

Lifespan® System Visual Installation Guide

*****BEFORE INSTALLING LIFESPAN® SYSTEM, PLEASE COMPLETE ONLINE TUTORIAL TO ATTAIN LIFESPAN® INSTALLATION AND MAINTENANCE CERTIFICATE – CONTACT JASON CLOWATER AT 416-230-5196 OR JASON.CLOWATER@HAMILTONKENT.COM TO RECEIVE AN INVITE TO THE TUTORIAL WEBSITE*****

*****LIFESPAN® SYSTEM DOES NOT INSTALL THE SAME AS STANDARD CAST IRON FRAME AND COVER - DETAILED INSTRUCTIONS FOR EACH STEP CAN BE FOUND ON REVERSE SIDE OF TOOLING REQUIREMENTS PAGE*****

1. Ensure that surface is flat/even (If foundation is not solid enough to accept anchor bolts, use concrete grade rings or other approved methods – listed in detailed instructions – to make it acceptable).



2. Measure distance from foundation to final grade to ensure that there is adequate room for Lifespan system and grade rings.



3. Drystack frame, adjustment risers, and grade rings ¼" below final street grade and mark their orientation (top of install needs to be even with eventual slope of the road).



4. Drill through frame, adjustment risers, grade rings – then into structure Tap anchor bolts carefully into foundation structure (leave 2.5-4" of bolt exposed for frame and grade ring).



5. Unstack, install anchor bolts into foundation (epoxy may be required) and use HK supplied Kent Seal sealant between each connection point in a continuous bead, ensuring that bolts are completely surrounded.



6. Hand tighten anchor bolt nuts, then install cover assembly using a torque wrench set to **35 ft/lbs.** Once cover is secured with cams engaged under frame, tighten anchor bolt nuts completely.

7. PERFORM PICK TEST TO ENSURE THAT COVER IS LOCKED AND SECURE TO FRAME.



*****FOR OFF-ROAD OR RESIDENTIAL, LIGHT TRAFFIC INSTALLATIONS ONLY - NOT INTENDED FOR HIGHWAYS OR HIGH TRAFFIC AREAS*****

CALL 416-675-9873 FOR INSTALLATION ASSISTANCE

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Detailed Installation Instructions for Lifespan® System to be used in conjunction with Lifespan® Visual Installation Guide

This guide is intended as a field installation refresher only. Installers and maintenance departments must attend a 30-minute online training where they will become certified Lifespan® Installers by Hamilton Kent.

Step 1

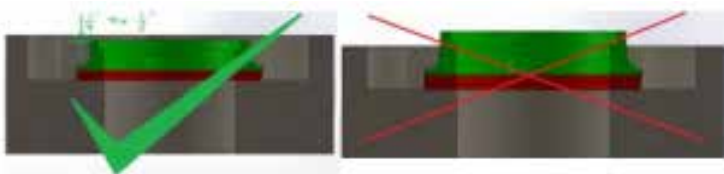
- Ensure foundation surface is dry and even.
- Remove loose brick if applicable.
- Precast concrete grade rings can be used to raise/strengthen foundation.
- EPP or composite grade rings can also be used.
- Anchor system varies depending on foundation type.
 - a) Anchors used with concrete grade rings.
 - b) Threaded rods used for Pro-ring or composite grade rings.

Step 2

- Foundation should be a minimum of 6.5" from final grade. If the distance is greater than this, used grade rings to reach suitable distance.
- Total distance should fall ¼" below final street grade in this calculation to account for pavement.

Step 3

- Dry stack frame, adjustment risers, and grade rings to correct grade.
- Mark vertical line to ensure components can be removed and replaced exactly as measured during dry stack.



Step 4

- Drill holes:
 - a) 24" & 27" – 3 holes
 - b) 30" – 4 holes
- Use 9/16" spade bit for frame, ½" concrete bit for structure – but use 5/8" concrete bit for threaded rod installation if they are necessary.
- Drill through the frame and grade rings while system is dry stacked.
- Remove Lifespan® System and drill into concrete structure and foundation.
- Drilling distance into structure:
 - a) At least 3" for anchors;
 - b) 4.5" for threaded rods.

Step 5

- Recommended to use compressed air to clear any dust inside previously drilled holes.
- Install anchor bolts into drilled holes, but do not tap yet OR install threaded rods into drilled holes with supplied epoxy.
 - a) Epoxy cure time is 15 minutes.
 - b) Use ¼ to 1/3 of the tube for each hole.
- Place Kent Seal™ on structure to seal between structure & system.
- Install adjustment risers and frame with large continuous beads of sealant between each component/level.

Step 6

- Prior to setting cover in place, check cam (attached to SS locking bolt on cover) is ¼" to ½" away from the locking nut.
- Tighten frame bolts or anchors until washers are flush with the frame.
- Lower cover onto frame, aligning Shure-lok™ notch and key unit it's seated firmly.
- **IMPORTANT** – If cam is in contact with locking nut, cover may not lock in place.
- Torque each bolt in cover gradually to 35 ft/lbs – alternating.
- Tap Lifespan® frame anchors until firmly set, and then tighten nuts well.

Step 7

- Use pick from both sides to ensure cover is fully engaged.
- **IMPORTANT** – If cover is not locked it can bounce out.

The Lifespan[®] System

INSTALLATION INSTRUCTIONS INSIDE

Tooling Requirements

What tools do I need to properly install:

- ü Hammer drill
- ü Standard drill
 - 9/16" spade drill bit
 - 1/2" concrete drill bit (5/8" for threaded rod assembly)
- ü String
- ü Tape measure
- ü Torque Ratchet
 - 1-1/8" socket
- ü 3/4" Open end or box wrench
- ü Grease pen
- ü Spray paint or chalk
- ü Hard rubber mallet
- ü Wire brush
- ü Whisk broom
- ü Caulking gun (if using a sealant other than Kent Seal[™] or epoxy)
- ü Air compressor
- ü Scissors or knife
- ü Cutting disk or saw capable of cutting the top off of the 1/2" SS anchor bolts



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for a **Greener**, Sustainable Tomorrow***