

Old Wood LLC

End Grain Panel Installation and Maintenance

Introduction: End Grain Panel flooring, EGP is a product which bridges across many aspects and it's installation and maintenance borrows from aspects of solid wood, engineered product and even carpet and tile methods. It is simple in it's nature and form and installation is considered to be conventional in all respects however care and good practice must be observed in order to obtain a successful commercial grade result.

Product: EGP is a solid wood product with no backer, plywood, mesh or other attached substrate. It depends on a solid, very flat and moisture impervious substrate such as cured concrete, flat well laid T&G flooring grade plywood or OSB or in the case of Raised panel Flooring, steel or calcium carbonate panels.

Finish: EGP is available in unfinished or fully finished varieties.

If a fully integral floor with no seams or joints visible is desired, user should select unfinished sanded product, which will allow for an invisible filling and sanding of joints, rendering them invisible in the finished floor.

If Pre-finished product is used joints/seams may be carefully filled with a quality wood filler such as Timber Mate or other professional grade product. Color matching should be carefully accomplished.

Species: Many species are available and our offerings are growing, however Pine, Douglas fir, Oak (any species), mesquite, juniper/cedar are currently offered. Other woods such as teak, mahogany and other tropical woods are suitable and available but do not display appearance attributes such as are generally sought after in end grain. All species must be protected from moisture, however oak is considered most at risk for failure due to expansion and contraction. This is due to the ring/ray structure of oak, which cause it to alter shape in unpredictable directions from moisture ingress/egress. Our process is intended to minimize this attribute but ultimately climactic and use conditions such as excessive water used in cleaning are very destructive to all wood floors and EGP is no exception.

Nature of the product: EGP is a solid wood product, composed of horizontally cut blocks, which take advantage of the dynamically strong nature of the tree along its vertical axis. End Grain blocks are *anisotropic in nature.* This means that they will expand and contract differently depending ring structure, shape and length. Old Wood has solved this aspect and our panels are stable across both axes but care must be taken to control moisture invasion.

Preparation: Slab or substrate must be dry, sound, clean and stable. It must be dust free and all glue manufacturers requirements must be met including where applicable the INTRODUCTION OF MOISTURE necessary to the curing of most modern polyurethane adhesives such as Bostick, Sika etc. These depend on moisture for proper curing and excessively dry environments may create unfavorable curing leading to improper adhesion or subsequent failure. Slab must be to client/architect specifications.

Level: critical to successful and long -term wear of EGP: Flat to 5 mm of a straight edge over a 3 meter radius or better.

Dry/Cured: Slab must be dry to current concrete industry standards being 3.5% or better using Calcium Chloride test or other permissible standard or meter. Slab should be at EMC or equilibrium moisture content.

Installation is conventional: Licensed and trained floor installers should be used however some crossover from tile/wood worlds is expected with this product.

Preparation: Slab or substrate MUST be clean and free of oil, solvents and excess soap such as TSP or other. In the case of metal flooring all manufacturing residues and oils must be well removed using an appropriate solvent.

If you plan to install an un-finished EGP floor, ask for complete installation guidelines. The following refers primarily to fully finished EGP floors.

Glue: We have our 'old friends' but any modern quality adhesive in the water cured polyurethane family may be used. Care MUST be taken to follow manufacturers instructions and at no time shall these instructions be taken to supersede any necessary warranty or absolute requirements of the product manufacturer.

Trowel: $3/16" \ge 1/4"$ square spacing is a good starting point. V notch may be preferred. We recommend testing both for good coverage and adhesion.

Excess glue is NOT good. Our panels will generally have a small 'splooge line' or excess glue space around the edges. One may be added if necessary or added to by simply kerfing with any table saw. This is to prevent push-back from excess glue but take care to use only that glue necessary without any push-up or excess accumulation.

Moisture barrier: Follow glue manufacturers instructions to obtain a moisture barrier appropriate to your desired installation and circumstances. On upper floors no barrier may be needed or desirable. Talk to your architect and engineer and installer who has READ the instructions on your adhesive and/or consulted with the glue manufacturer. Bostick has been very helpful in this regard.

Level and flat: Straight edges (drywall type) should be available and used to check square lines and level/flat. EGP will show minor variations once finished and looked at in flat light. Take care to look over your floor in a lower plane so as to see these defects while they can still be fixed!

Fill: After the floor has cured and can be walked on you may perform additional filling of gaps, seams may be filled with appropriate color fill. This is NOT a job for messy or tired people or to be done in low light conditions. The top coat of our prefinished floors will allow you to spread a good, properly thinned colored filler so as to fill any gaps and then be immediately wiped off with clean damp paper towels, rags or well squeezed sponge. Do not allow old filler to form a film on the surface but assure it is well cleaned. Further waterproofing may be attained by using a small artists paint brush to carefully brush on a thin coat of water based polyurethane top coat material of the non-two part variety.



Care and maintenance: Once installed this is a very tough, commercial grade floor.

Any 'normal' cleaning regimen may be used as long as excess water is NOT used.

Any water showing on the surface after cleaning is NOT allowed.

Soaps may be used and solvents such as paint thinner, Goof Off and others may be used but sparingly. Test on a small corner area prior to use!

Re-finishing: Conventional sanding and re-finishing may be used however our UV cured top coat may not be compatible with some water based polyurethanes for large area applications. Gap filling of seams is allowed and useful.

For future top coating, consult us or your coating manufacturer. Your EGP floor is coated with a UV cured oil based finish as standard.