

Instructions

Assembly
Installation
Operation

8/2007

Stay™ Bench

HANDLE WITH CARE! Pangard II® polyester powder coat is a strong, long-lasting finish. Protect this finish from damage during installation. Place unpacked powder coated parts on packaging foam or other non-abrasive surface. Do not place or slide powder coated parts on concrete or other hard or abrasive surfaces – this will damage the finish causing corrosion to occur. Use touch-up paint to repair any finish abrasions.

WARNING! TO REDUCE THE RISK OF ANCHOR FAILURE AND INJURY TO PERSONS, MOUNT THE STAY BENCH DIRECTLY TO CONCRETE ONLY.

Landscape Forms is not responsible for site preparation. Our recommendations for typical installations follow.

Recommended procedure for surface mounting:

Surface mount benches are shipped with surface mounting plates installed and anchor bolts packed separately. Each backless bench requires two anchors. Each backed bench requires four anchors. Use only the anchor bolts provided (Powers Fasteners Power-Bolt® #5934 stainless steel 1/2 x 4-3/4 hex head sleeve anchor).

1. Check the screws that fasten the mounting plates to the bench. Tighten them if necessary.
2. Place the bench in the desired position. See Figures 1 and 2 for minimum concrete base requirements.
3. Mark hole locations.
4. Move the bench to allow access for drilling holes.
5. Drill holes using a hammer drill and 1/2" carbide tipped drill bit manufactured to ANSI B212.15. The tip diameter lower wear limit is .510". Minimum hole depth is 4.50".
6. Clean holes carefully using compressed air. For best results, use a nozzle with an extended tip that reaches the bottom of the hole.
7. Place the bench over the drilled holes.
8. Do not expand the anchors prior to installation. Use a hammer to drive the anchors into the holes until each anchor is seated firmly against the mounting plate. Install all anchors before tightening any of them with a wrench.
9. Tighten the anchors by applying a torque of 25 to 35 foot-pounds. If a torque wrench is not available, tighten the head 3 to 5 turns past finger tight.
10. Inspect anchors periodically and tighten as necessary.

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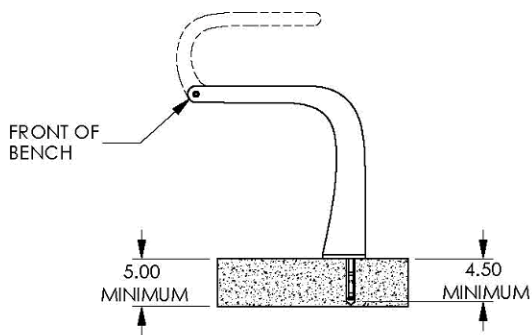
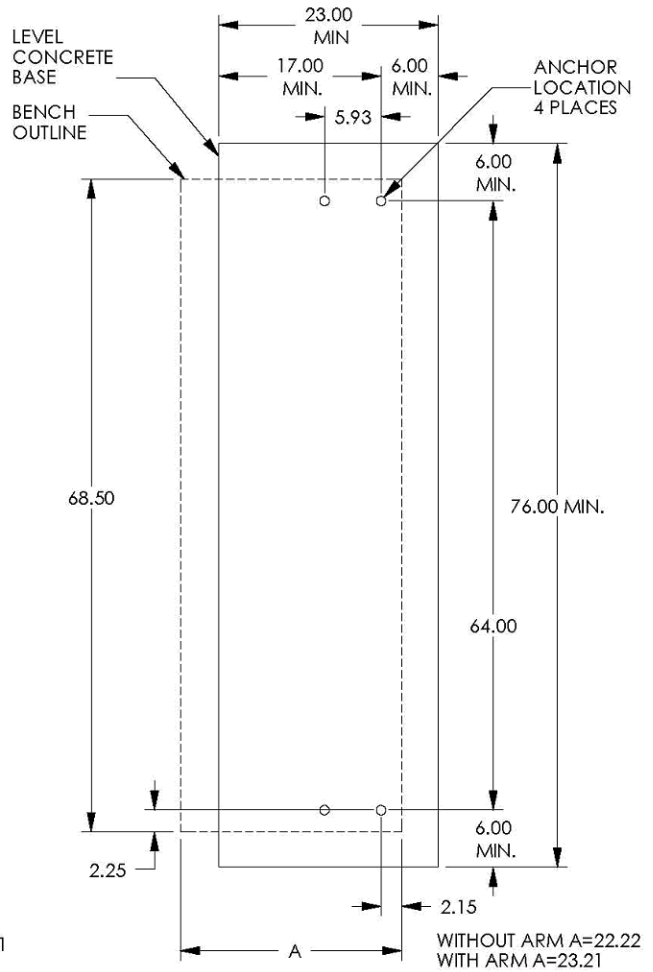
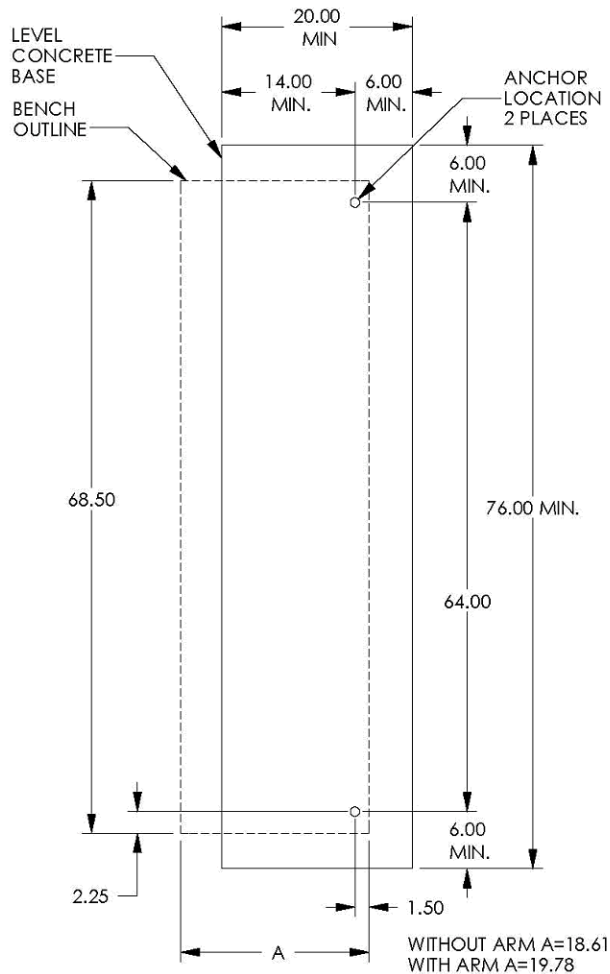


FIGURE 1
STAY BACKLESS BENCH
SURFACE MOUNT ANCHOR LOCATIONS
DIMENSIONS IN INCHES

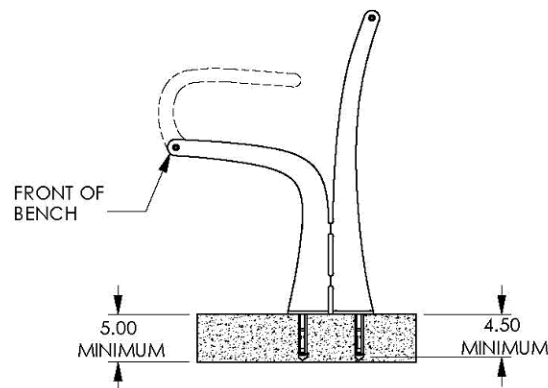


FIGURE 2
STAY BACKED BENCH
SURFACE MOUNT ANCHOR LOCATIONS
DIMENSIONS IN INCHES

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Recommended procedure for embedded installation:

Each bench is shipped with four stainless steel threaded rods (packed separately) intended for adhesive anchoring. Once installed, the bench cannot be removed without damaging the bench and/or concrete base. Use one of the following adhesives supplied by others:

- Powers Fasteners AC100 PLUS™ This gray colored adhesive is available in 8, 12, and 30 oz. tubes, and may be used at temperatures from 0° to 104°F. Contact the manufacturer at 914-235-6300 or www.powers.com for distributor and technical information.
- Hilti HIT RE 500 This red colored adhesive is available in 11.1 and 37 oz. tubes and may be used at temperatures from 23° to 104°F. Contact the manufacturer at 800-879-8000 or www.us.hilti.com for distributor and technical information.

These products may be used in wet or dry conditions. Gel and cure times vary with temperature. Each bench requires approximately 3 ounces of adhesive. The following additional items are available from the adhesive manufacturer:

dispenser
extra dispenser tips
1" diameter nylon brush
compressed air nozzle with extended tip

1. Lay out anchor locations as shown in Figures 3 and 4.
2. Drill holes using a hammer drill and 5/8" carbide tipped drill bit. Minimum hole depth is 4.5".
3. Clean holes carefully using a 1" diameter nylon brush and compressed air. For best results use a nozzle that reaches the bottom of the hole. Holes must be free of standing water or ice.
4. Install threaded anchor rods in end support castings as shown in Figures 3 and 4. Rods extend 4" from the bottom of the casting. It is not necessary to tighten the rods.
5. Before dispensing adhesive, place the bench in the installed position with anchor rods extending into drilled holes. Arrange a support for the bench to hold it in the correct position while the adhesive cures.
6. Remove the bench.
7. Follow the manufacturer's instructions for dispensing adhesive. Fill the holes from the bottom up to avoid air pockets. Fill to a level 1" from the top of each hole. (The adhesive level should rise to the top of the hole as the bench is set in place.)
8. Set the bench in the installed position with the support in place. Do not disturb the bench during the cure time.
9. Wipe away any spilled adhesive before it gels.

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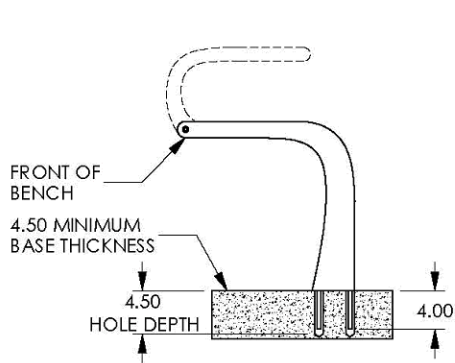
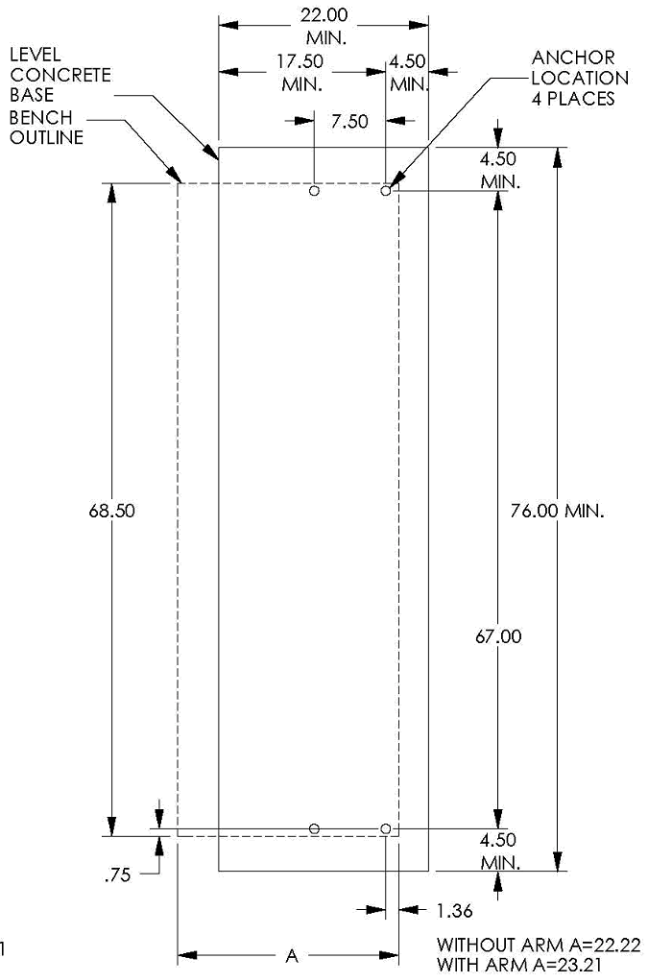
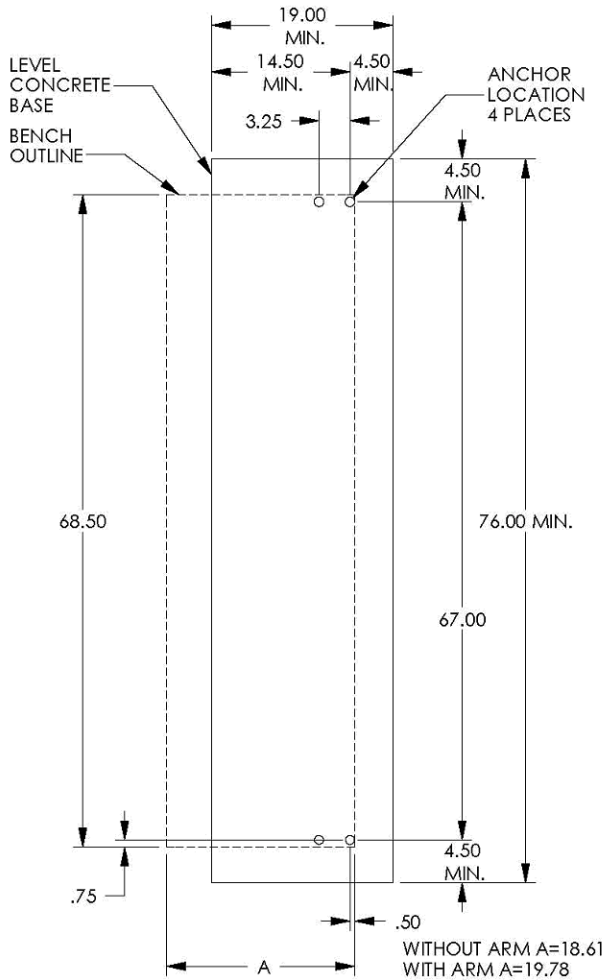


FIGURE 3
STAY BACKLESS BENCH
EMBEDDED ANCHOR LOCATIONS
DIMENSIONS IN INCHES

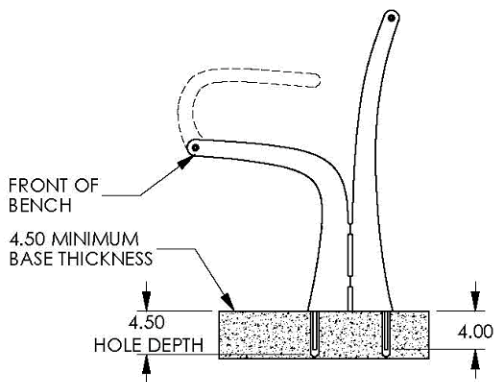


FIGURE 4
STAY BACKED BENCH
EMBEDDED ANCHOR LOCATIONS
DIMENSIONS IN INCHES

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Recommended procedure for surface mounting with optional paver adapters:

The Stay bench may be surface mounted to a concrete base that underlies the pavers. See Figures 6 and 7 for minimum requirements. The bench is supported by aluminum paver adapter extrusions that raise the bench 3-1/2" above the concrete base. The sand bed depth can be adjusted to bring the top surface of the pavers even with the bottom of the bench support castings. Each bench with paver adapters requires four anchors. Use only the anchor bolts provided (Powers Fasteners Power-Bolt® #5934 stainless steel 1/2 x 4-3/4 hex head sleeve anchor).

1. If your bench was shipped with paver adapter extrusions attached, skip to step 3. If your bench has standard surface mount plates installed, remove them and save the screws that fastened the mounting plates to the bench.
2. Assemble surface mount adapters to the bench using 3/8-16 x 1.25 socket flat head screws. Backed benches require two #1 adapters and four flat head screws per adapter. Backless benches require two #2 adapters and two flat head screws per adapter.
3. Check the screws that fasten the paver adapter extrusions to the bench. Tighten them if necessary.
4. Place the bench in the desired position.
5. Mark hole locations.
6. Move the bench to allow access for drilling holes.
7. Drill holes using a hammer drill and 1/2" carbide tipped drill bit manufactured to ANSI B212.15. The tip diameter lower wear limit is .510". Minimum hole depth is 4.5".
8. Clean holes carefully using compressed air. For best results, use a nozzle with an extended tip that reaches the bottom of the hole.
9. Place the bench over the drilled holes.
10. Do not expand the anchors prior to installation. Use a hammer to drive the anchors into the holes until each anchor is seated firmly against the adapter extrusion. Install all anchors before tightening any of them with a wrench.
11. Tighten the anchors by applying a torque of 25 to 35 foot-pounds. If a torque wrench is not available, tighten the head 3 to 5 turns past finger tight.

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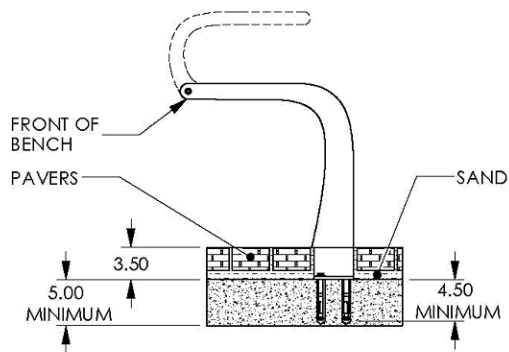
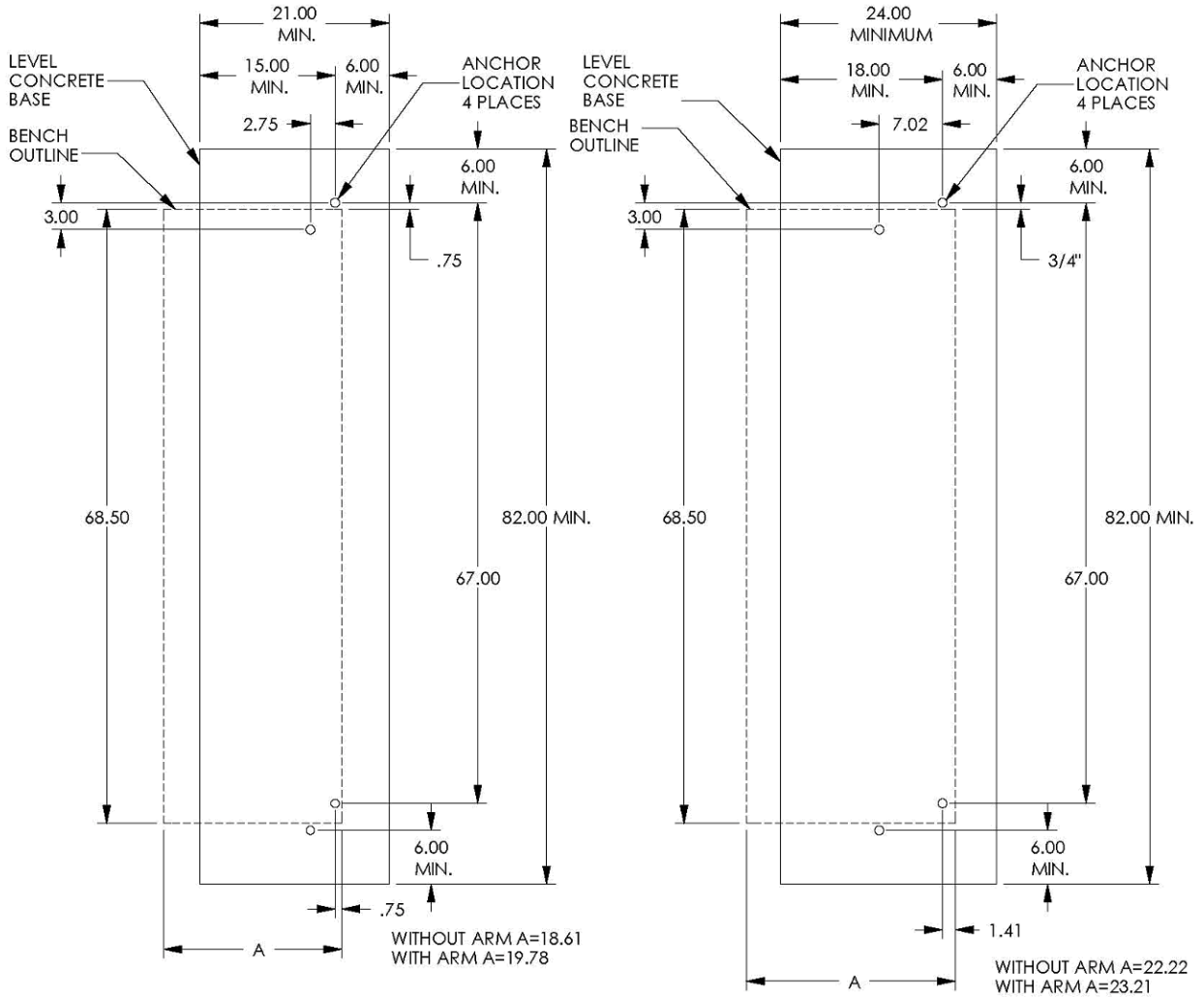


FIGURE 5
STAY BACKLESS BENCH
PAVER ADAPTER ANCHOR LOCATIONS
DIMENSIONS IN INCHES

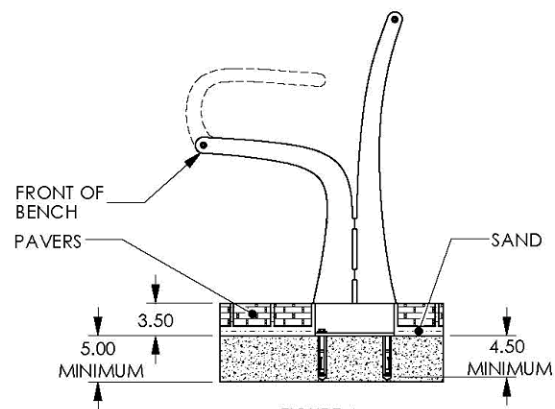


FIGURE 6
STAY BACKED BENCH
PAVER ADAPTER ANCHOR LOCATIONS