

# ***Eco-Grip Flooring Installation Manual***

Version: 2019/05

## **PRIOR TO JOB START:**

Allied Industries strongly recommends that adequate relative humidity testing be performed on all concrete substrate prior to installation. Allied Industries requires that relative humidity be no more than 90% within the concrete slab prior to installation of Eco-Grip® flooring. Allied Industries recommends the use of the Wagner Rapid RH Smart Sensor Relative Humidity test kit, or other suitable testing methods.

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## **Step 1:**

The floor substrate needs to be clean, free of dust, dry and a minimum temperature of 55 degrees fahrenheit. Using a jobsite vacuum, remove all dust and debris from corners, door jams and floor surfaces before laying out the Eco-Grip sheet flooring. The floor's slope will be determined in the next two steps.

## **Step 2:**

Inspect all floor areas to be installed for holes, dips, uneven or rough finished areas especially near floor sinks, trench drains, pipes and other penetrations in the substrate. All excessive floor patch work and preparation should be addressed with the Contractor or Owner before starting as it may require a change order in addition to the contract amount quoted and accepted. Execute the change order before conducting any work. Grind down all uneven areas to a smooth finish and even with substrate. Patch all holes and level all areas prior to installation of Eco-Grip sheet flooring.

Remove all drain grates, clean out lids and drain lids. Be sure that all lids are set 1/4" above the subfloor surface. Stainless steel collar detail is preferred and will prevent leaks and stand up well to rolling loads and floor abuse. Refer to stainless collar floor drain detail drawing for guidance and further details.

Floor sinks, trench drains and other square or linear drains will also need to be at 1/4" inch above concrete or substrate surface with proper slope to create water flow toward drains. These can be finished using stainless flanges or SpeedFlex liquid flanges. Refer to stainless steel flange and SpeedFlex liquid flange detail drawings for guidance and further details. Order stainless flanges and collars on the first day of the job.

**Step 3:**

Make sure that the colors of the sheets are the same and from the same dye lot. Remember: Eco-Grip is a recycled material and there can be slight shade variations between dye lots. Allied Industries closely inspects each sheet produced to ensure that material shipped to a given job will be the same shade. Measure the area to be installed and check to see which way is best to run the Eco-Grip sheets. Eco-Grip is a directional flooring product and should always be installed in line with the directional sticker affixed to the face of each sheet. Once started, the sheets should be run in the same direction. Eco-Grip sheets should be installed in a staggered pattern to avoid a 4-way intersection of sheet corners. If sheet direction must change it should be done in different areas, separated by a doorway or the smallest possible transition.

**Step 4:**

Standard wall base is 6" high. To prepare a sheet for 6" base, allow 3" for the width of the router and 6" for the wall base. Set your router board at 9" down from the sheet edge. Set the router depth at 1/8" inch and check depth of cut; make sure that your router cut is correct before scoring across the length of the sheet. Use a 1/2" standard router bit to insure proper cove.

Once the cut has been made this will allow the sheet to bend and create a gentle 3/4" radius from the floor to wall creating the proper cove base angle. It is good practice to carefully stack sheets, upside down, on a smooth surface with no obstructions (i.e.: drains, slope, rough surfaces). This way the router cuts in the sheets are consistent in depth and do not vary.

**Step 5:**

Sheets should be lined up and cut into each other. Doorways, drains and other penetrations will need to be cut out as well.

**Step 6:**

Prior to gluing the sheets, groove seams that cannot be cut with an electric groover. These areas would include verticals, seams close to walls, or seams in tight spaces. Additionally, cut FRP divider strips according to base height, in preparation for base trim to sit flush against the walls.

*\*Remember: No sheets should be welded together at this point. They will all be glued individually prior to seam welding.*

**Step 7:**

Prep floor for glue. Pull up the individual pieces to be glued and vacuum the substrate again to ensure that all debris and fine dust is removed. It is also recommended that you wipe the backside of the Eco-Grip with acetone while it is pulled back if it is dirty/dusty. It is very important that your vacuum filter is CLEAN during this step.

**Step 8:**

After several sheets are pulled back and vacuumed thoroughly, it is time to glue the floor. With a 3/32" trowel, glue the floor to the subfloor. There should be no space that is left unglued even underneath seams. If glued properly, there should be a small amount of glue at the bottom of every seam. This seals any voids and will yield better results with floor adhesion and SpeedFlex application. Keep in mind that the epoxy cannot come up more than a 1/16" into the seam or you will not get the full SpeedFlex bond. The objective is to seal the bottom of the Eco-Grip sheets and eliminate any void left unglued. Once half is glued, roll back the sheet pushing out all air gently and pull up the other side and repeat steps 7 & 8.

*\*Remember: Any excess glue that comes out of seam or ends up on surface of material needs to be cleaned IMMEDIATELY with acetone and a clean rag.*

**Step 9:**

Once the entire area has been glued the floor must be secured to the wall and rolled with the 100 lb. roller. The roller ensures the entire surface of the material has set into the glue and therefore will not bubble later. Even if there are no obvious bubbles the roller is still required. While rolling the floor, try to roll from the seam out to the wall and stay a few inches away from seams so excess glue isn't pushed out. Check to see that all seams are down and set into the glue. Any seam that is not level and even will cause more problems once welding begins.

**Step 10:**

Use a long, heavy handle screwdriver and perform a tap check. Walk around and tap the floor with the handle of the screwdriver and listen for hollow sounds. This indicates the floor is not flat on the substrate. If any areas have this hollow sound, then roll your 100-pound floor roller over the area until flat on the substrate and the tap check sounds solid. This assures that the sheet material is making firm transfer with the adhesive and will bond to the substrate.

**Step 11:**

The fastest way to secure the wall is by using a finish nail/staple gun and hold down the material to lowest possible height and secure a brad into wall at the top ¼" of material (will be covered by base trim). This can also be done by using screws every 2 or 3 feet, though they will need to be backed out after the glue sets and before the base trim is installed.

*\*Remember: This step must be done within 30 minutes of gluing the floor to ensure base sits even across floor area.*

### Step 12:

After the area is glued down and seams are sealed, it is time to install the base trim. Use a pair of titanium snips to cut the high impact base cap material. Apply a liberal 1/4" bead of E-6100 on top of the cove base then place the trim cap on while holding down pressure and installing the black or stainless-steel screws. While doing this, ensure the trim is level and the cove is tight to the floor and the wall. Screws should be installed in even patterns, 8" on center and 1" from the end of the base trim strip, and within 1" of either side of all inside and outside corners. All base trim should fit tight against the wall (FRP divider strips removed per Step 6). Wipe away any excess E-6100 that has squeezed up beyond the top edge of the base trim strip.

### Step 13:

After the base trim is installed per Step 12, run a small bead of sealant along the top edge of base trim to make a final seal to the wall. This can be done very easily with a clear Dap 100% silicone product.

### Step 14:

**SpeedFlex Liquid welding system-Step 1:** This step works best if you wait a full 24-hours after gluing the floor. If you have not already grooved the seams, this can now be done. The electric groover should cut out all the cured epoxy inside the seam and leave a perfect V-groove to weld. Make sure all grooves, verticals, corners, and floor seams are all grooved 6MM weld wide, leaving ample space for the SpeedFlex liquid weld to fill. The finished seam width should be 1/4".

### Step 15:

**SpeedFlex Liquid welding system-Step 2:** Tape the floor seams with the SpeedFlex tape or green seam tape, up to 10 sheets at a time (It is better to do this in sections.) Using a hand-held seam roller, roll the tape on both sides of the seam ensuring good adhesion.

*\*Remember: Be careful not to stretch out the SpeedFlex tape or green seam tape as you apply, or it will not adhere properly and cause problems later. It should be applied using no pulling pressure, just downward pressure as you roll the tape.*

### Step 16:

**SpeedFlex Liquid welding system-Step 3:** Prime the SpeedFlex cartridge to ensure proper flow and mixing of the product. Load the cartridge into your SpeedFlex gun. Remove the screw on collar and cap. Extrude a small amount of SpeedFlex onto scrap material or cardboard to ensure both the resin and activator are flowing out together. Attach a static mixer using the screw collar. Extrude approximately 12" of SpeedFlex through the static mixer onto scrap material or cardboard to ensure the SpeedFlex is evenly mixed before applying in a seam.

### Step 17:

**SpeedFlex Liquid welding system, - Step 4:** Holding the applicator at a 70-degree angle, apply SpeedFlex to seam with the nozzle of the static mixer as deeply as possible in seam. A second installer should be using a putty knife to smooth out the seam getting it level with the Eco-Grip®/tape. It is important to make sure the seam is filled up and there are no gaps underneath. Use light pressure to spread the seam in order to avoid scraping SpeedFlex out of the seam. Failure to push out the excess air could cause the SpeedFlex to improperly seal or have a rough appearance. For verticals, inside corners, and outside corners you will use the same green seam tape. Inside corners and cove welds should not be scraped for excess and instead should be smoothed over with a radius tool leaving more or less, a 45-degree angle.

### Step 18:

#### **Floor drain details:**

The preferred method is using **stainless steel collars** that are special ordered the first day you arrive on the job. Measure all sizes and order collars from LSI Floors and have them shipped overnight freight to the job. Install them on your last day before leaving. Dry fit all pieces around the drain until you have a rectangle then mark an outline with an ink pen. Remove the pieces and route out the floor material the thickness of the flange. Mark all the screw holes, drill with a 5/16" inch bit and your hammer drill and set the lead anchors. After you have set all the lead anchors, screw down the flange lengths ensuring that you have a flat finished profile.

### Step 19:

**Floor Sinks** can be handled in two ways – SpeedFlex collar, or Stainless-Steel flange. If the floor sink happens to be PVC plastic, you can weld to the edges by running a SpeedFlex bead around the edges of the fixture. This method doesn't require any additional penetrations in the flooring material like the flange method. Fewer penetrations through the flooring material will provide the best result.

With the **SpeedFlex collar** method, the floor sink must be PVC and must sit above the substrate at least ¼" to ensure a strong bond with the drain fixture, Eco-Grip, and concrete. The floor needs to be cut away from the drain a full 3/8" around all sides in the stair-step method. Then the top of the drain and the material around the collar should be taped off using SpeedFlex perforated tape or green seam tape. Be sure not to tape over a surface or edge that should be making a glue bond.

Apply SpeedFlex from applicator filling the entire void created from when the material was cut 3/8" around the drain. Using a putty knife, wipe excess weld material off the tape and make sure weld is at the same level as the finished Eco-Grip floor.

After all edges of the floor sink have been sealed with SpeedFlex, remove the SpeedFlex tape and let the area set up (it could take up to 30 minutes to fully cure. Foot traffic and water cannot be allowed to interfere while the SpeedFlex is curing.)

Any SpeedFlex that smeared over the tape boundary onto the floor or fixture must be cleaned very neatly with Acetone and a clean rag before it cures.

Another method is using **stainless steel flanges** that are special ordered the first day you arrive on the job. Measure all sizes and order flanges from LSI Floors and have them shipped overnight freight to the job. Install them on your last day before leaving. Dry fit all pieces around the drain until you have a rectangle, then mark an outline with an ink pen. Remove the pieces and route out the floor material the thickness of the flange. Mark all the screw holes, drill with a 5/16" inch bit and your hammer drill and set the lead anchors. After you have set all the lead anchors, screw down the flange lengths ensuring that you have a flat finished profile.

All flanges need to be recessed 1/16". Pilot holes for the #10 lead anchor need to be drilled through the Eco-Grip and concrete according to the hole pattern on the flange. E-6100 needs to be applied in holes and under flanges, and flanges need to be secured using #10 1-1/2" stainless steel screws and #10 lead anchors.

#### **Step 20:**

**Linear drains or trench drains** – Order custom-sized puzzle piece or single piece trench drain flanges on or before the first day of the job. Dry fit all pieces around the drain until you have a rectangle, then mark an outline with an ink pen. Remove the pieces and route out the floor material the thickness of the flange. Mark all the screw holes, drill with a 5/16" inch bit and your hammer drill and set the lead anchors. After you have set all the lead anchors, screw down the flange lengths ensuring that you have a flat finished profile. All flanges should be recessed 1/16", sealed with E-6100 and secured using #10 1-1/2" stainless steel screws and lead anchors.

#### **Step 21:**

Thoroughly check all of installation for watertight seal with SpeedFlex around door jams, pipe penetrations and corners. Make sure that all doorjamb and penetrations are taped off prior to applying SpeedFlex and are well sealed after the tape is removed. Check your welds and all seams for neatness and quality.

#### **Step 22:**

You must terminate edges of Eco-Grip material with stainless steel threshold at all locations where Eco-Grip transitions to another flooring product. With a band saw, cut the threshold the proper

length, dry fit the section and drill your holes. Remove any dust from the holes (vacuum) and set the lead anchors. After setting anchors run several large beads of E-6100 sealant under the threshold, applied in the holes and anchor down with #10 1-1/2" stainless steel screws. Clean all excess E-6100 with Acetone and a clean rag.

**Step 23:**

Thoroughly clean the worksite and pick up all pieces of scrap floor material and other trash that you have left on the job site. Always strive to leave the jobsite cleaner than how you found it. Eco-Grip is a finish product and should look as clean as possible for the customer.

**Step 24:**

Walk the job with your installation crew to make sure the installation is secure as per the Quality Control Checklist.

**Step 25:**

Educate all point personnel on **ECO-GRIP®** floor cleaning procedures, leaving behind a gallon of **Eco-Grip® Commercial Kitchen Floor Cleaner and complete cleaning kit**.

## Cleaning Eco-Grip® Floors

*\*\*The biggest mistake people make cleaning floors is to not thoroughly remove the used cleaning agent and contaminates\*\**

### Daily Maintenance Instructions

#### Kitchen

1. Always place signs in highly visible areas warning people that the floors are wet and could be slippery.
2. Thoroughly sweep all debris from floor surface and remove to trash receptacle.
3. Pre-rinse the floor with **HOT** water. Use the hand-held sprayer when rinsing.
4. Fill foam gun with Eco-Grip® Daily Cleaner and attach gun to water hose. Liberally apply foam to all floor areas. It is critical to use **HOT** water.
5. Using a deck brush quickly but thoroughly scrub the kitchen floor area.
6. Allow Cleaner to dwell on floor for 8 minutes.
7. Scrub floor again in high grease areas.
8. Thoroughly rinse kitchen floor with **HOT** water.
9. Squeegee water down drain and allow floor to dry.

