



Single Layer Floor System

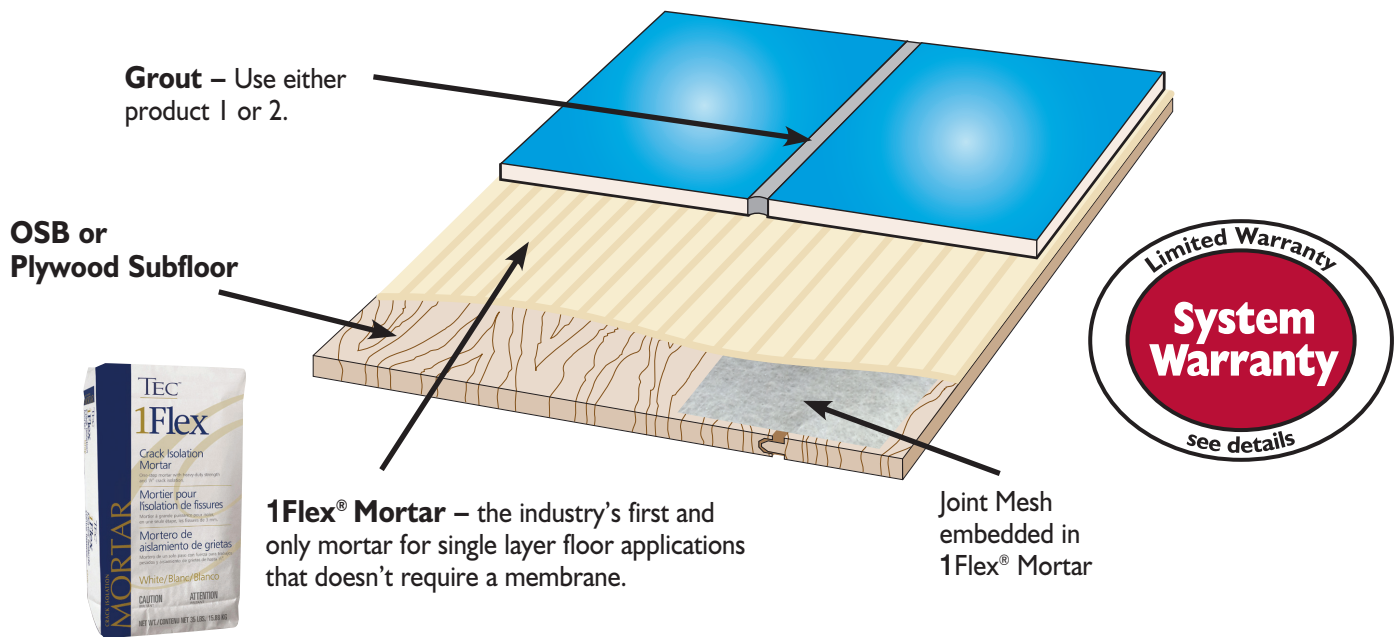
The only direct-bond system for wood frame construction.



1. **Power Grout® Ultimate Performance Grout** – Powerful performance made easy. Power Grout® is easy to install and offers permanent stain resistance, color consistency, crack, mold & mildew resistance.



2. **AccuColor EFX® Epoxy Special Effects Grout** – redefines traditional Epoxy grouts by offering superior handling and performance, and by boasting the most extensive color palette in the industry.

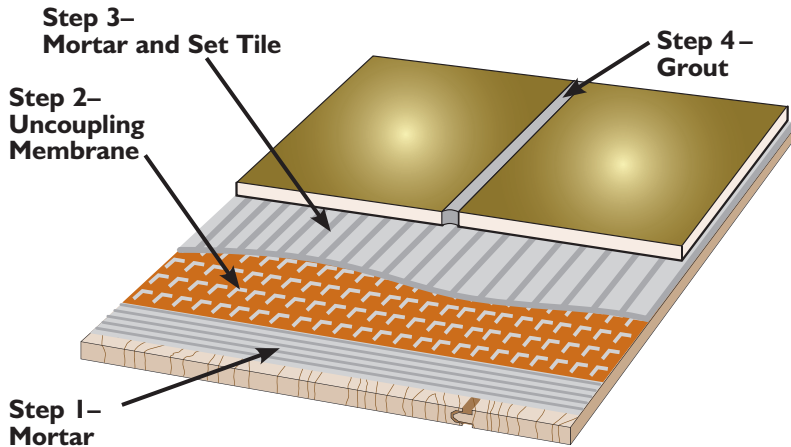


- ★ Direct-bond to approved subfloor
- ★ No underlayment or membrane required
- ★ Limited tile and grout warranty for bond and cracking

- ★ Lower installation costs
- ★ Increased productivity
- ★ Residential to Light Commercial Rating

Lower installation costs with the TEC® Single Layer Floor System

4-Step Uncoupling Membrane System



No complete system warranty

Do the Math . . .

Material Cost per Square Foot:

Uncoupling Membrane: _____

Mortar: _____

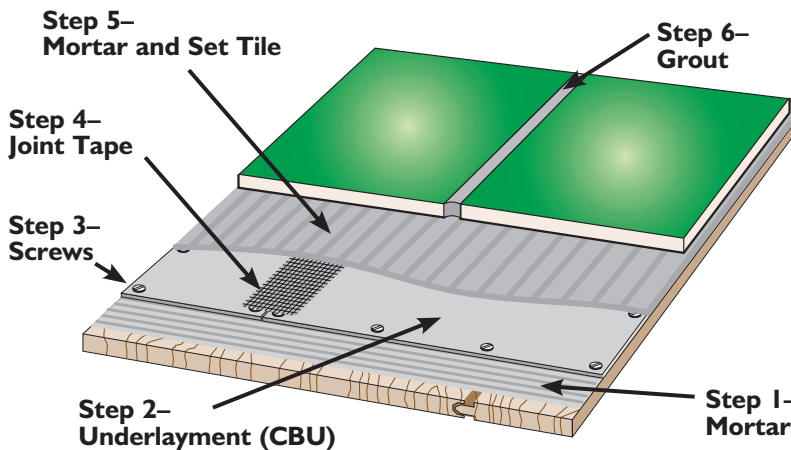
Grout: _____

Labor Cost per Square Foot:

Uncoupling Membrane: _____

Total _____

6-Step Underlayment System



No complete system warranty

Material Cost per Square Foot:

Cement Board: _____

Mesh: _____

Screws: _____

Mortar: _____

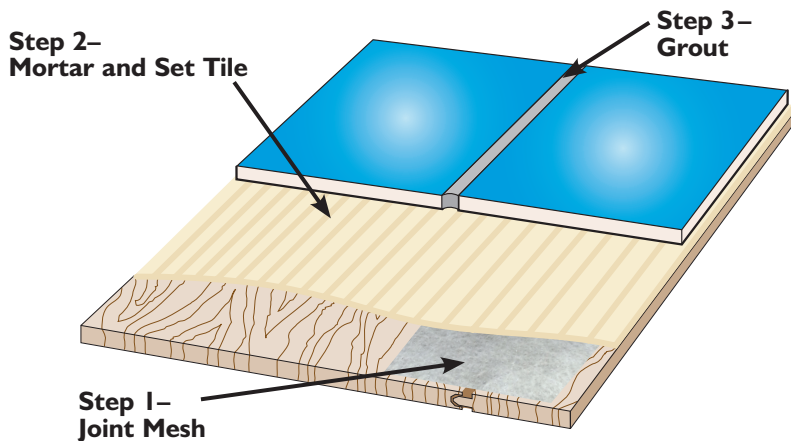
Grout: _____

Labor Cost per Square Foot:

Cement Board: _____

Total _____

TEC® 3-Step Direct-Bond, Single Layer Floor System



Complete system warranty!!

Material Cost per Square Foot:

Mesh: _____

Mortar: _____

Grout: _____

Labor Cost per Square Foot:

No underlayment required: \$0.00

Total _____

Calculate your savings with the TEC® Single Layer Floor System.

TEC® 1Flex® Single Layer Floor System

Specifications and Guidelines

Appropriate Applications:

- Residential to light commercial.

Approved Substrates:

Suitable Subfloors

- APA Rated IP Sturd-I-Floor™ Exposure I or better, Plywood or OSB.
- AdvanTech® OSB flooring panels.
- Exterior grade plywood (APA grade trademarked exterior plywood).
- Underlayment grade plywood, Exposure I or better.
- CDX plywood - Exposure I.
- LP® Top Notch® and Top Notch® Orange Plus® OSB tongue and groove flooring.

Subfloor Installation Requirements

- $2\frac{3}{32}$ " (18 mm) minimum thickness.
- Joist Spacing up to and including 24" (60 cm) o.c.
- Must be tongue-and-groove edges (or 2" (5 cm) lumber blocking beneath edge joints in between joists).
- Install with long dimension across supports and initial $\frac{1}{8}$ " (3 mm) spacing at end and edge joints.
- Securely fastened to joists with subfloor adhesive and wood screws or 6d ring shank nails 12" (30 cm) o.c. at panel ends and intermediate supports. Without subfloor adhesive, fasten with wood screws or 6d ring shank nails 6" (15 cm) o.c. at panel ends and intermediate supports.
- Maximum deflection of $\frac{1}{360}$ of the span when measured under a 300 lb. (136 kg) concentrated load.

Subfloor Surface Preparation:

- **Clean:**
 - Sweep first then remove fine dust with vacuum or compressed air. If using compressed air, ensure that compressor oil is not inadvertently sprayed onto the floor. (Do not use a method involving water when cleaning floor.)
 - Evaluate success of cleaning methods by wiping surface with a black cloth. If dust is still present repeat cleaning.
- **Integrity:**
 - Do not install over wet subfloor.
 - Remove any loose wood strands.
 - Fill all holes in subfloor. For small holes up to 1" (25 mm) diameter, fill with mortar and embed mesh over hole.
 - Fill surface voids up to $\frac{1}{4}$ " (6 mm) deep with mortar, if greater than $\frac{1}{4}$ " (6 mm) deep, fill with mortar and embed mesh over void.

- **Subfloor End and Edge Joints:**

- Place a 12" to 24" (30 to 60 cm) straight edge perpendicular to the joints to see if the edges of the subfloor panels have peaked.
- If there are no gaps between the straight edge and the subfloor panels on either side of the joint, proceed with the mesh installation as described below.
- If there is a gap under the straight edge on either side of the joint, the joint must be sanded down.

- **Mesh Installation:**

- Trowel minimum 6" (15 cm) wide strip over all subfloor end and edge joints, forcing mortar into the joint gap.
- Immediately place mesh over wet mortar and embed by troweling over the mesh (apply mortar to a thickness sufficient to cover the mesh color).

Set Tile:

- Set tile directly to approved subfloor using 1Flex® mortar.
- Use appropriate size notched trowel to ensure 100% coverage.
- Allow to cure 12-16 hours before grouting (or 4 hours for Fast Set 1Flex®).

Acceptable tile types:

- For joists 24" (60 cm) o.c.: ceramic and porcelain tile up to and including 18" x 18" (45 x 45 cm).
- For joists 19.2" and 16" (48 and 40 cm) o.c.: ceramic and porcelain tile up to and including 20" x 20" (50 x 50 cm).

Unacceptable tile types:

- For joists 24" (60 cm) o.c.: ceramic and porcelain tile *greater than* 18" x 18" (45 x 45 cm).
- For joists 19.2" and 16" o.c.: ceramic and porcelain tile *greater than* 20" x 20" (50 x 50 cm).
- Any size natural stone due to Marble Institute of America and TCNA requirements for $\frac{1}{720}$ maximum deflection.

Grout:

Acceptable grout types:

- Power Grout® Ultimate Performance Grout
- AccuColor EFX® Epoxy Special Effects Grout



1Flex® Single Layer Floor System System Limited Warranty



LIMITED WARRANTY

H.B. Fuller Construction Products Inc. ("HBF-CP") warrants, to the owner ("Owner") of the premises in which the product ("Product") listed below is applied, that the Product, when installed as a complete system¹ ("System"), will, for the period described below:

- The tile² and AccuColor EFX® Epoxy Grout or Power Grout® will not crack.
- The 1Flex® Crack Isolation Mortar will maintain the bond between tile and approved substrate³.

provided that the Product was properly applied as a System within its applicable shelf life and in accordance with HBF-CP's written guidelines, Product Data Sheets and Specifications found at tecspecialty.com in effect on the date of its application and consistent with all applicable building codes and industry standards and guidelines, including the TCNA Handbook when applicable, and procedures for professional application to the extent they are consistent with HBF-CP's written guidelines and specifications.

TEC® Single Layer Floor Systems		
Application	Lifetime System	10 Year System
Mesh	TEC® 6" (15 cm) Joint Mesh	TEC® 6" (15 cm) Joint Mesh
Mortar	1Flex® Crack Isolation Mortar	1Flex® Crack Isolation Mortar
Grout	AccuColor EFX® Epoxy Special Effects Grout	Power Grout® Ultimate Performance Grout

¹ System = TEC® 6" (15 cm) Joint Mesh + 1Flex® Crack Isolation Mortar + AccuColor EFX® Epoxy Grout or Power Grout®

² Acceptable tiles are limited to Ceramic Tile up to 18" x 18" (45 x 45 cm) and do not include any tile greater than 18" x 18" (45 x 45 cm) or any natural stone.

³ Approved substrates are: APA Rated IP Sturd-I-Floor™ Exposure 1 or better, Plywood or OSB, AdvanTech® OSB flooring panels, Exterior grade plywood (APA grade trademarked exterior plywood), Underlayment grade plywood, Exposure 1 or better, CDX plywood - Exposure 1, LP® Top Notch® and Top Notch® Orange Plus® OSB tongue and groove flooring. Substrate must meet requirements and be installed in accordance with the TEC® Single Layer Floor System Specifications and Guidelines (as seen on the reverse side of this Limited Warranty document.)

EXCLUSIVE REMEDIES

HBF-CP will, at its option and expense, for each warranty claim that it determines to be valid, supply the Owner with labor and materials necessary to repair or replace, merely one time, the portion of the installation which HBF-CP has determined needs repair or replacement due to defective Products or System, or replace or refund the amount Owner paid for the defective Product or System. HBF-CP may remedy grout cracking resulting from repetitive dynamic substrate cracking or movement with a sealant in lieu of grout and the foregoing warranty does not cover such sealant.

The duration of the warranty on any replacement Product and/or System will not exceed the balance of the warranty remaining on the Product and/or System that was replaced as of the date of such replacement.

WARRANTY CLAIM PROCEDURE

In order to qualify for the remedies described above, the Owner must notify HBF-CP, in writing, before the expiration of the warranty period described above and provide proof of purchase of the Product or System which is alleged to be defective, regarding the discovery of the alleged defect in the Product or System covered by the foregoing warranty. Owner must provide HBF-CP a reasonable opportunity to review and investigate the alleged defect. Owner must send or fax written claims to:

H.B. Fuller Construction Products Inc.
1105 South Frontenac Street
Aurora, IL 60504-6451
Attn: Technical Support
Fax: 630-952-1235

EXCLUSIONS AND DISCLAIMER OF WARRANTIES

The foregoing warranty does not cover damage or other harm from routine maintenance or cleaning, any defects, damage or other harm that is not the result of the acts or omissions of HBF-CP, or that arise to any extent or in any way from (i) the failure of Owner or Product/System applicator to follow any applicable instructions of HBF-CP or other manufacturers, if any, (ii) the abuse, misuse or modification of the Product or System, (iii) structural failure or workmanship not in accordance with HBF-CP's instructions and applicable industry standards, (iv) normal wear and tear resulting from usage, (v) installations with improper substrate preparation, sewer backup, acts of God, excessive or low relative humidity or any issues not related to excessive moisture proven to be coming through the moisture vapor barrier, if one was applied, (vi) any surface not installed in accordance with the manufacturer's recommendations including, but not limited to, temperature, relative humidity, and proper maintenance or (vii) any surface not installed in accordance with the manufacturer's most recent published literature pertaining to glue down installations, including, but not limited to, wood flooring acclimation, expansion space, jobsite temperature, relative humidity and air flow requirements.

When HBF-CP replaces tile, stone, floor covering or grout as part of the foregoing remedies, HBF-CP cannot guarantee an exact match thereof during such replacement.

ALTHOUGH HBF-CP MAY HAVE SUGGESTED THE PRODUCT AND/OR SYSTEM OR DEVELOPED THE PRODUCT AND/OR SYSTEM AT THE REQUEST OF THE OWNER OR THE PRODUCT/SYSTEM APPLICATOR, OWNER AND APPLICATOR ARE SOLELY RESPONSIBLE FOR TESTING AND DETERMINING THE SUITABILITY OF THE PRODUCT AND/OR SYSTEM FOR THE INTENDED USE AND PURPOSE, AND OWNER AND APPLICATOR ASSUME ALL RISK AND LIABILITY WHATSOEVER REGARDING SUCH SUITABILITY. THE FOREGOING WARRANTY IS IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, NONINFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ANY IMPLIED

WARRANTY GRANTED UNDER APPLICABLE LAW, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE EXPRESS WARRANTY GRANTED ABOVE. SOME STATES/PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO OWNER.

LIMITATION OF REMEDIES AND DAMAGES

EXCEPT AS OTHERWISE PROVIDED HEREIN, THE REMEDIES STATED ABOVE ARE OWNER'S SOLE AND EXCLUSIVE REMEDIES AGAINST HBF-CP.

ANY EFFORTS BY HBF-CP BEYOND THE OBLIGATIONS PROVIDED FOR HEREIN, WILL NOT IN ANY WAY CHANGE THE LIMITATION OF REMEDIES AND DAMAGES STATED IN THIS WARRANTY OR EXTEND OR CHANGE THIS WARRANTY.

LIMITATION OF LIABILITY

IN NO EVENT WILL HBF-CP'S LIABILITY UNDER THIS WARRANTY EXCEED THE AMOUNT PAID BY OWNER FOR THE PORTION OF THE INSTALLATION, INCLUDING LABOR AND MATERIALS, WHICH HBF-CP HAS DETERMINED NEEDS REPAIR OR REPLACEMENT DUE TO DEFECTIVE PRODUCT AND/OR SYSTEM.

DISCLAIMER OF DAMAGES

HBF-CP IS NOT LIABLE FOR ANY INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE SALE, PURCHASE OR USE OF THE PRODUCT AND/OR SYSTEM, BREACH OF WARRANTY, INCLUDING, BUT NOT LIMITED TO, LOSS OF ANTICIPATED PROFITS OR OTHER ECONOMIC LOSS, WHETHER OR NOT ARISING FROM DELAY DURING INSPECTION OR REMEDY OF PRODUCT AND/OR SYSTEM FOR ALLEGED DEFECT UNDER WARRANTY REGARDLESS OF ANY STRICT LIABILITY OR NEGLIGENCE OF HBF-CP AND REGARDLESS OF THE LEGAL THEORY (CONTRACT, TORT OR OTHER) ASSERTED TO MAKE A CLAIM. SOME STATES/PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO OWNER.

NONTRANSFERABLE WARRANTY

This warranty is not transferable and confers no rights or remedies on any third parties, whether as third party beneficiaries or otherwise.

COMPLETE AGREEMENT

This warranty completely replaces and supersedes any prior oral or written warranties, agreements or representations of HBF-CP regarding the Product and/or System or its application. Only an officer or general manager of HBF-CP may change this warranty.



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