

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

**Version: 2018/12**

## **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.

### **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. 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. 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.

Remove all drain grates, clean out lids and drain lids. Be sure that all lids are flush with the subfloor surface if using recessed lid detail. Recessed lid detail is preferred provided that the perimeter of the lid is less than ¼" thick and does not contain ridges, cutouts, or teeth. Refer to Recessed Drain Lid Detail Drawing and Stainless Collar Floor Drain Detail Drawing for guidance on appropriate drain height. Any floor drains that are not set flush with the subfloor will need a stainless steel or epoxy collar.

Floor sinks, trench drains and other square or linear drains need to be at ¼ "inch above concrete or substrate surface with proper slope to create water flow toward drains.

### **Step 3:**

Standard wall base is 6" high. To prepare a sheet for 6" base, allow 3" for the router and 6" for the wall base. Set your router board at 9" down from the sheet edge. Set the router depth at ⅛" inch with a ½" inch router bit width and check depth of cut; make sure that your router cut is correct before scoring across the length of the sheet.

Once the cut has been made this will allow the sheet to bend and create a gentle 90-degree angle from the floor to wall creating the proper cove base angle. It is good practice to carefully stack sheets, smooth side up, 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 4:**

Measure the area to be installed and check to see which way is best to run the Eco-Grip sheets. Once started, the sheets must 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.

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 following manufacturing.

**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. 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.

**Step 6:**

Prior to gluing the sheets, hand groove or bevel seams that will not be able to cut with electric groover, before adhesive is spread. 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*

If you do not have the groover it is recommended to groove all seams before adhering sheets with epoxy.

**Step 7:**

Prep floor for glue. This includes pulling up the individual pieces to be glued and vacuuming the substrate again to ensure that all debris and fine dust is pulled up. 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 enough pieces are pulled back and vacuumed thoroughly, it is time to glue the floor. With a **3/32" – 1/8"** inch trowel, glue the floor to the seams. There should be no space left on the floor 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 right SpeedFlex bond. We are just trying to seal the bottom of the Eco-Grip sheets and eliminate any void left unglued. Once half is glued, roll back the sheet pushing 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 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 sunk 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 stuck into the glue. Any seam that is not level and even will cause more problems once welding begins.

**Step 10:**

After this step use a long handle flat head screw driver and perform a tap check. Walk around and tap the floor with the screwdriver and listen for hollow sounds, which indicates the floor is not flat on the substrate. If any areas have this hollow sound, then use 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 contact with the adhesive and will bond to the substrate.

**Step 11:**

The fastest way to secure the wall is by using a finish nailer, 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 or the base will not sit evenly, causing major difficulties.***

**Step 12:**

After the area is glued down and seams are sealed, it is time to install the base trim. A pair of titanium snips will be needed to cut the high impact base cap material. Apply a liberal 1/4" inch

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 ensuring 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:

Liquid welding system. 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 of the cured epoxy inside the seam and leave a perfect V-groove to seal. Make sure all grooves, verticals, corners, and floor seams are all grooved at least **¼" (6.5mm) wide** and there is plenty of room for the Speed Flex liquid weld to fill. The finished seam width should be 3/8".

### Step 14:

Tape the floor seams with the Eco-Grip seam tape, up to 10 sheets at a time (It is better to do this in sections so the tape doesn't come loose from the product). Roll the tape on both sides of the seam ensuring good adhesion.

### Step 15:

Apply SpeedFlex inside seam with the nozzle of applicator as deep as possible in seam. A second installer should be using a putty knife to smooth the seams to the level with the Eco-Grip seam tape. It is important to make sure the seam is filled up and there are no gaps underneath. Failure to push out the excess air could cause the SpeedFlex improperly seal or have a rough appearance. For verticals, inside corners, and outside corners you will apply seam tape to all sides of seams before SpeedFlex. 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. **SpeedFlex starts to setup within 3-4 minutes, so you must smooth out the SpeedFlex within this time frame.**

### Step 16:

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 product as the E-6100 is harder to apply.

### Step 17:

**Floor drain details:** If the floor drain is set flush with the substrate and has a removable lid it can be installed using the **recessed lid detail**. This is the fastest and most aesthetically pleasing detail, but it cannot be used on linear drains such as sinks and trench drains. When using this method make sure to remove the small lids off of the drains prior to dry laying Eco-Grip sheets. Once sheets are laid, cut a small hole where the cover is to be re-installed. Look through the hole and locate the

screw holes that secure the lid. Then cut small eyelet holes in the material EXACTLY where the holes are. If you overcut past the holes you lose your seal and all integrity of the floor. Realign the cover, using the holes for accuracy, and mark around the cover using a ballpoint ink pen. You have used the drain lid as a template to mark exactly where the cover will be installed.

Set a plunge router to the thickness of the drain cover, usually 1/8" inch. Route away the circle that you have marked with the ink pen. Be careful not to over cut this area. Stay inside of your ink pen mark while routing the material. You can always go over the area again if needed but if you overcut the drain cover mark you may have to replace the sheet, so pay attention to detail here.

Using your shop vacuum clean up all of the shavings and run a bead of E-6100 underneath the routed material to seal off the cover. When you re-install the cover, you will need 1/8" longer screws to be able to re-attach the drain lid.

### Step 18:

**Floor Sinks** can be handled in three ways – Heat welding to PVC drain, SpeedFlex collar, or Stainless-Steel flange. If the floor sink happens to be PVC plastic, you can weld to the edges by running a bead around the edges of the fixture. The second method, which is approved and tested, is the SpeedFlex Collar method. 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 drain 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 blue painters tape. Be sure not to over tape a surface that should be making a glue bond. Anything taped WILL NOT seal and will become a problem.

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 epoxy off of tape and make sure epoxy is at the same level as the finished Eco-Grip floor.

After all edges of the floor sink have been sealed with the epoxy, remove the painters 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 and onto the floor or fixture must be cleaned very neatly with Acetone and a clean rag before allowing it to cure.

The third 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 a stainless-steel fabricator, have them shipped overnight freight to the job. Install them on your last day before leaving.

All flanges need to be recessed the thickness of the flange material, sealed with E-6100 and screwed down with stainless steel screws #12-11 X 1-1/2" and lead anchors. **Tip: knife cut 1/16" inch around outside marked edge, route close to the line and use a moon knife to remove the remainder. This will prevent over cutting**

**Step 19:**

**Linear drains or trench drains** – Order custom-sized puzzle piece or single piece trench drain flanges. 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. Seal with E-6100 then re-install the flange lengths after cleaning any shavings with your shop vac. Then mark all of 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 20:**

Thoroughly check all installations for water tight seal with SpeedFlex around door jams, pipe penetrations and corners. Make sure that all door jambs 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 21:**

At all locations where the new Eco-Grip flooring meets another type of material such as concrete or tile you must terminate your edge with stainless steel threshold. Cut the threshold the proper length with a band saw, 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 and anchor down with stainless steel #12-11 X 1-1/2" screws. Clean all excess E-6100 with Acetone and a clean rag.

**Step 22:**

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 when you arrived on site.

**Step 23:**

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

**Step 24:**

Educate all point personnel on **ECO-GRIP** floor cleaning procedures, leaving behind a gallon of *Eco-Grip cleaner along with the cleaning kit.*

## Cleaning Eco-Grip Floors

***The biggest mistake people make when cleaning floors is not thoroughly removing 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. Fill foam gun with Eco- Grip® Daily Cleaner and attach gun to water hose. Liberally apply foam to all floor areas.
4. Using a deck brush quickly, but thoroughly scrub the kitchen floor area.
5. Allow Cleaner to dwell on floor for 8 minutes.
6. Scrub floor again in high grease areas.
7. Thoroughly rinse kitchen floor with hot water.
8. Squeegee water down drain and allow floor to dry.