufactured in USA with US and Foreign parts

Max. User Wt.
 Max. Training Wt.
 S/N: XXXXXX.....

XXXXXX.....



Label Locations



Item	Description	Qty.
1	General Warning	1
2	Serial Number	1

2. Assembly

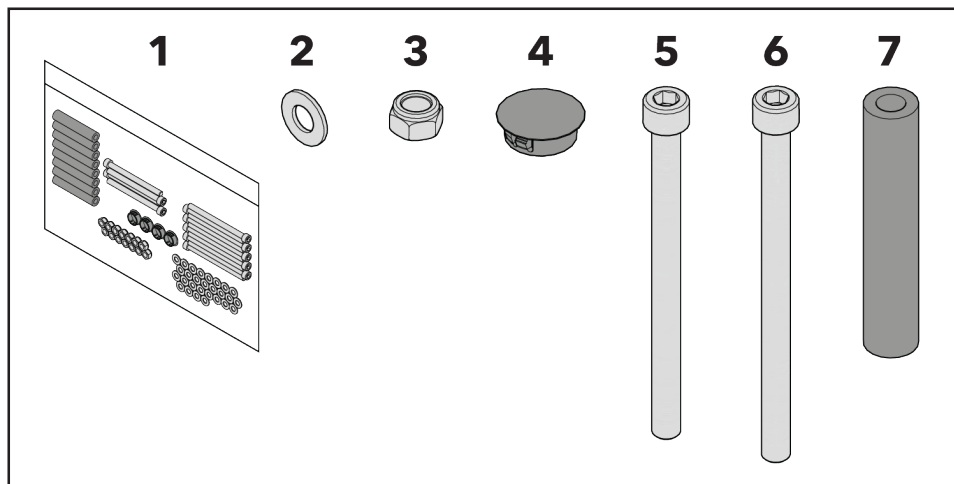
Component and Hardware List

Components

Item	Description	Qty.
1	Frame	1
2	Right Foot (with General Warning Label)	1
3	Left Foot	1
4	Hook Plate	4
5	Upright	2

Hardware

Item	Description	Qty.
1	Hardware Pack, OP-DBV-HDWR	1
2	3/8" Flat Washer	28
3	M10 Hex Nylock Nut	14
4	Hole Plug	4
5	M10 x 120mm Bolt	4
6	M10 x 140mm Bolt	10
7	Connection Tube	8



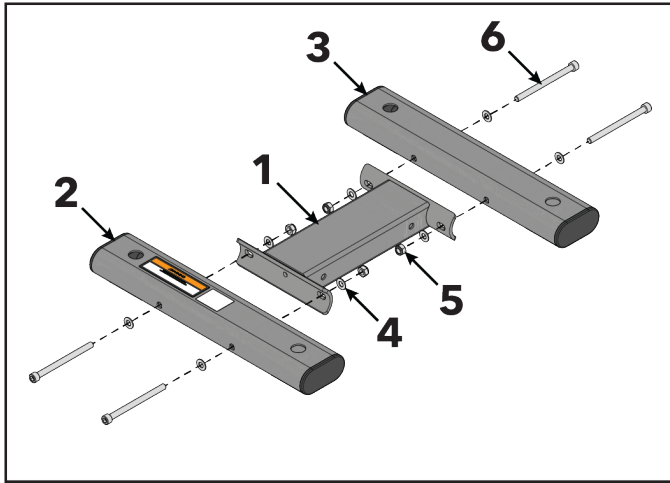
Tools Required

- 17 mm Socket wrench
- 8 mm Allen wrench
- Torque wrench
- Rubber mallet

Assembly Procedure

Assemble Frame

1. Install bolts, washers, and hex nuts securing right and left feet to frame using an 8mm Allen wrench and 17mm wrench.

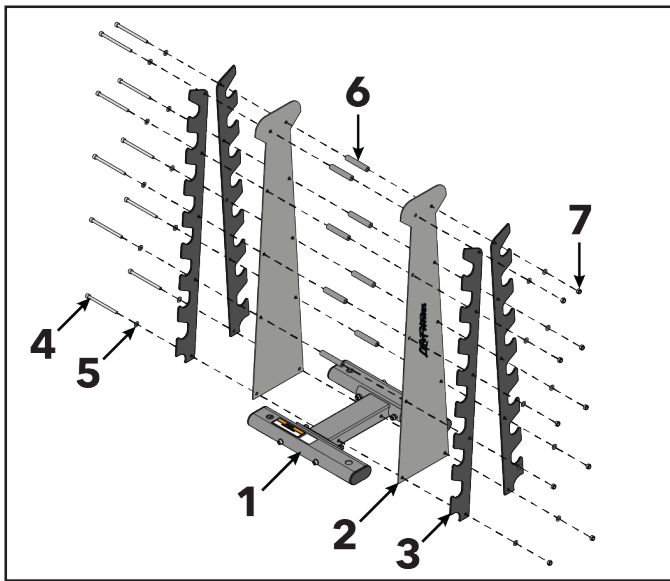


Item	Description	Qty.
1	Frame	1
2	Right Foot	1
3	Left Foot	2
4	3/8" Flat Washer	8
5	M10 Hex Nylock Nut	4
6	M10 x 120mm Bolt	4



Hand tighten hardware.

2. Place connection tubes in between uprights.
3. Install bolts, washers, and hex nuts securing uprights and hook plates to frame using an 8mm Allen wrench and 17mm wrench.



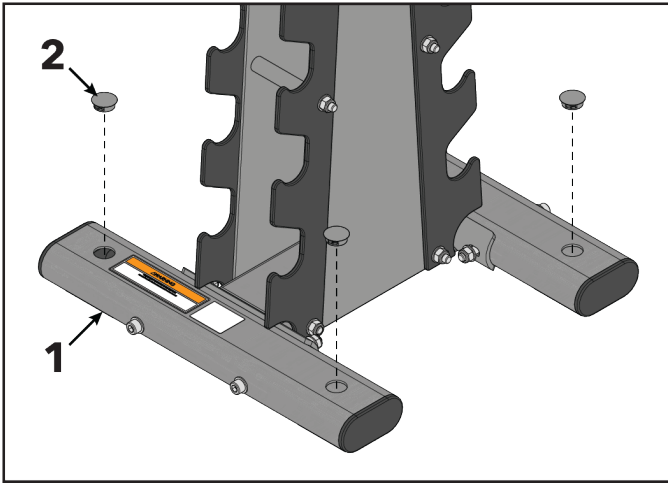
Item	Description	Qty.
1	Frame	1
2	Upright	2
3	Hook Plate	4
4	M10 x 140mm Bolt	10
5	3/8" Flat Washer	20
6	Connection Tube	8
7	M10 Hex Nylock Nut	10



Hand tighten hardware.

4. Tighten all bolts to 20-25 ft-lb (27-33 Nm).

5. Install hole plugs to right and left feet using a rubber mallet.

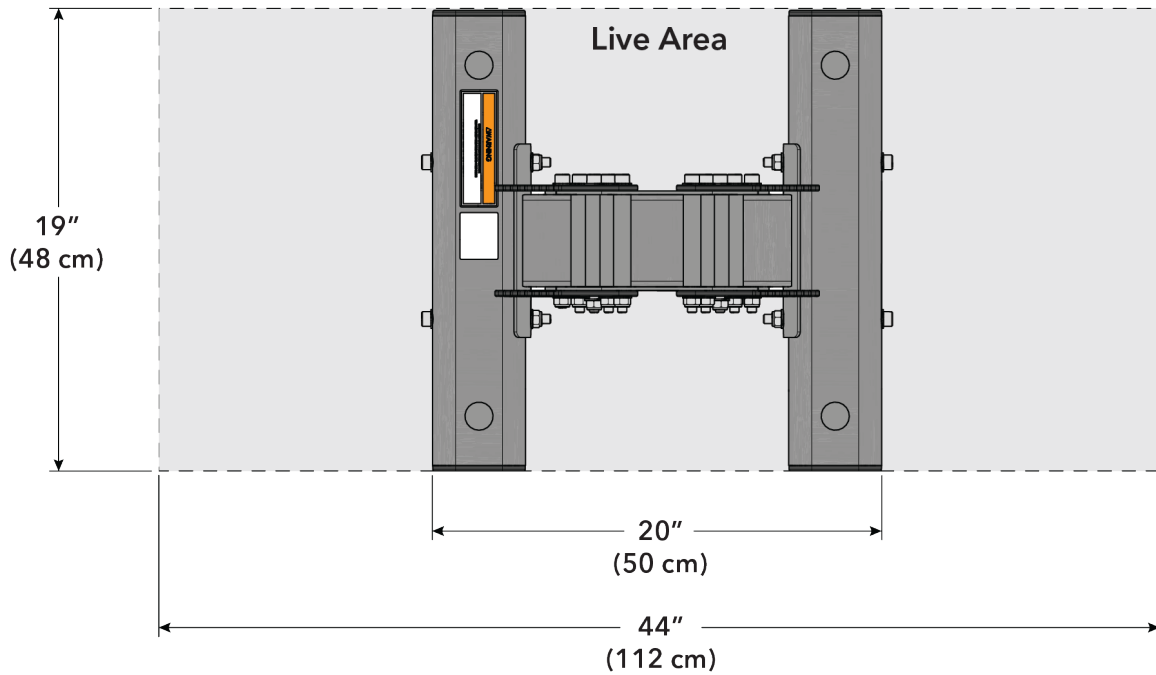


Item	Description	Qty.
1	Right/Left Foot	2
2	Hole Plug	4

3. Product Information

Specifications

Machine Weight:	57 lbs.	26 kg.
Size:	in. = 20 L x 19 W x 46 H	cm = 50 L x 48 W x 116 H
Live Area:	in. = 44 L x 19 W	cm = 112 L x 48 W
Storage Weight:	180 lbs.	82 kg.
Max Load:	8 pairs of dumbbells, 5-20 lbs.	



4. Maintenance Procedures

Maintenance Schedule

ACTION	DAILY	WEEKLY	MONTHLY	AS NEEDED
WAX				
Frames				X
INSPECT				
Paint			X	
Hardware		X		
Frame		X		

Wax

- Frames with a standard, non-abrasive, wax finish.

Inspect

- Hardware. Check for loosening. Tighten as required.
- Frames. Inspect for wear and damage.
- For paint chips. Fill in immediately with LIFE FITNESS touch-up paint.

Once a Week

- Visually inspect all hardware for loosening, tampering or wear.

Once a Month

- Inspect hardware on all machines and tighten any bolts or nuts that may have loosened over the life of the product.

Notes

- Use polishing compound (such as car wax) and remove shoe scuffs from powder coated surfaces as necessary.

Approved and Compatible Cleaners

Two preferred cleaners have been approved by reliability experts: PureGreen 24 and Gym Wipes. Both cleaners will safely and effectively remove dirt, grime and sweat from equipment. PureGreen 24 and the Antibacterial Force formula of Gym Wipes are both disinfectants that are effective against MRSA and H1N1.

PureGreen 24 is available in a spray which is convenient for gym staff to use. Apply the spray to a microfiber cloth and wipe down the equipment. Use PureGreen 24 on the equipment for at least 2 minutes for general disinfection purposes and at least 10 minutes for fungus and viral control.

Gym Wipes are large, durable pre-moistened wipes to use on the equipment before and after workouts. Use Gym Wipes on the equipment for at least 2 minutes for general disinfection purposes.

Contact Customer Support Services to order these cleaners (1-800-351-3737 or email: customersupport@lifefitness.com).

Mild soap and water or a mild non-abrasive household cleaner can also be used to clean the display and all exterior surfaces. Use a soft microfiber cloth only. Apply the cleaner to the microfiber cloth before cleaning. DO NOT use ammonia or acid based cleaners. DO NOT use abrasive cleaners. DO NOT use paper towels. DO NOT apply cleaners directly to the equipment surfaces.

Removal of Paint, Marking Pens, or Labels

- Butyl cellosolve works well for removal of paints, marking pen inks, lipstick, etc.
- Labels, stickers, etc. may be removed using kerosene. When the solvent will not penetrate sticker material, apply heat (hair dryer) to soften the adhesive and promote removal. GASOLINE SHOULD NOT BE USED.

5. Warranty

What is Covered

This LIFE FITNESS commercial exercise equipment product is warranted to be free of all defects in material and workmanship.

Who is Covered

The original purchaser or any person receiving the product as a gift from the original purchaser.

Who Pays Transportation and Insurance For Service

If the Product or any covered part must be returned to a service facility for repairs, We, Life Fitness, will pay all transportation and insurance charges for the first year. You are responsible for transportation and insurance charge after the first year.

What We Will Do To Correct Covered Defects

We will ship to you any new or rebuilt replacement part or component, or at our option, replace the Product. Such replacement parts are warranted for the remaining portion of the original warranty period.

What is Not Covered

Any failures or damage caused by unauthorized service, misuse, accident, negligence, improper assembly or installation, debris resulting from any construction activities in the Product's environment, rust or corrosion as a result of the Product's location, alterations or modifications without our written authorization, or by failure on your part to use, operate and maintain the Product as set out in your Operation Manual.

All terms of this warranty are void if this product is moved beyond the continental borders of the United States of America (excluding Alaska, Hawaii and Canada) and are then subject to the terms provided by that country's local authorized Life Fitness representative.

Owner's Manual

It is VERY IMPORTANT THAT YOU READ THIS MANUAL before operating the Product. Remember to perform the periodic maintenance requirements specified in the Manual to assure proper operation and your continued satisfaction.

Exclusive Warranty

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART. We neither assume nor authorize any person to assure for us any other obligation or liability concerning the sale of this Product. Under no circumstances shall we be liable under this warranty, or otherwise, of any damage to any person or property, including any lost profits or lost savings, for any special, indirect, secondary, incidental or consequential damages of any nature arising out of the use of or inability to use this Product. Some states do not allow the exclusion or limitation of implied warranties or of liability for incidental or consequential damages, so the above limitations or exclusions may not apply to you. Warranty coverages and terms may differ outside the United States. Please contact the Life Fitness office servicing your country (contact information found at the front of this manual) or visit the applicable local Life Fitness website to receive the specific warranty information for your country.

Changes in Warranty Not Authorized

No one is authorized to change, modify or extend the terms of this limited warranty.

Effects of State Laws

This warranty gives you specific legal rights, and you may have other rights which vary from state to state and country by country.

Warranty Coverage

 **NOTE:** There is no warranty coverage for labor on Strength Products.

Item	10 Years	5 Years	1 Year	90 Days
Frame	X			
Hardware / Mechanical				X
Items Not Specified				X

6. Bolt to Floor Guidelines

Introduction

LIFE FITNESS designs its products to be stable when used as designed. Because strength training is dynamic, we cannot predict how users will ultimately use the products in all circumstances. Therefore, LIFE FITNESS recommends that strength training equipment be secured to a solid, level surface to stabilize and eliminate rocking or tipping over. For some equipment, securing the equipment to the floor is REQUIRED.

Each new unit shipped comes with a multi-language hangtag stating the importance of bolting the unit down as a safety precaution.

It is the facility's responsibility to adhere to local and regional building codes.

Delivery and Installation Tips

All Anchors

- Fasteners must have minimum embedment in concrete floor, not including screed, regardless of wood/tile/rubber over sub-floor. (See *Anchor Types* for maximum sub-floor thickness between unit and concrete to equipment foot must be made of flooring or other material (i.e. no air gaps)).
- DO NOT reuse fasteners. Static and Dynamic anchors are designed for one-time use only.
- Factor in equipment's feet height when selecting fastener length.
- Factor in flooring thickness when selecting fastener length.
- It is also recommended to drill an additional 1/2" (12.7 mm) of depth beyond the length of the fastener being used to ensure that debris does not block the entry of the anchor.
- Minimum concrete compressive strength: 3000 psi (20 N/mm²).

Anchoring

- LIFE FITNESS requires that each foot has at least one anchor bolted to the floor.
- All anchors must have a minimum embedment into concrete, regardless of wood/tile/rubber/screed over sub-floor.
- Dynamic anchors must have a minimum embedment depth in concrete to ensure maximum security and pull out force. See *Anchor Types* for embedment depth minimums.

Building Codes

It is the facility's responsibility to adhere to local and regional building codes. Please verify with the customer to ensure that they are aware of this.

Carpeting

If bolted down to carpet flooring, be sure to use a box cutter knife to cut the carpet threads around each foot. This will help avoid the carpet threads from being wrapped around and pulled by the drill bit.

Competitor Product

The bolt down guidelines and procedures for LIFE FITNESS products were determined by the company's Engineering and Installation Development groups. These guidelines include which anchors to use and positioning of the anchors are required for LIFE FITNESS product.

- LIFE FITNESS does not have that level of specification or engineering input for competitive product.
- LIFE FITNESS installation teams are not permitted to anchor competitor equipment.

Drilling

It is also recommended to drill an additional 1/2" (12.7 mm) of depth beyond the length of the fastener being used to ensure that debris does not block the entry of the anchor.

- This can be done by marking your drill bit with a piece of tape.
- While it is recommended that a vacuum be used to clean up debris, this will not account for all the debris that will settle at the bottom of the drilled hole.

Anchor Types

Anchor	Subfloor between unit and concrete 0" to 1/2" (12.7mm) thick		Subfloor between unit and concrete over 1/2" (12.7mm) thick	
	Imperial	Metric	Imperial	Metric
Static	Imperial	KH-EZ 1/4" x 4"	Imperial	KH-EZ 1/4" x 5"
	Metric	HUS-H 6mm x 120mm	Metric	HUS-H 6mm x 150mm

Anchor Specifications

Static Anchor	Minimum Concrete Thickness	Minimum Drill Depth in Concrete	Minimum Concrete Embedment	Minimum concrete compressive strength
KH-EZ 1/4"	4-1/8" (105mm)	1/2" beyond anchor length	2-1/2" (63.5mm)	3000psi
HUS-H 6mm	100mm (3-3/32")	10mm beyond anchor length	55mm (2-1/64")	20 N/mm ²


Pullout Force

LIFE FITNESS specifies Hilti™ static and dynamic anchors. According to the anchor manufacturer, the recommended design pullout force (in tension) for the specified anchors, when properly installed in cracked concrete, is provided in the side table. This table should be used for reference only; for additional and up-to-date information on the anchor capabilities or the design pullout force in other substrates, please consult Hilti directly at <https://www.us.hilti.com>.

Selected Anchor	Design Resistance in Tension *
KH-EZ 1/4" x 4"	830 lb
HUS-H 6MM x 120MM	3.3 kN
KH-EZ 3/8" x 4"	1535 lb
KH-EZ 3/8" x 5"	1535 lb
HUS-H 8MM x 120MM	3.3 kN
HUS-H 8MM x 150MM	3.3 kN
HSL-3/8 4"	2000 lb
HST M12 x 115/20	8 kN
HST M12 x 195/200	8 kN
KB-TZ 3/8" x 3-3/4"	1615 lb

* Design strength extracted from the Hilti Anchor Fastening Technology Manual issued September 2014.


Tools Required

 **WARNING:** Adhere to manufacturer's equipment warnings and guidelines. Follow manufacturer's instructions for proper usage.

Static Anchor

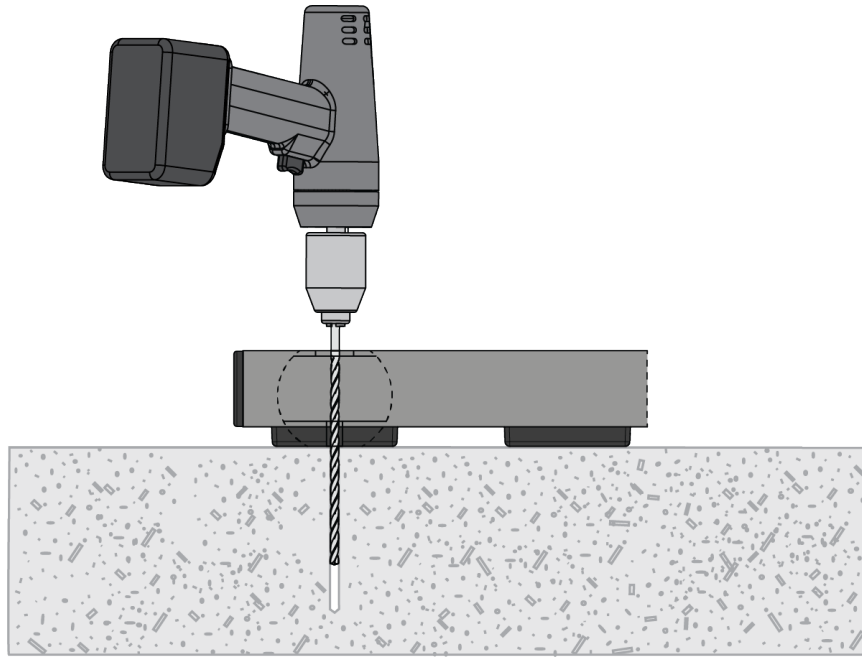
- Floor scanner/rebar detector (optional)
- 1" L-shape SDS rotary hammer
- 1/4" x 12" (6mm x 305mm) carbide drill bit (for 1/4" (6mm) anchors)
- 3/8" x 12" (8mm x 305mm) carbide drill bit (for 3/8" (8mm) anchors)
- Safety glasses
- Extension cord
- Impact wrench
- Vacuum (for debris)

Static Anchor Procedure


 **CAUTION:** If it is possible that the length of your bolt will not provide the minimum requirement of 2.5" (63.5mm) of engagement, a longer anchor should be used.

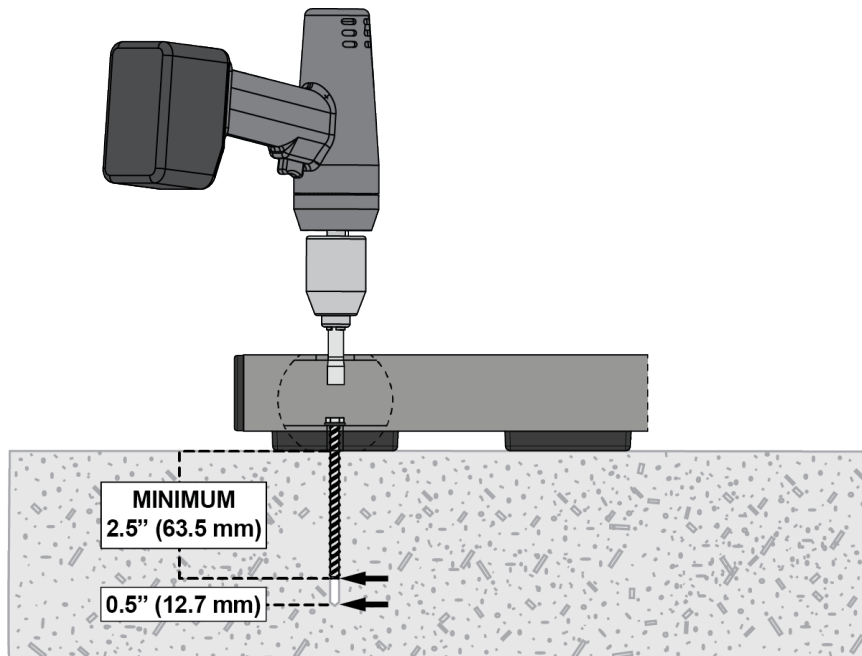
1. Place unit into position to be mounted and cycle unit to set stance.
2. Each foot **must** get at least one static fastener.

3. Wearing protective glasses, drill down into the flooring to the required depth as perpendicular as possible, ensuring that the foot thickness is being accounted for; refer to *Anchor Selection* and *Foot Dimensions*.



4. Insert fastener and tighten to 18 Foot-Pounds (24Nm) for 1/4" (6mm) anchor or 40 Foot-Pounds (54Nm) for 3/8" (8mm) anchor.

 **NOTE:** If the legs/frame do not contact the mounting surface **DO NOT** pull down with the fastener or anchor. Loosen frame hardware and re-tighten to allow machine to align.



Foot Dimensions

Use below image to determine foot specifications.

